SETUP and USER GUIDE

Web UI

Release 9.2-MP3 (October 25, 2019)

StiboSystems

MASTER DATA MANAGEMENT

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Web User Interfaces

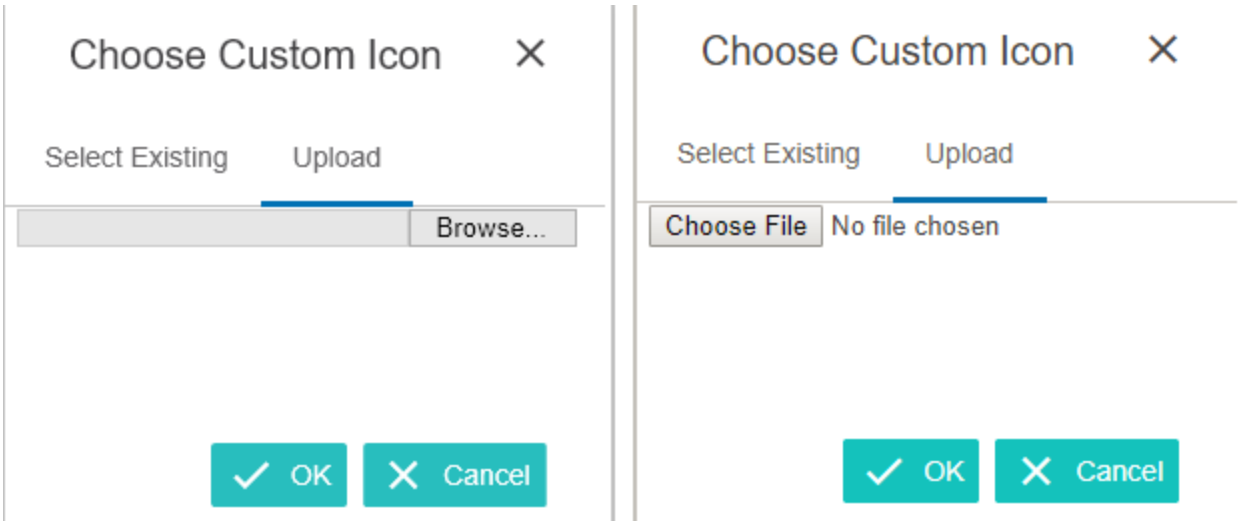
Web UI is an interface to STEP and provides an easy-to-use, intuitive way to work with data in the system, i.e., updating data or creating new objects, etc.

Web UI also provides a customized view of STEP. For example, Web UI can be configured to only show what is needed for a given task, while ignoring other components / screens, which are not required for that task.

The Web User Interfaces Web User Interfaces / Web UI Setup and User Guide documentation will guide you through the prerequisites and basic set-up procedures needed to implement a Web UI. You will also find additional information about Web UI components, how to configure the components, and recommendations for using them.

After reading the documentation, Web UI designers (admins) and end users will have a better understanding of all the functionality available through Web UI.

In very rare cases, admins will see labels that appear slightly different than described while in design mode. For example, 'Choose File' may appear in one browser but will appear as 'Browse' in a different browser. There may also be differences between Mac and PC users. However, these are exceptions and Web UI functionality will not differ from what is described in this documentation.



Important: Admin users should be aware that the option of customizing the layout of the Web UI through CSS, which overrides the existing classes, is not supported. Custom CSS can cause issues for customers with each feature release and/or patch update.

Web UI Getting Started

There are some prerequisites to Web UI configuration / usage.

Privileges

Privileges configured in STEP Workbench also apply when working with data in a Web UI. For instance, if a user can edit attributes in STEP Workbench, he / she will also be able to edit attributes through a Web UI.

Web UI configurations will, by default, not be user / user group specific. Apart from the fact that the standard privilege setup can influence what a user sees / is able to do, the Web UI will be the same for all users logging in.

Users need privileges to be able to access and use Web UI. Different privileges can be set up for different users and user groups depending on the users' roles. As an example, if a user will maintain Web UI configurations in an admin role, the user will need the proper privileges to access Web UI Designer. Or, if an end user will be using workflows or viewing / maintaining objects, then there are separate privileges for these tasks. Furthermore, users can be prevented from accessing specific Web UI instances they do not need to use.

To follow any of the steps in the Web User Interfaces Web User Interfaces / Web UI Setup and User Guide documentation, the proper privileges have to be granted (e.g., you cannot create a new Web UI unless you have the privilege to do so). For more information about privileges and user setup, see the **Users and Groups** section and **Adding User Privileges for a Group** section of the **System Setup / Super User Guide** documentation.

Web UI Access Privileges

At a minimum, the actions, 'Access Web UI' and 'View context' must be added to a user group's privileges before a user is able to log in to a STEP Web UI. If these actions do not already exist as a standalone item or as part of an existing Action Set, then they need to be set up.

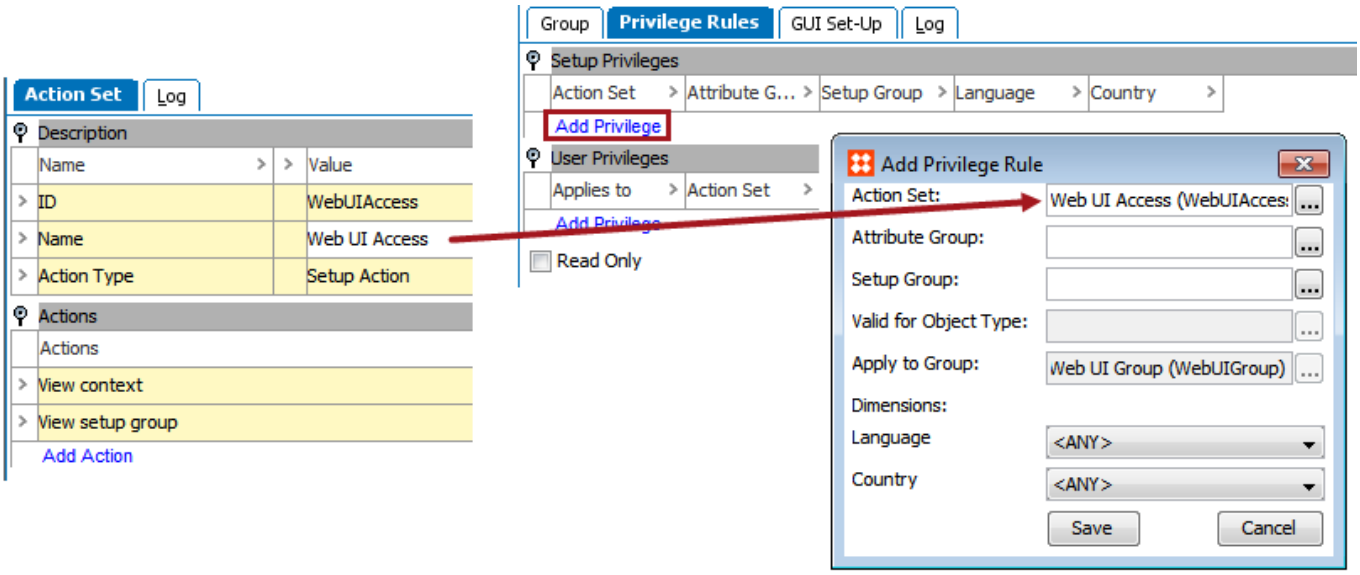
Below are the steps for creating an Action Set and applying it to a User Group.

1. Go to **System Setup** in the STEP Workbench.
2. Under **Action Sets**, right-click **Setup Actions** and add a New Action Set.
3. Type in an ID and Name then click Create. In this example, the name is 'Web UI Access.'
4. Click on the new action set that was just created (Web UI Access) and go to the Action Set tab.
5. Click on the Add Action link and select 'View context' then click Select.
6. Click on the Add Action link and select 'Access Web UI' then click Select.
7. Go to the **User & Groups** section of **System Setup** and click on the user group that needs Web UI access.
8. On the Privilege Rules tab, click the Add Privilege link under the Setup Privileges flipper.
9. In the 'Add Privilege Rule' dialog box, click the ellipsis button (...) next to the Action Set field and choose the Action Set you just created (Action Sets > Setup Actions > Web UI Access). Then, click Select.

Note: If the user(s) should only have access to specific Web UI instances, define the Setup Group in which those Web UIs reside. Click the ellipsis button (...) next to the Setup Group field and select the relevant Web UI Setup Group.

---

10. Click Save.



Important: If restricting user access to specific Web UIs, make sure there are no competing Action Sets set for the user group. The action set with the most generous access applies, not the Action Set with the most restrictive access.

For admin users who will be using the Web UI Designer, see the **Designer Access** section of the **Web User Interfaces** documentation.

Creating a New Web UI

A STEP Web UI is defined in an XML file placed in STEP. This XML file is called a Web UI configuration. Web UI configurations are listed in the STEP Workbench in **System Setup** below a specified setup group. New STEP installations are pre-configured with this setup group, which can be renamed by the user.

If using a system that does not have this setup group configured, one can be easily created by following the instructions found in the **Setup Groups** section of the **System Setup / Super User Guide** documentation.

Users can also choose to duplicate an existing Web UI instead of starting from scratch, and the steps are outlined later in this topic. Once a new Web UI is created or duplicated from another Web UI, it can be modified and customized to meet business needs.

Important: Before moving ahead, a crucial starting point in developing a new Web UI is the initial analysis of the requirements and purpose of the Web UI (e.g., how will it be used, what kind of data should be displayed, should data be editable, etc.). Once the use case and any data analysis is done, it is time to move ahead with creating and configuring a Web UI.

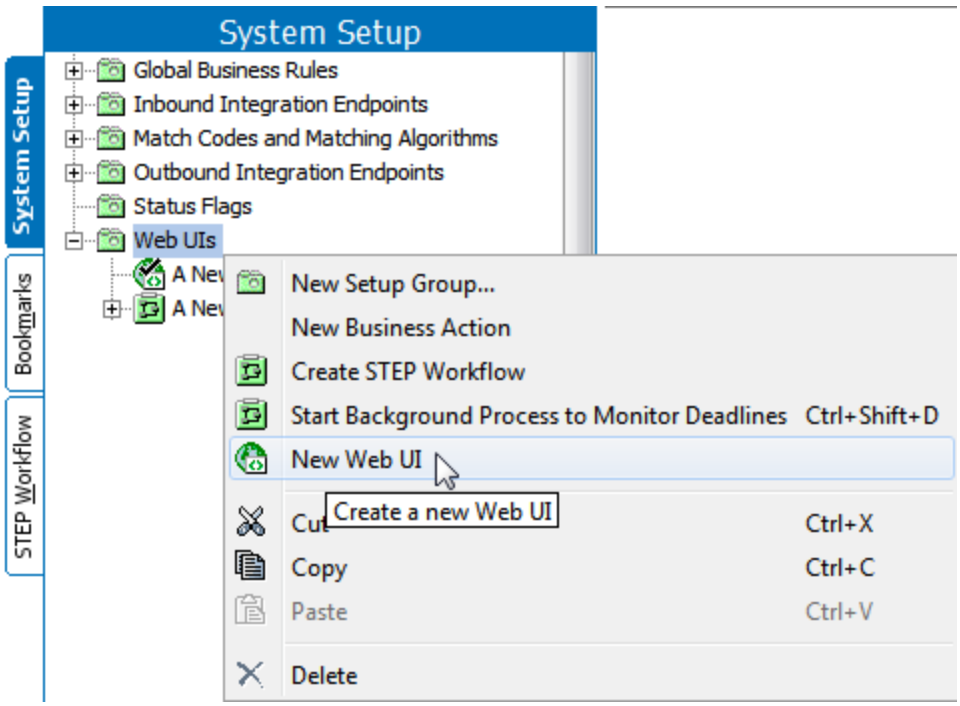
Creating a New Web UI

To create a new STEP Web UI:

1. In **STEP Workbench**, go to the **System Setup** tab and right-click the setup group that is designated as the parent folder for Web UI configurations. Select **New Setup Group** and name the group.

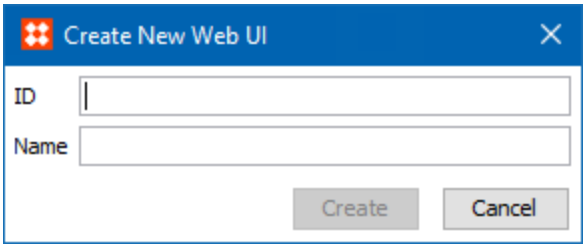
   While you can skip the New Setup Group step and go directly to step 2 to create a new Web UI directly under the parent folder, it is recommended practice to put each Web UI in a Web UI group so that you can limit user access if / as necessary. For systems in which multiple specialized Web UIs are going to be created / exist, this ensures that privileges can be set up so that users can only access Web UIs relevant to them.

2. From the setup group, right-click and choose **New Web UI**. (If the New Web UI option is not showing, make sure you are using the correct setup group folder.)



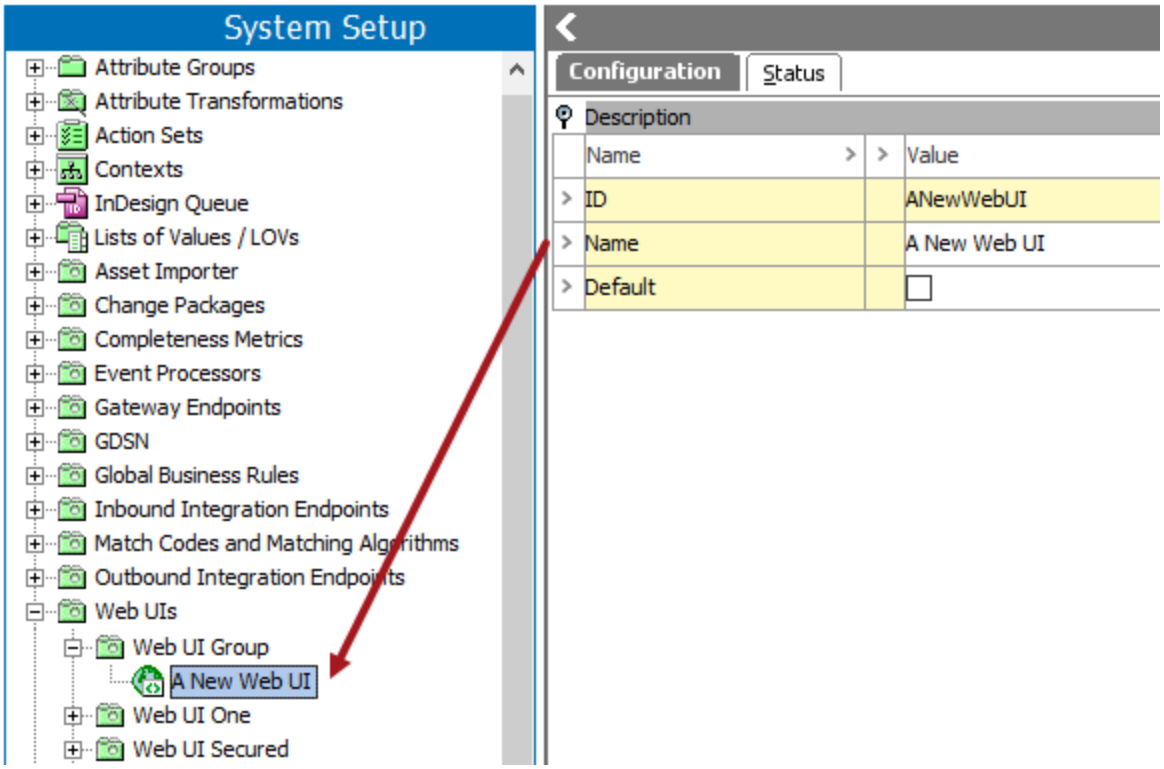
3. In the **Create New Web UI** dialog, enter an **ID** and a **Name** for the configuration, and then click **Create**.

Important: Do not use spaces or special characters in the ID since the ID is used as part of the URL for accessing the Web UI. The name is used as a display name within the STEP Workbench and on the STEP Start Page. The ID becomes the Web UI configuration ID referenced in various sections of the **Web User Interfaces**documentation.



A Web UI configuration is now created in STEP and will appear by name under the setup group folder.

The Web UI is available for configuration editing (e.g., Web UI name and default status) in System Setup and available to access using a browser.



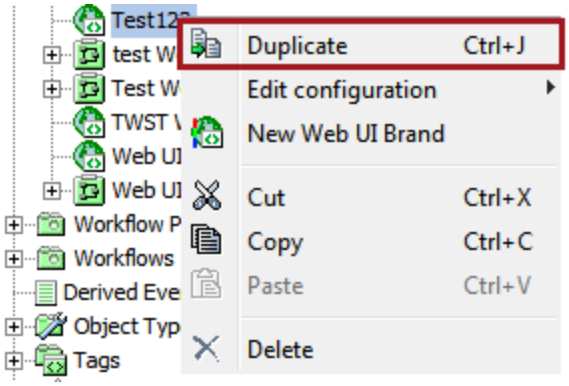
If **Default** is enabled / checked on the Configuration tab, the Web UI can be accessed via a simpler URL (no Web UI configuration ID required) than what is used for non-default Web UIs. For more information, see the **Accessing a Web UI** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Note: Setting a default is not required. If using this feature, only one Web UI at a time can be set as the default. The Default checkbox for a specific Web UI cannot be unchecked once it has been enabled, but users can change the default selection by enabling the value for another Web UI.

Duplicating an Existing Web UI

Instead of creating a new Web UI, it may be ideal to duplicate an existing one. In many cases, this will make the creation of a similar Web UI easier since much of the configuration has probably already been done.

1. In the workbench, go to **System Setup** and expand the setup group(s) that contains Web UI configurations.
2. Right-click the Web UI configuration you wish to duplicate.



3. Select **Duplicate** from the menu.
4. When the 'Duplicate' dialog appears, enter an **ID**. The **Name** is pre-populated, which can be edited or a new name can be entered. Click **OK** when finished.

A Web UI configuration, duplicated from an existing Web UI configuration, is now created in STEP and will appear by name under the setup group folder. The Web UI is available for configuration editing as described at the end of the **Creating a New Web UI** section found earlier in this topic.

For details about working with Web UI revisions and deleting a Web UI configuration, see the **Managing Web UI Configurations** section in the **Web User Interfaces / Web UI Getting Started** documentation.

For information on how to use the Web UI Designer, see the following topics in the **Web User Interfaces** documentation:

- Managing Web UI Configurations
- Designer Access
- Design Mode Basics
- Selecting Components
- Configuring Components
- 'Web UI component configuration reference' available at [system]/webui/docs

Accessing a Web UI

Web UI users, regardless of their role (e.g., admin or end user), must have Web UI access privileges. For more information on setting privileges up, see the **Web UI Getting Started** section of the **Web User Interfaces** documentation. Once the proper privileges are set up, there are two ways to access a Web UI.

Direct Browser Access

Privileged users can access a Web UI by opening a browser and entering the relevant URL. A Web UI URL is basically the URL that is used to access STEP Workbench but appended with **/webui**.

If the Web UI you are accessing is not enabled as the Default Web UI, the URL must also be appended to include the ID of the Web UI configuration.

Default URL Format	Non-Default URL Format
http://[your system name]/webui	http://[your system name]/webui/[Web UI configuration ID])

As a basic example, this is what the URLs will look like for a Web UI configuration where the system name (server URL) is 'your-system' and the Web UI configuration ID is 'ANewWebUI.'

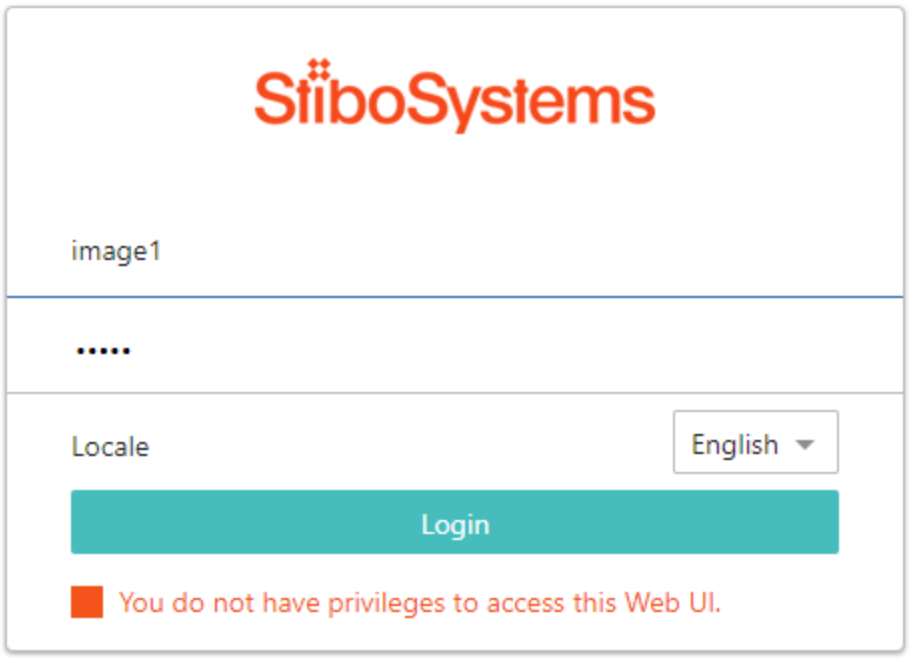
Example Default URL Format	Example Non-Default URL Format
http://your-system/webui	http://your-system/webui/ANewWebUI

Once the URL is entered into a browser address bar, a login screen displays.

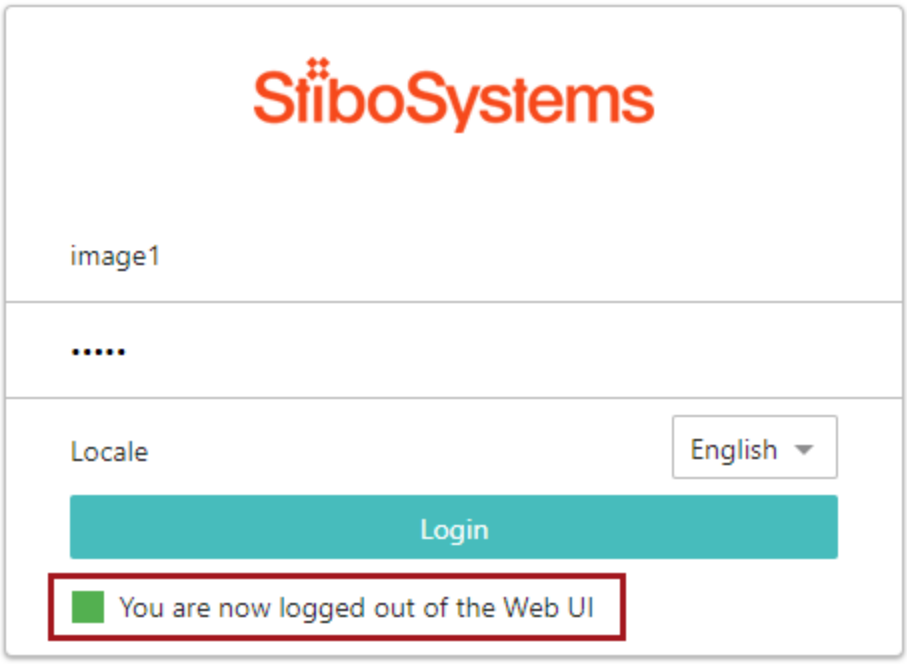
To access the Web UI homepage:

1. Enter STEP Username
2. Enter STEP Password
3. Click Login

If you do not have authorization to use a particular Web UI instance, access will be denied and a 'You do not have privileges to access this Web UI' message will appear.



Users with the appropriate privileges can access multiple Web UIs under a single username by logging in just once. Once a user has logged in to a single Web UI, additional Web UIs (for which a common username is valid) may be opened in the same browser, either in new browser windows or new browser tabs. During a browser session, log-in to each Web UI is automatic, forgoing the login screen altogether. To access a Web UI using a different username, users must first log out of one of the open Web UIs. This has the effect of logging the user out of all open Web UI sessions. The closed Web UIs will revert to the login screen and display a notification that states, 'You are now logged out of the Web UI.'



Once logged out, users are able to log in to a Web UI using a different username.

Launch Button Access

The STEP Start Page can be configured to display a launch button for all Web UIs created in STEP. Clicking the applicable launch button will open your default browser and navigate you directly to the Web UI URL.

In the **config.properties** file (or **sharedconfig.properties** file if running servers in cluster) the **Webstart.Portal.ShowAll** setting must be equal to true. If **Webstart.Portal.ShowAll** is equal to false, then users will not see any Web UI launch buttons and will need to use the **Direct Browser Access** directions outlined in the previous section.

```
#==============================================================================#
# Portal Settings
#==============================================================================#
Webstart.Portal.ShowAll=true
```

Read more about **Creating a New Web UI** in the **Web User Interfaces / Web UI Getting Started** documentation.

For details about **Managing Web UI Configurations** (reverting to previous versions or removing a Web UI configuration revision from the revision history), see the **Web User Interfaces / Web UI Getting Started** documentation.

For information on how to use the Web UI Designer, see the following topics in the **Web User Interfaces** documentation:

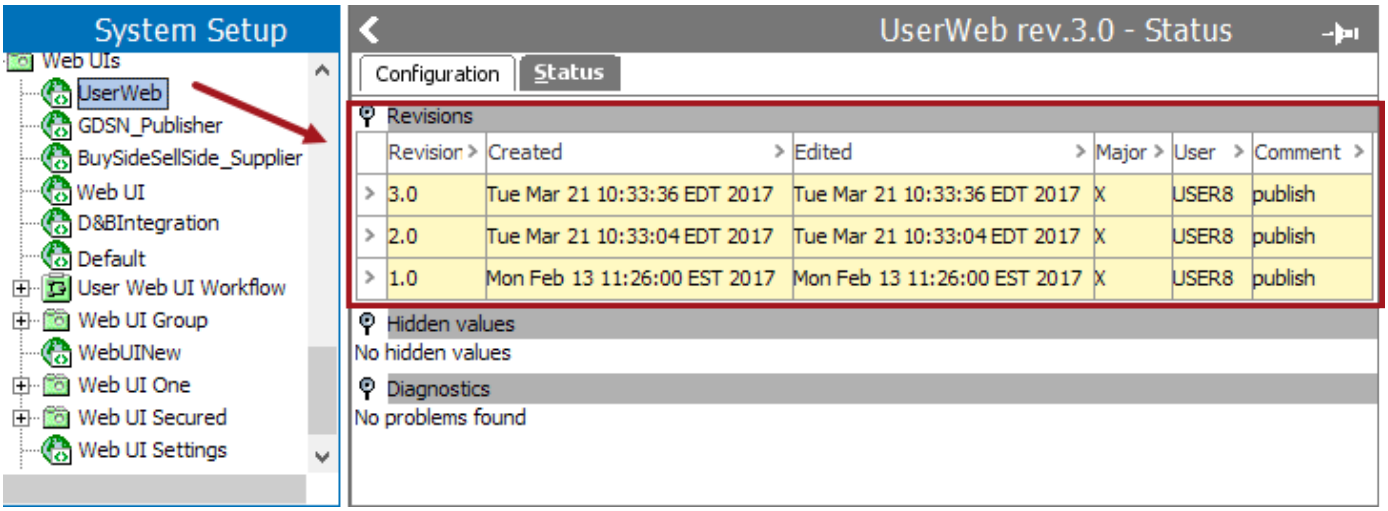
- Designer Access
- Design Mode Basics
- Selecting Components
- Configuring Components
- 'Web UI component configuration reference' available at [system]/webui/docs for more information.

Managing Web UI Configurations

Each time a change to a Web UI configuration is saved, a revision is created and listed in the STEP Workbench. This allows users to better manage the Web UI. There may be a need to revert to a previous revision if a configuration error is made. And if a particular revision contains an error, it can be removed (purged) so that it cannot be used again.

Revisions can be viewed from the **System Setup** tab in the workbench. Click on the Web UI name and then on the **Status** tab to view the revisions for that particular Web UI configuration.

Revisions are shown under the **Revisions** flipper, and display with the latest (newest) one at the top of the list. Each revision is shown with the date it was created and edited, whether revision includes a major change or not, the user who made the changes, and system revision comments.

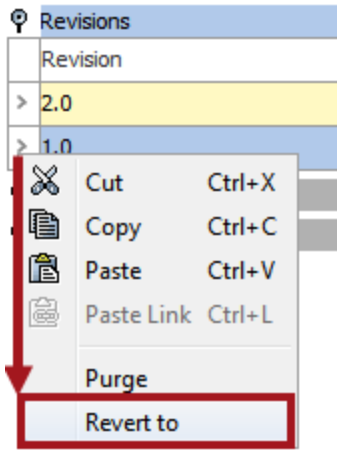


Note: The **Hidden values** flipper displays hidden inherited values on the object, and are those that are inherited from another dimension point rather than from a parental object. More information on this is available in the **Contexts** topic in the **System Setup / Super User** guide documentation. Diagnostics displays any issues found by system diagnostics with the object. If a problem has been found, the information can be copied by clicking the file link.

Reverting to an Older Revision

Revert a Web UI configuration to an earlier revision by following these steps in the workbench:

1. In **System Setup**, select the relevant Web UI configuration.
2. Click the **Status** tab.
3. Click the arrow to the left of the row that contains the revision that you would like to revert to, then select **Revert to**.

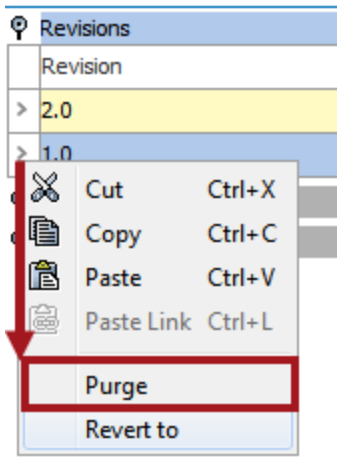


The Web UI configuration is now reverted to the selected revision and a new revision is created.

Purge a Web UI Configuration Revision

To remove a Web UI configuration revision from the revision history:

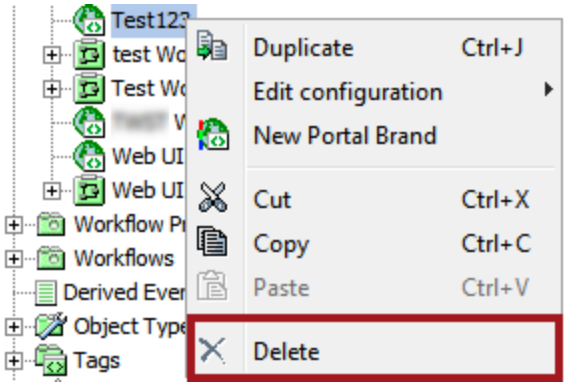
1. In **System Setup**, select the relevant Web UI configuration.
2. On the **Status** tab, click the arrow to the left of the row that contains the revision to purge, and then click **Purge**.



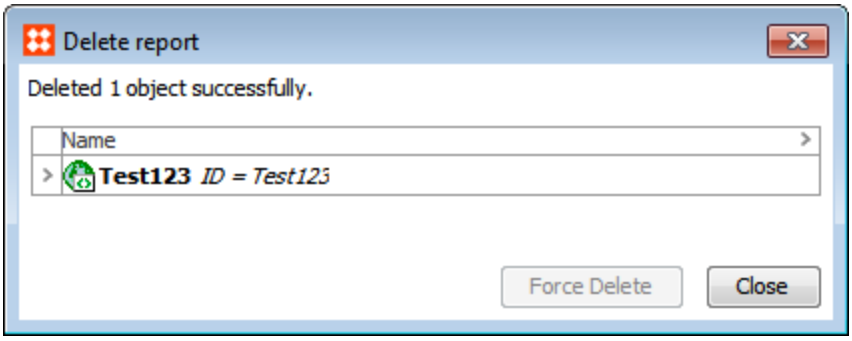
Note: If you purge a Web UI configuration revision and then later revert a workflow to a version that is dependent on the purged configuration revision, it may result in the workflow and/or Web UI configuration not working as expected.

Delete a Web UI Configuration

1. In **System Setup**, expand the Setup Group that contains Web UI configurations.
2. Right-click the Web UI configuration you wish to delete.



1. Select **Delete** from the menu.
2. Click **Delete** again once the 'Delete' dialog appears. (If you decide you do not want to delete the Web UI, click **Cancel** to exit without deleting.)
3. Observe on the 'Delete report' dialog that the Web UI was deleted successfully.



If there is anything stopping the Web UI configuration from being deleted, warning messages will be shown in the 'Delete report' dialog. You should review these messages carefully and make any changes, if applicable. Choosing 'Force Delete' is only an option when the button is active and should be used with caution.

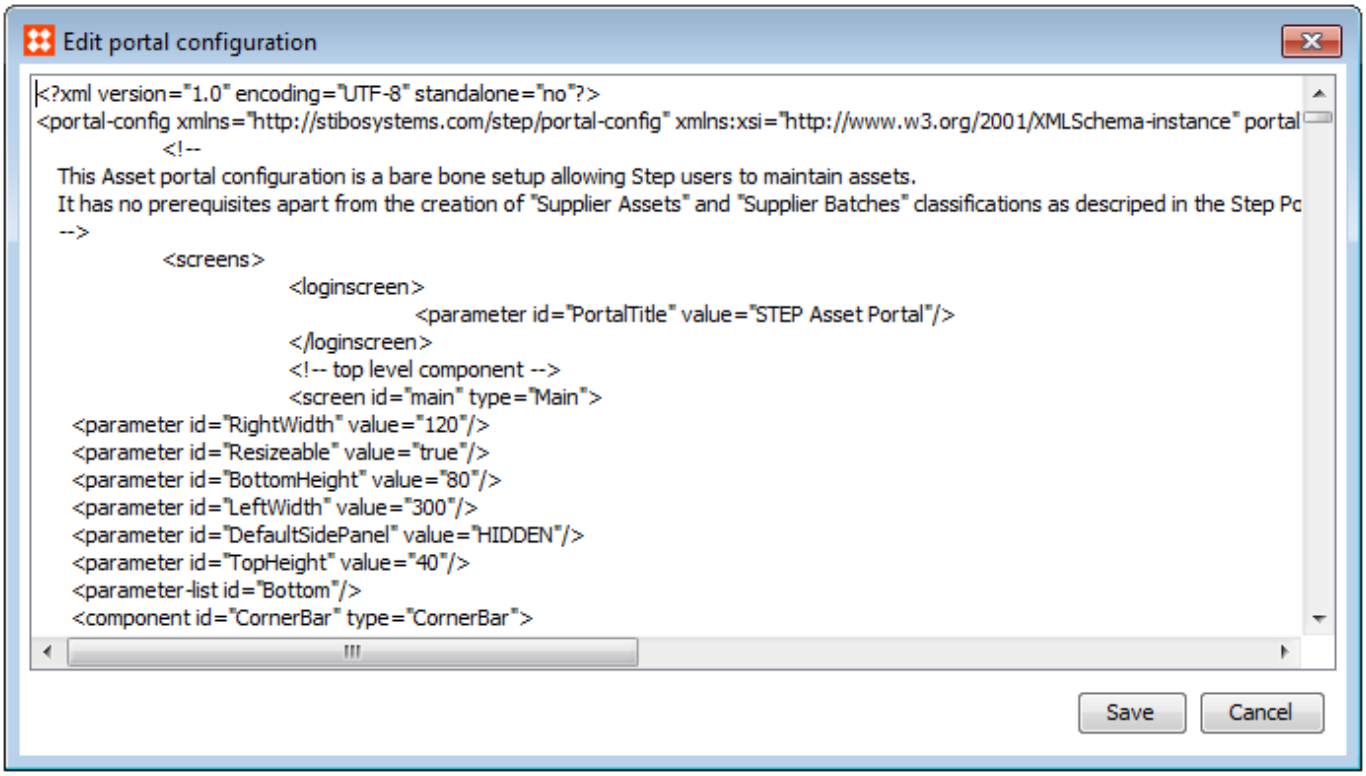
Edit a Web UI Configuration

While it is recommended that Web UI configurations are done through Web UI designer so that you are notified when making invalid design choices, a Web UI configuration is actually an XML file that contains all the information about the content of the Web UI. The XML for a Web UI configuration can be edited and can be used for building custom screens. Editing the Web UI XML should be done with caution, as an error in the XML syntax or content can potentially break the Web UI.

To edit the Web UI XML:

1. Go to **System Setup** and expand the Setup Group that contains Web UI configurations.
2. Right-click the Web UI configuration you wish to edit.
3. Select the menu item **Edit configuration**.

4. Select **Internal editor** (shown below) or **External editor** (if you have a software program that allows for editing of XML files).
5. Edit the XML for the Web UI once the editor appears.
6. Click the **Save** button to save the changes.



By editing the XML, It is possible to apply restrictions to specific components or parameters so that they can only be seen by specific user groups. In the example below, the Status Selector Homepage Widget will only be visible to users in the 'Data Stewards' user group due to the presence of the 'restrict="Data Stewards"' attribute.

```
<component restrict="Data Stewards" type="StatusSelectorHomepageWidget">
  <!-- conf left out -->
  <parameter-list id="States">
    <parameter  value="Enrich"/>
    <parameter value="Marketing"/>
    <parameter value="Verify"/>
  </parameter-list>
  <parameter id="Title" value="Onboarding Workflow"/>
  <parameter-list id="InitiateScreenSelectors"/>
</component>
```

In a similar way, a single state could be restricted:

```
<component type="StatusSelectorHomepageWidget">
  <!-- conf left out -->
  <parameter-list id="States">
    <parameter restrict="Data Stewards" value="Enrich"/>
    <parameter value="Marketing"/>
    <parameter value="Verify"/>
  </parameter-list>
  <parameter id="Title" value="Onboarding Workflow"/>
  <parameter-list id="InitiateScreenSelectors"/>
</component>
```

For information on how to use the Web UI Designer, see the following topics in the **Web User Interfaces** documentation:

- Designer Access
- Design Mode Basics
- Selecting Components
- Configuring Components
- 'Web UI component configuration reference' available at [system]/webui/docs.

For more information, see the **Accessing a Web UI** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Designer Access

All tasks related to configuring a Web UI, besides the initial setup in STEP Workbench, are carried out using the Web UI Designer.

The STEP Web UI designer enables users to modify any STEP Web UI to better suit business needs. Web UI components can be added, configured / reconfigured, and unused components can be deleted from showing on screen, allowing users to focus on the tasks at hand. Furthermore, the Web UI designer allows for basic look-and-feel changes, such as company logo, colors, and screen font size.

The Web UI Designer is a licensed component and thus to open it, the required license must be in place. The user or users accessing designer must have user privileges to make Web UI configuration changes.

Applying an Update Web UI Configuration Action Set

First, an 'Update Web UI configuration' action will need to be created if it does not already exist as a standalone item or as part of an existing Action Set. This privilege enables users to run a Web UI in design mode.

Note: Users without this privilege will not see the Designer button in the Web UI.

---

1. Go to **System Setup** in the STEP Workbench.
2. Under **Action Sets**, right-click Setup Actions and add a New Action Set.
3. Type in an ID and Name then click Create. In this example, the name is 'Web UI Designer.'
4. Click on the new action set that was just created (Web UI Designer) and go to the Action Set tab.
5. Click on the Add Action link and select 'Update Web UI configuration' then click Select.
6. Go to the **User & Groups** section of **System Setup** and click on the user group that needs Web UI Designer access.
7. On the Privilege Rules tab, click the Add Privilege link under the Setup Privileges flipper.
8. In the 'Add Privilege Rule' dialog box, click the ellipsis button (...) next to the Action Set field and choose the Action Set you just created (Action Sets > Setup Actions > Web UI Designer). Then, click Select.
9. Click Save.

Note: Adding the 'Update Web UI configuration' action allows a user to see the design mode icon once they log in to a Web UI. At a minimum, the actions 'View context' and 'View setup group' must also be added to the user group privileges before a user is able to log in to a STEP Web UI. Read more in the **Accessing a Web UI** section of the **Web User Interfaces / Web UI Getting Started** documentation.

For more information about privileges and user setup, see the **Users and Groups** section and **Adding User Privileges for a Group** section of the **System Setup / Super User Guide** documentation.

Web UI configurations will, by default, not be user / user group specific. That is, apart from the fact that the standard privilege setup can influence what a user sees / is able to do, the Web UI will be the same for all users logging in.

By editing the XML, It is possible to apply restrictions to specific components or parameters so that they can only be seen by specific user groups. In the example below, the Status Selector Homepage Widget will only be visible to users in the 'Data Stewards' user group due to the presence of the 'restrict="Data Stewards"' attribute.

```
<component restrict="Data Stewards" type="StatusSelectorHomepageWidget">
  <!-- conf left out -->
  <parameter-list id="States">
    <parameter  value="Enrich"/>
    <parameter value="Marketing"/>
    <parameter value="Verify"/>
  </parameter-list>
  <parameter id="Title" value="Onboarding Workflow"/>
  <parameter-list id="InitiateScreenSelectors"/>
</component>
```

In a similar way, a single state could be restricted:

```
<component type="StatusSelectorHomepageWidget">
  <!-- conf left out -->
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    <parameter value="Marketing"/>
    <parameter value="Verify"/>
  </parameter-list>
  <parameter id="Title" value="Onboarding Workflow"/>
  <parameter-list id="InitiateScreenSelectors"/>
</component>
```
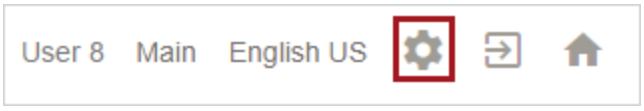

Entering Design Mode

Entering design mode can only be done by privileged users. These users can enter design mode by clicking on a launch button within Web UI or by entering a specific design mode URL into a web browser. Both methods are explained below.

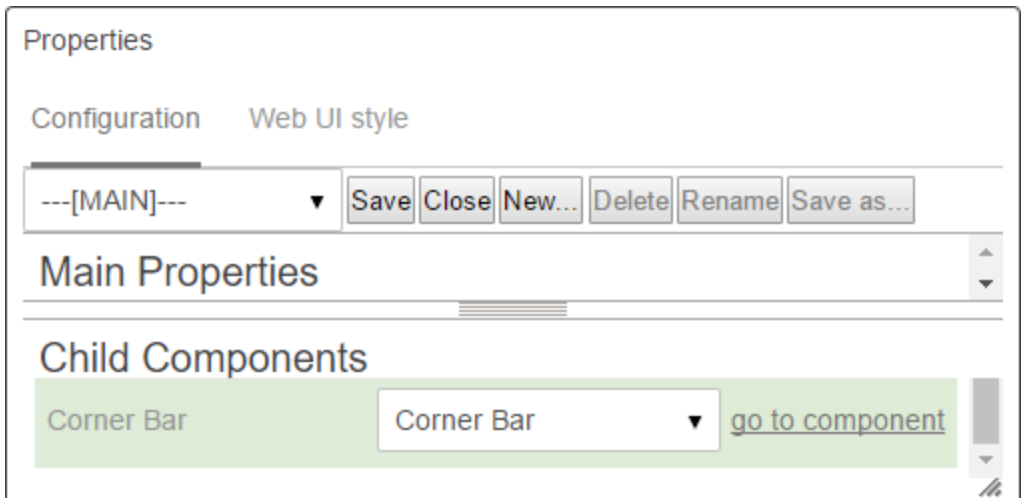
1. Log in to the Web UI.
2. Click the design mode launch button icon found on the corner navigation bar of the Web UI (upper right side of each screen).



If for some reason you do not see the design mode launch button, you can configure it as follows:

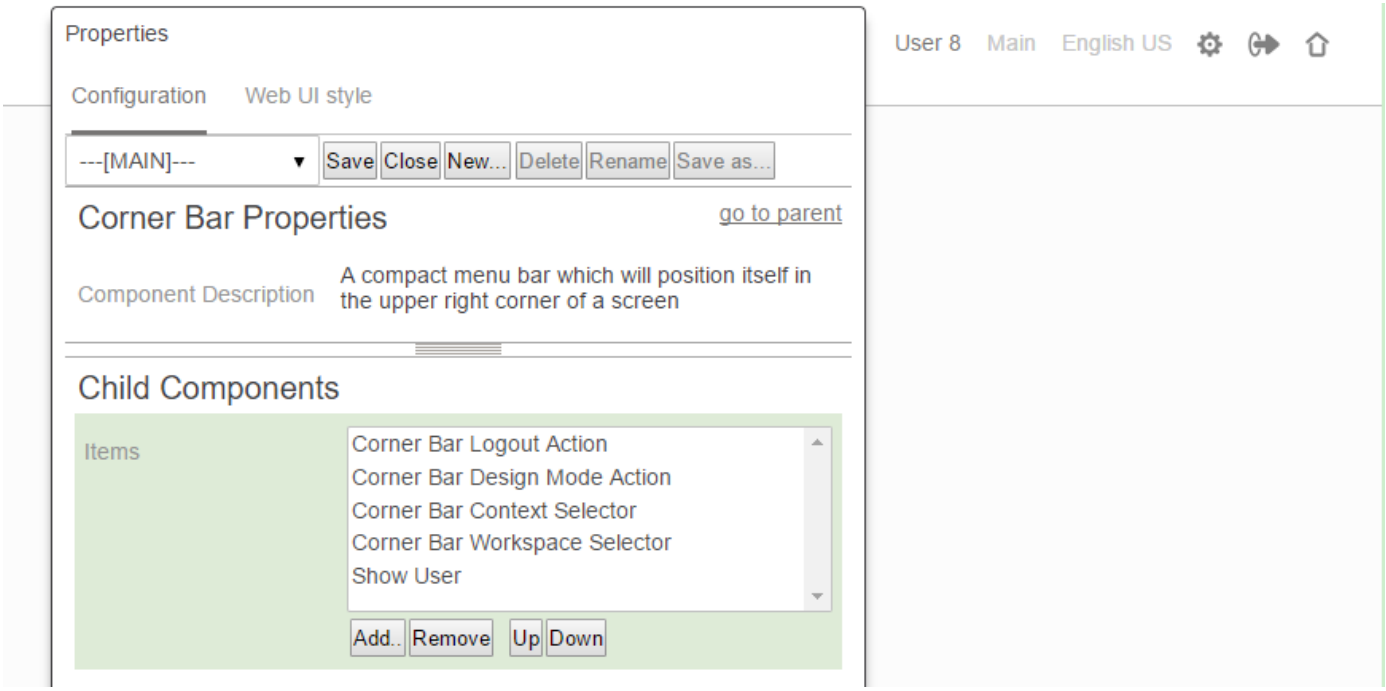
1. Enter design mode by appending the URL (as described in the next section).
2. Once in the Web UI designer, select the **---[MAIN]---** screen using the dropdown selector.

3. Go to the bottom of the Main Properties screen and find the Corner Bar Child Component and select **Corner Bar** from the dropdown.
4. Click the '**go to component**' link.



5. On the Corner Bar Properties dialog, click **Add** under the Items field and choose **Corner Bar Design Mode Action**.
6. Click **Add** again.
7. Click the **Save** button in the Web UI designer.

When you navigate to the various screens within Web UI, you will now see the design mode icon in the upper right corner of the screen. Corner Bar Items are shown from right to left, meaning that the first 'Item' on the list is shown on the right and each 'Item' added displays to the left (see image below). The Corner Bar can be configured as needed by adding, removing, and moving 'Items' up and down.



Append URL in Browser

If a launch button is not already configured, or just as an alternative method, a user may access design mode by appending the Web UI URL to include **#designmode=true** at the end. If the Web UI URL already includes the '#' character, it needs to be appended with the string **&designmode=true** instead. Users will be automatically entered into design mode after entering their username and password on the standard Web UI login screen.

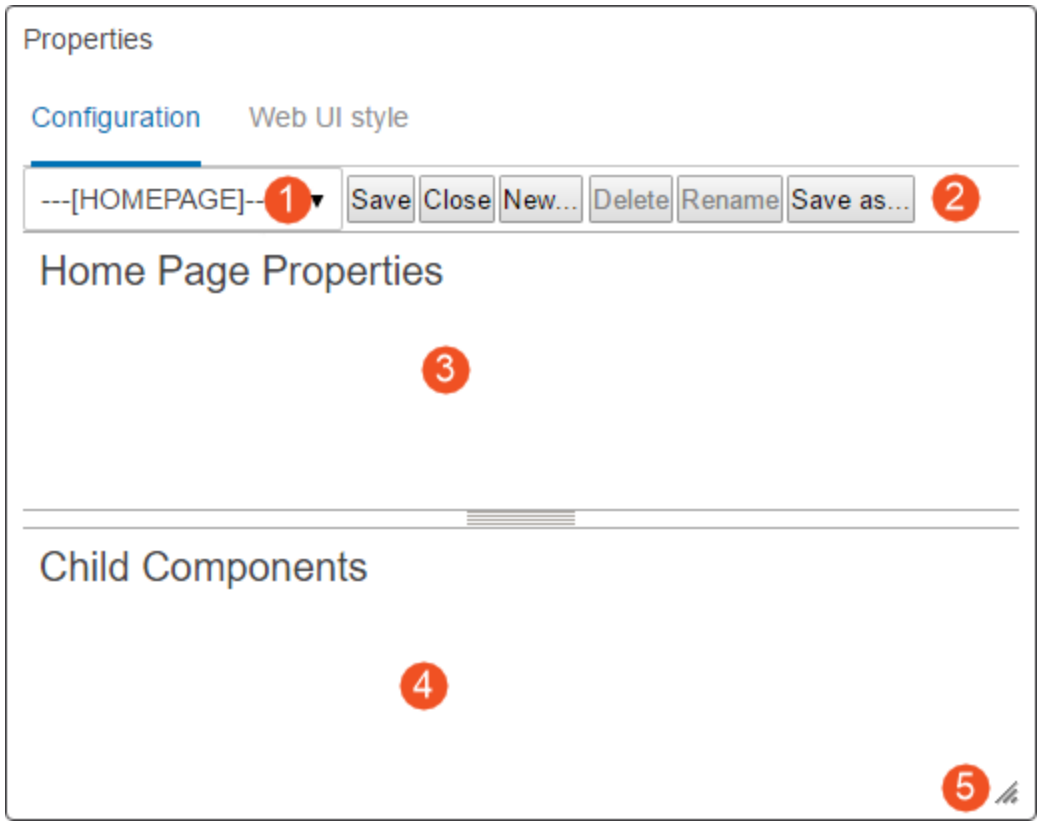
As a basic example, this is what the URL will look like in both cases for a Web UI configuration where the system name is 'your-system' and the Web UI configuration ID is 'ANewWebUI':

`http://your-system/webui/ANewWebUI`**`#designmode=true`**

`http://your-system/webui/ANewWebUI#contextID=Context1&workspaceID=Main&screen=Import`**`&designMode=true`**

Design Mode Basics

The STEP Web UI Designer Graphical User Interface (GUI) is divided into four main areas plus a drag handle for window resizing:



1. **Screen dropdown**: Select which screen / component to review and edit.
2. **Action icons**: Icons that can be clicked allow users to save changes to the properties configuration, close / exit the properties window, create a new screen, rename a screen, or save a configuration as new screen ID. Each option is explained in greater detail in this documentation.
3. **Properties area**: The main component properties of a selected screen are displayed and can be edited.

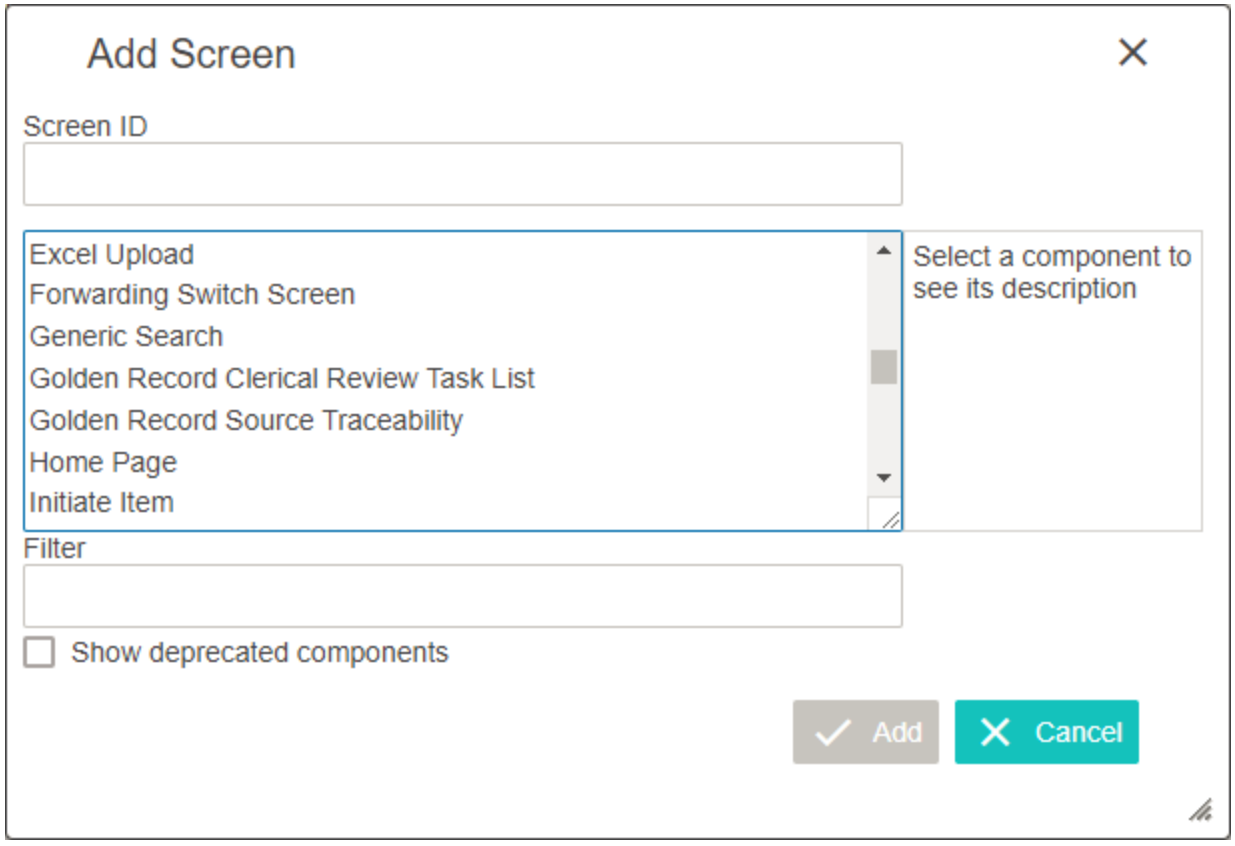
   Parameters are grouped together on the component properties screens for easier understanding of parameter interactions. Parameters that are required, as well as those frequently used, are shown immediately when opening a properties page. Additional optional parameters are grouped by topic and displayed when the user clicks the arrowhead preceding the group.

4. **Child components area**: This is the area where child components can be edited, deleted, and created. The area only displays information if the selected component can contain child components. If unavailable, the area under the Child Components header is empty.
5. **Resizable window**: By dragging the lower right corner of the design window, users can adjust the screen to easily view all available content. The component fields within the window adjust in size to match the size of the window.

Creating a New Screen

Select a component from a list and give it an identifying screen ID. The screen ID will show in the dropdown once saved.

1. Click the **New...** button in the Designer.



2. In the 'Add screen' dialog, enter an ID for the new screen in the **Screen ID** field. Make it descriptive so that it can be easily identifiable when a user looks through Screen IDs to make a selection.
3. In the screen type list, select the screen type you want to create by clicking on the displayed screen ID. Click the ID to view explanations on the different types. Use the **Filter** field to quickly display only the components matching the text entered in the filter box.
4. Click the **Add** button.

The new screen is created and displayed in the Web UI. You can now configure any applicable parameters and child components within the properties dialog.

Note: When the 'Show deprecated components' checkbox is checked, the withdrawn or deleted components will be listed within the screen type list. Using any of these deprecated components will prompt the Web UI user with an error.

The following screens have been deprecated: About Screen, Advance Search, Asset Details, Autopage Planner

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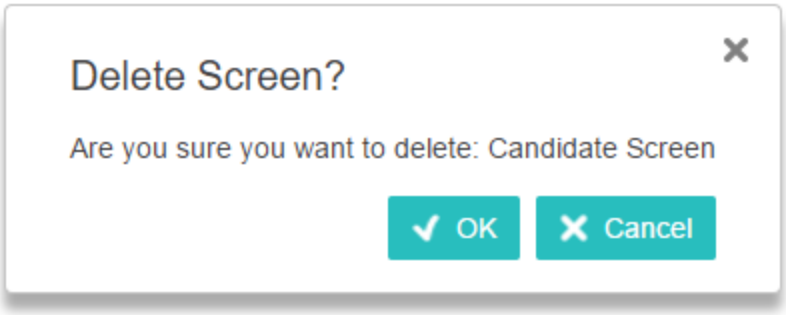
Screen, Child Entity Details, Child Product Details, Classification Details, Commercial Terms, Commercial Term Details, Enrich Screen, My Test Server Component, Product Details, Search List, Search Result.

Deleting a Screen

Delete an existing screen ID, and the ID will be removed from the screen dropdown list.

1. Select the screen you want to delete from the dropdown screen list.
2. Click the **Delete** button in the clickable icon row of the Designer window.

3. A 'Delete screen?' dialog appears. Click **OK** to proceed.



The screen is now deleted.

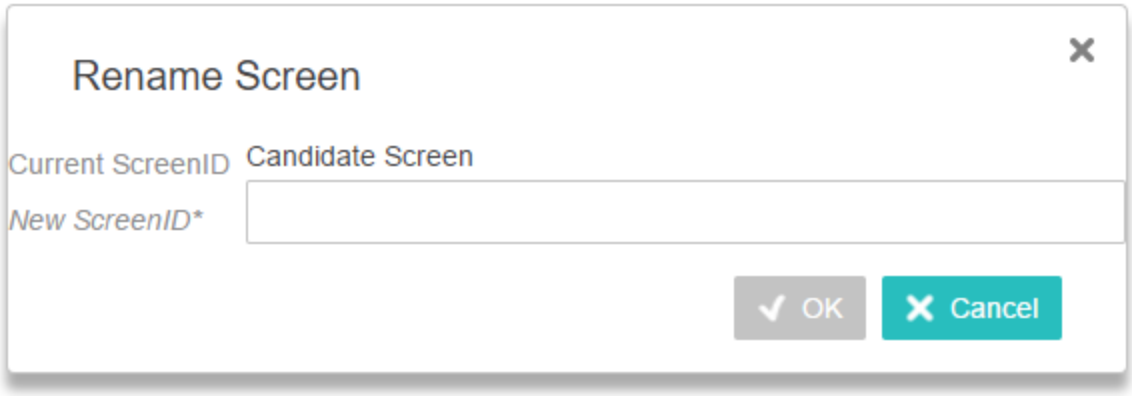
Note: If a screen is referenced by other parts of the configuration a warning will appear telling where the screen is referenced. The screen cannot be deleted until the references are deleted. The delete button is inactive when you are on the ---[LOGIN]---, ---[MAIN]---, or ---[HOMEPAGE]--- screen IDs.

Renaming a Screen

Rename an existing screen ID to a new screen ID, and the existing screen ID will be replaced by the new one.

1. Select the screen you want to rename from the screen list.
2. Click the **Rename** button in the Designer.

3. A 'Rename screen' dialog appears. Enter the new name for the screen ID.



4. Click **OK**.

The screen is now renamed. If the renamed screen is referenced somewhere else in the Web UI configuration, the old name (screen ID) will automatically be replaced by the new name.

Note: The that the 'Rename' button is inactive when you are on the ---[LOGIN]---, ---[MAIN]---, or ---[HOMEPAGE]--- screen.

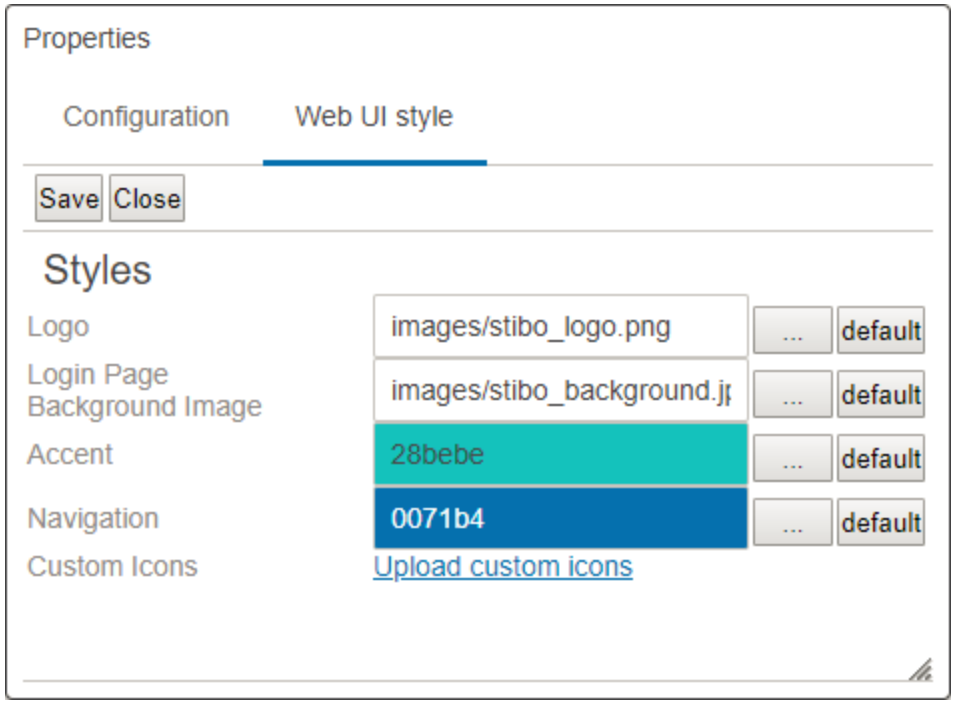
Changing the Web UI Style

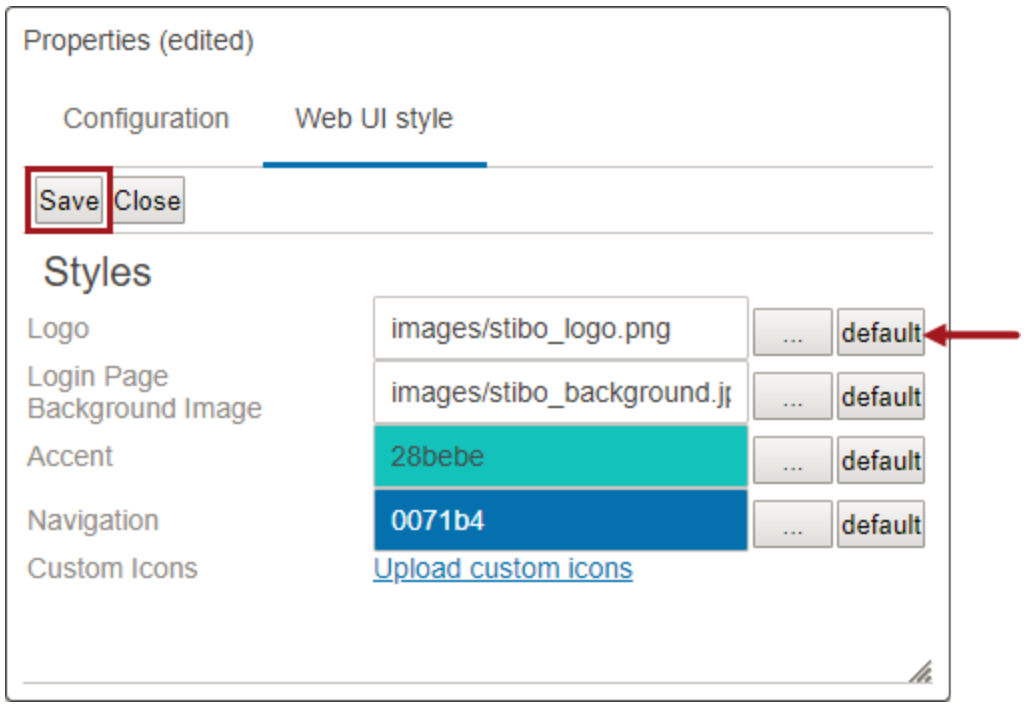
The settings on the **Web UI style** tab can be changed any time designer is open. The Web UI style is applicable to the entire Web UI and not just for the screen and/or component being configured.

1. While on the Web UI style tab, click the ellipsis button (...) to bring up the settings dialog, if applicable.
2. For color selections, drag the marker to pick a color or manually enter one of the color codes in the value boxes. If selecting an image, make a selection using search or browse in the Select Node(s) dialog.

Note: The recommended size for Logo files is 200 x 40 pixels. Background Image files should be larger than 1000 x 800 pixels. Use caution uploading Web UI style image files with a super high resolution, since this may cause Web UI pages to load slowly.

3. Click **OK**.
4. Continue making configuration selections, as desired.
5. Click the default button next to any style to remove a selection you have made.
6. Click the **Save** button within the Web UI style tab.





Saving Changes to a Configuration

There are two options for saving screens in the Designer.

Save: After making configuration edits, click the **Save** button. The screen is saved with the current screen ID.

Save as: Saving a screen configuration under a new screen ID:

1. Click the **Save as** button in the Designer.

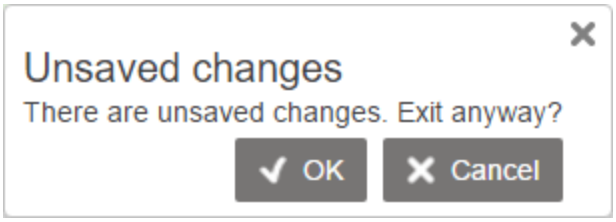
2. When the 'Save screen as' dialog appears, enter an ID for the new screen. Make it descriptive so that it can be easily identifiable when a user looks through Screen IDs to make a selection.
3. Click on OK when finished.

Both the new screen ID and the original screen ID show in the screen dropdown list.

Exiting Design Mode

Exit design mode by clicking the **Close** button.

If you have unsaved configuration changes, you will receive an 'Unsaved changes' warning.



- Click **OK** to close Designer without saving changes.
- Or, click **Cancel** to be sent back to the properties screen so that you can Save the current screen or Save as a new screen ID.

After closing / exiting Designer, the Web UI is now in normal mode.

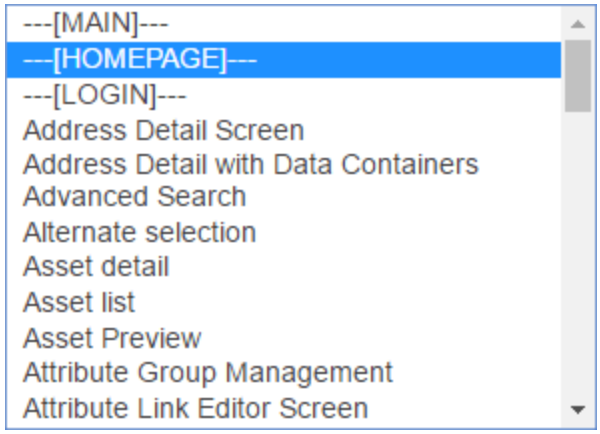
Selecting Components

For descriptions of the components available within the Web UI Designer, see the 'Web UI component configuration reference' available at [system]/webui/docs.

Choose a Screen and Enter Design Mode

There are two ways to select a screen and enter design mode.

- Navigate through the Web UI to the desired page and then enter design mode using the icon. The screen you are on will automatically be selected.
- Or, enter design mode from the homepage and then select the screen. To select a screen through the Designer, click the screen dropdown from the graphic interface and select the screen you want to edit. The desired screen will be shown.



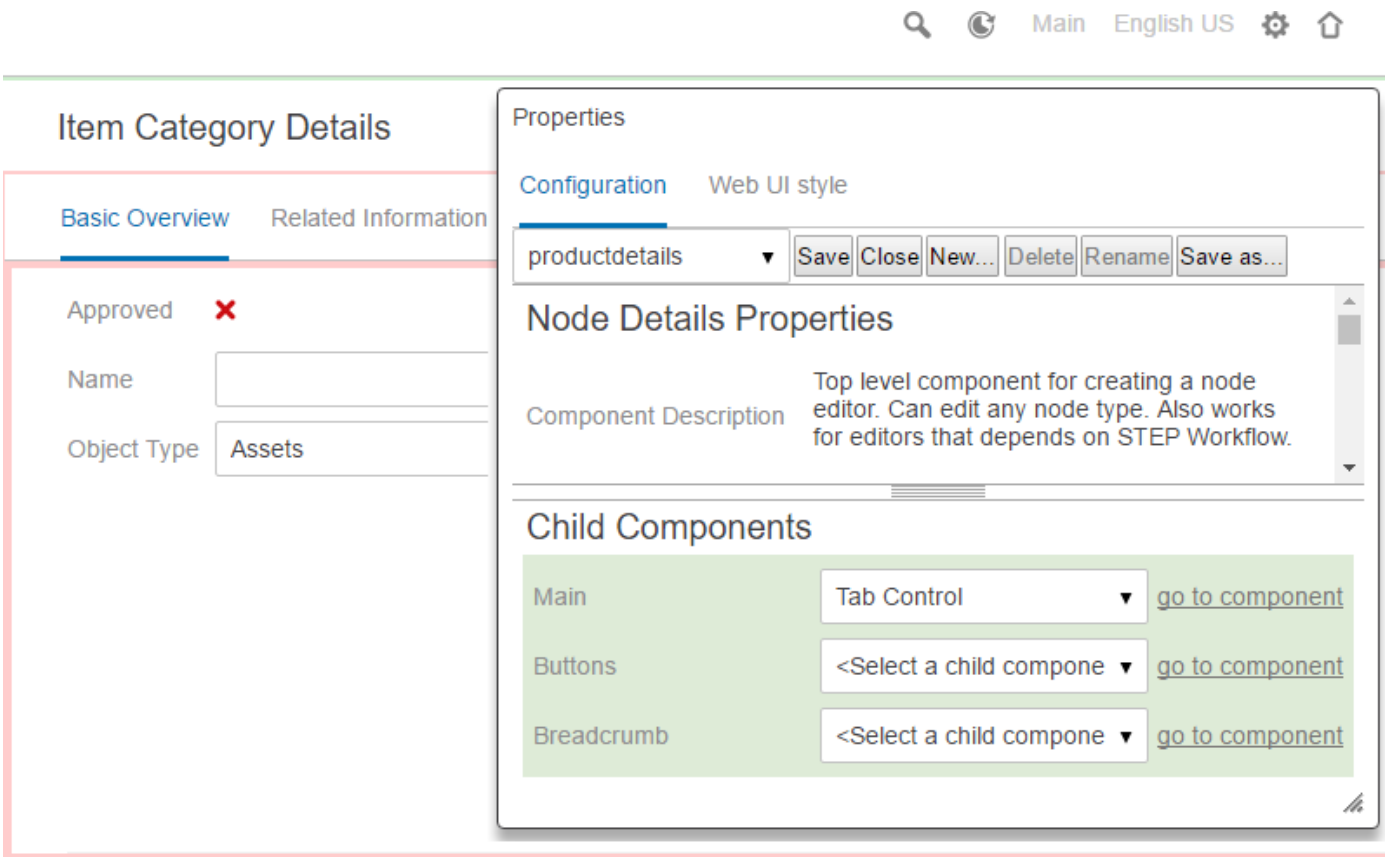
Now you can use Designer to edit the screen properties by configuring the components shown in the properties area and the child components area.

Select Components to Edit

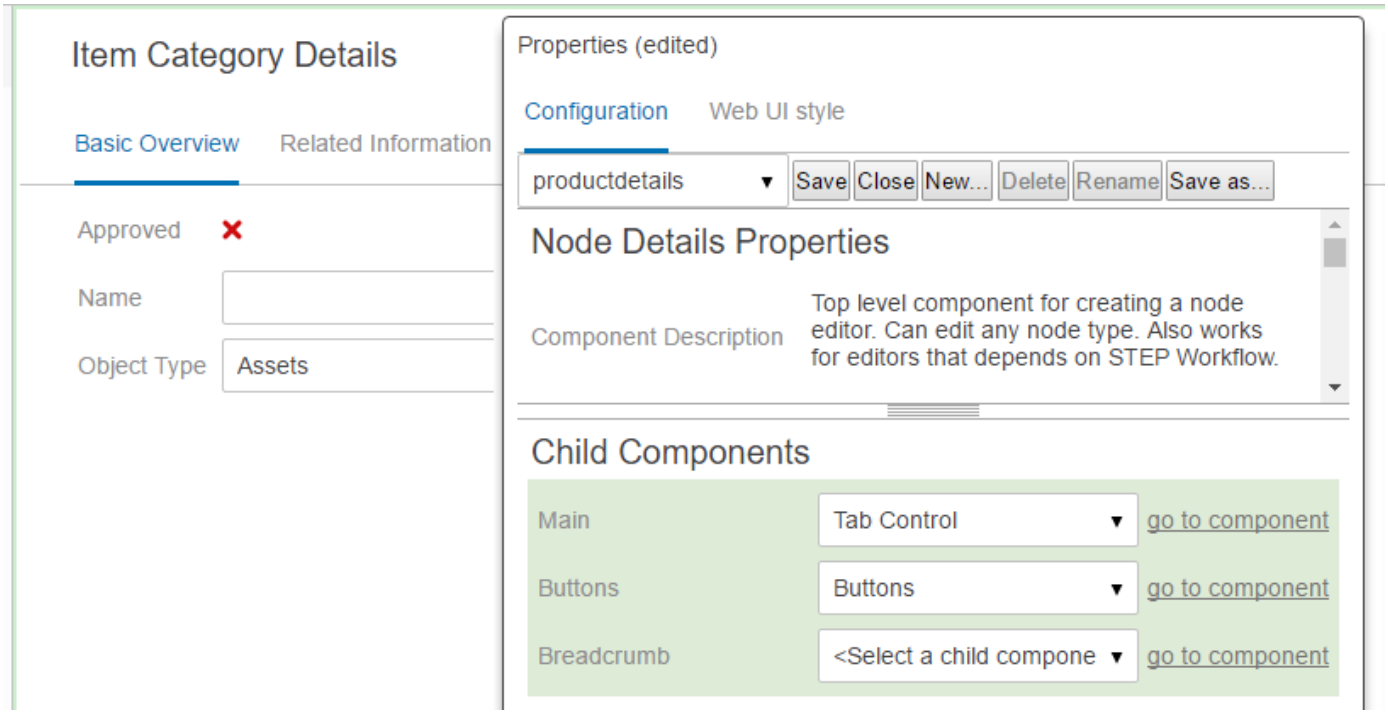
To select a component on a screen, click it and the Designer is updated based on the selection. Moving the cursor over the different components on a screen highlights the components that are selectable.

The highlighting patterns are outlined below:

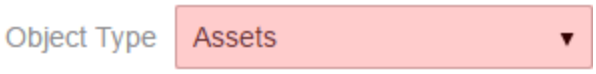
1. Red frame: When you mouse over the component, the red frame indicates that the component can contain child components.



2. Green frame: The green frame is displayed if a component that can contain child components is selected.



3. Red transparent box: Mousing over a component that cannot contain child components.



4. Red transparent box with green frame: Selecting a component that cannot contain child components.

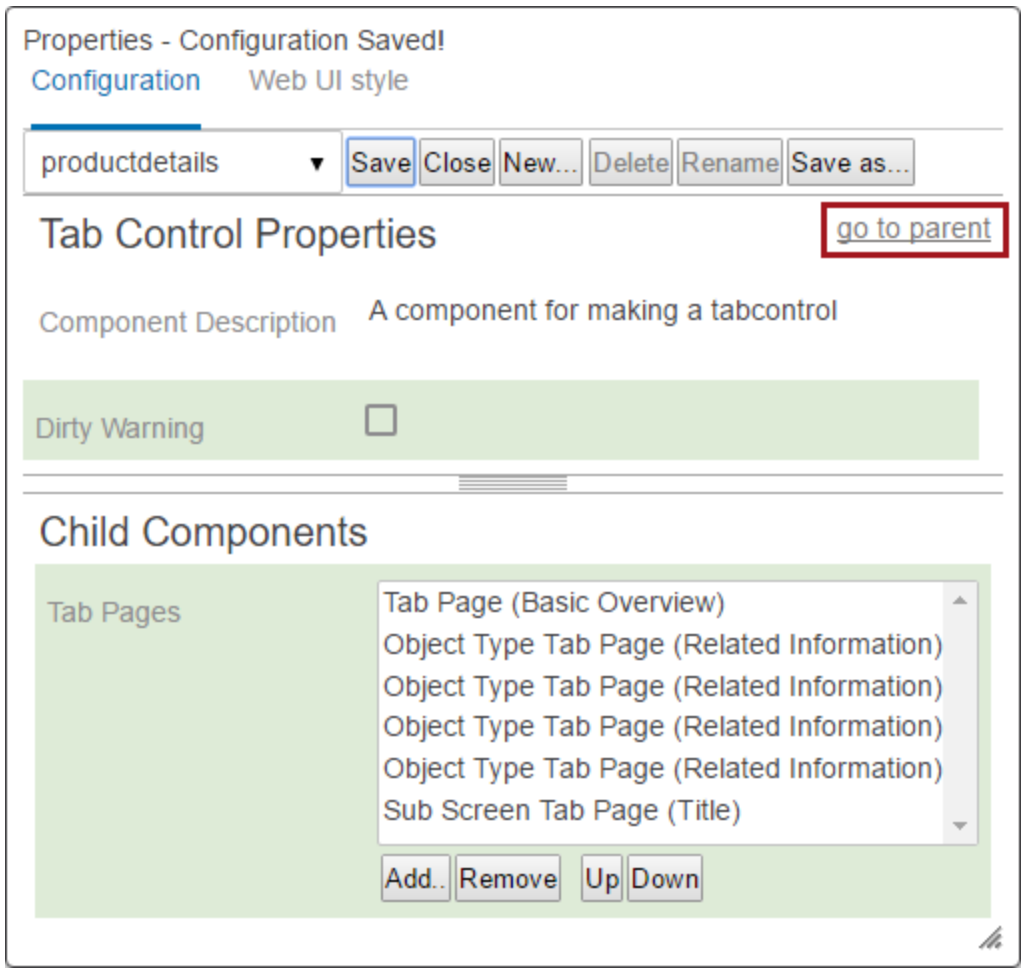
Navigating Up and Down the Component Structure

Some components are considered 'parent' components and can have a child component or components. In the Web UI, you may not be able to see this relationship, making it difficult to select the right component.

You can select a parent component or a child component easily within the Designer.

Selecting a Parent Component

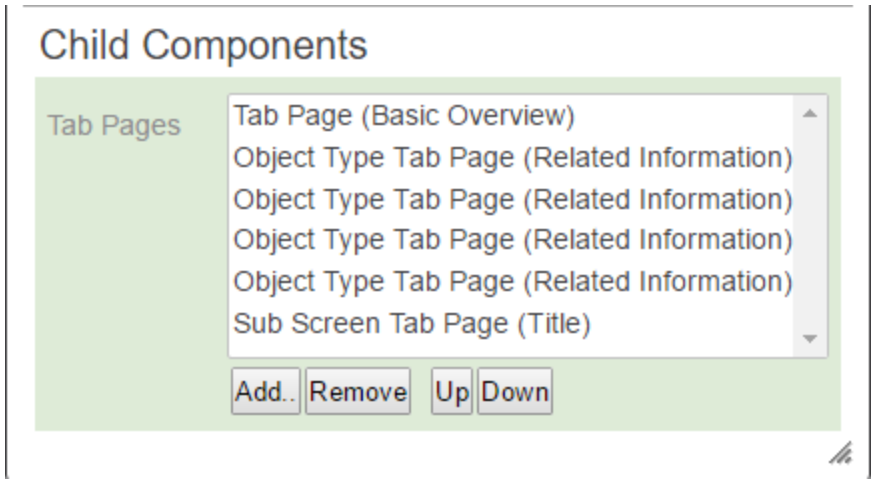
If you have selected a child component and want to select the parent component, use the '**go to parent**' link in the upper right corner of the Properties area to navigate to the parent component. When the 'go to parent' link is no longer showing, you know you are at the top level for that particular component structure.



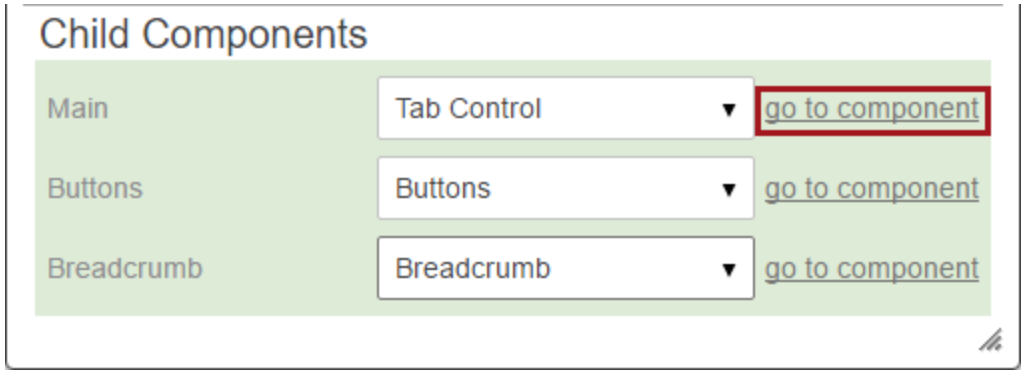
Selecting a Child Component

If you have selected a parent component and want to select a child component, there are two ways to do this within Designer.

1. If the child component list allows multiple components, double-click the child component:



2. If the child component list only allows for one component, a '**go to component**' link is available next to the component listed in the child components area:



For information about **Configuring Components**, see the **Web User Interfaces / Web UI Getting Started** documentation.

Configuring Components

To edit components, select the desired screen and then configure the component properties shown. The properties that are available for each component vary depending on the component type. Configuration options may include the ability to enable / disable parameters based on checkboxes, make displayed component title changes, choose table sorting options, and much more. Configurations may be done by selecting checkboxes, using dropdown menus and node selector buttons to make selections, or by entering text into free-text fields.

For descriptions of the components available within the Web UI Designer, see the 'Web UI component configuration reference' available at [system]/webui/docs.

Prerequisites

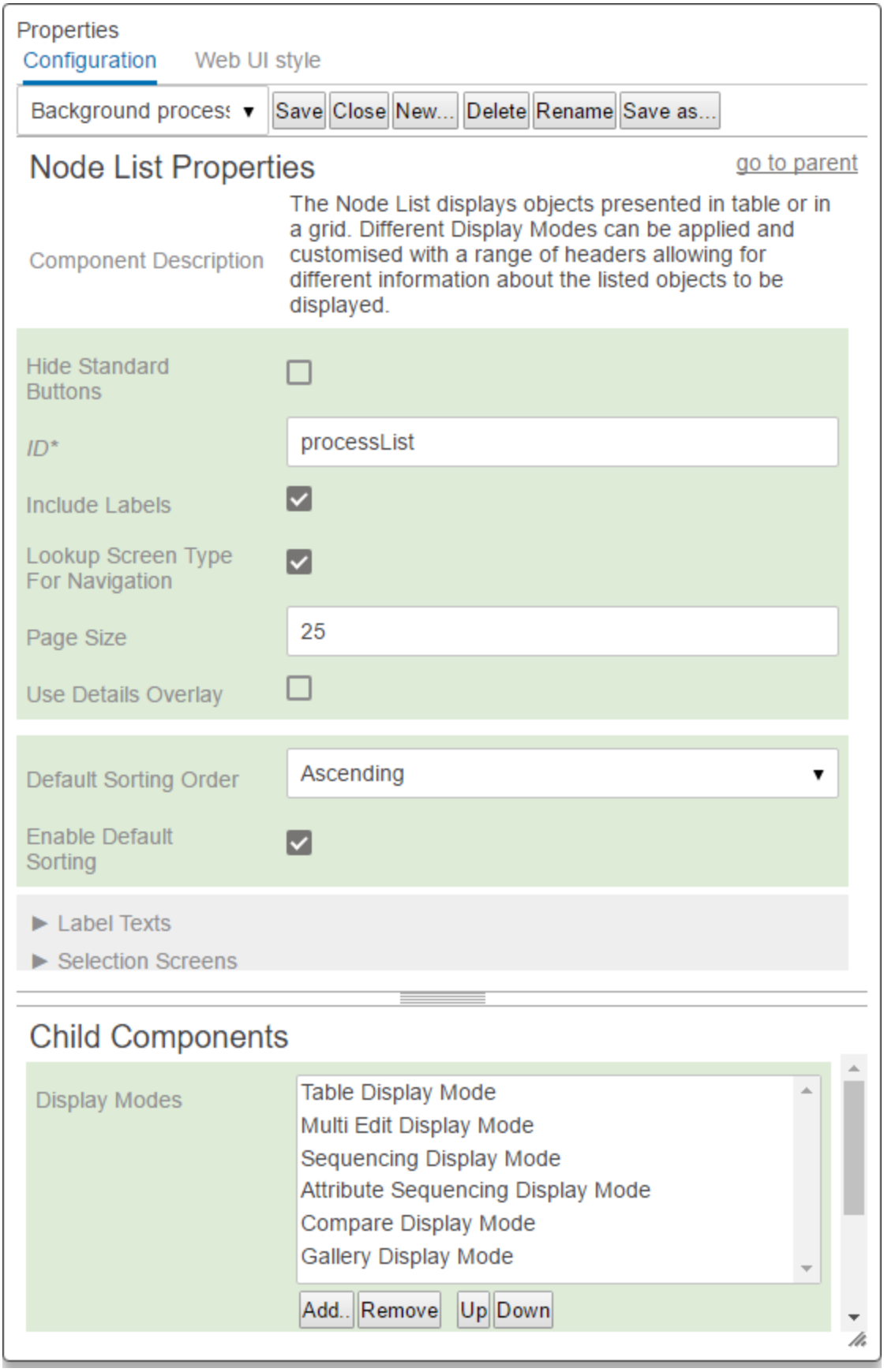
The directions given in this document are simple examples on how to use the properties screens. Before beginning any steps, anyone editing components should be familiar with the **Design Mode Basics** section and the **Selecting Components** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Properties Area

The parameters that are available for each component varies depending on the component type.

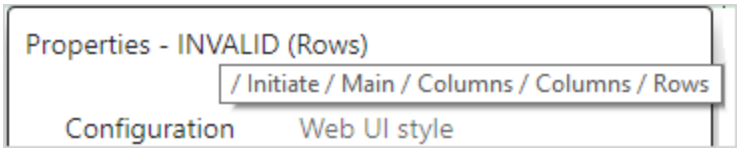
1. In design mode, select the component to edit.
2. On the screen, the Designer displays the available properties that can be maintained for the component.
   - The main parameters, those required or used most often, are shown automatically when the properties window opens. They also have a green background.
   - Some parameters are optional and grouped together under headings (e.g., Validity, Advanced, Label Texts, and Selection Screens). These can be accessed by clicking the arrowhead icon next to the heading name.
3. Changes made to the properties may be displayed directly on the screen as changes are made or will become applicable after saving the Properties screen.

Important: Some properties include a Title parameter, before entering a custom title, it is important to know if the title parameter offers i18n key functionality. Presence of an i18n key indicates that the field can be included in extraction for external translation, and that a value has not been manually populated. Once a value has been manually populated within the designer, it is no longer available for extraction, unless the manual value is removed and the configuration saved, closed, and then reopened. Customers planning to pursue or utilize Web UI translations should not overwrite i18n values manually in the designer, and should instead populate texts within the Web UI locales files on the application server. For more information, see the **Localization** topic within the **Administration Portal** documentation.


Properties
Configuration
Web UI style
Background process
Save
Close
New...
Delete
Rename
Save as...
Node List Properties
go to parent
Component Description
The Node List displays objects presented in table or in a grid. Different Display Modes can be applied and customised with a range of headers allowing for different information about the listed objects to be displayed.
Hide Standard Buttons
ID*
processList
Include Labels
Lookup Screen Type For Navigation
Page Size
25
Use Details Overlay
Default Sorting Order
Ascending
Enable Default Sorting
Label Texts
Selection Screens
Child Components
Display Modes
Table Display Mode
Multi Edit Display Mode
Sequencing Display Mode
Attribute Sequencing Display Mode
Compare Display Mode
Gallery Display Mode
Add..
Remove
Up
Down

Note: If you enter design mode and the Properties dialog indicates that there are INVALID settings, you need to update and/or remove the parameters / components that are not valid for your data structure. For troubleshooting, the Properties dialog header identifies INVALID settings.

Hovering over the INVALID text displays the path to the parameter / component where there is a problem. Once the initial issue is fixed, additional errors may exist and need to be fixed. 'INVALID' will no longer display when validity is restored.



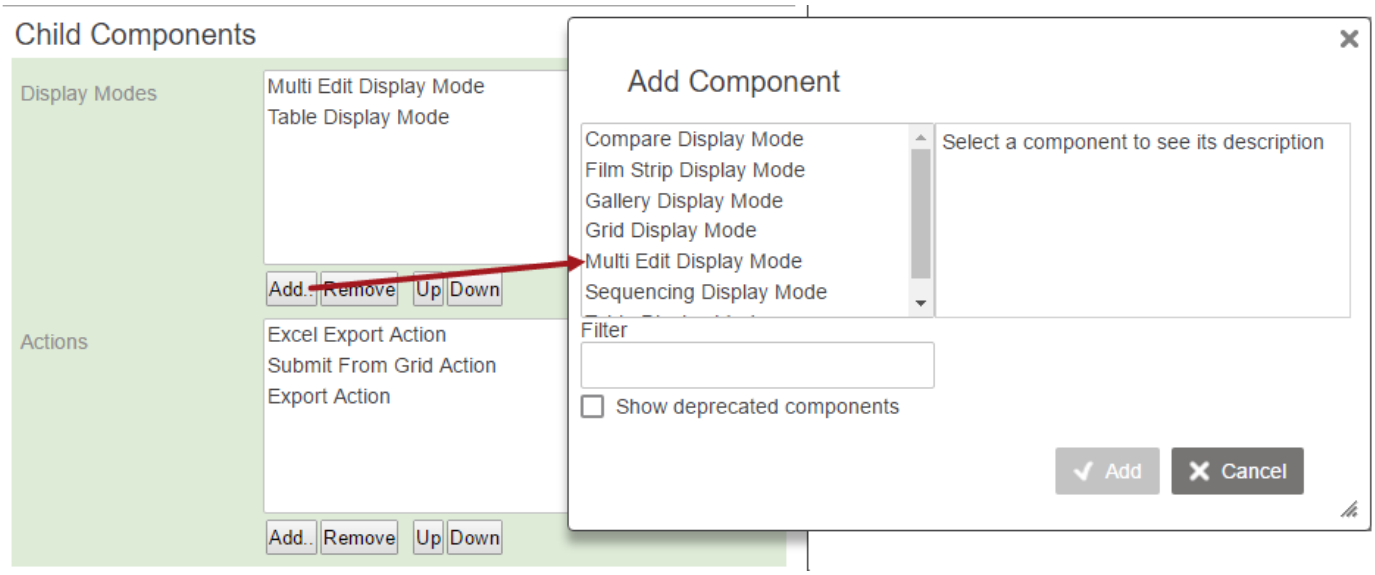
Child Components

Some Web UI components, called master components, can contain child components. Child components allow a user to drill down further into component configurations. These are maintained in the Child Components area in the Designer. Using the previous screenshot as an example:

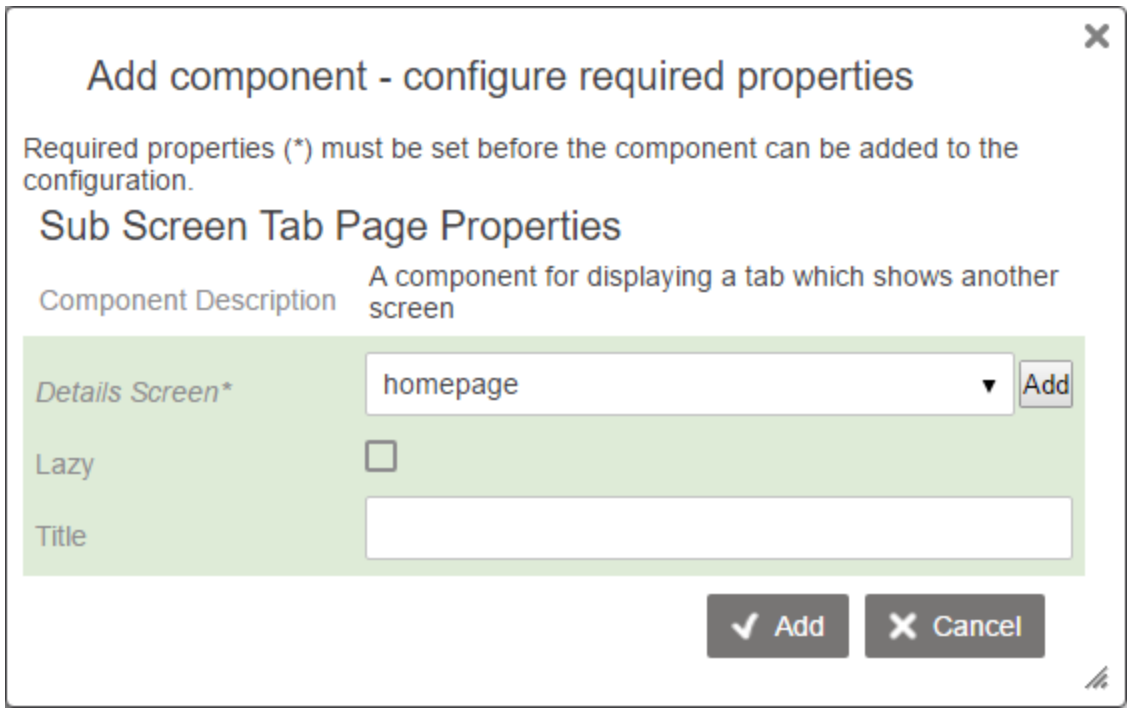
- Select the master component (Node List) you want to edit as described in the Properties Area section of this document.
- In the Child Components area, the child components that have been added to the master component (Table Display Mode) are shown. Remove or add more child components or change the sequence of the child components using the Up and Down icons.

Adding and Configuring a Child Component

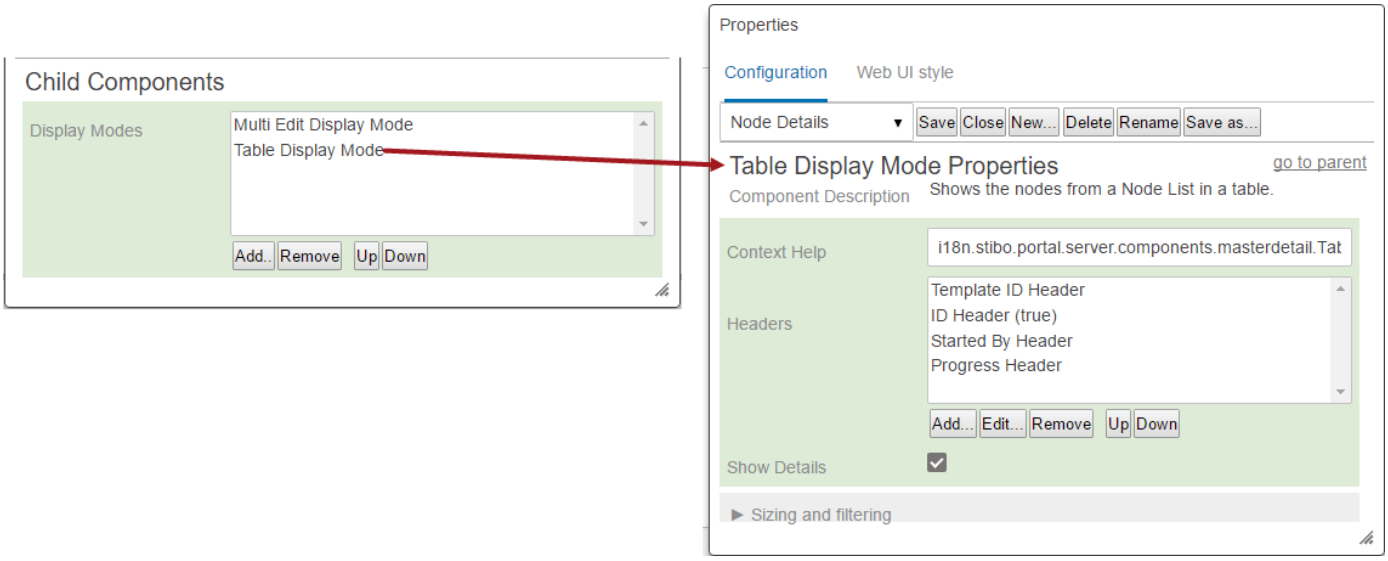
1. In the Child Components area, click the **Add** button, and a list of possible child components will be displayed in an 'Add component' dialog box.



2. Click on a component to make a selection, and then click **Add**.
3. If the chosen child component has a mandatory parameter that must be defined or verified before it can be displayed properly, a dialog will automatically show and selections / changes can be made. As an example, in the screenshot that follows, a user can change the default Details Screen before adding the child component—or leave the default 'homepage' selection and just click Add.



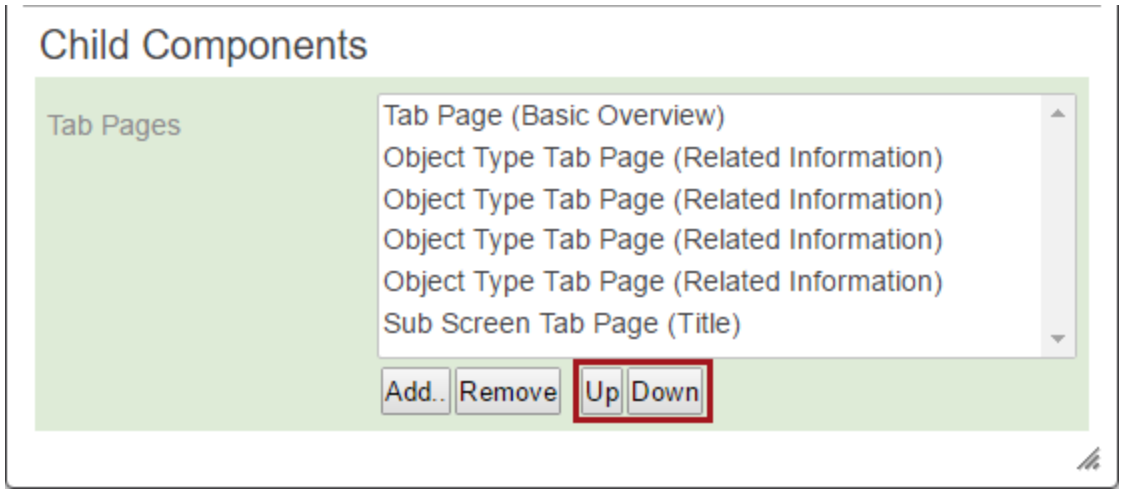
4. If a dialog is not automatically displayed, no immediate component decisions need to be made or verified. The component will be added to the child component list and can be selected / maintained as any other component. To configure the component, double-click on the component name within the child component list and a properties screen will be displayed. Make selections as needed.



5. Click Save on the properties screen before exiting design mode.

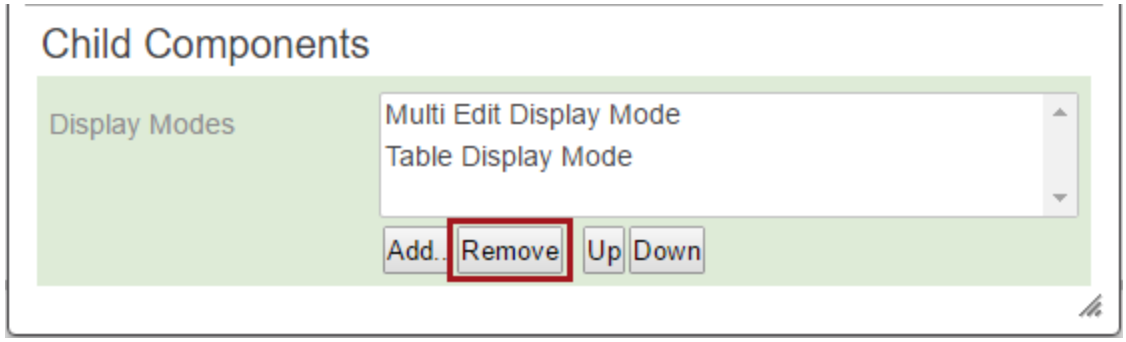
Changing the Sequence of Child Components

1. In the child component area, click to select the child component to be re-sequenced. In the next screenshot, 'Tab Page (Images and Documents)' is selected.
2. Click the Up or Down button to change the sequence of the selected child component.



Removing a Child Component

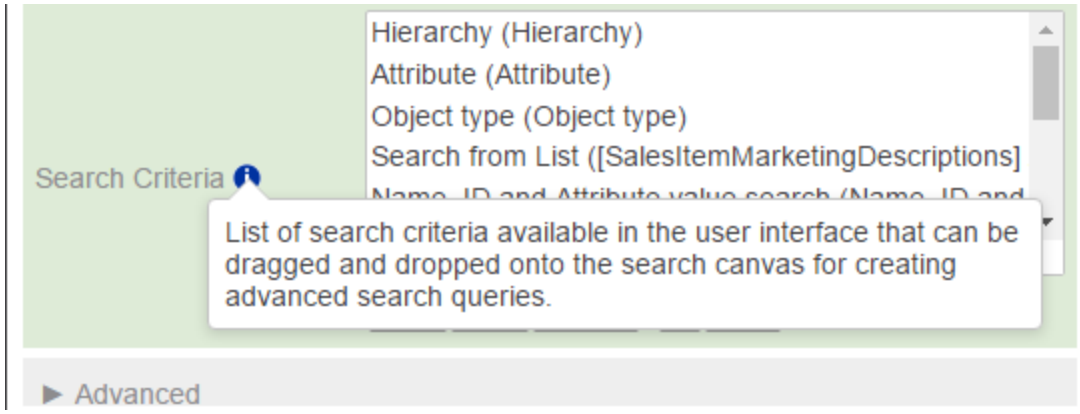
1. In the child component area, click to select a child component. In the next screenshot, 'Multi Edit Display Mode' is selected.
2. Click the Remove button. The child component is removed from the screen.



Help Text

Context help is available for each component in both the Properties area and the Child Components area, and provides users with a brief explanation about the purpose of the component and/or parameter. This is especially helpful if the user is fairly knowledgeable about a configuration but needs a little guidance completing a step, enabling a specific parameter, or understanding a new component.

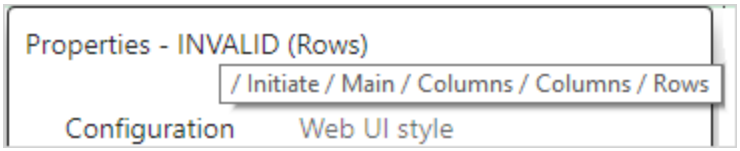
Access help text by placing the cursor over the component / parameter name. A circle icon with an 'i' inside of it will show. Click the icon and a dialog box displays with descriptive help text. To remove the help text box, click the 'x' in the top right corner of the box.

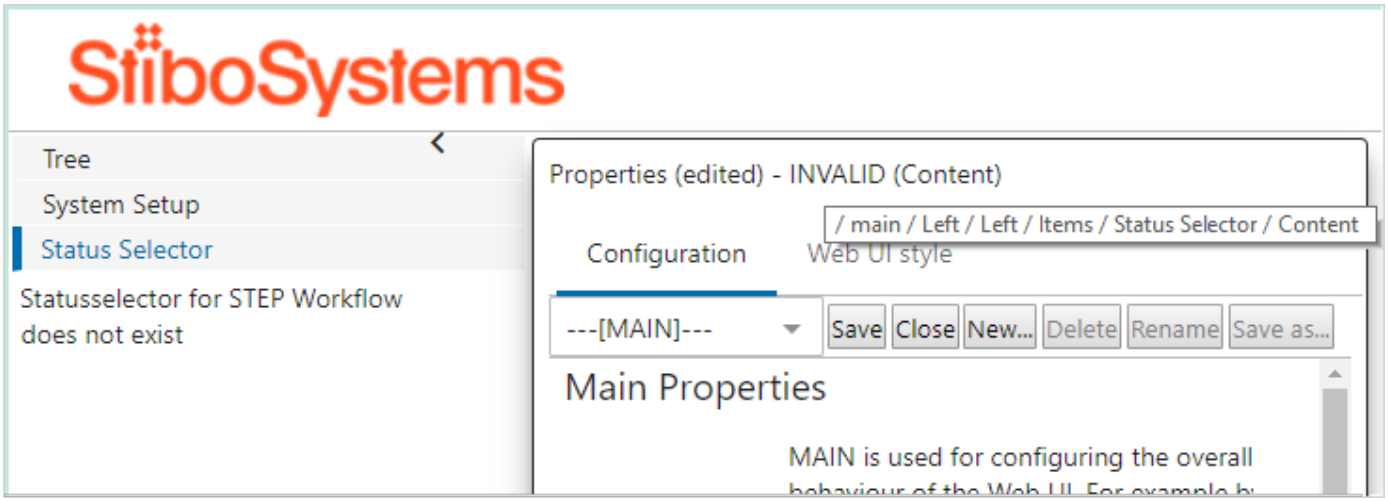


Invalid Properties

If you enter design mode and the Properties dialog indicates that there are invalid settings, you need to update and/or remove the parameters / components that are not valid for your data structure. For troubleshooting, the Properties dialog header identifies INVALID settings.

Hovering over the INVALID text displays the path to the parameter / component where there is a problem. Once the initial issue is fixed, additional errors may exist and need to be fixed. 'INVALID' will no longer display when validity is restored.





Using Web UI

This documentation gives users more details in regards to how components work and how they can be configured.

Important: GUI setups described in this section are not meant to be used to replace user privileges. For example, if you have allowed all privileges to the primary product hierarchy, you cannot control updates to specific product structures with GUI setups. The user privileges must be used to control such actions.

For more information about privileges and user setup, see the **Users and Groups** section and **Adding User Privileges for a Group** section of the **System Setup / Super User Guide** documentation. Also, see the **Web UI Getting Started** topic.

General information on Web UI behavior

The ability to copy and paste a URL from the Web UI to recreate a mirror image of the original Web UI screen in another browser tab or window is supported, but there are limitations to this 'deep linking' that may affect a user's experience. The following items are not remembered when accessing a deep link:

- Freezing and manual table flipping (horizontal / vertical).
- Attribute groups, states, and value sections (expanded / collapsed).
- Hide equal / Mark different (actions for Multi Context screen).
- Select Languages, affecting the number / order of displayed lines in table (action on Multi Language Screen).
- Applied user configurable views, if end user does not share the same configurable view as original user; instead, they will see the standard layout or their own previously applied user configurable view.
- When multiple pages of Homepage widgets are sent in a URL, the URL will not remember the specific page of widgets, taking users to the first page by default.
- Automotive search in Application Manager.
- Manually resized column widths.
- Values entered but not saved including open editor dialogs.
- State of panels (e.g., expanded collapsed BGP/ Warning notifications/ Primary navigation).
- Position of drag handles and scroll bars.

Additionally, consider these items:

- Pages will not be scrolled to focus on read-only attributes on a Node Details screen.
- Focus on attributes on a Node Details screen is not visible when fields are checkboxes or radio buttons.
- Having two Node Lists inside the same tab, only one display mode state is saved.

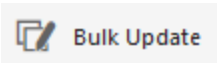
Action Buttons

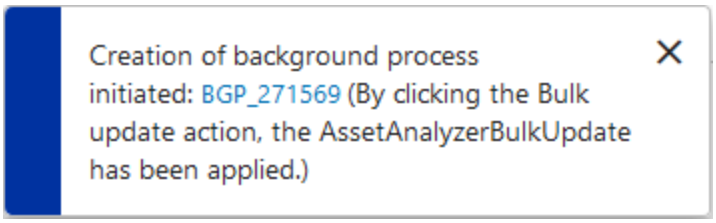
In Web UI design mode, action buttons can be added to one or more types of screens and/or components. The following list is not an all-inclusive list.

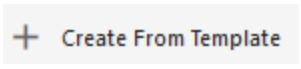
For configuration of some of these action buttons that appear on a Node List, see the **Action Button Configuration on a Node List** topic in the **Web User Interface** documentation.

Note: Some print-related actions may not be present on the list.

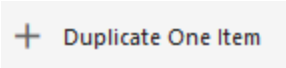
Action Title	Description	Screen / Component Configuration	Topics with additional Information
Add Autopage Items Action	This component adds items to an Autopage Publication.	Child Action component on a Node List	Node List Component
Add Selected Items To Collection	This component adds selected nodes to the collection without query URL.	Child Action component on a Node List	Node List Component
Add To Basket Action	When added to a PowerSearch screen, this action lets users add the selected items to the basket.	Child Action component on a Node List	Node List Component
Add to Batch Action	When added to the Actions parameter of a Node List, this component allows the user to add the selected items to a batch.	Child Action component on a Node List	Node List Component
Assign Toolbar Action	On the Task List screen, this component can assign and unassign tasks in bulk. The Assign toolbar action comes by default with two options: 'Release task' and 'Assign to.' Selecting the 'Release task' option will release the task to the user group to which the workflow is assigned. Selecting the 'Assign to' option results in a second dropdown that lists both the default user group to which the workflow has been assigned, and all users to which the task item can be assigned, including the user who has clicked the button.	Child Action component on a Node List	Node List Component Assigning Workflow Tasks in Web UI
Attribute Add Valid Object	This component adds valid object types to an attribute. The user can browse or search for the desired product	Child Action component on a	Node List Component

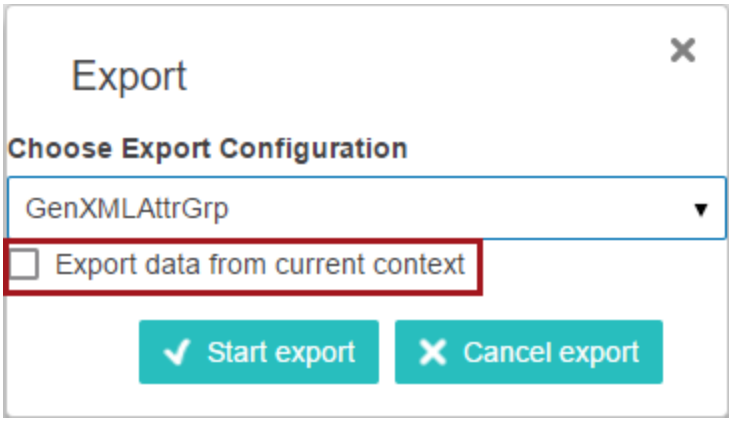
Action Title	Description	Screen / Component Configuration	Topics with additional Information
Types Action	object type.	Node List	Attribute Management Screen
Attribute Remove Valid Object Types Action	To remove a valid object type from a product, select the object types that need to be removed, then click on the 'Attribute remove valid object types.'	Child Action component on a Node List	Node List Component Attribute Management Screen
Bulk Update Action	Allows the user to perform a bulk update of the selected items.	Child Action component on a Node List	Node List Component
Bulk Update List Action	This component allows the user to perform bulk updates of the selected items using templates and root node parameters that house bulk update configurations.	Child Action component on a Node List	Node List Component Parameterized Business Actions in Web UI
Bulk Update Template Action	Allows users to select items in a Node List and update them all at once according to a pre-configured Bulk Update configuration. The title, icon, and help text for the action are configurable. • How the toolbar action button displays in the toolbar:  With this component, users can also configure the text that will display in the information popup when the bulk update action has been initiated. Background process popups can be configured to include not only a custom message, but also existing names and processes by adding braced words. The braced words are: {Action}, {Configuration}, {WorkflowID}, {WorkflowName},	Child Action component on a Node List	Node List Component Bulk Updates

Action Title	Description	Screen / Component Configuration	Topics with additional Information
	{WorkflowState}, {StatusFlag}, {ItemCount} and {ImportFile}. Each of these will bring in the corresponding element name into the background process message. Below is an example of a valid 'Process Description' message added in the designer: And below is how the background process popup would display: 		
Business Action with Web UI Bind	Enables users to execute a business rule when clicking a button in the Web UI. Can be used, for example, to streamline navigation through workflows in the Web UI. Because the Business Action with Web UI Bind component enables business actions to make changes in the Web UI, this component can be applied by admin users in a wide range of scenarios.	Toolbar action button on a Node List or a standard action button on a Node Details screen	Business Action with Web UI Bind Component Node List Component Node Details Screen
Cancel Asynchronous Job Action	When added to a job list screen, this component allows the user to cancel the selected asynchronous job(s). Note that this action button is designed to cancel only asynchronous translation jobs, not all backgound process (BGP) jobs.	Child Action component on a Node List	Node List Component
Change Reference Target Action	This component changes the target of the selected reference(s) in a table.	Child Action component on a Node List	Node List Component

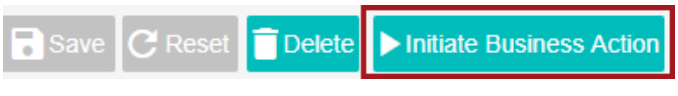
Action Title	Description	Screen / Component Configuration	Topics with additional Information
Confirm Duplicate From Grid Action	When performing a merge, this component confirms the selected items in a grid as duplicates. To perform a merge, choose which objects to merge with the selected node and click 'Confirm duplicate from grid.' In the message that pops up, provide a reason for why they are duplicates, then click OK. Navigate to the 'Confirmed Matches' component screen and select which match to merge the currently selected node with. Then, click the 'Navigate to merge nodes screen' button. On the merge screen, choose which attributes and references will survive the merge by clicking the arrows next to them. Select the surviving node via the radio buttons displayed above the Merge button.	Child Action component on a Node List	Node List Component Merging Confirmed Matches
Create from Template	Allows users to configure product-based templates that can be used to create new products. When one or more templates have been created, users can click on the 'Create from Template' toolbar action to create a new product. A 'Create New Item' window displays with a series of template options, each indicated by an image. Once created and a new name assigned to the new product, the selected template's attributes, attribute values, and references are applied to the new product. This component allows users to configure the new object's object type and placement in the hierarchy to be different than that of the template. It is important to note that an auto ID configuration must be setup for the relevant object type to enable this action. • How the toolbar action button displays in the toolbar: 	Child Action component on a Node List	Node List Component
Create Collection Action	Collections are containers for storing sets of objects. This action creates a collection from results of a search.	Child Action component on a Node List	Node List Component Status Selector Homepage Widget

Action Title	Description	Screen / Component Configuration	Topics with additional Information
Create Collection Action Automotive	This action creates a collection from results of a search within the Application Manager Screen.	Child Action component on a Node List	Node List Component Results Table and Toolbar
Create Confirmed Match From Grid	This action adds an additional confirmed match. Matches must be confirmed via the Potential Duplicates List or Deduplication List screens.	Child Action component on a Node List	Node List Component Confirmed Matches Component
Create References Action	Enables the user to create a reference or link between selected objects and one or more targets for the configured reference or link type. The available reference and link types include Classification, Entity, Image and Document (assets), or Product reference types, or the Product to Classification link type. The reference and link types applied can be displayed using the 'Reference Header' when configured as a Table Header in a table / grid Display Mode.	Child Action component on a Node List	Node List Component Create References Action Configuration
Delete Confirmed Match From Grid Action	This action deletes a confirmed match.	Child Action component on a Node List	Node List Component Confirmed Matches
Delete From Collection Action	This action deletes the selected item(s) from the collection.	Child Action component on a Node List	Node List Component
Delete From Grid Action	This action deletes the selected item(s) in the grid.	Child Action component on a Node List	Node List Component
Download Assets Action	Asset Download is an add-on component for STEP that	Child Action component on a	Node List Component

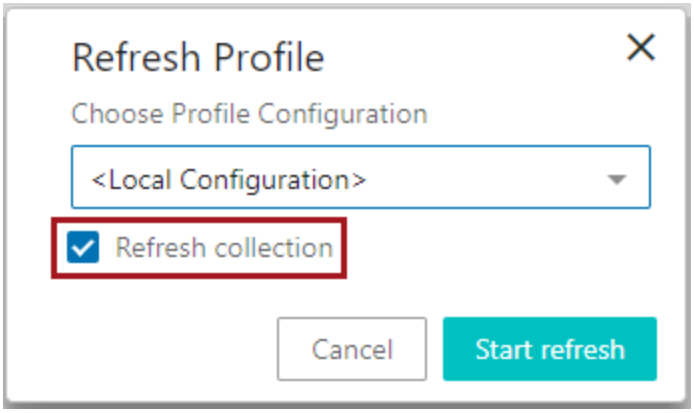
Action Title	Description	Screen / Component Configuration	Topics with additional Information
	enables users to provide a URL to an asset on a product and have STEP automatically download the asset. This functionality allows users—typically suppliers—to efficiently create and/or replace their business-critical assets in STEP, adding an additional layer of flexibility in how they can manage and store the assets and images that need to be linked to their products. The Asset Download component enables STEP to pull assets (e.g., images) from external URLs, store them in supplier asset classification structures, and link them to products in an automated operation.	Node List	Asset Download
Duplicate Item Action	Enables users to duplicate a single item in a Node List. Once an object in a Node List (displayed in a tabular view style) is selected, this toolbar action button can be used to duplicate that object. The duplicated item is added to the same parent node as the original and retains all of the original object's information, including references. It is important to note that an auto ID configuration must be setup for the relevant object type to enable this action. • How the toolbar action button displays in the toolbar: 	Child Action component on a Node List	Node List Component
Edit Collection Search Criteria Action	This action allows the user to edit the search criteria for a collection.	Child Action component on a Node List	Node List Component
Experian Email Validation	Once all setup is complete, the Experian Email Validation integration allows users to perform email validations on a node list with one click of the 'Validate Emails' button. Users can choose one or more objects containing email account data that need to be validated, then click on the 'Validate Emails' button to run the 'Experian Email validation Job' background process.	Node List component	Experian Email Validation Integration in Web UI

Action Title	Description	Screen / Component Configuration	Topics with additional Information
Export Action	Downloads selected items using the selected export configuration. • By default, STEPXML and Advanced STEPXML configurations export data from the current Web UI context. • By default, non-STEPXML configurations export data from the context saved in the export configuration. To overwrite the configuration context and export data from the current Web UI context, check the 'Export data from current context' parameter. 	Node List component on a: • Task List screen • Display Children screen • Classification screen • Collection Content screen • Asset Basket screen • Advanced Search screen	Node List Component Task List Advanced Search Search Screen Basket
Export Action Automotive	This action can be added to a Node List within the Application Manager screen for downloading selected items in the current state using a saved export configuration.	Child Action component on a Node List	Node List Component Using Automotive Exporters
Freeze Panes	Allows Node List tables viewed in either the Multi Edit or Comparison View modes to be locked vertically and horizontally on a selected cell. The parameter that enables Freeze Panes is available in the 'Advanced' section of the Multi Edit view mode in the designer. • How the toolbar action button appears in the toolbar:	Node List component in Multi Edit or Compare View	Node List Component

Action Title	Description	Screen / Component Configuration	Topics with additional Information
	 • How the Enable Freeze Panes parameter appears in the designer: 		
Generate PDF	This component generates PDF files for the mounted pages in the selected publication(s), section(s), or page (s).	Child Action component on a Node List	Node List Component
Golden Record Advanced Merge From Grid	This action, when added to a Golden Record Clerical Review Task List screen, opens the Golden Record Advanced Merge Dialog, which allows the user to edit the golden records merged result.	Child Action component on a Node List	Node List Component Golden Record Clerical Review Task List Golden Record Advanced Merge Dialog
Golden Record Merge From Grid	In the Golden Record Clerical Review Task List, this action merges the selected task(s) into a single surviving golden record (for each task selected). Which values get promoted to the surviving golden record are determined automatically by the survivorship rules specified on the corresponding matching algorithm.	Child Action component on a Node List	Node List Component Golden Record Clerical Review Task List
Golden Record	In the Golden Record Clerical Review Task List, this action enables the user to reassign chosen task(s) to	Child Action component on a	Node List Component

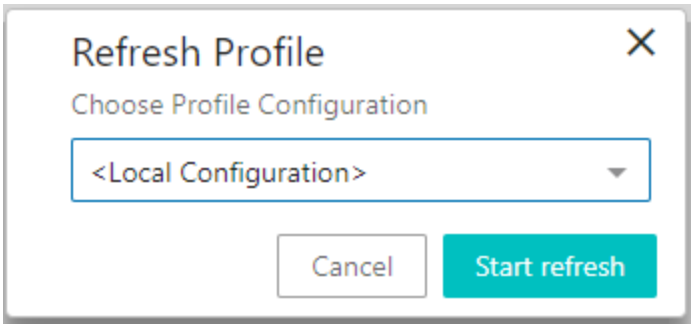
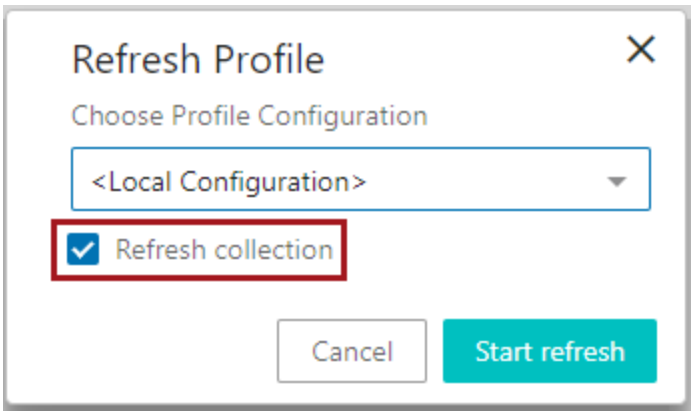
Action Title	Description	Screen / Component Configuration	Topics with additional Information
Reassign From Grid	another user or user group configured in the workflow. The new assignee can be selected from the 'Select assignee' dialog box that pops up.	Node List	Golden Record Clerical Review Task List
Golden Record Reject From Grid	In the Golden Record Clerical Review Task List, this action confirms golden records as non-duplicates and removes them from the workflow.	Child Action component on a Node List	Node List Component Golden Record Clerical Review Task List
Golden Record Submit From Grid	This action submits the configured event to the chosen task(s) in the Golden Record Clerical Review Task List.	Child Action component on a Node List	Node List Component Golden Record Clerical Review Task List
Guided Data Entry	This action will move selected items into Guided Data Entry. The Guided Data Entry window displays configured attributes, attribute groups, and reference types for the selected objects. Users may then add attribute values or references to complete the Guided Data Entry 'stepper.'	Child Action component on a Node List	Node List Component Adding Guided Data Entry to Web UI
Initiate Business Action	Once configured, the Initiate Business action component can be used to start a business action. Below is an example of the Initiate Business Action button: 	Child Action component on a Node List	Node List Component Using Asset Download

Action Title	Description	Screen / Component Configuration	Topics with additional Information
Initiate Business Condition	Creates a button for initiating a business condition.	Child Action component on a Node List	Node List Component
Initiate Business Rule Action	Action for invoking a business rule on a single selected entry.	Child Action component on a Node List	Node List Component
Merge Confirmed Match From Grid Action	This action launches a screen where one can view and merge two nodes. In order to perform a merge, the user chooses which attributes and references will survive the merge, then select the surviving node via the radio buttons and clicks the Merge button.	Child Action component on a Node List	Node List Component Merging Confirmed Matches
Move Action	This component can be used for moving products in the product hierarchy. If it is placed in the Buttons component, it will move the currently selected product. If it is placed in the Actions parameter on a Node List, it will move the products that are selected in the list.	Child Action component on a Node List	Node List Component
Multi Context Edit	This component enables users to view object information for multiple objects in multiple contexts in the same view. Once configured, users implement this editable view by selecting the objects to be viewed from the Node List, and then clicking the Multi Context Edit button. Users then select which headers should display in the view, and then which contexts should be included in display. The view shows all selected objects, once for each selected context, with all of the selected attribute information.	Child Action component on a Node List	Node List Component Multi Context Edit Component
New Item Action	This action can be added to a Node List inside the Children Of Types screen. This allows the user to create new children below the selected product.	Child Action component on a Node List	Node List Component Children of Types Screen
Refresh Profile Action	Allows the user to manually generate / update a data profile for the currently selected collection.	Child Action component on a Node Lists	Node List Component

Action Title	Description	Screen / Component Configuration	Topics with additional Information
	When clicked, the user is prompted to select a profile configuration. A 'Refresh collection' option is also available. Checking this box will refresh the collection before the profile is run:  A link to the background process is provided any time this action button is used.	screen	
Reject Duplicate From Grid Action	This component, which can be used while merging confirmed matches or confirming a deduplication via clerical review, rejects the selected items in grid as duplicates.	Child Action component on a Node List	Node List Component Merging Confirmed Matches Configuring a Deduplication Clerical Review
Remove From Basket Action	This action can be added to the Basket screen. It allows the user to remove the selected items from the basket.	Child Action component on a Node List	Node List Component
Remove References Action	This component enables users to remove one or multiple references from one or multiple objects in a Node List. Once properly configured, initiating this action brings up a	Child Action component on a Node Lists	Node List Component

Action Title	Description	Screen / Component Configuration	Topics with additional Information
	window displaying a menu of all configured reference types for which there are references, along with the objects referenced using that reference type. Users may then select one or more of the referenced objects and remove all references to that object in all selected Node List items in one action. • How the toolbar action button appears in the toolbar: 	screen	
Select	This action can be added to a Planned Spread Navigator screen. This allows the user to choose the version for which to display the planned pages.	Child Action component on a Node List	Node List Component
Simple Exporter Action	The Simple Export action can be added to a toolbar on a given screen a Node List or Task List, enabling the user to export a selection of products, classifications, or entities. Supported export formats for the simple export are Excel and CSV.	Child Action component on a Node List	Node List Component Simple Export
Smart Sheet Export Action	Used alongside the Smartsheet Import action, the Smartsheet Export action maintains product data by allowing users to download Smartsheet maintenance files from products in a workflow. To access the Smartsheet Export action, the user must be a member of a supplier group and have appropriate privileges to access the Web UI Designer.	Child Action component on a Node List	Node List Component Smartsheet Export Action
Start Workflow From Grid	When working with objects in Web UI, a Start Workflow Action button can be added to any Node Details screen. This allows users to work with object data and then initiate the object into a workflow by clicking the 'Start STEP Workflow' button at the bottom of the screen. The button is only enabled when initiation is possible. If disabled, the object may already exist as a task in the designated workflow. **Note:** The button label for 'Start STEP Workflow' can be	Child Action component on a Node List	Node List Component Initiating Objects in a Workflow using Web UI

Action Title	Description	Screen / Component Configuration	Topics with additional Information
	configured in the designer.		
Stateflow Filtering Action	This action, when added to a Planned Spread Navigator screen, allows the user to filter pages by stateflow assignee.	Child Action component on a Node List	Node List Component
Submit From Grid Action	This action submits the selected item(s) in a grid.	Child Action component on a Node List	Node List Component
Unlink Duplicate From Grid Action	This action unlinks the selected items in a grid. To use this action, select two source records and click the Unlink Duplicates button. This will unlink the two records and mark them as confirmed non-duplicates. Only one will survive and remain linked to the golden record.	Child Action component on a Node List	Node List Component Golden Record Linked Members Component
Unlink Single Record from Golden Action	This action unlinks the selected record from the golden record. To use this action, select one source record and click the Unlink Single Record From Golden button. This will remove the source record reference from the golden record.	Child Action component on a Node List	Node List Component Golden Record Linked Members Component
Update Profile Action	Allows the user to manually generate / update a data profile for the currently selected node. When clicked, the user is prompted to select a profile configuration:	Child Action component on a Node Lists screen	Node Details Screen

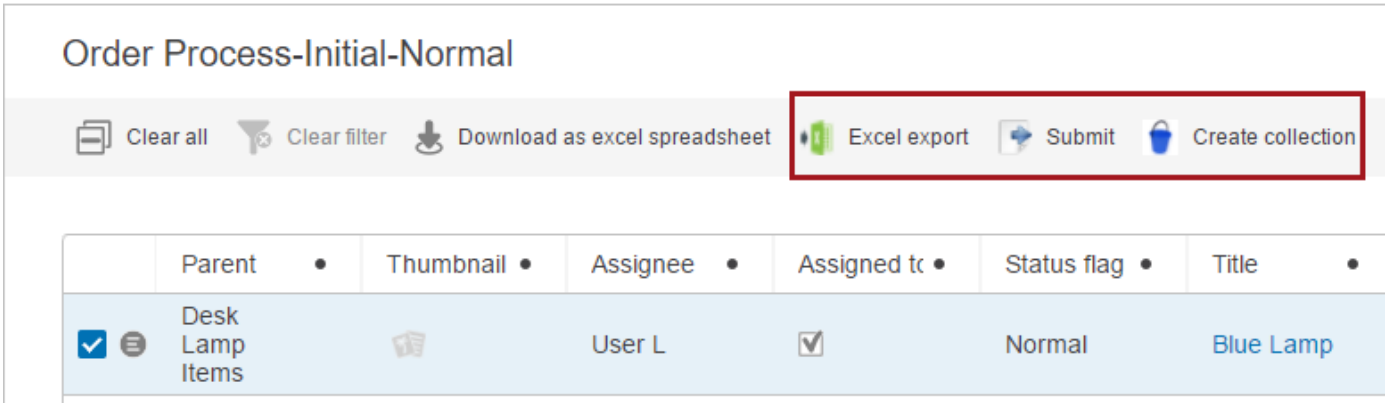
Action Title	Description	Screen / Component Configuration	Topics with additional Information
	 When updating a collection profile, a 'Refresh collection' option is also available. Checking this box will refresh the collection before the profile is run.  A link to the background process is provided any time this action button is used.		
Upload Asset Action	The Upload Asset action, which can be added to a Folder screen or Asset Folder screen, allows the user to upload and create an asset in the current classification for the screen. **Note:** An asset importer configuration must be selected before uploading an asset. The configuration will apply its rules against the imported asset and make any necessary changes (or reject if it fails to meet minimum requirements).	Child Action component on a Node List	Node List Component Asset Importer in Web UI

Action Button Configuration on a Node List

In Web UI action buttons aid users in performing various tasks. In some cases these action buttons are configurable to allow for better ease of use. Below are the various options for configuring action buttons on Node Lists.

User-Added Toolbar Action Buttons on Node Lists

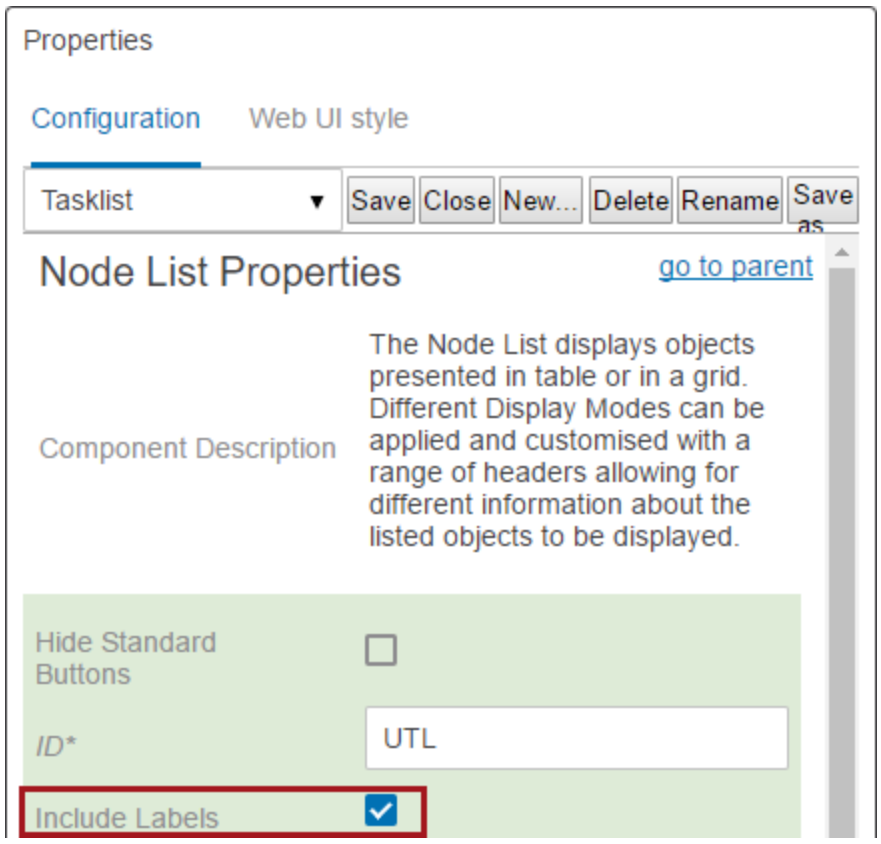
In Web UI, user-added toolbar action buttons on Node Lists help users perform various actions. A few examples are: exporting data, creating collections, submitting a task from one state to another in a workflow, etc. Because there are so many different types of actions that a user may need to use on a Node List, it is sometimes hard to remember what each button does. For this reason, text and icons of user-added toolbar actions can be customized to make it clear to the user what action the button represents.



It is important to note that some of these user-added actions are shared between Node List toolbar actions and child actions on a Node Details screen. Therefore, the custom label and icon parameters are available on these shared actions, though only functional when the actions are applied as toolbar actions on Node Lists.

Enabling / Disabling Button Labels

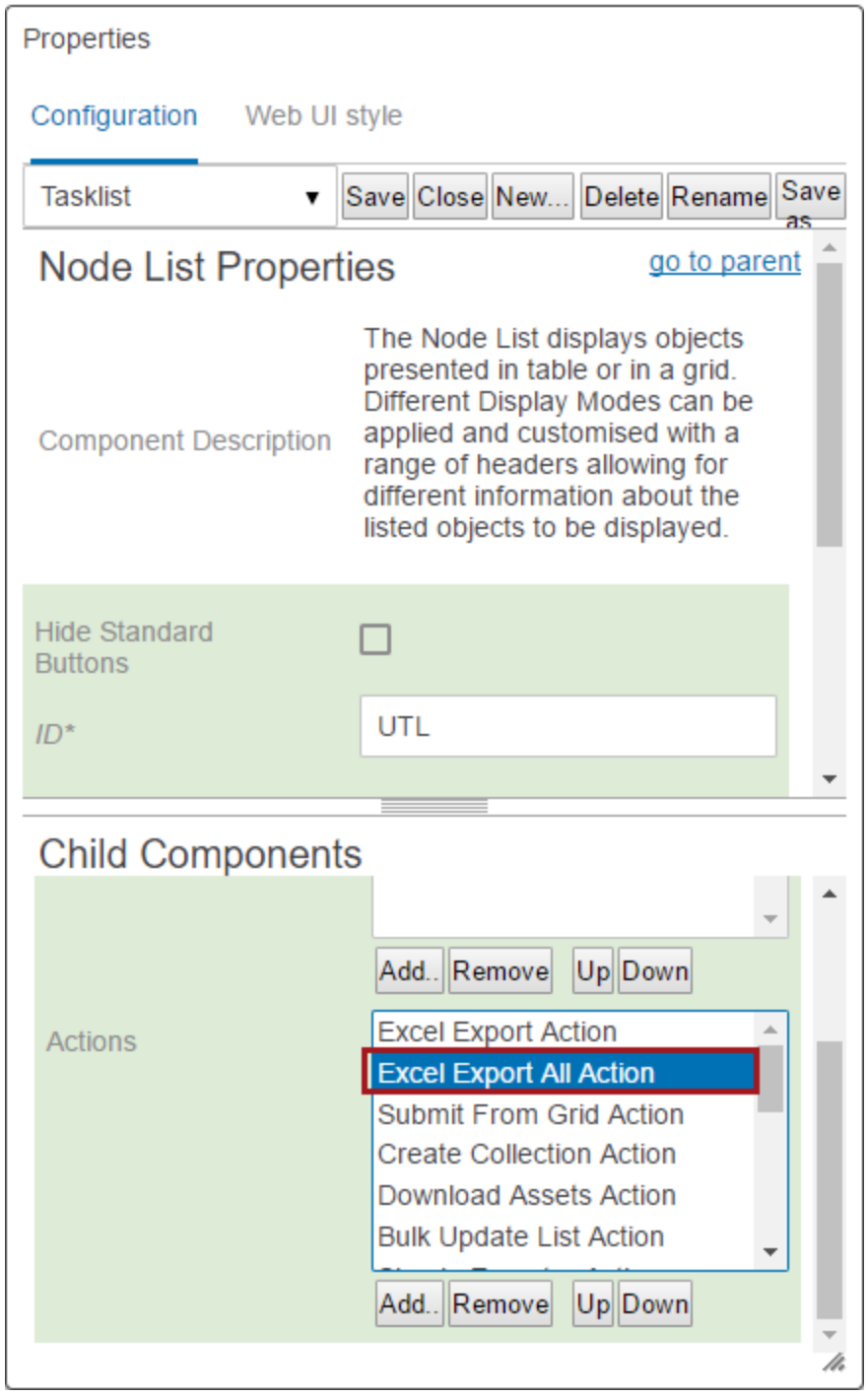
The presence / absence of text labels is determined by the parameter **Include Labels** on a Node List.



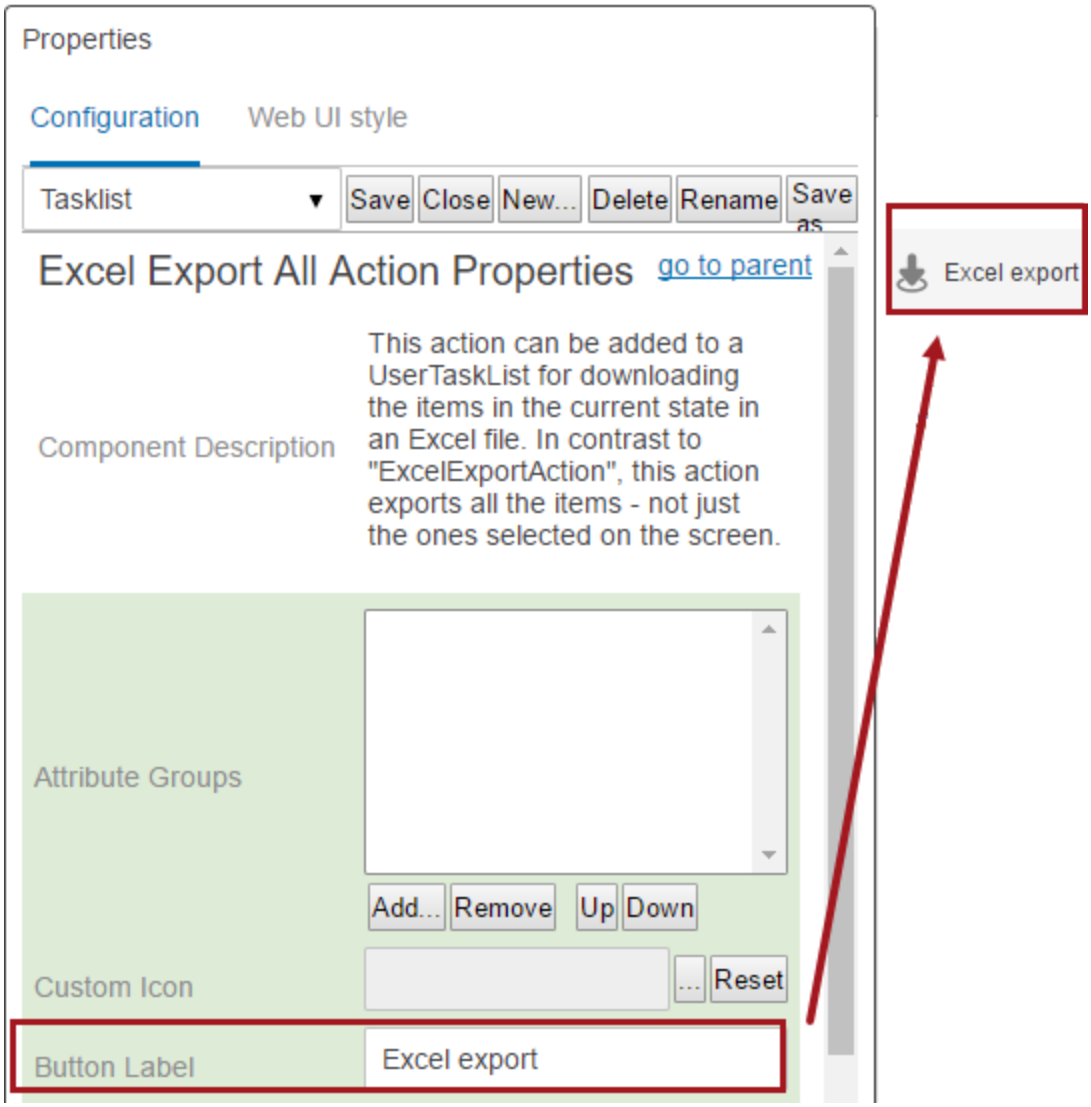
Once checked, all toolbar actions display predefined set labels, though administrators can configure user-added toolbar actions with distinct text labels to display instead of set labels.

Configuring Custom Labels for User-Added Toolbar Actions

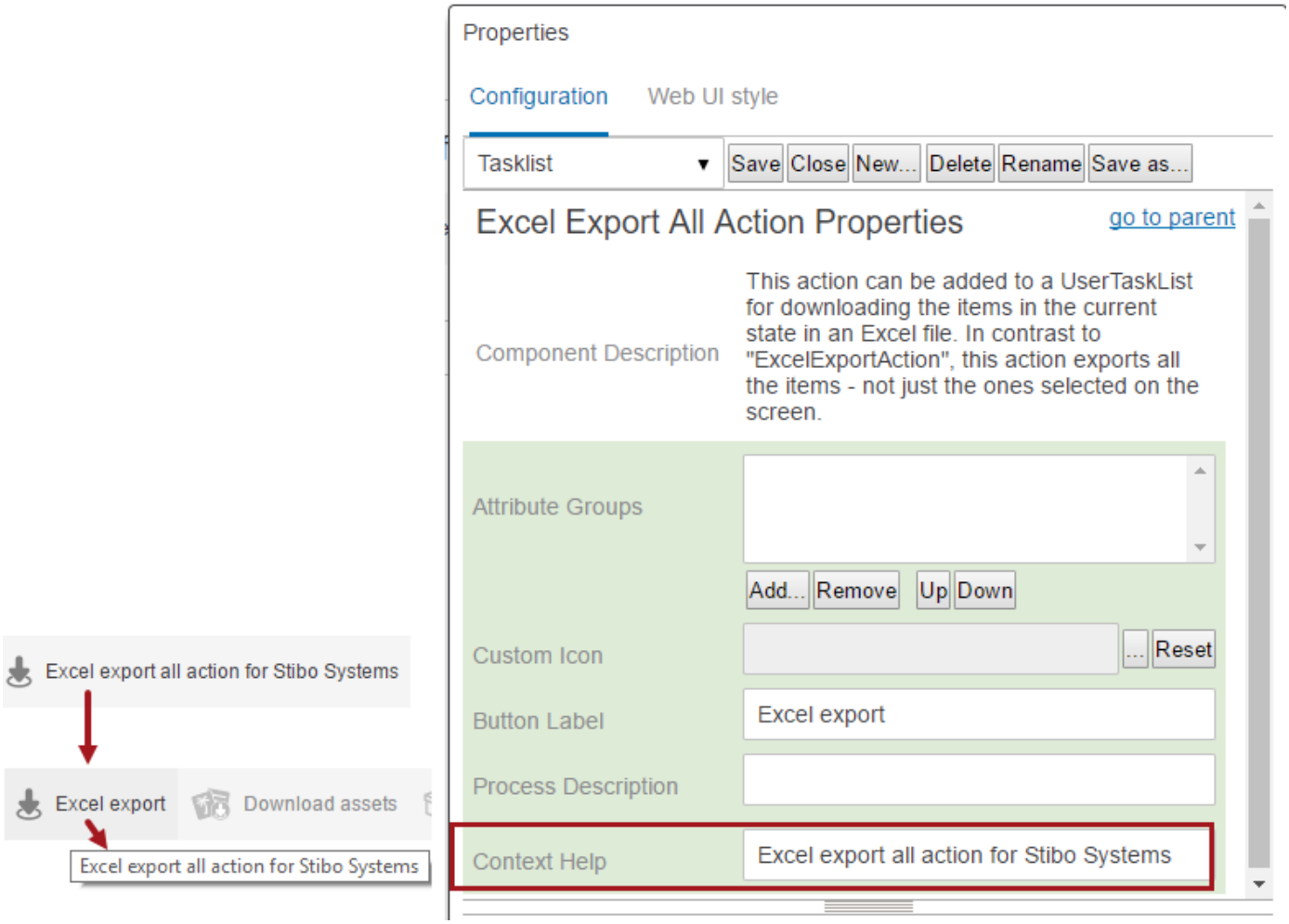
To configure user-added toolbar actions with custom text labels go to Node List Properties > Child Components > and double click on the desired action.



Once opened, a user can configure the **Button Label** field by entering the desired text label.



Note that if the name for the button label is long, it is suggested to put it in the Context Help field and put a more abbreviated name in the Button Label field, or leave it blank.



To revert to the default Stibo Systems button label settings, clear the Button Label field, and then save and close the designer.

Configuring Custom Icons for User-Added Toolbar Actions

There are two ways to add icons to Web UI for use on a Node List when configuring custom icons.

- Upload a single icon directly from a Node List configuration
- Upload multiple icons from the designer's Web UI Styles tab

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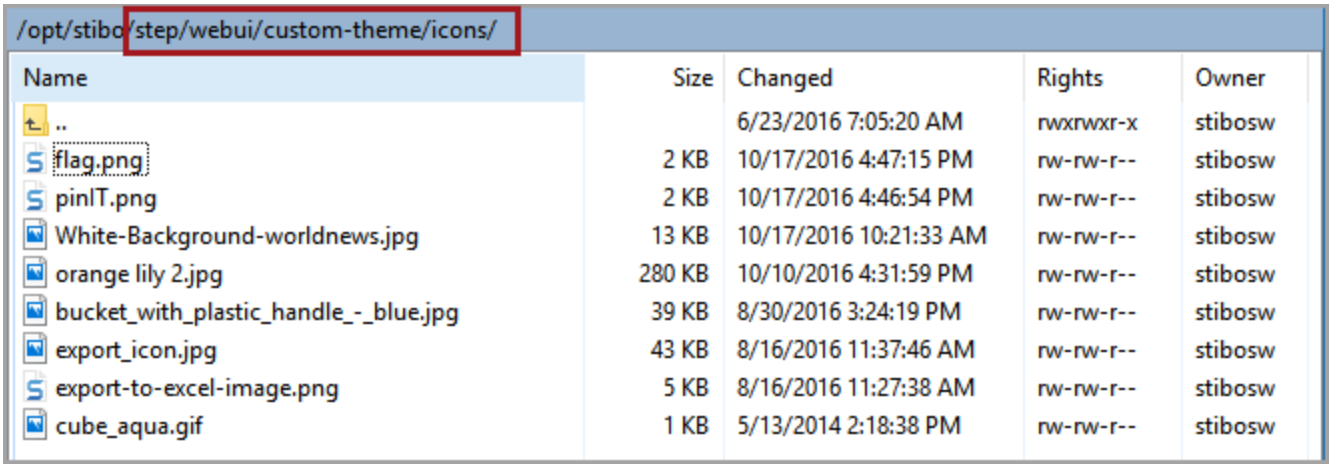
Note: All uploaded images should be either a JPG or PNG file, and it is suggested that it is between 20 pixels high and 40 pixels wide.

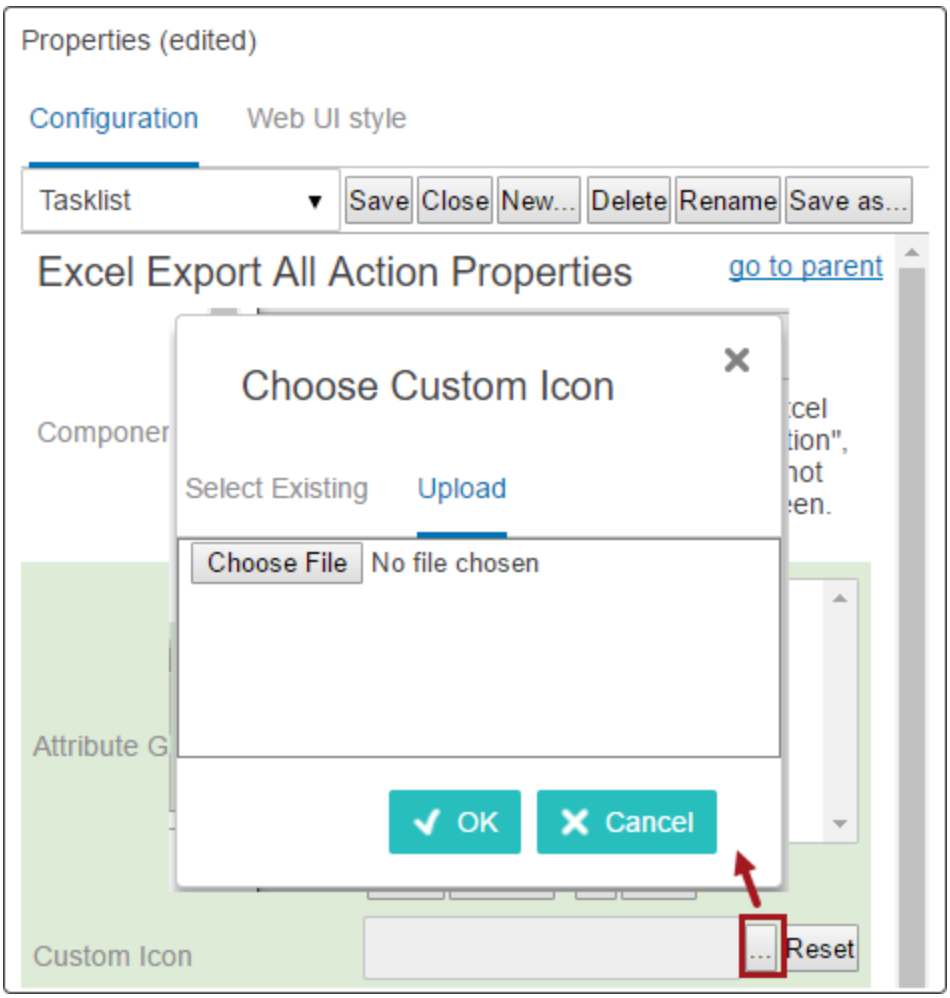
Once images are uploaded, they are stored on the server and are available for other Web UIs. The image below shows the standard directory path where the icons will be stored.



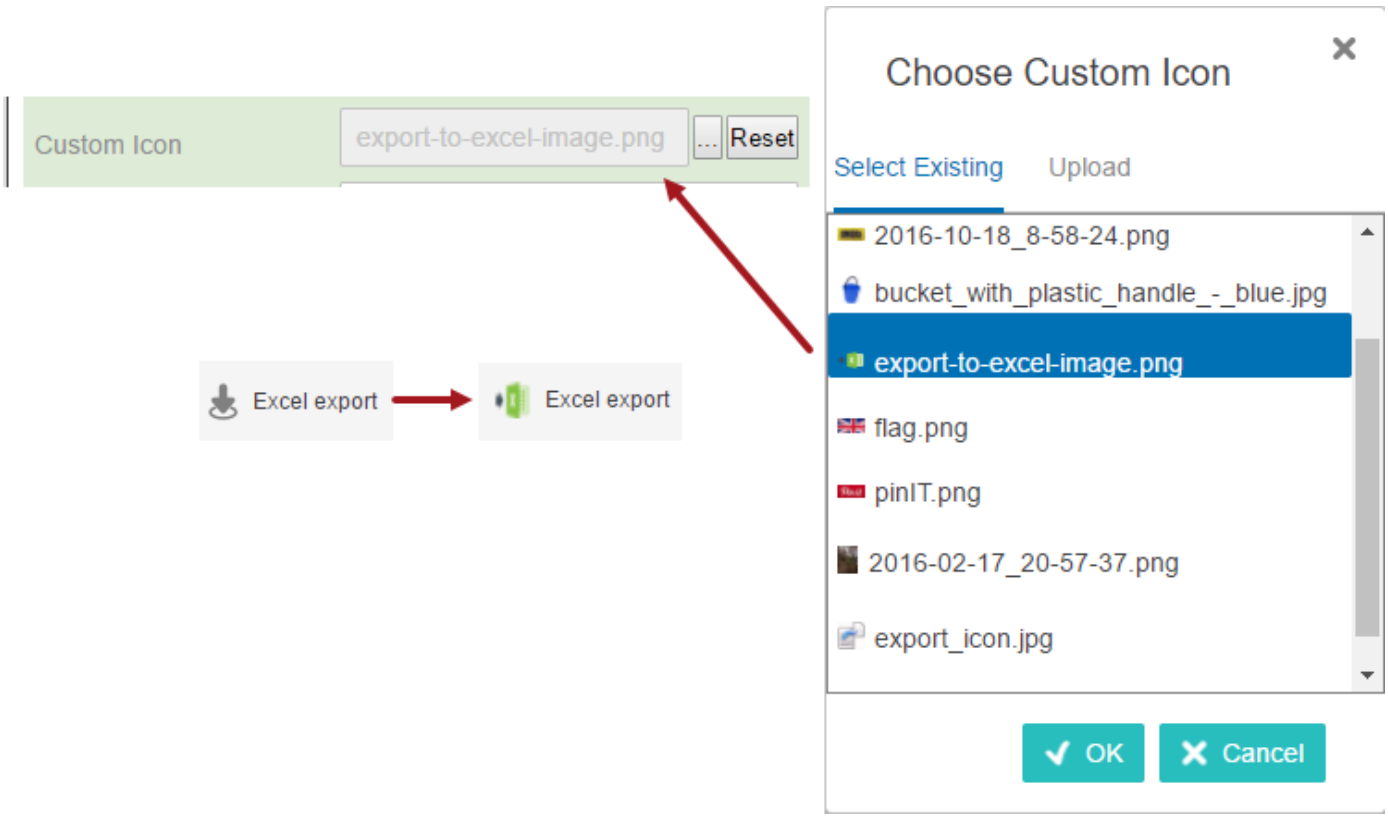
Upload a Single Icon Directly From a Node List

To add a custom icon to user-added toolbar actions go to Node List Properties > Child Components > and double-click on the desired action.

Once opened, click the ellipsis button (...) to configure the **Custom Icon** field. Select the **Upload** tab, and upload a new image. Once selected, save and close the designer.



If selecting an image already uploaded to Web UI, choose the image from the **Select Existing** tab.

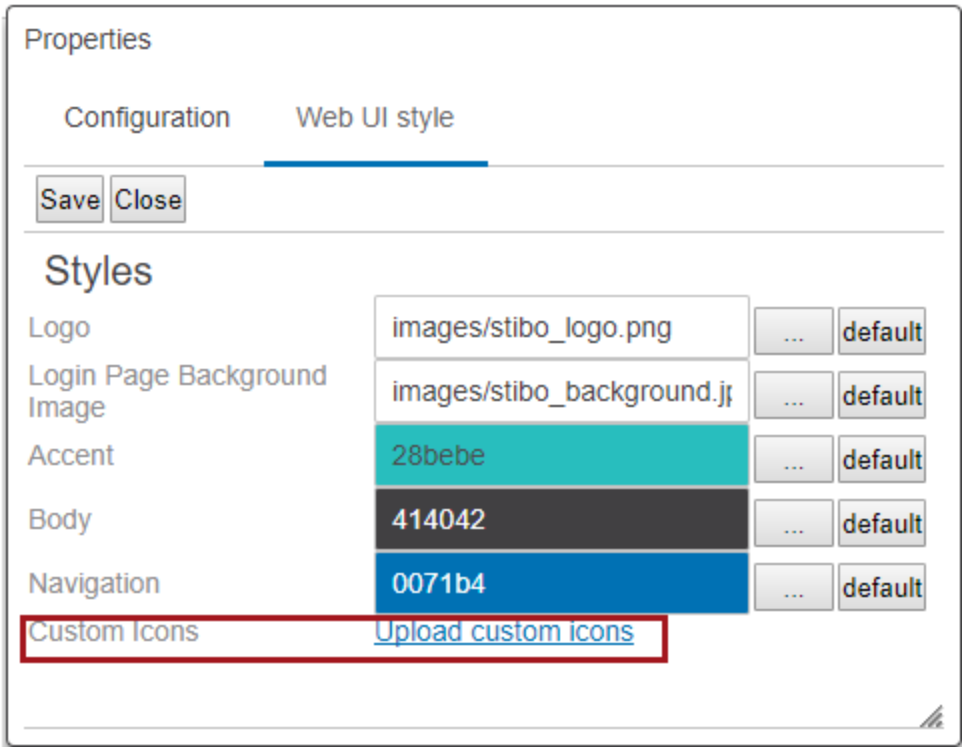


To revert to the default icon setting, select the **Reset** button next to the ellipsis button (...), save, and close the designer.

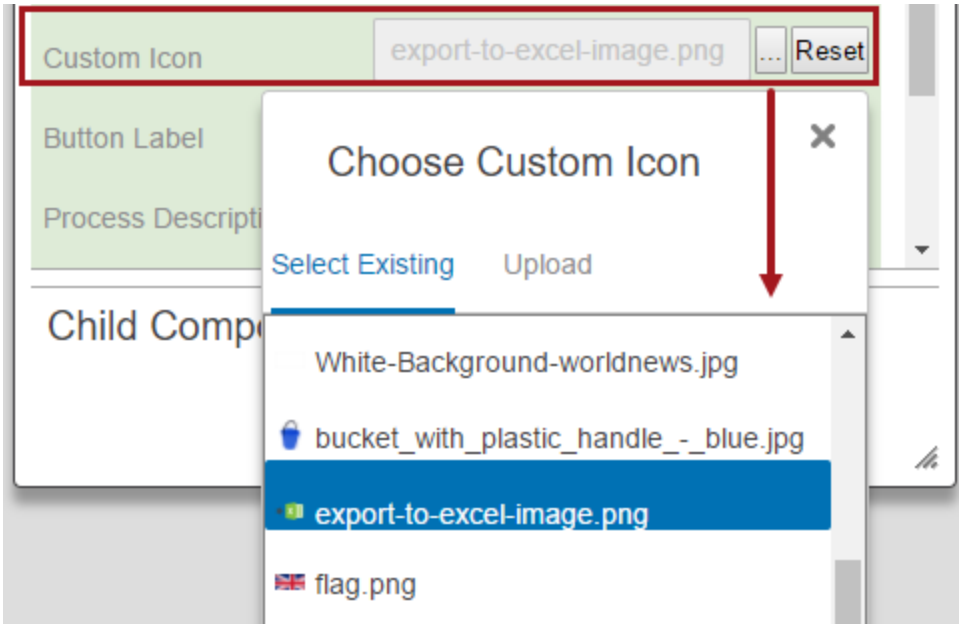
Upload Multiple Icons From the Designer's Web UI Styles Tab

The option to upload many images at one time ensures that images are ready to use when needed. For example, if an administrator is configuring multiple Node Lists, having the images already in the system to choose from will save time and make the configuring process easier.

To upload multiple icons at the same time, open the designer > Web UI Style tab > **Upload custom icons**. Multiple files can be selected.



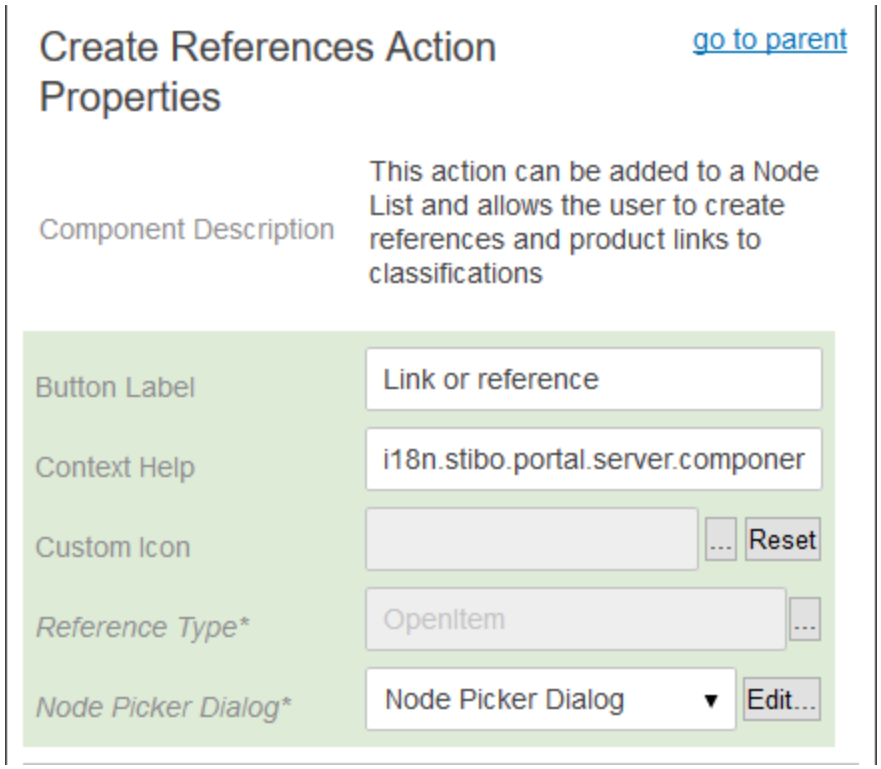
Once uploaded, apply the icons by going to Node List Properties > Child Components > double clicking on the desired action > Custom Icon > **Select Existing**.



To revert to the default icon setting, select the **Reset** button next to the ellipsis button (...), save, and close the designer.

Create References Action Configuration

The Create References Action can be added as an Actions child component on a Node List.



Action button configuration parameters include:

- **Button Label** allows custom text to be displayed on the action button. For details, see the **Configuring Custom Labels for User-Added Toolbar Actions** section of **Action Button Configuration on a Node List** in this guide.
- **Context Help** allows custom help text to be displayed when hovering over the action button. Type in the text you want to display, or leave unchanged for the default hover text.
- **Custom Icon** allows a custom icon to be displayed on the action button. For details, see the **Configuring Custom Icons for User-Added Toolbar Actions** section of **Action Button Configuration on a Node List** in this guide.
- **Reference Type** allows selection of a single reference or link type that has been defined in workbench. An additional action button must be configured for each required reference or link type needed.

  Creation of a reference type or link type in workbench includes setting the 'Allow multiple references / links' parameter, which determines if single or multiple targets are allowed. If multiple targets are allowed by the reference type or link type, the Create References Action allows the user to choose to replace the existing specified reference or link altogether, or to add to the list of existing references or links. When a single target is allowed, the existing reference or link is replaced.

- **Node Picker Dialog** allows display of only the valid target nodes, the Browse Tab or Search Table Tab components, and a custom title. For details, see the **Node Picker Dialog** documentation in this guide.

  When configuring the Node Picker Dialog, to locate the desired target for a reference or link via values on metadata attributes that are valid for the reference or link type, in the Tab Pages parameter use the **Search Table Tab** option and set the **Search Plugins** parameter to use **Name Or Id Or Attributes**. For example, the ETIM metadata attribute 'Synonyms' includes alternate names for an ETIM classification. After clicking the toolbar action button, searching for one of these synonym values would allow the user to find the classifications that include the value without having to know the classification's STEP name.

Business Action with Web UI Bind Component

The **Business Action with Web UI Bind** component is a configurable feature that provides admin users with additional flexibility when designing how end users navigate through and complete tasks in the Web UI. By incorporating custom business rules, this component can be applied in a broad range of scenarios. Added as either a toolbar action button on a Node List or a standard action button on a Node Details screen, the **Business Action with Web UI Bind** can help address challenges that may arise in the Web UI for which existing features may not fully account.

Important: The complexity of the business rule configured for the Business Action with Web UI Bind component, as well as the number of nodes upon which the business rule is to be executed, must be considered when using this feature. **Running a complex business rule on a sizable selection has the potential to crash the system**. Execution time does not scale linearly with the number of nodes selected. This means that each additional node selected will compound the execution time.

Through the use of a global JavaScript bind called 'Web UI Context' that enables business actions in the Web UI, the **Business Action with Web UI Bind** component can, for example, be used to show popup notifications with custom messages when the **Business Action with Web UI Bind** button is clicked. These messages also support display of rendered HTML, providing admin users with a range of messaging options when configuring this component. Additionally, the button can be configured to display a user-input window that allows information to be added to an object. The window can include attributes with values selected via Node Pickers, date pickers, and Lists of Values (LOVs), for example. For more information, see the **Web UI Context Bind** topic in the **Resource Materials** online help.

Information related to configuration of this component can be found in the **Configuring the Business Action with Web UI Bind Component** topic in this documentation. Information related to example use cases describing applications of this component can be found in the **Business Action with Web UI Bind Use Cases** topic, also in this documentation.

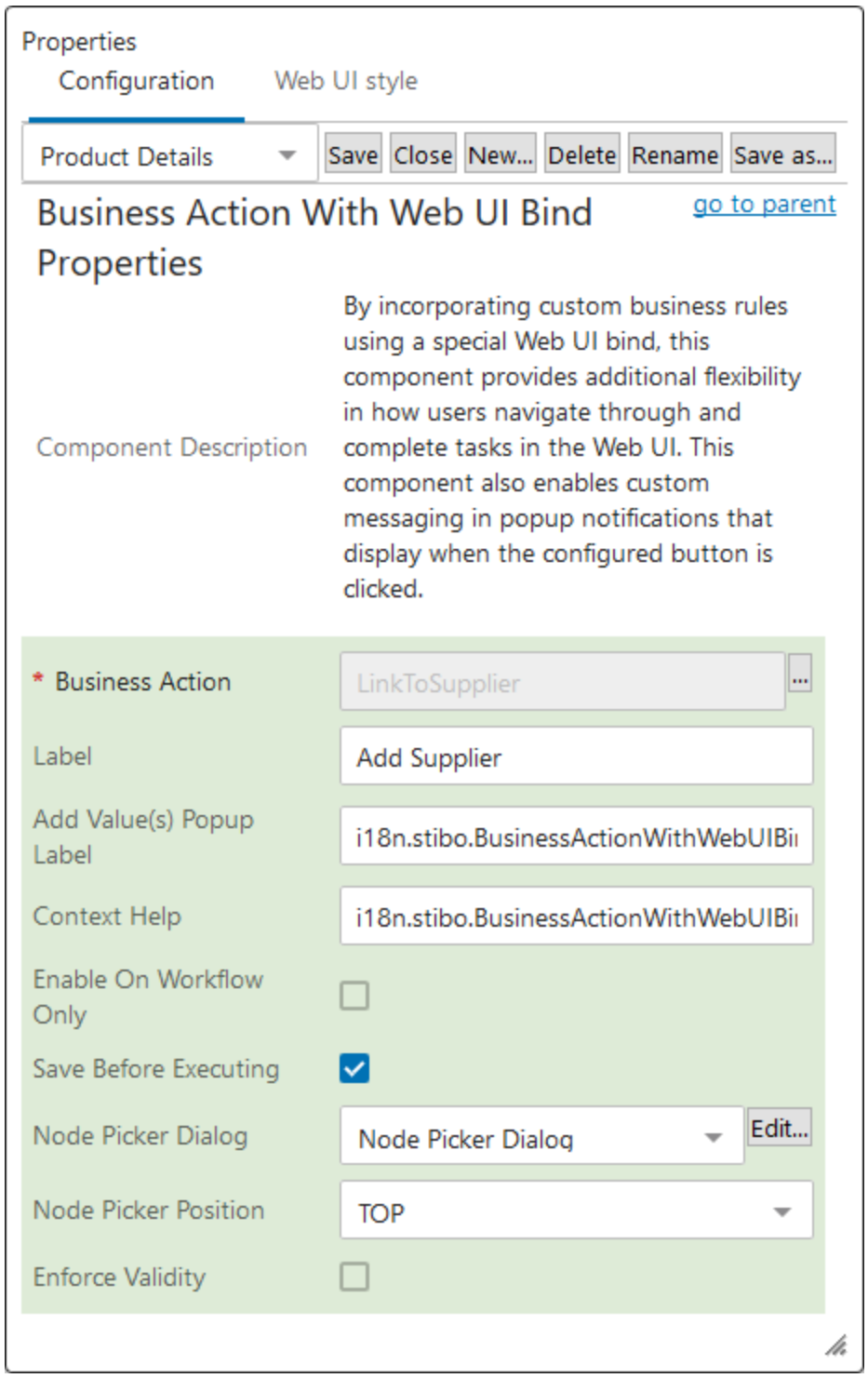
Configuring the Business Action with Web UI Bind Component

The **Business Action with Web UI Bind** button can be added to any Node List as a toolbar action (a button accessible above the table) and to any Node Details screen as a standard action button (a button accessible below the table).

To add the **Business Action with Web UI Bind** button to a Node Details screen as a standard action button, navigate to the relevant 'Node Details Properties' screen in the designer. Under 'Child Components', click the 'go to component' link next to the 'Buttons' parameter. Click 'Add' and then find, select, and add the 'Business Action with Web UI Bind' component.

To add the **Business Action with Web UI Bind** button to a Node List screen as a toolbar action button, navigate to the relevant Node List component in the designer. In the 'Child Components' section, click the 'Add' button below the 'Actions' field. In the 'Add Component' screen that displays, find, select, and add the '**Business Action with Web UI Bind**' component.

Whether configuring the **Business Action with Web UI Bind** component as an action button or a toolbar action button, the options displayed in the designer are the same.



- **Business Action**. By clicking the ... button to the right of this mandatory field, users can select which pre-configured business rule will be run when the button is clicked. If no business action has yet been configured, set up of this button cannot be completed. For information on how to configure a business rule for this component, see the **Business Action with Web UI Bind button Use Cases** topic later in this

documentation. For general information on business rules and conditions, see the **Business Rules** documentation.

- **Label**. When configuring a standard action button, the text entered in this field will display on the button. When configuring a toolbar action button, the text entered in this field will display beside the button.
- **Add Value(s) Popup Label**. If the selected business action includes Attribute Validated Parameter binds and / or a Node Picker is configured, the text entered will display as the title of the Add Value(s) popup.
- **Context Help**. Enter the text that will display in a small informational popup message when the cursor is placed over the button.
- **Enabled on Workflow Only**. When checked, the button will only be available when the item is being viewed through a workflow state.
- **Save Before Executing**. When checked, clicking the button will save all the information on the screen before executing the business action. This property is not applicable when used as a toolbar action.
- **Node Picker Dialog**. Select 'Node Picker Dialog' from the dropdown if a Node Picker element is required for the business action configured for the Business Action with Web UI Bind component. For more information on configuring Node Picker components, see the **Node Picker Dialog** topic in the **Using Web UI** section of this documentation.
- **Node Picker Position**. If a Node Picker is configured in the business rule and in the designer, selecting 'TOP' places the field containing the Node Picker at the top of the Add Value(s) Popup, and selecting 'BOTTOM' places the field at the bottom of the popup.
- **Enforce Validity**. When checked, this restricts activation of the configured Business Action with Web UI button until all mandatory attributes have been provided.

Business Action with Web UI Bind Use Cases

Because the **Business Action with Web UI Bind** component is so configurable due to its close integration with custom business actions, describing what steps to follow to enable the component may not provide a full picture of this component's capabilities. With that in mind, four full use cases are described below that outline instances where this component has been successfully implemented.

Use Case One, Part One

To enable a workflow, the customer requires that the same user who initiates new products into a workflow must also complete enrichment tasks on those products once they have entered the first workflow state.

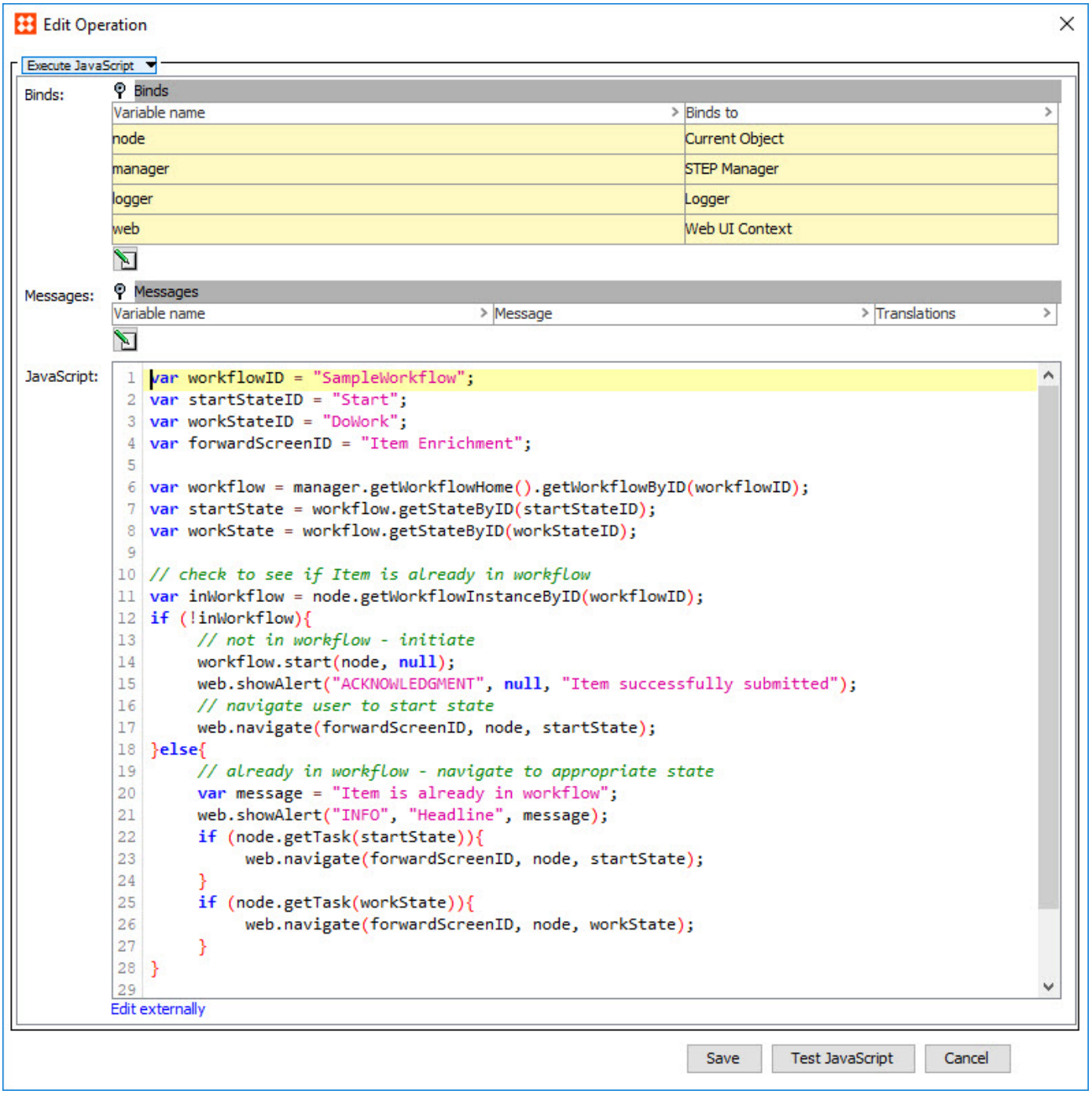
Default behavior in the Web UI is that, following either initiation of an object into a workflow or submission of an object from one workflow state to the next, the user must navigate back to the homepage, click on the relevant state in the relevant Status Selector widget, and then find the submitted object in a Task List screen. Appropriate configuration of the **Business Action with Web UI Bind** component can address this by auto-navigating the user to the appropriate screen on the same object, allowing the user to continue to move an object through the workflow.

The configuration steps required to address this use case are described below:

1. **Define desired workflow**. In this instance, the customer is asking its users to access products either in the Tree or through an advanced search, and initiate them into a workflow. Products are mapped to a screen with four tabs. The business rule needed to meet the requirement must, following a click of the **Business Action with Web UI Bind** button, take the user from the current screen to the screen upon which the user will add values. Additionally, the business rule can be configured to show a success message when the product is successfully initiated into the workflow.
2. **Configure the business rule**. Directly below is a screenshot of the business rule, as it displays in the workbench, that meets the above-described requirement. Beneath this screenshot is the text of the business rule that can be cut and pasted into the business rule editor in the workbench, and then edited as needed.

   The binds required to enable this business rule are listed above the business rule itself. The bind that does the work of bringing the business rule into the **Business Action with Web UI Bind** component is the 'Web UI Context' bind. Regardless of the work the business rule is configured to do, the 'Web UI Context' JavaScript bind must be included for the component to work.

   Additional guidance about how this business rule has been written displays in green text in the screenshot below.

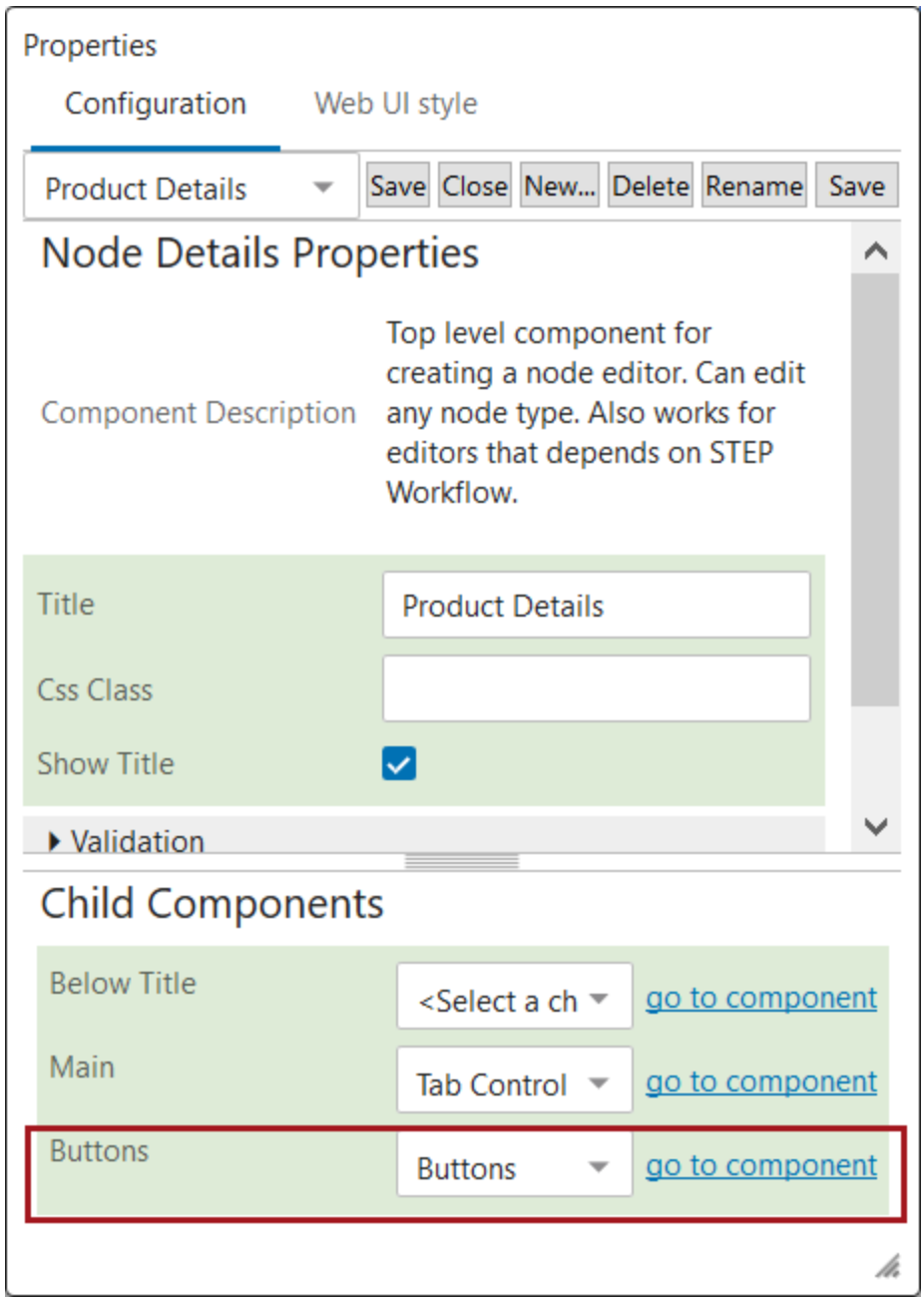



```
var workflowID = "SampleWorkflow";
var startStateID = "Start";
var workStateID = "DoWork";
var forwardScreenID = "Item Enrichment";

var workflow = manager.getWorkflowHome().getWorkflowByID(workflowID);
var startState = workflow.getStateByID(startStateID);
var workState = workflow.getStateByID(workStateID);
```

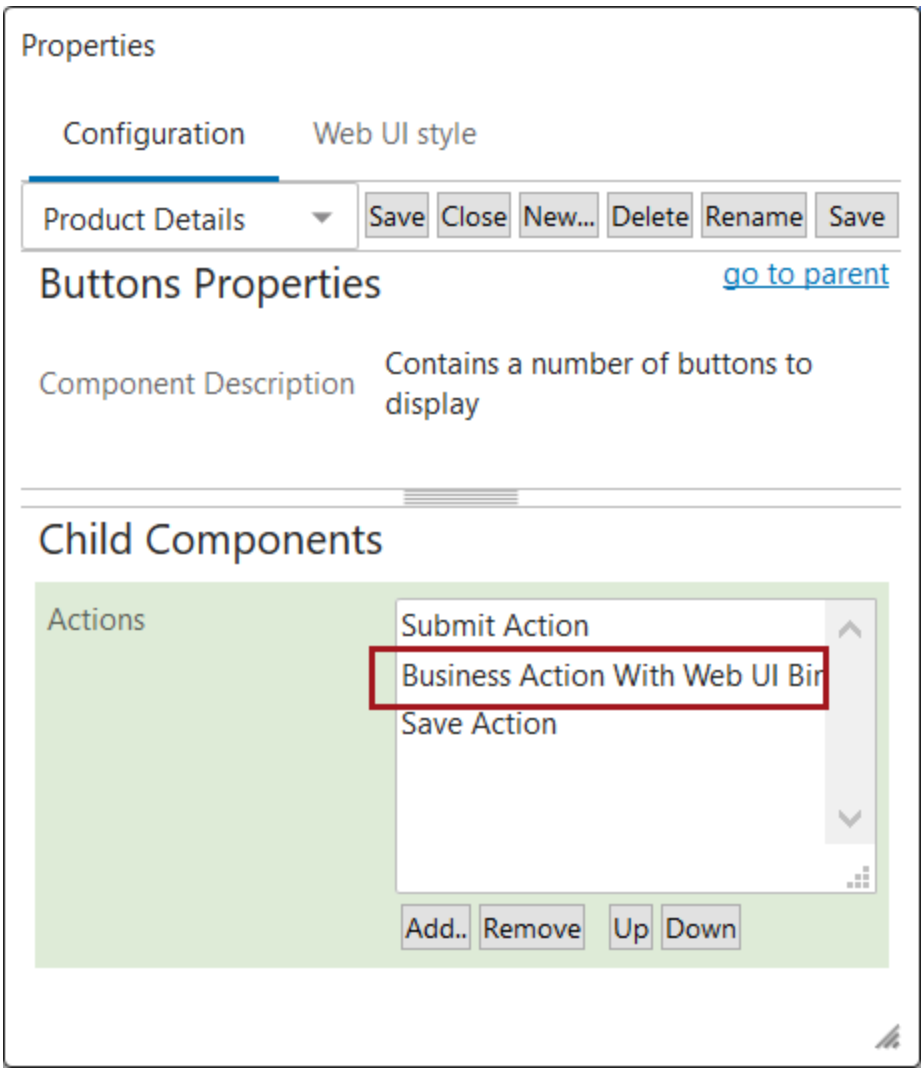
```
// check to see if Item is already in workflow
var inWorkflow = node.getWorkflowInstanceByID(workflowID);
if (!inWorkflow){
	// not in workflow - initiate
	workflow.start(node, null);
	web.showAlert("ACKNOWLEDGMENT", null, "Item successfully submitted");
	// navigate user to start state
	web.navigate(forwardScreenID, node, startState);
}else{
	// already in workflow - navigate to appropriate state
	var message = "Item is already in workflow";
	web.showAlert("INFO", "Headline", message);
	if (node.getTask(startState)){
		web.navigate(forwardScreenID, node, startState);
	}
	if (node.getTask(workState)){
		web.navigate(forwardScreenID, node, workState);
	}
}
```

3. **Configure the button**. With a business rule created, users can now configure this component in the Web UI.

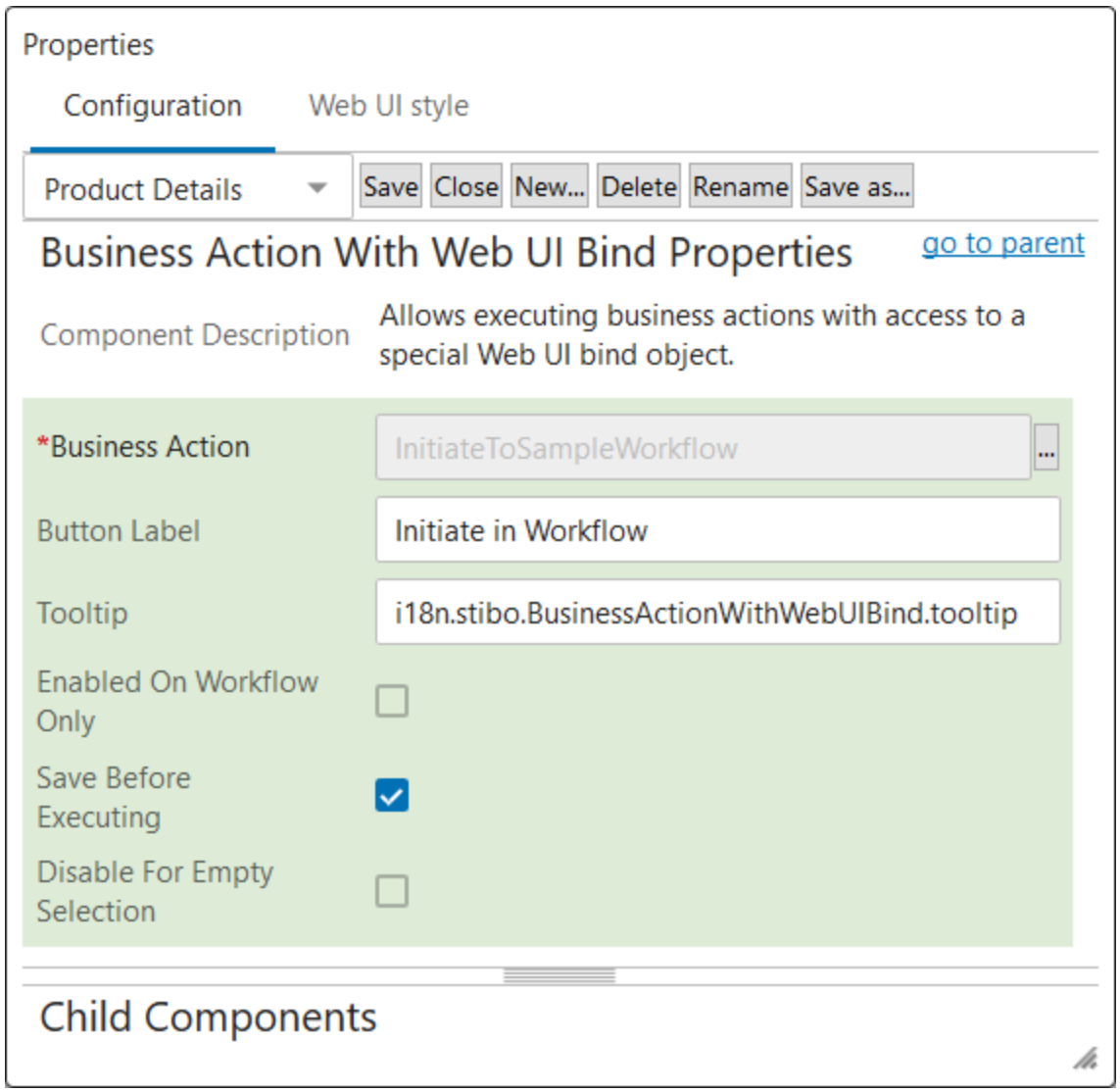
   To make the button accessible on any of the four tabs configured for the mapped Web UI screen, as per the use case's requirements, the **Business Action with Web UI Bind** component should be configured as a standard action button, which is a button that displays at the bottom of a Node Details screen. On the screen mapped to the relevant products, in this case a Node Details screen the user has named 'Product Details', click the 'go to component' link beside the 'Buttons' parameter as shown in the screenshot below.



Once there, add the **Business Action with Web UI Bind** component.

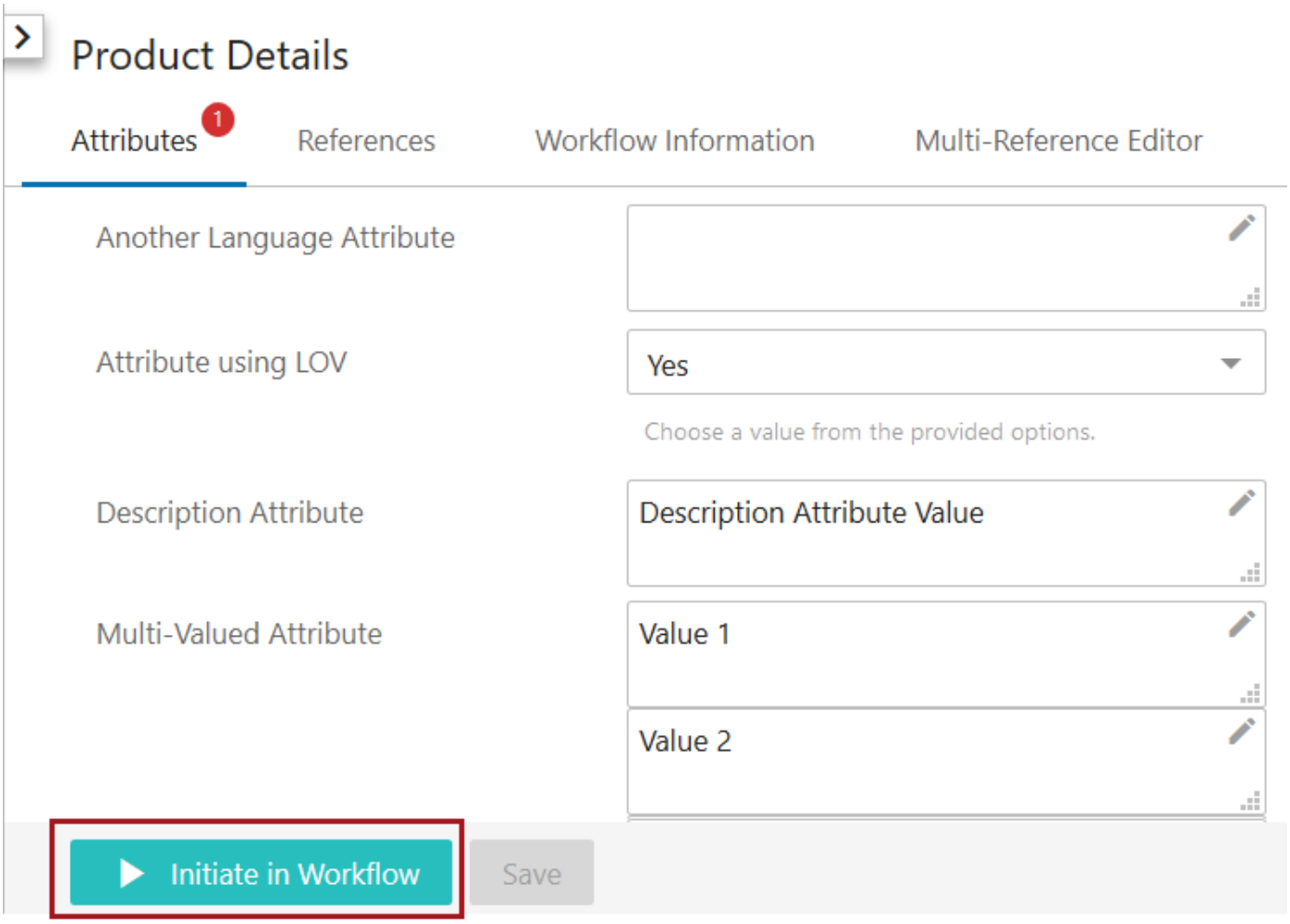


Double-click on the action to access the **Business Action with Web UI Bind** configuration screen in the designer.

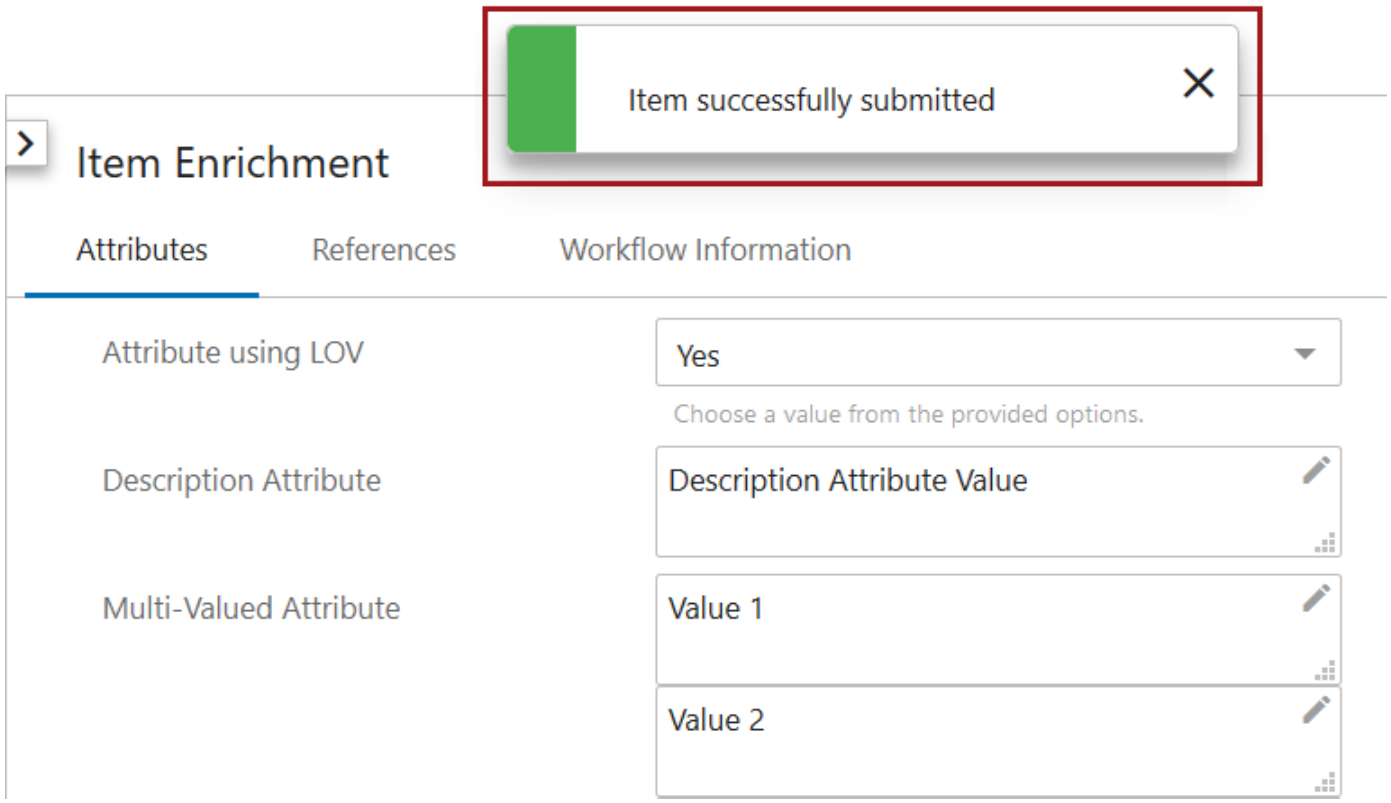


- On the 'Business Action' parameter, click the ... button to select the relevant business rule from a Node Picker. In this case, the business rule is titled, 'InitiatetoSampleWorkflow'.
- On the 'Button Label' parameter, add text that will display beside the button in the toolbar. In this case, because the operative business rule moves a product into a workflow, the button label text is 'Initiate in Workflow.'

4. **Result**. Now, when a user selects a product, either from the Tree or via an Advanced Search, an 'Initiate in Workflow' button displays at the bottom of the screen.



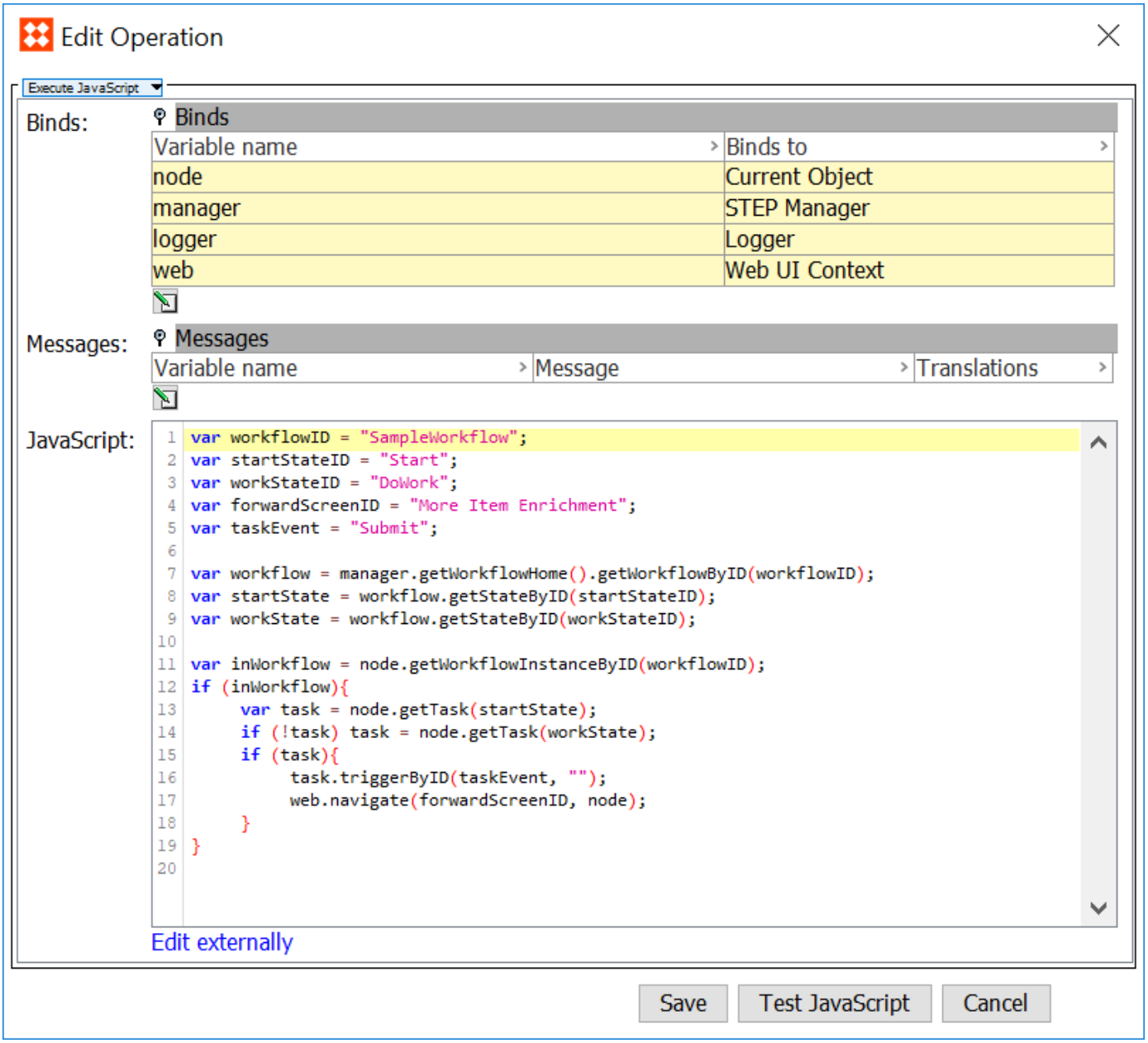
Based on the configured business rule, clicking this button will simultaneously initiate the product into the workflow, and auto-navigate the user to the relevant screen for the first state of the workflow. In this case, the screen to which the user has been forwarded is titled 'Item Enrichment'. The custom text configured with the business rule to display upon executing the business rule ("Item successfully submitted") displays at the top of the screen.



Use Case One, Part Two

The second requirement for this use case entails giving users working on a product in one workflow state the ability to submit the product into the next state and, simultaneously, be auto-navigated to the relevant screen to start work. In essence, the same user who submits a product into a new state is also tasked with taking action in the next step, so it does not make sense for them to have to locate the object again via a Status Selector widget.

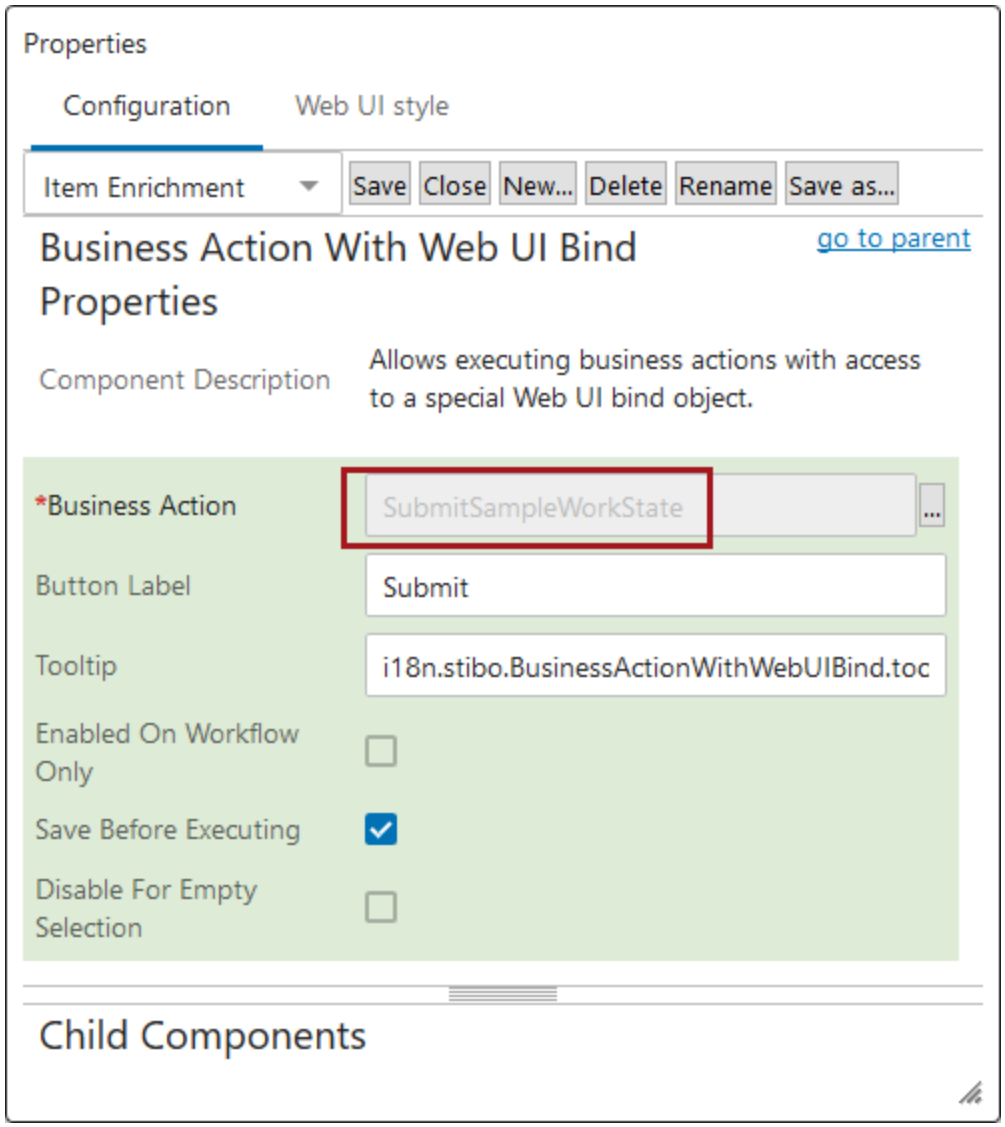
1. **Define the desired workflow**. In this case, users who complete their tasks in the 'Do Work' state must push a 'Submit' button and be taken to the same product on the screen mapped to the 'Finish' state.
2. **Configure the business rule**. To meet the stated requirement, a second business rule must be written to configure a second **Business Action with Web UI Bind** button. Directly below is a screenshot of the business rule, as it displays in the workbench, that meets the above-described requirement. The binds required to enable this business rule for the component are shown above the text of the business rule. Beneath this screenshot is the text of the business rule that can be cut and pasted into the business rule editor in the workbench, and then edited as needed.



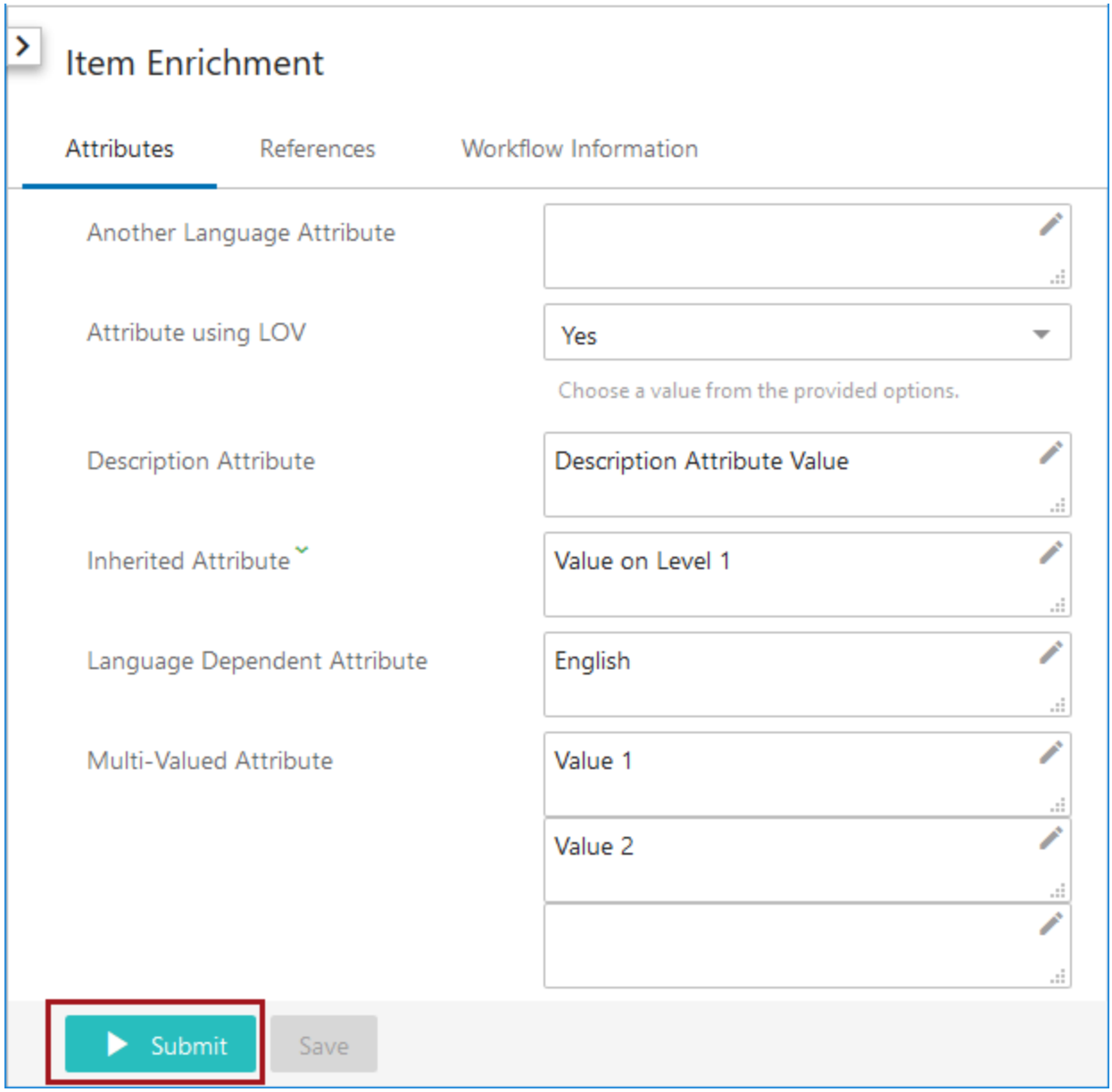

```
var workflowID = "SampleWorkflow";
var startStateID = "Start";
var workStateID = "DoWork";
var forwardScreenID = "More Item Enrichment";
var taskEvent = "Submit";

var workflow = manager.getWorkflowHome().getWorkflowByID(workflowID);
var startState = workflow.getStateByID(startStateID);
var workState = workflow.getStateByID(workStateID);

var inWorkflow = node.getWorkflowInstanceByID(workflowID);
if (inWorkflow){
```

```
        var task = node.getTask(startState);
        if (!task) task = node.getTask(workState);
        if (task){
                task.triggerByID(taskEvent, "");
                web.navigate(forwardScreenID, node);
        }
}
```

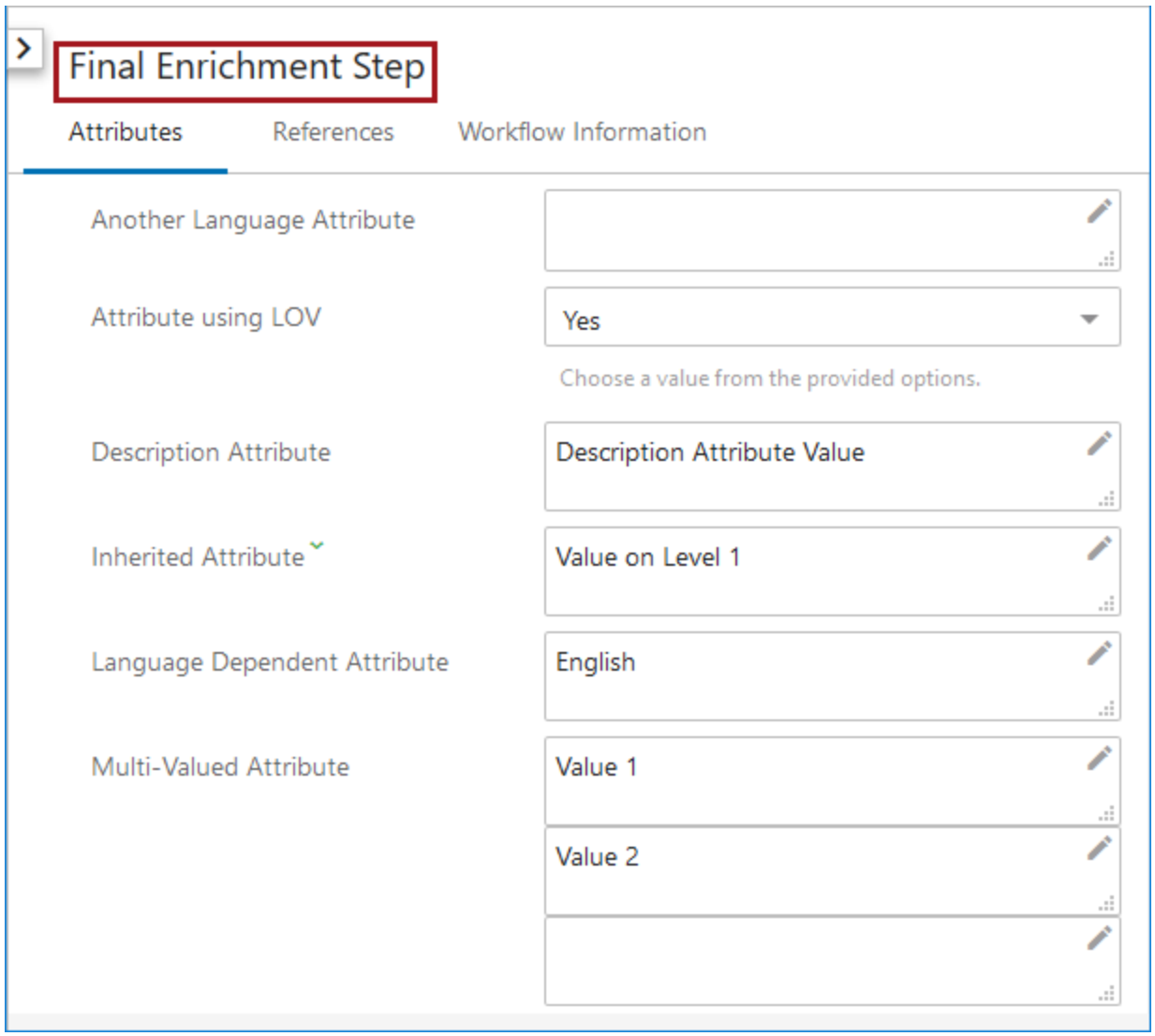
3. **Configure the button**. For the configuration of this button, the same sequence of steps described before should be used, except the user should select the relevant business action. In this case, it is 'SubmitSampleWorkState'.



4. **Result**. Now, when a user selects a product that is in the 'Do Work' state, a 'Submit' button displays at the bottom of the screen.



When the user clicks 'Submit', two things happen simultaneously: the product is moved into the next state of the workflow, in this case the state named 'Finish', and the user is auto-navigated to the screen mapped to the last state in the workflow, in this case, the screen is entitled 'Final Enrichment Step.'



Use Case Two

The second use case describes an application of the **Business Action with Web UI Bind** component in which multiple items can be approved with one click. In this instance, the component is added as a toolbar action on a Node Editor screen.

In this scenario, the customer requires that a user who has made changes to information on a Multi-Reference screen should then be able to multi-select the changed items and approve the information that has been updated. The solution is to activate auto-save and configure the **Business Action with Web UI Bind** button so that clicking it will approve all changes made to values for the relevant attributes. For details, see the **Auto-Save in the Web UI** topic.

The configuration steps required to address this use case are described below:

1. **Review requirement and assess solution**. In this instance, a Multi-Reference component displays on a Node List configured on a product. The target objects being referenced are other products. The headers on the

Multi-Reference screen display information from attributes on the referenced product. These attributes are grouped in an attribute group. With the appropriate business rule written and configured for the 'Approve' button, the user can make updates to any of the values under the grouped headers, multi-select the references upon which they have made updates, and click the 'Approve' button. The auto-save saves all updated values, and the business rule approves only those changes made to attributes on that target object. Validation is run on each selected reference and, for those that fail, a notification message has been configured to display following a click of the button.

2. **Configure the business rule**. Directly below is a screenshot of the business rule, as it displays in the workbench, that meets the above-described requirement. In the online help, beneath this screenshot is the text of the business rule that can be cut and pasted into the business rule editor in the workbench, and then edited as needed.

   The binds required to enable this business rule are listed above the business rule itself. The bind that does the work of bringing the business rule into the **Business Action with Web UI Bind** component is the 'Web UI Context' bind. Regardless of the work the business rule is configured to do, the 'Web UI Context' bind must be included for the component to work.

   Additional guidance about how this business rule has been written displays in green text in the screenshot below.

Edit Operation

Execute JavaScript

Binds:

Binds

Variable name	Binds to
manager	STEP Manager
logger	Logger
web	Web UI Context

Messages:

Messages

Variable name	Message	Translations

JavaScript:

```
var attributeGroupID = "AttributeGroup";

var exceptionMessages = new java.util.HashMap();

// start by creating a HashSet containing all attribute IDs we want to evaluate for approval
var group = manager.getAttributeGroupHome().getAttributeGroupByID(attributeGroupID);
var attributeSet = group.getAllAttributes().iterator();
var attributeIdSet = new java.util.HashSet();
while (attributeSet.hasNext()){
     var attribute = attributeSet.next();
     attributeIdSet.add(attribute.getID());
}


// loop through each of the selected products and look for changes to approve
var selection = web.getSelection().iterator();
while (selection.hasNext()){
     var node = selection.next();
     var approvalSet = new java.util.HashSet();
     var exceptionSet;
     var exceptionMessage = "";

     // loop through the set of unnapproved part objects and build a set of those we care about
     var unnapprovedSet = node.getNonApprovedObjects().iterator();
     while (unnapprovedSet.hasNext()){
          var partObject = unnapprovedSet.next();

          // if it's an attribute value, check to see if it's part of our group set
          if (partObject instanceof com.stibo.core.domain.partobject.ValuePartObject){
               if (attributeIdSet.contains(partObject.getAttributeID())){
                    approvalSet.add(partObject);
               }
          }

          // also check for a name change
          if (partObject instanceof com.stibo.core.domain.partobject.NamePartObject) approvalSet.add(partObject);
     }

     // if the approval set isn't empty, attempt an approval
     if (!approvalSet.isEmpty()){
          try{
               exceptionSet = node.approve(approvalSet);
          }catch(e){
               if (e.javaException instanceof com.stibo.core.domain.approve.ApproveBulkValidationException ||
                    e.javaException instanceof com.stibo.core.domain.synchronize.exception.SynchronizeException){
                         // provide some meaningful information to the user
                         exceptionMessage += "    " + e.javaException.getMessage() + "<br/>";

               }else{
                    // we can't hide unhandled exceptions because the db transaction is already voided, so rethrow it
                    throw(e);
               }
          }
     }

     // check if the approve operation returned synchronize exceptions
     if (exceptionSet && !exceptionSet.isEmpty()){
          // one or more synchronize exceptions occurred - provide a meaningful user a message
          var iter = exceptionSet.iterator();
          while (iter.hasNext()){
               var exception = iter.next();
               exceptionMessage += "    " + exception.getMessage() + "<br/>";
          }
     }

     if (exceptionMessage){
          exceptionMessages.put(node.getID(), exceptionMessage);
     }

}


// create some user messaging
if (exceptionMessages.isEmpty()){
     // no approval errors were caught, all is well
     web.showAlert("ACKNOWLEDGMENT", null, "Selected items successfully approved");
}else{
     // some errors were caught, format error message list
     var headline = "Approval Errors";
     var message = "";

     var errorNodes = exceptionMessages.keySet().iterator();
     while (errorNodes.hasNext()){
          var errNode = errorNodes.next();
          message += "Errors for item: " + errNode + "<br/>";
          message += exceptionMessages.get(errNode) + "<br/>";
     }

     web.showAlert("ERROR", headline, message);
}

// refresh the page after we're all done to make sure the user is seeing current values
web.navigate(null, null);
```

Edit externally

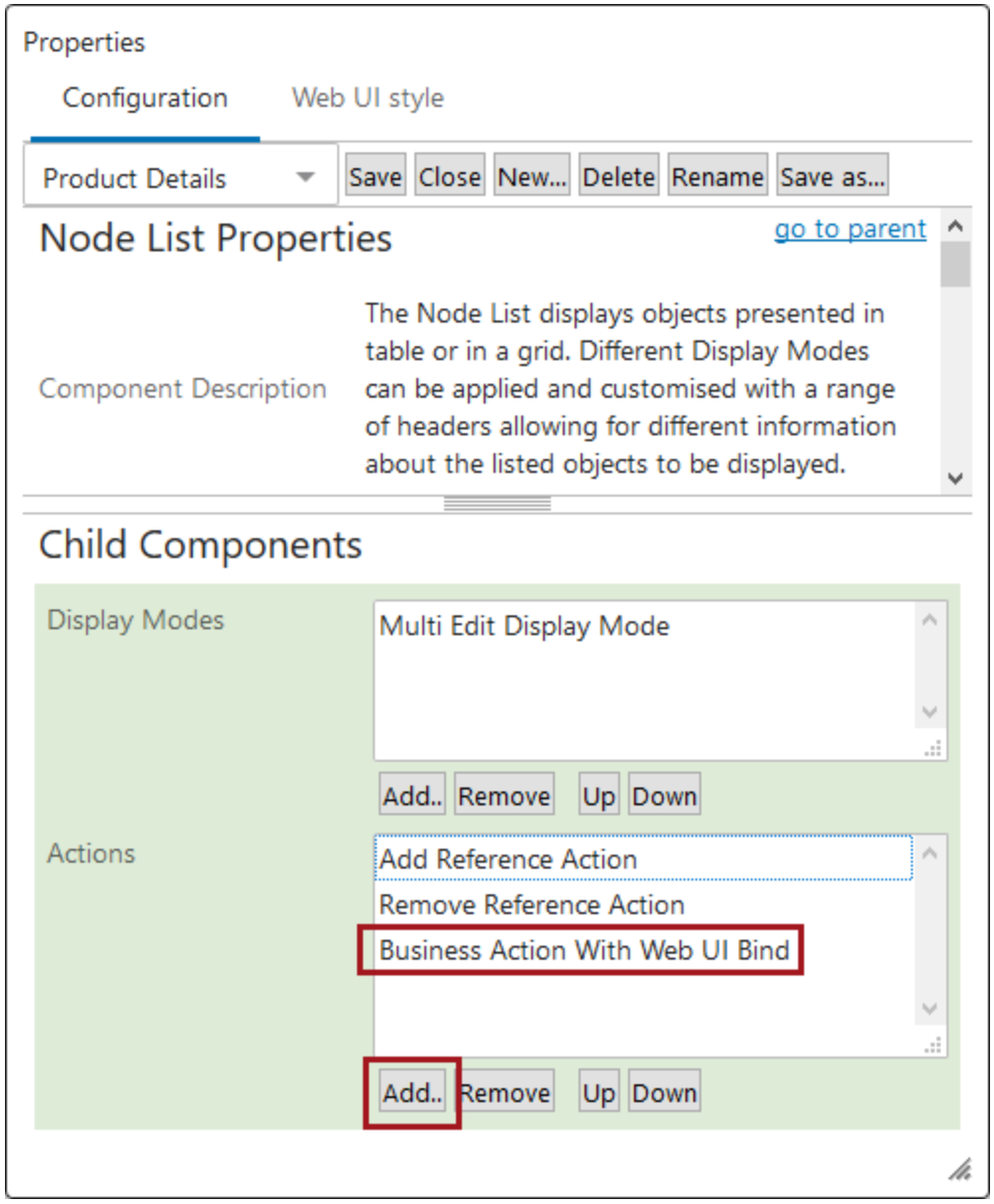
Save | Test JavaScript | Cancel

For a full JavaScript code example, see the online version of this topic.

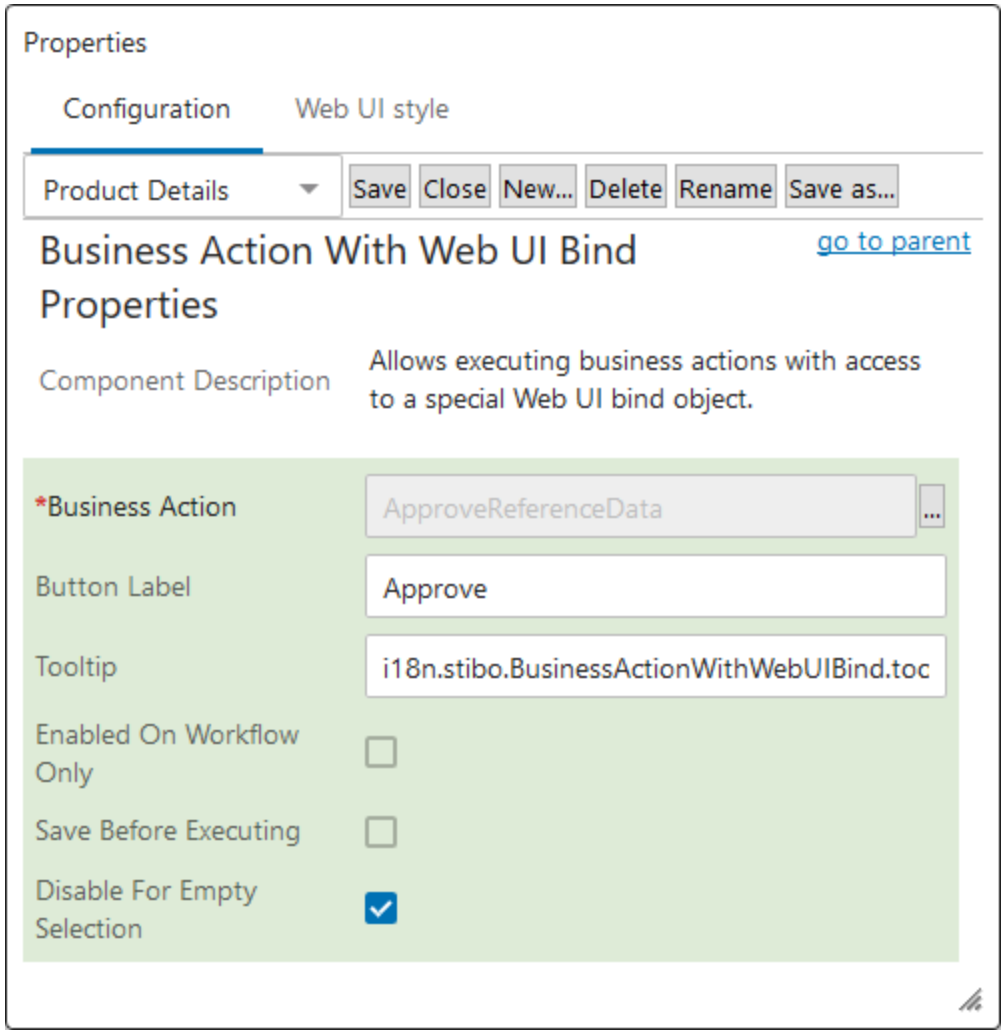
3. **Add the button**. With the business rule created, users can now configure this component in the Web UI.

   Because the button should only be accessible on the Multi Reference Editor screen for this use case, the component will be added as a Toolbar Action button on that screen. In this instance, the Multi-Reference Editor screen is configured as a Node List Tab Page on a Node Details screen.

   The **Business Action With Web UI Bind** component should be added as a toolbar action button in the 'Actions' field.

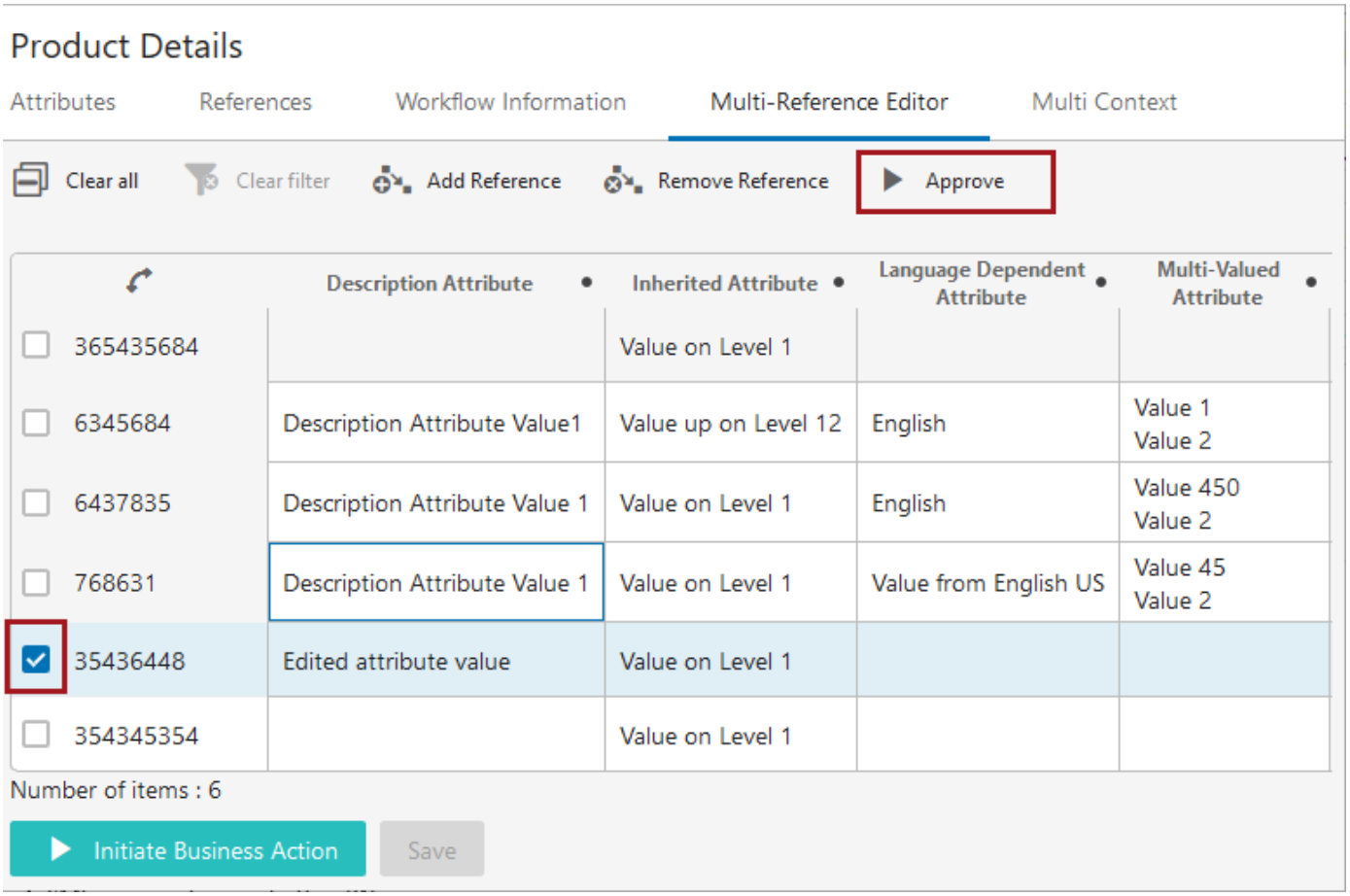


4. **Configure the button**. To configure the **Business Action with Web UI Bind** component as a toolbar action for this use case, review the bullets below:

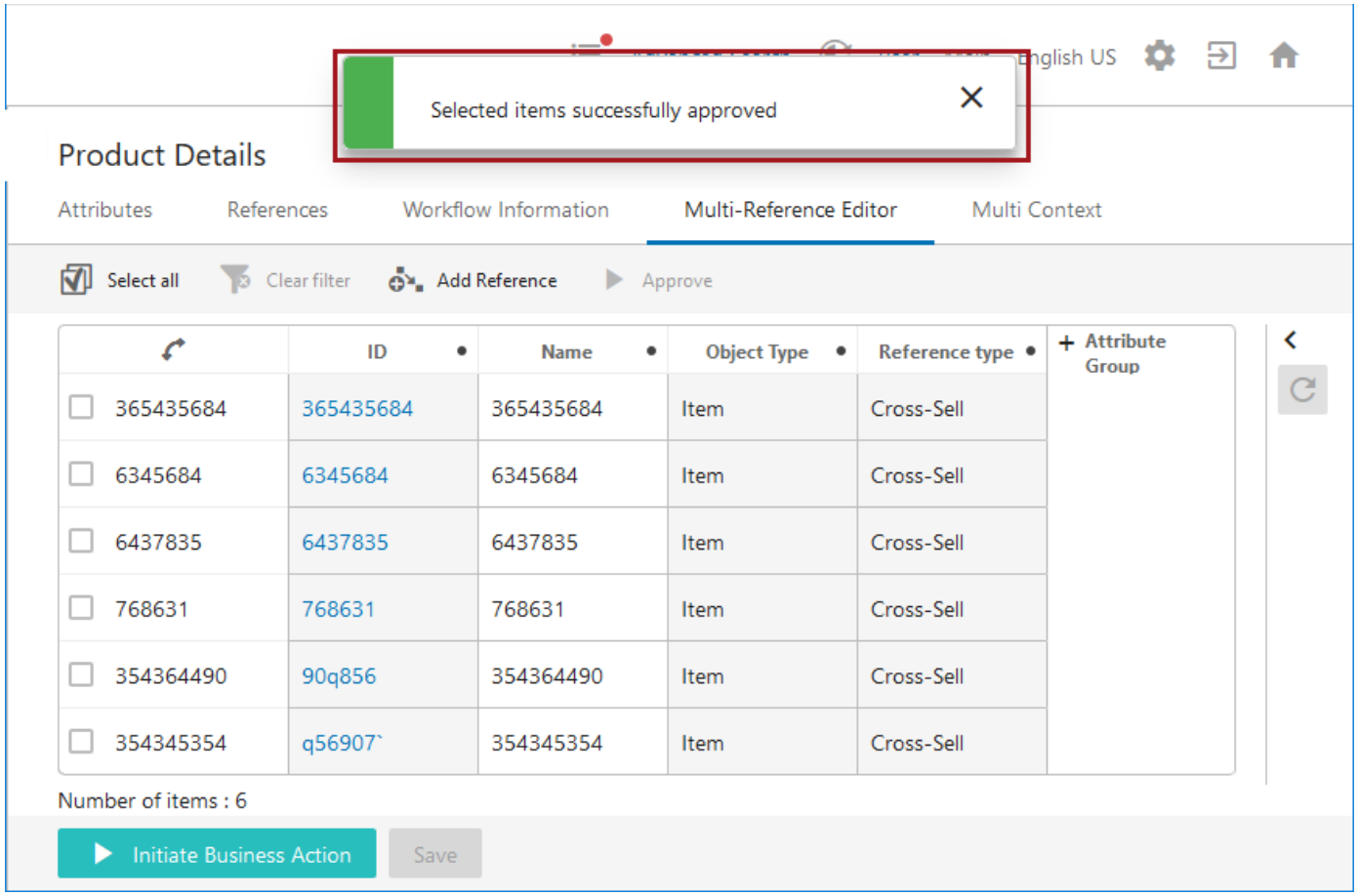


- On the 'Business Action' parameter, click the ellipsis button (...) to select the relevant business rule from a Node Picker. In this case, the business rule is titled 'ApproveReferenceData'.
- On the 'Button Label' parameter, add text that describes in two or three words what action clicking the button will execute. In this case, because the operative business rule approves changes made to values in the attribute group, the button label text is 'Approve'.
- 'Enabled On Workflow Only' should not be checked as this component's configuration does not touch on workflows.
- 'Disable For Empty Selection' should be checked as the button should not be enabled when no references are selected. Selecting one or more references will enable the button and make it active.

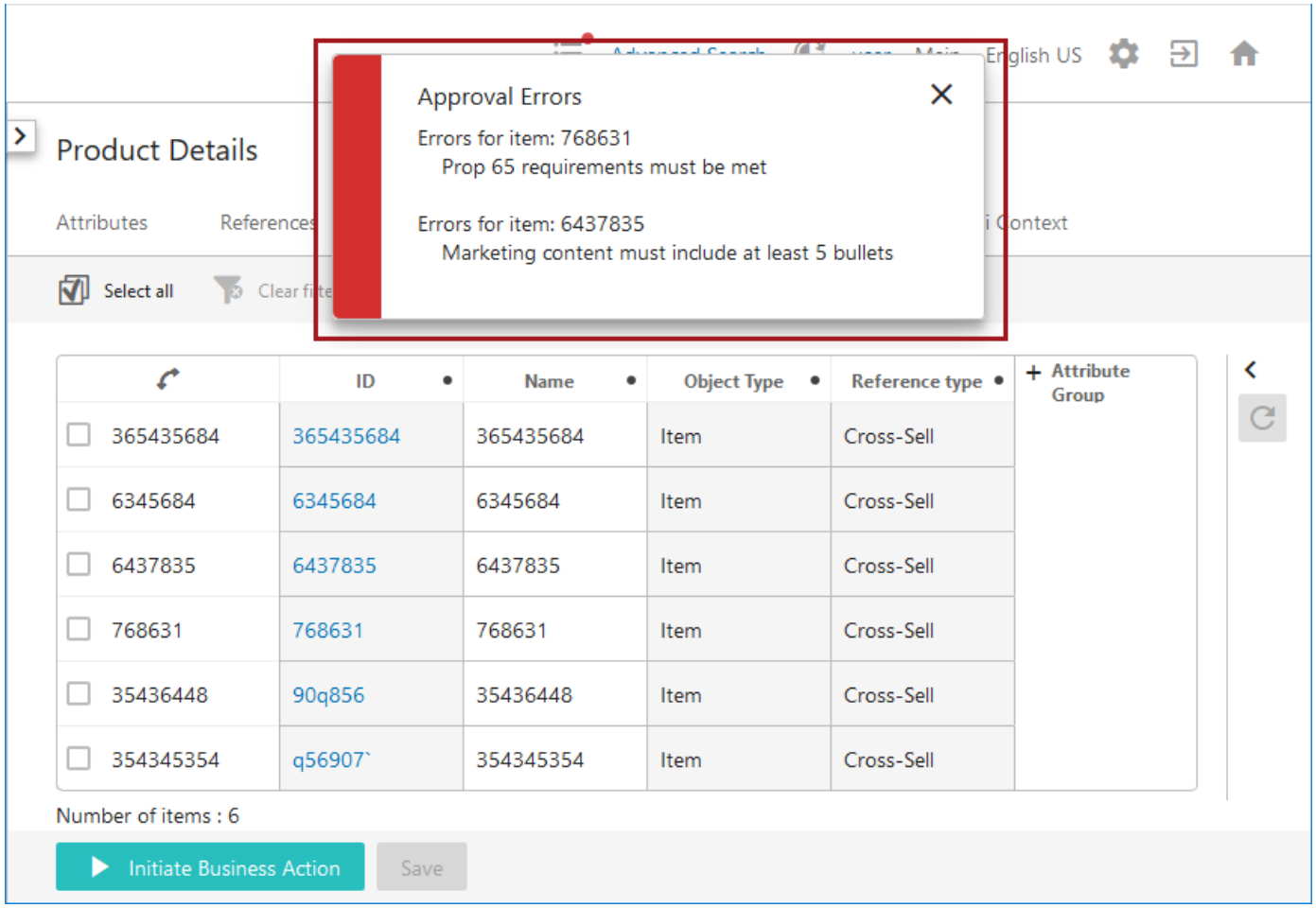
5. **Result**. Now when a user has made changes to one or more references, the 'Approve' button will be enabled.



When the 'Approve' button is clicked with one or more references multi-selected, the button initiates a validation process. If no issues are detected with the approve action, a custom notification will display to that effect:



If the validation process detects issues with the approve action, a custom notification displays describing the items that could not be approved and why.



Use Case Three

The third use case describes an application of the **Business Action with Web UI Bind** component in which a user wants to change the position of a classification node in the Web UI's Tree hierarchy from one parent node to another, a process called 'reparenting.' This use case illustrates the **Business Action with Web UI Bind**'s ability to incorporate a Node Picker into an input field. In the example described, the component is added as a button displaying at the bottom of a Node Details screen.

In this scenario, the customer requires that a Classification node called 'SubCategory2' must be moved from its current position under 'Category 1' to a new position beneath 'Category 2.'

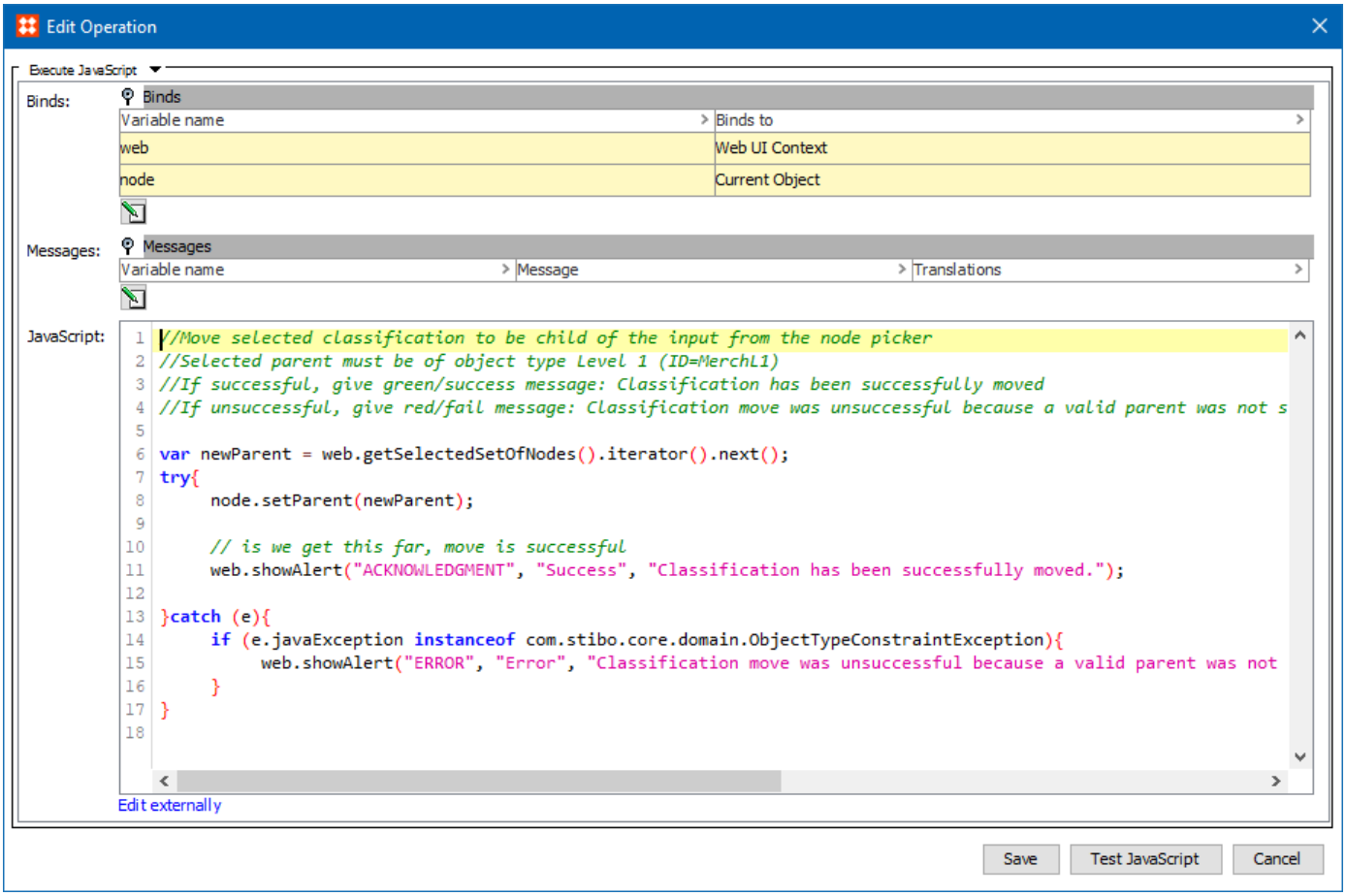
The configuration steps required to address this use case are described below:

1. **Review requirement and assess solution**. In this instance, the requirement is that users must be able to move a classification object from a child position under one parent to a different parent. To configure a solution to this requirement, a **Business Action with Web UI Bind** button must be added to the Node Details screen mapped to the classification object type that will require reparenting.

2. **Configure the business rule**. Directly below is a screenshot of the business rule, as it displays in workbench, that meets the above-described requirement. Beneath this screenshot is the text of the business rule that can be cut and pasted into the business rule editor in the workbench, and then edited by the user as needed.

   The binds required to enable this business rule are listed above the business rule itself. The bind that does the work of bringing the business rule into the **Business Action with Web UI Bind** component is the 'Web UI Context' bind. Regardless of the work the business rule is configured to do, the 'Web UI Context' bind must be included for the component to work.

Additional guidance about how this business rule has been written displays in green text in the screenshot below.



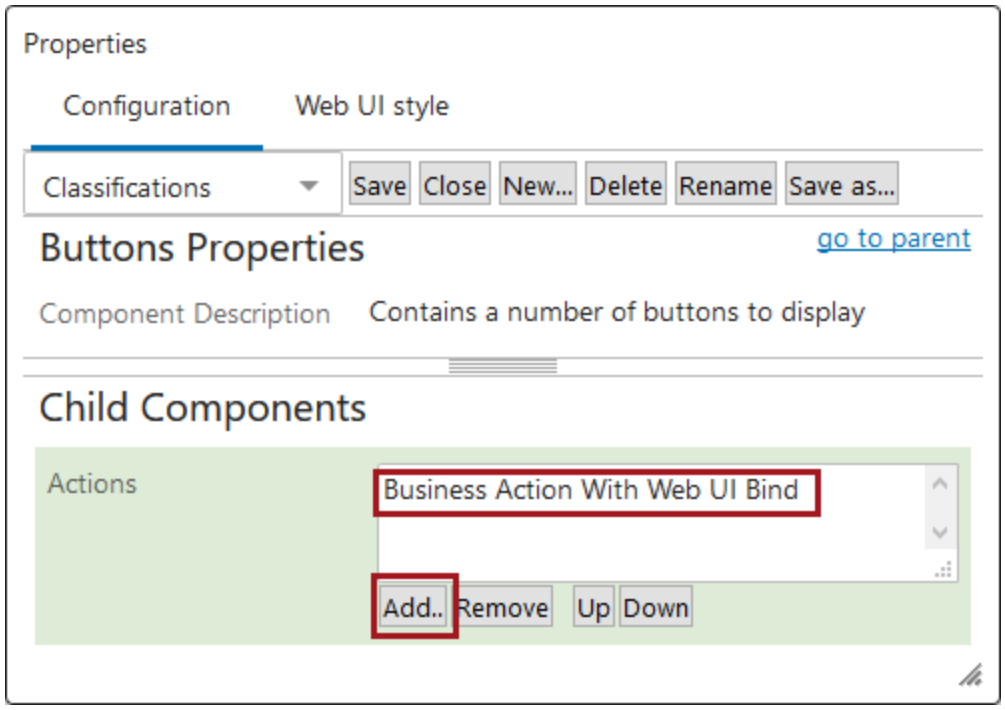
For a full JavaScript code example, see the online version of this topic.

```
var newParent = web.getSelectedSetOfNodes().iterator().next();
try{
	node.setParent(newParent);

	web.showAlert("ACKNOWLEDGMENT", "Success", "Classification has been
successfully moved.");

}catch (e){
	if (e.javaException instanceof
com.stibo.core.domain.ObjectTypeConstraintException){
```

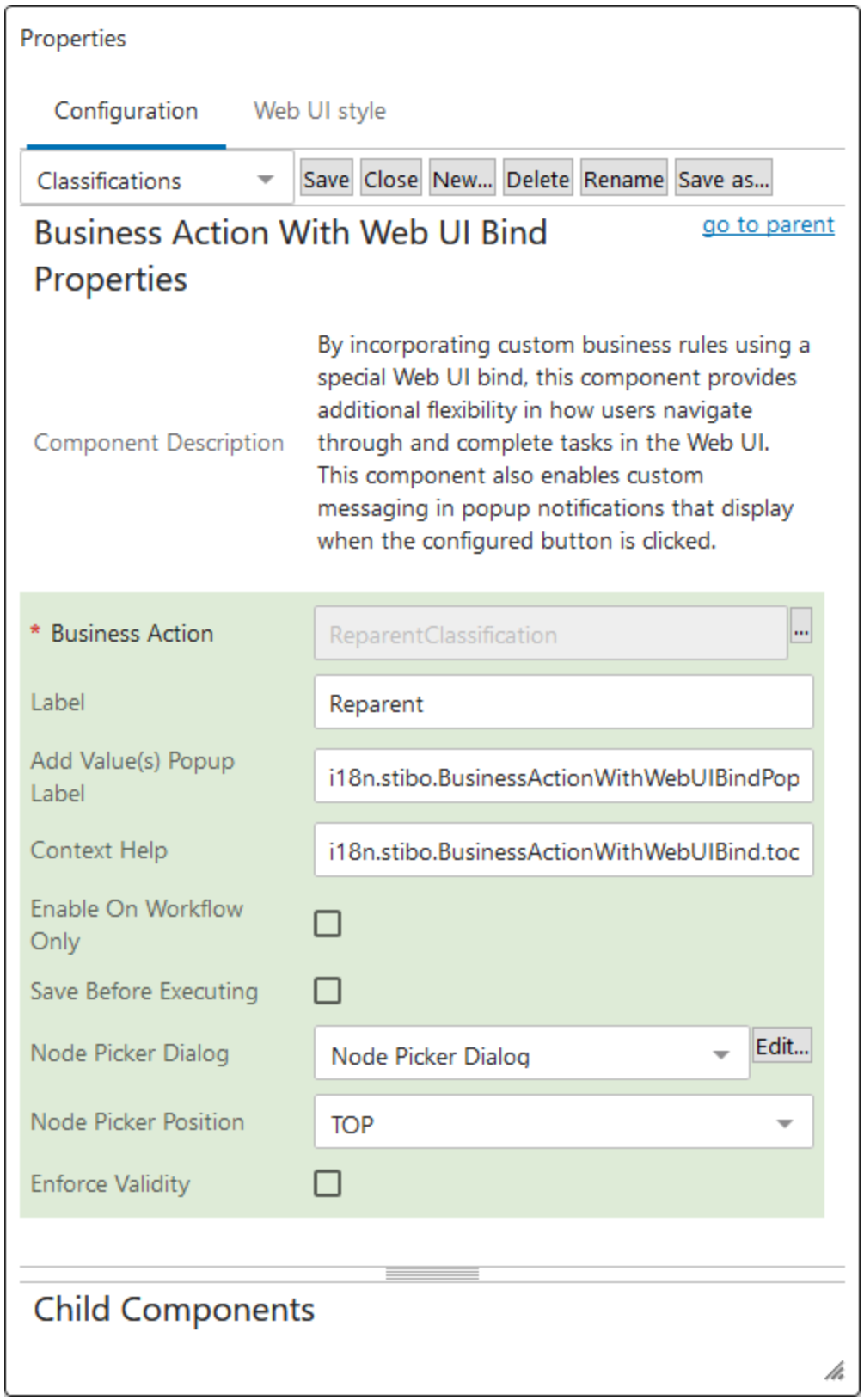
```
                web.showAlert("ERROR", "Error", "Classification move was unsuccessful because
a valid parent was not selected. Please try again by selecting a Category
within the Merchandising Hierarchy");
        }
}
```

3. **Add the button**. With the business rule created, users can now configure this component in the Web UI.

   Because the **Business Action with Web UI Bind** component should be accessible on any tab on the object, the button should be added to the 'Buttons' field located in the 'Child Components' section of the Node Details screen. Actions added display as buttons at the bottom of the Node Details screen.

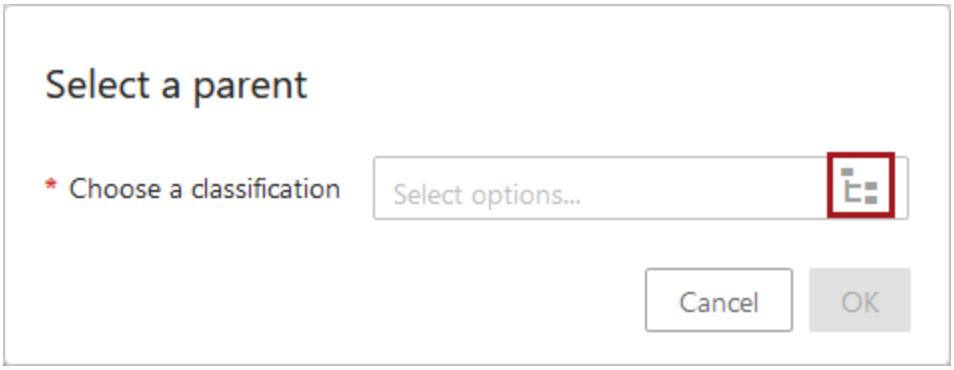


4. **Configure the button**. To configure the **Business Action with Web UI Bind** component as a button for this use case, review the bullets below:

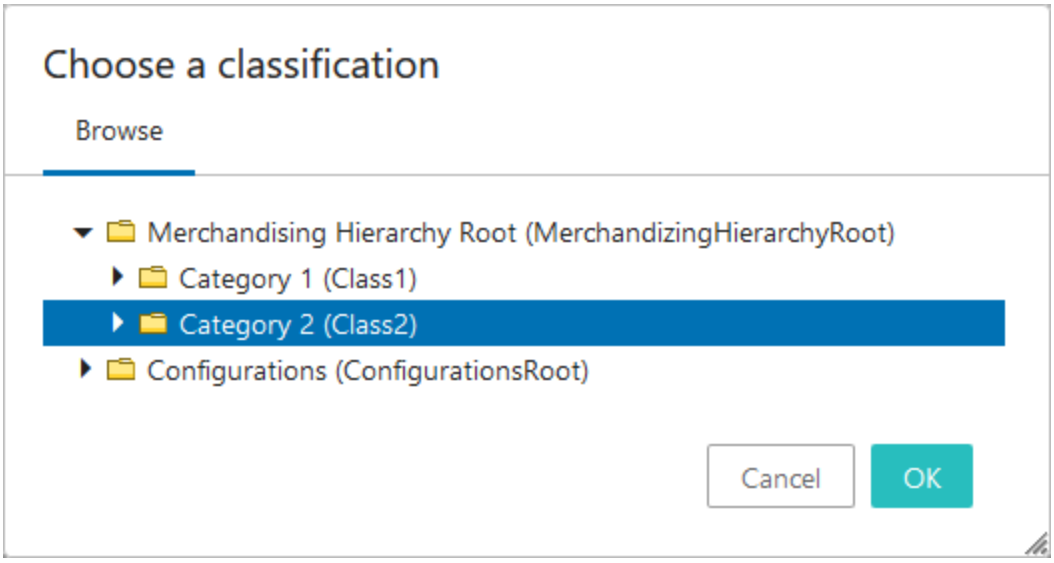

Properties
Configuration
Web UI style
Classifications
Save
Close
New...
Delete
Rename
Save as...
Business Action With Web UI Bind Properties
go to parent
Component Description
By incorporating custom business rules using a special Web UI bind, this component provides additional flexibility in how users navigate through and complete tasks in the Web UI. This component also enables custom messaging in popup notifications that display when the configured button is clicked.
* Business Action
ReparentClassification
Label
Reparent
Add Value(s) Popup Label
i18n.stibo.BusinessActionWithWebUIBindPop
Context Help
i18n.stibo.BusinessActionWithWebUIBind.toc
Enable On Workflow Only
Save Before Executing
Node Picker Dialog
Node Picker Dialog
Edit...
Node Picker Position
TOP
Enforce Validity
Child Components

- On the 'Business Action' parameter, click the ellipsis button (...) to select the relevant business rule from a Node Picker. In this case, the business rule is titled 'Reparent Classification.'
- On the 'Label' parameter, add text that describes in one or two words what action clicking the button will execute. In this case, because the operative business rule is 're-parenting' the current node, the button label text is 'Reparent.'
- 'Enable On Workflow Only' should not be checked as this component's configuration does not touch on workflows.
- If a Node Picker component is written into the business rule, the 'Node Picker Dialog' parameter gives users the ability to fully configure the Node Picker component. Click the 'Edit...' button to the right of the field to begin configuration. For more information on configuring the Node Picker, see the **Node Picker** topic in this documentation.

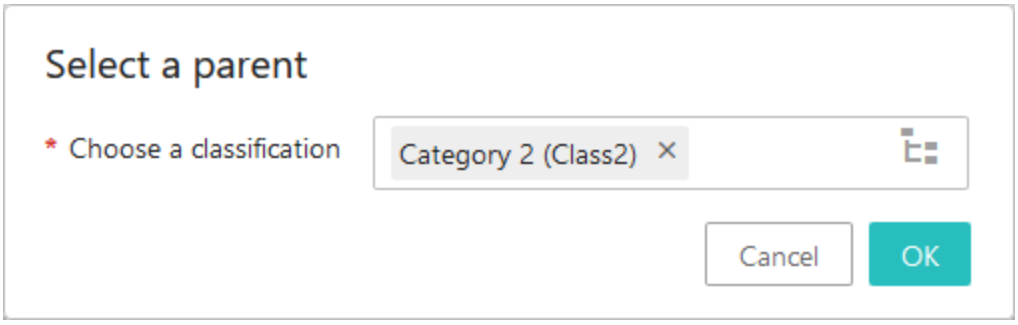
5. **Result**. Now, when a user stands on a classification node and clicks the 'Reparent' button, a user-input window will display. In this example, a single input field entitled 'Choose a classification' is available. Inside the field is a Node Picker icon. Click the icon to access the Node Picker.



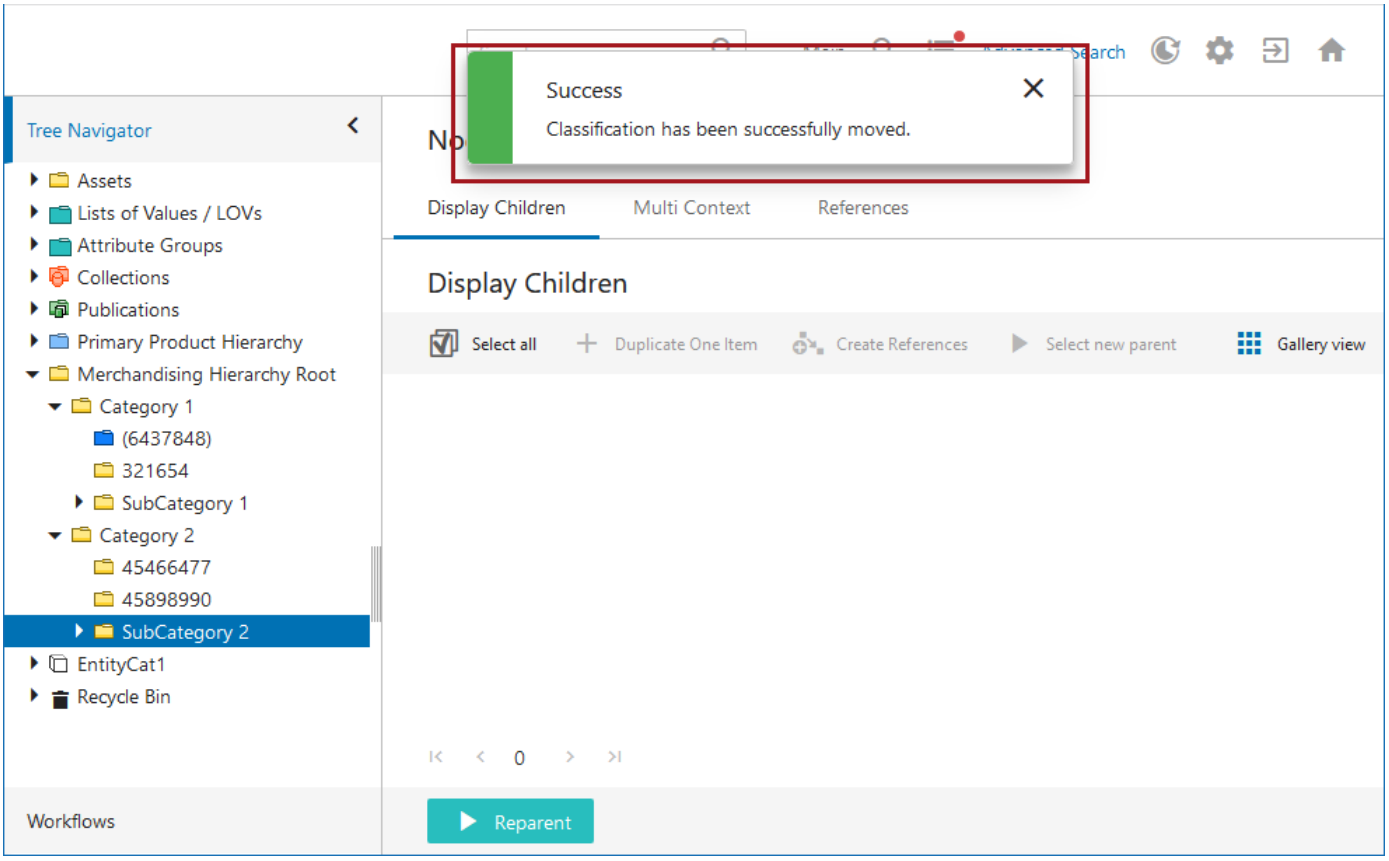
Using the Node Picker, the user has the ability to browse through the available classifications to decide under which node the current classification node should be moved. In this example, the classification 'SubCategory2' will be moved from its current parent, 'Category 1,' to a new parent, 'Category 2.' Once the desired destination classification has been selected, click 'OK.'



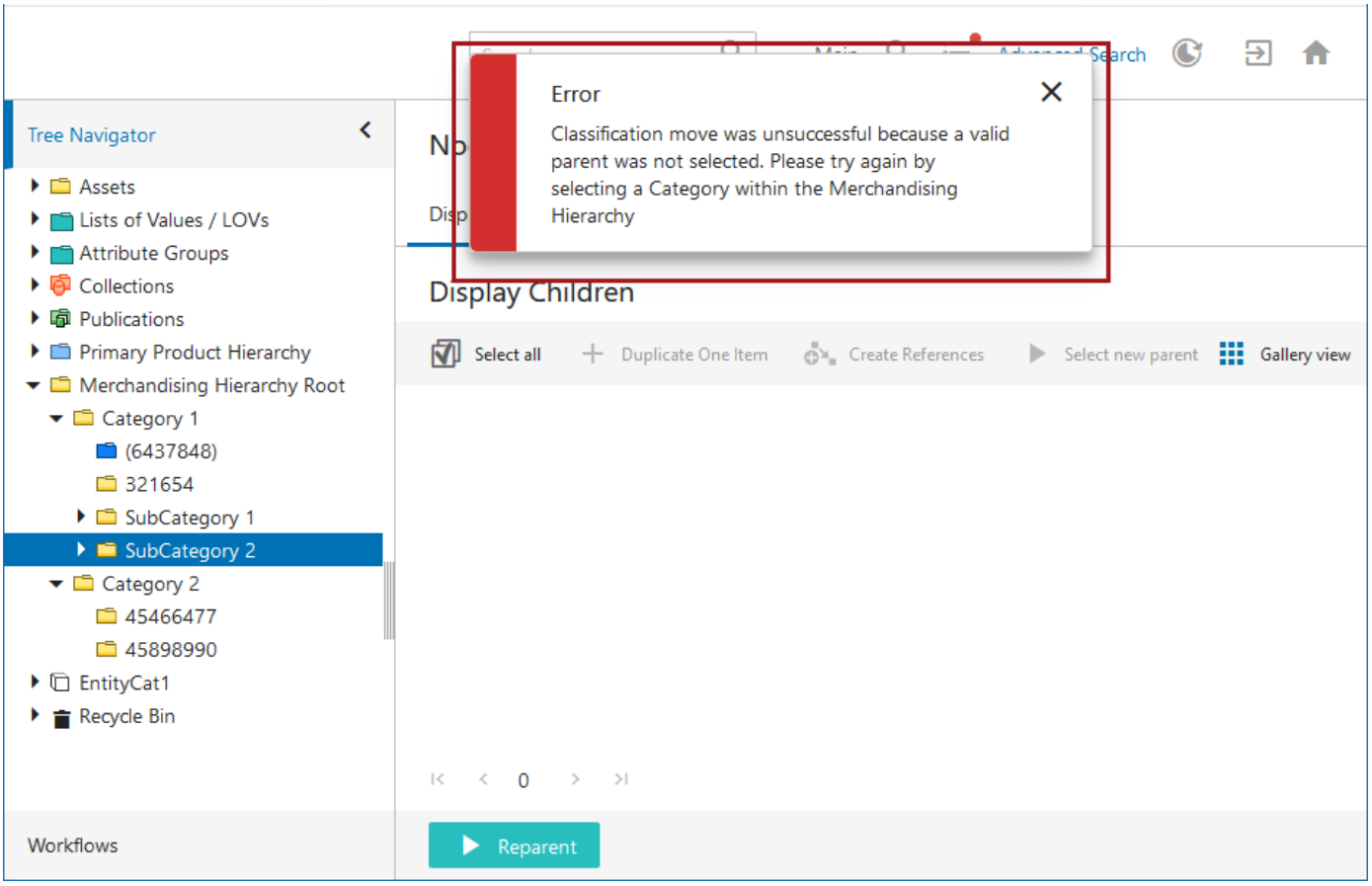
The selected destination classification will display in the 'Select a parent' dialog. Click 'OK'.



When the reparenting task is successful, the business rule is configured to display a popup message acknowledging a successful move from one classification to another.



When a reparenting action fails due to the user selecting an invalid destination classification, an error popup message displays with details specific to the error.



Use Case Four

The fourth use case describes an application of the **Business Action with Web UI Bind** component in which a user wants to add metadata to a new reference linking a product to a supplier. This use case makes use of the **Business Action with Web UI Bind**'s ability to display an input field that enables users to write data to the configured attributes. These input fields allow for the use of Node Pickers, List of Values (LOV) dropdowns, and date pickers, as examples.

Though in the example used to present this use case, the user input window is enabling users to enter data that is written to the attribute, there are many ways the user-input window can be applied that do not entail writing data to the attribute. For example, a **Business Action with Web UI Bind** component can use a bind tying the business rule to an LOV containing a list of workflow state names. By selecting a state and clicking 'OK' the business rule submits the object to the selected workflow state, but no data is written to an attribute. As another example, a parameter in a configured user-input window might be 'Name.' By adding text in this field and submitting it, the business rule powering the **Business Action with Web UI Bind** component could create a new object with an auto-generated ID and the user-submitted name but would not write the submitted 'Name' value to the attribute bound in the business rule.

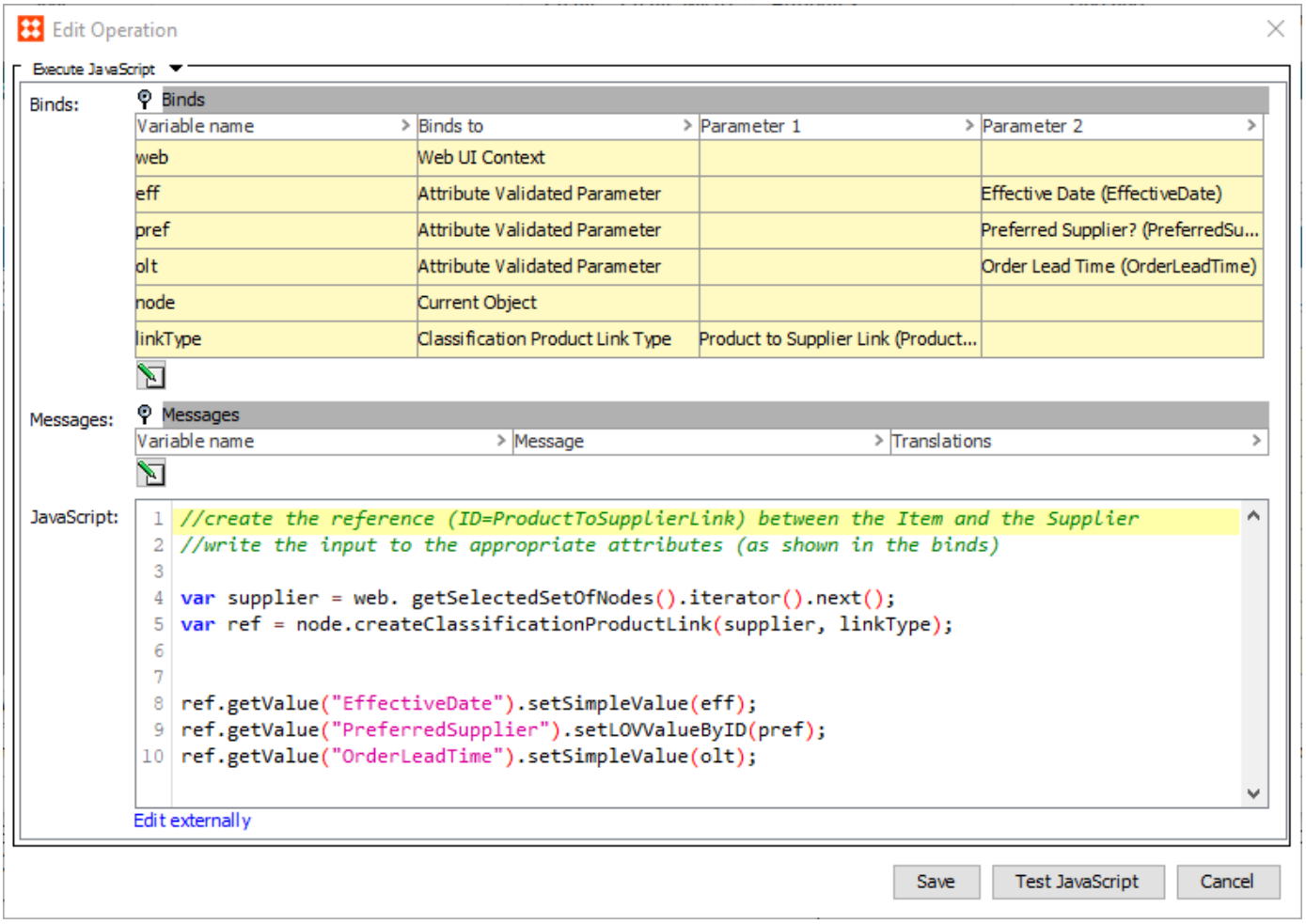
In this use case, however, the customer wants to add a reference to a supplier named 'Alpha,' and then populate that new reference with metadata all in the same action, which entails writing data to attributes. In this example, the component is added as a button displaying at the bottom of a Node Details screen.

The configuration steps required to address this use case are described below:

1. **Review requirement and assess solution**. In this instance, the requirement is that a user must be able to add a reference of the type 'Product to Supplier' to a product object in the Web UI. Further, the user must be able to add metadata to that reference in the same action in which the reference is created. The metadata values that must be added are a supplier (a Node Picker component is required), how much lead time is required (a free text field), a designation of 'Preferred' for the supplier (an LOV with 'Yes' or 'No' as the selectable values), and an effective date (which uses a Date Picker component). To configure a solution for this requirement, a **Business Action with Web UI Bind** button must be added to the Node Details screen mapped to the product object type to which the user must add references to suppliers.
2. **Configure the business rule**. Directly below is a screenshot of the business rule, as it displays in the workbench, that meets the above-described requirement. Beneath this screenshot is the text of the business rule that can be cut and pasted into the business rule editor in the workbench, and then edited as needed.

   The binds required to enable this business rule are listed above the business rule itself. The bind that does the work of bringing the business rule into the **Business Action with Web UI Bind** component is the 'Web UI Context' bind. Regardless of the work the business rule is configured to do, the 'Web UI Context' bind must be included for the component to work.

   Additional guidance about how this business rule has been written displays in green text in the screenshot below.

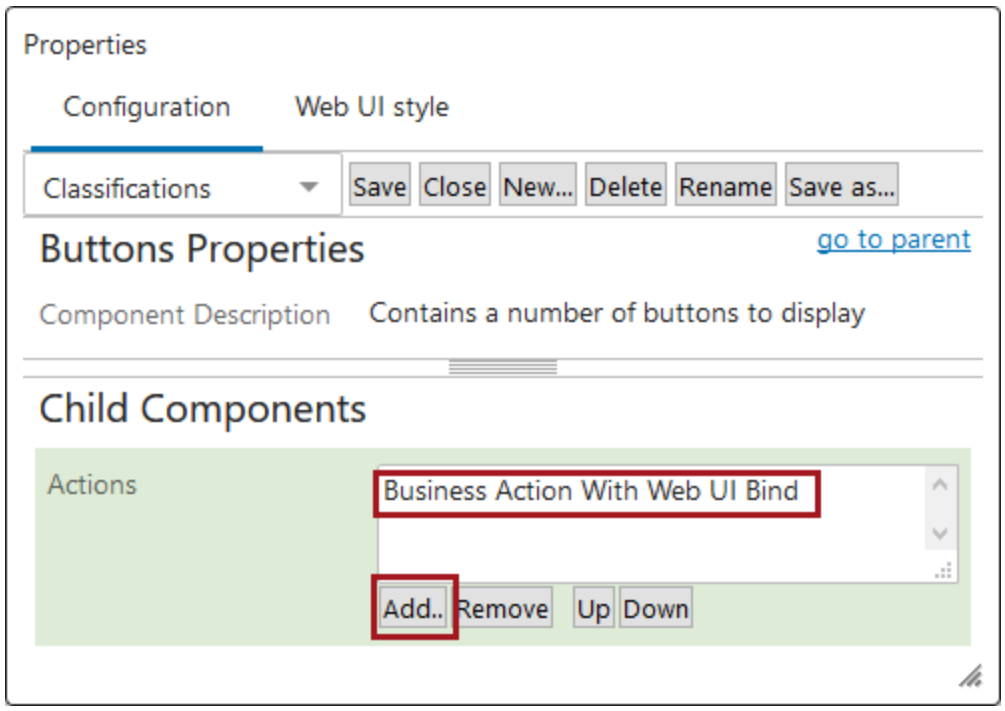


For a full JavaScript code example, see the online version of this topic.

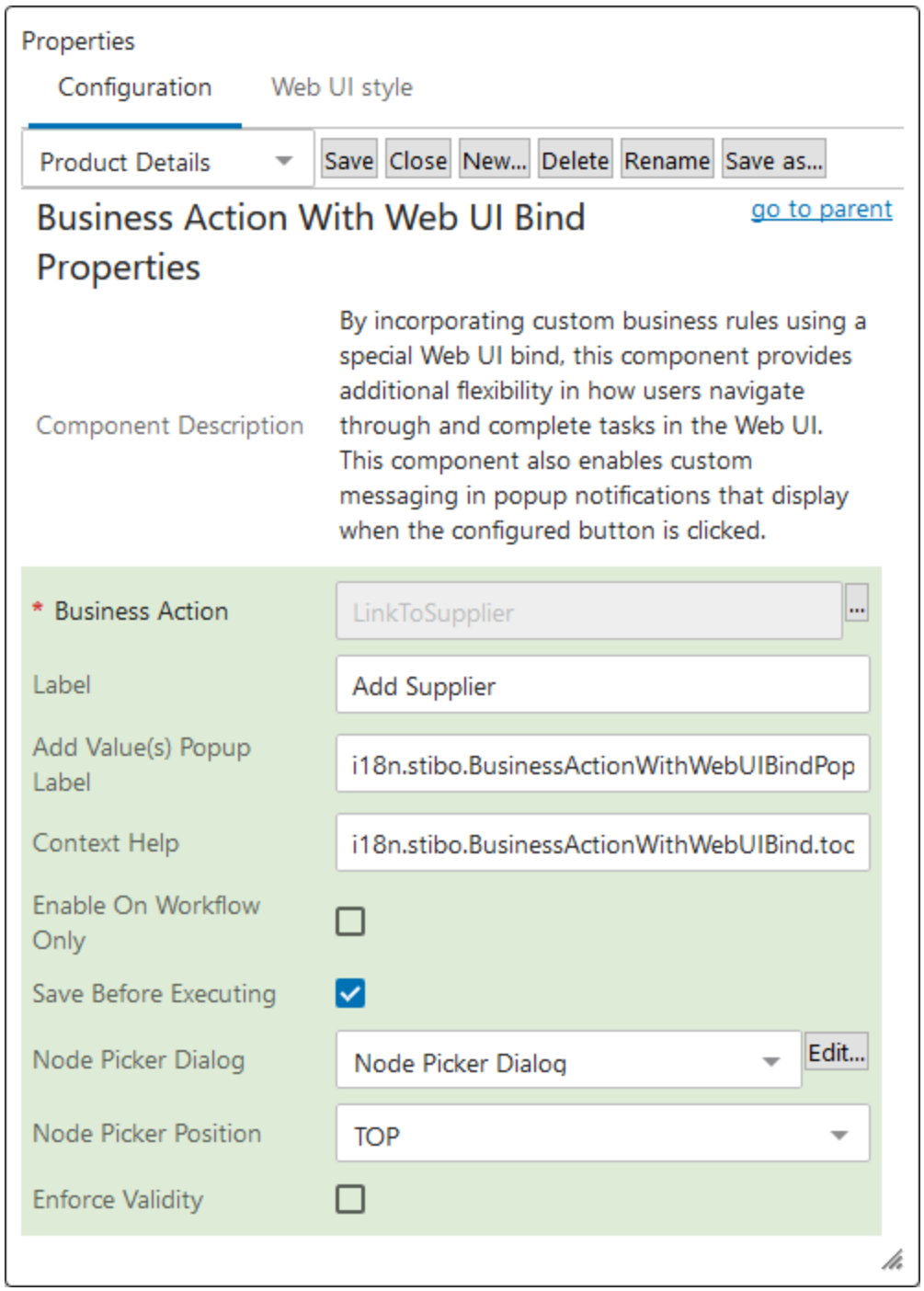
```
var supplier = web.    getSelectedSetOfNodes().iterator().next();
var ref = node.createClassificationProductLink(supplier, linkType);


ref.getValue("EffectiveDate").setSimpleValue(eff);
ref.getValue("PreferredSupplier").setLOVValueByID(pref);
ref.getValue("OrderLeadTime").setSimpleValue(olt)
```

3. **Add the button**. With the business rule created, users can now configure this component in the Web UI.

   Because the **Business Action with Web UI Bind** component should be accessible on any tab on the object, the button should be added to the 'Buttons' field located in the 'Child Components' section of the Node Details screen. Actions added display as buttons at the bottom of the screen.



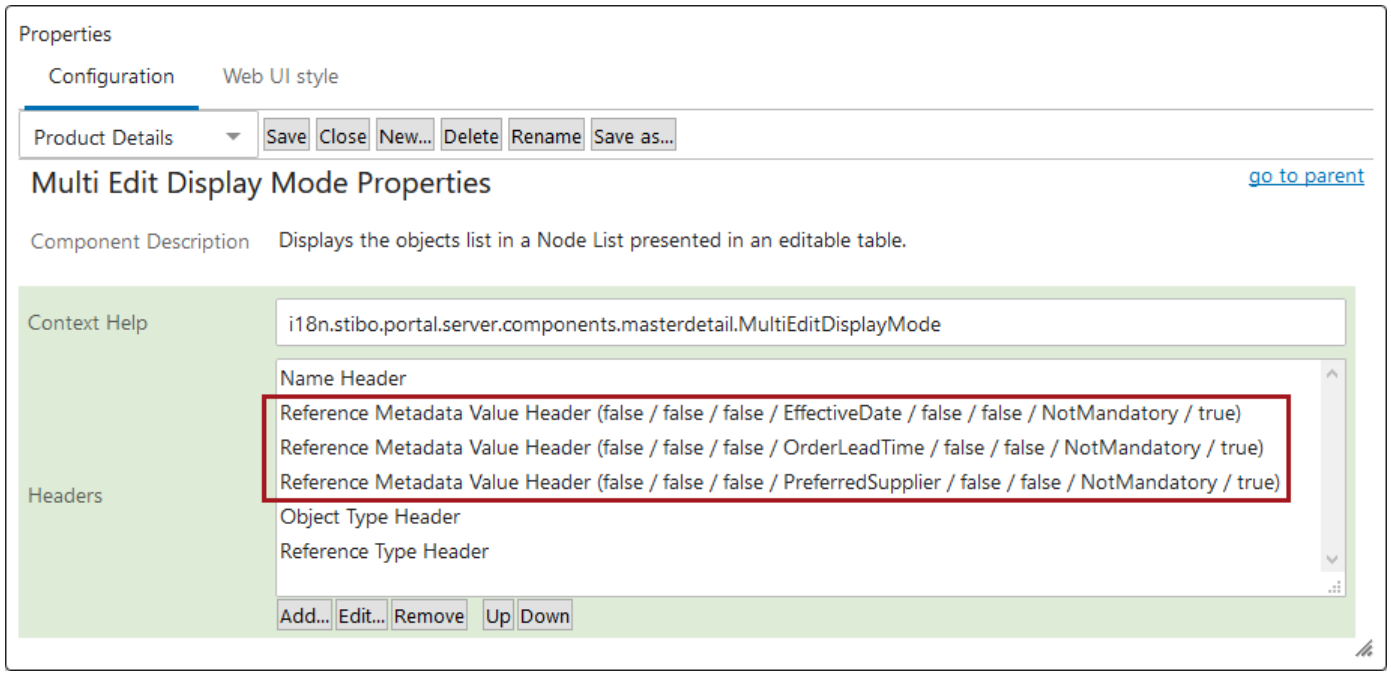
4. **Configure the button**. To configure the **Business Action with Web UI Bind** component as a button for this use case, review the bullets below:



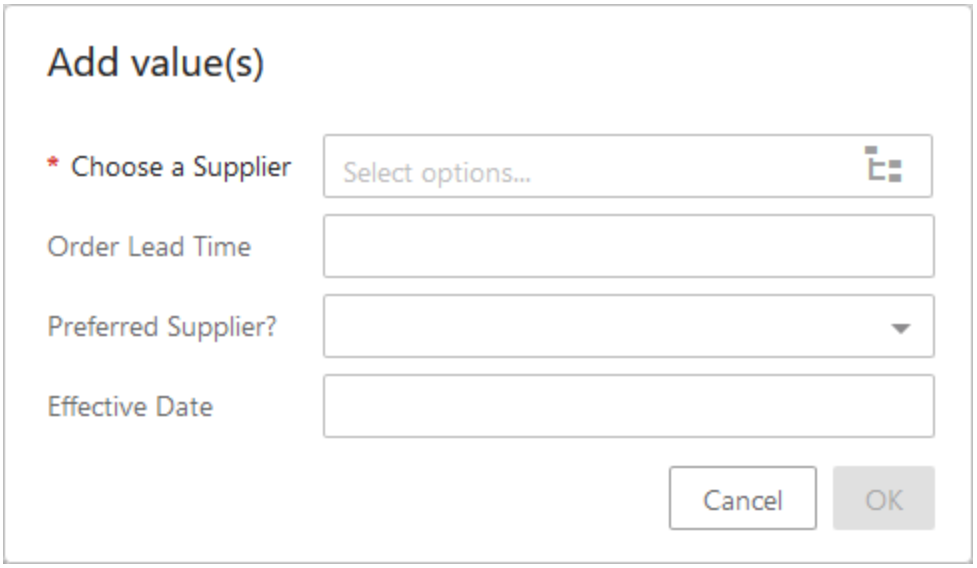
- On the 'Business Action' parameter, click the ellipsis button (...) to select the relevant business rule from a Node Picker. In this case, the business rule is titled 'LinktoSupplier.'
- On the 'Label' parameter, add text that describes in one or two words what action clicking the button will execute. In this case, because the operative business rule enables the user to add a reference to a supplier, the button label text is 'Add Supplier.'

- 'Enabled On Workflow Only' should not be checked as this component's configuration does not touch on workflows.
- If a Node Picker component is written into the business rule, the 'Node Picker Dialog' parameter gives users the ability to fully configure the Node Picker component. Click the 'Edit...' button to the right of the field to begin configuration. For more information on configuring the Node Picker, see the **Node Picker** topic in this documentation.
- Select 'Top' or 'Bottom' from the 'Node Picker Position' dropdown to determine where in the user-input window the Node Picker field will display. Selecting 'Top' puts the parameter featuring the Node Picker at the top of the user-input window, while selecting 'Bottom' places it at the bottom of the user-input window.

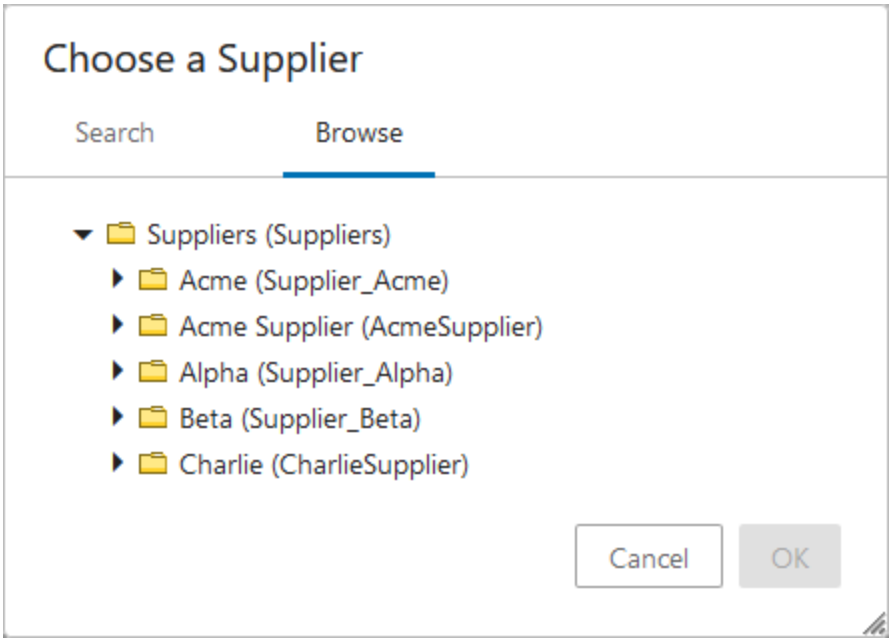
6. **Configure display of reference metadata**. For this example, the references created via the **Business Action with Web UI Bind** component are configured to display on their own tab on the mapped screen. In this case, the configuration has been built like this: Node Details > Multi Reference component > Node List > Multi Edit Display Mode. The attributes built into the relevant business rule are selected as Reference Metadata Value Headers in the 'Headers' field.



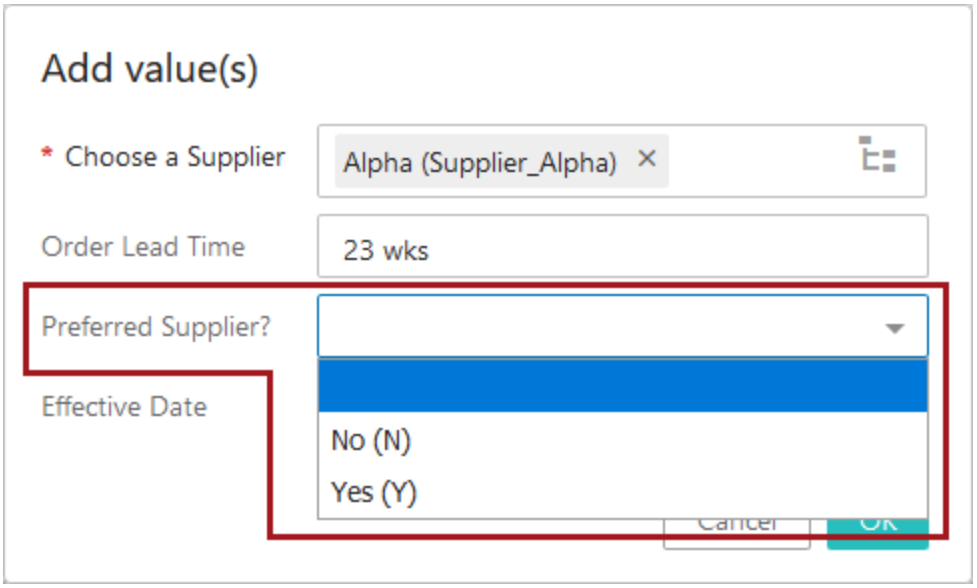
7. **Result**. When all is properly configured, users standing on a product object in the Web UI can click on the 'Add Supplier' **Business Action with Web UI Bind** button, which will result in display of a user-input window, like the one shown in the screenshot below:



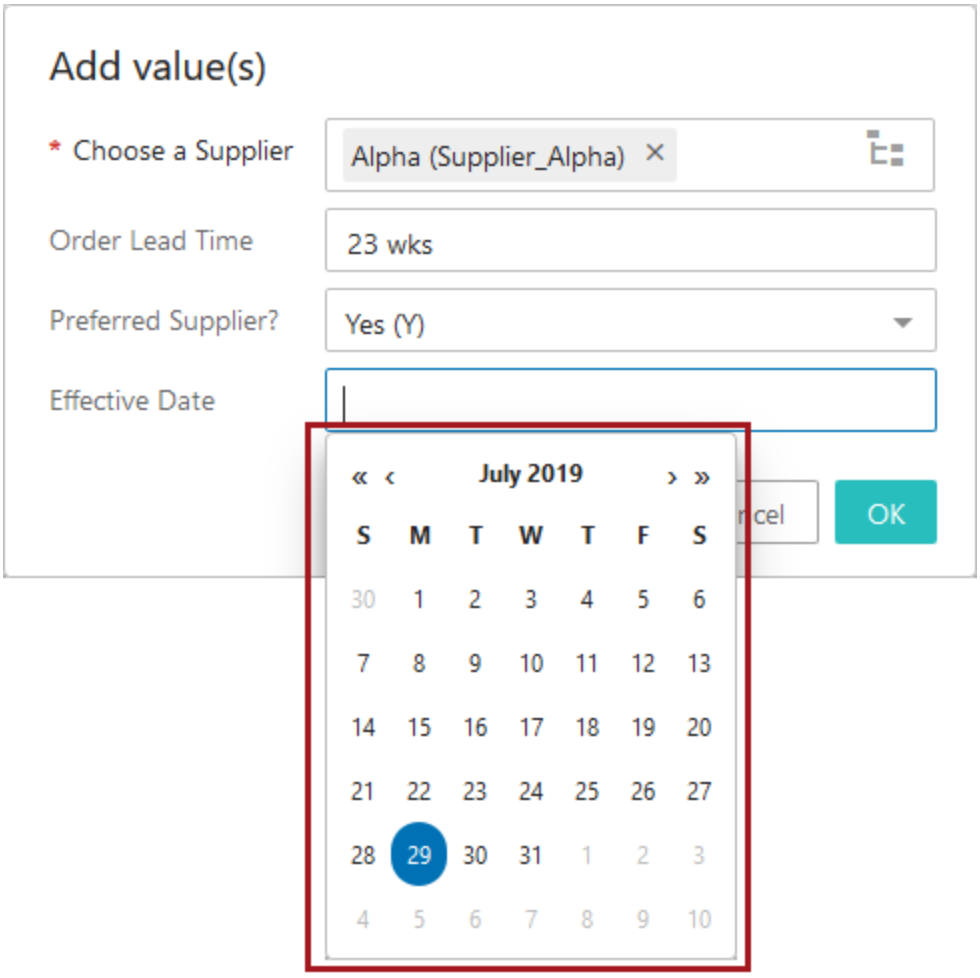
- The 'Choose a Supplier' field located at the top of the user-input window includes a Node Picker icon ( ). When the icon is clicked, a Node Picker displays that allows the user to search or browse one or more hierarchies to select the supplier to which a reference will be created. For this field, the supplier 'Charlie' is selected.



- The 'Order Lead Time' field is a free text field. For this field, the value '23 wks' is entered.
- The 'Preferred Supplier?' field is a 'No (N) ' Yes (Y)' LOV dropdown. For this field, the value 'No (N)' is selected.

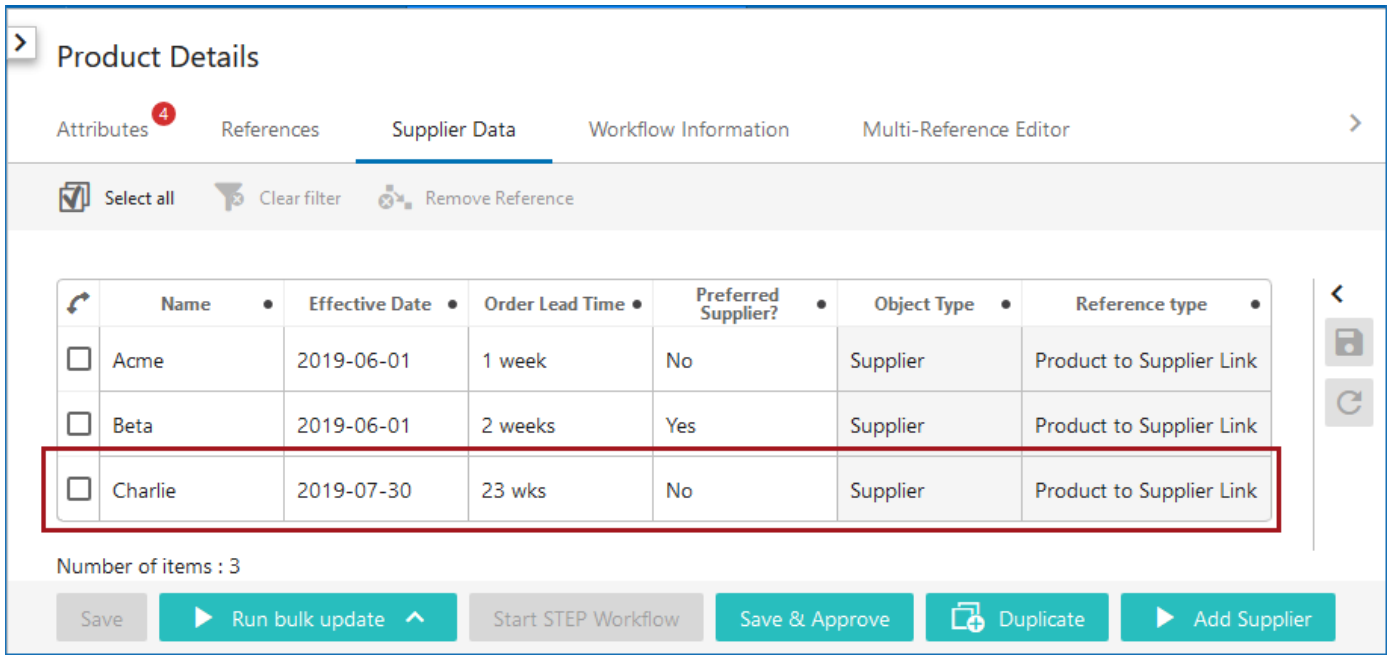


- The 'Effective Date' field displays a date picker when the user clicks in the field. For this field, the date of July 30, 2019 is selected.



- When all desired metadata values are entered, the user clicks 'OK'.

By viewing references in the 'Supplier Data' tab (configured in step four), users can confirm the reference added using the **Business Action with Web UI Bind** component has been created and populated with the metadata added in the user-input window.



Multi Context Edit Component

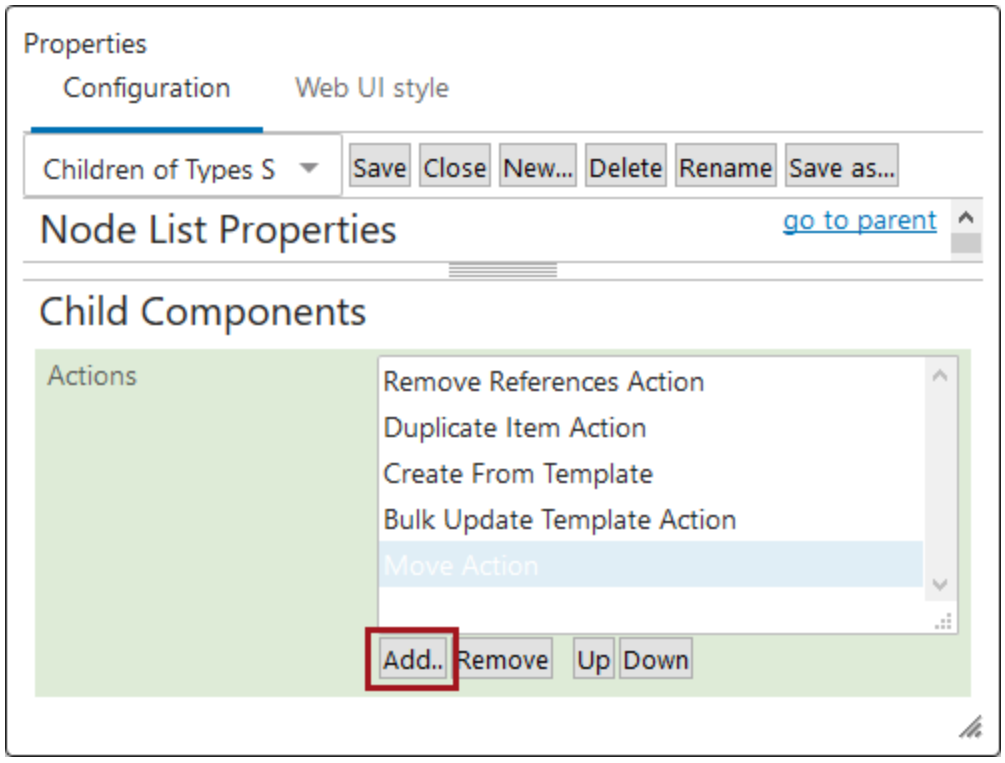
The Multi Context Edit component enables users to view information about one or more products in multiple contexts in a single, editable view. This component is available as a toolbar action for Node Lists, and only applies to objects of the product super type.

Note: The Multi Context Edit component is only available to users that have the 'multi-context-edit' component installed on their system. For more information, please contact your Stibo representative.

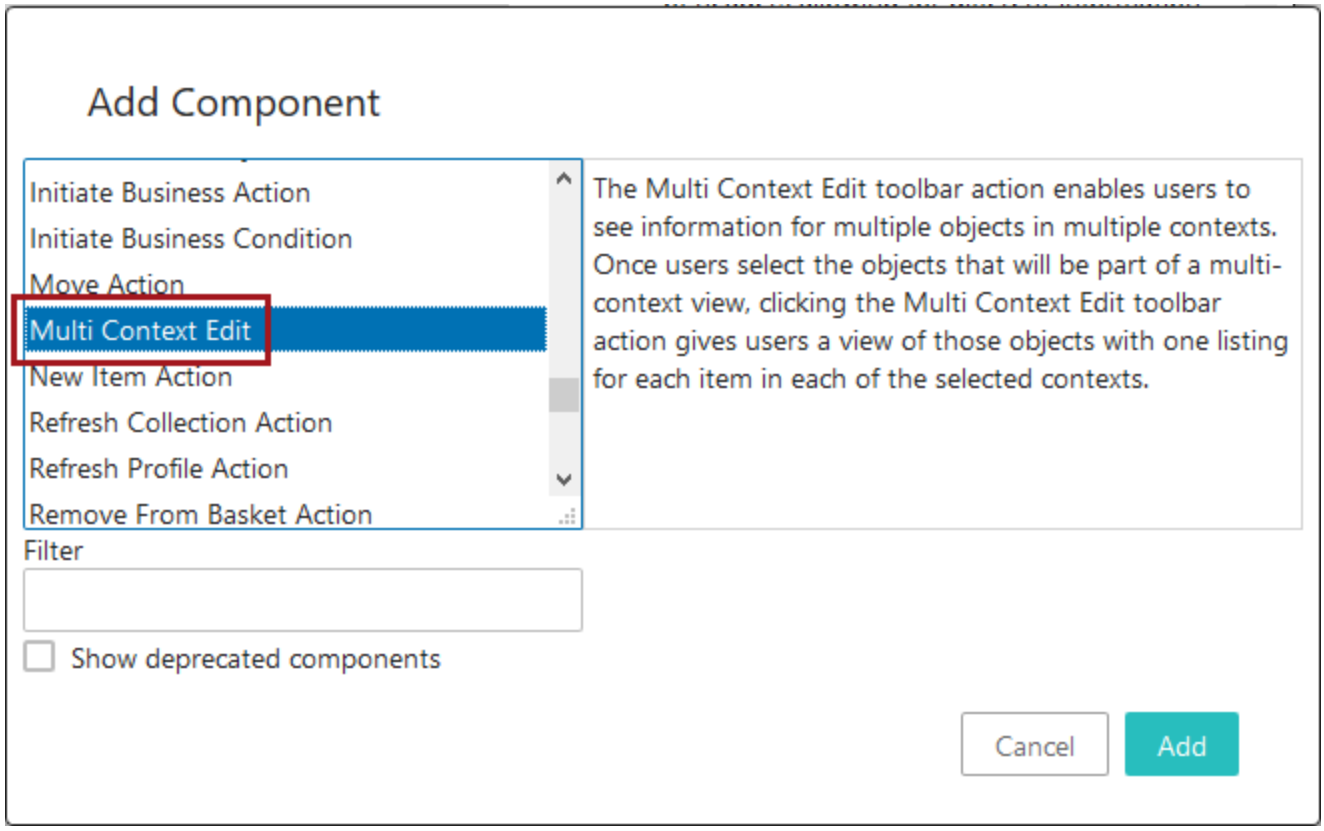
Configuring the Multi Context Edit Component

Follow the steps described below to add and configure the Multi Context Edit component as a toolbar action on a Node List.

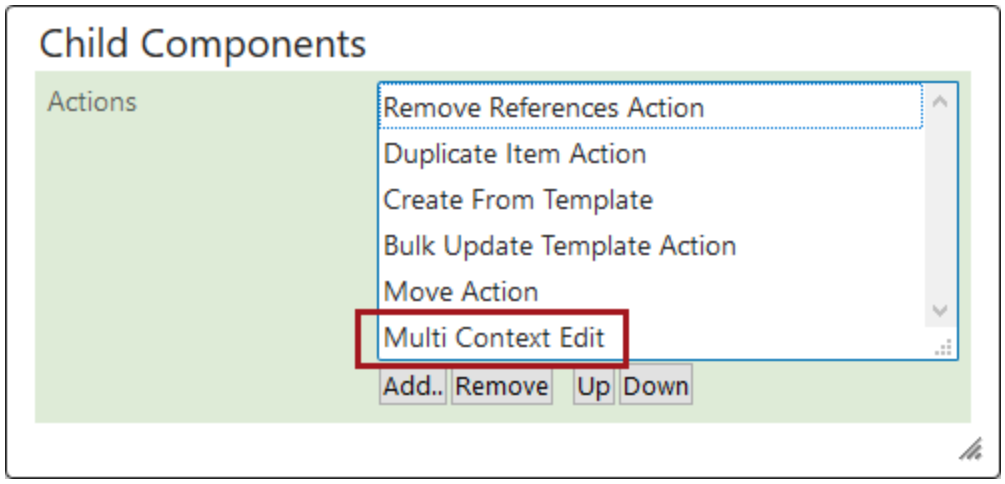
1. First, add the component. Under 'Child Components' on the 'Node List Properties' screen in the designer, click the 'Add' button under the field for 'Actions'.



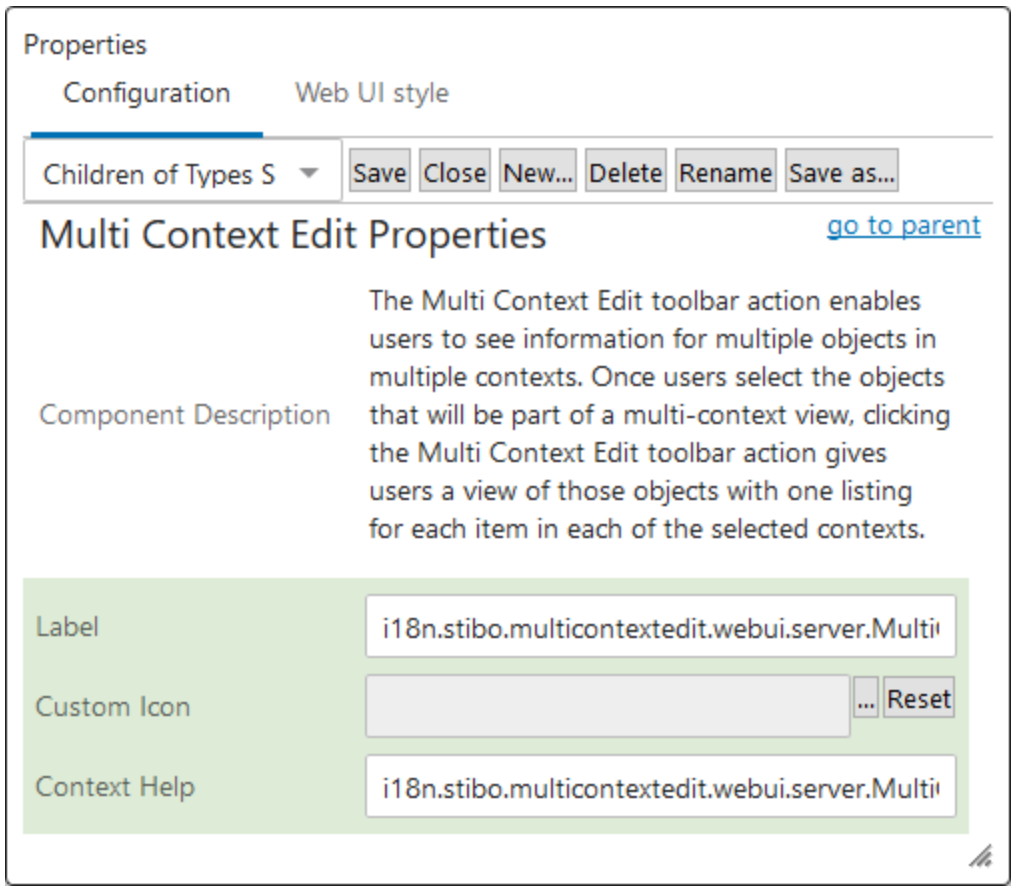
2. Then select 'Multi Context Edit' from the component list. Click 'Add'.



3. Once added to the list of actions for the Node List, double-click the Multi Context Edit component to configure.

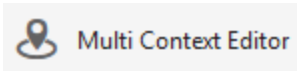


4. The configuration of the Multi Context Edit component is limited, allowing users to customize the button label, icon, and help text.



To make changes to the default button label or context help, add the custom text to the relevant fields. If nothing is added, the 'Label' default will display as 'Multi Context Editor' and the 'Context Help' default will display as 'Click to enter Multi Context Edit Mode'.

This is how the button will display at the top of the Node Editor screen:

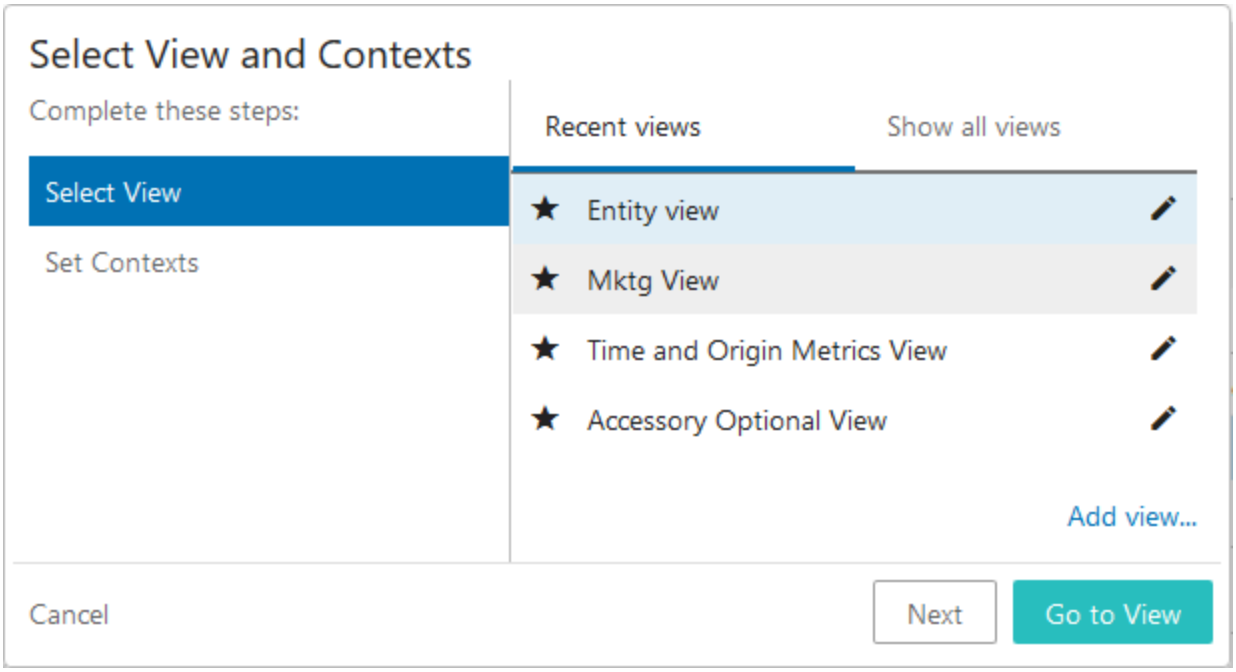


To make adjustments to the button icon, users may select a new icon. For more information on selecting new toolbar action icons, see the **Action Button Configuration on a Node List** topic in the Web User Interfaces documentation.

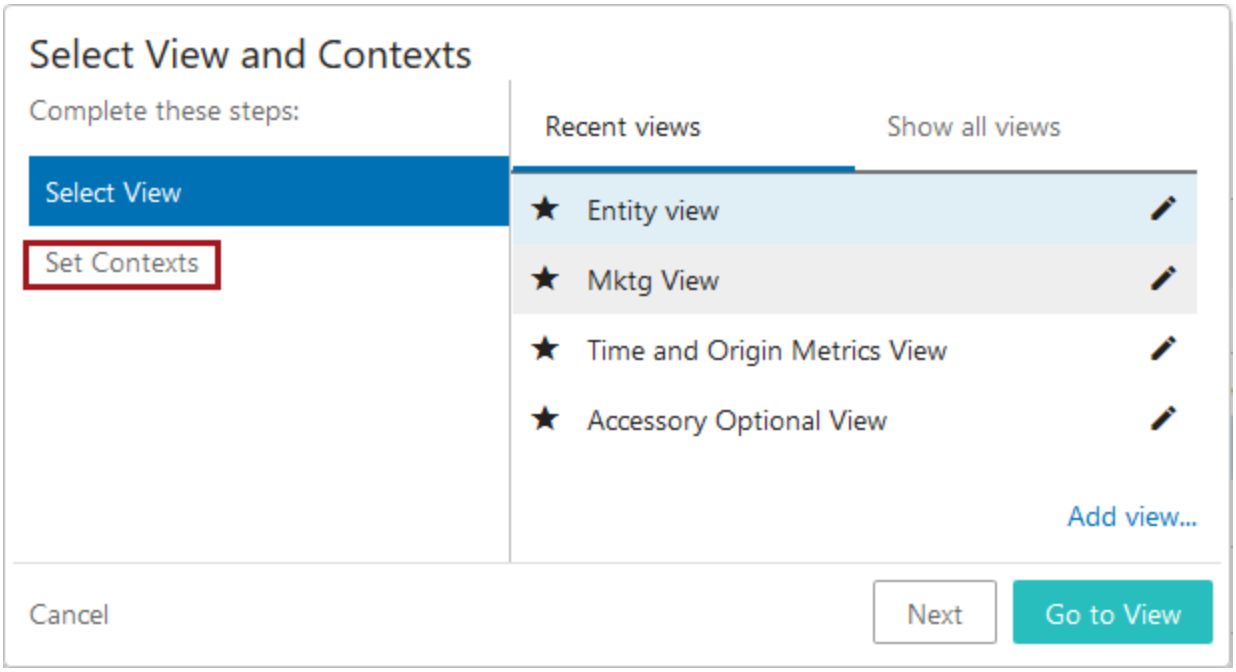
Configuring the Multi Context Edit view

The Multi Context Edit button will not display until one or more products have been chosen from the Node List. When clicked, a view-configuration window displays. In this window, users decide which headers and which contexts will display.

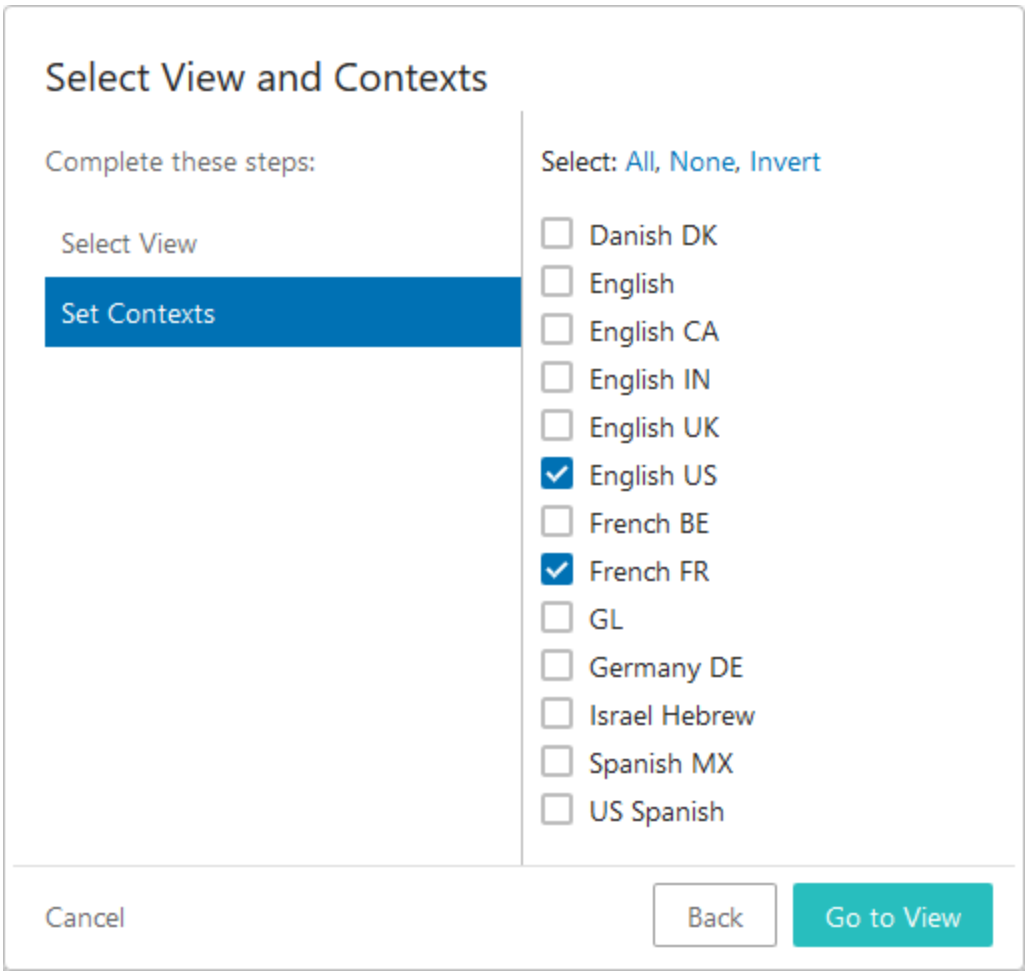
Follow the steps below to design the view that will display for the Multi Context Edit in the 'Select View and Contexts' screen.



1. Select the view. The view selection functionality in the Multi Context Edit component is similar to that of the user configurable view component, which is accessible on Multi Edit Display Modes. In addition to allowing users to create new views, the Multi Context Edit component allows users to add and edit shared views created in the user configurable view component. Information related to how to create new views or apply existing ones can be found in the **User Configurable Views** topic in the Web User Interfaces documentation.
2. Select contexts. To move into the context selector section of the view configuration, users may either click the 'Set Contexts' option, found on the left-hand side of the window, or the 'Next' button in the lower right-hand side of the window.



3. In the 'Set Contexts' section, all configured contexts for the system will display beside a checkbox.



When a check is placed beside a context, the view will display one listing in the table for each of the selected products in that checked context. For example, if two products were selected in the Node List, and two contexts were selected in this screen, four rows would display in the Multi Context Edit view, each product appearing once for each context.

Above the context list are three additional selection options: 'All', 'None', and 'Invert'. When a user clicks 'All', all contexts are selected. Clicking 'None' deselects all active selections. 'Invert' simultaneously deselects all selections and selects all unchecked boxes.

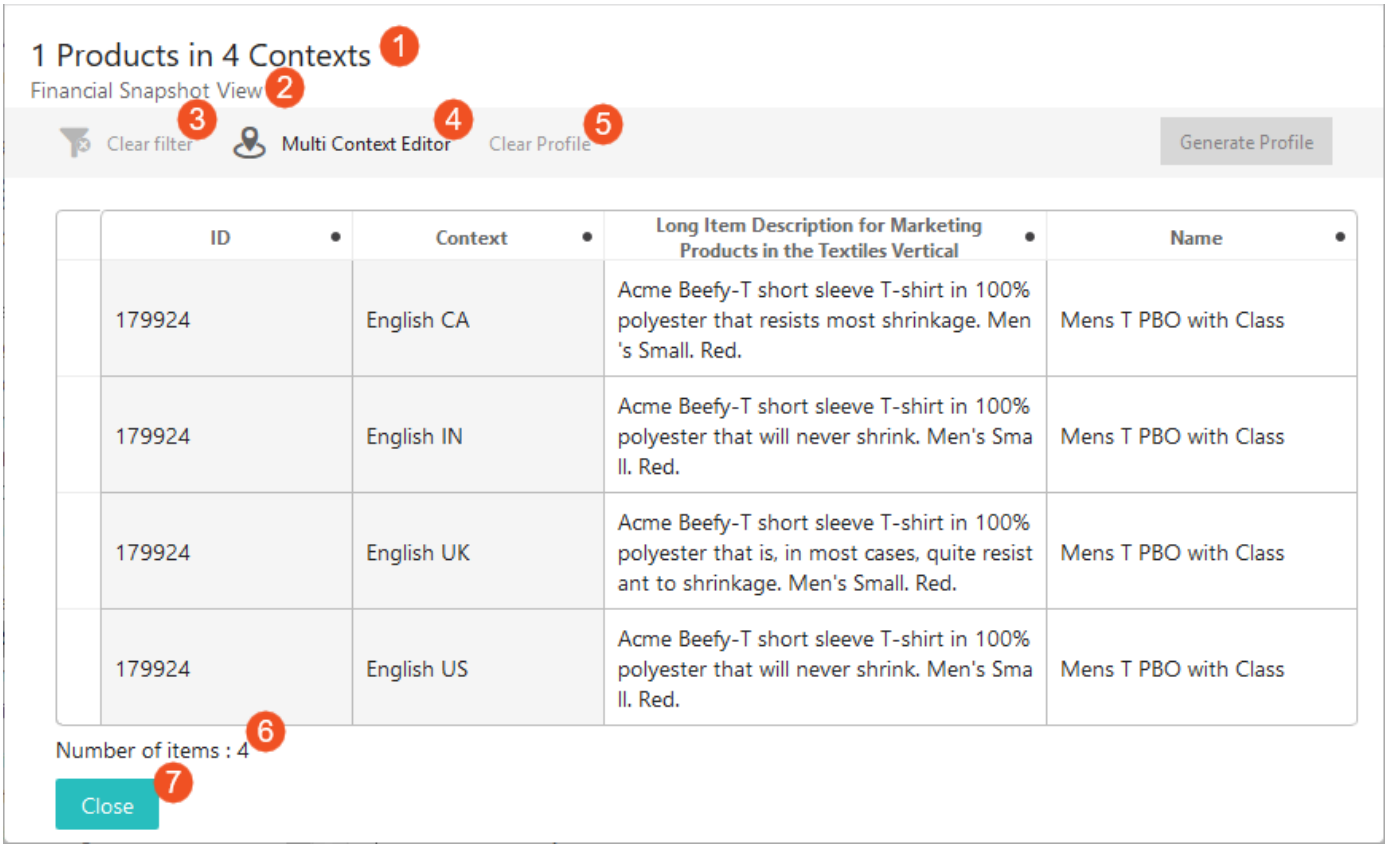
When the view is set as needed, click the 'Go to View' button to enter the Multi Context Edit view.

By default, the last view and context combination used will already be applied when entering the 'Select View and Contexts' window. It is important to note that the 'Go to View' button will not be activated until a view and at least one context has been selected.

Using Multi Context Edit

The view generated by the Multi Context Edit component is a full-screen overlay superimposed over the Node List. The Node List cannot be edited while the overlay is active. In the screenshot below, a single item has been selected for four language contexts, 'English CA' (Canada), 'English IN' (India), 'English UK(Great Britain), and 'English US' (United States).

In the screenshot below, numbers have been added beside the various elements contained in the Multi Context Edit component. Each numbered item in the list below corresponds to the numbered element in the screenshot.



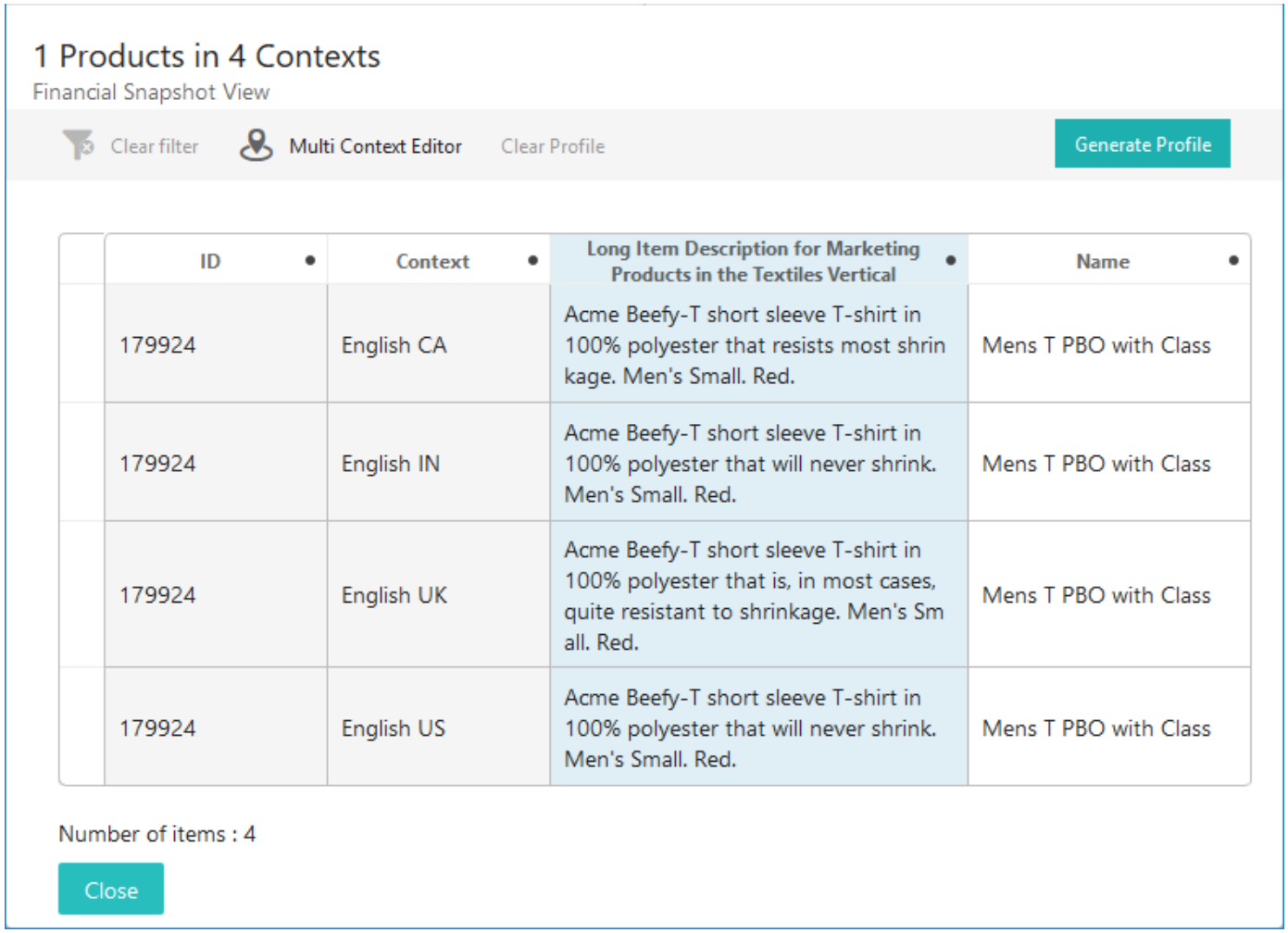
1. **Multi Context Edit display readout** - Describes how many products have been selected for display as well as the number of contexts.
2. **View name** - Displays the name of the selected view.
3. **Clear filter** - Any filtering applied to any of the columns will be cleared when clicking this button.
4. **Multi Context Edit button** - Returns the user to the view configurator without fully exiting the Multi Context Edit view mode.
5. **Clear Profile** - If a profile has been run on any of the columns in this view, clicking this button clears the shading the profile applies that differentiates between cell content that is local for the context and which is not. The button name also changes from 'Show Profile' to 'Generate Profile'.
6. **Number of items** - Lists the total number of rows included in the view.
7. **Close** - Clicking the 'Close' button closes the Multi Edit Context view and returns the user to the Node List.

Data profiling using Multi Context Edit

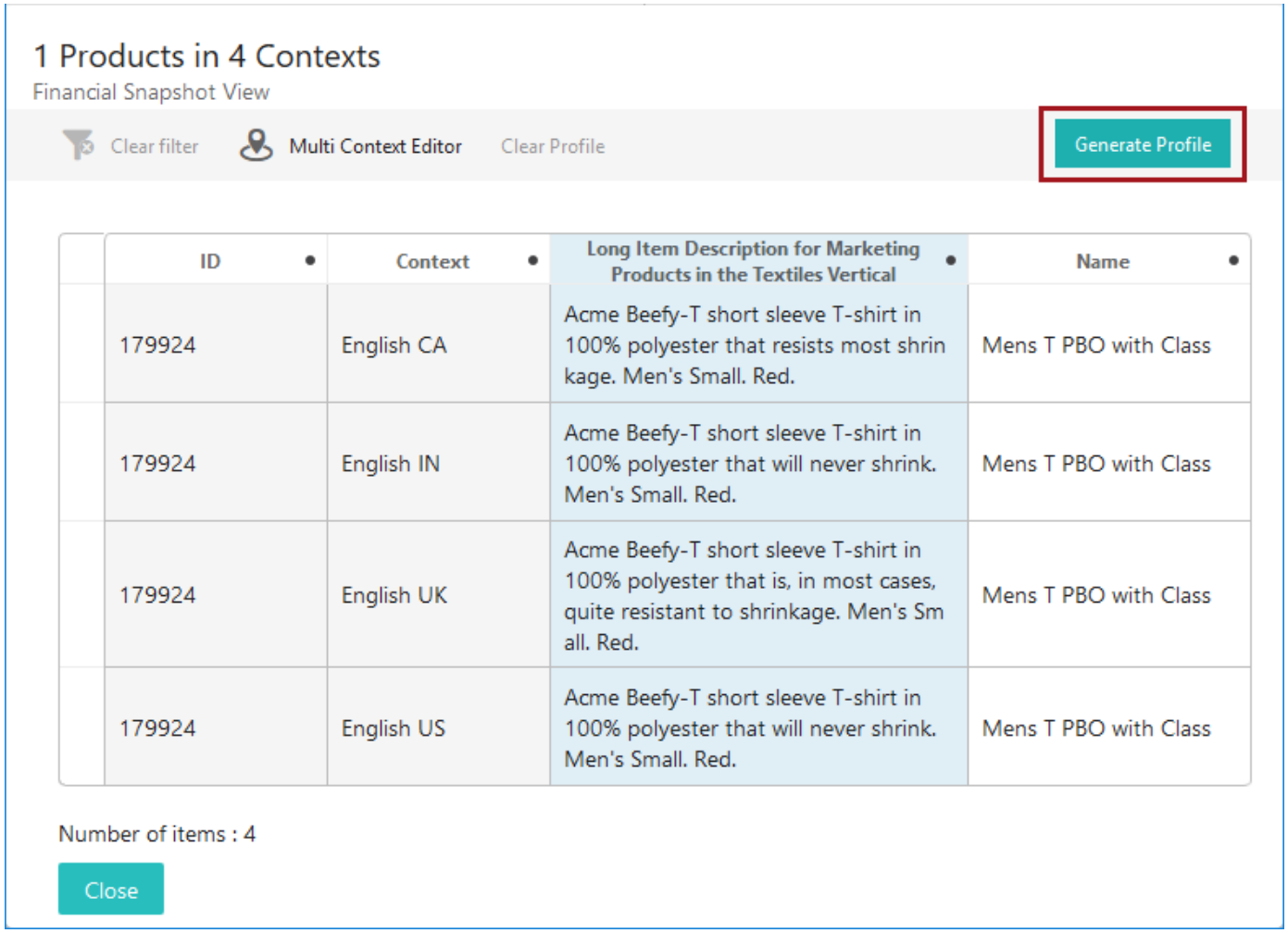
The central feature of the Multi Context Edit view is the ability to create a data profile on the displayed data. Follow the steps described below to generate a data profile on the data collected in a Multi Context Edit view.

1. Select the attribute columns that will be included in the data profile. It is important to note that only attribute columns will work with the data profiling feature. If aspects (like 'ID', 'Name', or 'Object Type') or references are selected, for example, these columns will be ignored in the data profile.

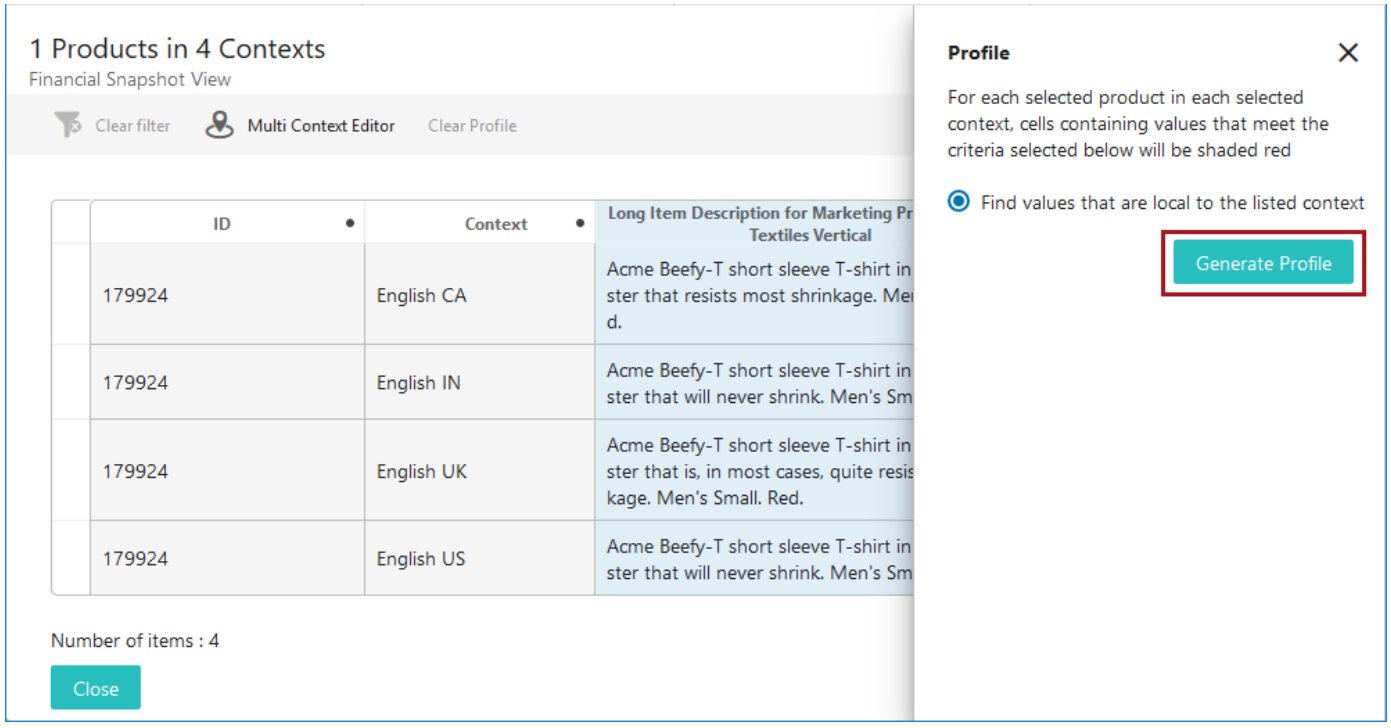
   To select a column, click the column header. The column will be shaded blue when selected. In this example, the column 'Long Item Description for Products in the Textiles Vertical' has been selected.



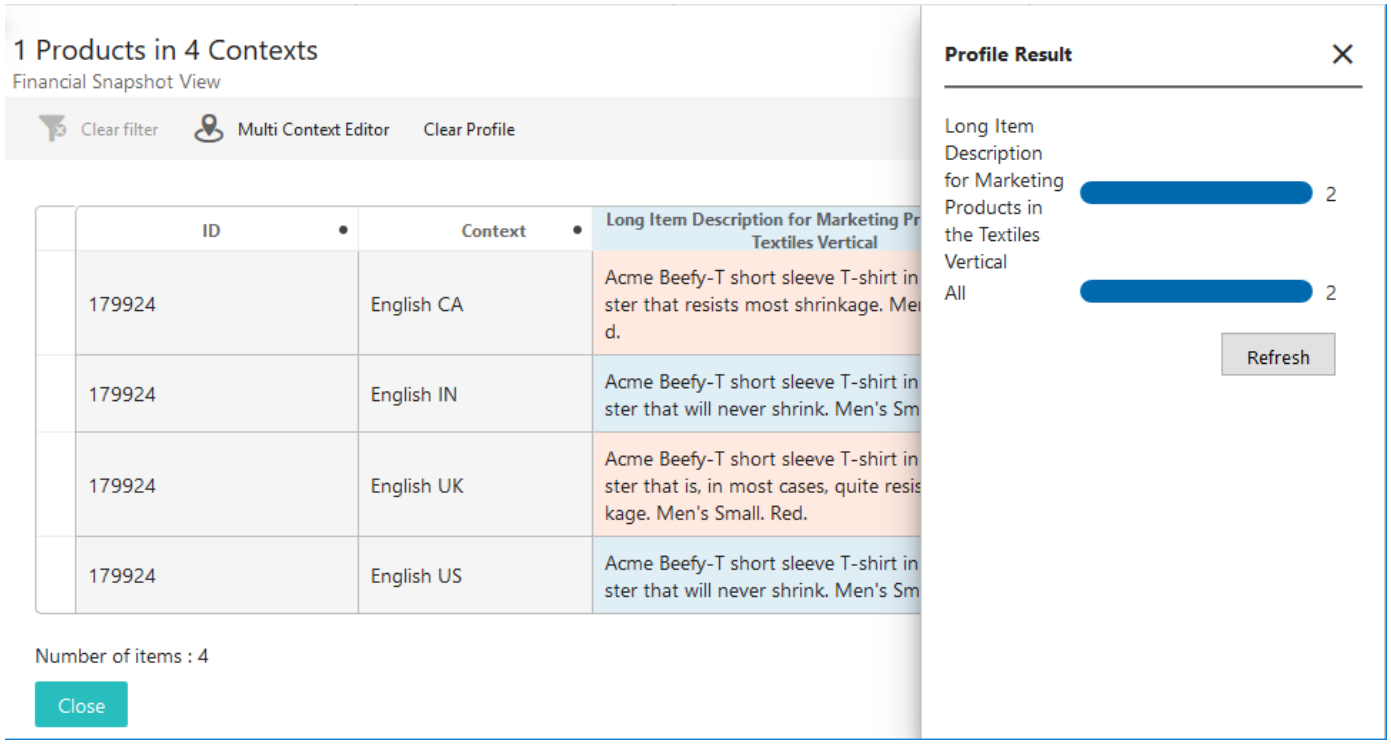
2. Click the 'Generate Profile' button in the upper left hand corner of the screen.



3. Select the data profile criteria that should be applied to the selected columns. The available option is 'Find values that are local to the listed context'. When the radio button for that option is clicked, click the 'Generate Profile' button.



4. A Profile Result panel displays the results of the data profile. The screenshot below shows the column that was profiled with the product's attributes that are local for the listed context shaded red, those that are not local to the context remaining blue-shaded.



The 'Profile Result' includes the name of the attribute column that was profiled with the number of contexts that met the criteria, in this case, which attributes were local to the context. Below the attribute is an 'All' metric that shows the number of all cell content for all selected columns that met the criteria. The 'Refresh' button allows users to re-run the same data profile action if the user believes additional changes were made since the last data profile was generated.

It should be noted that selecting a large number of objects coupled with a large number of contexts can create performance issues when rendering. The system gives admins the ability to display a warning when the number of nodes selected exceeds a configured maximum by adding the property MultiContextEdit.RecommendedMaximumNumberOfNodes=1000 in the sharedconfig.properties file. This property directs the system to display a warning message to the user if more than 1,000 nodes (a combination of objects and contexts) are set to display in the Multi Context Edit component. The '=1000' is the maximum that aligns with Stibo Systems' recommended practices, but can be set higher or lower, depending on customer requirements.

Adding Announcements to the Login Page

STEP enables users to add announcement messages to the login screens of their Web UIs. For instance, if an administrator wants to inform all Web UI users that the system will be down for maintenance, the administrator can create a message, either plain text or HTML, that will appear on that Web UI's login screen above the login dialog.

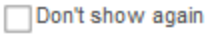
A sample plain text announcement message might appear like this:

STEP also supports the use of HTML files to display an announcement message on the login screen. Plain text messages are automatically styled by the announcement feature, but HTML files can be styled based on the preferences of the announcement message's designer.

A sample HTML-fed announcement message might appear like this:

As shown in the screenshot above, aspects of the announcement's appearance like font, font size, color, and image are all customizable using HTML. If an announcement's length exceeds the space between the top of the browser's screen and the top of the login dialog, the announcement message will push the login dialog down the page. If the message is longer than this allowed distance, a scroll bar will display beside the announcement message allowing users to scroll through the entirety of the message.

One additional feature of the announcement component is a 'Don't show again' checkbox that appears in the lower left-hand corner of all announcement messages.



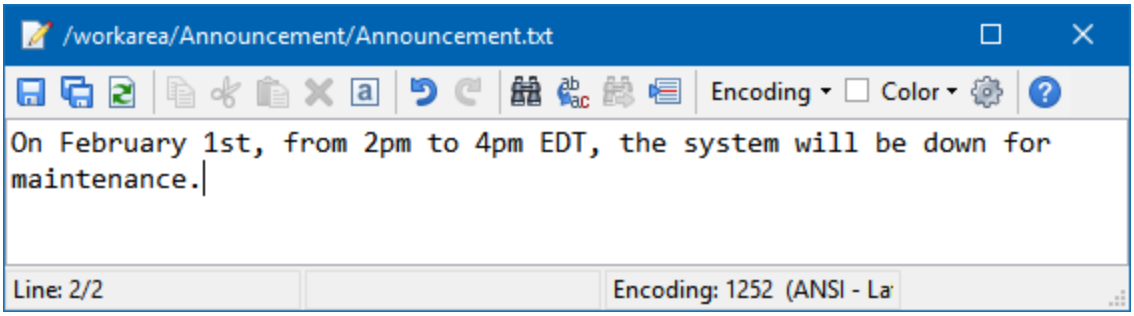
Users who have read the announcement message appearing on their Web UI login page can check this box, ensuring the message does not appear on their login screen again, at least in its current form. If the announcement is amended in any way, the announcement message displays again on the Web UI users' screens, and they can again check the 'Don't show again' checkbox.

Announcement messages can be added to as many Web UIs as are configured on a given STEP system. This gives the administrators the ability to be targeted in their messaging to users. For instance, administrators can post one message to a Web UI used by suppliers and a different message to a Web UI used by marketers.

Configuring the Announcement Feature

The announcement message can be added to a Web UI's login page by adding properties to the sharedconfig.properties file located on the application server.

1. Create your announcement file. STEP will display a message created as either a plain text message in a .txt file, or a more designed message in an HTML file. The text file can be as simple as this example:



2. Add your .txt file to the application server. If you are creating many announcements for a series of Web UIs, you may want to create a folder structure strictly for announcements.
3. Edit the configuration file. In the sharedconfig.properties file, administrators will need to add two properties for each Web UI getting an announcement.

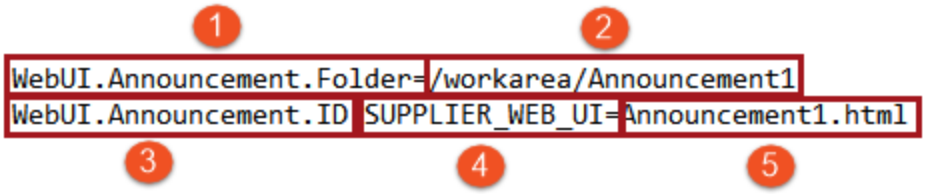
Adding the properties to the configuration file

Below is an example of how the properties are written:

```
WebUI.Announcement.Folder=/workarea/Announcement
WebUI.Announcement.ID.SUPPLIER_WEB_UI=Announcement.txt
```

The first line indicates where on the application server the Web UI should find the announcement message. The second line stipulates which Web UI should receive the message, as well as the name of the announcement file.

Below are the two sample properties divided into the components required to enable the announcement message.



1. Required text to enable the property.
2. The name of the area and folder on the application server where the announcement file is posted.
3. Required text to enable the property.
4. The name of the Web UI for which the announcement message is intended. The recommended practice is to locate the relevant Web UI in the System Setup tab, copy the Web UI STEP ID exactly as it appears in STEP, and then paste it into the property.
5. Do not use the Name of the Web UI, only the ID. Using the Name may cause the announcement to error.
6. The name of the text or HTML file posted to the application server. It is important that the file extension is included.

Once the properties are properly added to the sharedconfig.properties file, the user should save the file and then execute a stop / start of the STEP system. Following this (allow for a few minutes) the announcement message will appear on the designated Web UI.

For every Web UI the administrator intends to display an announcement, these two properties must be added to the sharedconfig.properties file. Even if a single announcement file must display on four Web UIs, for each of the four Web UIs, the announcement file must be referenced. For example, in the below screenshot there are three Web UIs that will all display the same announcement. Each of the three Web UI STEP IDs are highlighted. Because each Web UI will display the same announcement, the announcement file for all three is the same.

```
WebUI.Announcement.Folder=/workarea/Announcement
WebUI.Announcement.ID MARKETING_WEB_UI=Announcement.txt

WebUI.Announcement.Folder=/workarea/Announcement
WebUI.Announcement.ID SUPPLIER_WEB_UI=Announcement.txt

WebUI.Announcement.Folder=/workarea/Announcement
WebUI.Announcement.ID CUSTOMER_WEB_UI=Announcement.txt
```

Note: Once the announcement message is displaying on the Web UI's login page, saved changes made to the announcement file itself will display on its Web UI instantaneously.

Advanced Search

Creating and performing searches in Advanced Search can be a complex process for users with limited knowledge about the underlying data structure in STEP. For that reason, Advanced Search functionality in the Web UI is readily accessible for all kinds of users, including end users with limited STEP experience.

Advanced Search topics in online help include a mix:

- Advanced Search Initial Configuration
- Restricting and Sharing Advanced Searches
- Using Advanced Search

The topics listed below cover more information on Advanced Search configurations, going beyond the basic setups described in the introductory material.

- Mapping Task List to Workflow State
- Using Advanced Search with Workflow Tasks

Advanced Search Initial Configuration

Advanced Search allows users to find specific data using search criteria that can be combined with other search criteria. Adding search operators (And, Or, and Not) further allows users to find the most relevant information to meet their needs.

The Advanced Search link can be added to the Web UI homepage for convenient user access. In addition, the search criteria panel itself is configurable so Web UI designers can present users with criteria relevant to their job.

Adding Advanced Search to the Homepage

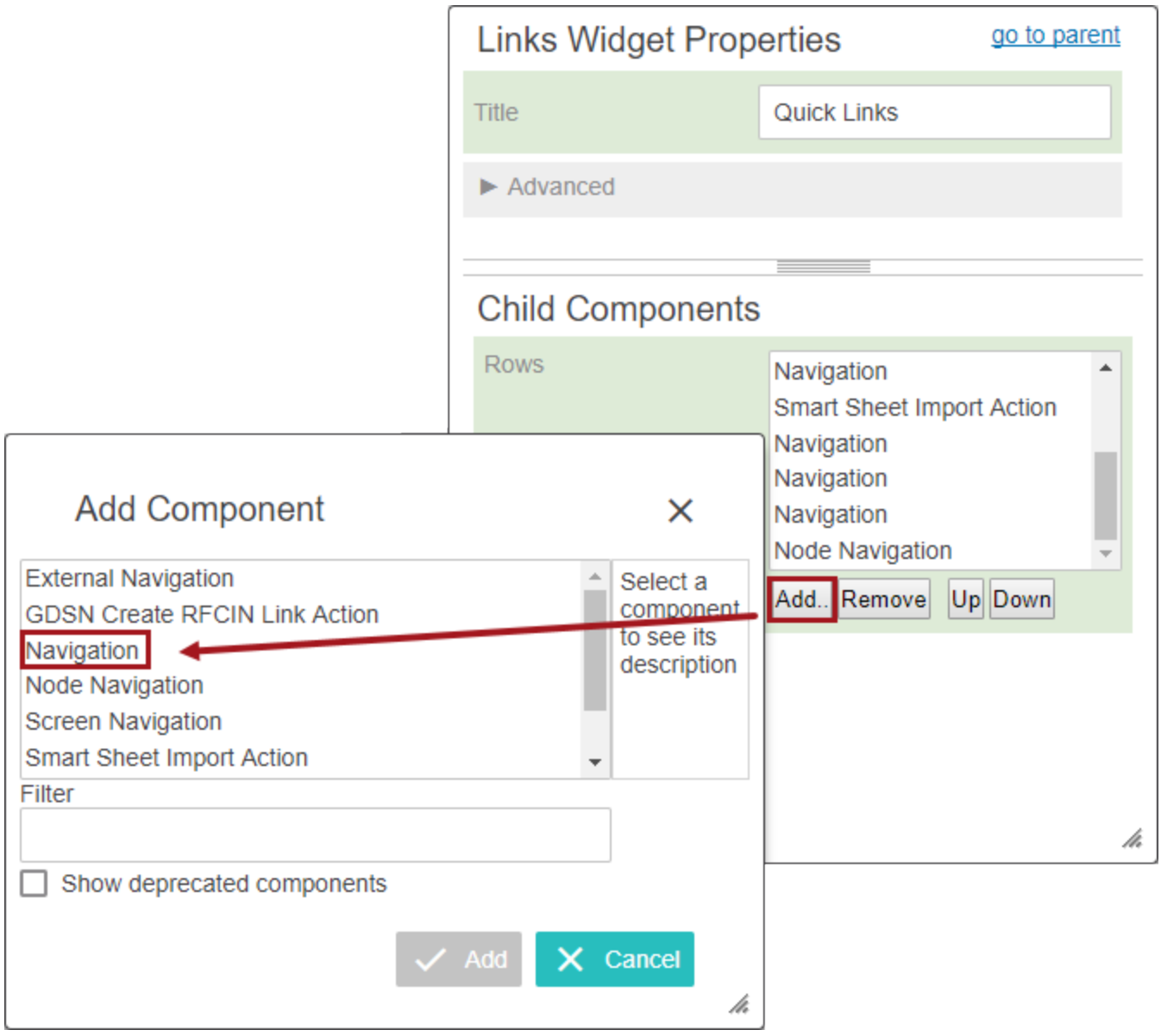
To add a link to Advanced Search on the homepage:

1. Log in to the Web UI. User must have privileges to edit Web UI configurations.
2. Enter design mode.
3. The link must now be configured to display in the **Links Widget**.

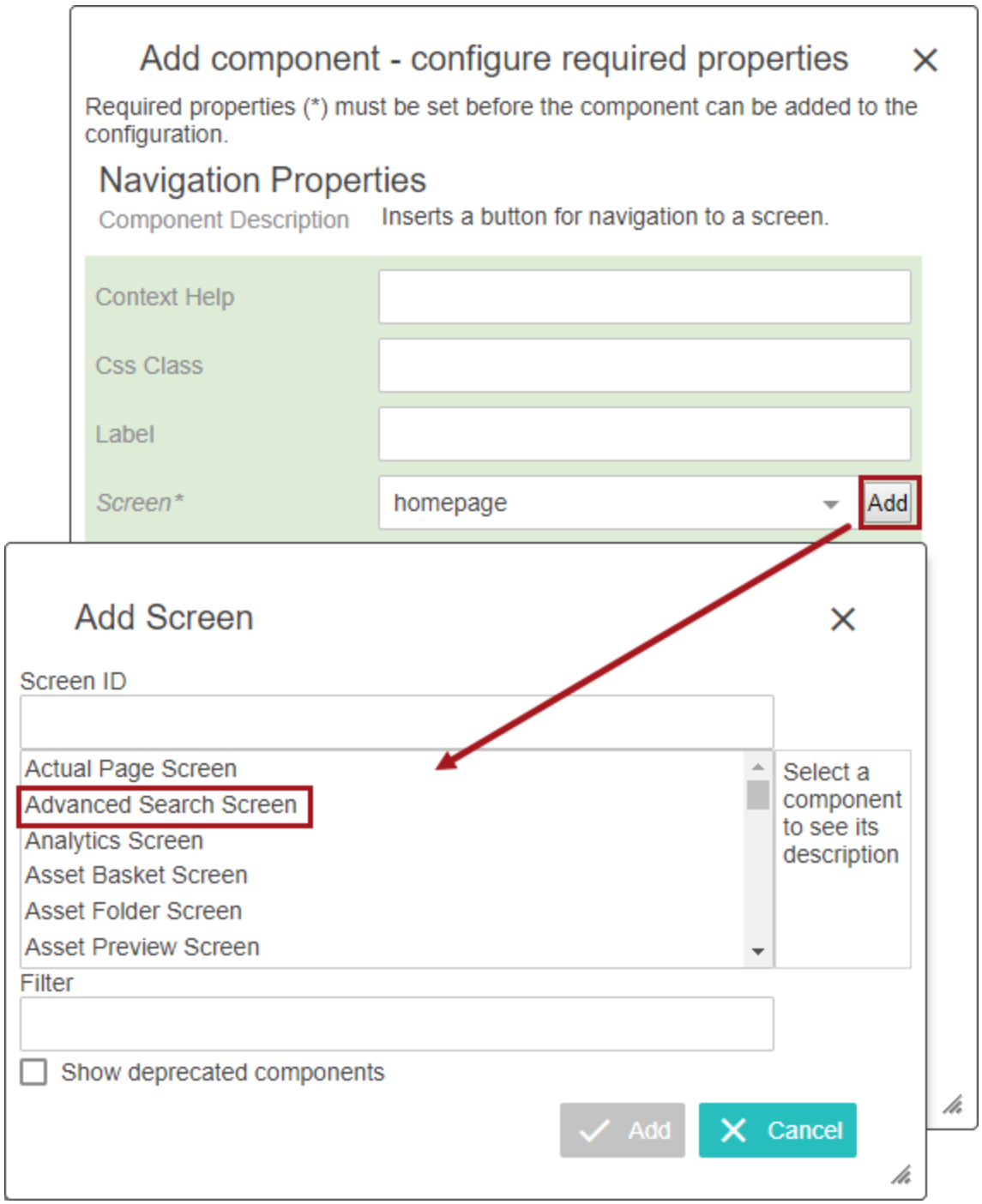
   Select HOMEPAGE from the screen dropdown in the designer and select the Links Widget in the applicable Widget Grid (found under Home Page Properties > Child Components > Content).

   If the Links Widget has never been configured to display on the Homepage, it will need to be added to a Widget Grid. Details on how to do this can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

4. Within Links Widget Properties, go down to the Child Components section and click the Add button.

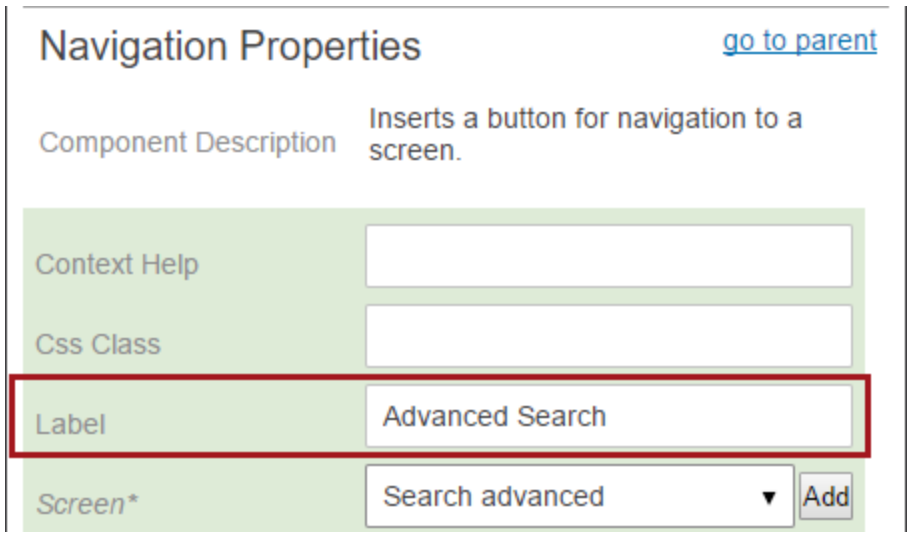


5. Choose the Navigation component and click Add.
6. On the Navigation properties screen, click the Add button to the right of the *Screen* field.
7. Select 'Advanced Search Screen' and input a Screen ID. Click Add.

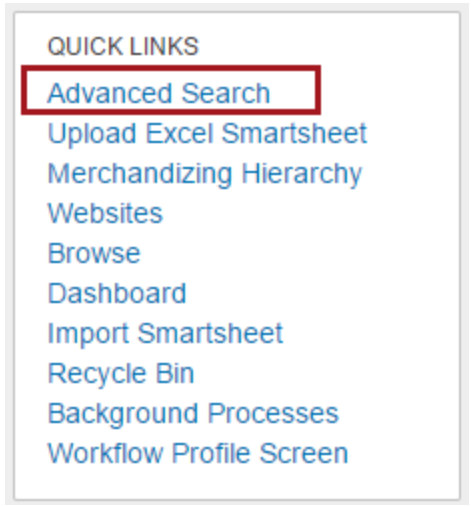


The Screen ID you use should be something descriptive (e.g., Advanced Search or Search Advanced) since this will be the name shown on any design component list in the Web UI. Screen IDs cannot be reused and must be unique.

8. Fill in the Label field with the name that will show on the links widget, then click Add.



9. You can move the Links widget Child Components up and down based on your preference for how they show on the homepage.
10. Click Save in the Properties Configuration dialog box.
11. The Advanced Search link will now show under Quick Links and is identified by the name you gave the link in Step 8.

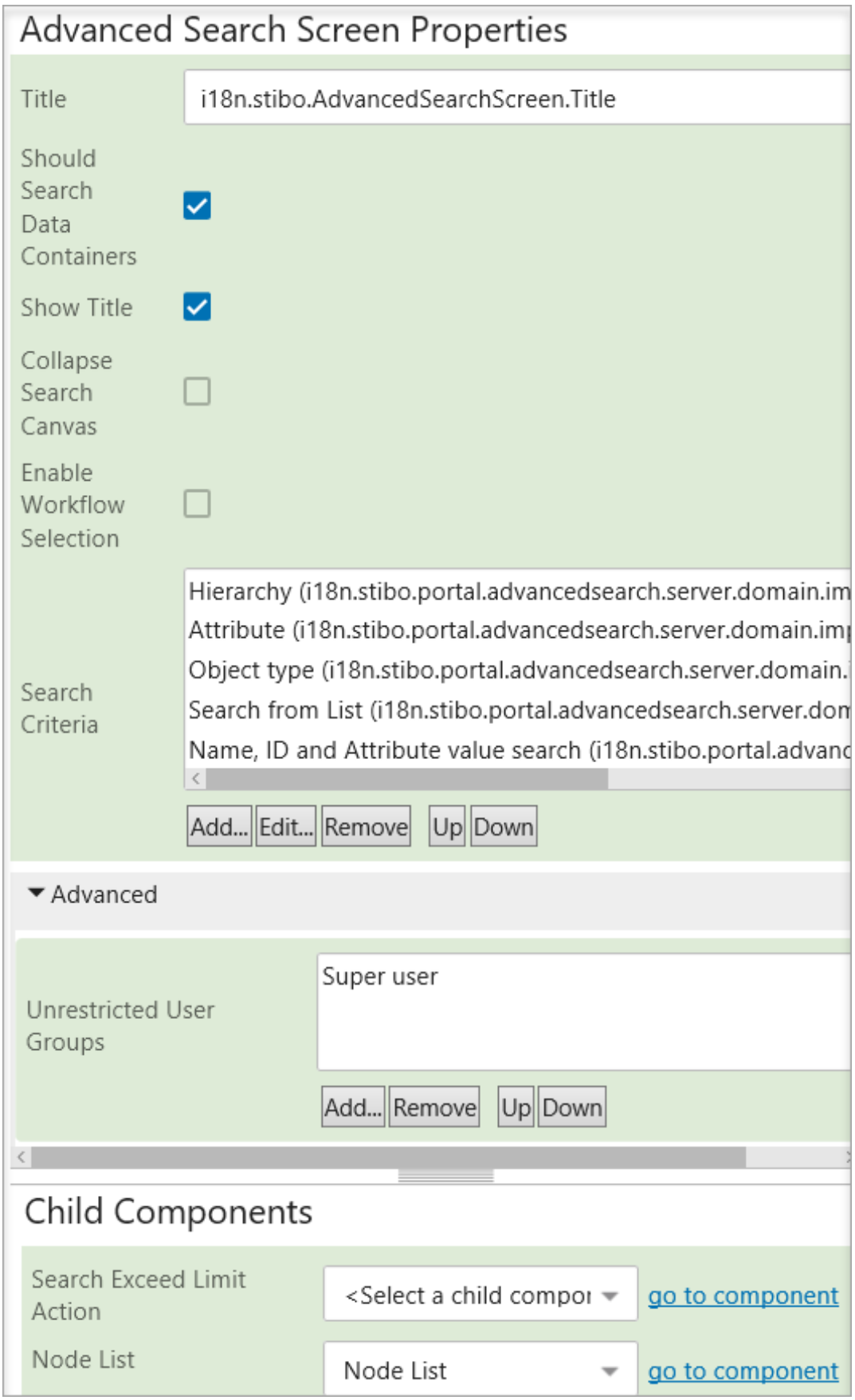


Note: Additional information regarding STEP Web UI Designer (entering design mode, selecting screens to edit, and more) can be found in the **Web User Interfaces** / **Getting Started** documentation.

Editing Advanced Search Screen Properties

Admin users can configure Advanced Search to better meet their data / job needs. This includes modifying existing search criteria for a better user experience (e.g., relabeling a criteria with a more descriptive title), and removing unused search criteria to lessen the risk of unintended and unrestricted searches.

Advanced Search properties can be edited at any time. However, it is best to configure the properties early on. Removing search criteria later may impact searches you have already built and saved. If removed, a criterion remains accessible through a saved search. However, the criterion will say 'No Title' and be unidentifiable to the end user.


Advanced Search Screen Properties
Title
i18n.stibo.AdvancedSearchScreen.Title
Should Search Data Containers
Show Title
Collapse Search Canvas
Enable Workflow Selection
Search Criteria
Hierarchy (i18n.stibo.portal.advancedsearch.server.domain.im
Attribute (i18n.stibo.portal.advancedsearch.server.domain.imp
Object type (i18n.stibo.portal.advancedsearch.server.domain.
Search from List (i18n.stibo.portal.advancedsearch.server.dom
Name, ID and Attribute value search (i18n.stibo.portal.advanc
Add...
Edit...
Remove
Up
Down
Advanced
Unrestricted User Groups
Super user
Add...
Remove
Up
Down
Child Components
Search Exceed Limit Action
<Select a child compor
go to component
Node List
Node List
go to component

1. Log in to the Web UI. Again, user must have privileges to edit Web UI configurations.
2. Navigate to the Advanced Search screen (set up using the instructions above) and enter design mode from that page. Or, alternatively, enter design mode on the Homepage and use the screen dropdown to select the Advanced Search screen ID.
3. Edit the **Title**, if desired. Placeholders can be used in conjunction with, or in place of, that text to automatically insert workflow-specific information into the screen title. These placeholders ({WorkflowID}, {WorkflowState}, {WorkflowName}, and {StatusFlag}) can be used individually or together and display exactly what the name implies. The placeholders are ideal for identifying workflow information when accessing the Advanced Search screen via a Status Selector (Homepage / Sidebar) widget selection, and also when the search criteria is collapsed upon entering the screen.
4. Enable the **Should Search Data Containers** parameter, if desired. When enabled, the search shall also include data containers in its results.
5. Leave the **Show Title** parameter enabled if the Advanced Search Screen should display the title. Disable the parameter to hide the title and its associated white space.
6. Enable the **Collapse Search Canvas** parameter, if desired. When enabled, the search canvas where search criteria can be dragged and dropped to, is collapsed (not showing) when the screen is loaded. The tab with Search Criteria and/or My Searches is also removed from the screen.

   This can be beneficial to users who use Advanced Search as a results screen when clicking on a task within a Status Selector. If the user already knows the search criteria being used to return the results, then there may be no need to see the criteria each time they navigate to the Advanced Search page.

7. The **Enable Workflow Selection** does not need to be enabled for setting up and running standard Advanced Searches.

   However, if clicking on an object ID in the Advanced Search results set should route users to different display screens based on the workflow and state tasks are in, then read more about the required setup for Forwarding Switch Screens in the **Mapping Task List to Workflow State** section of the **Using a Web UI** documentation.

8. Search criteria can be added (Add), removed (Remove), reordered (Up / Down), and renamed (Edit) to meet specific needs. This organization is done in the **Search Criteria** value field, and allows an admin user to limit the number of search criteria (if some are unused) and rename all of the search criteria with more indicative titles to help end users better understand the intended use. Some criteria can be pre-configured to always use certain nodes, and it may be best to have more than one of these pre-configurable criteria set up. Search criteria is described in detail in the **Adding and Modifying Search Criteria** section of this topic, below.
9. Click the Advanced heading to display the **Unrestricted User Groups** parameter. Initially, it is okay to leave this field blank. If there are no groups added, then all users will get access to the configured Advanced Search interface.

   More details about restricting and sharing searches can be found in **Restricting and Sharing Advanced Searches** section of the **Using a Web UI** documentation.

Adding and Modifying Search Criteria

The available Search Criteria are listed below along with a description of each. The default criteria titles are shown, but these can be changed to something more meaningful to the end user.

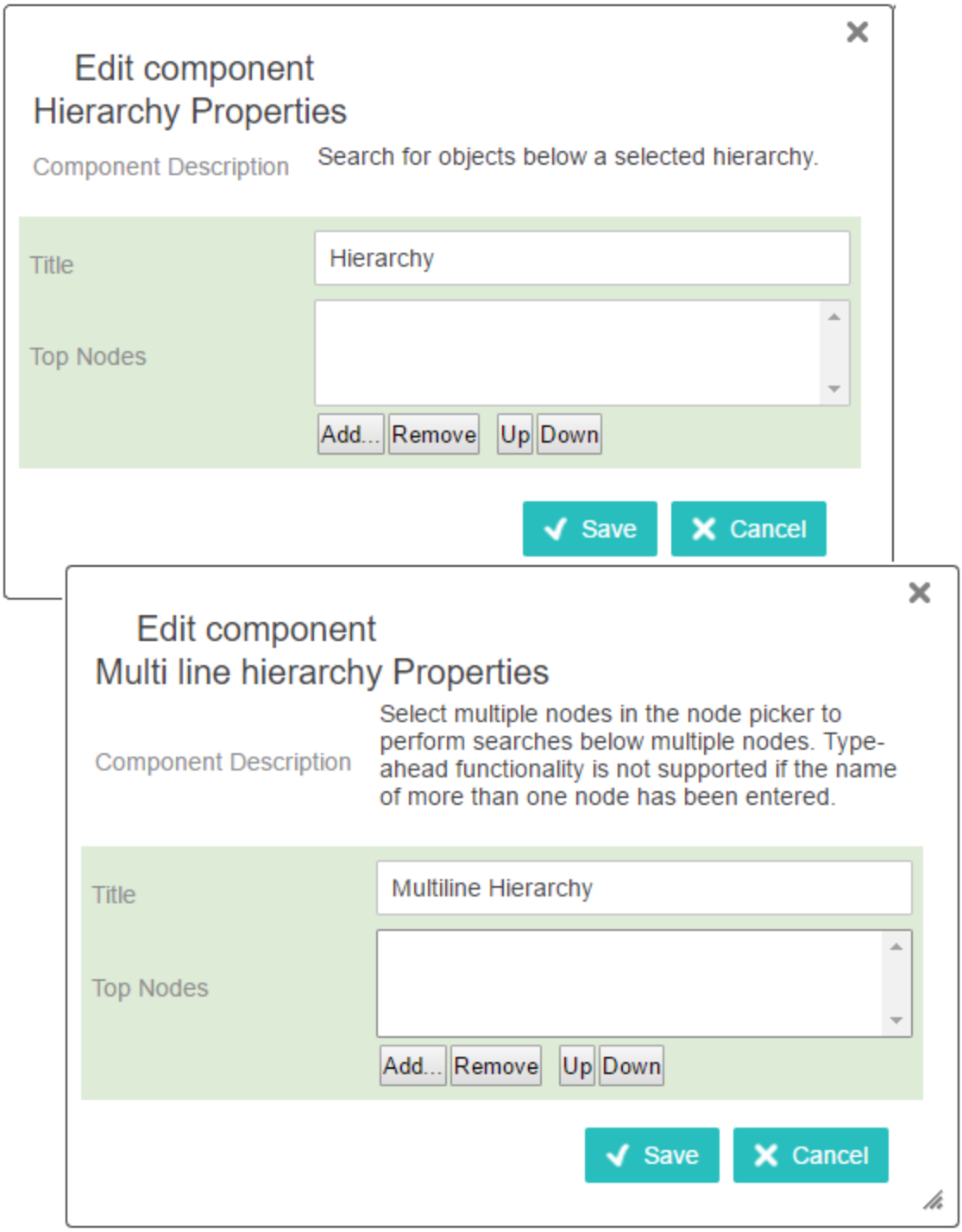
- **Hierarchy** and **Multiline Hierarchy**

  Search objects at or below a STEP Workbench Tree tab hierarchy node.

  Using the Top Nodes section, these criteria can be configured to specify the exact data locations (hierarchy nodes) under which a user can search. Also, there can be more than one instance of the Hierarchy and Multiline Hierarchy under each set of search criteria. Each instance can point to different top nodes.

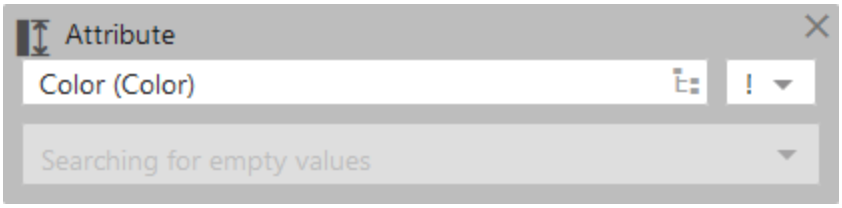
  The Hierarchy search allows you to search under one node at a time. If the object you are looking for can be found under different nodes, the Multiline Hierarchy criteria can be used. Using the Multiline Hierarchy search criterion can make even highly specific searches less complex and easier to define.

  Click on the Add button next to Top Nodes, and then click on a node by expanding / collapsing the folder structures as needed, or manually type in a selection (under Search). When picking multiple nodes, press the control button on your keyboard and click on each node (Ctrl+click). Save your choices and continue editing other search criteria or save the properties and exit out of design mode.



- **Attribute**

  Search or browse attributes to determine which one you want to search. Attributes include metadata, category-specific attributes, business rules, and bound (to a STEP attribute) Workflow Variables. Once an attribute is selected, choose an operator, and then enter a value. Most operators allow you to search for specific attribute values , but there are also operators that allow you to search for empty attribute value fields.



Note: The seven operators to choose from are less than (<), less than or equal to (≤), greater than (>), greater than or equal to (≥), equal to (=), search for missing values in current context (!), and search for missing values in all contexts (!!).

Wildcards

Two different wildcards can be used in any manual entry fields. These wildcards allow users to perform searches on partial text strings. The wild cards are asterisk (*) and question mark (?). The asterisk (*) represents any number of characters in a string, and the question mark represents exactly one character. Wildcard characters can go at the beginning, end, or middle of a search.

Examples of wildcard character usage are shown under the **Name, ID and Attribute value search** section of this documentation.

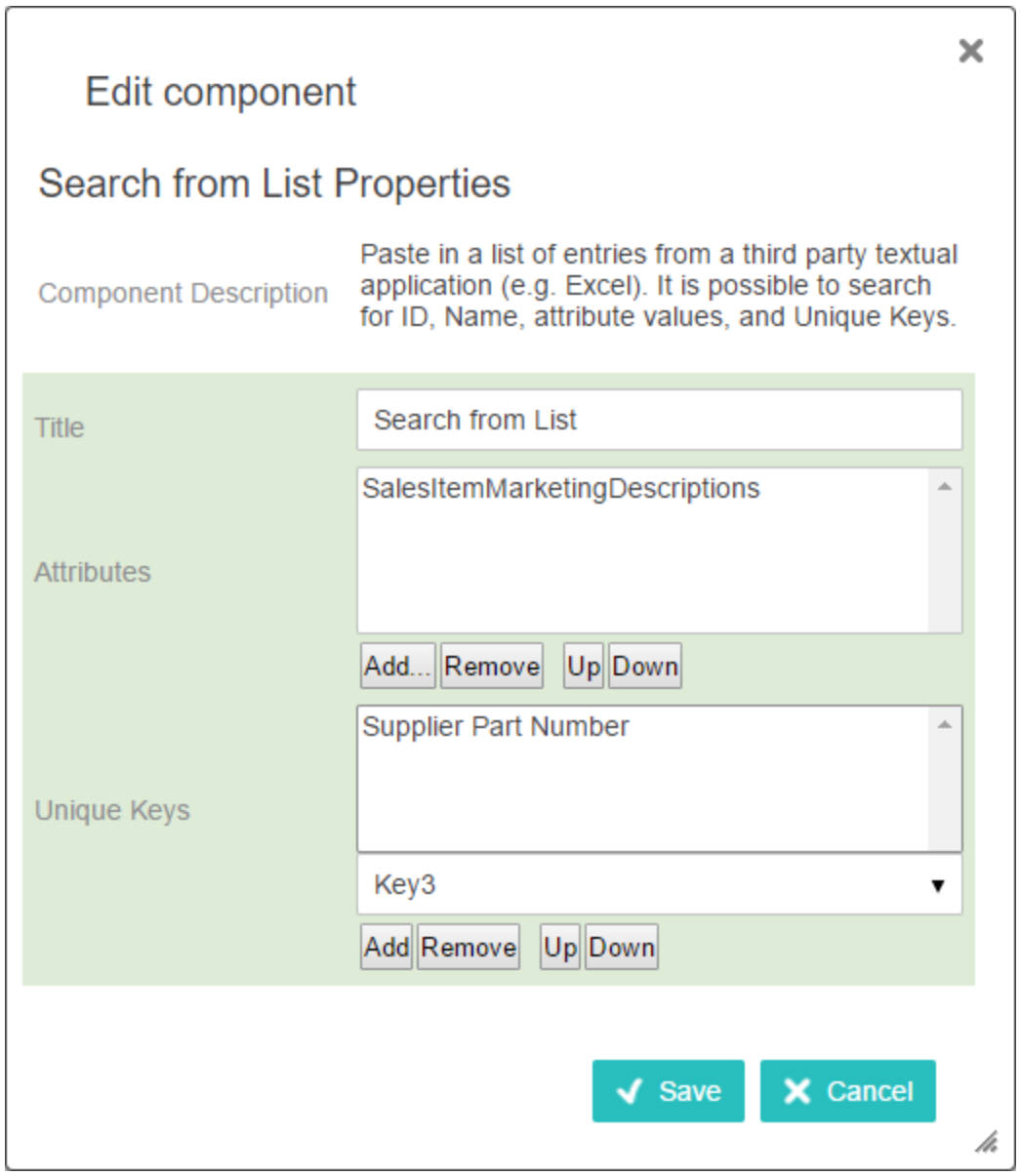
- **Object type**

  Search through attributes, users, classifications, products, assets, entities, and other object types. These objects are maintained through the STEP Workbench, on the System Setup tab, and under the Object Types & Structures folder. Start typing in the field or drill down through the hierarchy to make a node selection.

- **Search From List**

  Users may input a list of IDs and Names to search rather than searching through all system objects. Data can be entered manually or by pasting in data from another source such as an Excel spreadsheet or Smartsheet. Searches can be based on lists of IDs, names, attribute values, or unique keys.

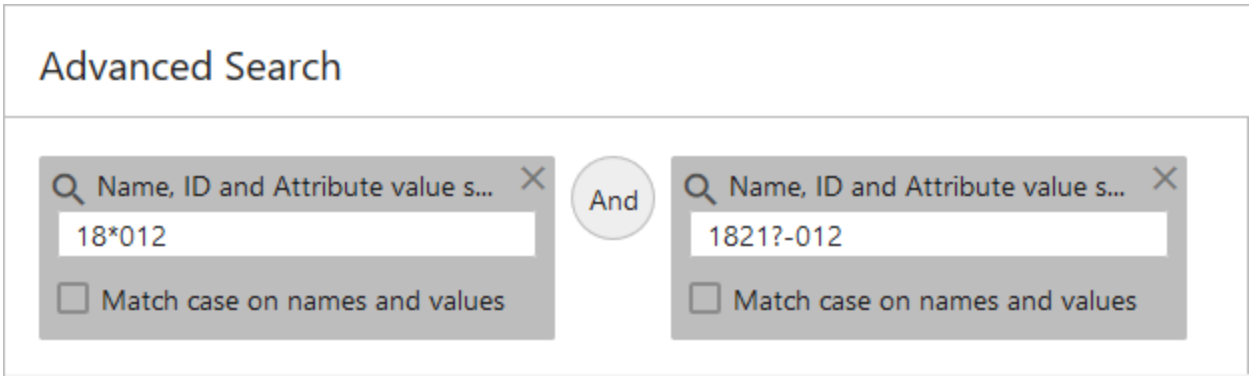
  As an example, a product manager may own a certain set of SKUs. They only want to work with those objects, so they put in their list and (or set up the properties to) use that data - combining, if desired, with other search criteria - to identify specific projects needing work (e.g., in a particular workflow state or having a missing value for a mandatory attribute).



- **Name, ID and Attribute value search**

  Search names, IDs, and attribute values. This parameter is very similar to the Search tab functionality in STEP Workbench.

  Also, similar to the Attribute criterion, wildcard characters (* and ?) may be used when searching. Check the 'Match case on names and values' option if applicable.



- **Approval status**

  This criterion is used to identify objects that are not currently approved. These include classifications, products, images and documents, and entities setup to be Workspace revisable. There are three options to use: 'Never approved or modified in main,' 'Never approved,' or 'Modified in Main.'

- **Missing mandatory entries**

  Search for product attributes and reference types that are required but missing. The mandatory attribute or reference type must be set as mandatory using standard methods. The Missing mandatory entries search works the same in Web UI as it does in STEP Workbench. Both are driven by Workbench mandatory settings.

  This means that any attribute values marked as mandatory in just the Web UI (and not in STEP Workbench) will not show in the results. Also, mandatory workflow states and transitions will not show in the search results either.

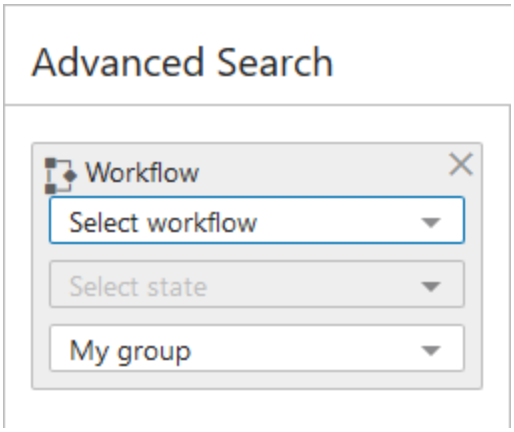
  In workbench, mandatory items have a red checkmark on the validation base icon to the right of the attribute / reference name. For example: .

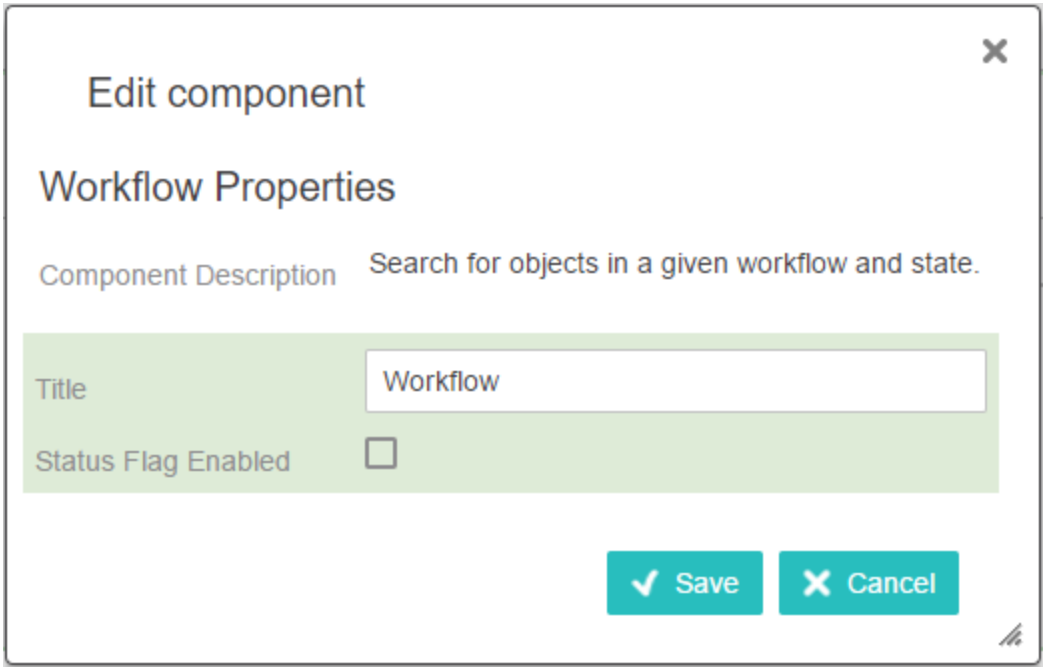
- **Workflow**

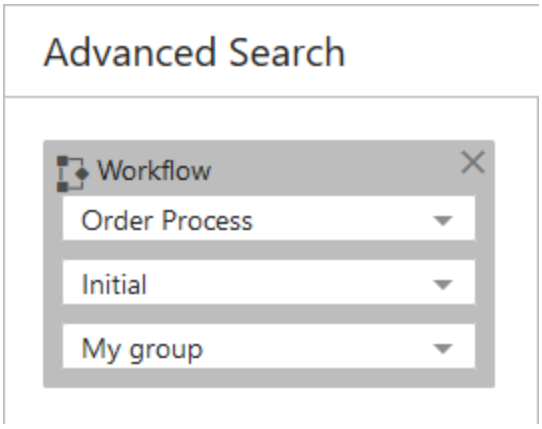
  Workflows can be monitored using this criterion. Click on each dropdown menu and select a workflow, workflow state, state assignee, and status flag (if applicable and configured to display).

  Choosing the '[any State]' state option allows for you to search the entire workflow, if choosing a specific state is not preferred. Choosing 'All' under the assignee field will allow for a broader search. Users may want to refine the search to see only workflow tasks that are directly applicable to them or their group.

  A status flag dropdown can be added to the Workflow criterion by checking the 'Status Flag Enabled' parameter within the Advanced Search Workflow Properties. When doing a search with the Workflow criterion, the status flag selector can be left as 'All status flags' if desired, or may be populated to restrict the search to only tasks with specific status flags applied.


Advanced Search
Workflow
Select workflow
Select state
My group


Edit component
Workflow Properties
Component Description
Search for objects in a given workflow and state.
Title
Workflow
Status Flag Enabled
Save
Cancel


Advanced Search
Workflow
Order Process
Initial
My group

When accessing the Advanced Search screen via a workflow selection, make note of the default screen behavior, with the third bullet being *key* to this functionality:

- The Advanced Search screen is configured as the result screen for a Status Selector (Homepage / Sidebar) widget
- A Status Selector task selection has been made
- The Workflow criteria is removed from, or not initially configured as one of, the valid Search Criteria selections through the Advanced Search Screen Properties

When users make a task selection in the widget operating under this scenario, the workflow criteria fields display on the screen (as long as the search canvas is not collapsed). The search criteria values are read-only, and the workflow criteria cannot be removed from the search area. Privileged users can add / remove additional criteria to do more focused searches, but the user is always left with the original workflow search criteria that they began with. This allows for end users to focus on their tasks without any concern that they may inadvertently take action on tasks that they do not own.

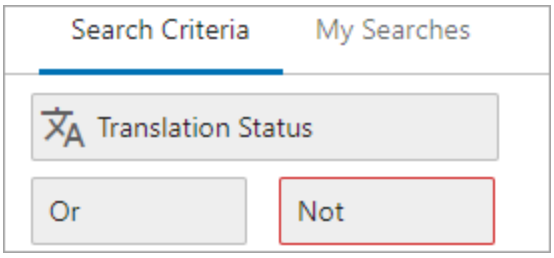
When accessing Advanced Search via any other method (e.g., a link in the Quick Links widget), the screen behavior is as expected.

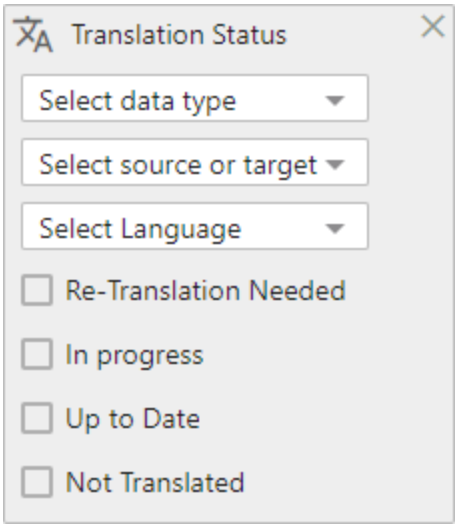
- **Translation Status**

  The Translation Status criterion allows users to:

  - Perform an advanced search for the translation status of Products, Classifications, Assets or List Of Values
  - Choose a language and specify that language as the source or target
  - Choose one or more of the provided filters to narrow down their search results

  For more information regarding translations, see the **Translations** topic.

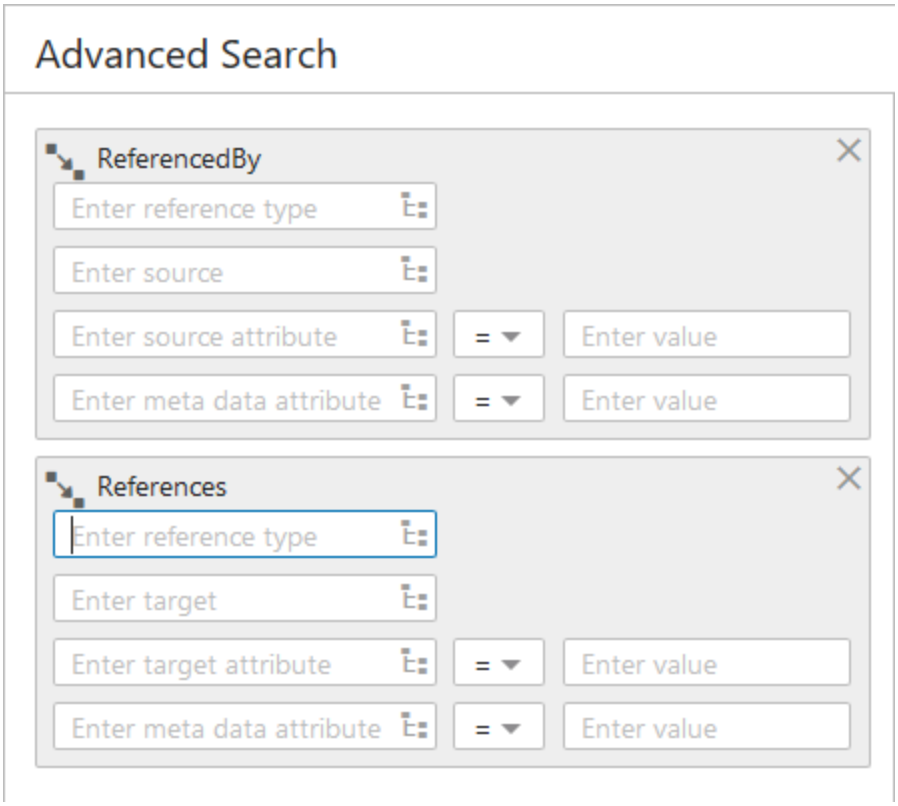




- **Referenced By** and **References**

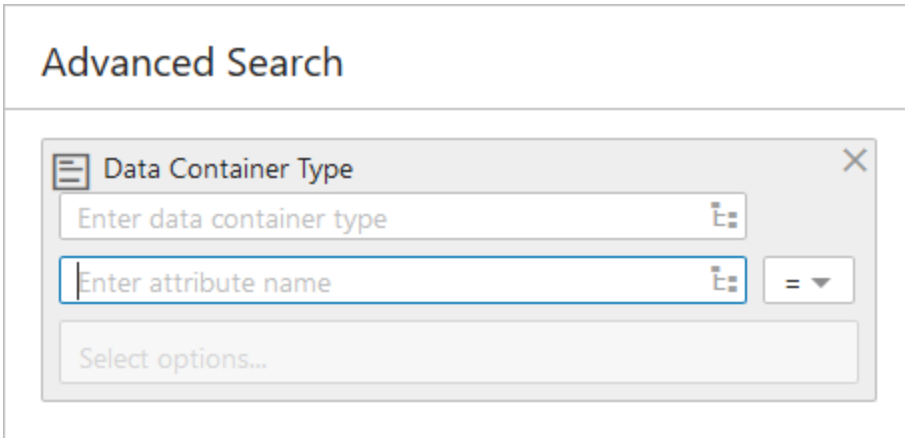
  The Referenced By and References criteria work similarly. The 'Referenced By' search criteria will return target objects. The 'References' search criteria will return the source objects. Both options require a reference type selection to begin. Reference types are setup in the STEP Workbench System Setup tab in the Reference Types folder.

  Once a reference type is entered, no additional options need to be filled in to start a search. Use the information at a high level or fill in the other values to drill down further. Select a reference source under Referenced By and a target under References, or locate reference objects based on attributes and attribute values residing on the target or source object. Plus enter specific attributes, values to search reference metadata. For searches using either the source / target attribute or metadata search criteria, users may also select the appropriate search operators when refining the search to include values: less than (<), less than or equal to (≤), greater than (>), greater than or equal to (≥), and equal to (=).



- **Data Container Type**

  The data container criterion enables users to search either for entity objects for which specific data container types have been made valid, or for entities that may have specific attributes and attribute values linked via a data container.



The data container criterion enables a few different kinds of searches.

- Search by data container type, which will display all entities for which a data container has been added to the data container type being searched.

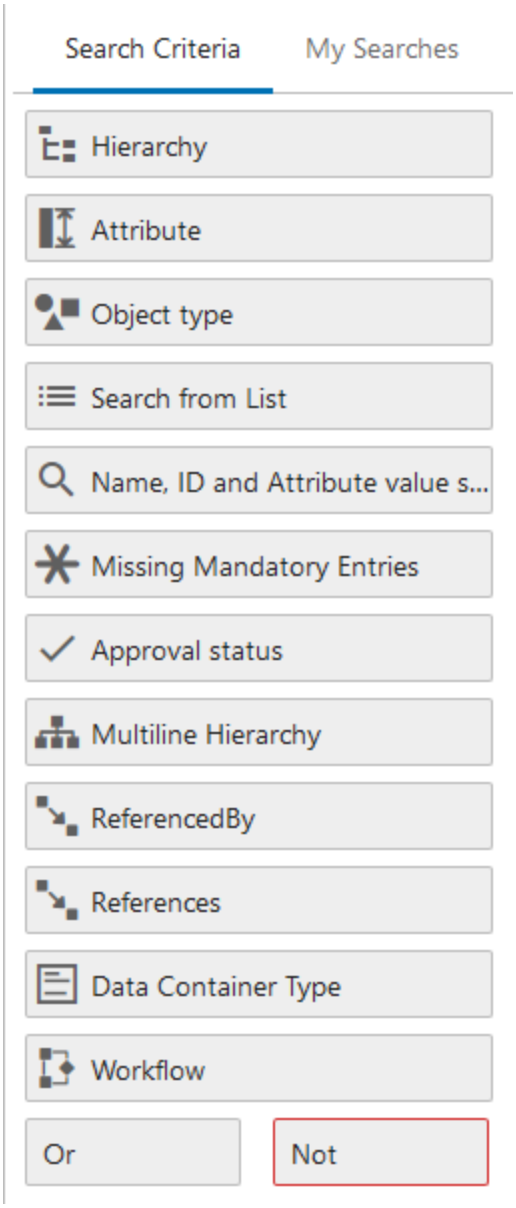
- Search by attribute name / attribute value to view entity objects that have any data containers populated with a specific value or values.
- Search a combination of both of the searches listed above: data container type and attribute name / attribute value.

Important: *Any criteria with a dropdown menu allows for a user to click on the dropdown and make a choice. No manual typing can be done in those fields. Any place the Node Picker icon ( ) shows, click on it to expand the options and select / search nodes. Users may also start typing in any of those value boxes to see a list of available choices.*

Completed Search Criteria

The next screenshot shows an example of what the Search Criteria looks like under Advanced Search. The criteria properties have not been renamed in this example and each criteria is only used once.

Note: The 'Or' and 'Not' operator fields are standard and cannot be removed or renamed.



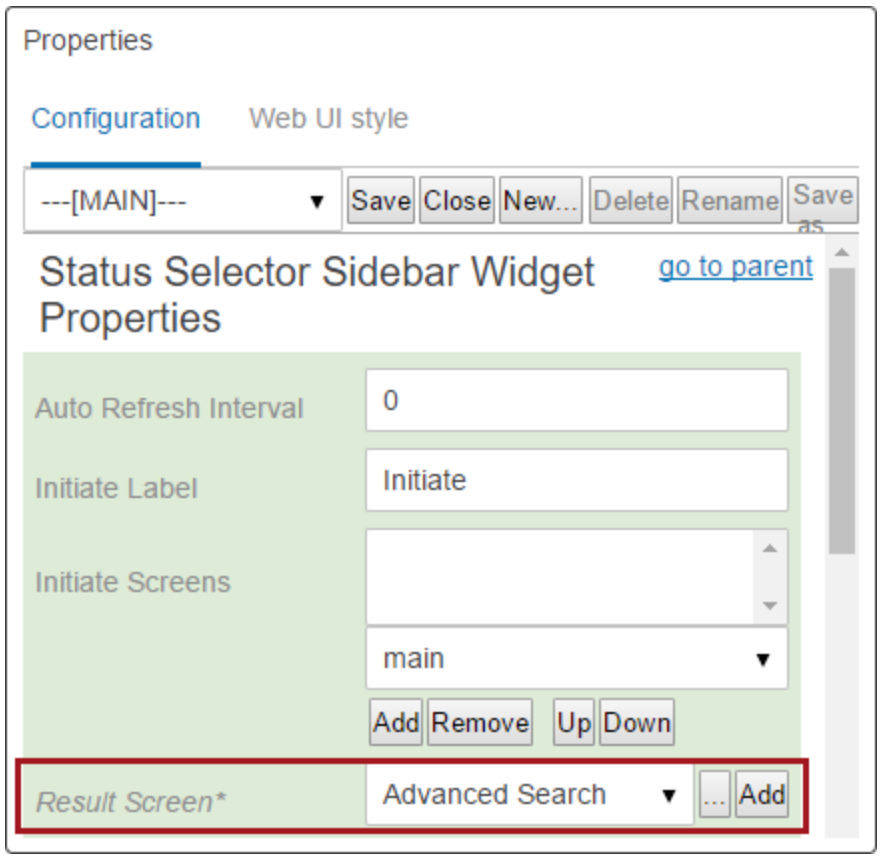
Advanced Search is now set up and ready for use.

Mapping Task List to Workflow State

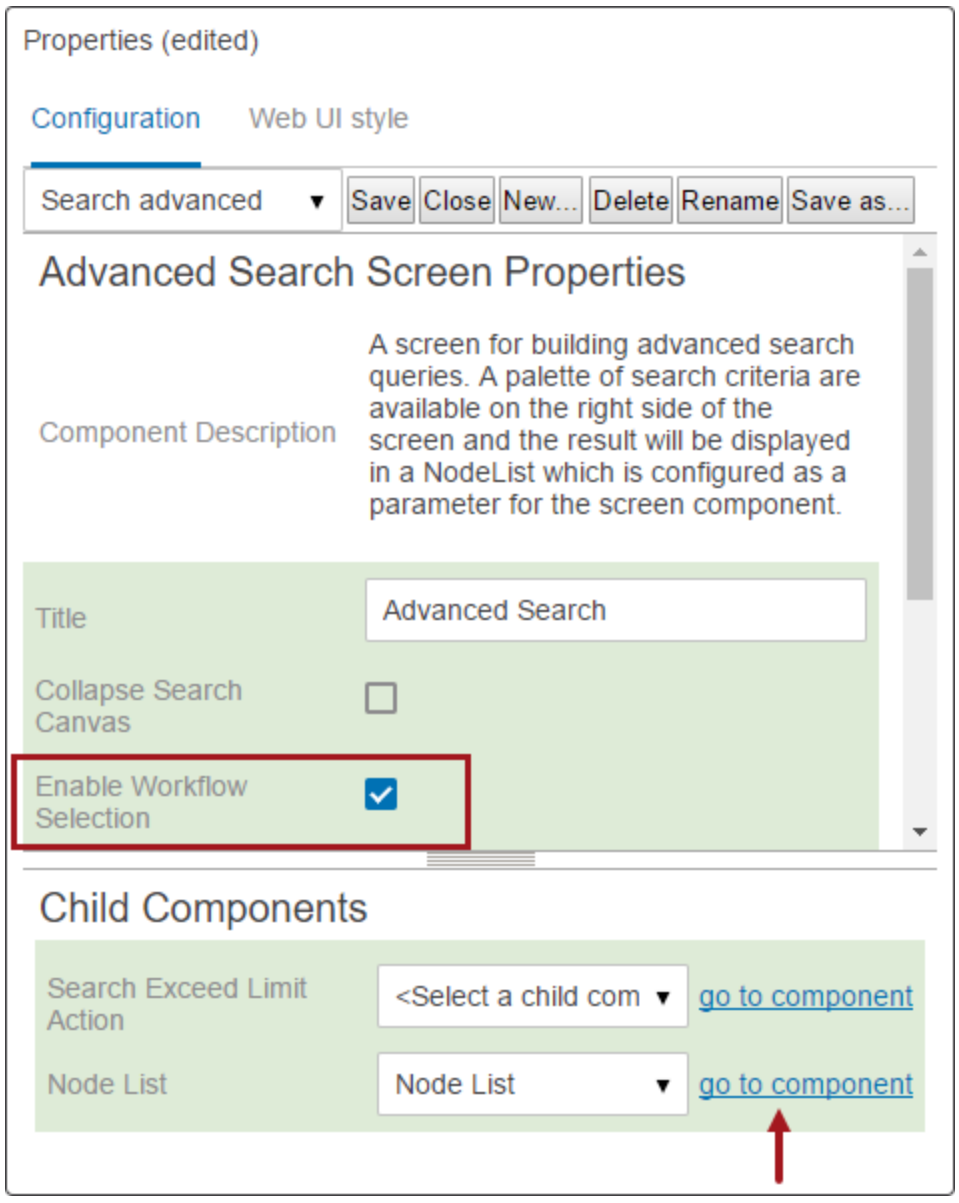
When properly configured, a user clicking on an object in an Advanced Search Task List will be routed to a specific screen designated for display of objects in the particular workflow and state that the object is currently in.

What follows is an example that a user can utilize as a starting point to complete their own configuration. The directions and screenshots are designed under the assumption that the user has already set up all the screens required.

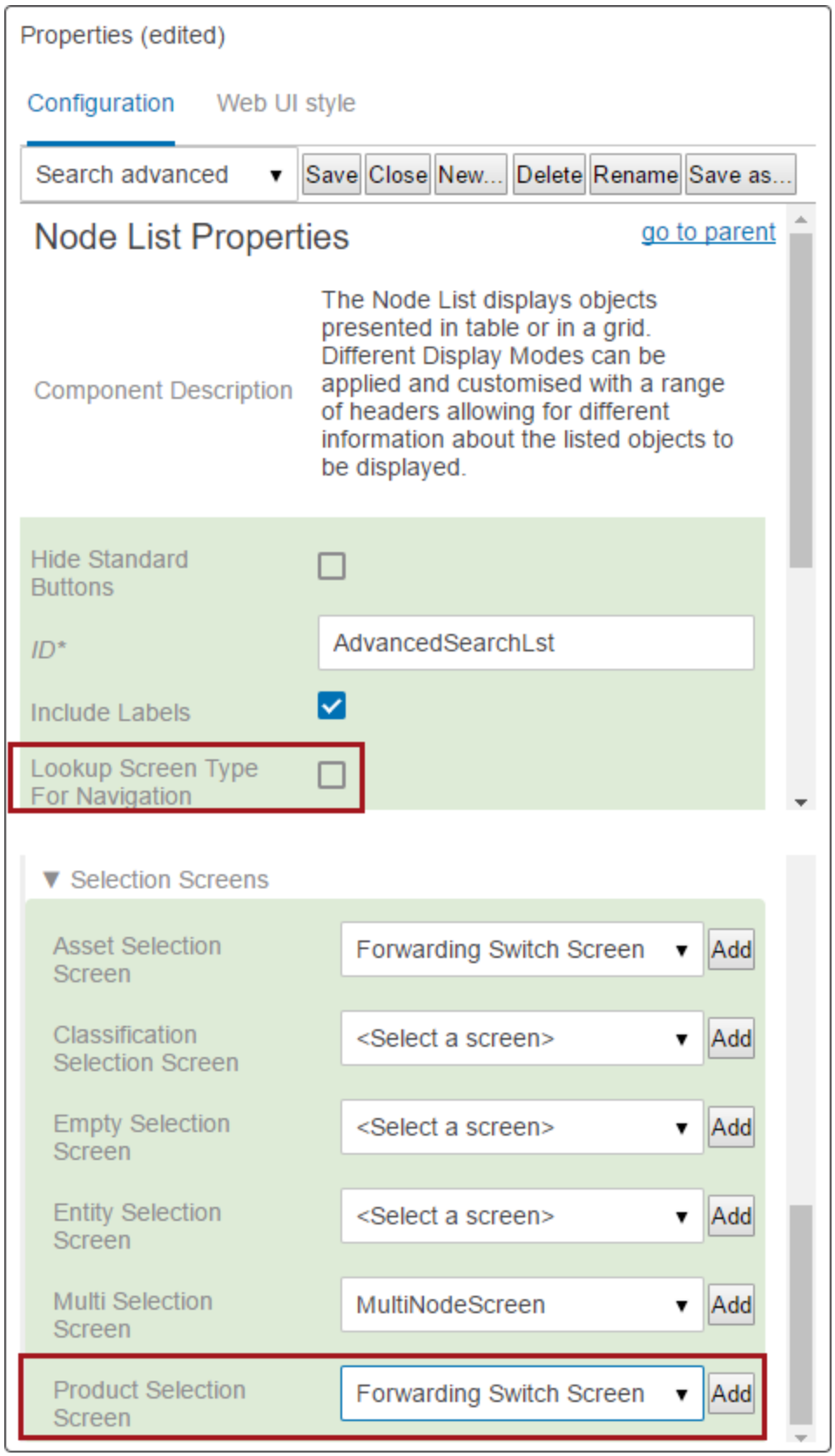
1. Log in to the Web UI and enter design mode.
2. Navigate through the properties to get to the Status Selector you will be editing (either Status Selector Sidebar Widget via the Main Properties or the Status Selector Homepage Widget). For more information, see the **Status Selector Sidebar Widget** in the **Web User Interface** documentation. The **Results Screen** for the applicable Status Selector should be set up to go to the Advanced Search screen. If not, make the selection and click Save.



3. Select the Advanced Search Screen ID from the dropdown (it is Search advanced in the example below). Click the checkbox for the **Enable Workflow Selection** parameter in the Advanced Search Screen Properties. Save the selection before going on to the next step.

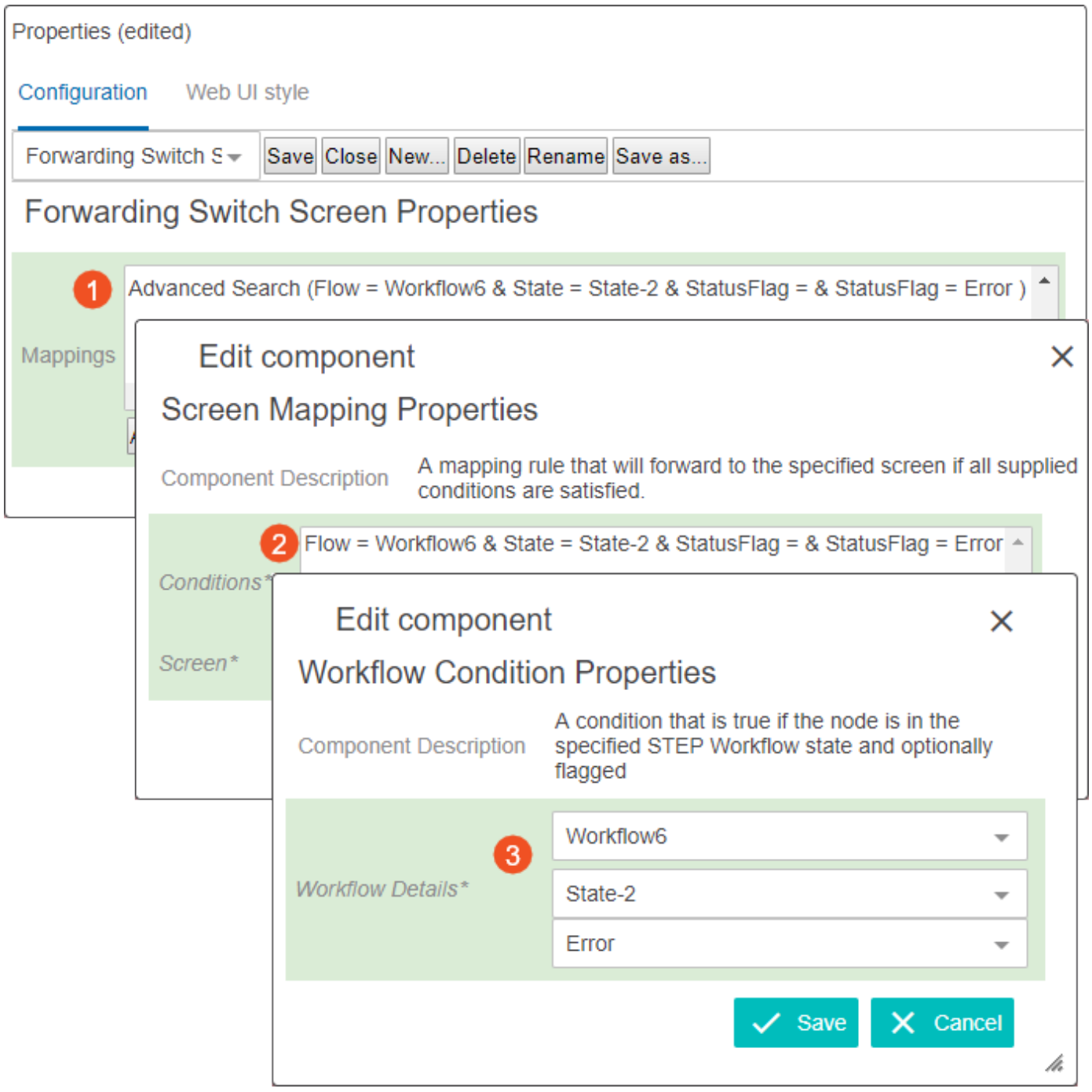


4. Stay on the Advanced Search Screen Properties screen, and click on the Node List 'go to component' link.
5. On the Node List properties screen, disable / **uncheck** the Lookup Screen Type For Navigation parameter. Save these changes.
   - If Lookup Screen Type For Navigation is **unchecked**, then the object screen selection that is defined under Selection Screens will be used as a target screen (e.g., Asset Selection Screen, Classification Selection Screen, Product Selection Screen, and Entity Selection Screen).
   - If Lookup Screen Type For Navigation is checked, then the screen mappings that are defined in the Main Properties screen are used when selecting the object from the Node List.


Properties (edited)
Configuration
Web UI style
Search advanced
Save
Close
New...
Delete
Rename
Save as...
Node List Properties
go to parent
Component Description
The Node List displays objects presented in table or in a grid. Different Display Modes can be applied and customised with a range of headers allowing for different information about the listed objects to be displayed.
Hide Standard Buttons
ID*
AdvancedSearchLst
Include Labels
Lookup Screen Type For Navigation
Selection Screens
Asset Selection Screen
Forwarding Switch Screen
Add
Classification Selection Screen
<Select a screen>
Add
Empty Selection Screen
<Select a screen>
Add
Entity Selection Screen
<Select a screen>
Add
Multi Selection Screen
MultiNodeScreen
Add
Product Selection Screen
Forwarding Switch Screen
Add

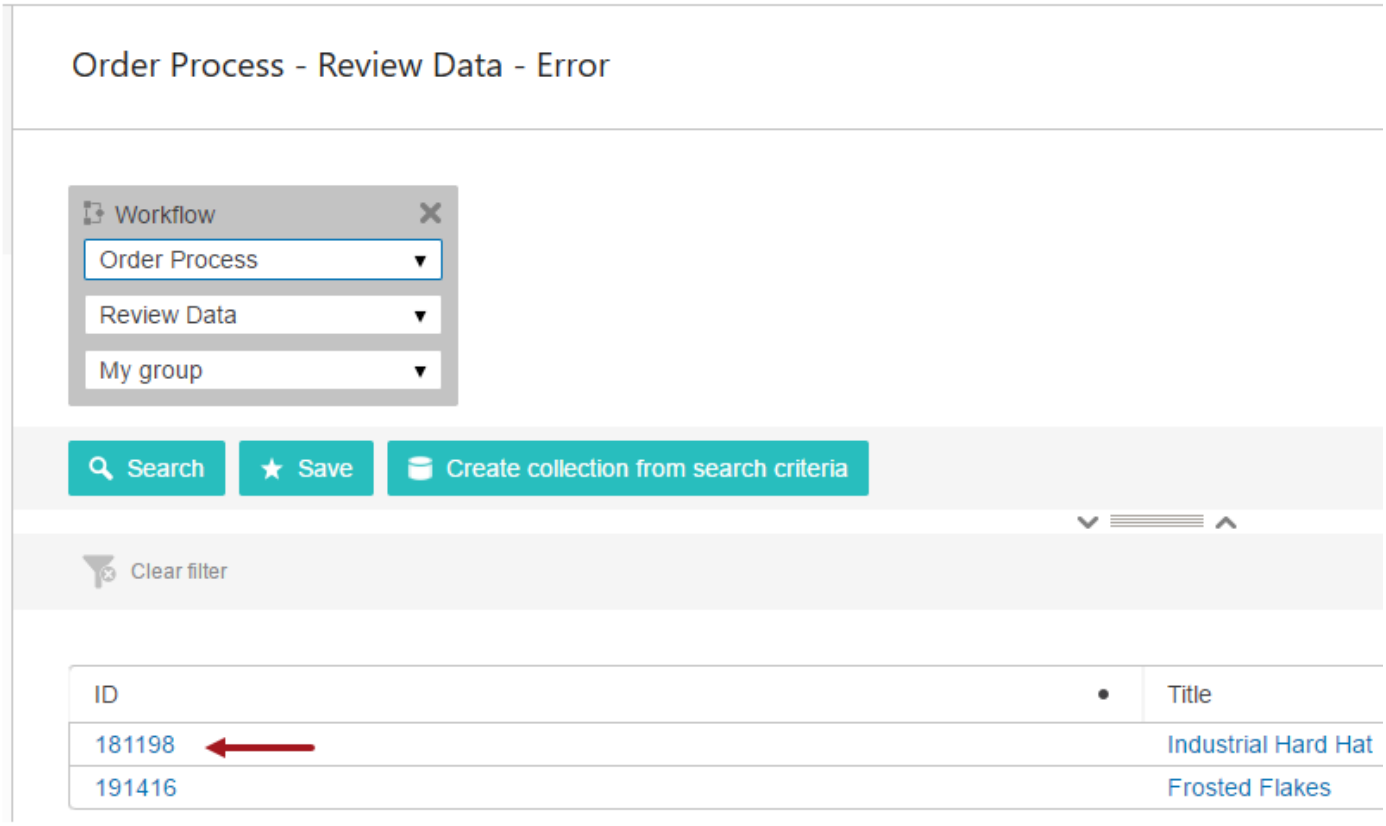
7. Select a Forwarding Switch Screen from the Product Selection Screen dropdown. Save the Node List Properties.
8. From the screen dropdown selector (to the left of the Save button), pull up the properties for the screen designated as the Product Selection Screen. In this example, it is the Screen_TaskList2_Forwarding screen.
9. In the Forwarding Switch Screen Properties, define the workflow condition that should show on the screen when selecting an object link within a Node List.
   - Click Add to add a mapping. This will open Screen Mapping Properties.
   - On Screen Mapping Properties, under the Conditions field, click Add.
   - Select 'Workflow Condition' from the component list and click Add.
   - Make a State and Workflow selection. Click Add again. Users should continue mapping any additional workflow states, if applicable, that will be going to the *same* screen. When done, click the dropdown for the Screen parameter and make a selection. Click Add.
   - Save the Forwarding Switch Screen Properties.
   - Repeat the steps in the previous bullets as needed.
   - Save any additional changes and close Web UI Designer.

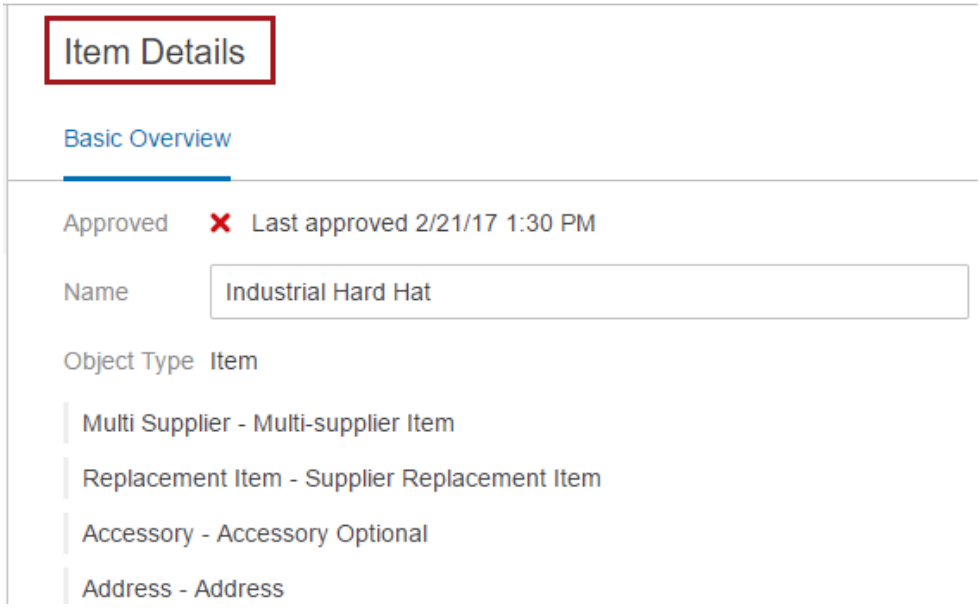
Important: If mapping is set up for one state in a workflow displayed using a Status Selector, mappings should be set up for all displayed states of the workflow to avoid end users seeing a 'No mapping found' message when clicking on an object ID in the results set.



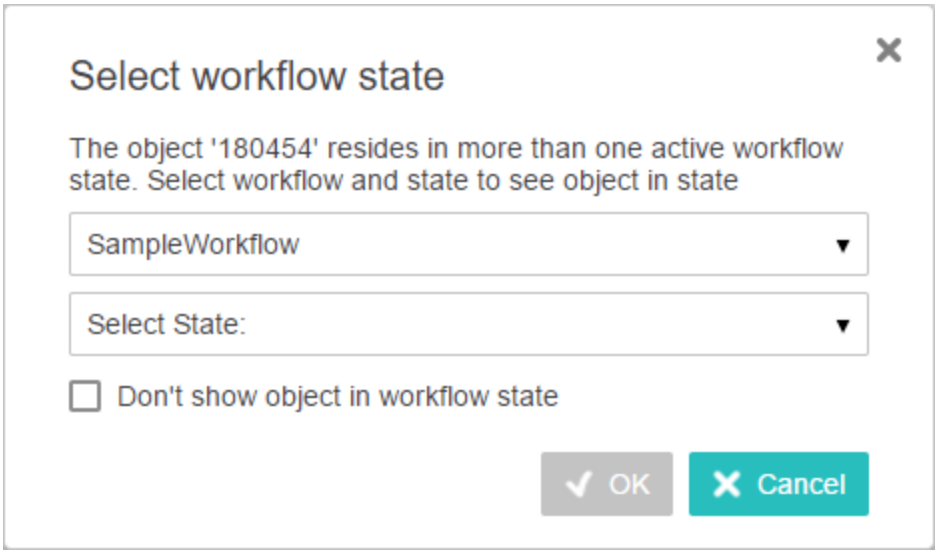
The result is that when a user clicks on the a workflow state on the Status Selector, the results are shown in an Advanced Search Task List. When a user clicks on the ID for an object in the results set, the screen is redirected to the forwarding screen that is specified by the workflow condition.

In the example shown in the screenshots, when a user clicks on the Review Data state on the Status Selector, the result is shown in the Advanced Search Task List. When the user clicks on of the ID links, the screen in this example is redirected to an Items Details screen. See the screenshots that follow.





If an object is in more than one workflow, or in multiple states in the same workflow, a 'Select workflow state' dialog appears for the user to specify the state they would like to see the object in. Users need to make a selection or selections using the dropdowns that are active / available. The top dropdown is for workflow selection, and the bottom dropdown is for state selection.



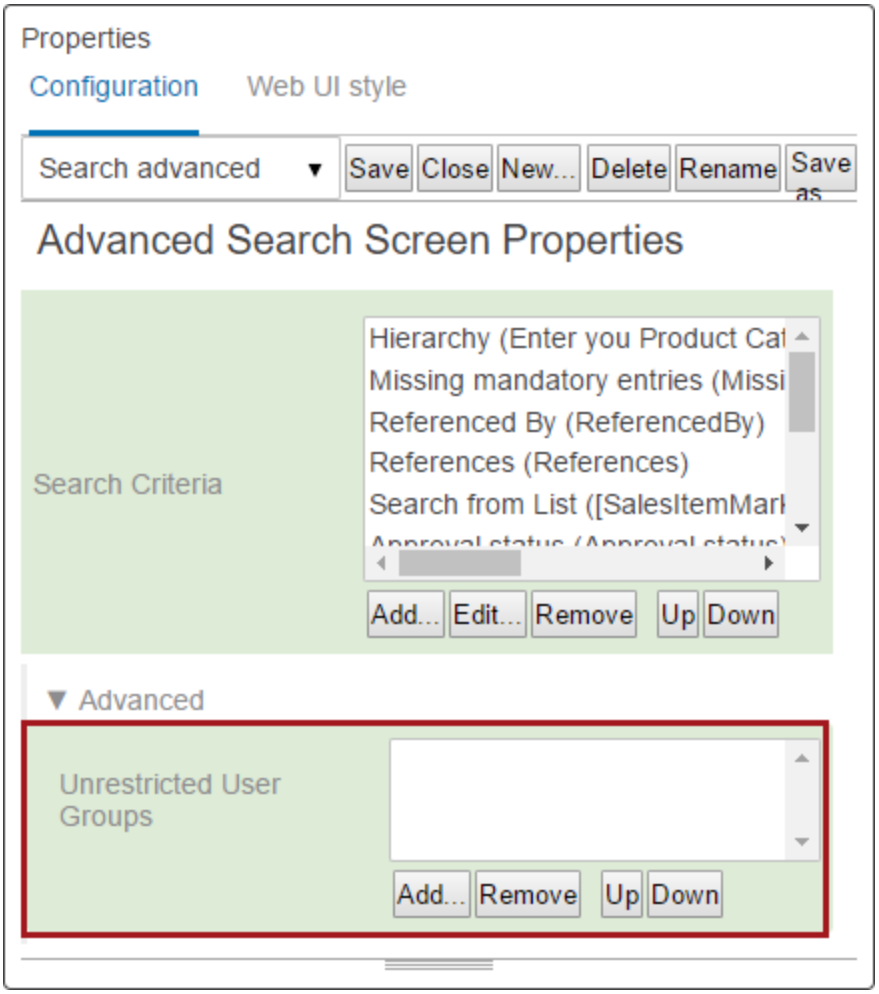
Once selections are made, the user clicks OK and is then redirected to the designated screen for the selected workflow state.

Restricting and Sharing Advanced Searches

Creating and performing searches in Advanced Search can be a complex process for users with limited knowledge about the underlying data structure in STEP. For that reason, users with 'unrestricted access' (administrators) are able to pre-configure an Advanced Search in the Web UI and share it with other users. Experienced users can tailor Advanced Search to specific purposes and share with end users who do not have as much STEP experience.

Restricting User Groups

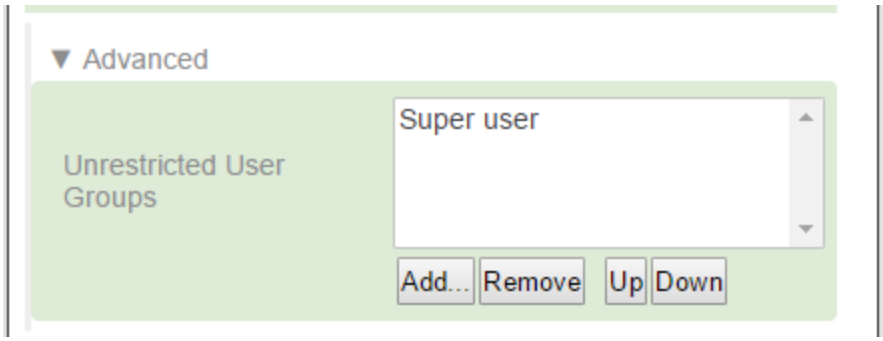
1. Log in to the Web UI. User must have privileges to edit Web UI configurations.
2. Click the design mode launch button found on the homepage (in the user widget).
3. Click the Advanced Search link (e.g., if configured to display in the Quick Links widget) or navigate to the screen using the dropdown in the Web UI Designer window.



4. Click Add under **Unrestricted User Groups** and pick the applicable node from the selection menu.

The admin - or anyone who will be creating and sharing the saved searches - needs to be added to the Unrestricted User Groups. All other groups are considered to be restricted and, therefore, cannot create and save Advanced Searches themselves.

5. In the next screenshot, the 'Super Users' group has been given Unrestricted User Group rights. This means that a member of the Super Users group will be setting up / sharing searches.

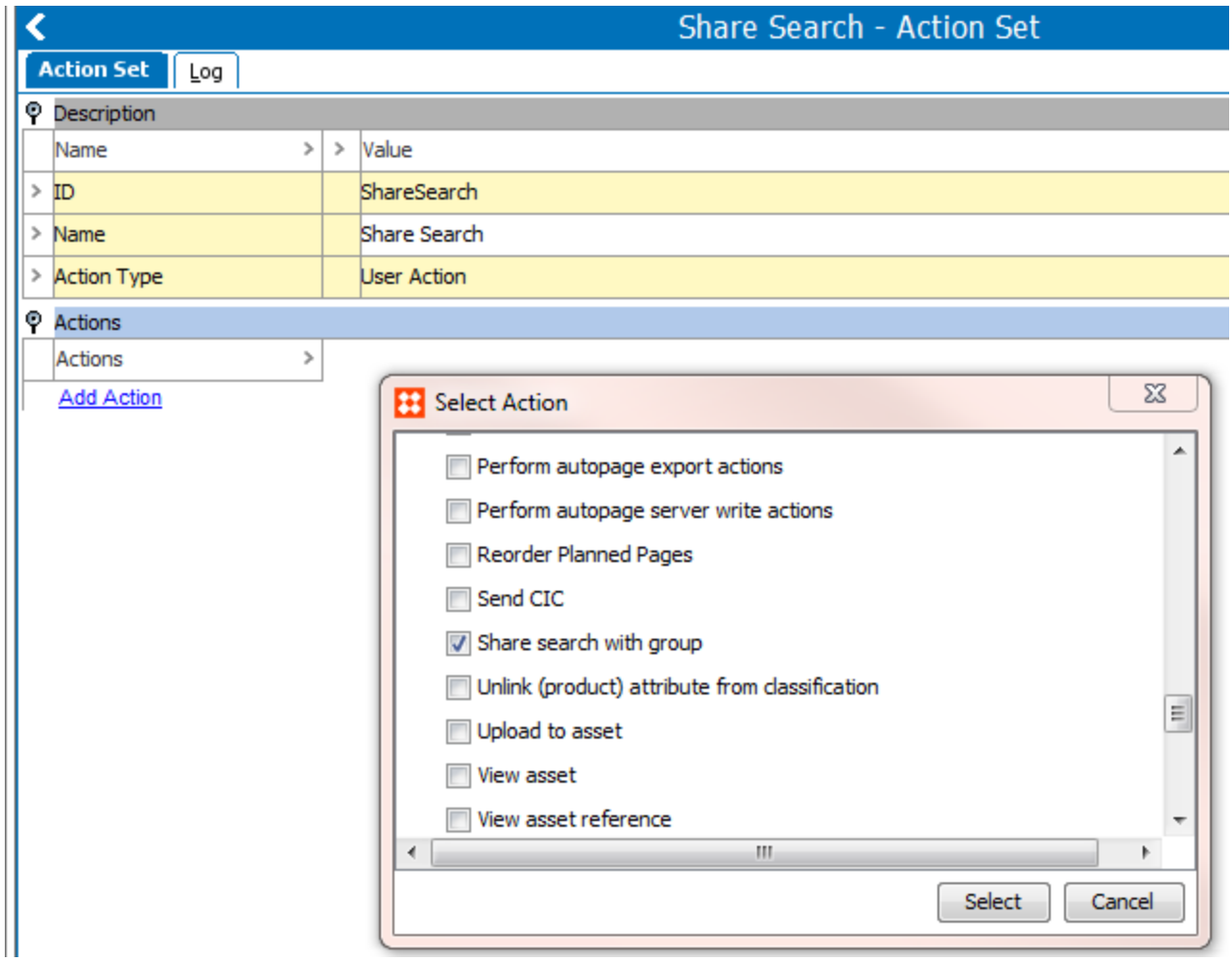


Important: If there are no groups added as Unrestricted User Groups, everyone will get access to the Advanced Search tab and the criteria. However, users who are not privileged to share searches will not be able to save searches. As soon as a group is added as an Unrestricted User Group, all other groups become restricted users until added as unrestricted. It is best to drop the Web UI admin group into this selection to avoid any issues that may come up if users with limited STEP experience try an all-encompassing search using large amounts of data.

Applying a Share Search Action Set

First, a 'Share search with group' action will need to be created if it doesn't already exist as a standalone item or as part of an existing Action Set.

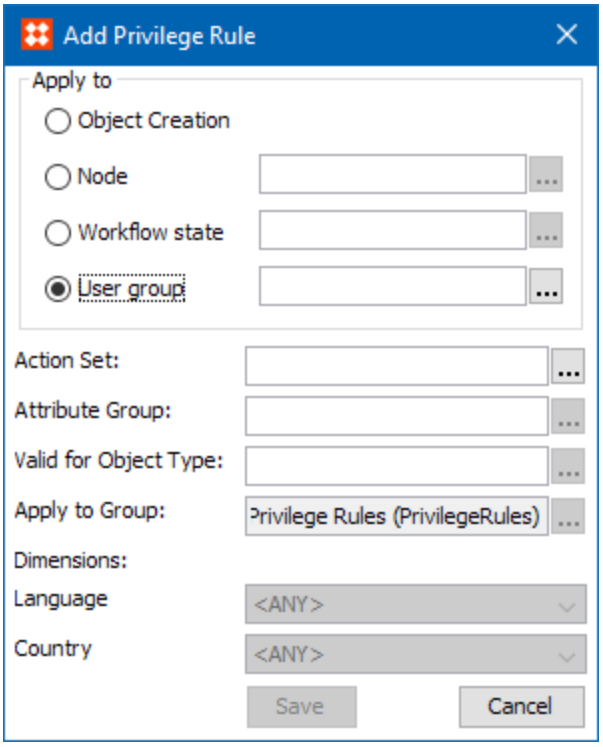
1. Go to **System Setup** in the STEP Workbench.
2. Under Action Sets, right-click User Actions and add a New Action Set.
3. Type in an ID and Name then click Create. In this example, the name is 'Share Search.'
4. Click on the new action set that was just created. Go to the Action Set tab.
5. Click on the Add Action link and select 'Share search with group.'



Next, the user or group that has unrestricted Advanced Search Web UI access, typically Web UI administrators, will need to have updated Privilege Rules before being able to share pre-configured searches.

In the following example, Super Users is the unrestricted group. And Buyer Group is the user group that will be able to access the shared search(es).

6. Under **System Setup** in the STEP Workbench, go to Users & Groups. Click on the group that will have unrestricted privileges in the Web UI Advanced Search configuration.
7. On the Privilege Rules tab, click on Add Privilege found under User Privileges (expand the flipper, if needed). Specify the user or group that the admin will share searches with (in the Apply to User group section). For Action Set, pick the action set that was created in Step 3 (Share Search). The user group with unrestricted privileges should be listed for Apply to Group.



Important: The 'Privilege' to share pre-created searches should be added to the group who will be setting up the searches and sharing them, not to the user or group who will receive the shared searches.

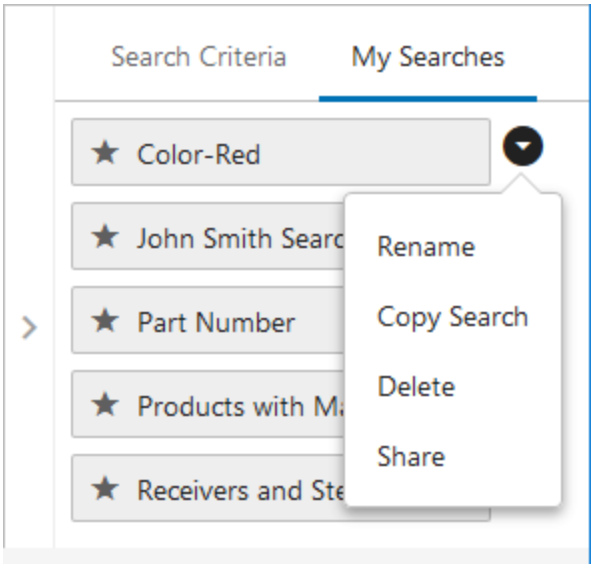
8. Click Save.

   Setup in the STEP Workbench is now complete.

   The group or groups designated as Unrestricted User Groups may run searches and also create searches, save them, and share with the user(s) designated in the Workbench as privileged users.

Sharing Saved Searches

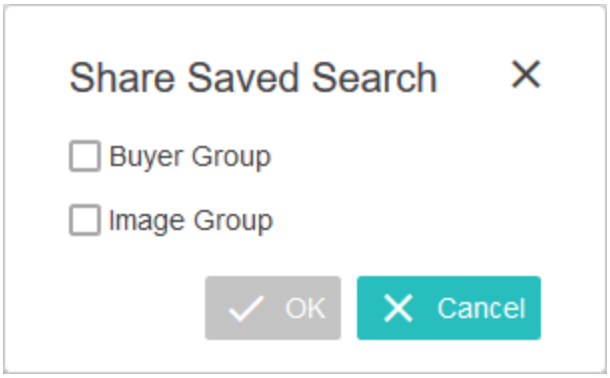
The administrator (unrestricted user) will need to log in to the Web UI to create an Advanced Search or access an existing saved search. Saved searches can only be shared with the privileged users. See the 'Applying a Share Search Action Set' section in this documentation.



To share a saved search, the administrator (a member of the Unrestricted User Group) can click on the icon to the right of each saved search to see the options available:

- Rename - change the pre-configured search name and resave
- Copy search - make a copy of an existing search that can then be edited and renamed
- Delete - remove the saved search from the list
- Share - make the saved search available for a (privileged) user

When the Share link is clicked, a menu of available users / groups is shown.

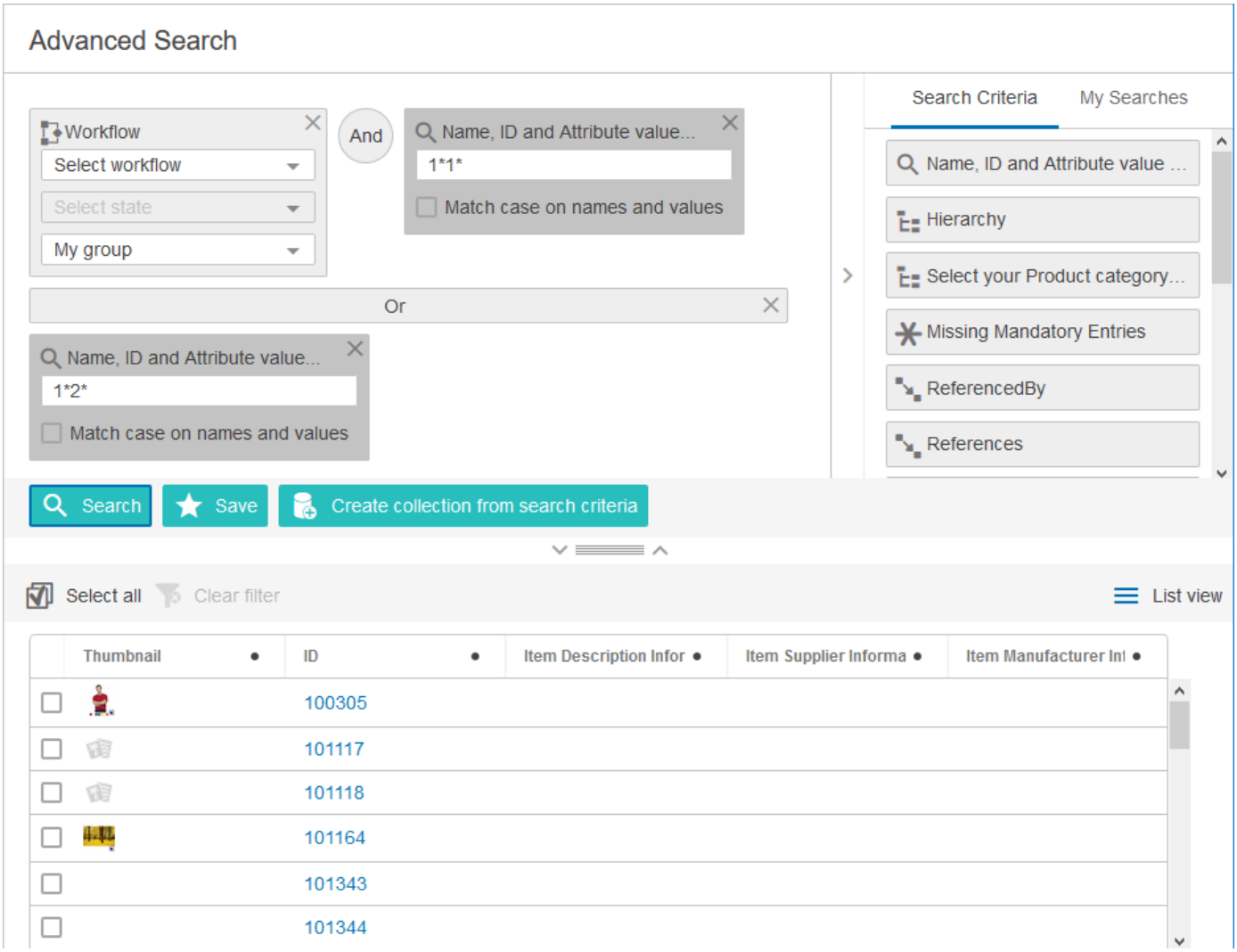


Make a selection and click OK. The user / group picked will have the saved search available under the Advanced Search My Searches tab the next time they access and/or refresh their Advanced Search page.

User groups without explicit access to create, share, save, and maintain advanced searches will experience a more simplistic and user friendly layout when they access the Web UI Advanced Search. End users who receive

shared searches will not, for instance, see the 'Search Criteria' tab display in Advanced Search. They will only see the 'My Searches' tab. In addition to increasing usability, this also reduces the risk of broad searches being unintentionally performed and depleting system resources.

End users cannot change or move the parameters of a saved search. However, they may change the values within a search, even if the search is already pre-configured with values.



Considerations and Limitations

- Unrestricted user groups will see two tabs - 'Search Criteria' and 'My Searches.' Restricted users who have been set up to receive shared searches will only have the 'My Searches' tab.
- Only one search can be used at a time. Saved searches cannot be combined on the screen in any way.
- End users may receive shared searches from multiple administrators.
- Administrators cannot see saved searches by others unless one admin shares with another or shares with the entire admin group. The admin group or a particular admin user would need to be set up to receive

searches. For more information, see the **Advanced Search Initial Configuration** topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation. If one admin shares a search with another admin / admin group, the shared search can only be copied (not deleted, renamed, or shared) by the receiving admin user(s).

- If an administrator deletes a saved search from their own account, the search is deleted across the board. End users will no longer find that search under the 'My Searches' tab.
- If an administrator edits and overwrites a saved search on their own account and that search has previously been shared with other users, then the search will also be overwritten for those users. The updated criteria will be visible the next time the saved search is opened.

Using Advanced Search

Once Advanced Search has been configured (e.g., criteria renamed, unused criteria removed, hierarchy nodes pre-selected and added), the search is ready to use.

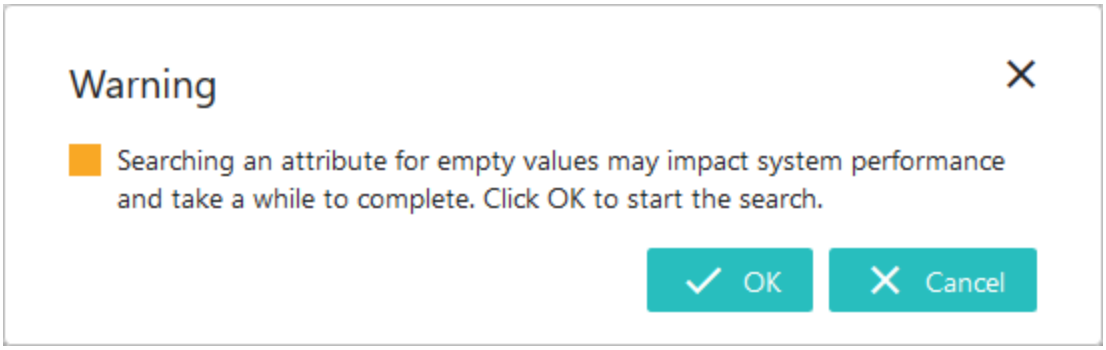
Performing an Advanced Search

Drag and drop each search criteria button and operator button over to left side of the page. Or click on each search criteria button to build the search. Building search queries visually helps the user better understand the data.

Building a Search Query

1. Choose the Search Criteria by dragging and dropping each search criterion over to the left side of the screen or by clicking the desired search criteria button.
2. Click / drag and drop the Or and Not Exclude operators as needed. The default operator is And.
3. When all the criteria are set up, click 'Search'. Results will show at the bottom of the page. The 'Search' button will display as gray-shaded when the search area is either blank or if the added search elements are insufficient to initiate a search. When a search has been built that will allow a search to be initiated, the 'Search' button will display with the configured 'Accent' color, which can be set in the designer's Web UI style tab.
4. Users may save any search by clicking 'Save'. More information on saving new searches and using existing searches is available later in this same topic.
5. Users may create a collection from the search results by clicking the 'Create collection' button. More information on this functionality is available in the **Creating a collection from search results** section of this topic.
6. Users may clear all search criteria and operators from the search area by clicking 'Clear.'

Note: Using the Attribute criterion for searching (! and !! operators) attributes that have empty values is an easy way to identify objects in STEP that are not yet complete. It is important to note that performing these searches can be time consuming depending on the number of attribute values being searched and the complexity of the assembled search criteria. Because of this, when starting an empty-value search (either alone or with other criteria), users are presented with a message asking them to confirm that they want to move ahead given the potential resource and time constraints. When the end user clicks OK, the search is performed.



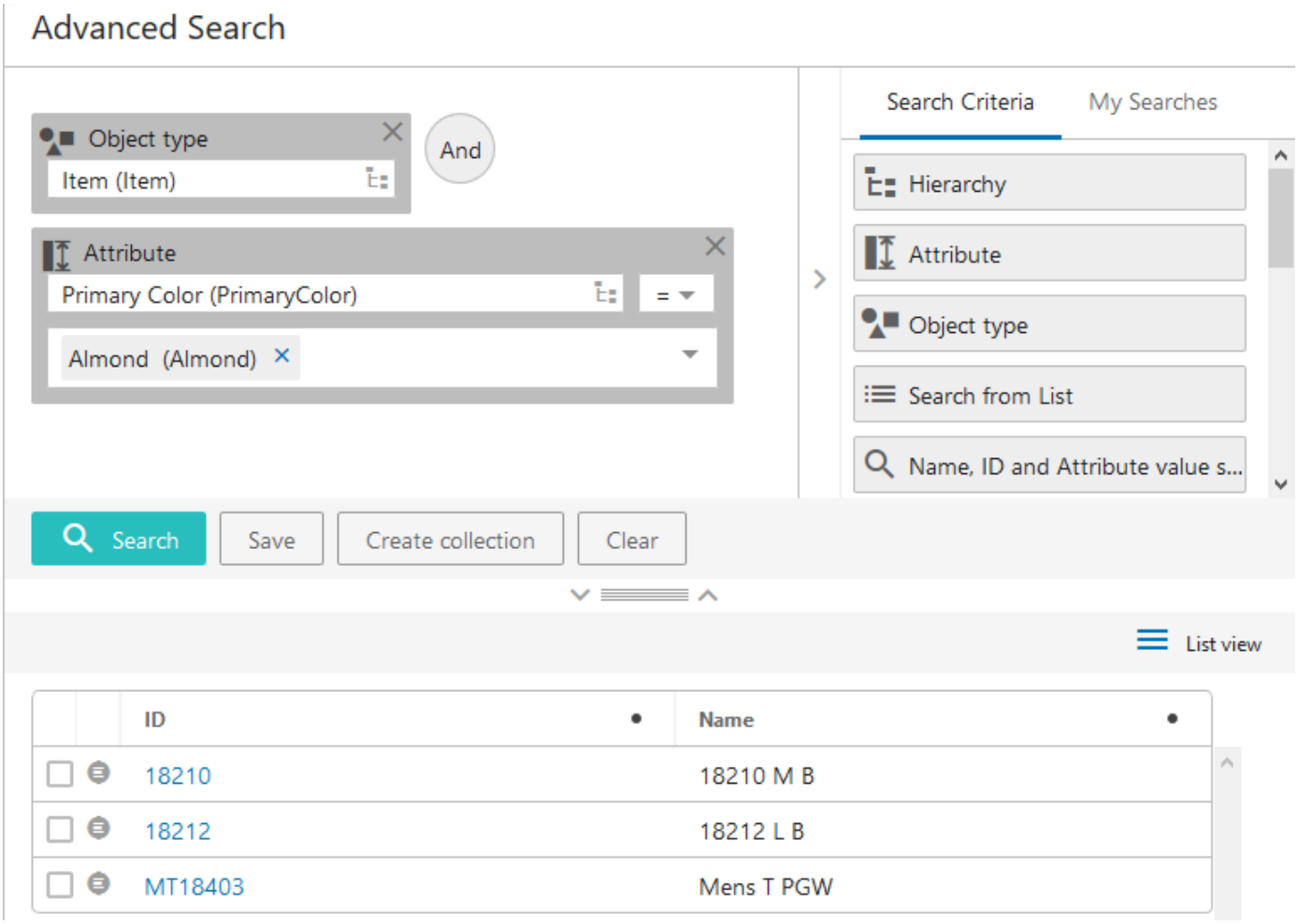
Examples

The following examples with screenshots that show basic searches with different operators: **And**, **Or**, and **Not**. The example screenshots do not show every search criteria available. For more information on adding / removing criteria shown to users, see **Advanced Search Initial Configuration** in the **Web User Interfaces** documentation.

Example 1: Object type (Item) **And** Attribute (Primary Color)=Almond

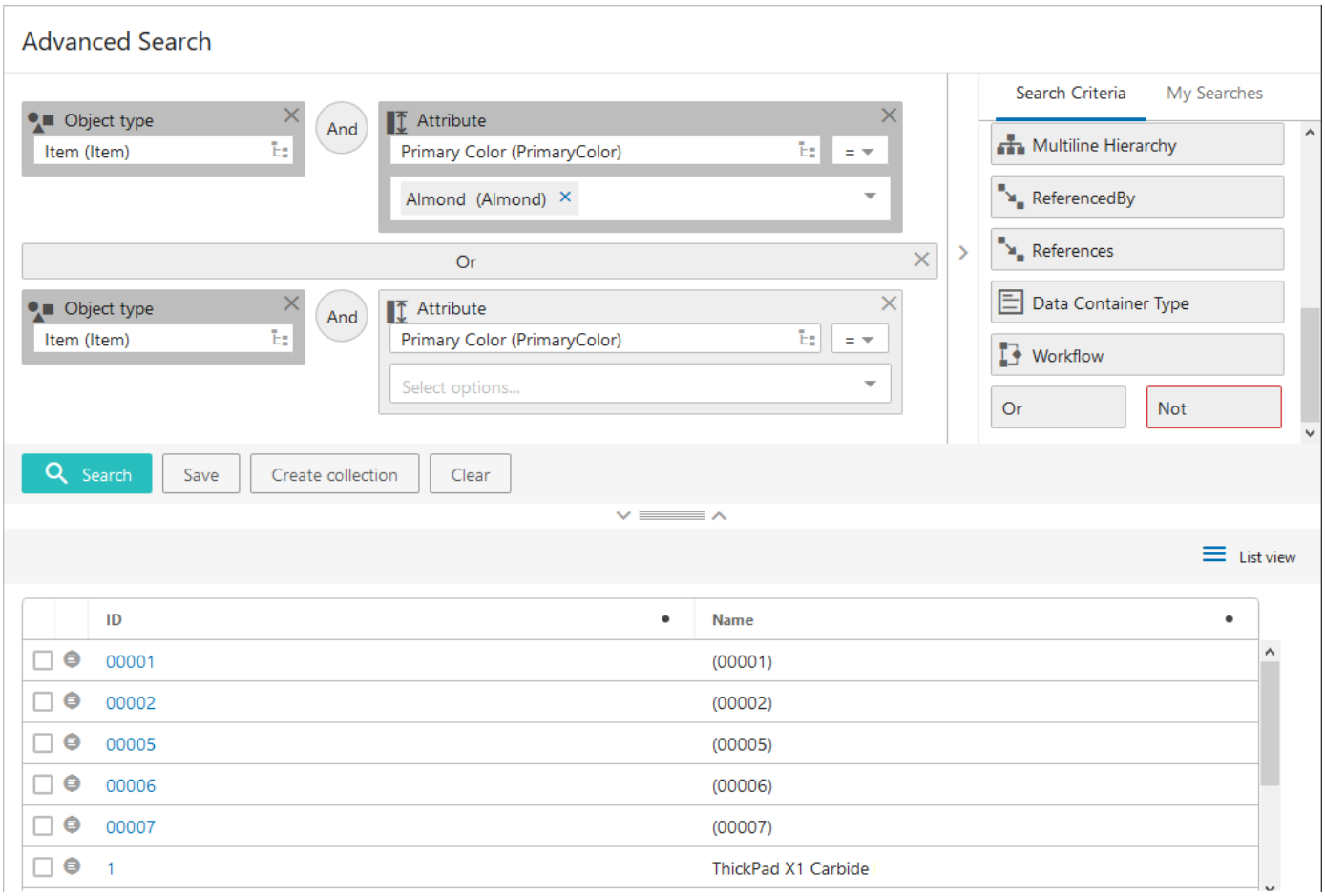
Results include items that have the color 'Almond' as an attribute value.

While only one value is being searched, multiple values can be searched at one time (if applicable to the search). And, if searching an LOV-based attribute, users can use the dropdown to access the actual list of values to enter an attribute value.



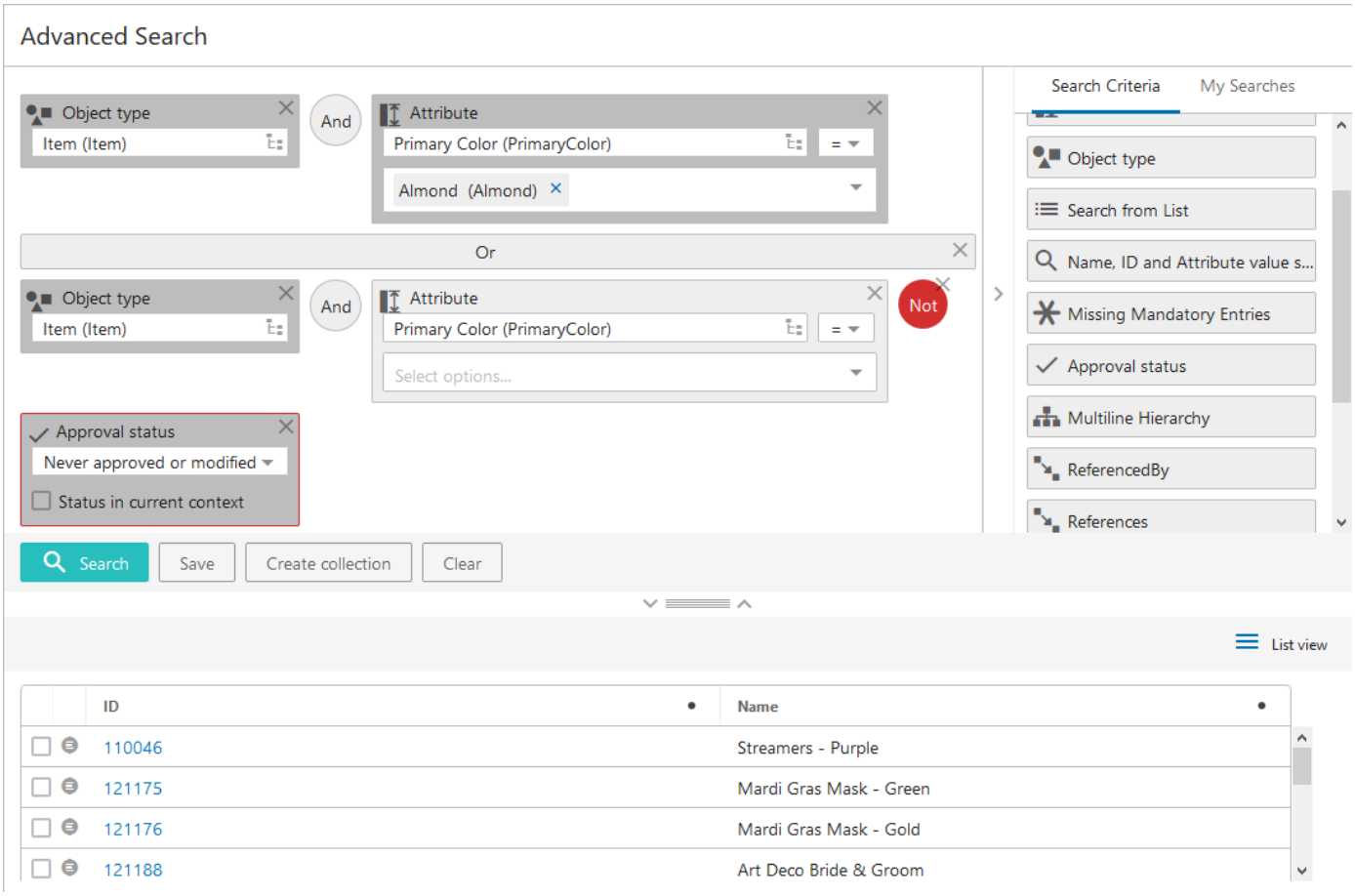
Example 2: [Object type (Item) **And** Attribute (Primary Color=Almond)] **Or** [Object type (Item) **And** Attribute (Primary Color=Apricot)]

The search pulls items that have the primary color 'Almond' as an attribute value and combines those results with items that have the primary color 'Apricot' as an attribute value.



Example 3: [Object type (Item) **And** Attribute (Primary Color=Almond)] **Or** [Object type (Item) **And** Attribute (Primary Color=Apricot)] **Not** Approval status (Never approved or modified)]

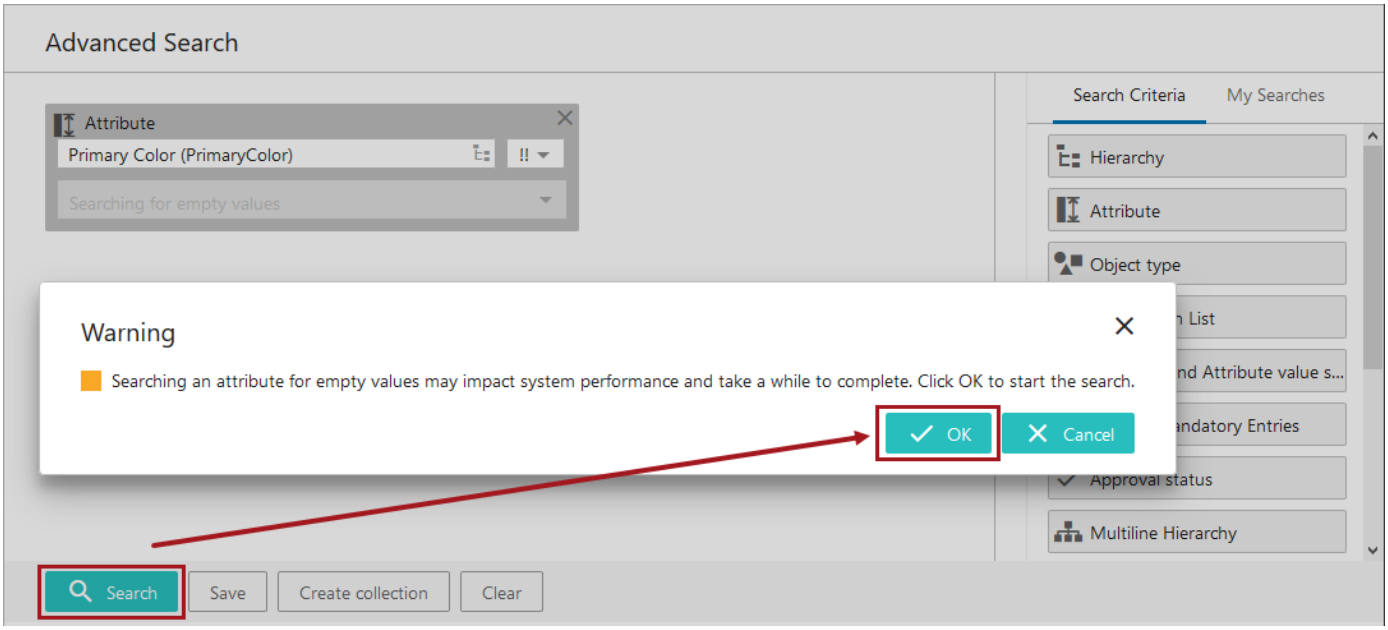
The search pulls items that have the primary color 'Almond' as an attribute value. It combines those results with items that have the primary color 'Apricot' as an attribute value, with any object types that have never been approved excluded from the Item / Primary Color= Apricot results.

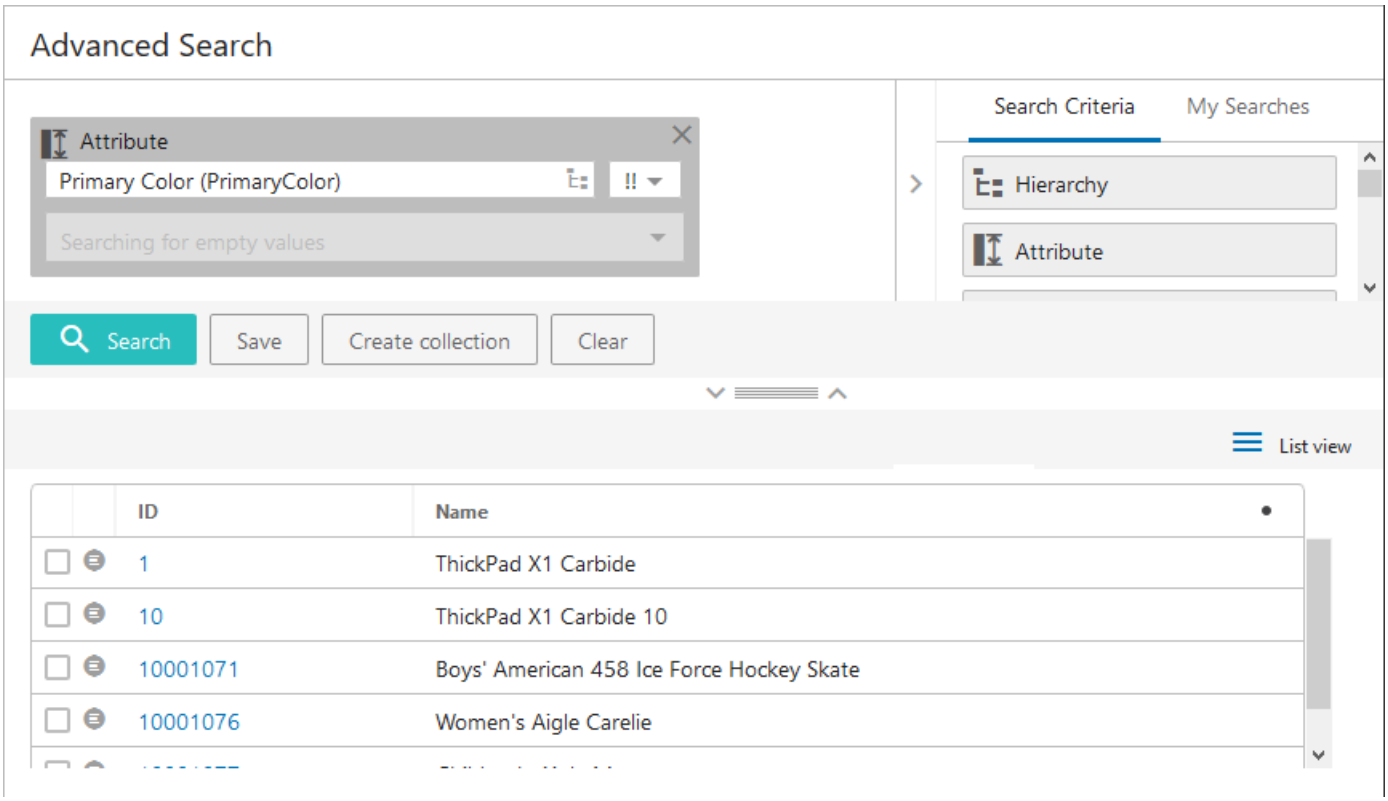


In Example 3, if the user also wants to exclude unapproved object types from the Item / Primary Color=Almond portion of the query, they would go back and add the **Not** operator and the 'Approval status (Never approved)' criteria in front of the **Or** operator.

Example 4: Empty value search for [Attribute (Primary Color)]

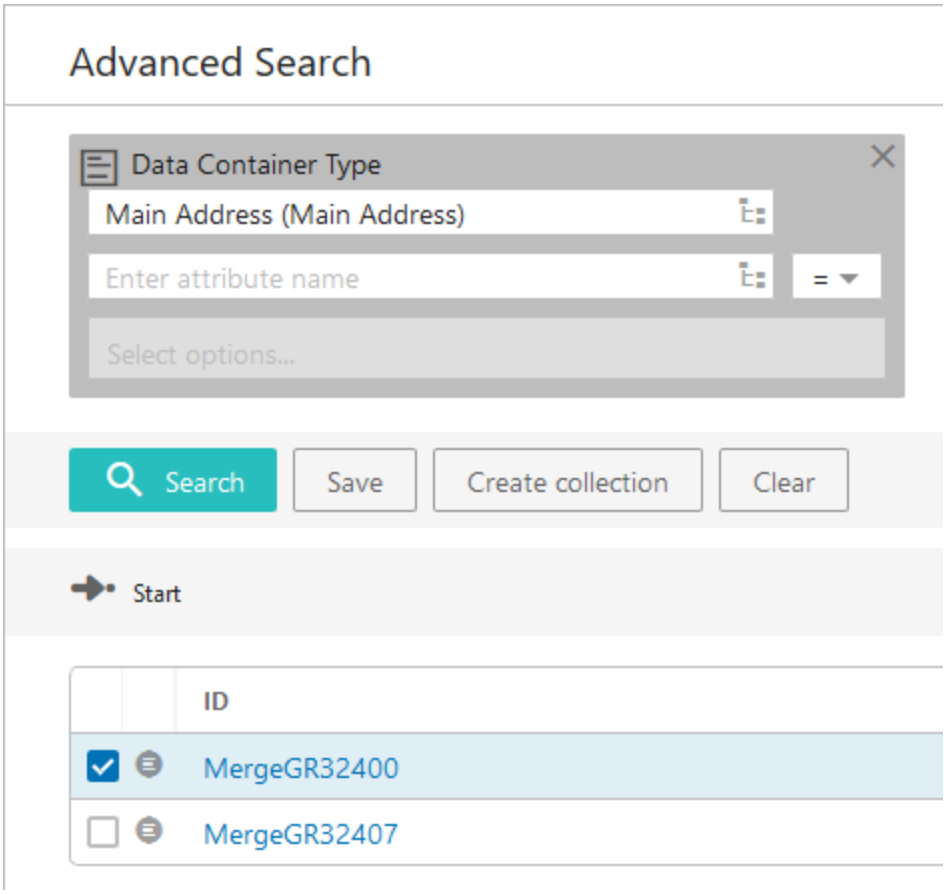
The search pulls objects that do not have a value for the Primary Color attribute within the current context (English US). A warning dialog is presented upon clicking the Search button. After pressing OK to confirm you want to continue, the search will process.





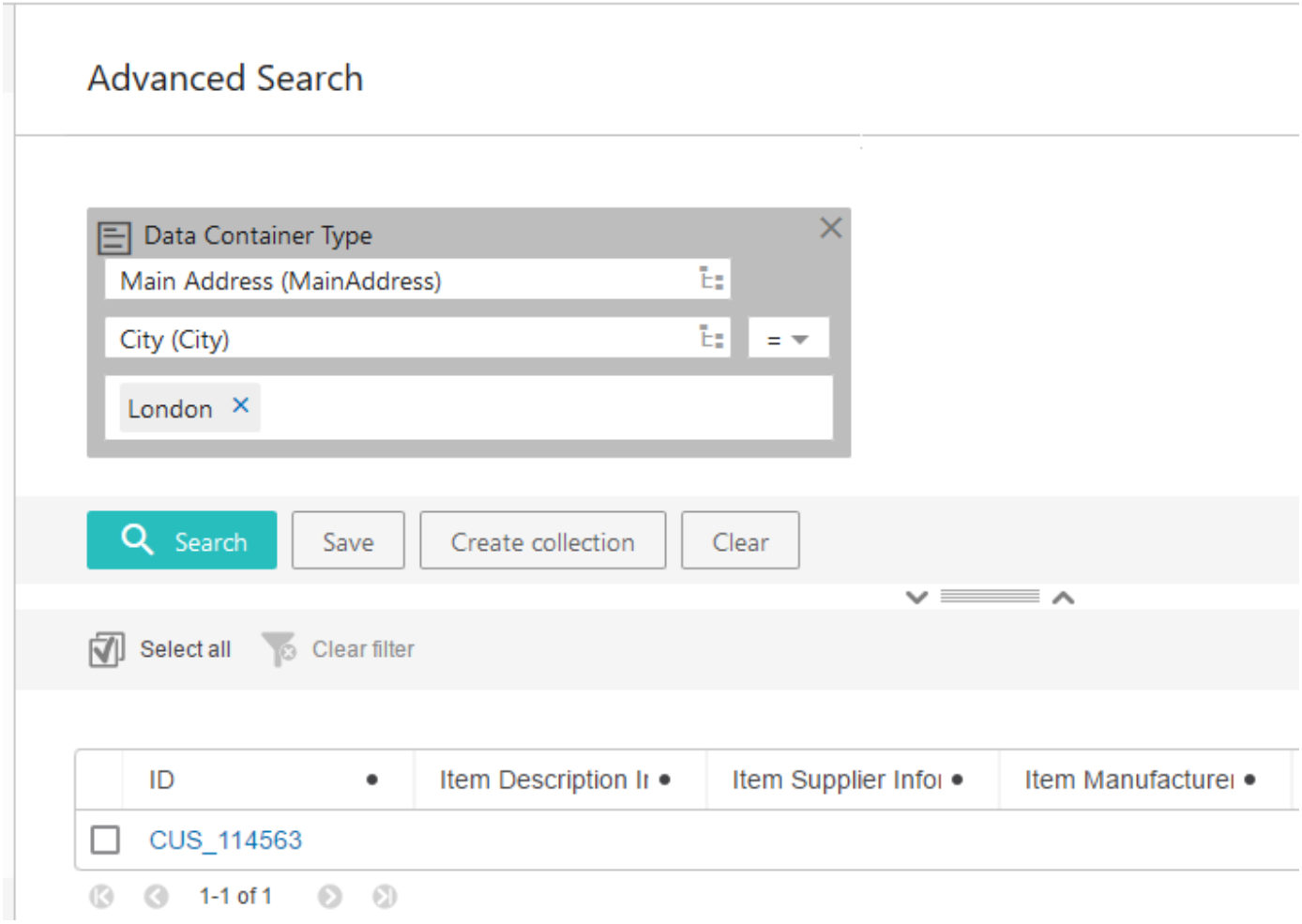
Example 5: Data Container Type searches

Example 5.1: Data Container Type search for [Main Address]



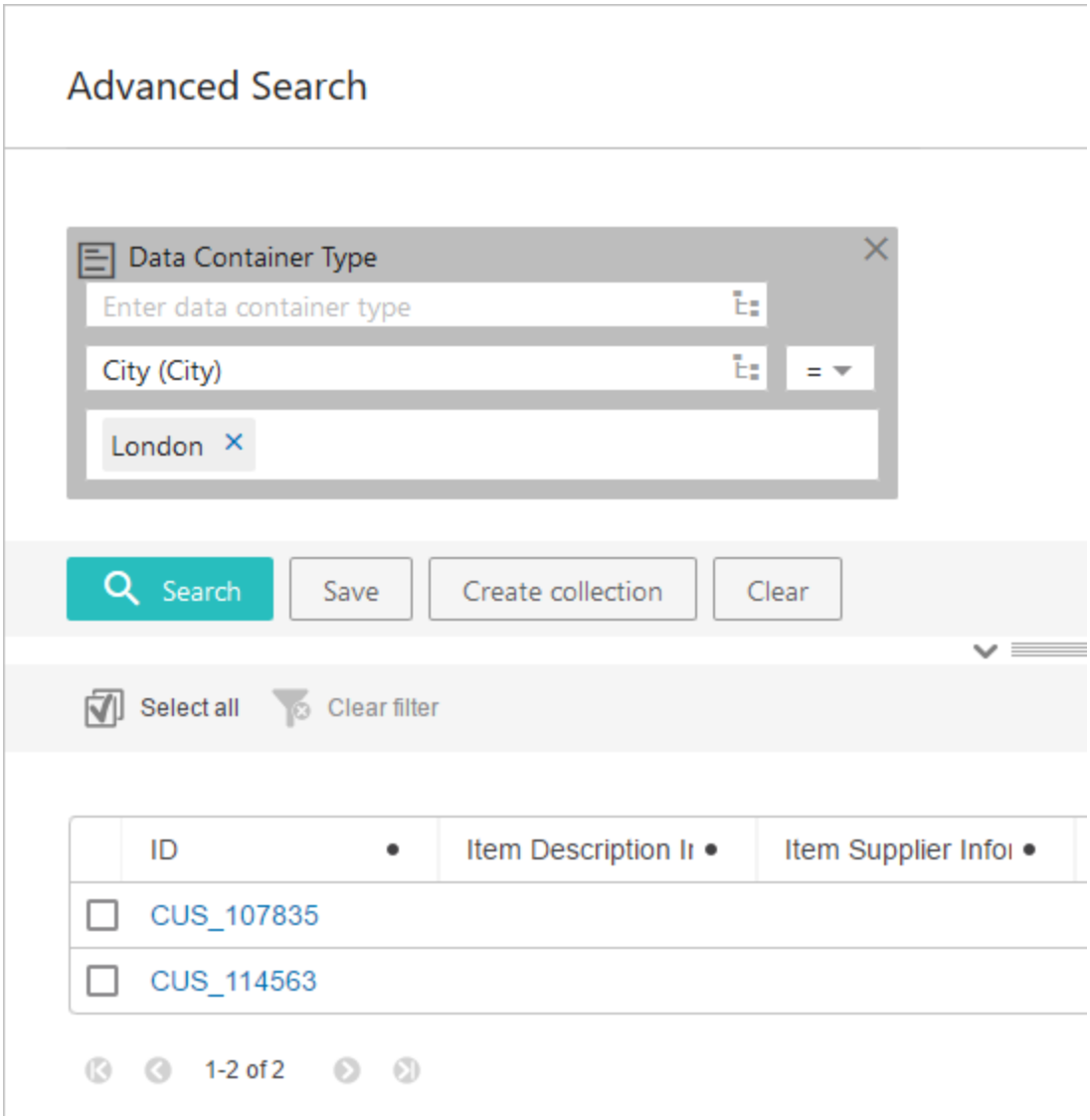
By clicking the Node Picker icon ( ) in the 'Enter data container type' field (in the screenshot above, the data container type 'Main Address (MainAddress)' displays in this field), users may either browse through or search for the data container types that have been created in the system. Once a selection is made and **Search** is clicked, a list of all applicable entities for which a data container has been created / added of the data container type specified will populate.

Example 5.2: Data Container Type search for [MainAddress] and [Attribute (City)]



Users may narrow the search further by also selecting an attribute linked to a data container of the specified data container type. To execute this kind of search, users must select an attribute by clicking the Node Picker icon in the 'Enter attribute name' field, or by typing the attribute into the field. Once the user makes their attribute selection, selects a search operator (equals (=), in this example), enters an attribute value, and then clicks **Search**, a list of all entities that have a data container added of the type specified, which also contain the selected attribute / attribute value combination, will populate.

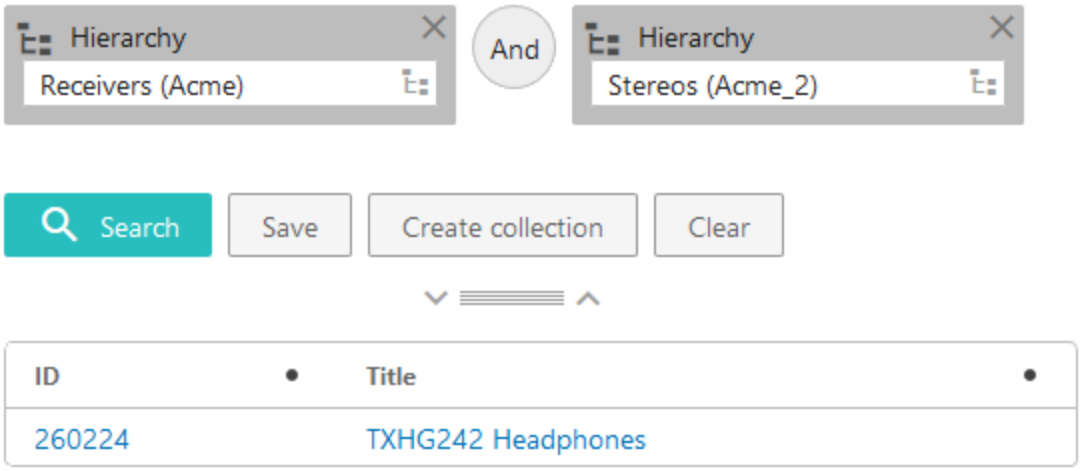
Example 5.3: Data Container Type search for [Attribute (City)]



Users can elect to search for attribute values that exist in attributes contained in any data container, irrespective of type. To execute this kind of search, user must select an attribute by clicking the Node Picker icon in the 'Enter attribute name' field, or by typing the attribute into the field. Once the user makes their attribute selection, selects a search operator ('less than or equals (≤)', in this example), enters an attribute value in the 'Select options' field, and then clicks **Search**, a list of all entities with an attribute value that matches the value specified for the selected data container-linked attribute will populate. By leaving the 'Enter data container type' field blank, the user is searching for attribute values within any existing data container.

Example 6: Searching for objects linked to different classifications

To find products linked in two different classifications, add a [Hierarchy] search criteria to the search panel, and set it to the first classification to be searched. In this example, the classification is 'Receivers (Acme)'. Then add a second [Hierarchy] search criteria, and set it to the second classification to be searched, which is 'Stereos (Acme_2)'. Then click ' Search'.



When this search is run, only those objects linked to both classifications will display in the results. In this example, the only product linked to both classifications is 'TXHG242 Headphones'.

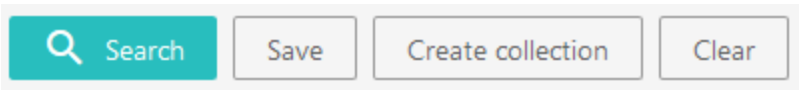
Note: When a user clicks on the 'x' to remove a 'Not' or 'Or' operator symbol, the system changes it to 'And'. To entirely remove a particular operator, remove the search parameters that come after that operator.

Building searches within the Web UI is very similar to the functionality found within the STEP Workbench Search tab. For additional information on this process, see the **Navigation and Searches** section of the **Getting Started** documentation.

Saving a Search

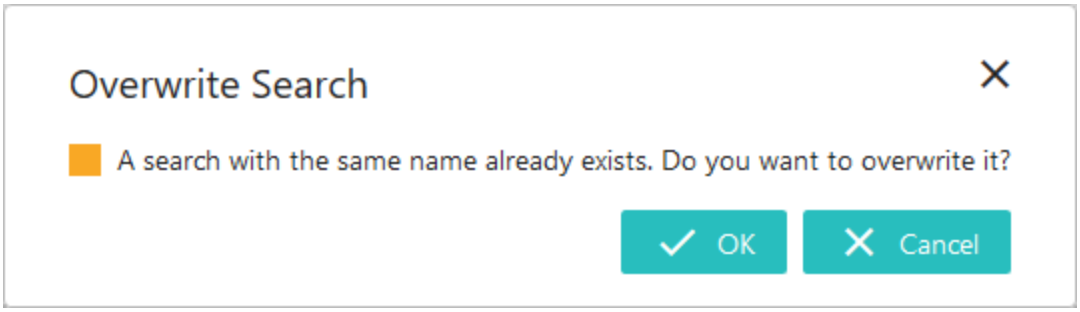
When an Advanced Search is built, a user may want to save the search to use again. Searches can be saved once parameters have been added. There is no need to run a search before saving it. However, it is a good idea to make sure the designated criteria are set up effectively and meet data / business needs prior to saving.

Values may be pre-populated for each search parameter prior to saving.



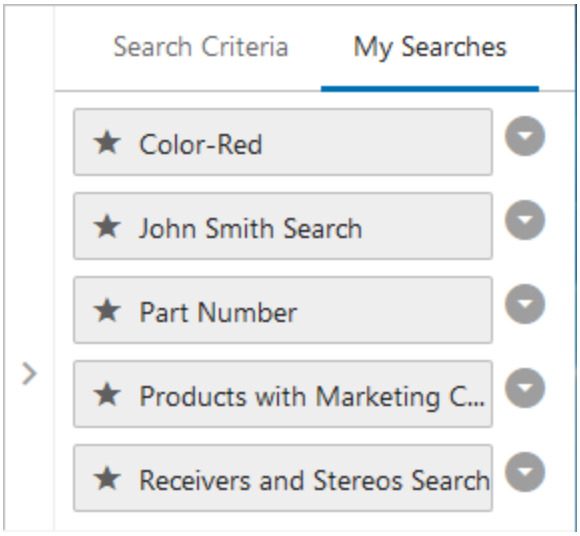
Click Save, and name the search. Press OK to save it.

If saving a new search using a name that is already used by an existing saved search, an overwrite notification will appear and require user action. If overwriting a search that has been previously shared, the search is overwritten for all users.



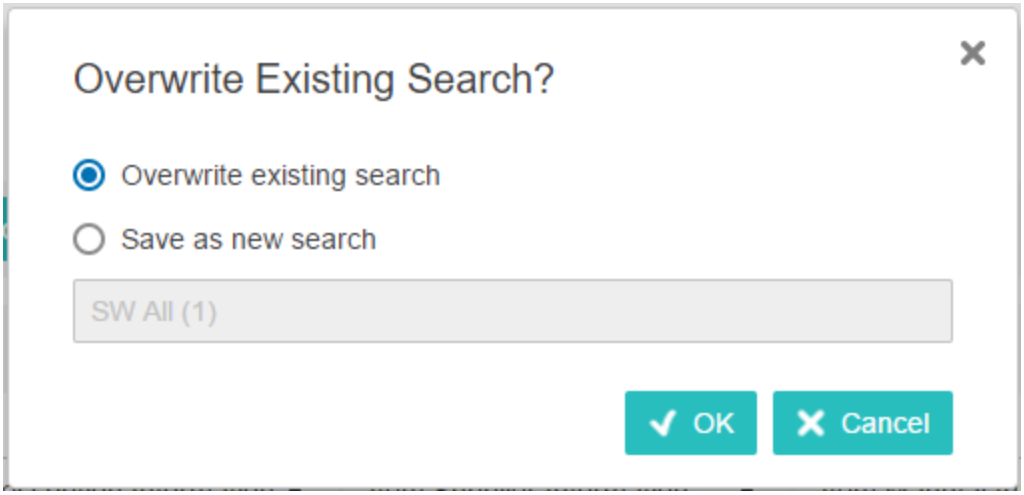
Using Saved Searches

Access saved searches by clicking on the 'My Searches' tab.



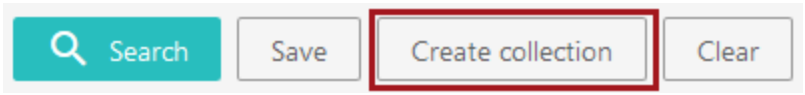
To initiate a saved search, drag and drop any of the saved searches listed under the 'My Searches' tab from the right side of the screen into the search area. Users may also click on the desired search to bring the configured criteria into the search area. To complete the search, click 'Search'. The results will show at the bottom of the page. If no results are returned, a zero (0) will display at the bottom left-hand corner of the page.

Users in unrestricted user groups can overwrite existing saved searches within Advanced Search. After opening an existing saved search from the My Searches tab, modifying it, and then clicking the Save button, a notification dialog appears in which the user can choose to overwrite the search or save the search with a new name. If the search is overwritten and has previously been shared with other users, then the search will also be overwritten for those users.

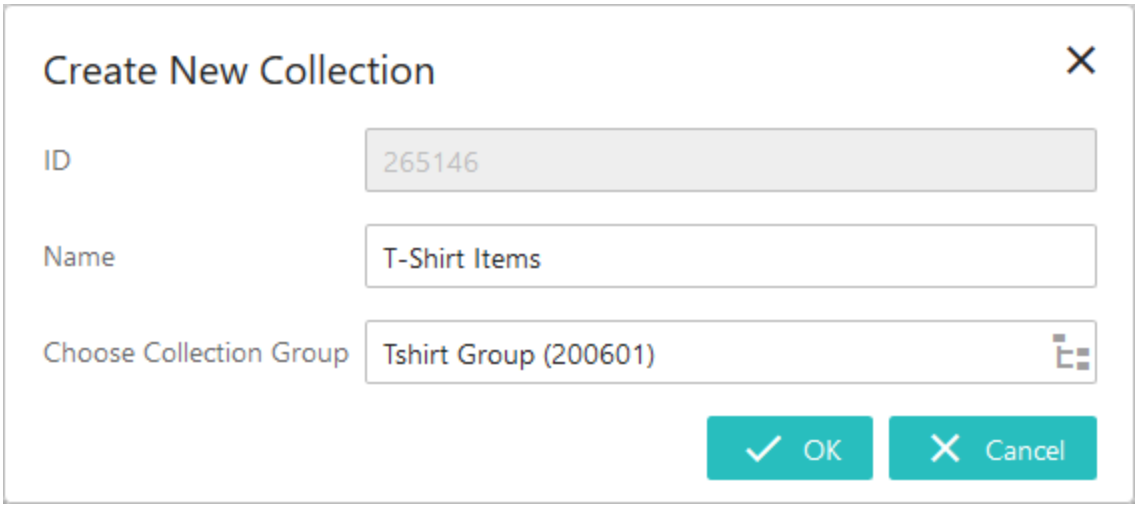


Creating a collection from search results

The Advanced Search screen enables users to create collections from the generated search results by clicking the 'Create collection' button.



Following a completed search with one or more generated results, users may create a collection that includes all items in the search result. When a user clicks 'Create collection', a 'Create New Collection' window displays:



- **ID** -- In this field, a read-only automatically generated ID displays.
- **Name** -- Users can select the name for the new collection.
- **Choose Collection Group** -- By either typing the name of the collection group in the field or by selecting it from a Node Picker after clicking the hierarchy icon, users must select the collection group into which the new collection will be added.

Once the fields are filled out, click 'OK' and the objects contained in the search results will be saved as a collection.

For more information on collections, see the **Collections** section of the **Getting Started** documentation.

Collapsible splitter feature

The individual panels on the Advanced Search screen are collapsible and expandable through the use of a collapsible splitter feature, which consists of a drag handle element and two arrows, one pointing up and one down. This feature is shown below:

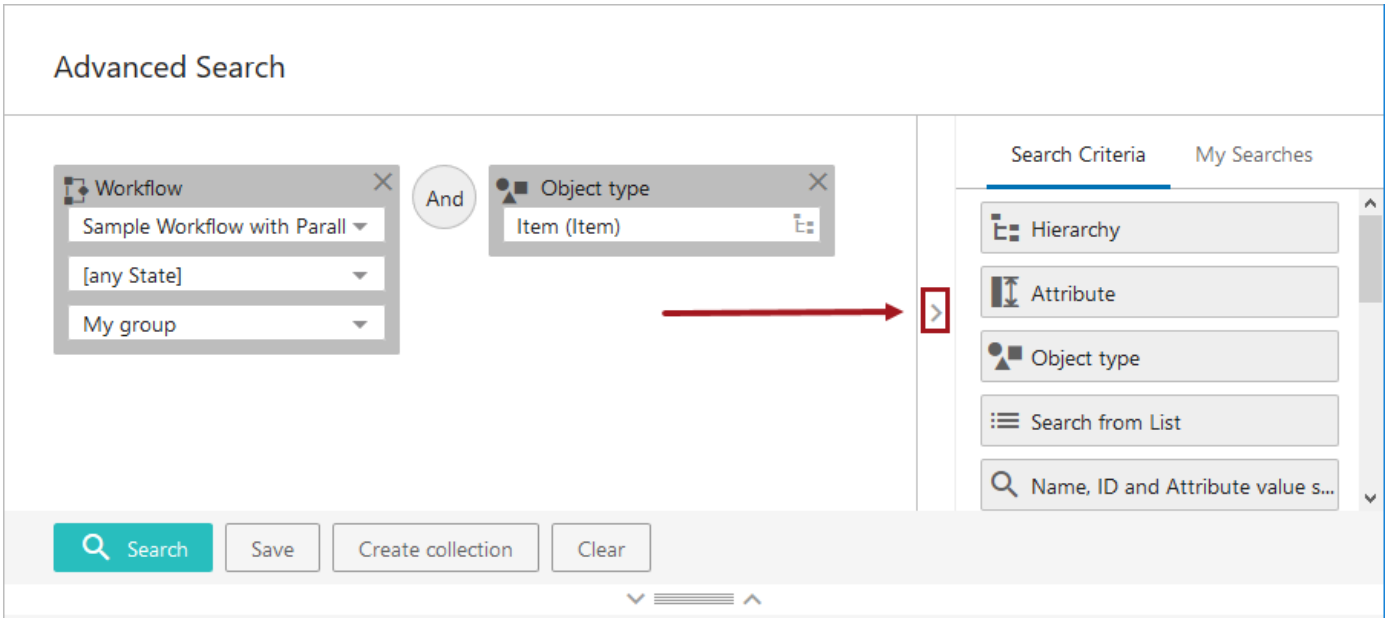
When the screen is configured with a horizontal split panel, the drag handle divides the panels / components on the screen. To the left of the drag handle is a down arrow, and to the right, an up arrow.

Clicking the up arrow removes the main component (Advanced Search build / criteria) from display, providing more screen space to focus on the Node List. This is useful if the user wants to focus on the results set only. For example, a user may choose to display the results set in Multi Edit Display Mode to make edits and no longer needs to see the criteria or the way the search was built.

Clicking the down arrow returns the hidden component back to the screen display.

Similarly, if the user first clicks the down arrow, the child component is hidden from display so the user can focus on using the criteria and setting up an Advanced Search.

Note: By default, the collapsible splitter is typically in the middle of the screen and the Search Criteria panel / tab is automatically displayed once a user is on the Advanced Search screen. However, if the Advanced Search Task List is used as a result screen for any Status Selector Widget, the criteria panel is collapsed and the splitter moves up under the search criteria used in the search. This allows more room to view the Task List once a user gets on the Advanced Search page. The Search Criteria panel can be expanded by clicking the arrowhead on the right of the screen (shown expanded in the following screenshot) and the splitter can manually be dragged down to expand the Search Criteria list and area, if desired.

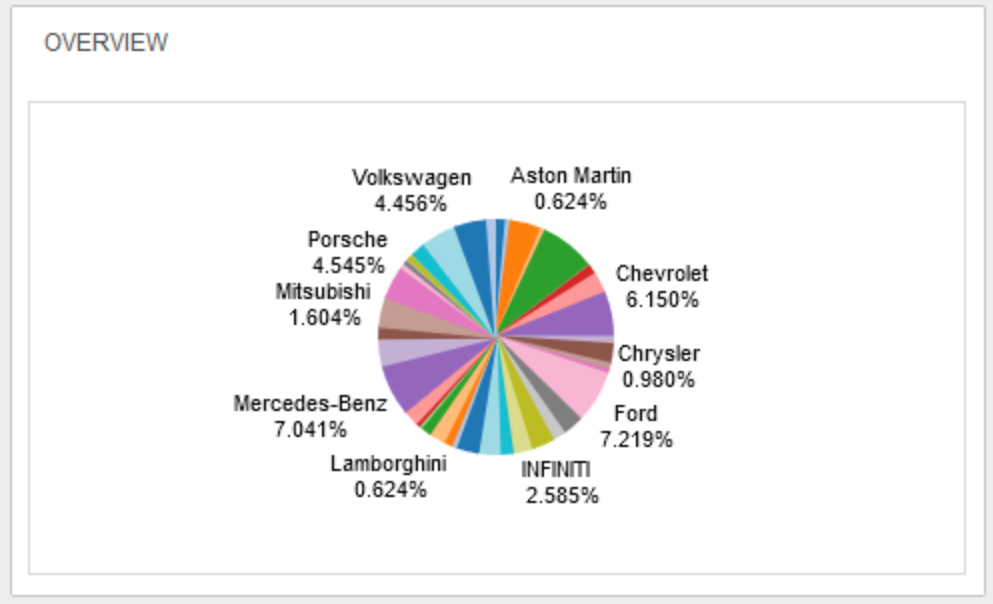


Considerations and Limitations

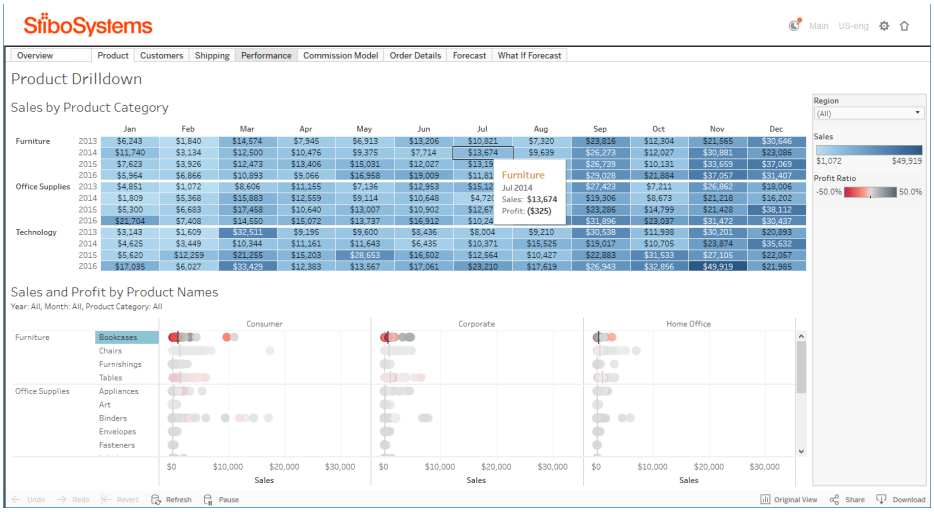
- Unrestricted user groups will see two tabs - 'Search Criteria' and 'My Searches.' Restricted users who have been set up to receive shared searches will only have the 'My Searches' tab. Read more in the **Restricting and Sharing Advanced Searches** section of the **Web User Interfaces** documentation.
- Only one search can be used at a time. Saved searches cannot be combined on the screen in any way.
- Non-admin users cannot change or move the parameters of a saved search. However, they may change the values within a search, even if the search is already pre-configured with values.

Analytics

The STEP Web UI supports integration with data analytics tools like Tableau and Qlik. Through configuration of the Web UI, admin users can add both a homepage widget (shown below) and a Web UI screen designed specifically to display visually compelling views of data (called dashboards) from data analytics tools.



The Analytics Homepage Widget (shown above) is useful as a quick, simplified view of a dashboard, while the Analytics Screen (shown below) offers a more expansive view of analytics data, allowing for more interaction.



Users have the ability to utilize analytics tools in a variety of ways. They may:

- Interact with dashboards comprised of both STEP and external data within the Web UI
- Apply filters to the analytics screen that give users customized views of data analytics dashboards

- Configure the Web UI to pass attribute value data into the analytics platform, thus making product-specific views of data from the analytics platform

Complementary to this Web UI capability, the Java Database Connectivity (JDBC) delivery plugin feature can be configured to automatically (or manually) make STEP data available to the analytics platform. This feature effectively closes the loop of data and visualization by making STEP data viewable in a data analytics dashboard, which is in turn viewable in the Web UI. For information regarding proper setup of JDBC in conjunction with data analytics integration with the Web UI, see the Analytics Using JDBC Example topic, also in the Data Formats guide.

Information related to configuration of data analytics tools in the Web UI can be found in the Analytics Configuration topic in this documentation.

Analytics Configuration

The STEP platform supports integration with data analytics tools like Tableau Server and Qlik Server in the STEP Web UI. Data analytics dashboards can be displayed in the Web UI in either a homepage widget or in a screen. STEP also supports automatic authentication for Tableau and Qlik, which allows users seamless access to dashboards in the Web UI. A successful integration that includes automatic authentication may require configuration steps be taken in the Web UI, the data analytics tool, and the application server. This guide describes only those actions that can be taken in the STEP Web UI and the application server. Configuration actions that must be taken in the relevant data analytics tools are detailed in the appropriate vendor documentation.

This functionality supports the sharing of attribute values with the analytics environment, thus creating a dynamic dashboard that is filtered based on the selected STEP node.

Important: Implementation of a data analytics integration with the STEP Web UI does require a specific license to enable the required components.

Configuring the Analytics Screen

The **Analytics Screen** is a Web UI screen that can display a much larger analytics dashboard. The screen is typically added as a tabbed page to any mapped object where the specific data analytics dashboard is most pertinent.

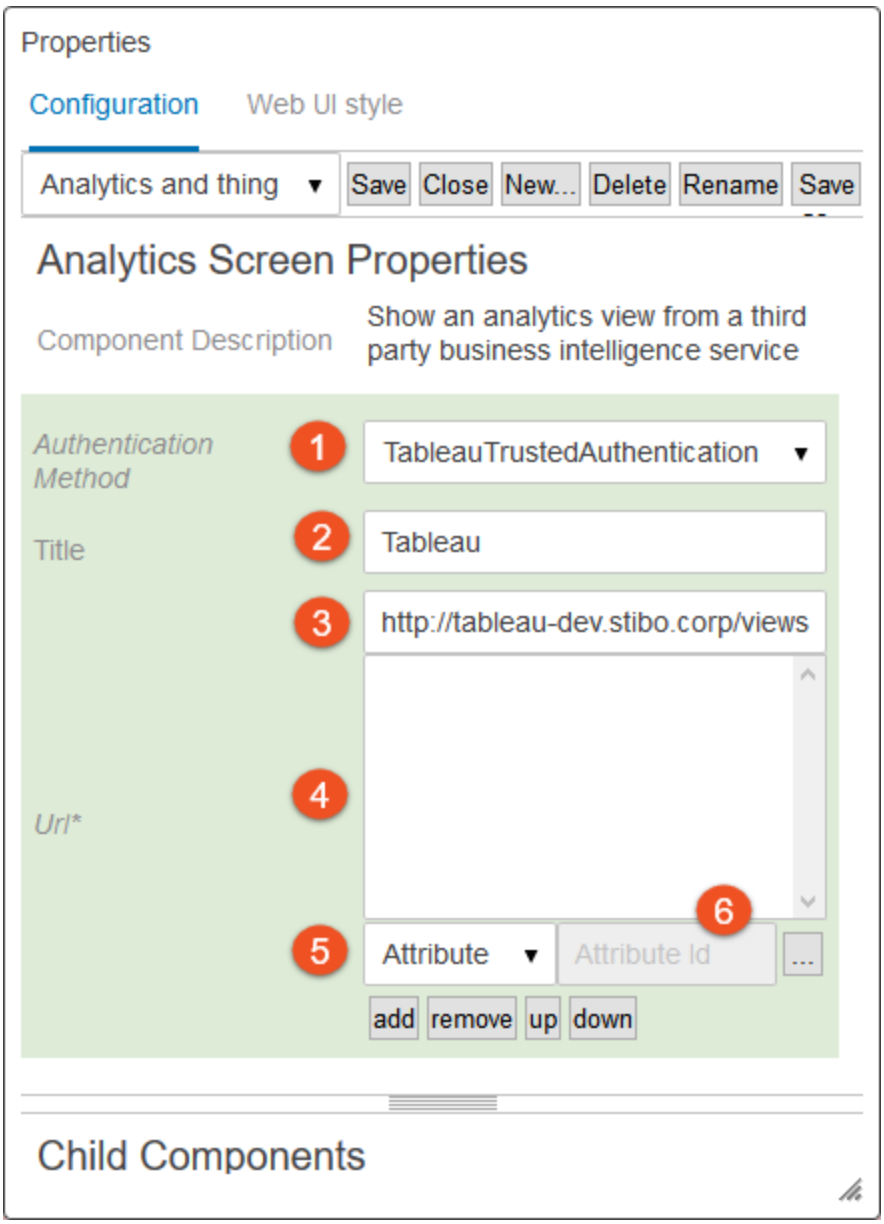
Both the homepage widget and the screen are configured in almost identical ways. The configuration steps described below can be applied to configuring either the widget or the screen, except where expressly noted.

Adding the Analytics Screen

The analytics screen must be added before it can be configured as described below. The method for adding screens in the Web UI is detailed in the **Creating a New Screen** section of the **Design Mode Basics** topic.

Setting up the Analytics Screen

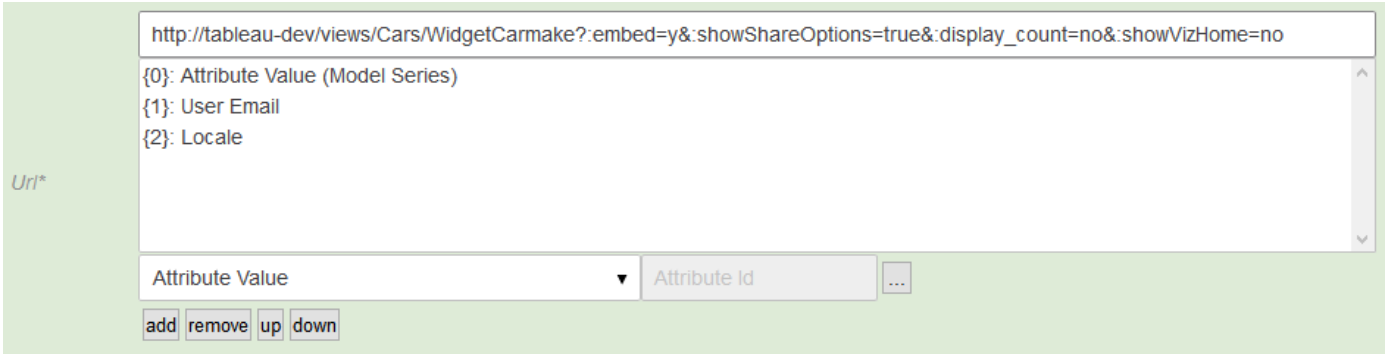
Using the analytics screen, admin users are able to create a view from the Web UI into a published data analytics dashboard. Below is a screenshot of the Properties window for the analytics screen in the Web UI designer. The parameters that appear in the screenshot are described in detail directly beneath the screenshot.



1. Authentication Method – This parameter enables users to configure automatic access to Tableau or Qlik dashboards through the Web UI analytics component (screen or homepage widget). For more information on setting up authentication in the Web UI, see the **Configuring Authentication** section at the end of this topic.
2. Title – Content added to this field appears at the top of the Web UI analytics component (screen or homepage widget).
3. Url – This field relates to the analytics server dashboard URL that will be viewed in the Web UI. The URL can be static (showing a dashboard whose display is not dependent on which object is currently selected) or dynamic (showing a dashboard that is dependent on which object is currently selected). A static URL contains no mapping to STEP attributes. A dynamic URL does.

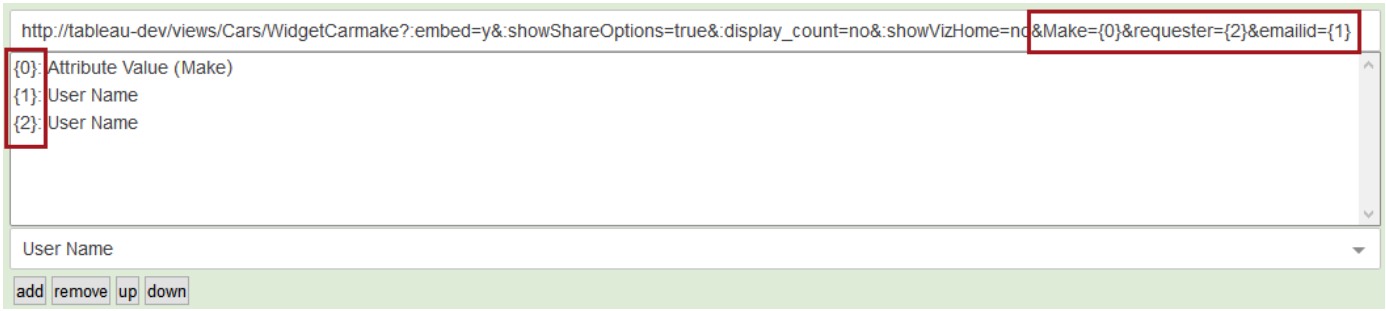
4. The fourth field displays the attributes selected in fields five and six with their corresponding placeholder numbers (in braces).
5. The fifth field is a dropdown menu from which users can select one of eight attribute types to create a dynamic dashboard in the analytics screen. The attributes selected, if matched precisely in the analytics tool, can give users a filtered view of a dashboard based on which object is selected. For instance, if a dashboard has been configured to display a pie chart representing data from ten different car manufacturers, but the user wishes only to see data for one of those manufacturers, keying on the attribute value 'manufacturer' (which must be present in both the dashboard and the Web UI analytics screen), the Web UI screen can show the same pie chart with only the data for that one manufacturer displaying. The available attribute types are as follows:
    - **Attributevalue** returns, or filters the dashboard view for, a STEP attribute value
    - **NodeID** returns the STEP ID of the current object
    - **ContextID** returns the current context ID
    - **UserID** returns the user ID of the logged-in user
    - **UserName** returns the name of the logged-in user
    - **UserEmail** returns the email address of the logged-in user (if specified)
    - **Locale** returns the selected locale, which is used for the Web UI session
    - **Today** returns the current date
        - For other date formats, this functionality uses the rules for SimpleDateFormatter in Java
6. The sixth field will display or not display dependent on which attribute is selected in the fifth field. For instance, if the user selects 'Attribute Value,' the sixth field displays with a node picker button (...) beside it. Once clicked the user may then select the appropriate attribute value in the node picker window. If a user selects 'Today', then the sixth field will display allowing users to add the date in the proper format.

After the attributes needed to implement a dynamic dashboard view have been added, but before the URL has been manually edited to include the placeholders, the URL might look something like this:

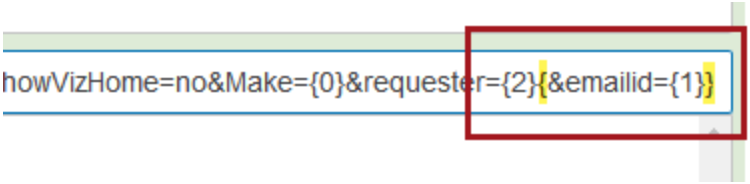


As shown in the screenshot above, the selected attributes are listed along with a braced number (ex. '{0}'). These braced numbers act as placeholders that can be manually added into the URL. Adding these braced numbers into the URL actuates a dynamic view of the dashboard.

In the example below, the Tableau field 'Make' is mapped to placeholder {0}, Tableau field 'requester' is mapped to placeholder {2}, and Tableau field 'emailed' is mapped to placeholder {1}.



Braces can be encapsulated within braces to ensure that a URL is always valid (e.g. to avoid 404 errors), especially if one of the placeholders does not return any content. If such a placeholder within the encapsulated section does not return content, the entire section within braces will be removed from the URL parameter. An example of this is shown in the screenshot below.



For more information on how to structure the URL, users should reference the 'Using Field and Filter Values in URLs' topic in the documentation available for the relevant analytics tool.

Configuring the Analytics Homepage Widget

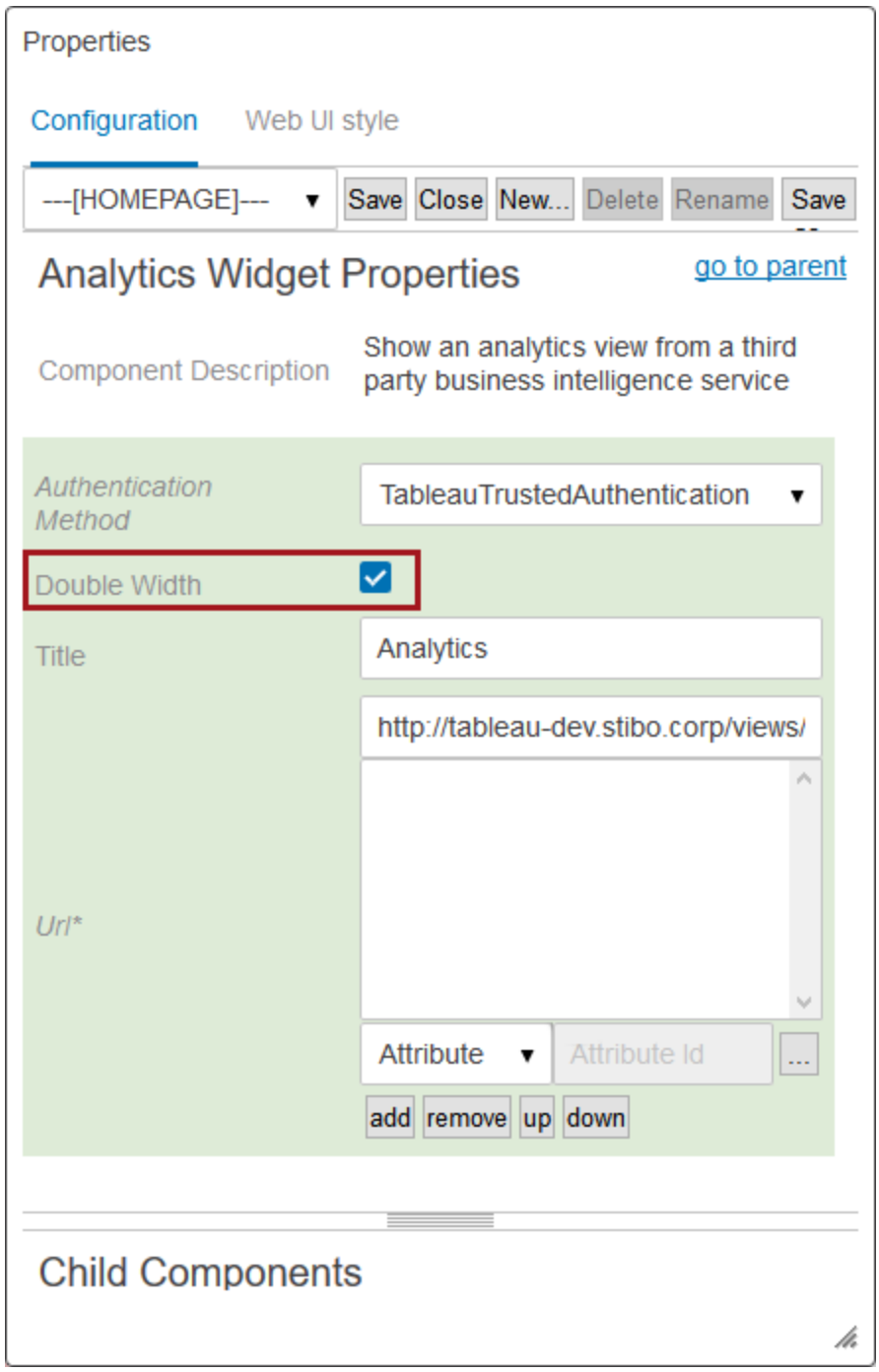
The **Analytics Homepage Widget** provides users with a quick and simple view of an analytics dashboard on the Web UI's homepage. The appearance and behavior of the analytics widget is, in large part, determined by how the dashboard is configured in the analytics tool itself. These dashboards can vary greatly based on the specific business need. Analytics homepage widgets can be single- or double-width, and multiple homepage widgets can be configured to display multiple views of analytics dashboards.

Adding the Analytics Homepage Widget

The Analytics Homepage Widget must be added to the homepage prior to configuration. Details on how to do this can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

Setting up the Analytics Homepage Widget

The Analytics Homepage Widget Properties window in which users configure the widget is shown below. The only parameter for the homepage widget that is different from those used to configure the analytics screen is the 'Double Width' parameter (indicated by a red box in the screenshot below). This parameter determines the width of the homepage widget. The size of the dashboard display is configured in Tableau, but it is recommended that this box is checked to create a homepage widget in the Web UI that is double-width. This allows the most information to be displayed.



Additionally, using the filtering functionality for a homepage widget would not conform to the recommended practices for this Web UI component. Optimally, the homepage widget should be neutral with respect to which objects are selected in the hierarchy.

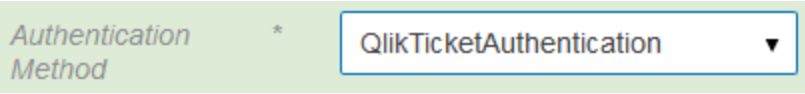
For information on the purpose of the other parameters, see the description in the Configuring the Analytics Screen section of this topic.

Configuring Authentication

Automatic authentication refers to the capability of enabling seamless access to the data analytics tool upon logging in to the Web UI. The analytics functionality available in STEP is built to accommodate many analytics tools, but with respect to automatic authentication of users, STEP supports Tableau and Qlik. Once authentication is configured correctly, the user will be granted access to the analytics server restricted by the licensing and user privileges set on the analytics environment. A suitably privileged user will have a seamless display of a Tableau or Qlik dashboard in their Web UI.

- To enable automatic sign-on for access to Tableau dashboards, users must select the 'TableauTrustedAuthentication' option from the dropdown.

- To enable automatic sign-on for access to Qlik dashboards, users must select the 'QlikTicketAuthentication' option.



Tableau

To enable automated Tableau authentication, admin users must configure Tableau to add the relevant STEP application server as a trusted host. Further, the username used in Tableau must match the username used in the Web UI to enable the authentication (the passwords, however, can be different). See the 'Trusted Authentication' documentation on the official Tableau website for details on this functionality.

Qlik

Successful configuration of automatic authentication for Qlik in the Web UI requires that a number of conditions be met:

- Access must be established to the REST API on port 4243
- a certificate, created and configured on the Qlik server, must be placed on the user's app server
- the Web UI user name and the user name used to access Qlik must be the same (the passwords can be different)
- three new properties must be added to the sharedconfig.properties file

Adding the certificate to the app server

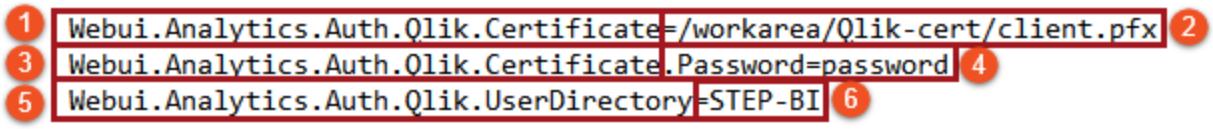
For information on how to add the certificate to the app server, see the 'Certificate Trust' section of the 'Security Overview' documentation on Qlik's official website.

Adding the properties to the configuration file

Below is an example of how the analytics properties should be written:

```
Webui.Analytics.Auth.Qlik.Certificate=/workarea/Qlik-cert/client.pfx
Webui.Analytics.Auth.Qlik.Certificate.Password=password
Webui.Analytics.Auth.Qlik.UserDirectory=STEP-BI
```

Below are the three sample properties divided into the components required to enable placement of the certificate.



1. Required text to enable the certificate location property
2. The application server path to where the certificate is posted ('/workarea/Qlik-cert/'), followed by the file name of the certificate ('client.pfx')
3. Required text to enable the certificate password property
4. The password assigned to the certificate when it was created in Qlik
5. Required text to enable the user directory property
6. The name of the user directory in Qlik in which the allowable user names are contained

Once the properties are properly added to the sharedconfig.properties file, the user should save the file and then execute a stop / start of the relevant STEP system. Following this (allow for a few minutes) the user with a Qlik analytics homepage widget or screen will have automated sign-in enabled, which means that access to the Qlik server will automatically occur immediately following a successful sign-in to the Web UI.

Useful Hints Regarding Configuration of Tableau

Listed below are some helpful steps users may take to facilitate proper configuration of a Web UI integration with Tableau:

- Enable navigation from embedded Tableau Web UI dashboards to other standard Web UI screens using Tableau 'Actions'. To do this, users must create calculated Tableau fields to generate STEP Web UI URLs using STEP IDs and screen IDs. Be sure to have STEP IDs in your underlying Tableau data to identify the target object in the generated URL. This method can be extended to access any STEP REST API functionality. For example, it is possible to initiate a workflow from within an embedded Web UI Tableau screen.
- To inform users when the dashboard was last updated, users can configure Tableau to display a timestamp. This can be done by adding the tag “Data Update Time” in the dashboard title. This is particularly useful when you have automated update processes.
- To transform STEP multi-value attributes into a Tableau list of values, use parameters and calculated fields. Users must define a Tableau parameter with the list of user-selectable values. Then, a Tableau calculated field with a Boolean condition (e.g. Tableau’s ‘CONTAINS’ function) must be defined that compares the multi-value

attribute in the dashboard source data with the parameter list of values. Finally, users must add the calculated field as a filter with the option 'True' selected.

- Consider using data source filters to optimize the performance of Tableau. Data source filters exclude unnecessary data from your dashboard, which has the effect of improving dashboard performance. Standard filters only hide unnecessary data, which means the data is still processed, leading to potentially diminished dashboard performance.
- Prevent the embedded Web UI Tableau dashboard from creating new windows or tabs when following links to other screens in the Web UI by including the tag ":linktarget=_self" in the Tableau URL that is added into the STEP Web UI designer.
- To configure a Tableau dashboard to fit into a double-size homepage widget, the screen should be set to 485px wide by 260px high.

Asset Handling in Web UI

In Web UI, assets can be created and maintained in a variety of ways, including via components configured on a product or asset node, or through the Asset Importer widget.

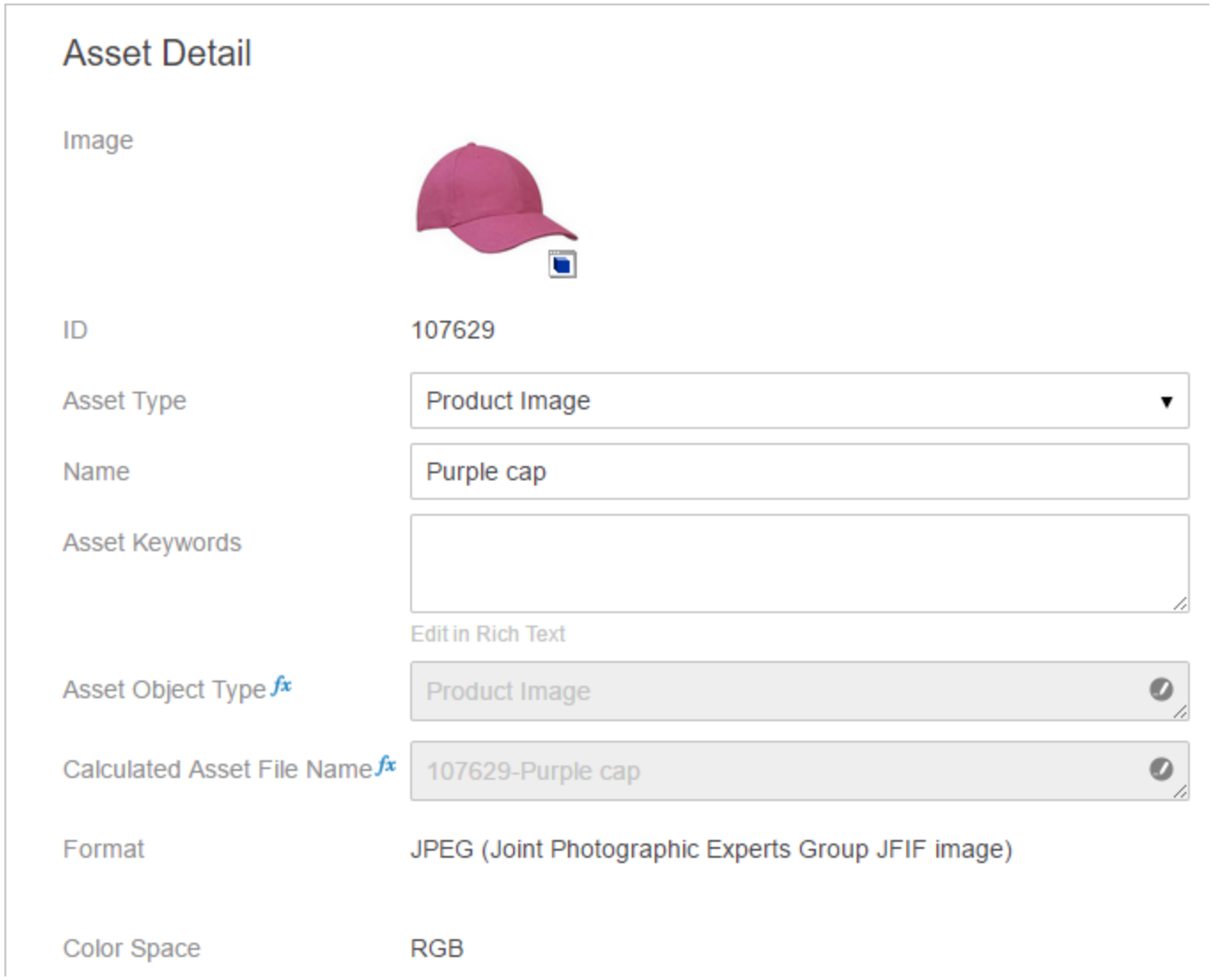
Assets can be handled via the following components / functionality:

- Asset Representation
- Asset Mid Sized
- Referenced Asset Representation
- Asset Thumbnail Component
- Asset Importer Widget
- Asset Previews in Web UI

This documentation assumes that the user is familiar with Asset Pushes. For more information, see the **Asset Push** topic in the **Digital Assets** documentation.

Asset Representation

The Asset Representation component displays a visual depiction of the asset, ranging from a thumbnail to a full-size image, that represents the currently selected asset. With this component, users can easily replace or delete asset content.



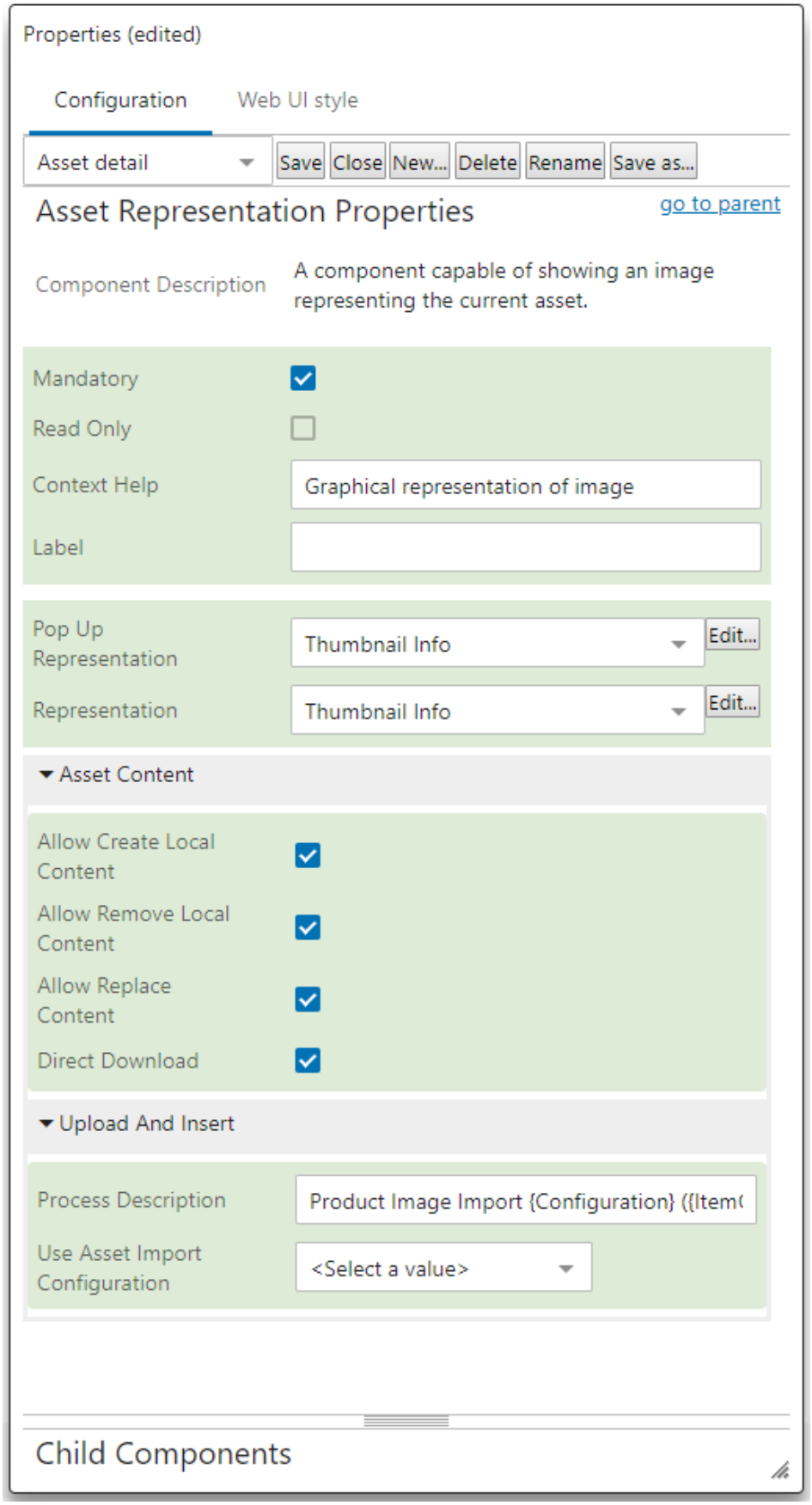
Note: Prior to the 9.0 release, this component was called the 'Asset Image Value' component. Users who have the 'Asset Image Value' component configured when upgrading to 9.0 will need to revisit the configuration to enable the 'Download' button on the asset. Where this button displayed by default in pre-9.0 versions, 'Direct Download' is a configurable setting for this component as of 9.0.

Prerequisites

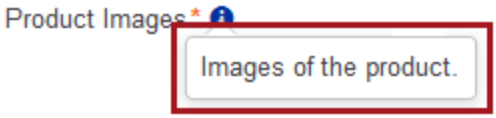
It is expected that anyone configuring the Asset Representation component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring Asset Representation

A number of configuration options are available for this component, including options to delete and replace asset content, directly download the asset, apply an asset import configuration, and more.


Properties (edited)
Configuration
Web UI style
Asset detail
Save
Close
New...
Delete
Rename
Save as...
Asset Representation Properties
go to parent
Component Description
A component capable of showing an image representing the current asset.
Mandatory
Read Only
Context Help
Graphical representation of image
Label
Pop Up Representation
Thumbnail Info
Edit...
Representation
Thumbnail Info
Edit...
Asset Content
Allow Create Local Content
Allow Remove Local Content
Allow Replace Content
Direct Download
Upload And Insert
Process Description
Product Image Import {Configuration} ({Item(
Use Asset Import Configuration
<Select a value>
Child Components

1. **Mandatory:** Checking the box for this parameter indicates that content must be added to the asset.
2. **Read Only:** Check the box for this parameter to make the component read only. In this state, the component cannot be used to replace or remove asset content.
3. **Context Help**: In this parameter, enter the help text that will display when the user clicks the help icon to the right of the field label.



4. **Label**: In this parameter, enter a label for this field. The label appears before the asset thumbnail of the node details screen. In the example image below, the label was configured in design mode to display 'Product Images.'

5. **Pop Up Representation**: In this parameter, specify how to present the image representing the current asset by selecting a sub-component from the dropdown. This sub-component displays in a pop-up window when the asset thumbnail is clicked.

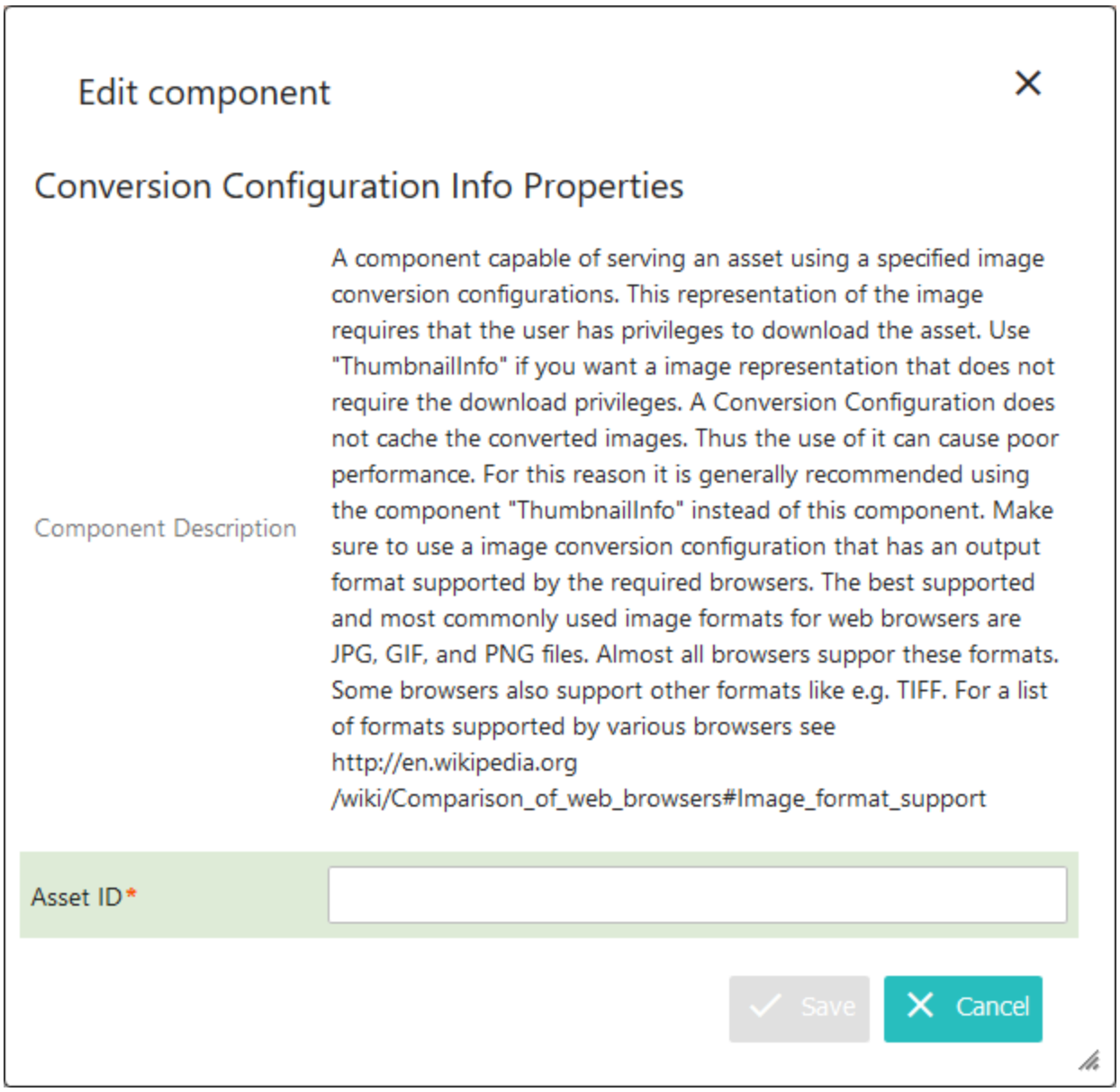
   Valid sub-components include: 'ConversionConfigurationInfo,' 'ConversionScriptInfo,' 'NoConversionInfo,' 'PipelineInfo,' and 'ThumbnailInfo' which are all described below in further detail.

   - **Conversion Configuration Info**: Selecting this component shows the image with the predefined conversion configurations in a pop up window. For example, if there is a need to view the selected asset in grayscale view / less resolution view / in any converted format, this pop up representation can be used.

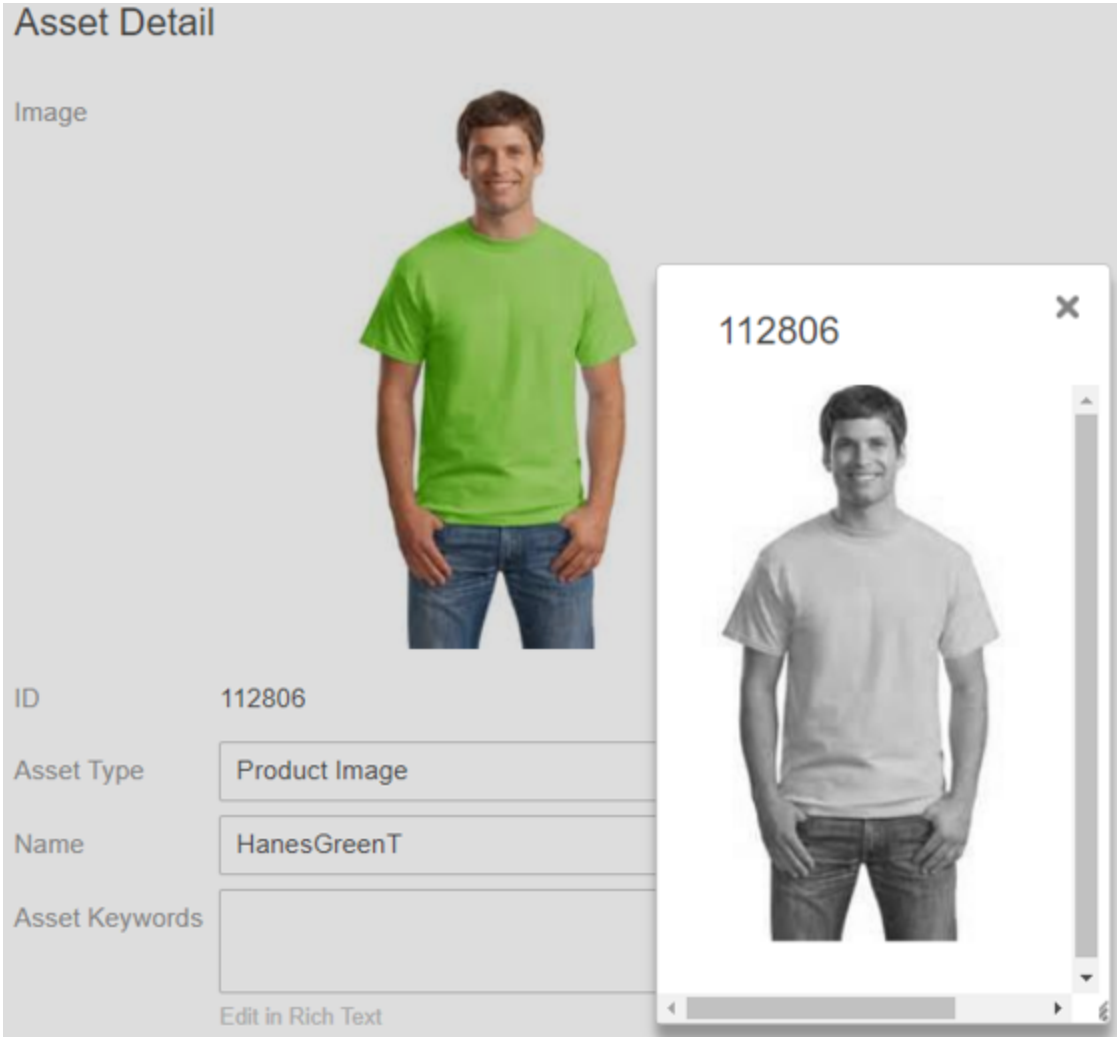
     To enable this, the user should have created an image conversion configuration, and the ID of the image conversion configuration should be known. For more information, see the **Image Conversion Configuration** topic in the **Digital Assets** documentation.

     This representation of the image also requires that the user has privileges to download the asset. A Conversion Configuration does not cache the converted images. Thus the use of it can cause poor performance. For this reason it is generally recommended using the component 'Thumbnail Info' instead of this component.

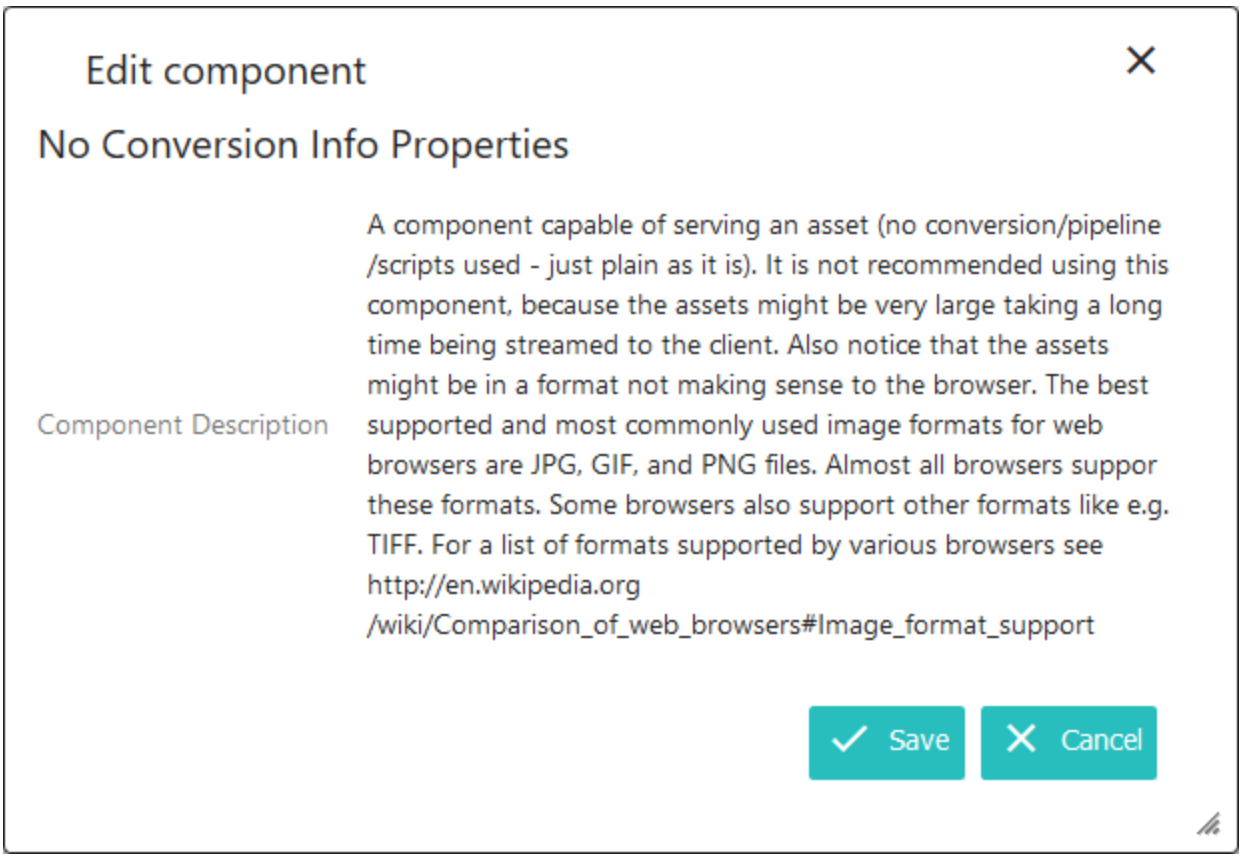
     - **Asset ID**: (Mandatory) ID of the required Image conversion configuration.



Below is an example of the asset image with the pop up view converted into grayscale.



- **No Conversion Info Properties**: Selecting this component will let the user view the image in a pop up window, same as the original image is, without any conversions / change in asset (no conversion / pipeline / scripts used). No configuration is necessary.

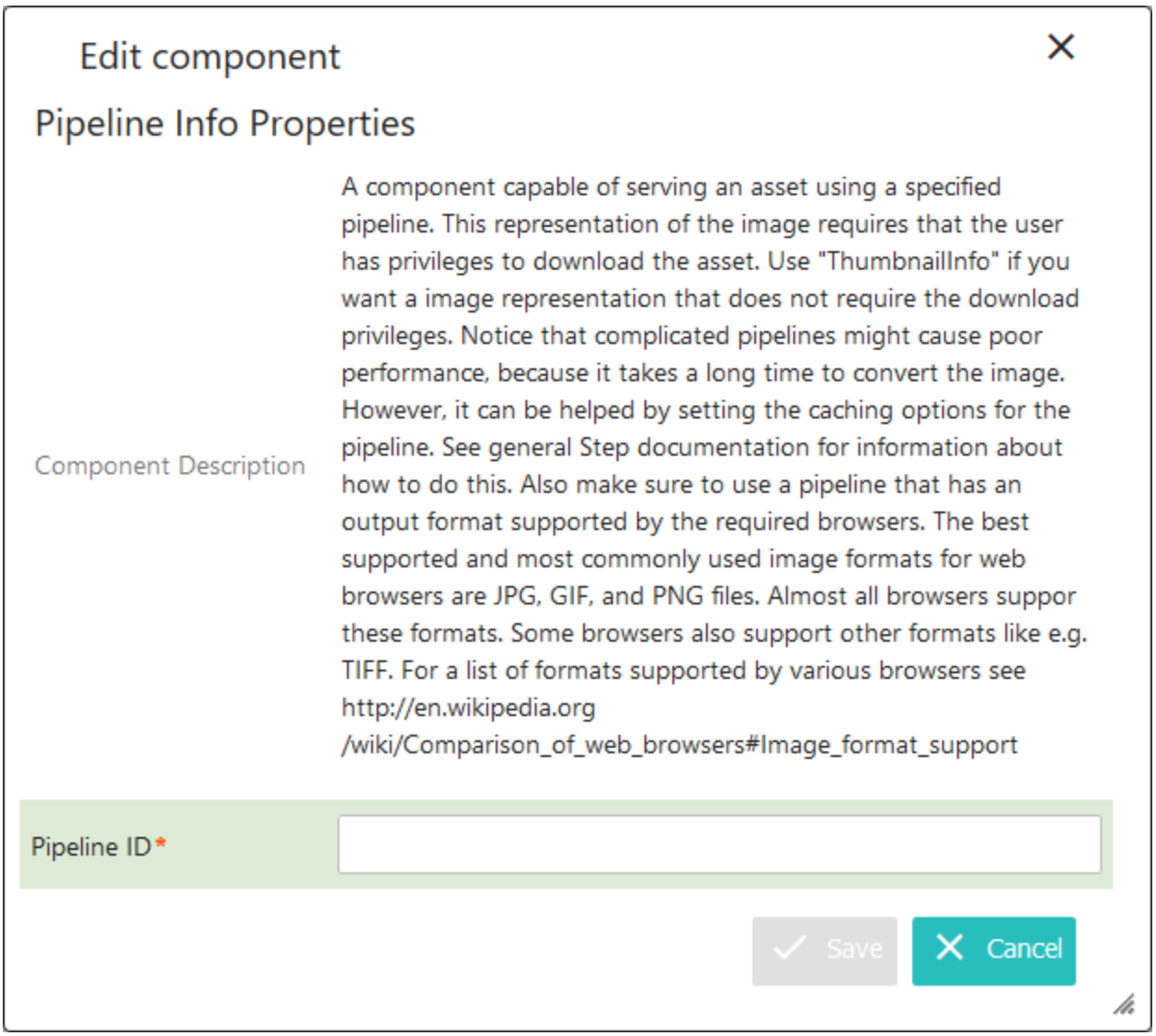


It is not recommended to use this component, because if the asset is very large it can take a long time to render. Further, the assets might be in a format incompatible with the browser being used.

- **Pipeline Info**: A component capable of serving an asset using a specified pipeline. This representation of the image requires that the user has privileges to download the asset. Use 'ThumbnailInfo' if you want a image representation that does not require the download privileges.

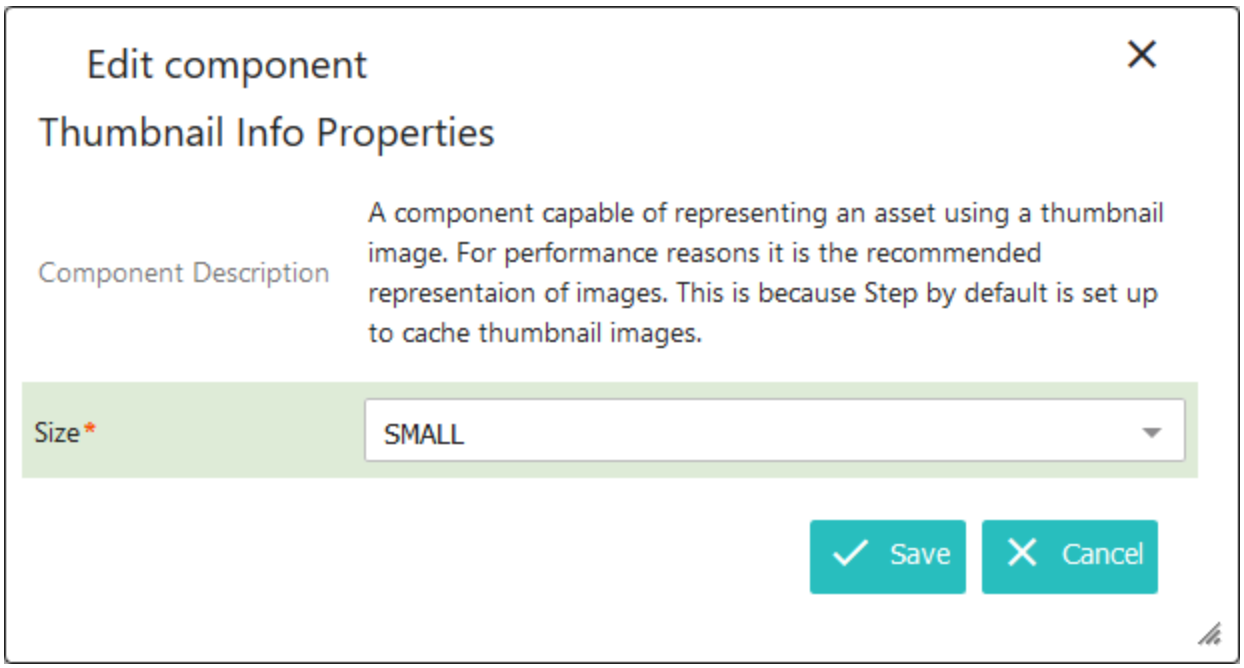
  Notice that complicated pipelines might cause poor performance, because it takes a long time to convert the image. However, this delay can be shortened by setting the caching options for the pipeline. See general STEP documentation for information about how to do this. Also make sure to use a pipeline that has an output format supported by the required browsers.

  In the designer, 'Pipeline ID' is the only field that needs to be set.



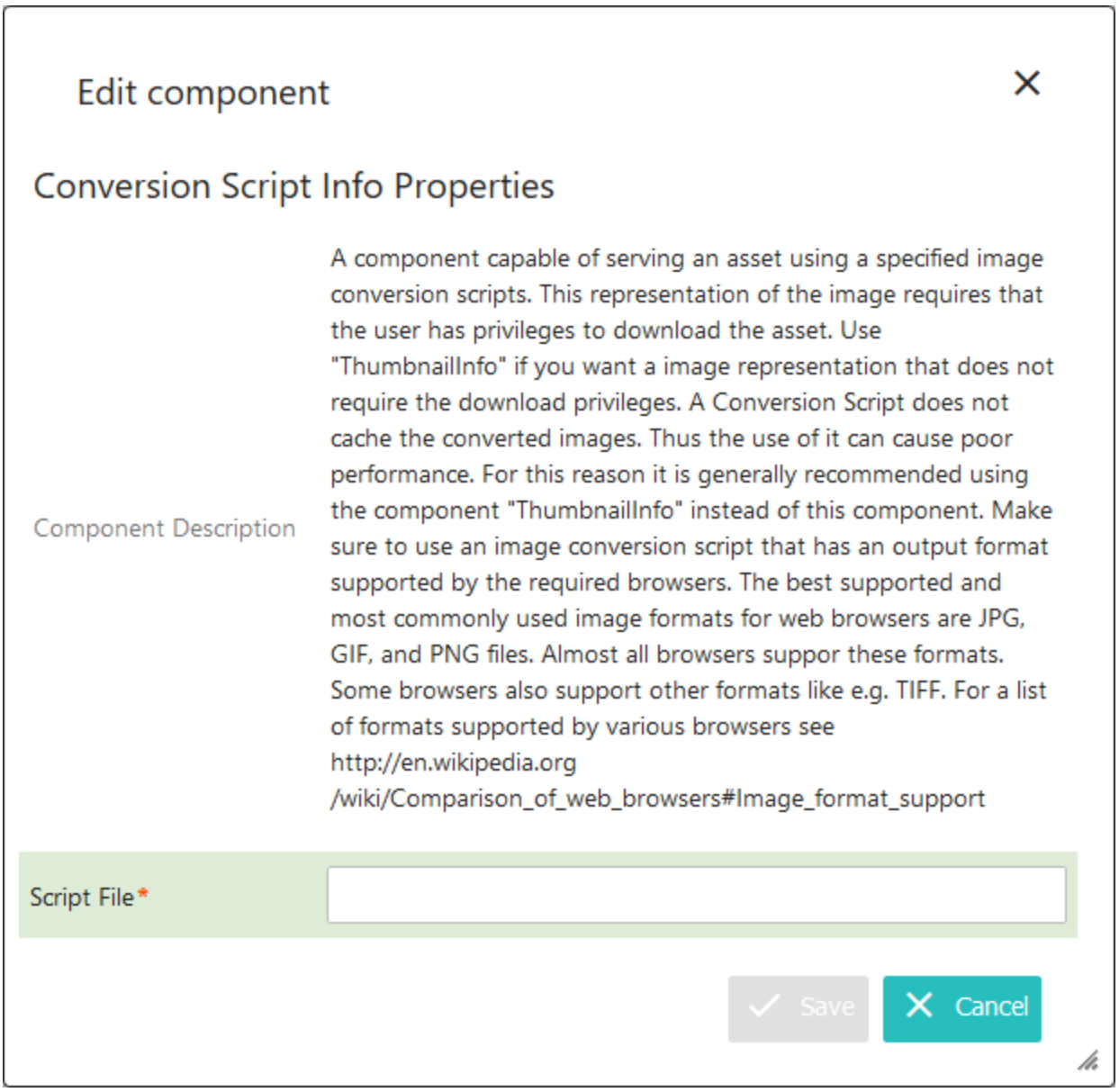
- **Thumbnail Info**: Selecting this component will let the user view the image in a pop up window using a thumbnail image. For performance reasons, this is the recommended representation of images. This is because the default is set up to cache thumbnail images.

  The 'Size' field is the only mandatory field for configuration. The user can choose the size of the thumbnail, as either SMALL, MEDIUM, or FULL. Note that while using the FULL option, the images are not cached in this version, and this require users to have download privileges.



- **Conversion Script Info**: A component capable of serving an asset using a specified image conversion scripts. This representation of the image requires that the user has privileges to download the asset. Use 'ThumbnailInfo' if you want an image representation that does not require the download privileges. A Conversion Script does not cache the converted images, thus the use of it can cause poor performance. For this reason it is generally recommended using the component 'ThumbnailInfo' instead of this component. Make sure to use an image conversion script that has an output format supported by the required browsers.

  The only mandatory field for configuration is the 'Script file.'



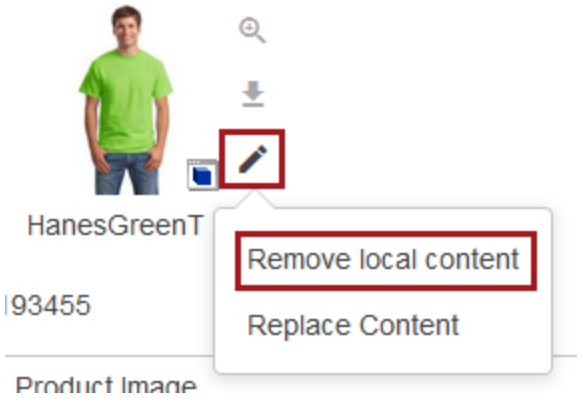
6. **Representation**: In this parameter, specify how to present the image representing the current asset by selecting a sub-component from the dropdown.

   Valid sub-components include: 'ConversionConfigurationInfo', 'ConversionScriptInfo', 'NoConversionInfo', 'PipelineInfo', and 'ThumbnailInfo'. The sub components work the same way as explained in the above component Pop Up Representation.

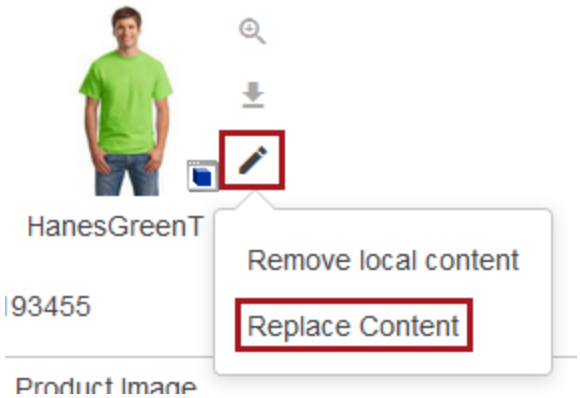
The following parameters display in the 'Asset Content' section of the Asset Representation properties screen in the designer. These parameters determine which icons display to the right of the thumbnail, and which options are available when those icons are clicked:

7. **Allow Create Local Content**: For this parameter, check the box to enable users to copy the asset from the global context to the local context.

8. **Allow Remove Local Content** : For this parameter, check the box to add a 'Remove local content' option to the 'Edit asset' button ( ) dropdown. This button allows users to delete local asset content for a specific context. Note that this option is only available if assets are set as dimensionally dependent.



9. **Allow Replace Content:** For this parameter, check the box to add a 'Replace Content' option to the 'Edit asset' button ( ) dropdown. This button allows users to replace asset content. If assets are set as dimensionally dependent, and 'Create Local Content' has been enabled, and the asset has been made local, replacing the content will only change the content for the asset in the currently selected context. Otherwise replacing the asset changes the content in all contexts.



10. **Direct Download**: For this parameter, check the box to add both a 'Download' button ( ) and a magnifying glass icon ( ) to the right side of the asset thumbnail display. When this is enabled, assets can be downloaded by clicking the 'Download' button, or viewed in a new browser tab by clicking the magnifying glass icon.

The following parameters display in the 'Upload and Insert' section of the Asset Representation properties screen in the designer. These parameters control how assets can be added using this component:

11. **Process Description**: In this parameter, create a template for the background process description. The template contains placeholders that are populated when the background process is started. The available placeholders include:

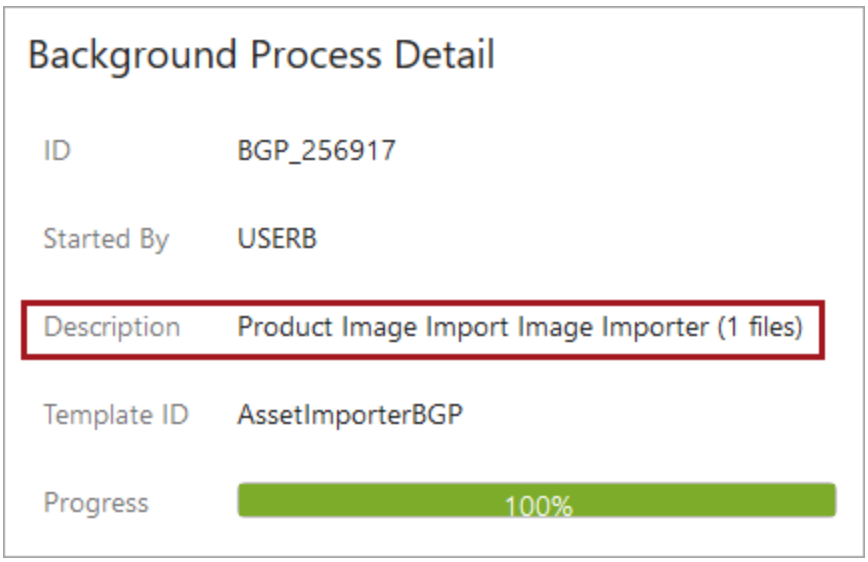
    - **[Configuration]**: The asset importer configuration.
    - **[ItemCount]**: The number of files to import.

    The default template is: **{Configuration} ({ItemCount} files)**. This template displays in this field automatically.

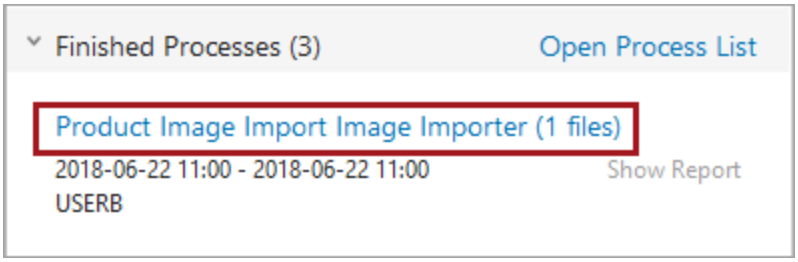
    Below is a sample template as it might appear in the designer. The elements that make up the template are divided and numbered. The description of each element is listed below the screenshot.

    1. Additional text added by an admin user to further define the background process for the end user. Any text may be added.
    2. This placeholder will cause the name of the asset import configuration selected in the 'Use Asset Import Configuration' parameter to display in the background process description. In this example, the name of the asset import configuration is 'Image Importer.'
    3. This placeholder will cause the number of imported files to display in the background process description. In this example, one file is being imported.

    Using this example template, the background process description will display like this in the background process screen:



And like this in the Background Process Notification panel:



Any values added to the Process Description field will only be applied to a background process if the 'Asset Import Compatability Mode' setting on **Users & Groups** is set to 'Advanced,' and an import configuration has been selected for the 'Use Asset Import Configuration' parameter (described below).

12. **Use Asset Import Configuration**: In this parameter, select an asset importer configuration to use from the dropdown. This configuration will be applied when any asset content is imported via this component.

    Any asset import configuration selected for this parameter will be applied to imported assets provided the 'Asset Import Compatability Mode' setting on **Users & Groups** is set to 'Advanced.'

    For more information on using asset importer configurations with this component, see the **Asset Importer in Web UI** section of the **Asset Importer** documentation.

Asset Mid Sized

The Asset Mid Sized component displays a thumbnail that represents the asset linked to the currently selected product. With this component, users can easily create, delete, or replace the content of a referenced asset.

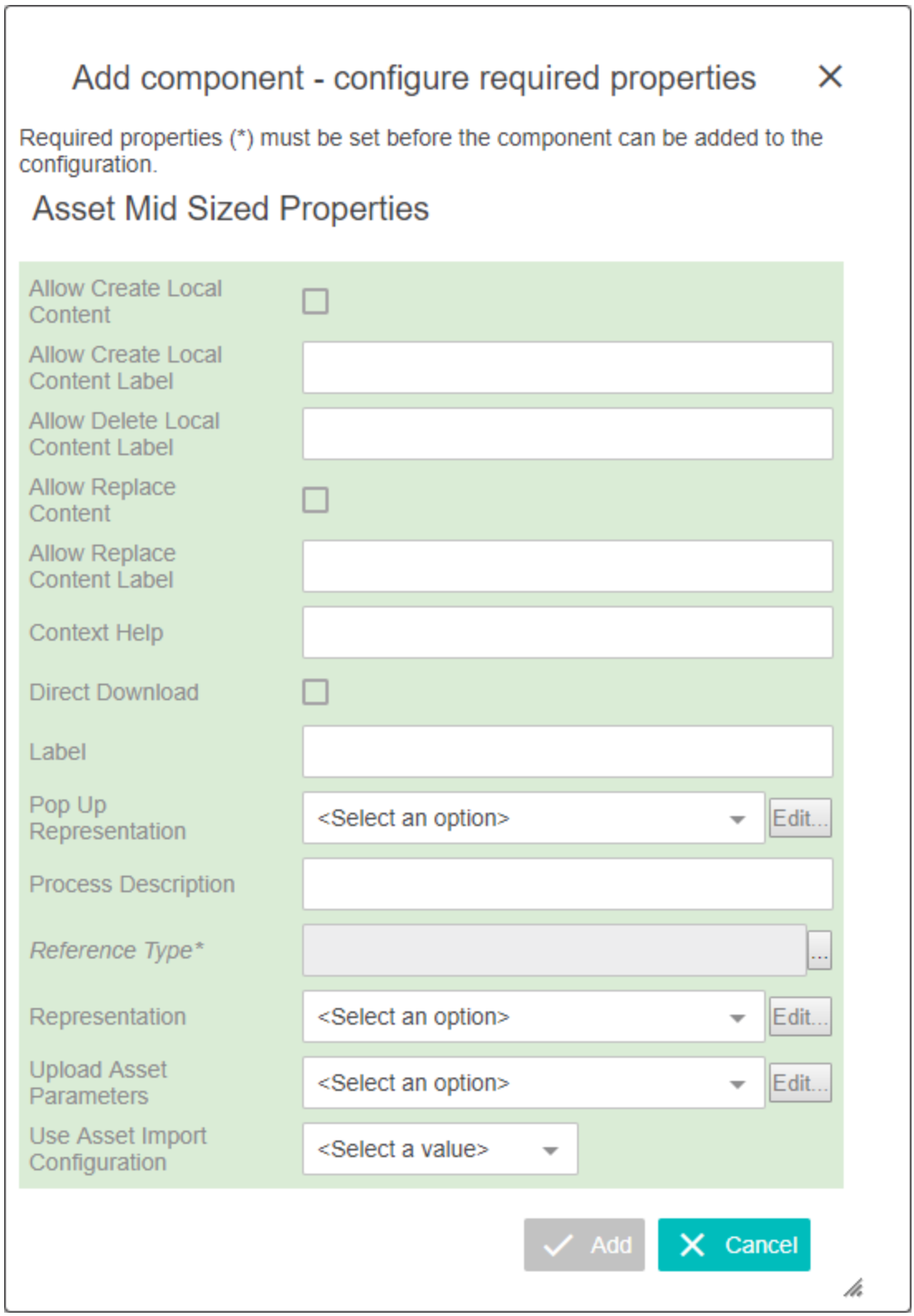
Important: This component is superseded and may be removed in a future release. The Referenced Asset Representation Component is the recommended component to use when configuring display of a referenced asset's thumbnail on a selected product. For more information on this component, see the **Referenced Asset Representation Component** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Prerequisites

It is expected that anyone configuring the Asset Mid Sized component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring Asset Mid Sized Component

A number of configuration options are available for this component, including options to create, delete, and replace asset content, directly download the referenced asset on mouse click, specify a reference type for the asset, represent the asset with a sub-component, specify an asset import configuration when uploading asset content, and more.

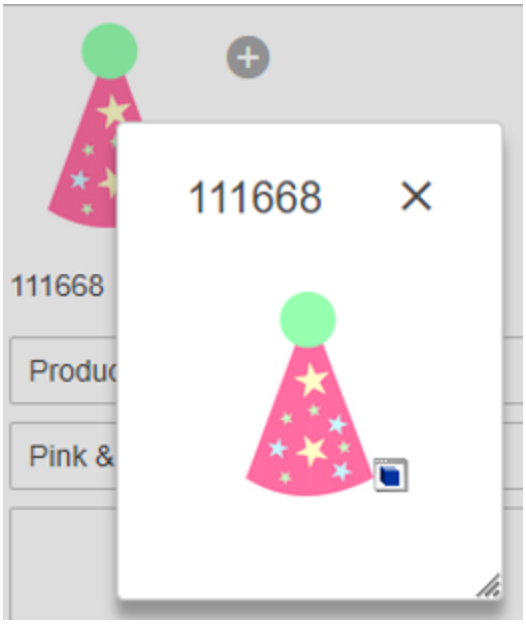


1. **Allow Create Local Content**: For this parameter, check the box to add a 'Create Local Content' button to the component. This button allows users to import local asset content for a specific context. Note that this option is

only available if assets are set as dimensionally dependent.

2. **Allow Create Local Content Label**: In this parameter, enter a label for the button configured in the above step.
3. **Allow Delete Local Content Label**: In this parameter, enter a label for the 'Delete Local Content' button
4. **Allow Replace Content:** For this parameter, check the box to add a 'Replace content' button ( ) to the component. This button allows users to replace asset content with newly imported content. If assets are set as dimensionally dependent this will only change the content for the currently selected context, and only after 'Create Local Content' has been enabled via the associated button ( ), otherwise it changes the content in all contexts.

5. **Allow Replace Content Label**: In this parameter, enter a label for the button configured in the above step.
6. **Context Help**: In this parameter, enter the context help displayed for the field.
7. **Direct Download**: For this parameter, check the box to allow assets to be downloaded by clicking the asset thumbnail. If the checkbox is unchecked, clicking the asset thumbnail will result in image preview pop up with a Cancel icon of the asset selected.



8. **Label**: In this parameter, enter a label for this field. The label appears before the asset thumbnail.
9. **Pop Up Representation**: In this parameter, specify how to present the image representing the current asset by selecting a sub-component from the dropdown. This sub-component displays in a pop-up window when the asset thumbnail is clicked.

   Note: To Display the Pop-up window, the component Direct Download check box should be unchecked

   Valid sub-components include: 'ConversionConfigurationInfo', 'ConversionScriptInfo', 'NoConversionInfo', 'PipelineInfo', and 'ThumbnailInfo.'

   Note: For more details about these (Conversion Configuration Info, Conversion Script Info, No Conversion Info, Pipeline Info and Thumbnail Info.) functionalities, see the **Asset Representation** topic in the **Web User Interfaces** documentation.

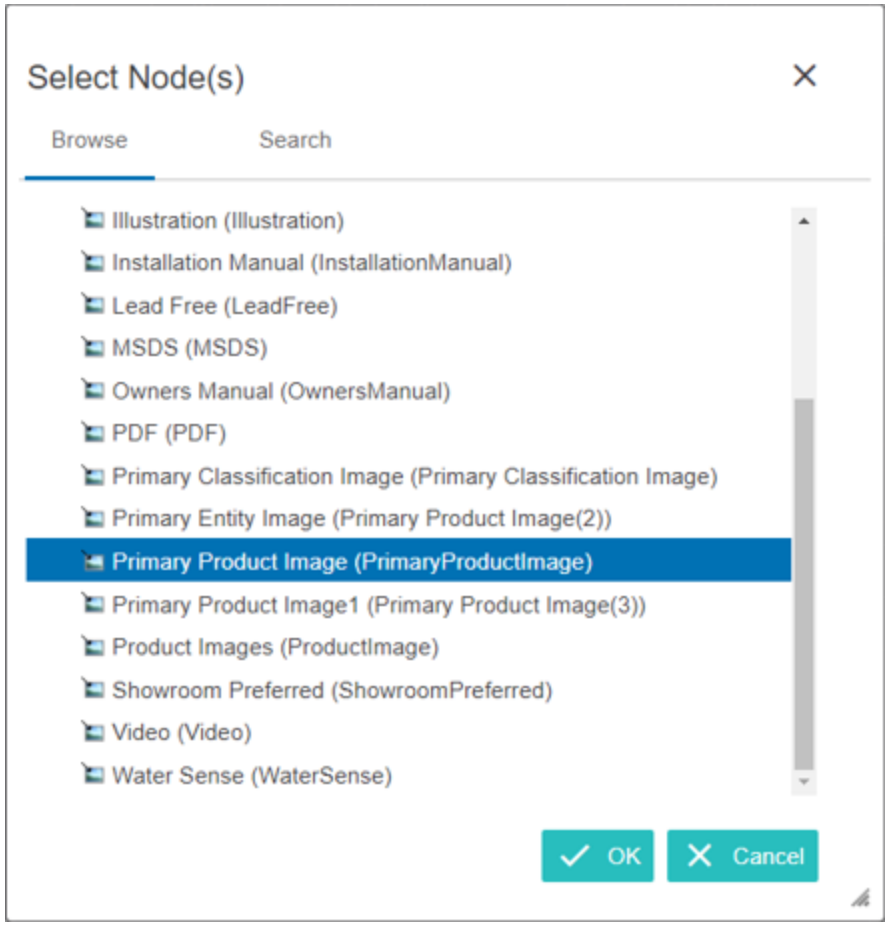
10. **Process Description**: In this parameter, create a template for the background process description. The template may contain a number of place holders that are expanded when the background process is started.

    Available placeholders include:

    - **[Action]**: The name of the action.
    - **[Configuration]**: The asset importer configuration.
    - **[ItemCount]**: The number of files to import.
    - **[ImportFile]**: The name of the file(s) in a comma separated list.

Note: Only valid if the 'Asset Import Compatibility Mode' setting under **Users & Groups** is set to 'Advanced'.

11. **Reference Type**: In this parameter, Click the ellipsis button (...) and select the reference type to be used for displaying the asset on the component.



12. **Representation**: In this parameter, specify how to present the image representing the current asset by selecting a sub-component from the dropdown.

    Valid sub-components include: 'ConversionConfigurationInfo', 'ConversionScriptInfo', 'NoConversionInfo', 'PipelineInfo', and 'ThumbnailInfo'.

    Note: For more details about these (Conversion Configuration Info, Conversion Script Info, No Conversion Info, Pipeline Info and Thumbnail Info.) functionalities, see **Asset Representation** topic in the **Web User Interfaces** documentation.

13. **Upload Asset Parameters**: In this field, if import parameters are required, select 'Upload Asset Parameters' from the dropdown.

Note: Only valid if the 'Asset Import Compatibility Mode' setting under **Users & Groups** is set to 'Simple'.

For more information on configuring this parameter, see the 'Upload Asset Parameters Configuration' section later in this topic.

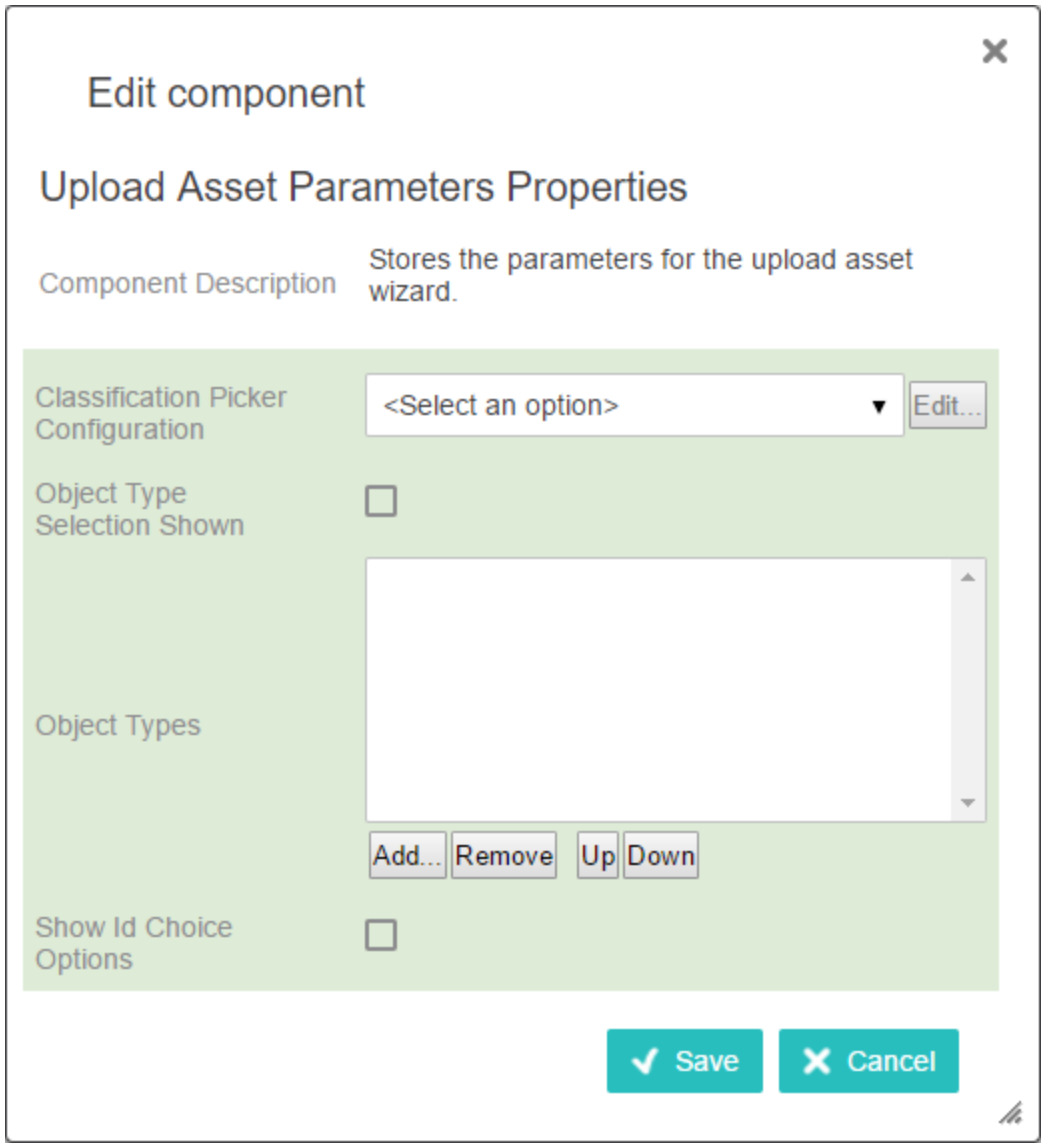
14. **Use Asset Import Configuration**: In this parameter, select an asset importer configuration to use from the dropdown. This configuration will be applied if any asset content is imported via this component.

Note: Only valid if the 'Asset Import Compatibility Mode' setting under **Users & Groups** is set to 'Advanced'.

For more information of using asset importer configurations with other components, see the **Asset Importer in Web UI** section of the **Asset Importer** documentation.

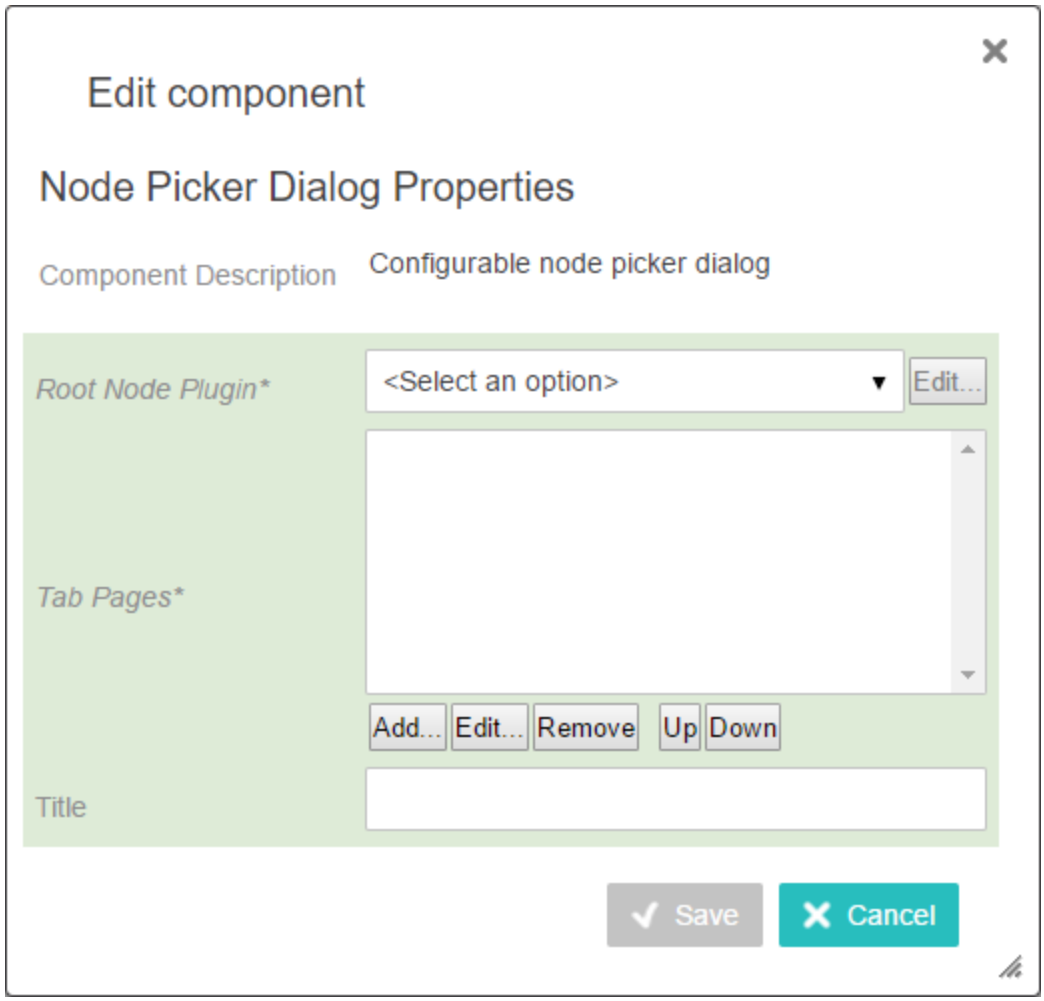
Upload Asset Parameters Configuration

1. To set upload parameters for the component, click the **Edit...** button next to the Upload Asset Parameters field.
2. The 'Upload Asset Parameter Properties' dialog appears.

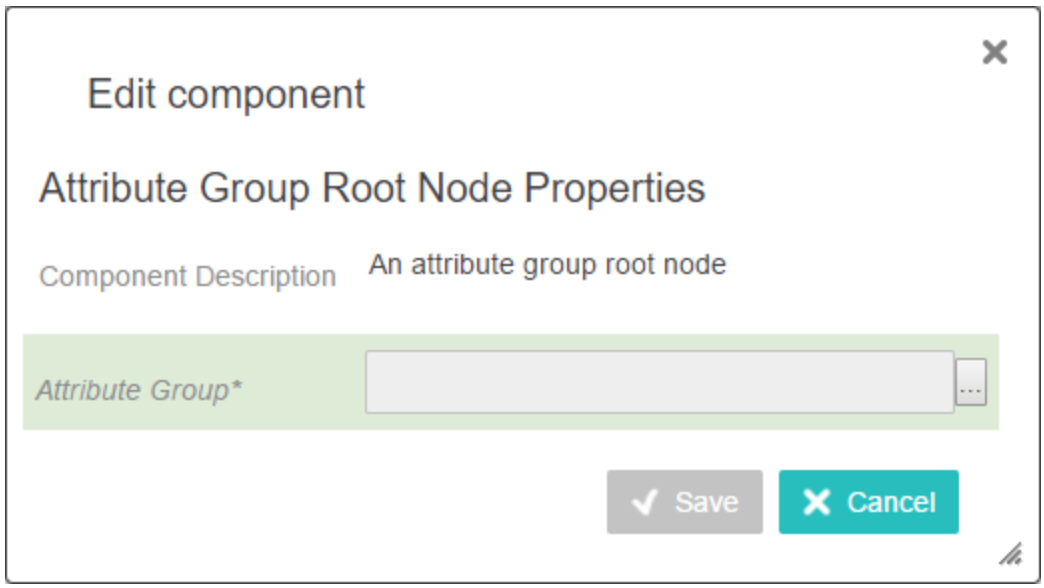


3. In the 'Classification Picker Configuration' parameter, select 'Node Picker Dialog' to enable a node picker that prompts the user to specify which classification folder to upload assets to. This is an optional parameter.

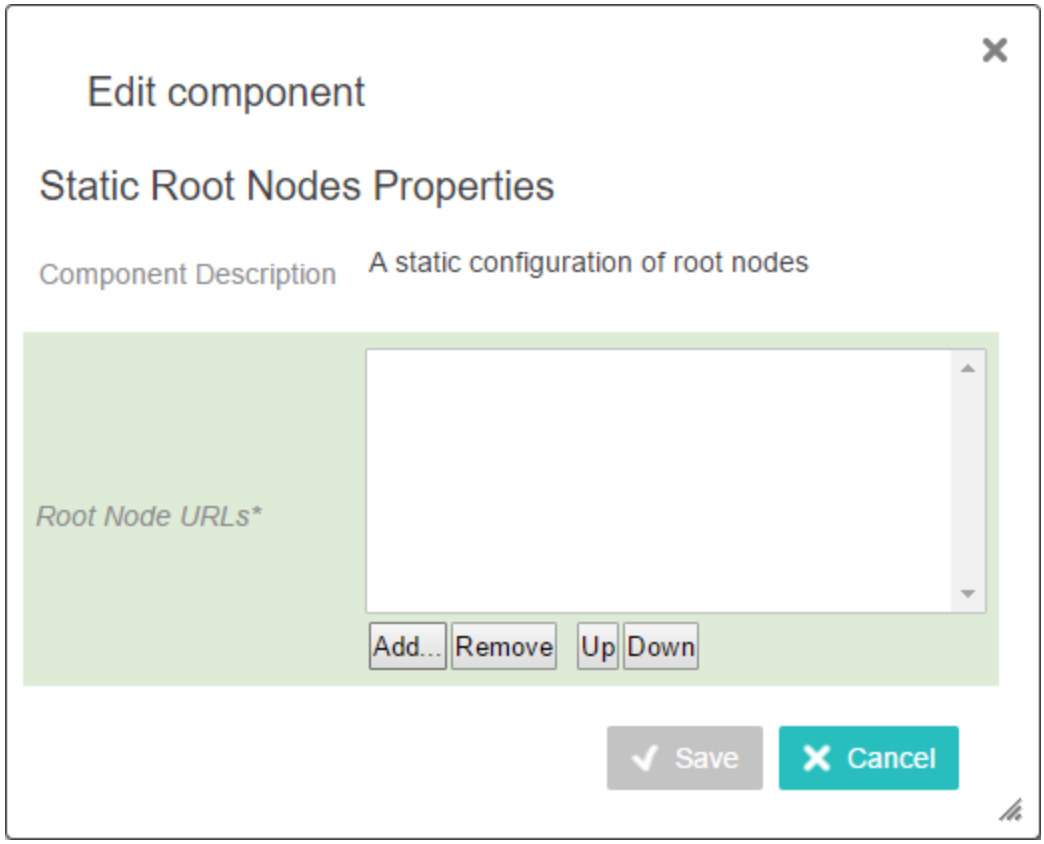
   When selected (or when you click the **Edit...** button) the Node Picker Dialog Properties window appears.



- **Root Node Plugin**: In this parameter, select the plugin that provides the relevant root nodes from the dropdown. The three options include 'Attribute Group Root Node', 'Supplier Asset Folders', and 'Static Root Nodes', and may require additional configurations of their own. This is a mandatory field.
- If **Attribute Group Root Node** is selected, specify an attribute group to act as top root node for the node picker dialog via the 'Attribute Group' parameter. Click **Save** when the selecting is made.



- If **Static Root Nodes** is selected, specify the root nodes the node picker will use via the 'Root Node URLs' parameter.



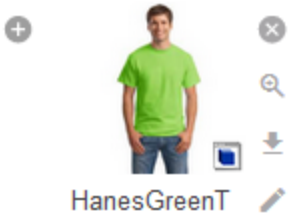
- **Tab Pages**: In this parameter, use the **Add...** (or **Edit...**) button to specify which tab pages should be available in the node picker dialog. This is a mandatory field.
- **Title**: In this parameter, enter a title for the dialog. This is an optional field.

4. **Object Type Selection Shown**: In this parameter, check the box to add two radio buttons to the dialog which allow users to choose whether to manually specify the object type of the asset, or have the system detect it automatically. This is an optional field.
5. **Object Types**: In this parameter, specify the valid object types for imported assets via the **Add...** button. Object types listed appear as options when manually specifying the object type of an asset. If no object types are specified, all asset object types will be listed. This is an optional field that requires 'Object Type Selection Shown' to be enabled.
6. **Show Id Choice Options**: In this parameter, check the box to add two radio buttons to the dialog which allow users to choose whether to use Filename as the ID, or Auto ID. This is an optional field.

Referenced Asset Representation

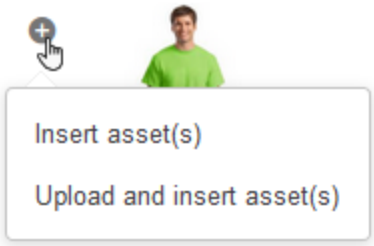
The Referenced Asset Representation component displays one or multiple thumbnails that represent the asset or assets linked to the currently selected product, and allows for the creation of additional asset references on the product.

Note: Prior to the 9.0 release, this component was called the 'Asset Value' component. The following configuration settings available on that component are no longer available following the 9.0 release: Message Insert Image, Message Insert Images, Message Replace Image, Message Upload Image, Message Upload Images, and Asset Classification. Any text applied to the listed label parameters prior to 9.0 will not be applied following an update to 9.0. Any settings applied to the Asset Classification parameter will be disregarded following an update to 9.0.

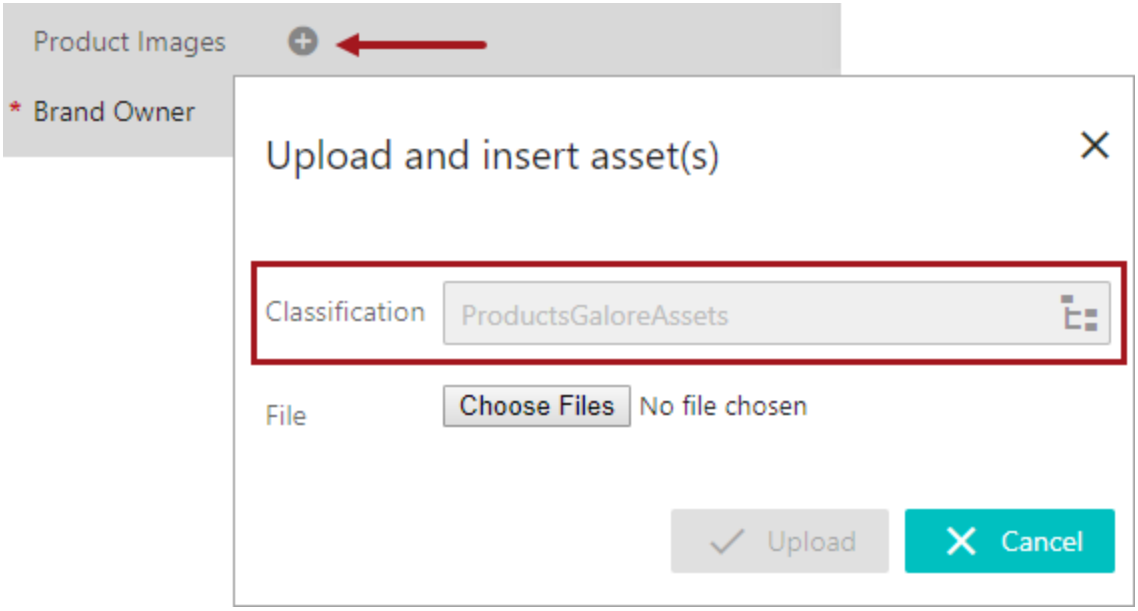


With the Referenced Asset Representation component, users can:

- Upload new assets or add existing assets to the product by clicking the 'plus' ( ) button. When clicked, two options are made available via the dropdown: 'Insert asset(s)' and 'Upload and insert asset(s)'. 'Insert asset (s)' allows users to add one or multiple existing assets to the product via a node selector. 'Upload and insert image(s)' allows users to import one or multiple assets via a file selector, and if necessary, specify an object type, and a classification folder where the assets will be saved.



- For multi-supplier / vendor users: If the component is not configured to use an Asset Import configuration, the 'Upload and insert asset(s)' dialog displays with the asset classification of the currently selected supplier group automatically pre-selected. The Supplier ID comes from the supplier selected within the Corner Bar Supplier Selector component. The user will still be able to choose a different classification folder, if needed. See the Corner Bar Supplier Selector Component topic for more information.



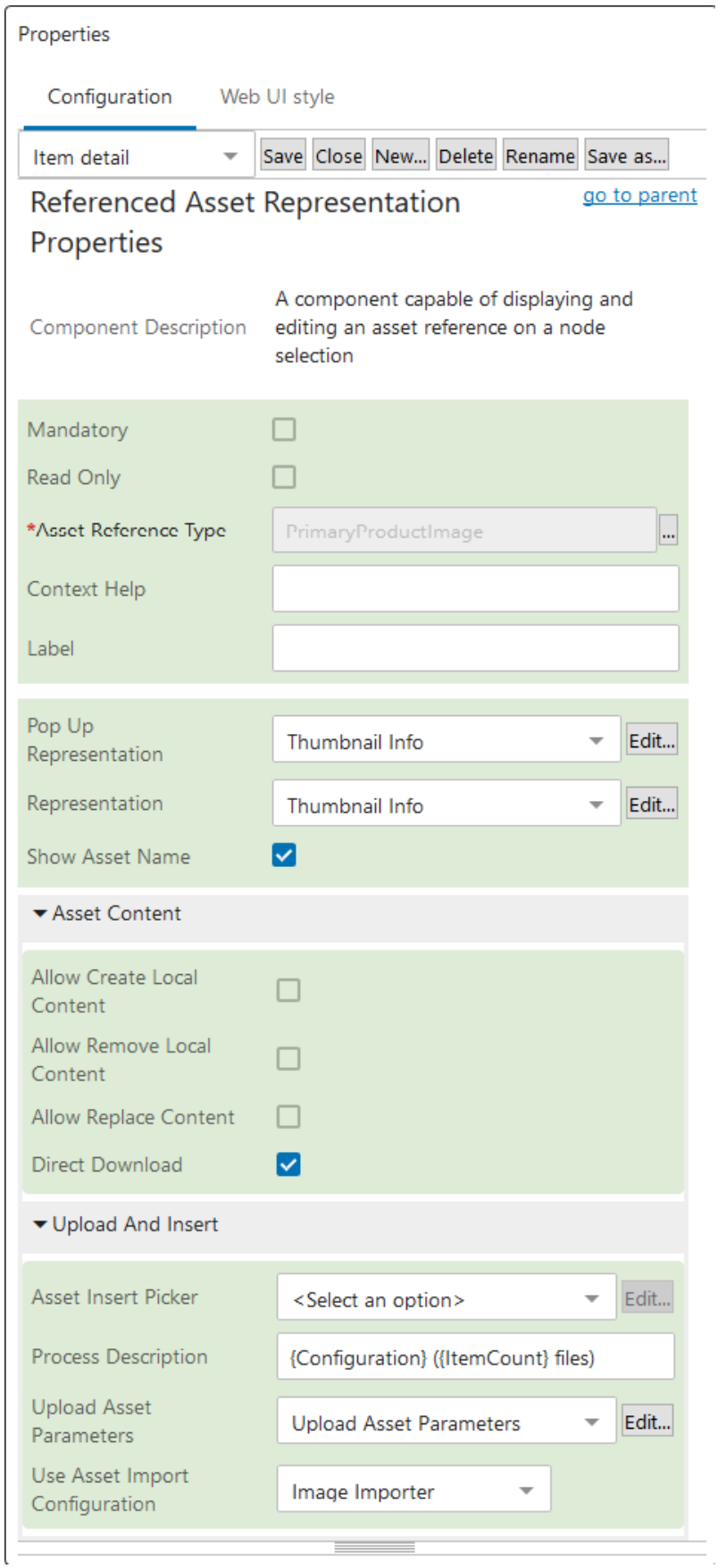
- Open the asset content in a new browser tab by clicking the magnifying glass ( ) button.

Prerequisites

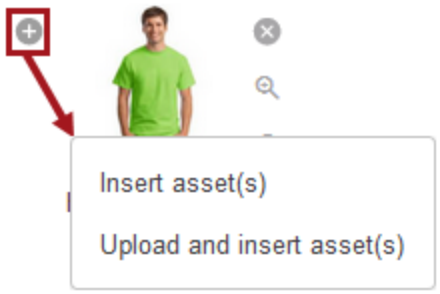
It is expected that anyone configuring the Referenced Asset Representation component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring Referenced Asset Representation component

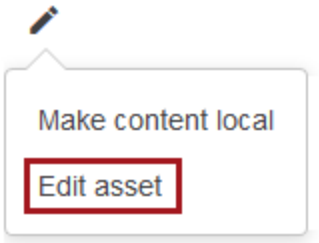
Included in the configuration settings for this component are options to predefine a classification folder into which assets can be imported, and to specify the reference type for those assets. What follows is a comprehensive list of all configuration options available for this component.


Properties
Configuration
Web UI style
Item detail
Save
Close
New...
Delete
Rename
Save as...
Referenced Asset Representation Properties
go to parent
Component Description
A component capable of displaying and editing an asset reference on a node selection
Mandatory
Read Only
*Asset Reference Type
PrimaryProductImage
Context Help
Label
Pop Up Representation
Thumbnail Info
Edit...
Representation
Thumbnail Info
Edit...
Show Asset Name
Asset Content
Allow Create Local Content
Allow Remove Local Content
Allow Replace Content
Direct Download
Upload And Insert
Asset Insert Picker
<Select an option>
Edit...
Process Description
{Configuration} ({ItemCount} files)
Upload Asset Parameters
Upload Asset Parameters
Edit...
Use Asset Import Configuration
Image Importer

1. **Mandatory:** Checking the box for this parameter indicates that at least one asset must be referenced by the product.
2. **Read Only:** Check the box for this parameter to make the component read-only. In this state, the component cannot be used to upload, insert, or remove asset references. When unchecked, meaning users may make changes, a plus icon ( ) displays. This is the 'Add' button. When the 'Add' button is clicked, a dropdown displays that allows users to either 'Insert asset(s)' or 'Upload and insert asset(s).' 'Insert asset(s)' allows users to link one or multiple assets already present in STEP to the product via a node selector. 'Upload and insert image(s)' allows users to import one or multiple assets that are not in STEP via a file selector and, if necessary, specify a classification folder where the non-STEP assets will be saved in STEP.

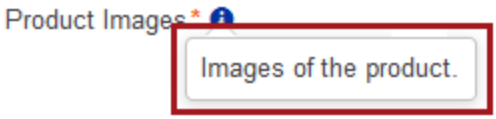


Further, when the 'Read Only' parameter is checked, the 'Edit Asset' icon ( ) does not display, which means that all options that can display under the 'Edit asset' icon are not accessible. The 'Edit asset' option is always available if the 'Edit asset' button icon ( ) displays, but does not have a corresponding parameter in the Referenced Asset Representation Properties page in the designer.

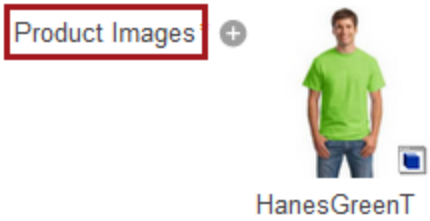


When 'Edit asset' is clicked, the user is taken directly to the asset object. To ensure this option works as it should, admin users should also create a mapping that will display a configured Asset Details screen whenever a user views an asset object. When selecting the condition from the 'Screen Mapping' window, use the 'Asset Condition'. When selecting the screen, a configured Asset Details screen is recommended. For more information on mapping screens, see the Mappings section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

3. **Asset Reference Type:** For this parameter, click the ellipsis button (...) and specify the reference type that should be used when linking assets to the product via the node selector. This field is mandatory.
4. **Context Help:** In this parameter, enter the help text that will display when the user clicks the help icon to the right of the field label.



5. **Label:** In this parameter, enter the label that will display for this field in the Web UI. Defaults to 'Image.'



6. **Pop Up Representation**: In this parameter, specify how to present the image representing the current asset by selecting a sub-component from the dropdown. This sub-component displays in a pop-up window when the asset thumbnail is clicked.

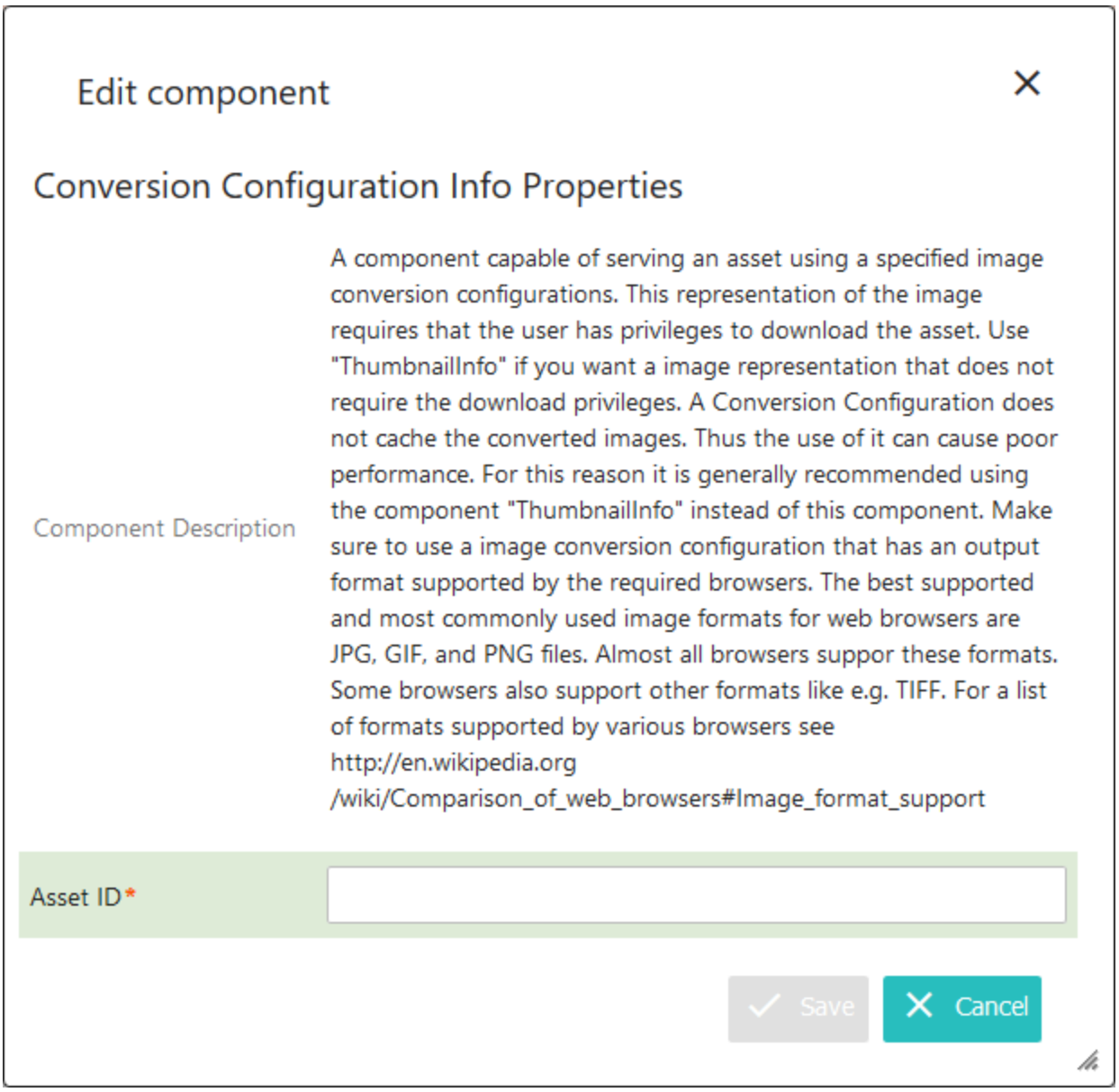
   Valid sub-components include: 'ConversionConfigurationInfo,' 'ConversionScriptInfo,' 'NoConversionInfo,' 'PipelineInfo,' and 'ThumbnailInfo' which are all described below in further detail.

- **Conversion Configuration Info**: Selecting this component shows the image with the predefined conversion configurations in a pop up window. For example, if there is a need to view the selected asset in grayscale view / less resolution view / in any converted format, this pop up representation can be used.

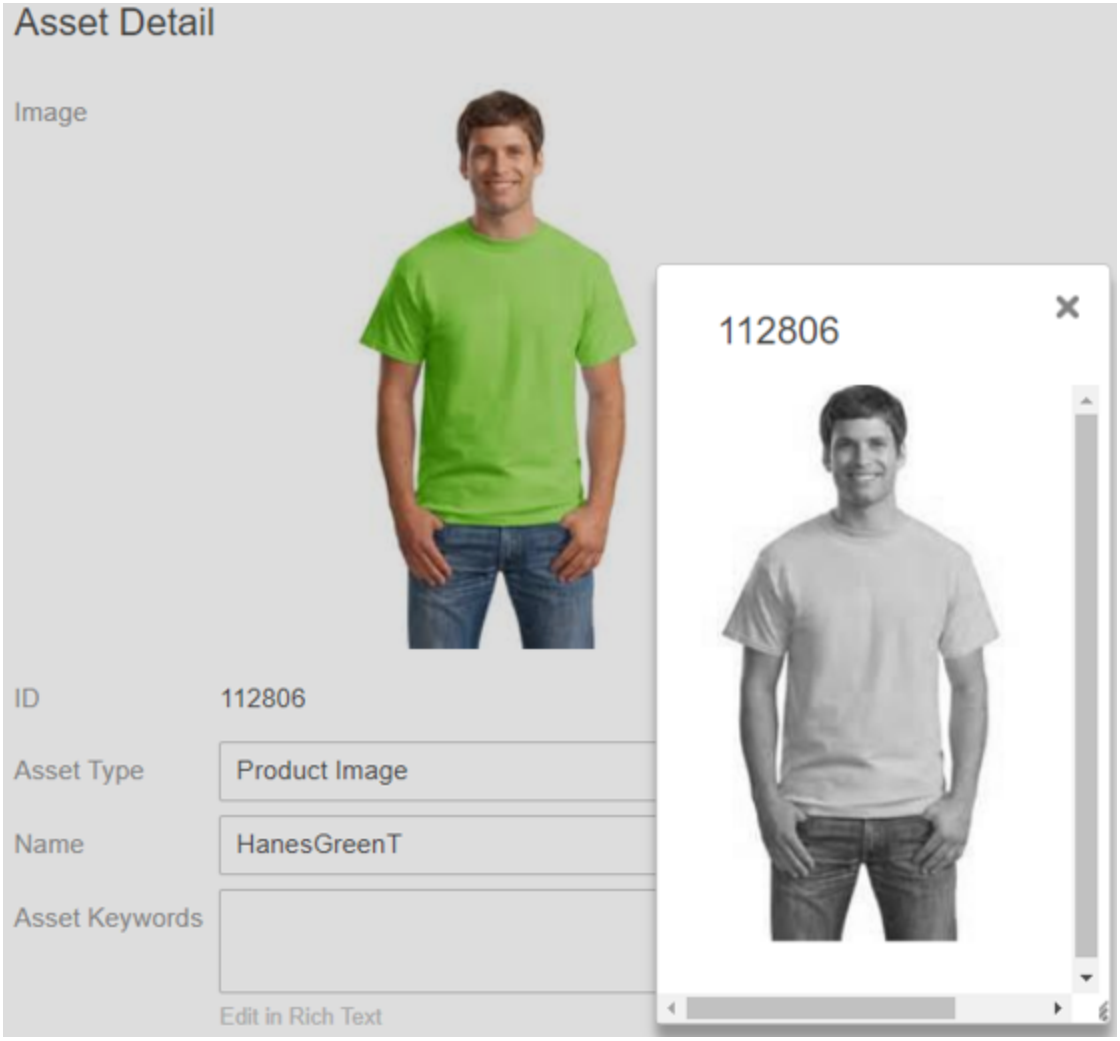
  To enable this, the user should have created an Image conversion configuration, and the ID of the Image conversion configuration should be known. For more information, see the **Image Conversion Configuration** topic in the **Digital Assets** documentation.

  This representation of the image also requires that the user has privileges to download the asset. A Conversion Configuration does not cache the converted images. Thus the use of it can cause poor performance. For this reason it is generally recommended using the component 'Thumbnail Info' instead of this component.

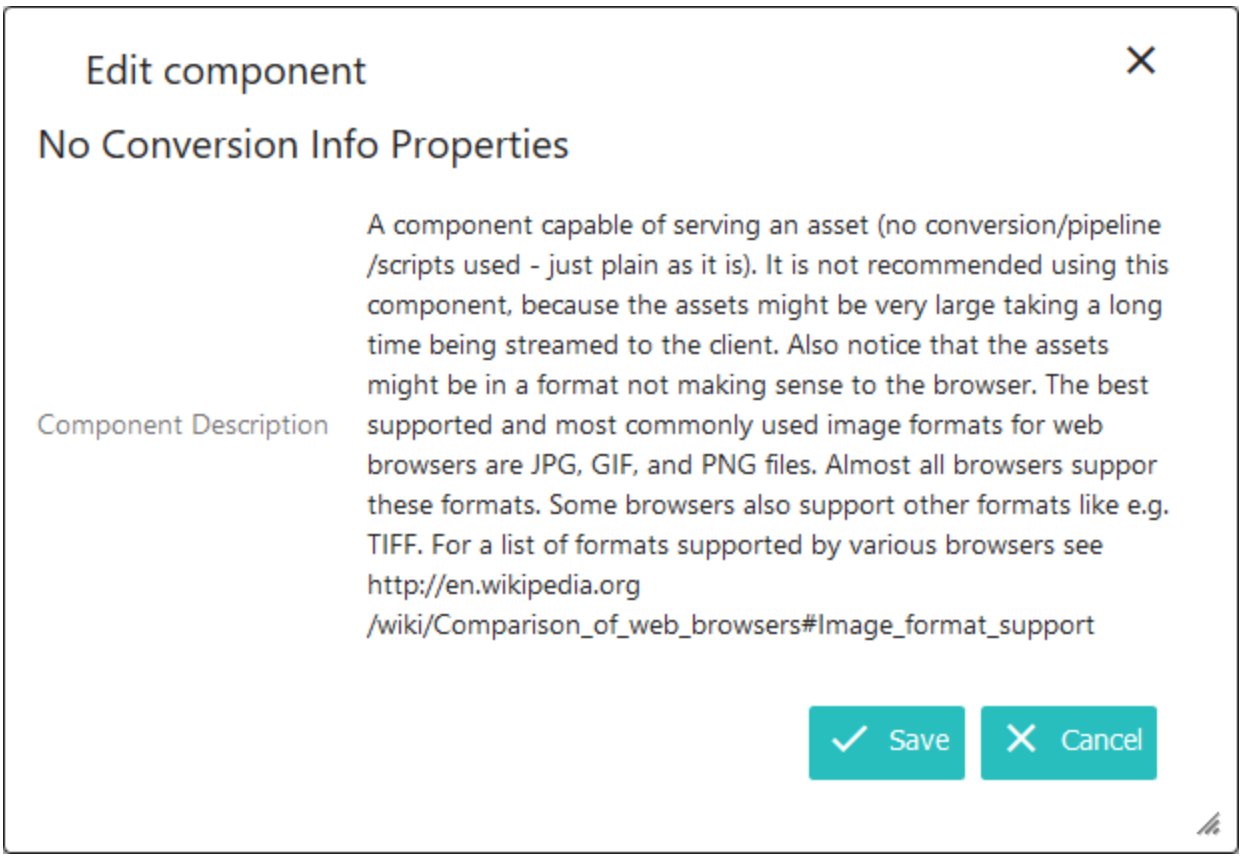
- **Asset ID**: (Mandatory) ID of the required Image conversion configuration.



Below is an example of the asset image with the pop up view converted into grayscale.



- **No Conversion Info Properties**: Selecting this component will let the user view the image in a pop up window, same as the original image is, without any conversions / change in asset (no conversion / pipeline / scripts used). No configuration is necessary.

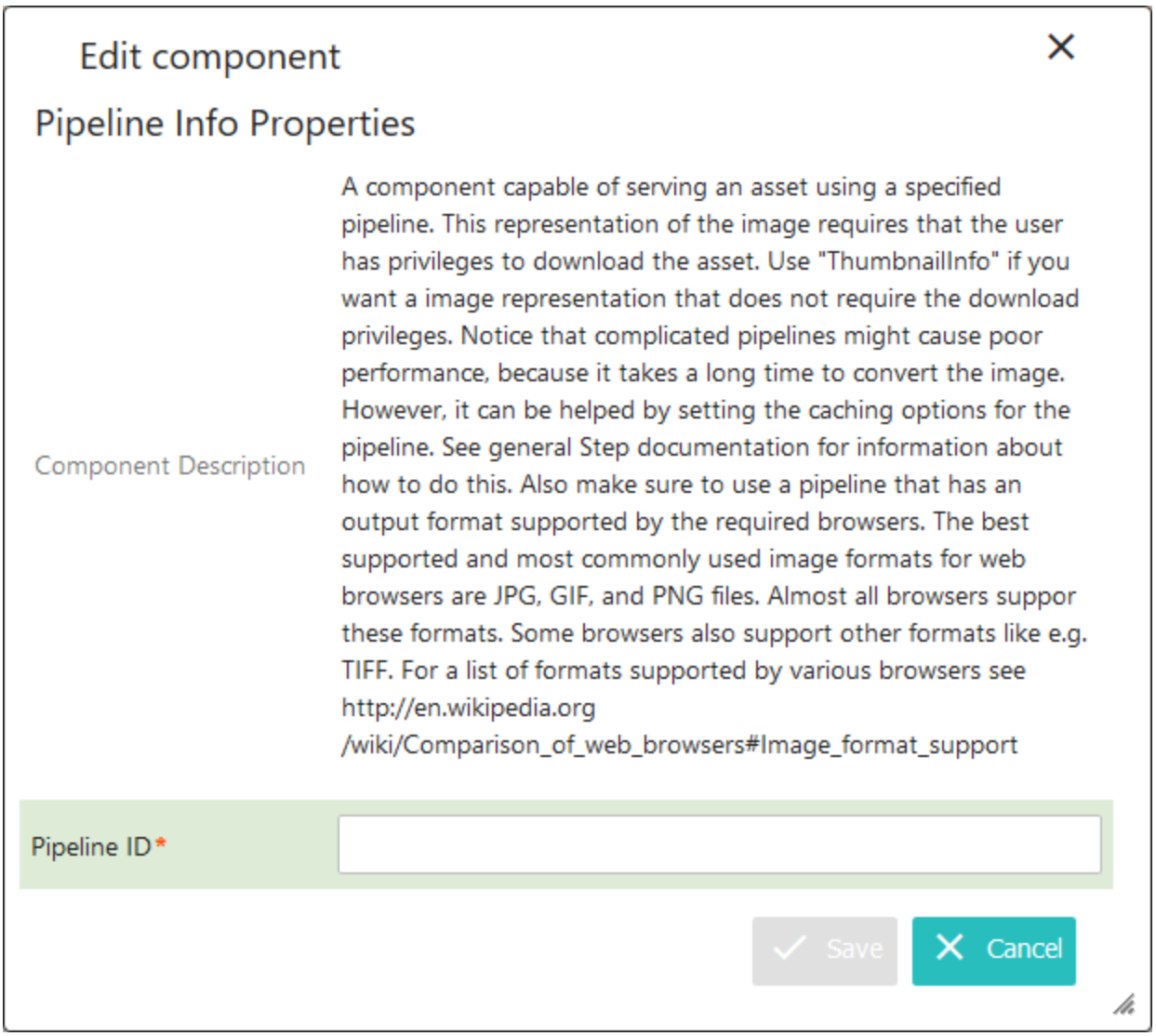


It is not recommended to use this component, because if the asset is very large it can take a long time to render. Further, the assets might be in a format incompatible with the browser being used.

- **Pipeline Info**: A component capable of serving an asset using a specified pipeline. This representation of the image requires that the user has privileges to download the asset. Use 'ThumbnailInfo' if you want a image representation that does not require the download privileges.

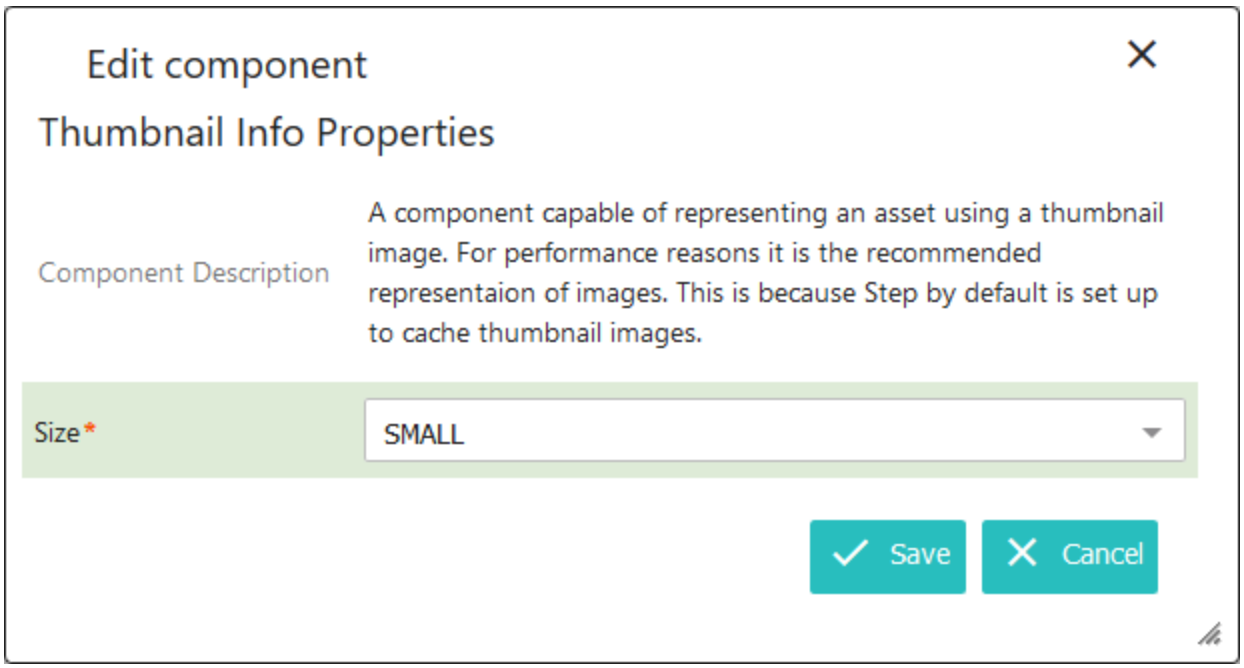
  Notice that complicated pipelines might cause poor performance, because it takes a long time to convert the image. However, this delay can be shortened by setting the caching options for the pipeline. See general STEP documentation for information about how to do this. Also make sure to use a pipeline that has an output format supported by the required browsers.

  In the designer, 'Pipeline ID' is the only field that needs to be set.



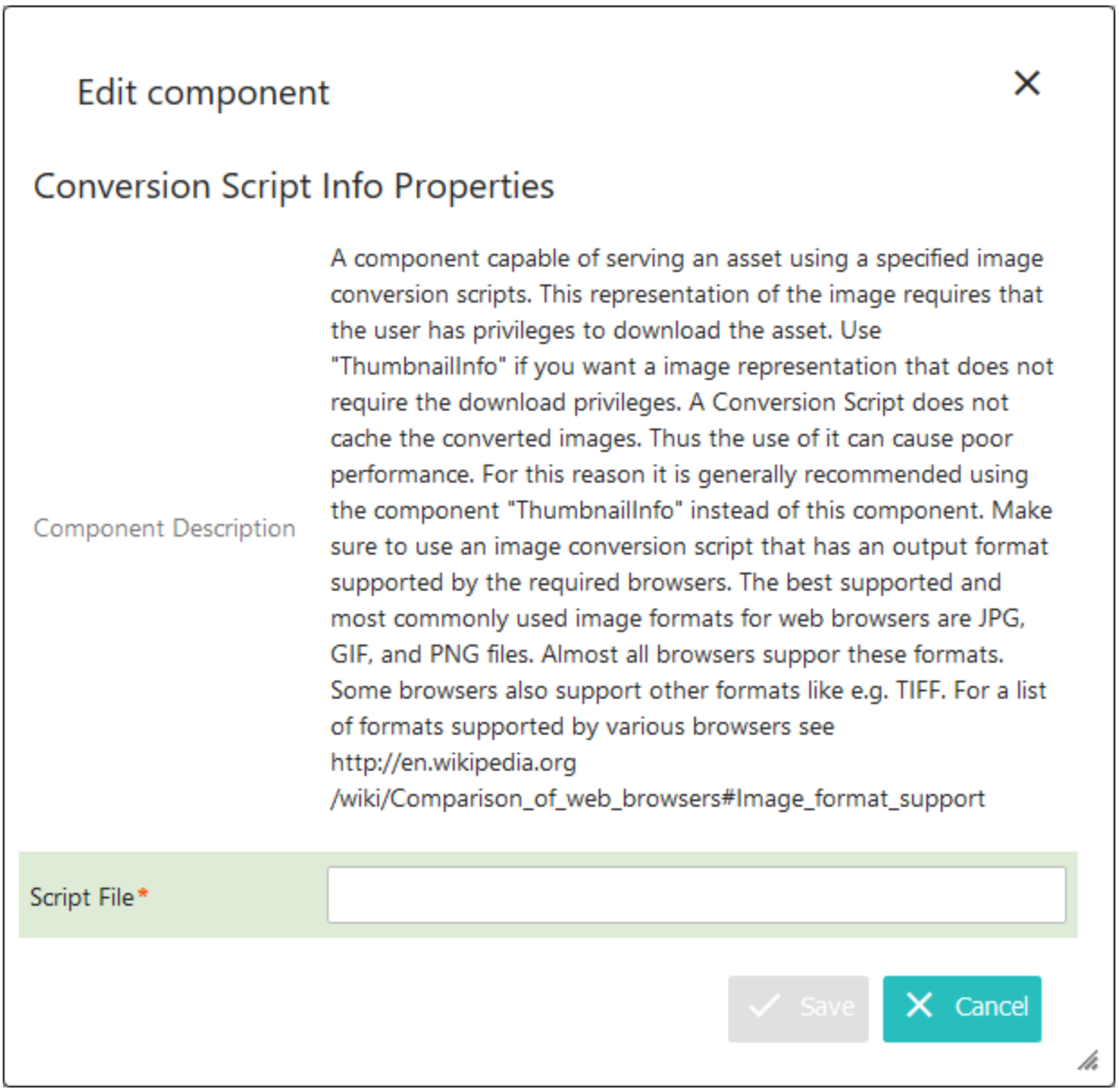
- **Thumbnail Info**: Selecting this component will let the user view the image in a pop up window using a thumbnail image. For performance reasons, this is the recommended representation of images. This is because the default is set up to cache thumbnail images.

  The 'Size' field is the only mandatory field for configuration. The user can choose the size of the thumbnail, as either SMALL, MEDIUM, or FULL. Note that while using the FULL option, the images are not cached in this version, and this require users to have download privileges.



- **Conversion Script Info**: A component capable of serving an asset using a specified image conversion scripts. This representation of the image requires that the user has privileges to download the asset. Use 'ThumbnailInfo' if you want an image representation that does not require the download privileges. A Conversion Script does not cache the converted images, thus the use of it can cause poor performance. For this reason it is generally recommended using the component 'ThumbnailInfo' instead of this component. Make sure to use an image conversion script that has an output format supported by the required browsers.

  The only mandatory field for configuration is the 'Script file.'



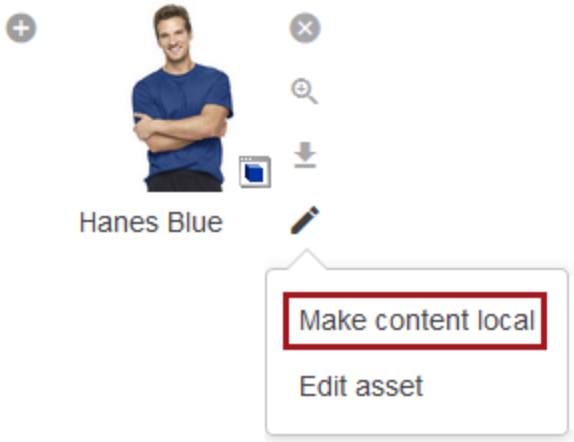
7. **Representation**: In this parameter, specify how to present the image representing the current asset by selecting a sub-component from the dropdown.

   Valid sub-components include: 'ConversionConfigurationInfo', 'ConversionScriptInfo', 'NoConversionInfo', 'PipelineInfo', and 'ThumbnailInfo'. The sub-components work the same way as explained in the above component Pop Up Representation.

8. **Show Asset Name**: This determines whether the image name displays beneath the asset thumbnail. When the box for this parameter is checked, the image name will display. When the box is unchecked, the image will not display.

The following parameters display in the 'Asset Content' section of the Referenced Asset Representation properties screen in the designer. These parameters determine which icons display to the right of the thumbnail, and which options are available when those icons are clicked:

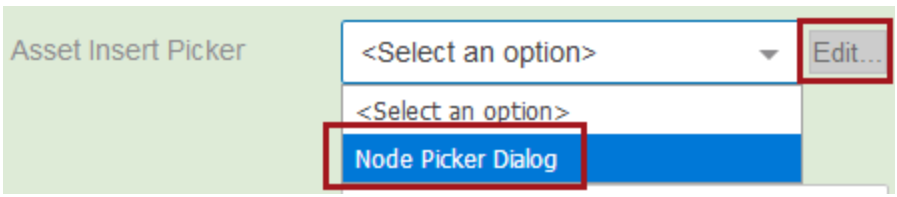
9. **Allow Create Local Content**: For this parameter, check the box to add a 'Make content local' option to the 'Edit asset' button ( ) dropdown. This button allows users to copy the asset content from the global context down to the viewed context.



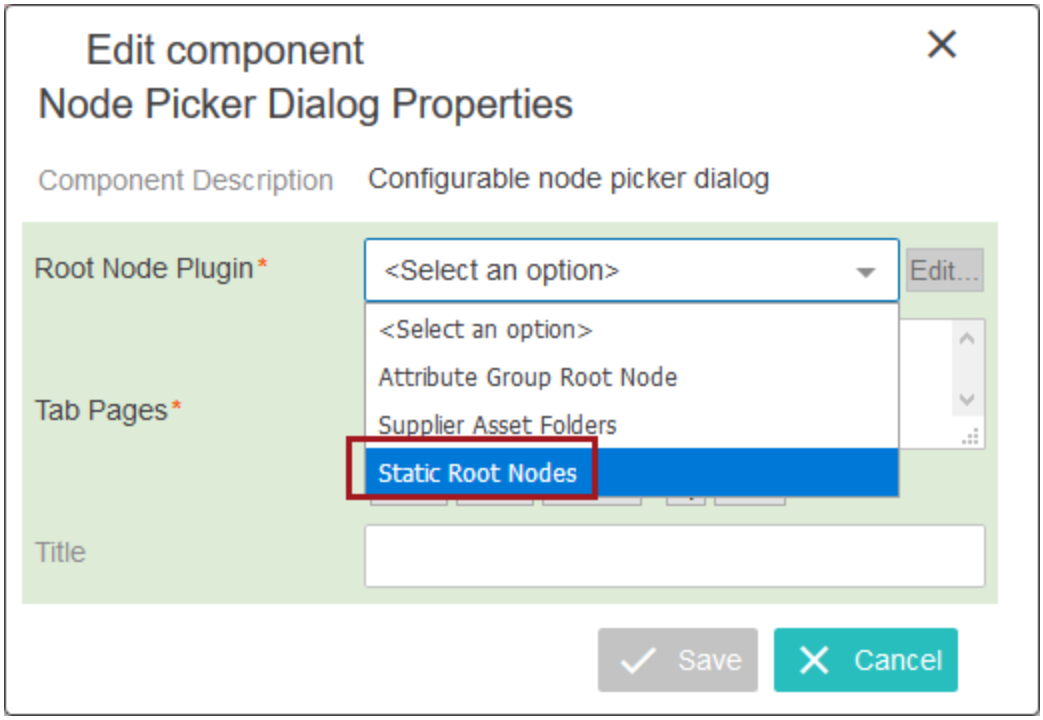
10. **Allow Remove Local Content** : For this parameter, check the box to add a 'Remove local content' option to the 'Edit asset' button ( ) dropdown. This button allows users to delete local asset content for a specific context. Note that this option is only available if assets are set as dimensionally dependent.
11. **Allow Replace Content:** For this parameter, check the box to add a 'Replace Content' option to the 'Edit asset' button ( ) dropdown. This option allows users to replace asset content with newly imported content.
12. **Direct Download**: For this parameter, check the box to add both a 'Download' button ( ) and a magnifying glass icon ( ) to the right side of the asset thumbnail display. When this is enabled, assets can be downloaded by clicking the 'Download' button, or viewed in a new browser tab by clicking the magnifying glass icon.

The following parameters display in the 'Upload and Insert' section of the Referenced Asset Representation properties screen in the designer. These parameters control how assets can be brought in using this component:

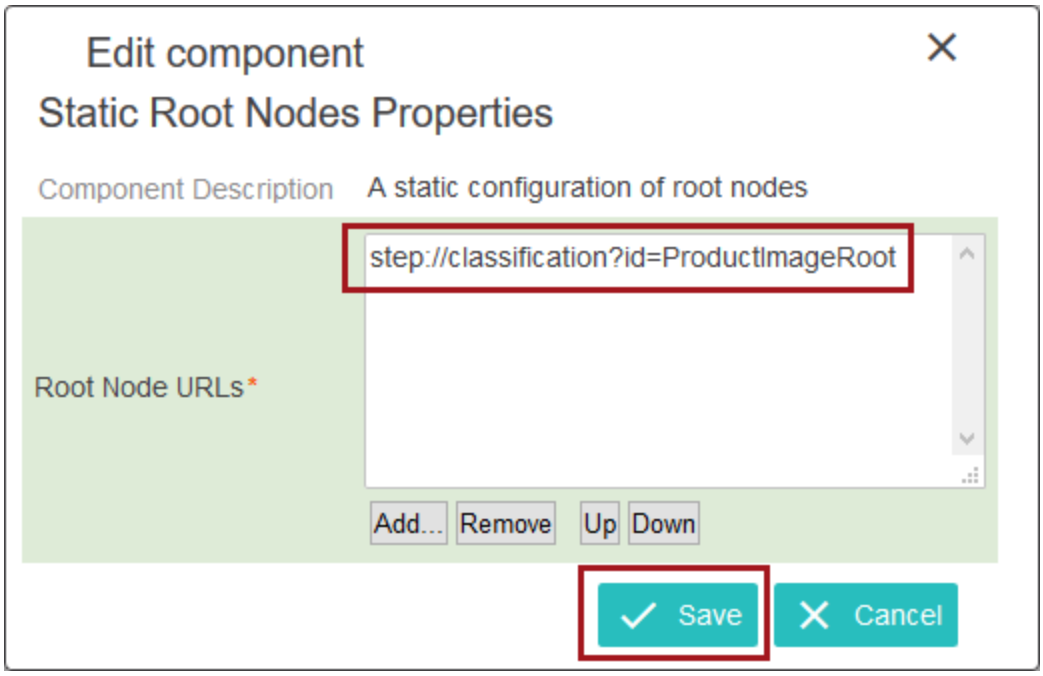
13. **Asset Insert Picker**: Configuration of this parameter enables users to configure which nodes are available when selecting a new asset reference.
    - First, select the 'Node Picker Dialog' option from the dropdown. Then click the 'Edit...' button.



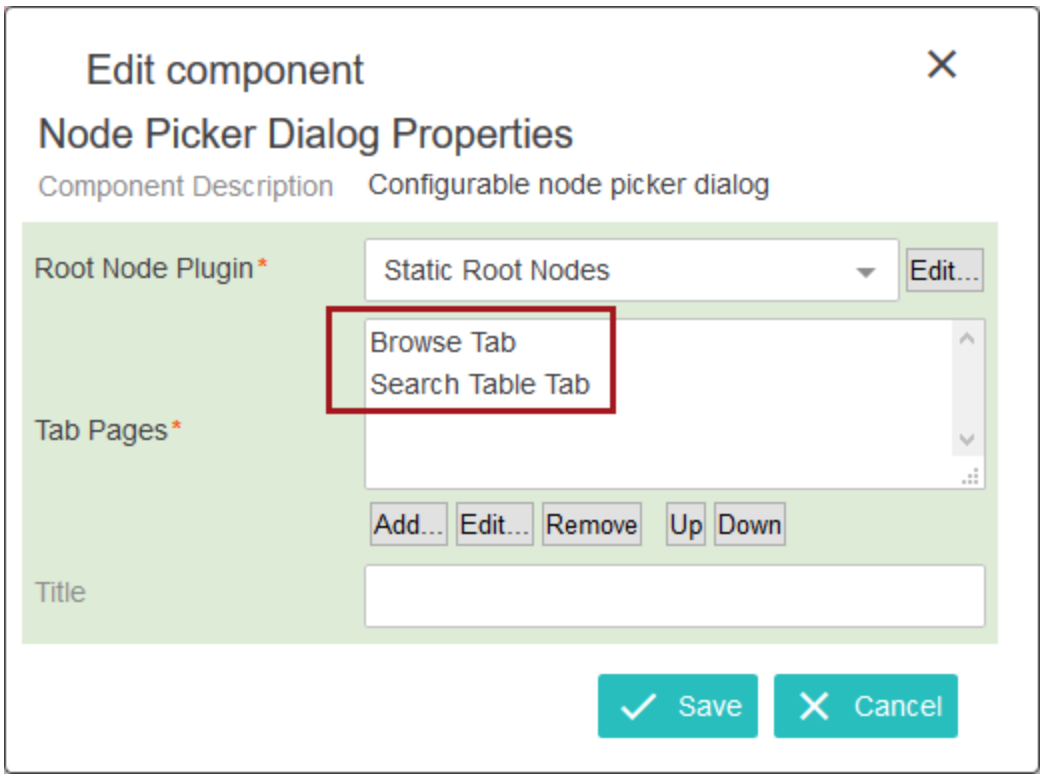
- Second, select the appropriate root node from the dropdown. For this example, 'Static Root Nodes' is selected.



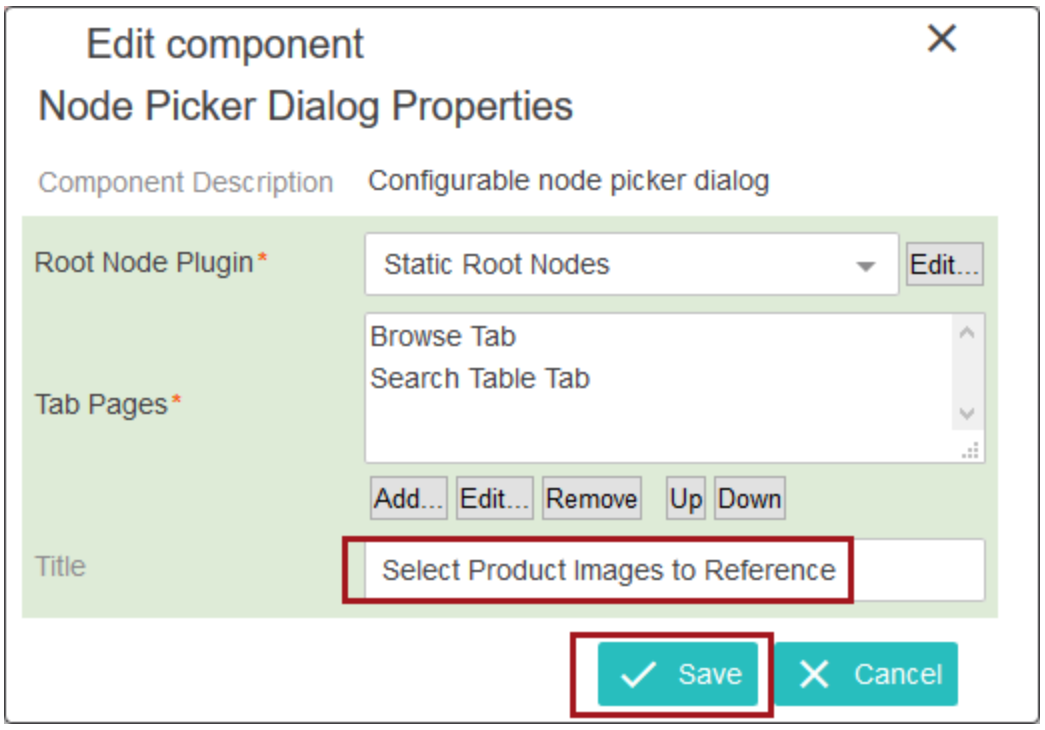
- In the 'Static Root Nodes Properties' dialog that displays, click 'Add...' and then select the node or nodes that should display when a user is selecting assets to reference. Then click 'Save.'



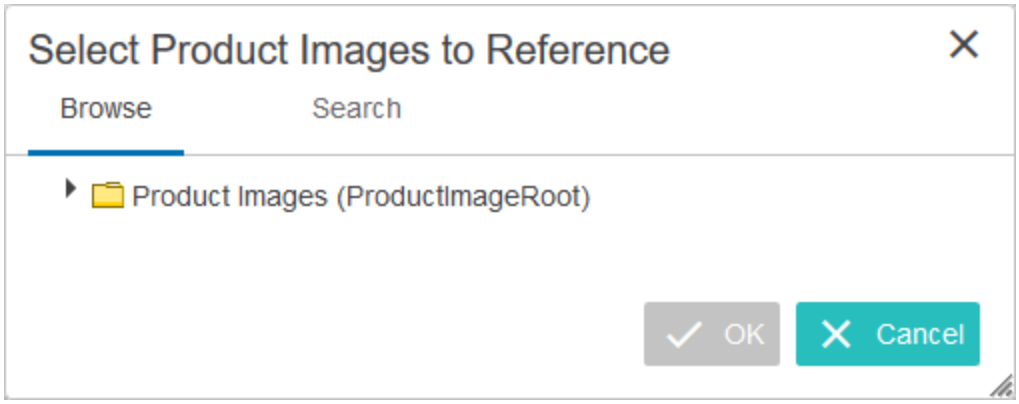
- Then, in the 'Tab Pages' field, click 'Add...' to select the tabs that will display in the Node Picker. Common choices are 'Browse' and 'Search.'



- In the 'Title' tab, add any text that should display as the title for the Node Picker. If no text is added, the title defaults to 'Select Node(s).'



- When configured, the Node Picker will display like this when the 'Insert Asset(s)' option is selected from the dropdown that displays when the ⊕ is clicked.



14. **Process Description**: In this parameter, create a template for the background process description. The template contains placeholders that are populated when the background process is started. The available placeholders include:

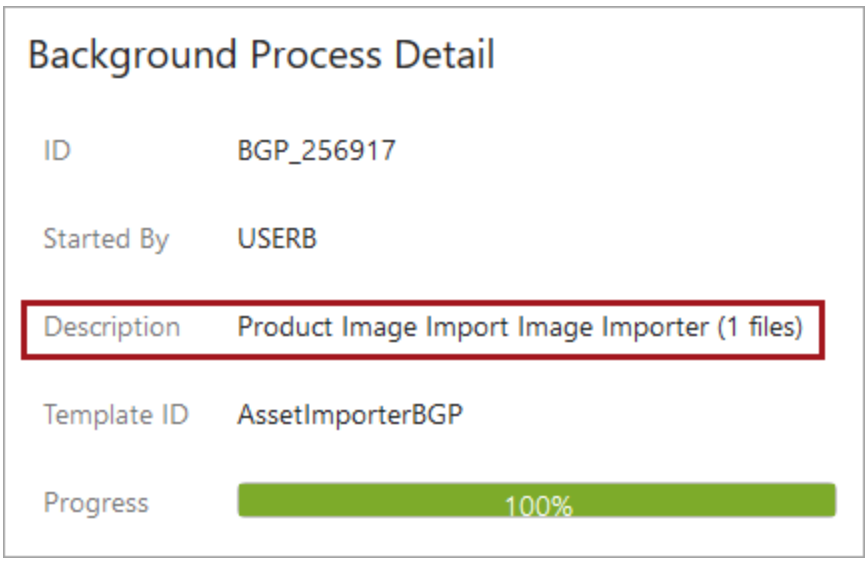
    - **[Configuration]**: The asset importer configuration.
    - **[ItemCount]**: The number of files to import.

    The default template is: **{Configuration} ({ItemCount} files)**. This template displays in this field automatically.

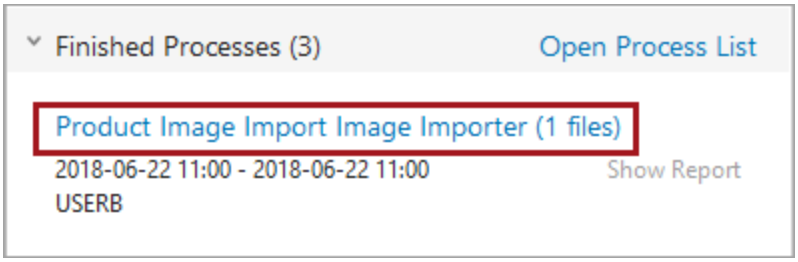
    Below is a sample template as it might appear in the designer. The elements that make up the template are divided and numbered. The description of each element is listed below the screenshot.

    1. Additional text added by an admin user to further define the background process for the end user. Any text may be added and will display first in the resulting description.
    2. This placeholder will cause the name of the asset import configuration selected in the 'Use Asset Import Configuration' parameter to display in the background process description. In this example, the name of the asset import configuration is 'Image Importer.'
    3. This placeholder will cause the number of imported files to display in the background process description. In this example, one file is being imported.

    Using this example template, the background process description will display like this in the background process screen:



And like this in the Background Process Notification panel:



Any values added to the Process Description field will only be applied to a background process if the 'Asset Import Compatability Mode' setting on **Users & Groups** is set to 'Advanced,' and an import configuration has been selected for the 'Use Asset Import Configuration' parameter (described below).

15. **Upload Asset Parameters**: If import parameters are required, select 'Upload Asset Parameters' from the dropdown in this field.

    For more information on configuring this parameter, see the 'Upload Asset Parameters Configuration' section at the end of this topic.

    For more information on using asset importer configurations with this component, see the **Asset Importer in Web UI** section of the **Asset Importer** documentation.

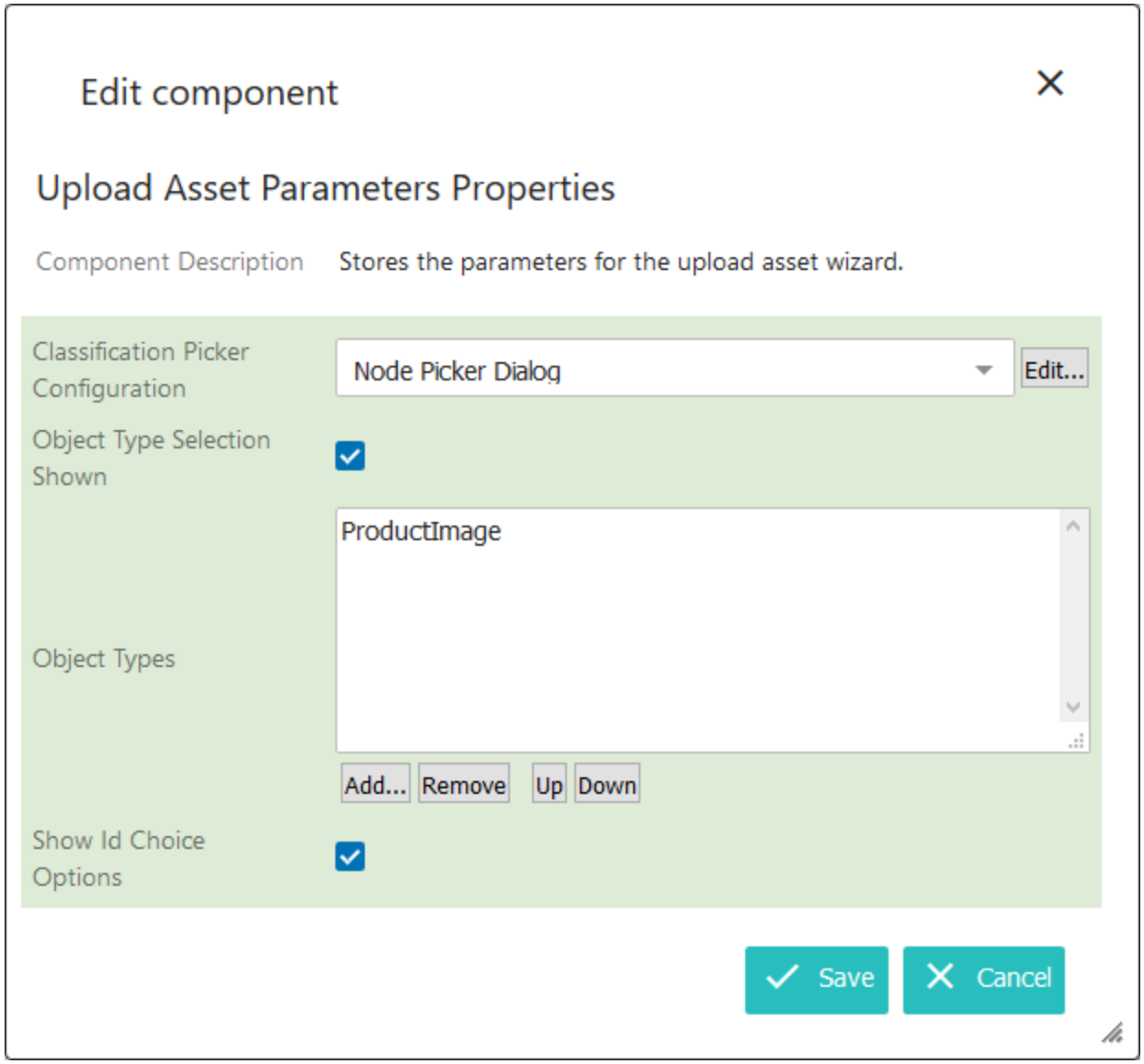
16. **Use Asset Import Configuration**: In this parameter, select an asset importer configuration to use from the dropdown. This configuration will be applied when any asset content is imported via this component.

    Any asset import configuration selected for this parameter will be applied to imported assets provided the 'Asset Import Compatibility Mode' setting on **Users & Groups** is set to 'Advanced.'

    For more information on using asset importer configurations with this component, see the **Asset Importer in Web UI** section of the **Asset Importer** documentation.

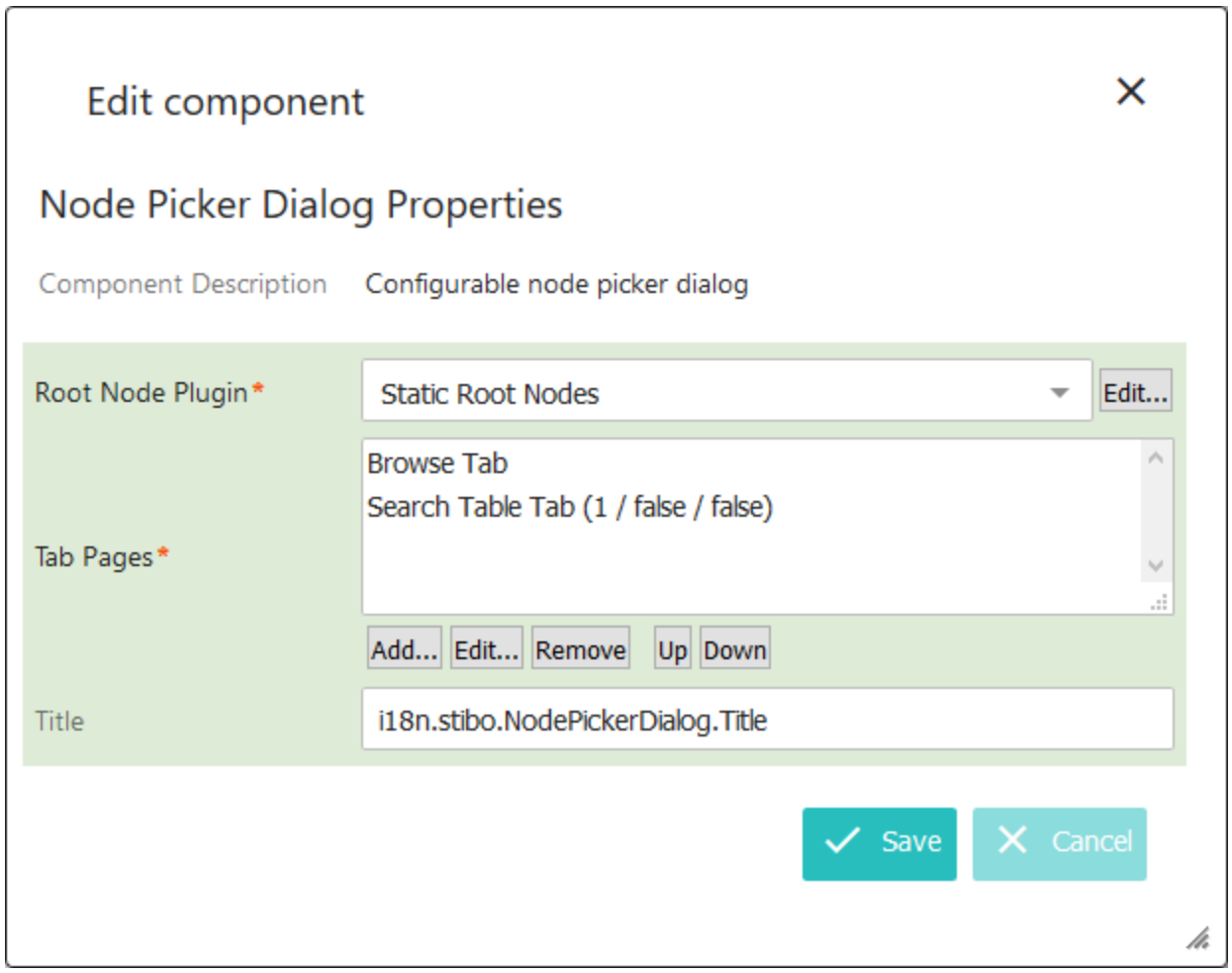
Upload Asset Parameters Configuration

1. To set upload parameters for the component, click the **Edit...** button next to the Upload Asset Parameters field.
2. The 'Upload Asset Parameter Properties' dialog appears.

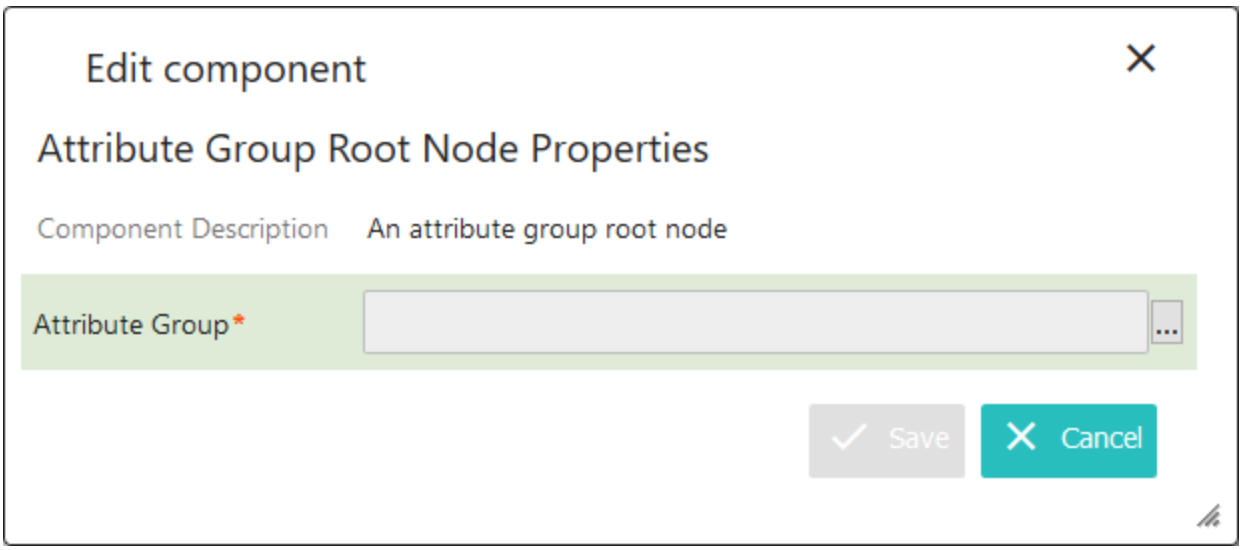


3. In the 'Classification Picker Configuration' parameter, select 'Node Picker Dialog' to enable a node picker that prompts the user to specify which classification folder to upload assets to. This is an optional parameter.

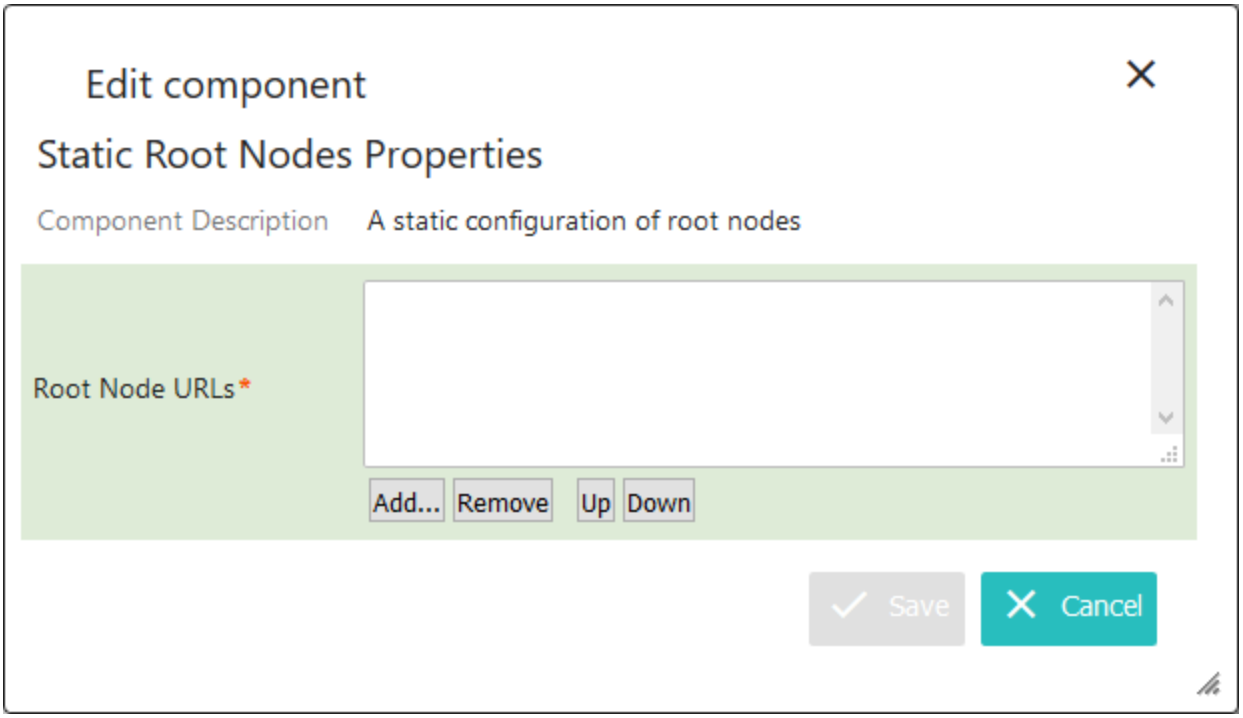
   When selected (or when you click the **Edit...** button) the Node Picker Dialog Properties window appears.



- **Root Node Plugin**: In this parameter, select the plugin that provides the relevant root nodes from the dropdown. The three options include 'Attribute Group Root Node', 'Supplier Asset Folders', and 'Static Root Nodes', and may require additional configurations of their own. This is a mandatory field.
- If **Attribute Group Root Node** is selected, specify an attribute group to act as top root node for the node picker dialog via the 'Attribute Group' parameter. Click **Save** when the selecting is made.



- If **Static Root Nodes** is selected, specify the root nodes the node picker will use via the 'Root Node URLs' parameter.



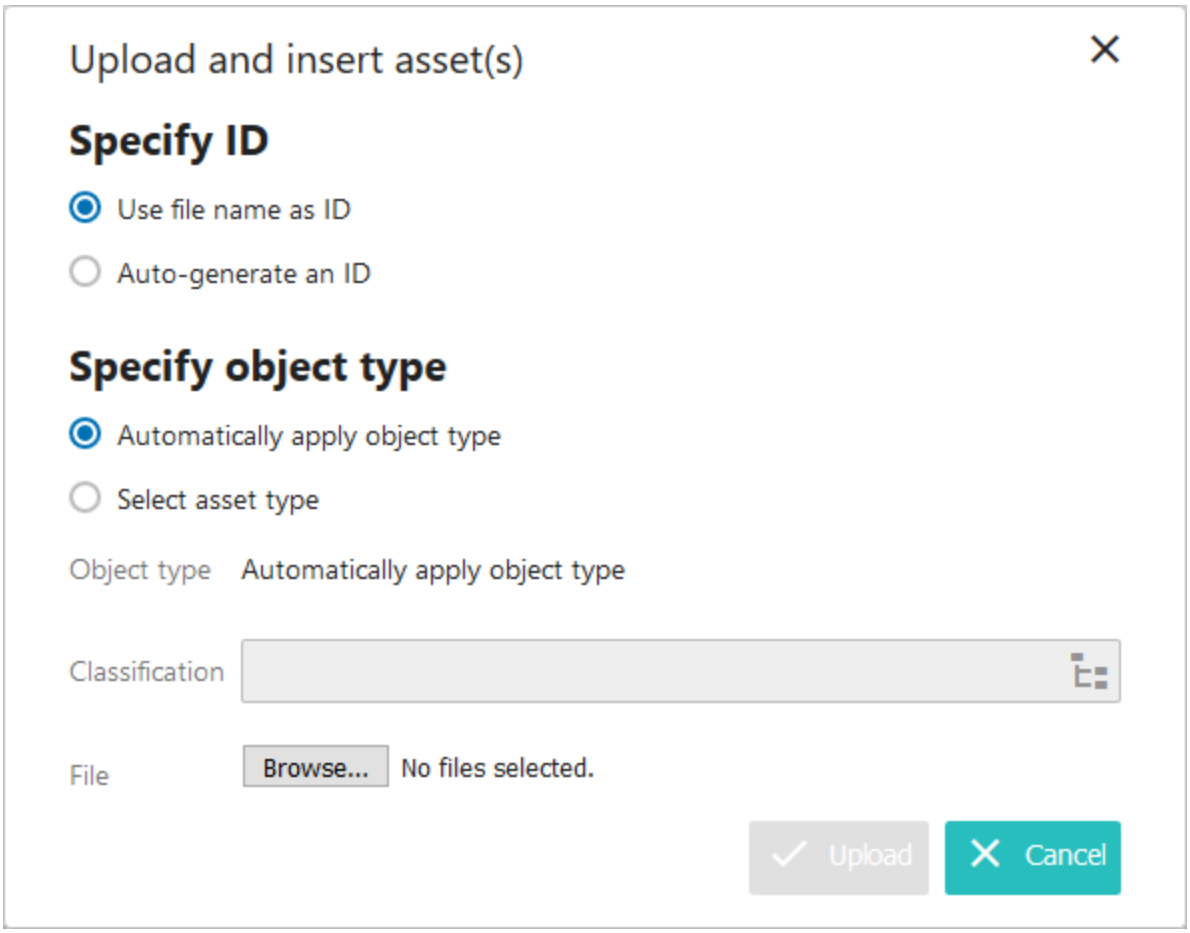
- **Tab Pages**: In this parameter, use the **Add...** (or **Edit...**) button to specify which tab pages should be available in the node picker dialog. This is a mandatory field.
- **Title**: In this parameter, enter a title for the dialog. This is an optional field.

4. **Object Type Selection Shown**: In this parameter, check the box to add two radio buttons to the dialog which allow users to choose whether to manually specify the object type of the asset, or have the system detect it

automatically. This is an optional field.

5. **Object Types**: In this parameter, specify the valid object types for imported assets via the **Add...** button. Object types listed appear as options when manually specifying the object type of an asset. If no object types are specified, all asset object types will be listed. If only one single object type is valid as target type for the reference type, then this will be used in place of content detection based on MIME type. Object Types is an optional field that requires 'Object Type Selection Shown' to be enabled.
6. **Show Id Choice Options**: In this parameter, check the box to add two radio buttons to the dialog which allow users to choose whether to use Filename as the ID, or Auto ID. This is an optional field.

   When configured, clicking the ⊕ will bring up a dialog that may resemble the screenshot below, dependent on how the options described above were configured:



Asset Thumbnail Component

The Asset Thumbnail component displays thumbnails of all assets linked to the currently selected product.

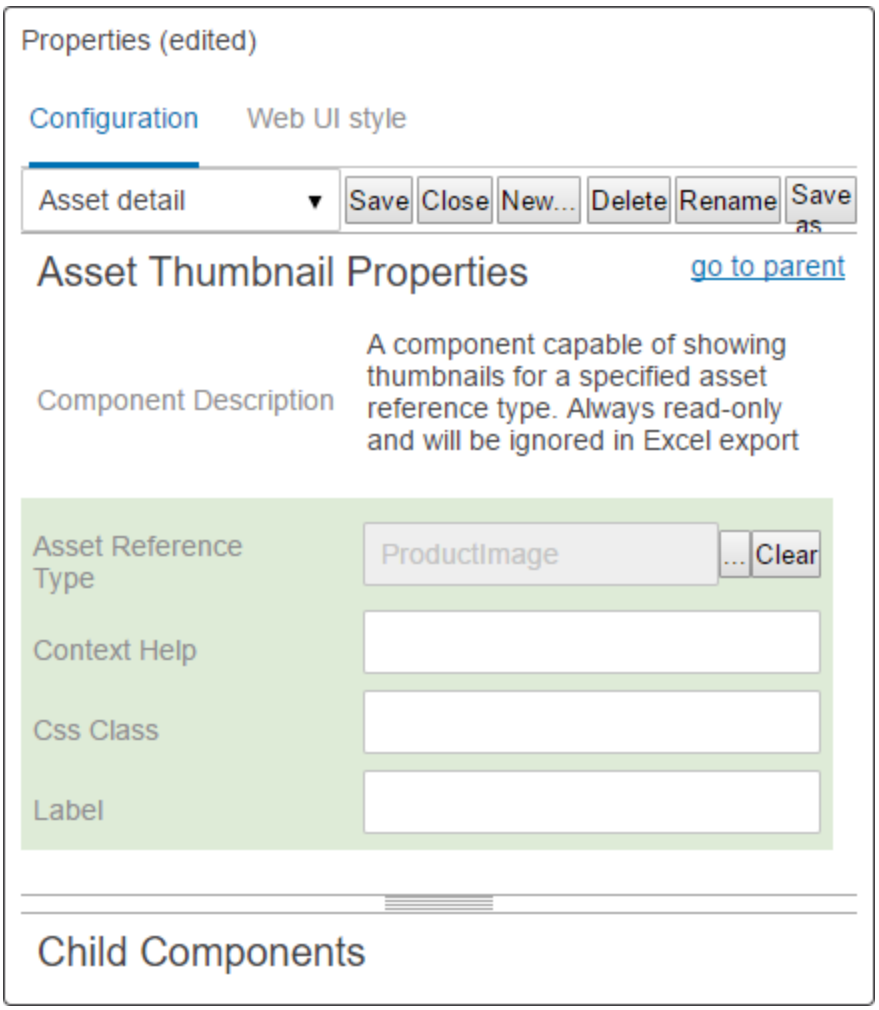
Important: This component is superseded and may be removed in a future release. The Referenced Asset Representation Component is the recommended component to use when configuring display of a referenced asset's thumbnail on a selected product. For more information on this component, see the **Referenced Asset Representation Component** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Prerequisites

It is expected that anyone configuring the Asset Thumbnail component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Configuring Asset Thumbnail Component

The only configuration option that impacts the functionality of this component is the 'Asset Reference Type' parameter.



1. **Asset Reference Type:** For this parameter, click the ellipsis button (...) and specify the reference type of the assets to be displayed by this component via the node selector.
2. **Context Help:** In this parameter, enter the context help displayed for the field.
3. **Css Class:** In this parameter, enter an optional name of a CSS-style to be set as the primary style for the component.
4. **Label:** In this parameter, enter a label for this field. When no label is entered, 'AssetThumbnail' displays.

Asset Importer Widget

The Asset Importer Widget offers users a simple method of importing assets from the Web UI Homepage. Multiple asset importer configurations can be mapped to the same widget, which are accessed individually by dragging and dropping files into the appropriate area on the widget or by clicking on the **Select File** button for the corresponding configuration.

Before this widget can be used, ensure that the Asset Importer functionality has been enabled and that there are configurations available on the system.

For more information on enabling Asset Importer, see the **Asset Importer Initial Setup** section of the **Asset Importer** documentation.

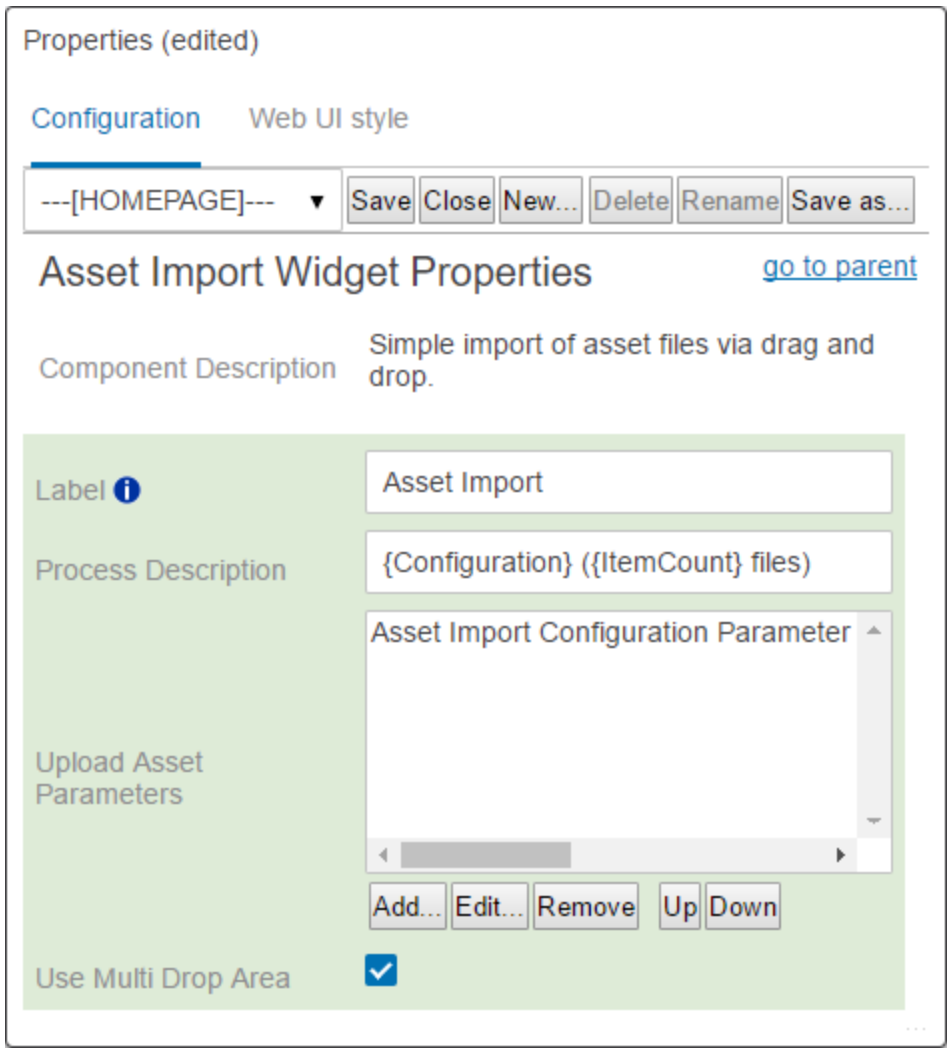
For more information on creating asset importer configurations, see the **Asset Importer Configuration Overview** section of the **Asset Importer** documentation.

Configuration

It is expected that anyone configuring the Asset Importer Widget is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer.

For information on adding a widget to the homepage, see **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

1. When configuring the Asset Importer Widget for the Homepage, there are four optional parameters to consider; Label, Process Description, Upload Asset Parameters, and Use Multi Drop Area.

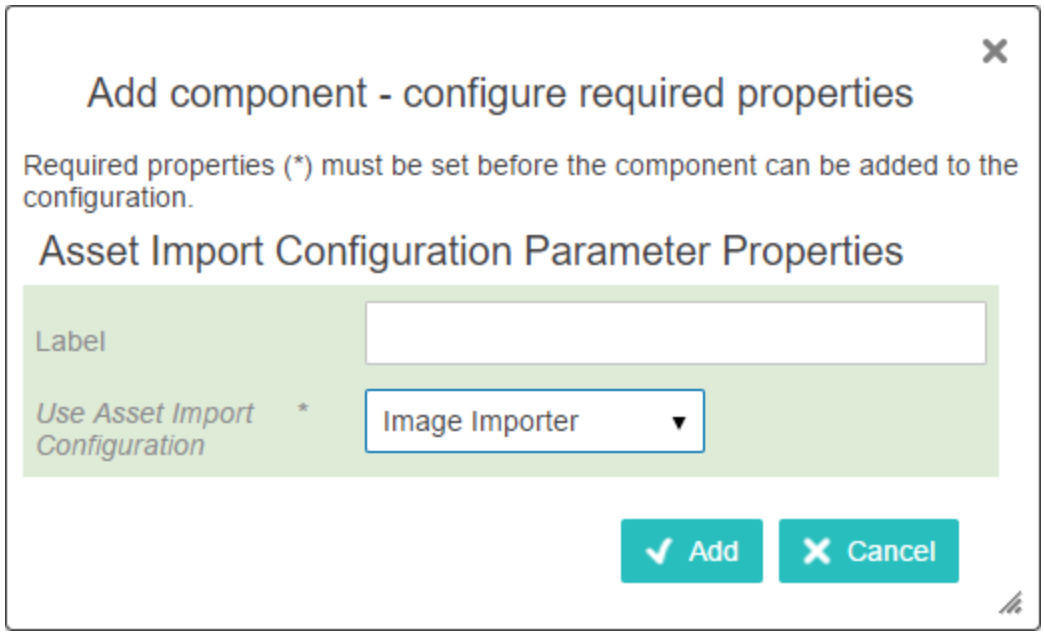


2. In the 'Label' parameter, enter a label for the widget.
3. In the 'Process Description' parameter, create a template for the background process description. The template may contain a number of place holders that are expanded when the background process is started.

   Available placeholders include:

   - **[Action]**: The name of the action.
   - **[Configuration]**: The asset importer configuration.
   - **[ItemCount]**: The number of files to import.
   - **[ImportFile]**: The name of the file(s) in a comma separated list.
4. In the 'Upload Asset Parameters' field, click **Add** (and follow the below steps) to map an asset import configuration to the widget. If no selections are made, the user will be prompted to specify which configuration to use among all those present on the system upon import.

- In the dialog that appears, enter a label for the area in which the configuration will reside.
- Select the desired Asset Configuration.
- Click **Add** when finished.



5. In the 'Use Multi Drop Area' parameter, check the box to enable multiple drop areas on the widget. Each of these drop areas represent an individual asset importer configuration that was specified in the above step. If unchecked, the widget will have one large drop area, that when used, will prompt you to select a configuration from those specified in the previous step.

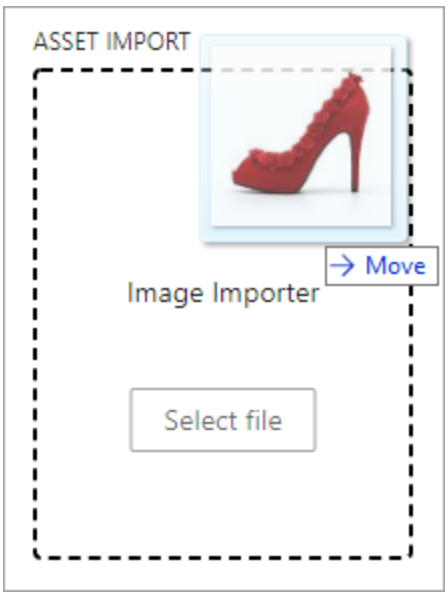
Note: It is recommended to leave the box unchecked if you want to map many different configurations to the same widget.

Importing Assets

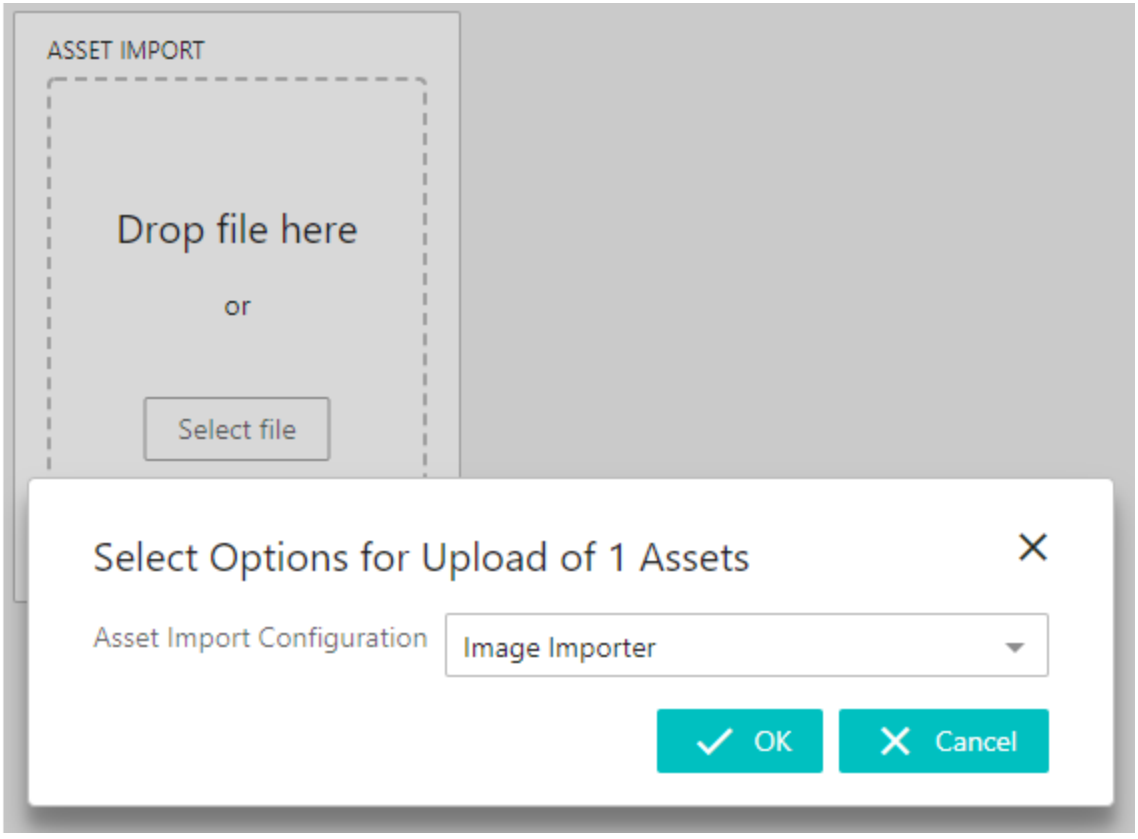
Once the widget is configured, assets can be easily uploaded by either dragging and dropping the relevant file into the widget drop area or by clicking on the **Select File** button for the corresponding configuration.

Drag and drop

Files can be dragged and dropped directly into the widget. Once dropped, the user will be provided with a link to the background process.

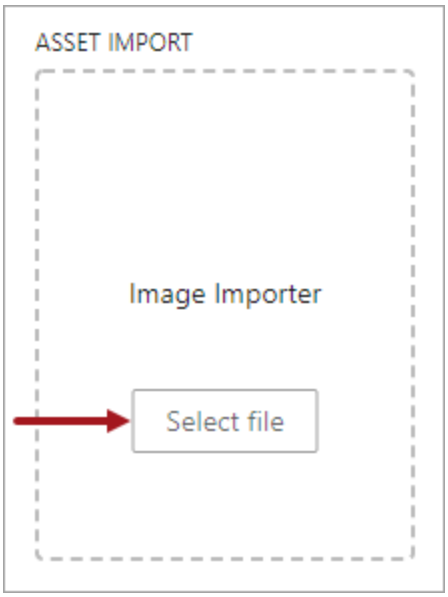


If 'Use Multi Drop Area' is not configured, the user will be prompted to select a configuration. Once a selection is made, click **OK** and the import will initiate.



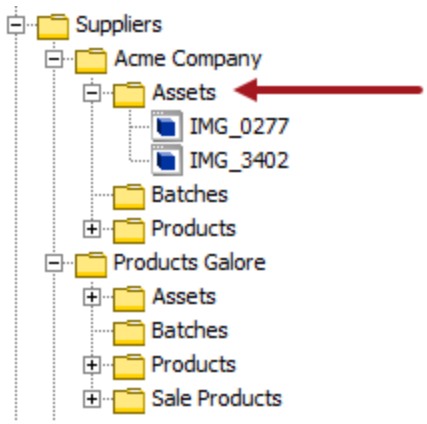
'Select file' option

In addition to drag and drop, users can click **Select file** for the corresponding importer configuration.

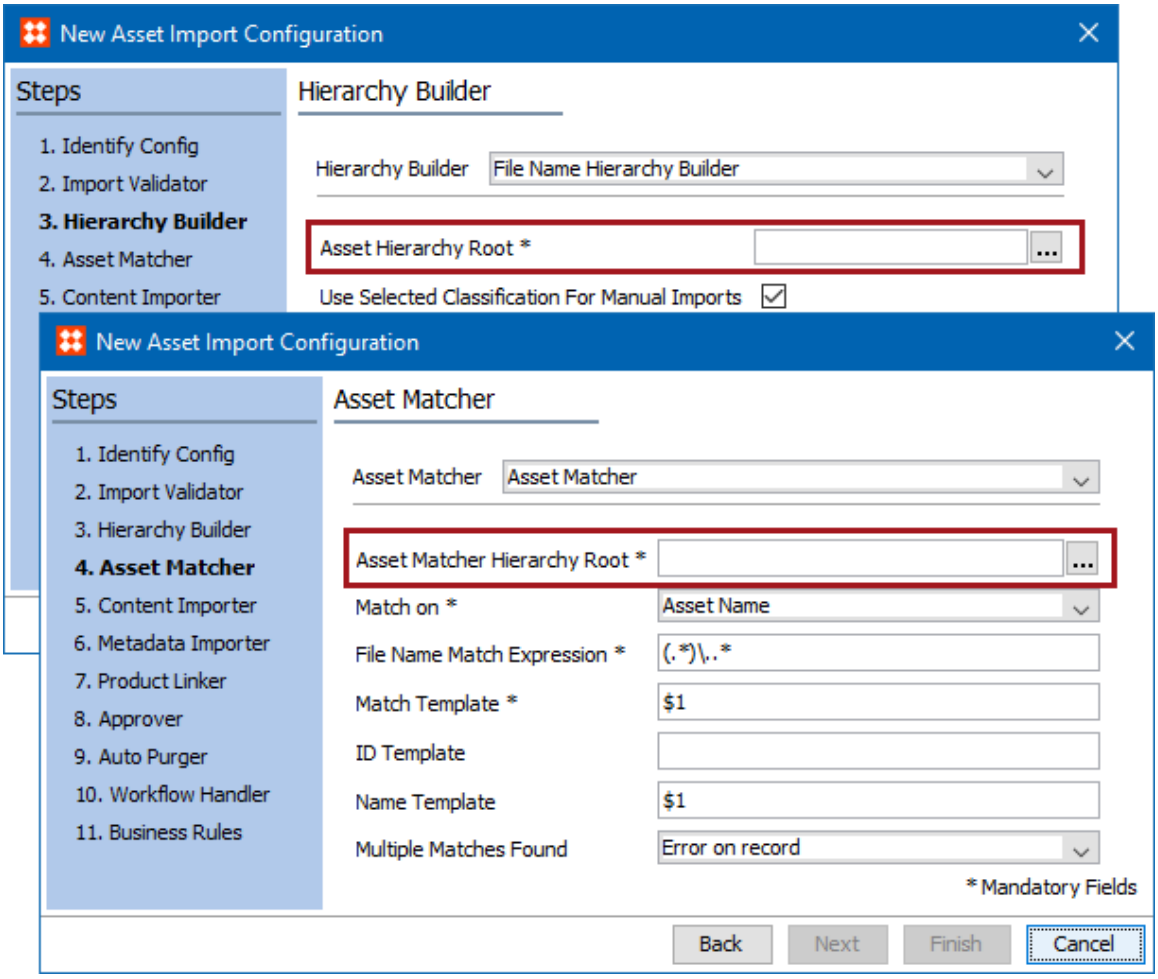


Supplier / vendor users

Supplier selection is important in Web UI. If a user is a member of multiple vendor groups, they are able to upload assets to a specific supplier that they are acting on behalf of and the supplier selection is passed along in the process. The Supplier ID chosen from the Corner Bar Supplier Selector will be passed to the import background process so that the correct supplier / vendor classification assets folder is selected to import the asset into.



Successful importing relies on the proper configuration of the root selected for Hierarchy Builder and the root selected for Asset Matcher within the asset import configuration.



Users also need to be aware of any matching products, which are currently below a product node, and should only link to products owned by the selected vendor.

See the **Corner Bar Supplier Selector Component** topic for more information.

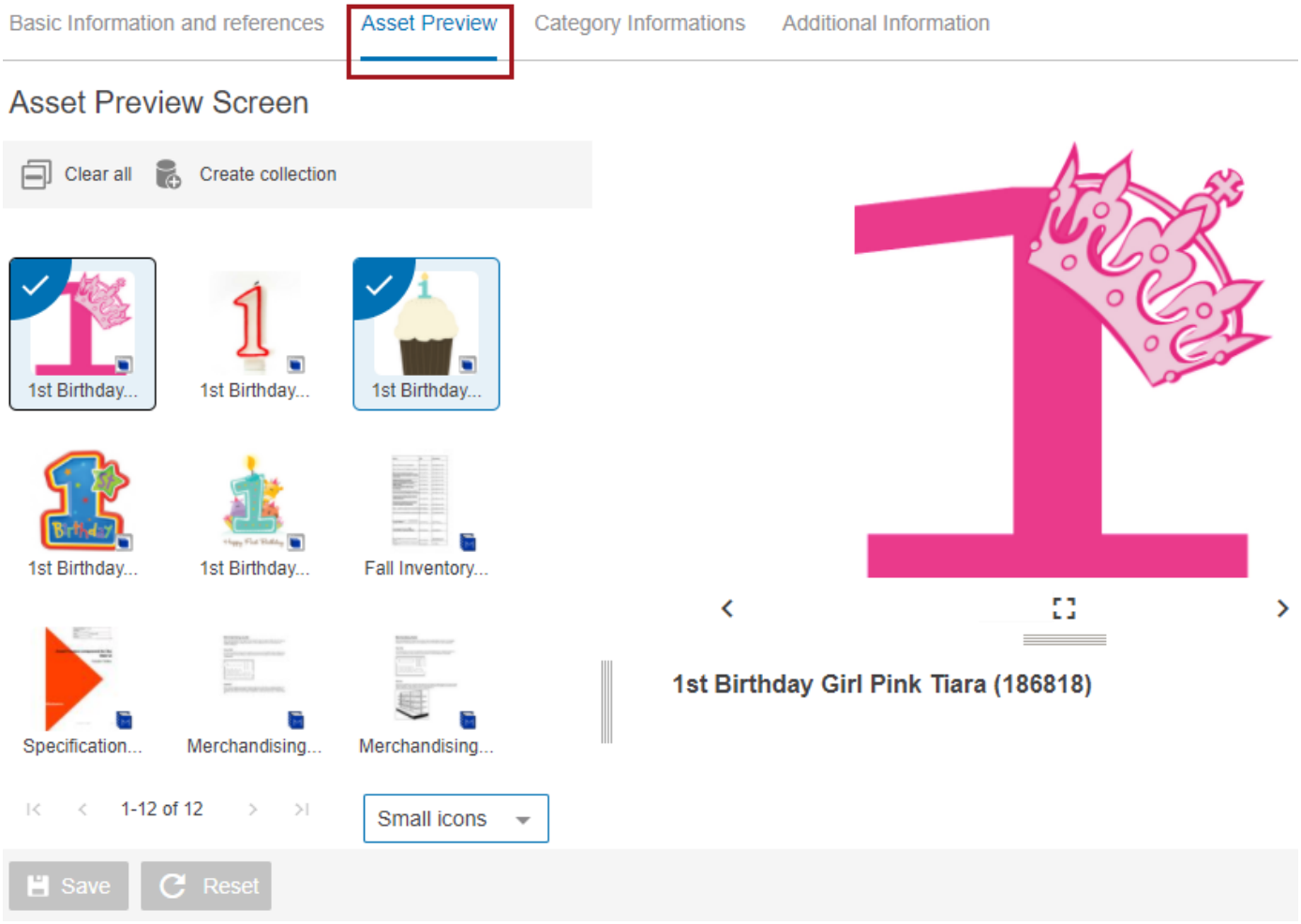
Asset Previews in Web UI

Full-screen previews of image assets, PDFs, Microsoft Office documents, and video files are available in three locations in Web UI: the **Asset Preview Screen**, the **Asset Mid Sized** component, and the **Asset Representation** component. The Asset Preview Screen and Asset Mid Sized components are used to view previews of referenced assets linked to product object nodes. The Asset Representation component provides these previews when viewing assets themselves.

Asset Preview Screen

The Asset Preview Screen supports configurable and enhanced asset previewing capabilities such as full-screen image previews and scrollable previews of Office and PDF documents, as well as viewable previews of video files. The types of references displayed on this screen are configurable in the designer by admin users. It is typically configured as a Sub Screen Tab Page on Node Details pages for product objects.

The below screenshot shows a sample Asset Preview Screen and the preview displayed when viewing image assets. Linked assets are displayed as thumbnails in the left-hand panel. The sizing of these thumbnails is controlled by selecting one of the three thumbnail size selector icons that appear below the thumbnails. When a thumbnail is selected, a larger preview of the asset appears in the right-hand panel. Below the asset preview, a configurable selection of description attributes that are valid for the selected asset object type can be added.



Using the Asset Preview Screen

To navigate between assets, click on the left and right arrow icons directly beneath the asset preview in the right panel. Alternatively, you may use the left and right arrow keys on your keyboard.

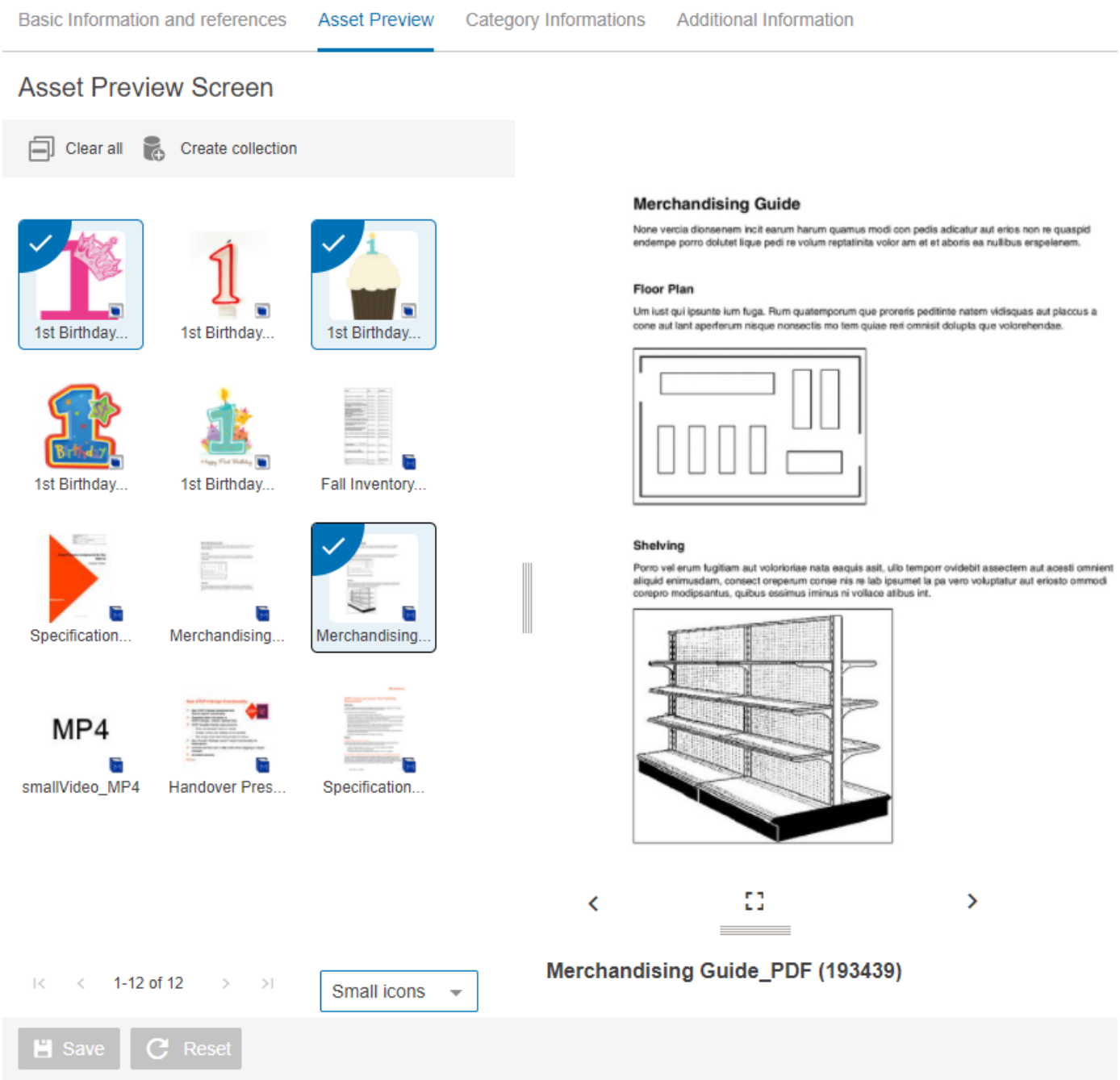
To resize the preview, move the horizontal drag handle below the preview up or down, and/or move the vertical drag handle left or right. To view a full-screen preview (pictured below), click on the 'full screen' icon below the preview.

1st Birthday Girl Pink Tiara (186818)
1st Birthday - Girl > 1st Birthday Girl Tiara
ategory Informations
Additional Information
Packaging Hierarchy
Status
References
1st Birthday...
1st Birthday Girl Pin

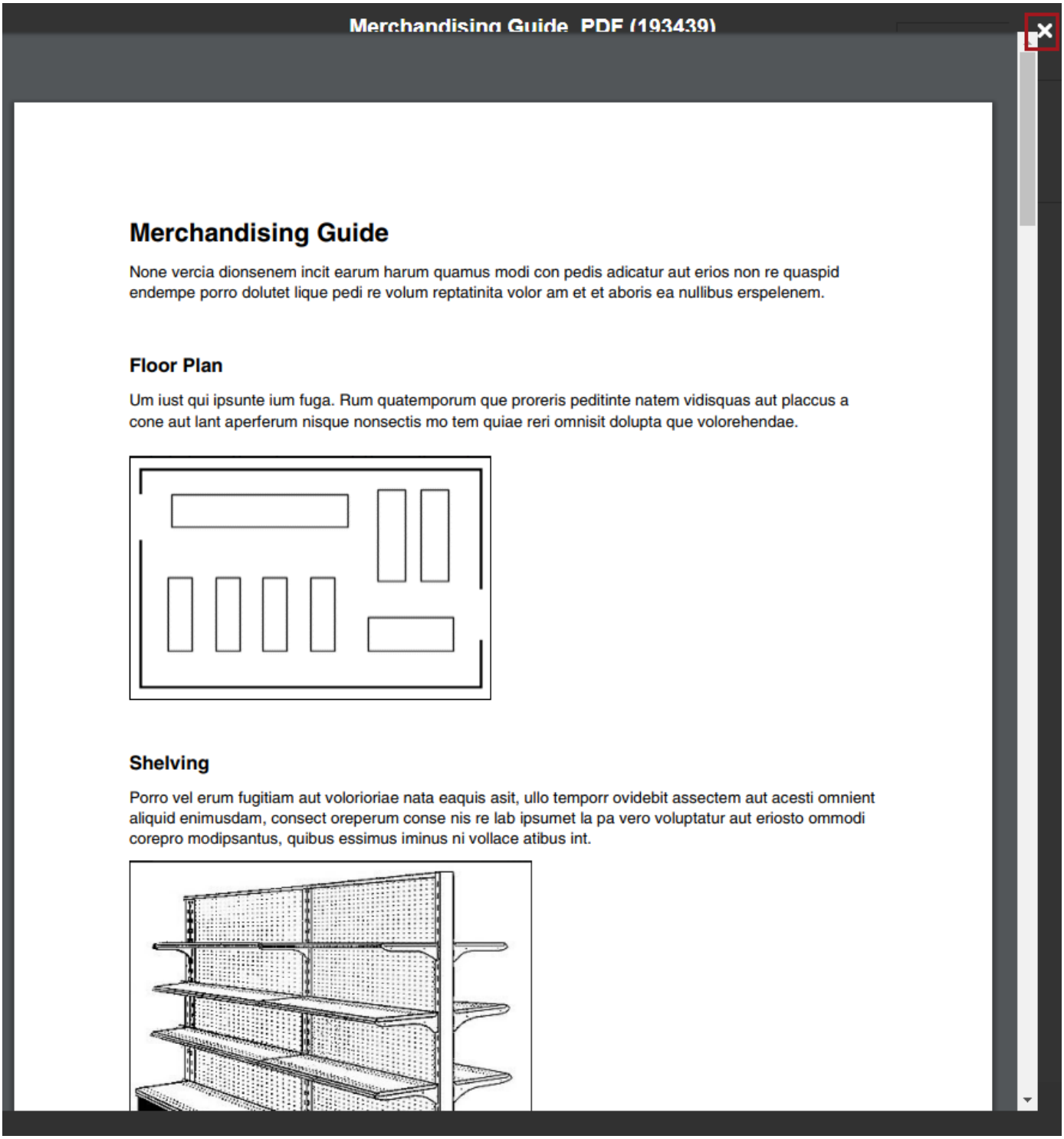
Previews of PDF, Microsoft Office, and Video Files

Previews of PDFs, Microsoft Office documents (Word, PowerPoint, and Excel), and video files (such as MP4s) work in the same fashion on the Asset Preview Screen as previews of standard image assets, though with additional dynamic functionality.

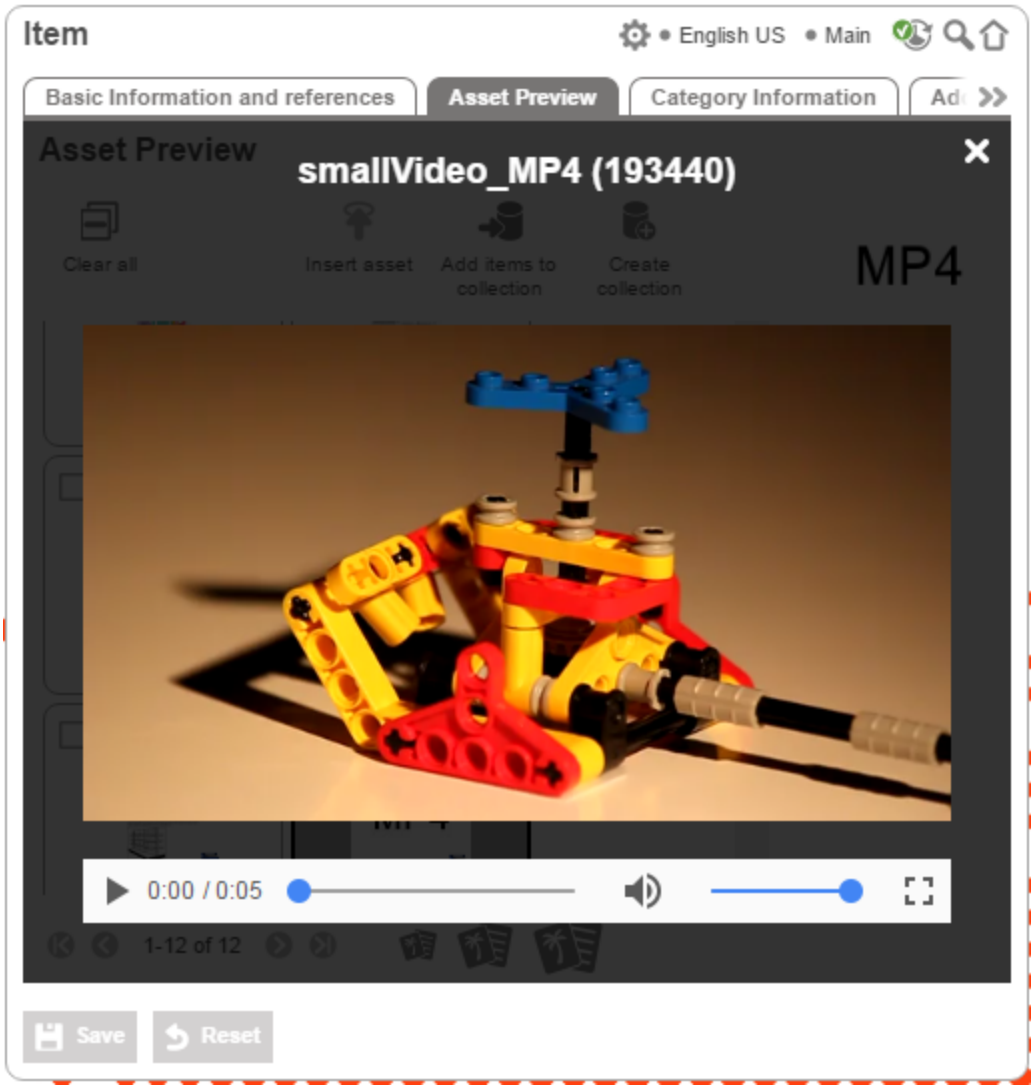
First-page thumbnails for **MS Office** and **PDF** documents display in the thumbnail gallery in the left-hand panel. For **Excel**, the thumbnail representation is of the first sheet of the workbook. Selecting a thumbnail will generate a larger preview of the first page / first sheet in the right panel. Pictured below is a preview of a PDF document.



Click the full-screen icon below the asset to view a full-screen readable and scrollable preview of the entire document. Click outside of the displayed item or on the X button in the upper right corner to close the image.



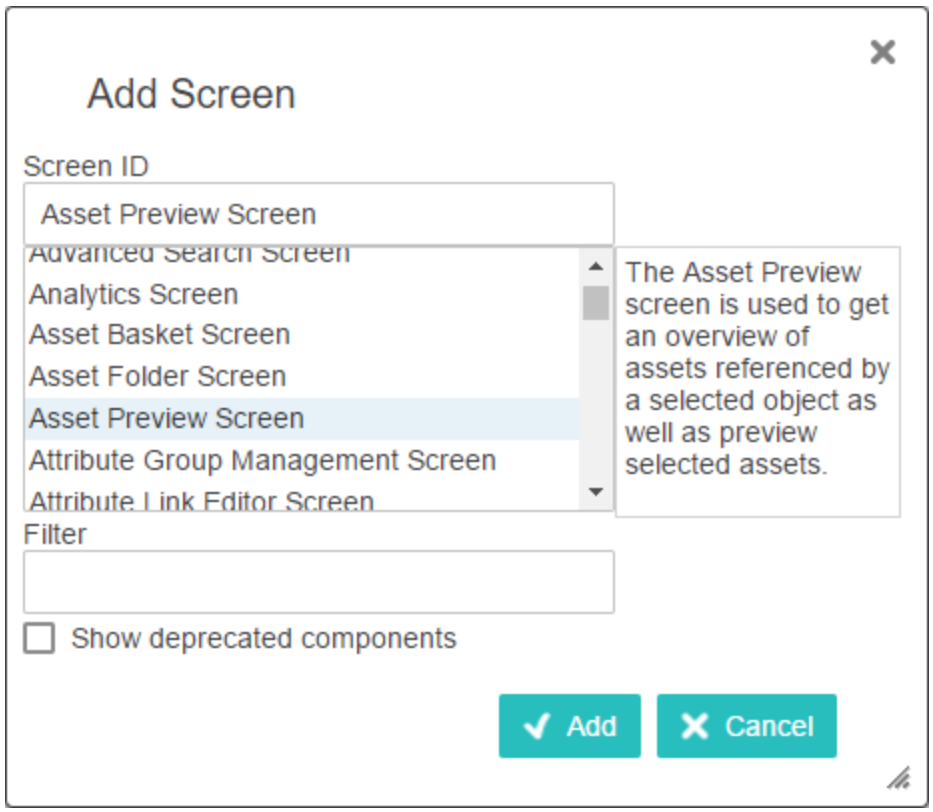
Video files display a generic thumbnail and right-panel preview, but once the magnifier icon is clicked, the video displays in a full-screen, playable preview.



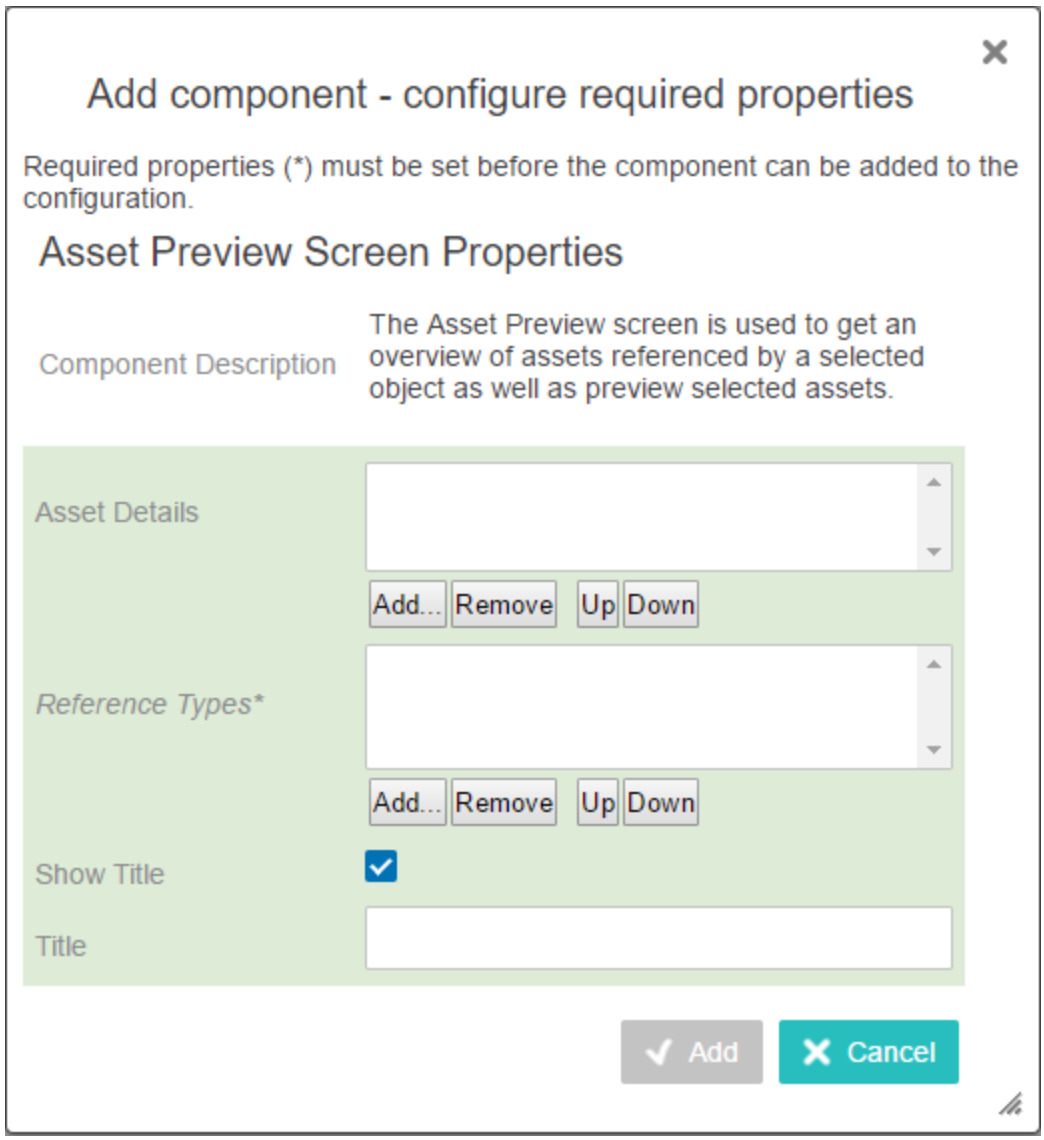
Creating an Asset Preview Screen

In order to create an Asset Preview Screen, a new screen must be created using the Asset Preview screen type.

1. Open the Designer and click on **New**. An **Add screen** dialog displays.
2. Select **Asset Preview Screen** from the list, then enter an ID for the new screen in the **Screen ID** field. (In this example, the ID provided for the screen is Asset Preview Screen.)



3. The **Asset Preview Screen Properties** dialog displays.

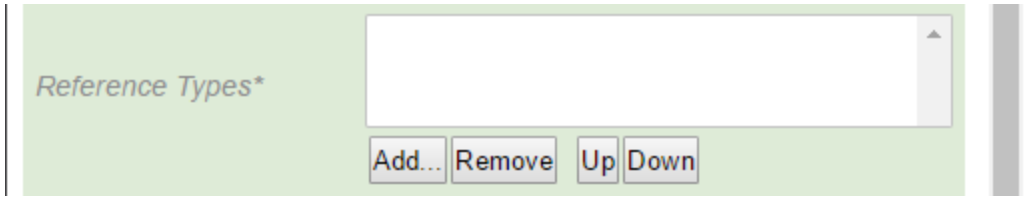


4. In the **Asset Details** field, click **Add...** to launch the Select Node(s) dialog for attributes and attribute groups.
5. Browse to or search for the metadata attributes or attribute groups that you would like to display beneath the asset preview in the right-hand panel. (Typically, these will be system attributes such as asset.size, asset.extension, and asset.filename, as shown in the following screenshot.) Hold Shift or Ctrl to multi-select while making your choices.
6. Click **OK** to complete and close the Select Node(s) dialog.

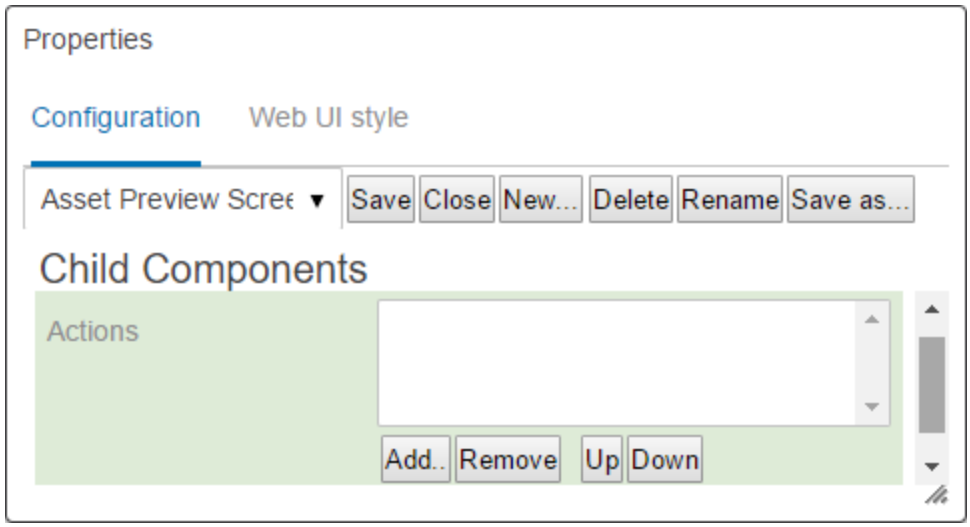
1st Birthday Girl Pink Tiara (186818)

Category	Classification 1 root | Assets | Product Images
Asset Object Type	Product Image
Get Inherited Pub Group Value	N/A
Object Type	Product Image
Get Inherited Publication Value	N/A
FirstPageNumber	0
LastPageNumber	0
Parent	1st Birthday Girl Pink Tiara
Asset Keywords	1st birthday, birthday girl, child birthday, tiara
Qty Of Items	1

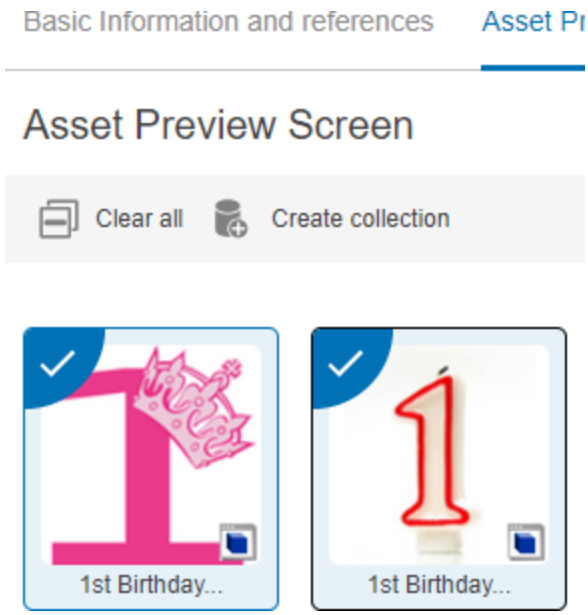
7. In the mandatory **References Types** field, click the **Add...** button to launch the Select Node(s) dialog for choosing the reference types.



8. Browse to or search for the asset reference types that you would like to display on the Asset Preview screen. Hold Shift or Ctrl to multiselect while making your choices.
9. Click **OK** to complete and close the Select Node(s) dialog.
10. Leave the Show Title parameter enabled if the Asset Preview Screen should display the title. Disable the parameter to hide the title and its associated white space.
11. If a title should display, determine if the default title should remain, or if a custom title is necessary. The default title will display as 'Asset Preview' on the screen in the top left corner (an example is shown in step 13)
12. The Asset Preview Screen Properties dialog closes and users can add any needed Actions under the Child Components.



13. Under **Child Components**, select the actions to display above the gallery of asset thumbnails (left panel of the Asset Preview screen) when assets are selected. In this example, there is the 'Create Collection Action.'



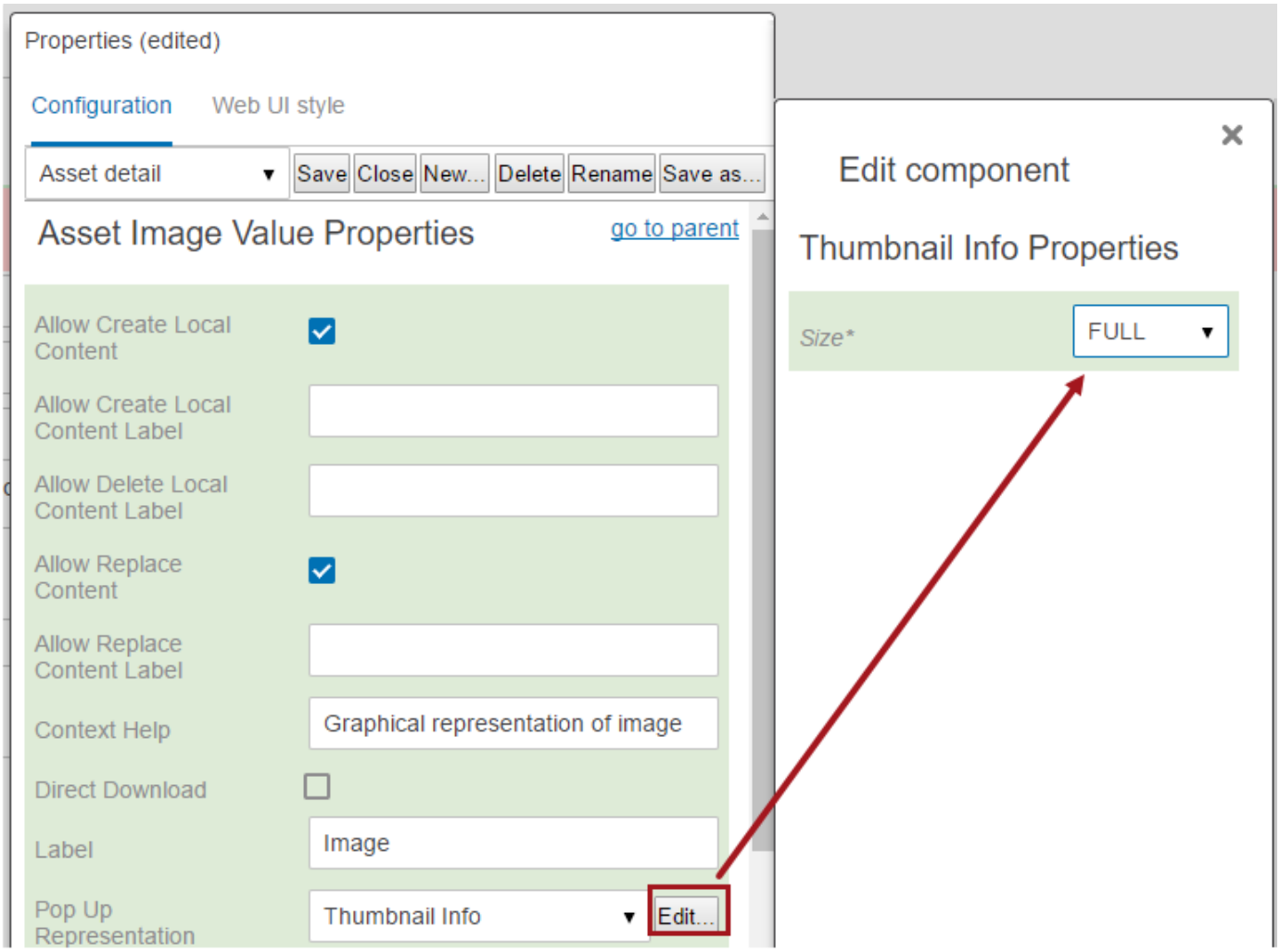
14. In the designer, click **Save** to save all configurations, then click **Close** to exit the designer.

Previews Using the Asset Image Value and Asset Mid Sized Components

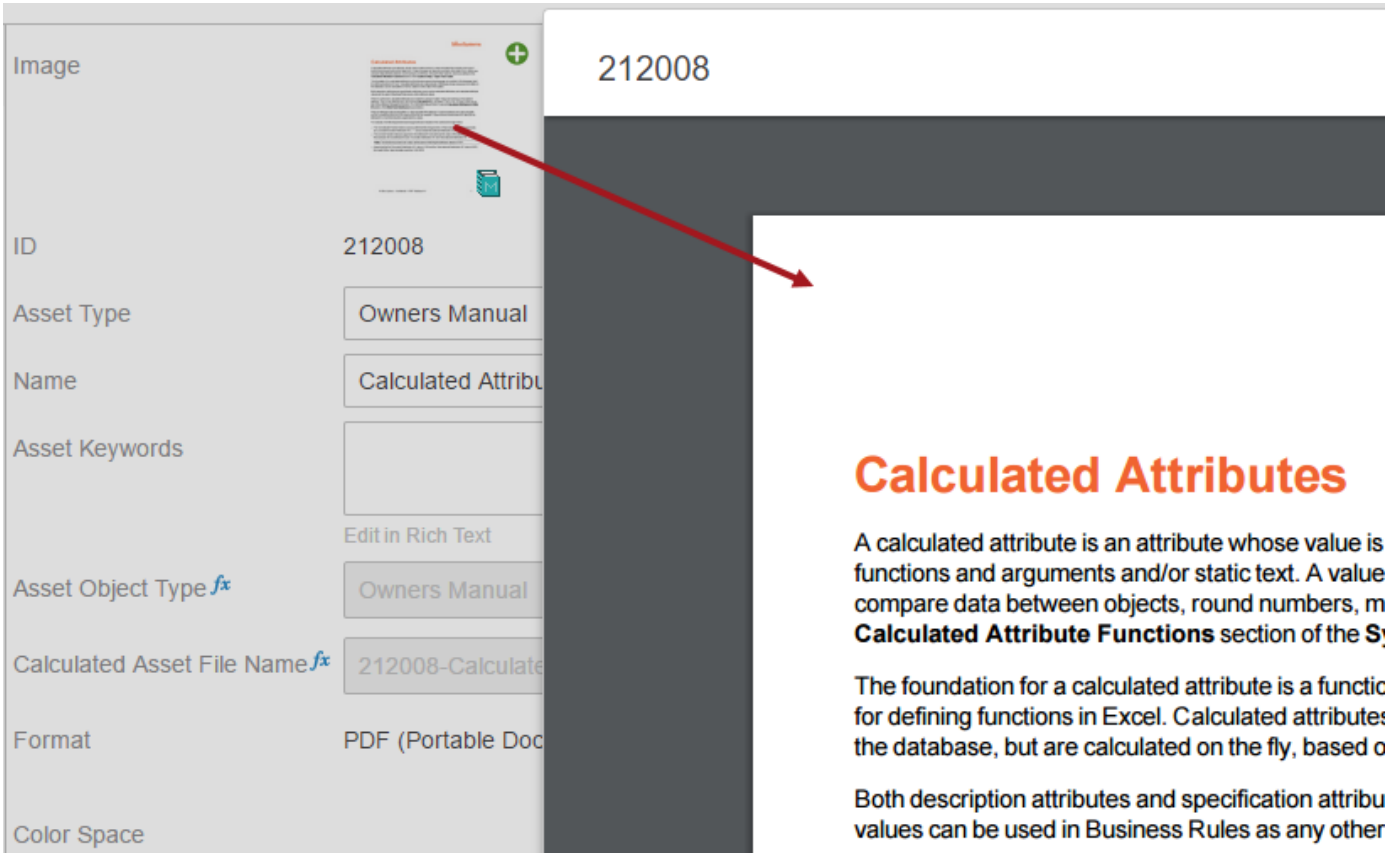
Two Web UI components—'Asset Representation' and 'Asset Mid Sized'—can also be configured to view large and scrollable previews of referenced assets, PDF, and Microsoft Office documents, as well as playable previews of video assets.

Asset Image Value

The Asset Representation component can be configured to view large, scrollable previews of assets by setting the **Pop Up Representation** parameter to FULL.



When the asset thumbnail is clicked, the full-size popup representation displays a scrollable preview (or, in the case of a video asset, a playable preview).



Asset Mid Sized

The Asset Mid Sized component is configured identically to the Asset Representation component to view large, scrollable previews of referenced assets—the **Pop Up Representation** parameter is set to FULL.

For more detailed information on these components, see the **Asset Mid Sized** and **Asset Representation** online help topics.

Important: The Asset Mid Sized component is superseded and may be removed in a future release. The Referenced Asset Representation Component is the recommended component to use when configuring display of a referenced asset's thumbnail on a selected product. For more information on this component, see the **Referenced Asset Representation Component** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Considerations and Limitations for Asset Previews in Web UI

- The Asset Preview Screen can only be used on product object nodes; it cannot be configured to view referenced assets on classification or entity nodes.
- A PDF reader plugin must be activated in your browser in order to display previews of PDFs, MS Office documents, and video files.

- Document previews (regardless of Web UI component) may not always be accurate down to fonts, image placement, etc., but they provide users the option to review the contents of the documents to ensure that they are the correct assets for the product in question.
- Though not strictly required for image previews to function, it is highly recommended to enable asset caching functionality in order to optimize performance when loading screens with large numbers of images. This ensures that the various image sizes used by the preview components are cached and available on-demand. For more information on asset caching, see the **Event Processors** section of the **System Setup** / **Super User Guide** documentation.
- Enhanced and scrollable Office document and PDF previews are only available on STEP systems in which a portable version of LibreOffice, the third-party library that STEP uses to generate the previews, has been installed.

  Note that the LibreOffice distribution is approximately 700 MB on Linux and 500 MB on Windows. Because this installation takes up such a large amount of disk space, it is optional. Without the installation, asset previews of Office and PDF documents will function as follows: a plain DOCX thumbnail will display for Word documents and a generic 'image' thumbnail will display for PDFs. Limited popup preview functionality will be available for the first page of PDF documents, and configurations can be applied to open PDFs in a new browser tab, but Office documents can still only be downloaded to the users' local computer.

- MS Office, PDF, and video assets uploaded to the STEP system before the installation of the LibreOffice patch will not present enhanced previews. Only documents uploaded to the STEP system after the LibreOffice installation will have the appropriate document preview / thumbnail.

Attribute and LOV Creation and Maintenance in Web UI

Attributes and LOVs can be created and maintained in Web UI, similar to STEP Workbench. This functionality in Web UI provides access for basic management of attributes and LOVs. With that in mind, some of the more advanced features available in workbench are unavailable, or available in a reduced manner, within the Web UI.

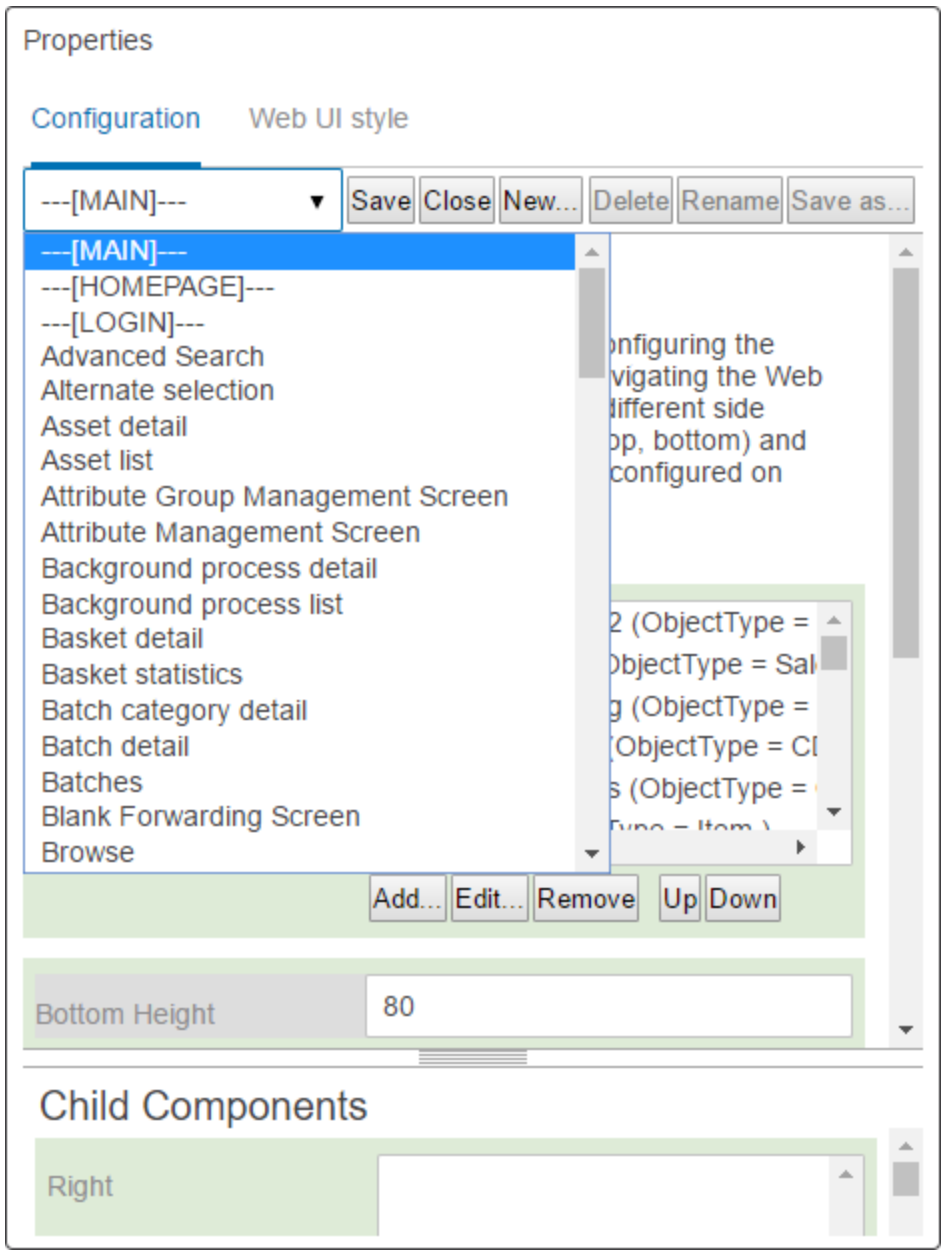
This section of the documentation describes how to configure and work with attribute and LOV management functionality in Web UI.

Attributes, attribute groups, Lists of Values (LOVs), and LOV groups can be created and maintained in the Web UI by accessing one of four screens. The screens, however, cannot be accessed without some basic configuration to enable those screens. In this topic, the step-by-step configuration for that initial setup is described. The screens (**Attribute Group Management screen**, **Attribute Management screen**, **List of Values Group Management screen**, and **List of Values Management screen**) are described in the sub-topics located after this one.

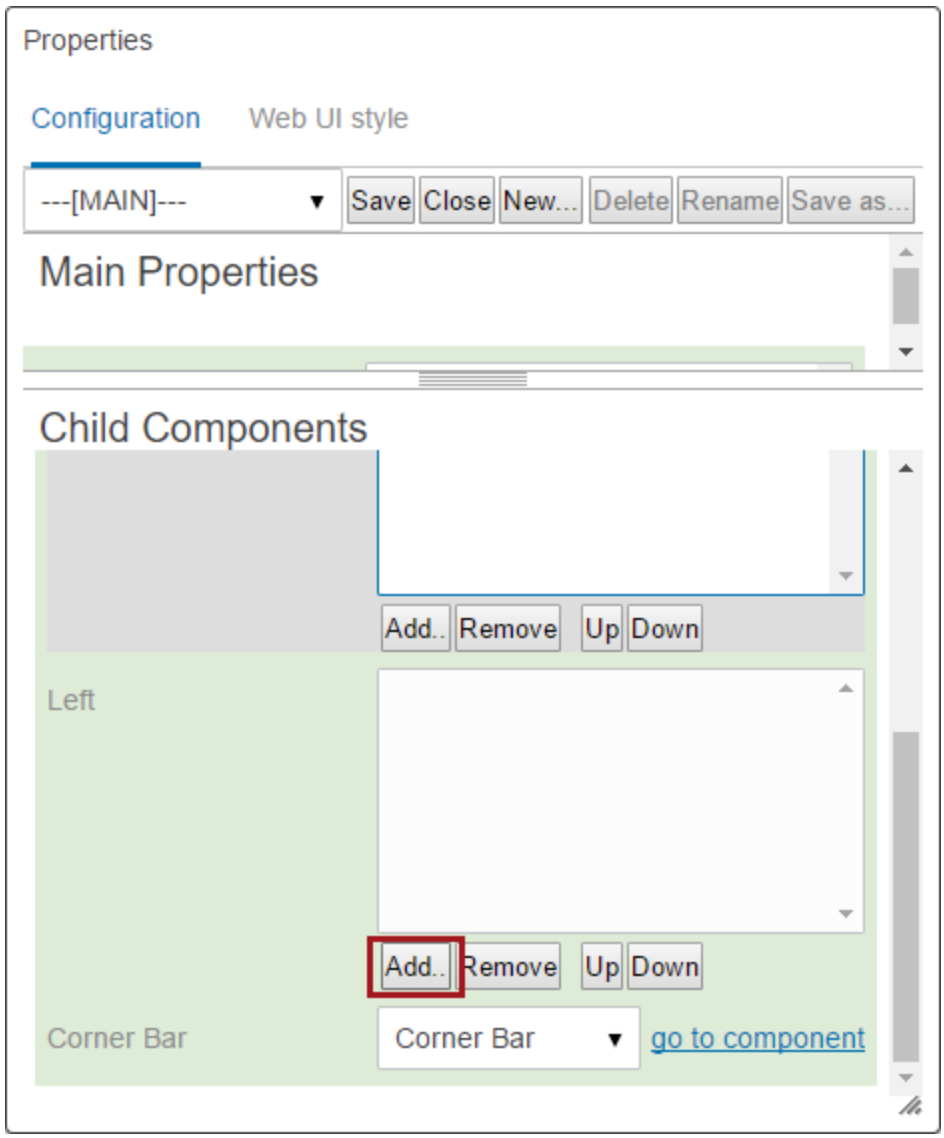
Adding the Stack Panel

In order to make attributes, attribute groups, LOVs and LOV groups accessible in the Web UI, the user must first add the **Attribute Group** and **List of Values Group** root nodes to the left navigation area, or **Stack Panel**, as a stack panel element. Before these nodes can be added, the Stack Panel must first be added in Web UI. If a user already has a left navigation element, they should skip ahead to the **Configuring the System Setup element in Web UI** section below. If the user's Web UI does *not* have a left navigation element, the following steps should be taken:

1. Once logged into the Web UI, open the Designer, and select **[MAIN]** from the dropdown screen menu.

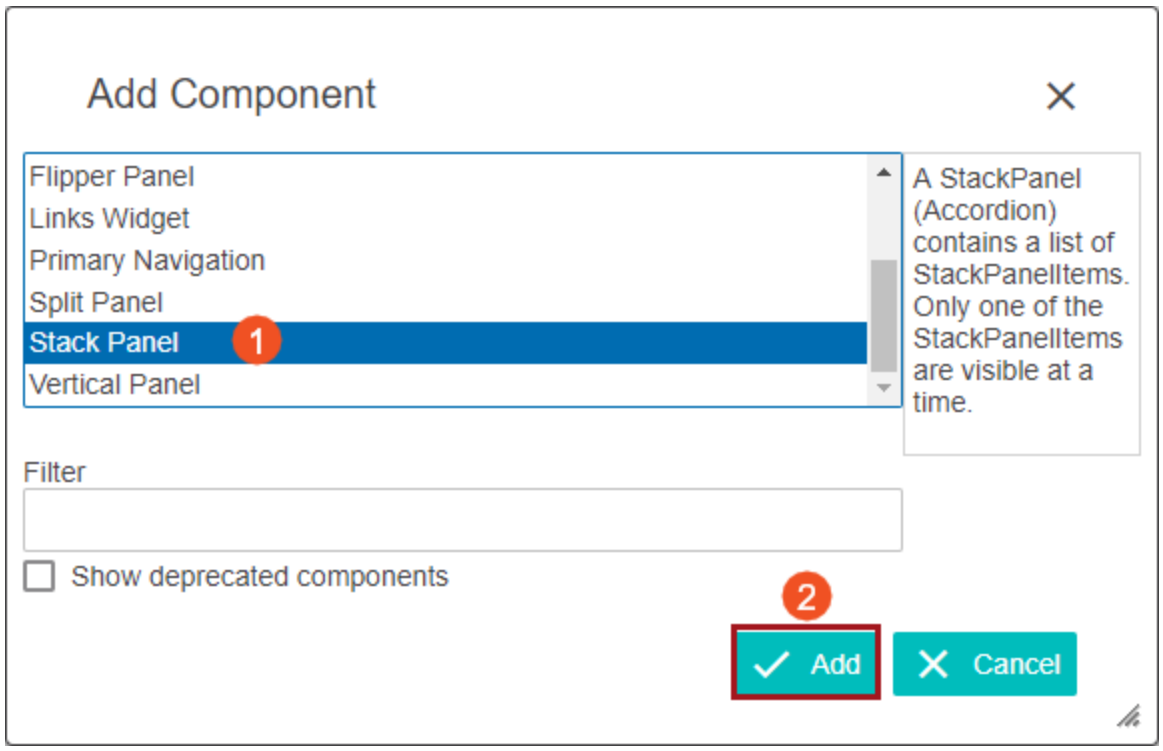


2. Under Main Properties, scroll down to the **Left** field in the **Child Components** section, and click the **Add** button.

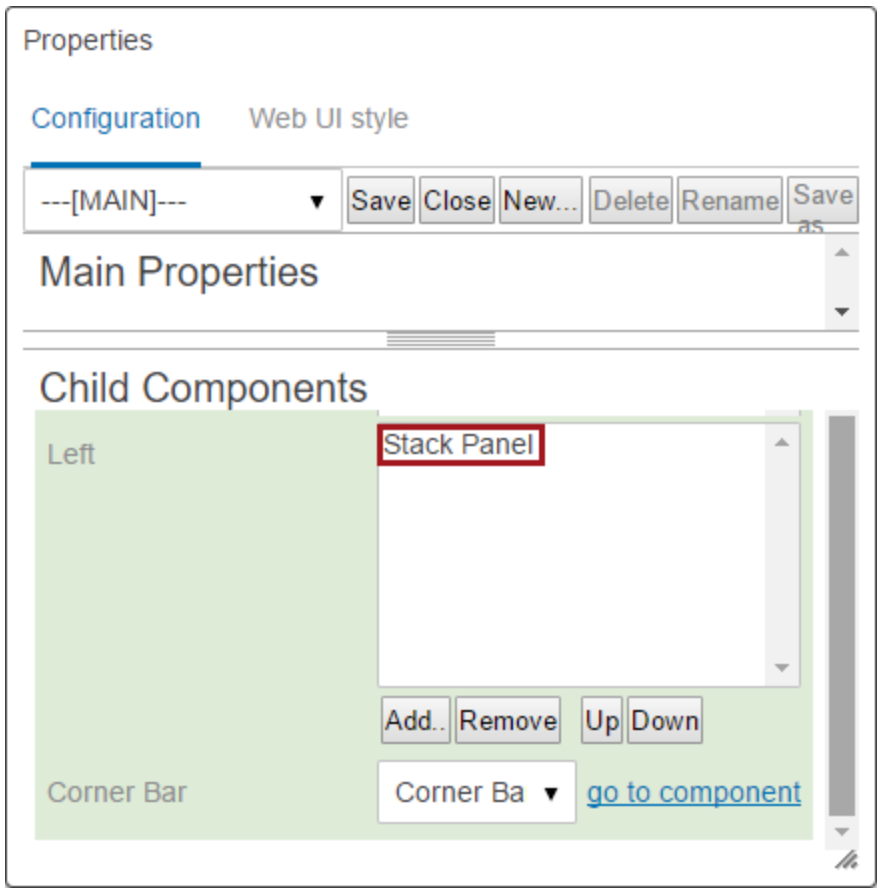


Note: It is also possible to configure access to these screens in a *right-screen* stack panel element, depending on the designer's preference.

3. In the **Add component** window, select **Stack Panel** and click the **Add** button. (Double clicking **Stack Panel** will accomplish the same goal.) This action adds the left navigation element to the Web UI screen.



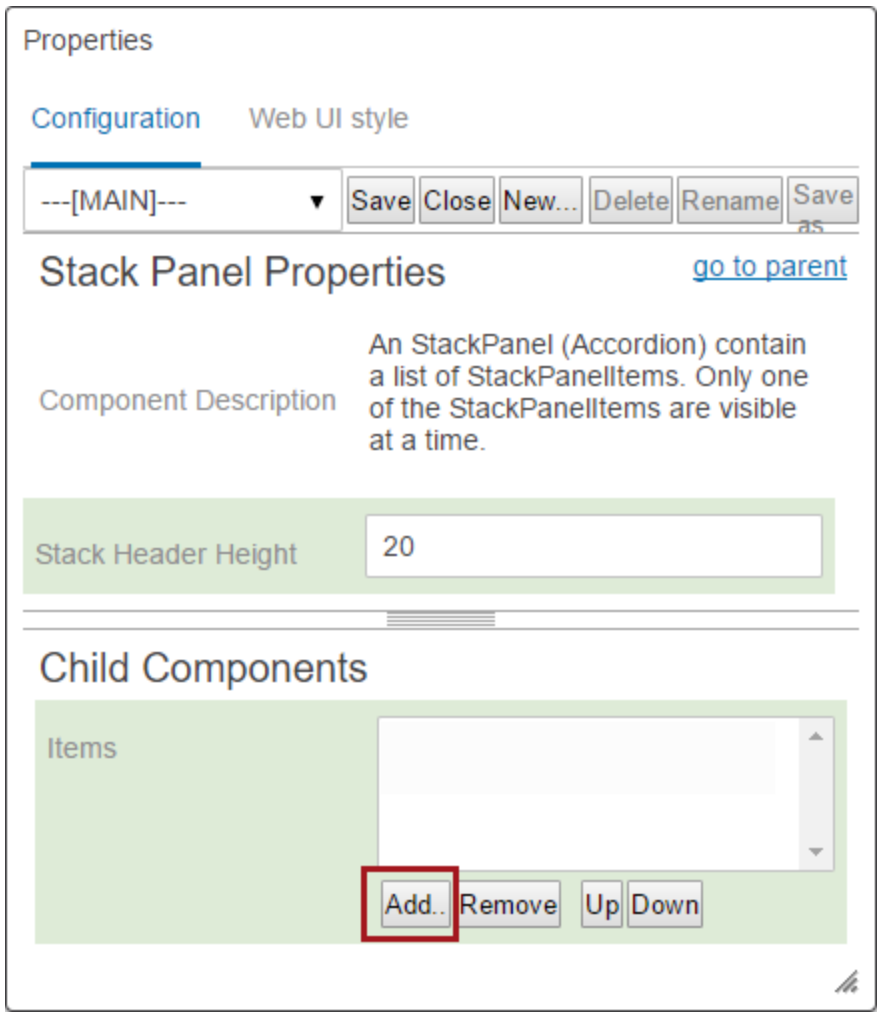
4. Double click the **Stack Panel** component that was just added. This will take the user into the **Stack Panel Properties** screen in order to begin adding the required components.



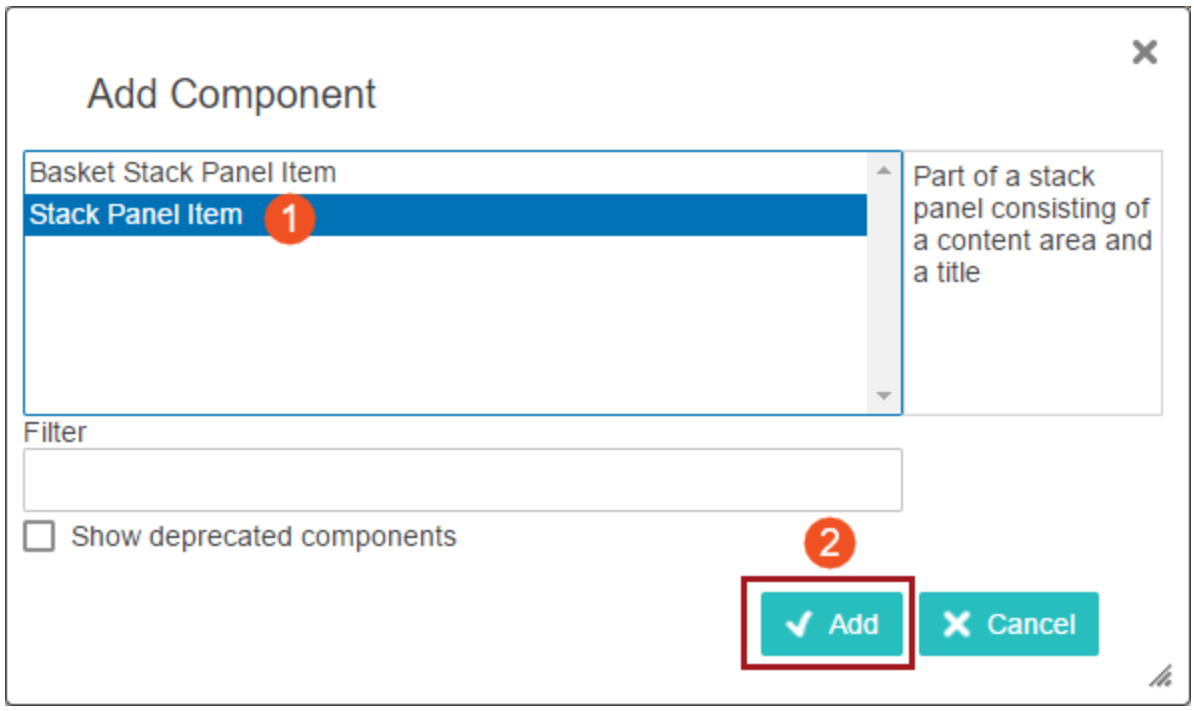
Configuring the System Setup Element in Web UI

To add Attribute and/or LOV hierarchies to a stack panel, follow the steps below.

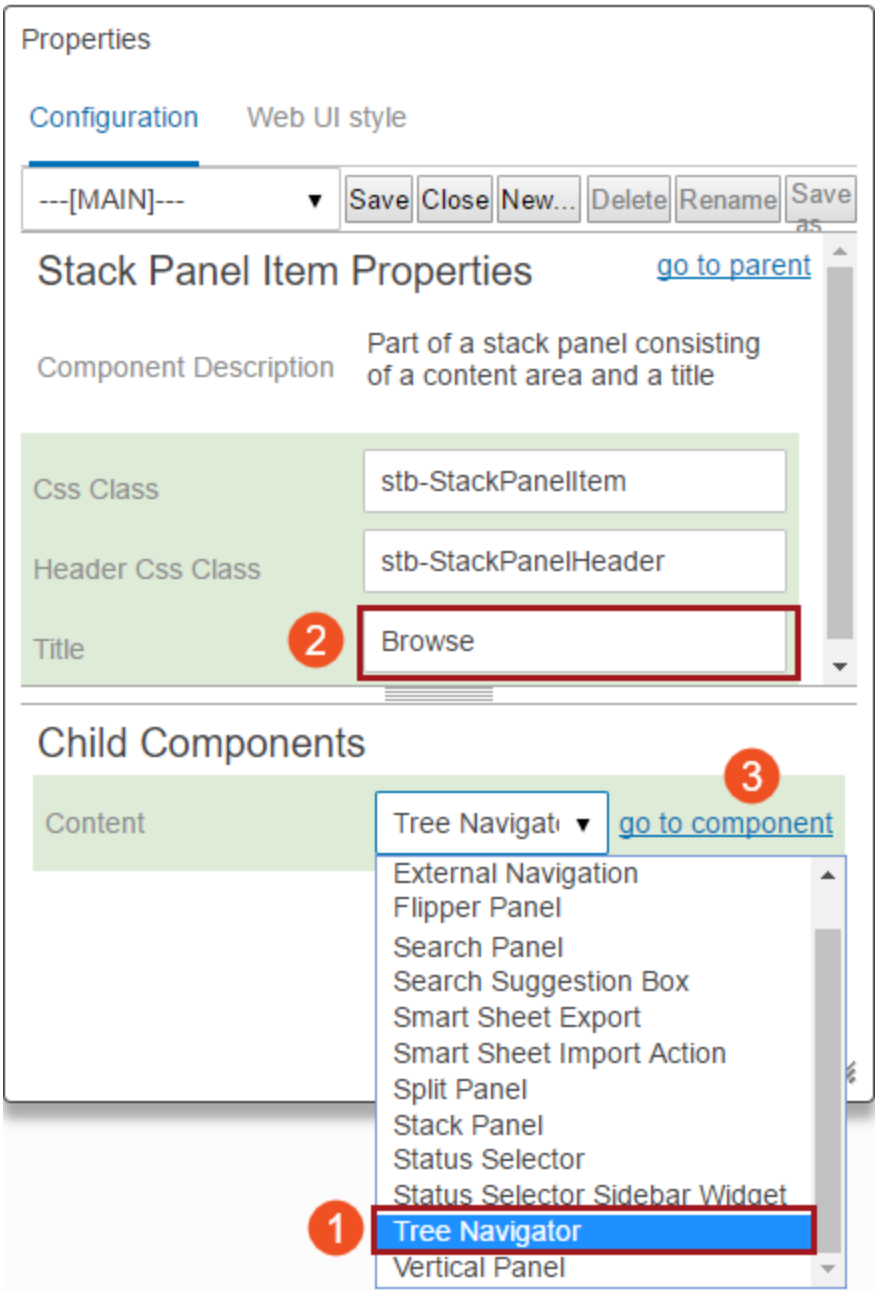
1. In the **Stack Panel Properties** window, click the **Add** button located beneath the **Items** field in the **Child Components** section.



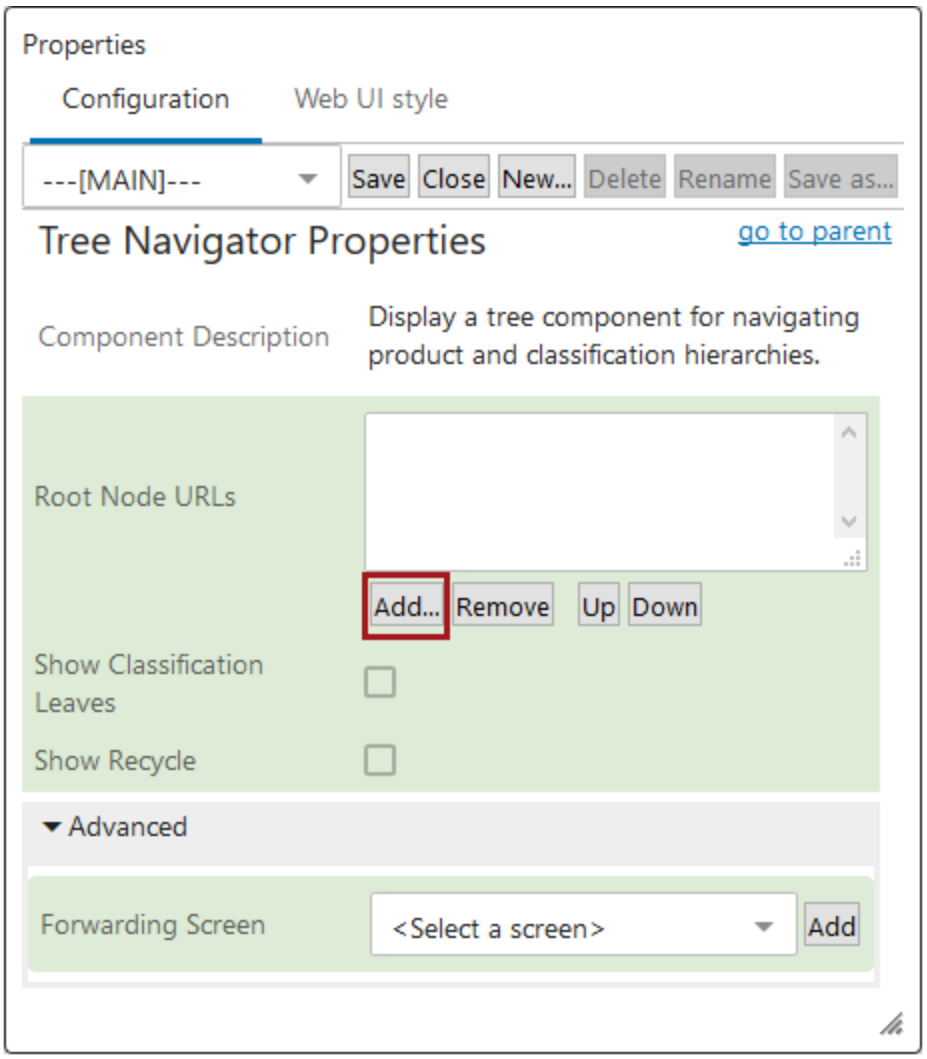
2. In the **Add component** dialog that appears, select **Stack Panel Item** and click **Add**. Once added, double click the new **Stack Panel Item** to navigate to its configuration.



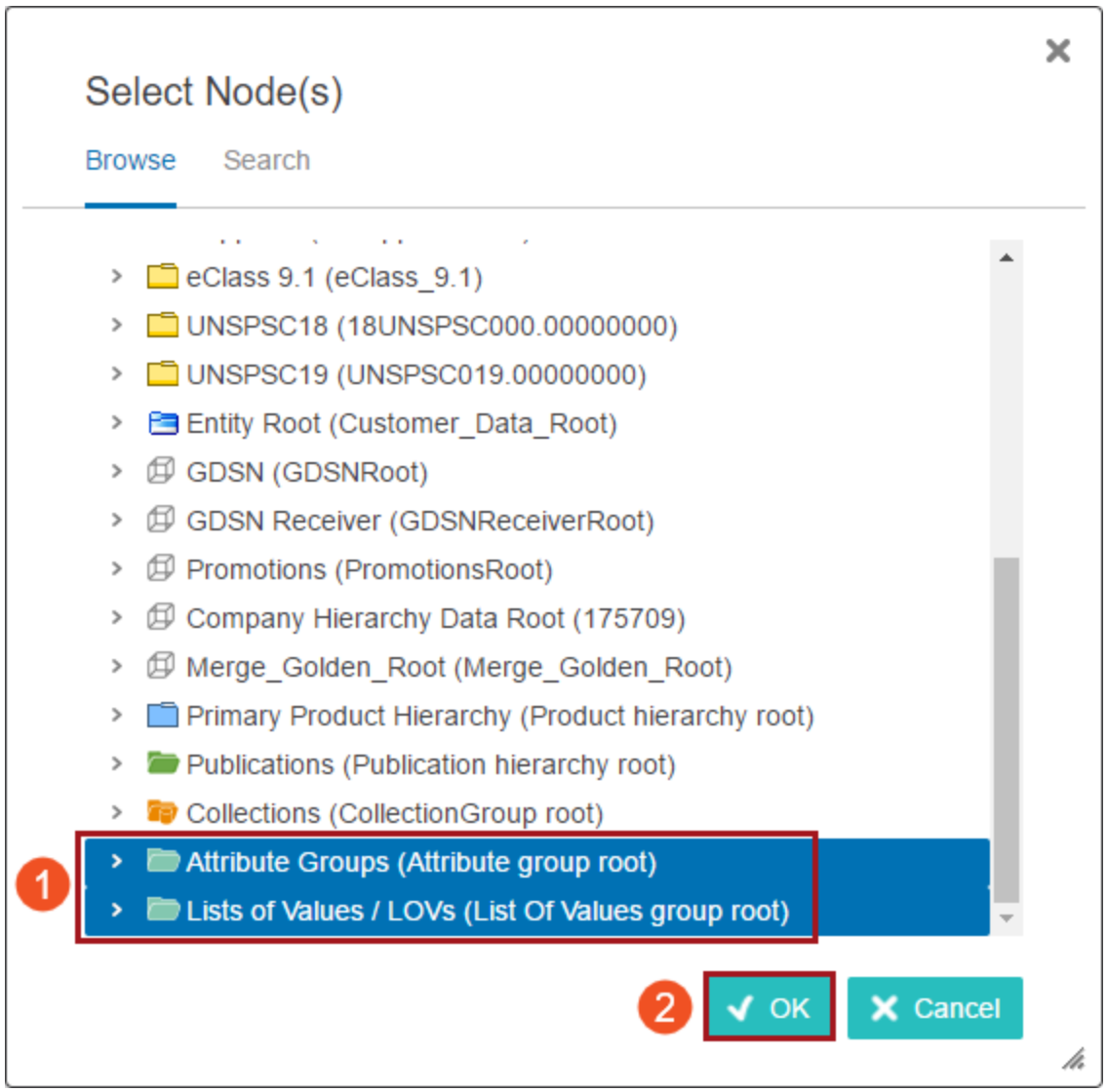
3. On the **Stack Panel Item Properties** configuration, click the **Content** dropdown in the **Child Components** section, and select **Tree Navigator**. In order to assign a useful name to this **Stack panel** element (the default is **Title**), you may consider amending the title in the **Title** field. Then click **go to component**, located to the right of the **Content** dropdown field.



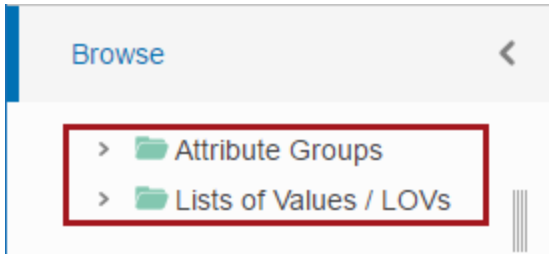
4. On the **Tree Navigator Properties**, beneath the **Root Node URLs** field, click the **Add** button. This is where the admin user can select the Attribute and LOV nodes to add to their stack panel.



5. In the **Select Node(s)** window the **Attribute Groups (Attribute group root)** and **Lists of Values / LOVs (List of Values group root)** will display in the list. You can select one or both of these nodes, and then click the **OK** button at the bottom of the window.



6. Save and close the Designer. Now the **Attribute Groups** and **Lists of Values / LOVs** nodes will appear in the **Stack Panel**.



For more information on configuring and using the various screens required to access the attribute, attribute group, LOV, and LOV group object types in Web UI, see the subsequent topics.

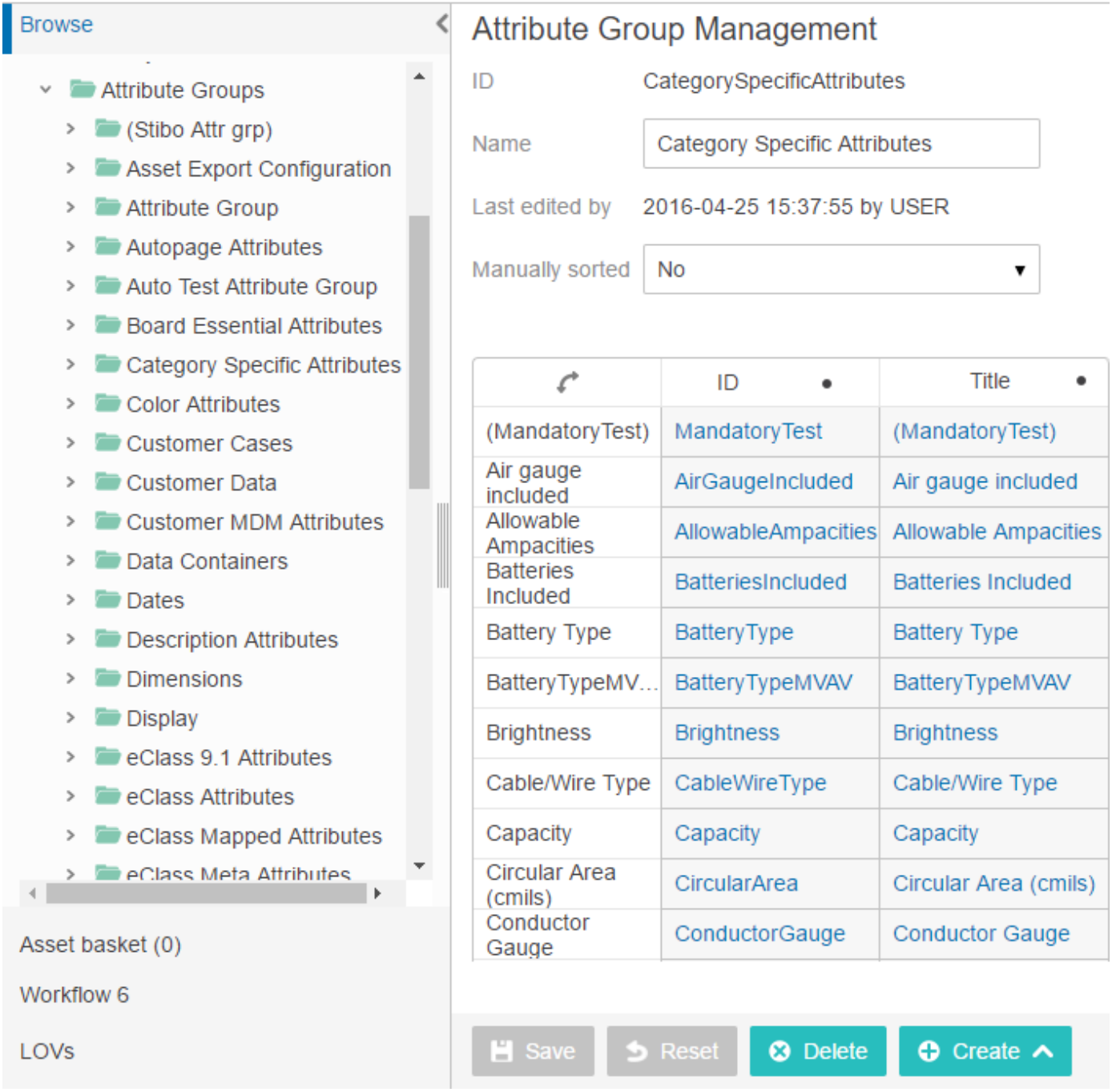
Considerations and Limitations

The intent of these components is to provide access for basic management of attributes and LOVs in Web UI. With that in mind, some of the more advanced features available in workbench are unavailable, or available in a reduced manner, within the Web UI.

- A calculated attribute editor available in Workbench is not provided in Web UI.
- The Web UI does not have capacity for managing changes to attributes that conflict with and/or impact existing data values for the attribute.
- Linking of attributes to hierarchies requires use of the previously existing Attribute Link Editor component.
- As with all STEP functionality, the ability to create and maintain attribute and LOV objects requires the user to have privileges to do so.

Attribute Group Management Screen

By using the **Attribute Group Management screen** in Web UI, users are able to create attributes and create and configure attribute groups.

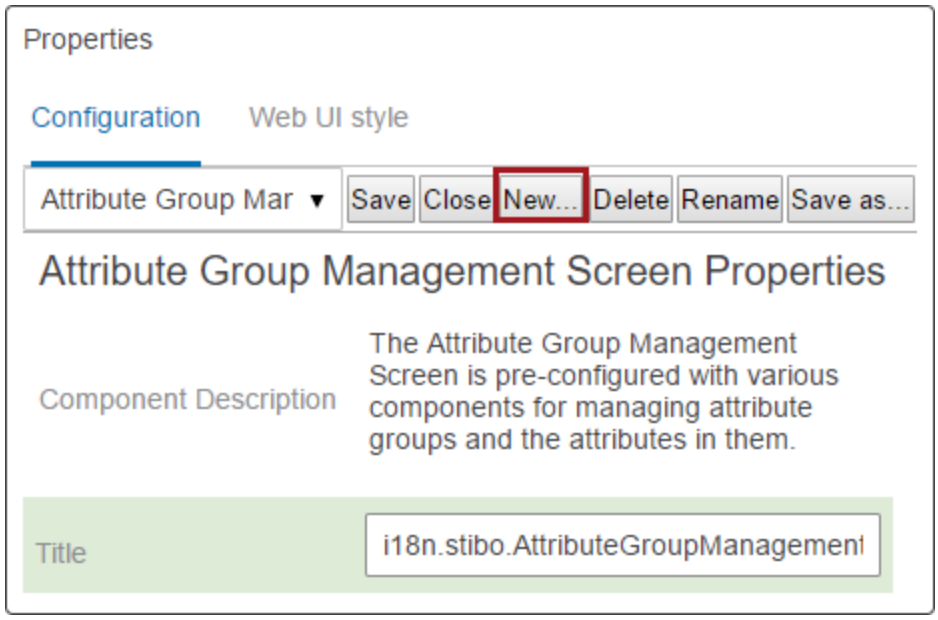


Configuring the Attribute Group Management Screen

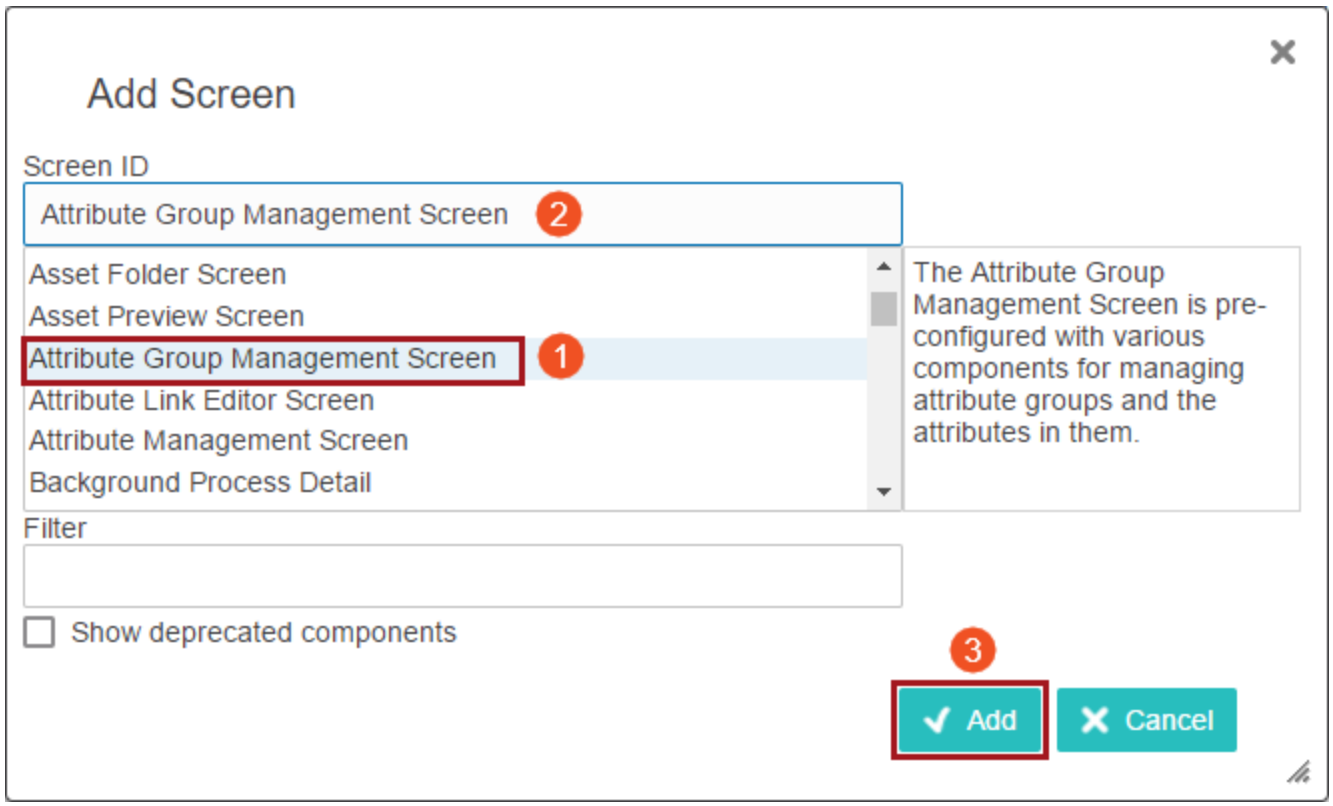
Before configuring the screen, it is assumed that the general configuration described in the **Attribute and LOV Creation and Maintenance in Web UI** section of the Web UI documentation has been completed so that users can access the screen via the stack panel.

To create the **Attribute Group Management screen**, follow the steps below.

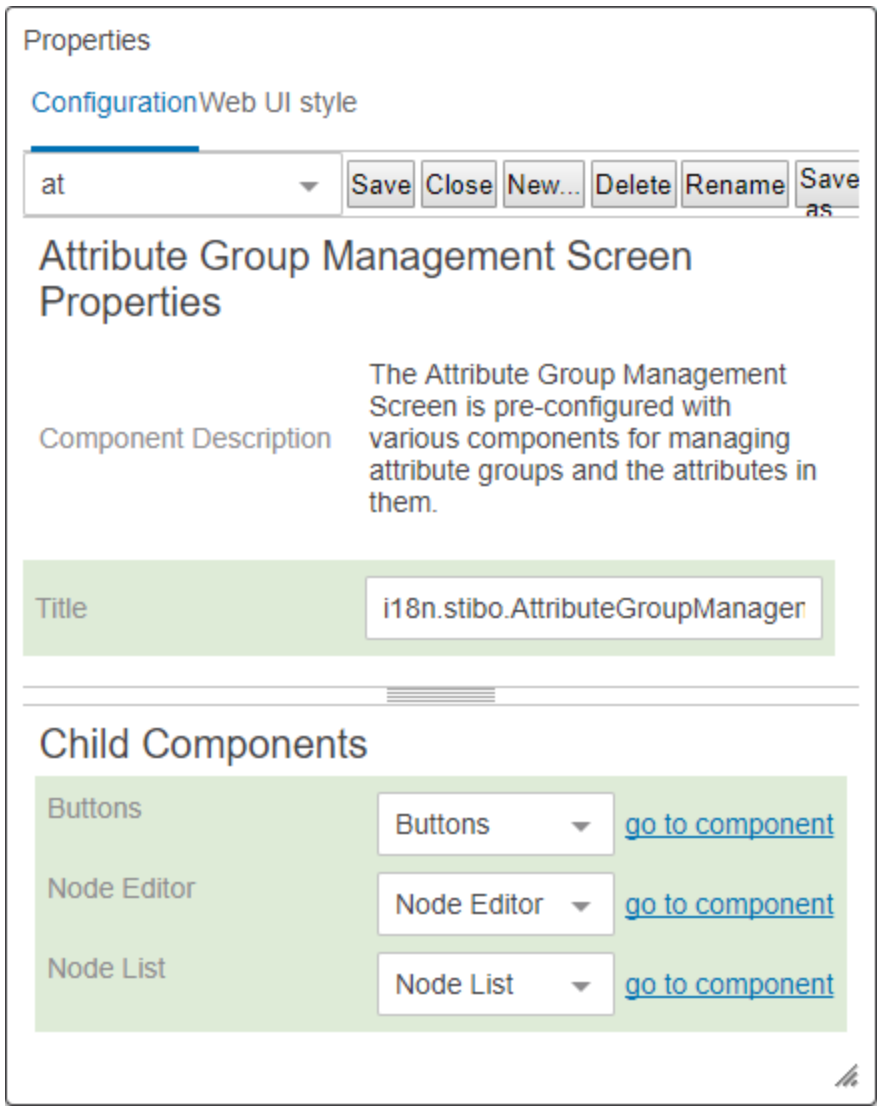
1. In the **Designer**, click the **New** button.



2. In the **Add screen** window, find **Attribute Group Management screen** in the list of screen names. Select it and then, in the **Screen ID** field, type the name you would like to give this screen in your Web UI. Unless there's a specific business need to change the name, it is simplest to copy the pre-configured screen name. Once the name's been added, click **Add**.



3. The screen comes pre-configured with all necessary child components so additional screen-specific configuration is not required.



However, as with all new screens, it must be mapped using the **Mappings** parameter in the **---[MAIN]---** dropdown in the Designer. The screen can be mapped using the **Object Type Condition** and selecting the **Attribute Group** node (under Basic Object Types).

Using the Attribute Group Management Screen

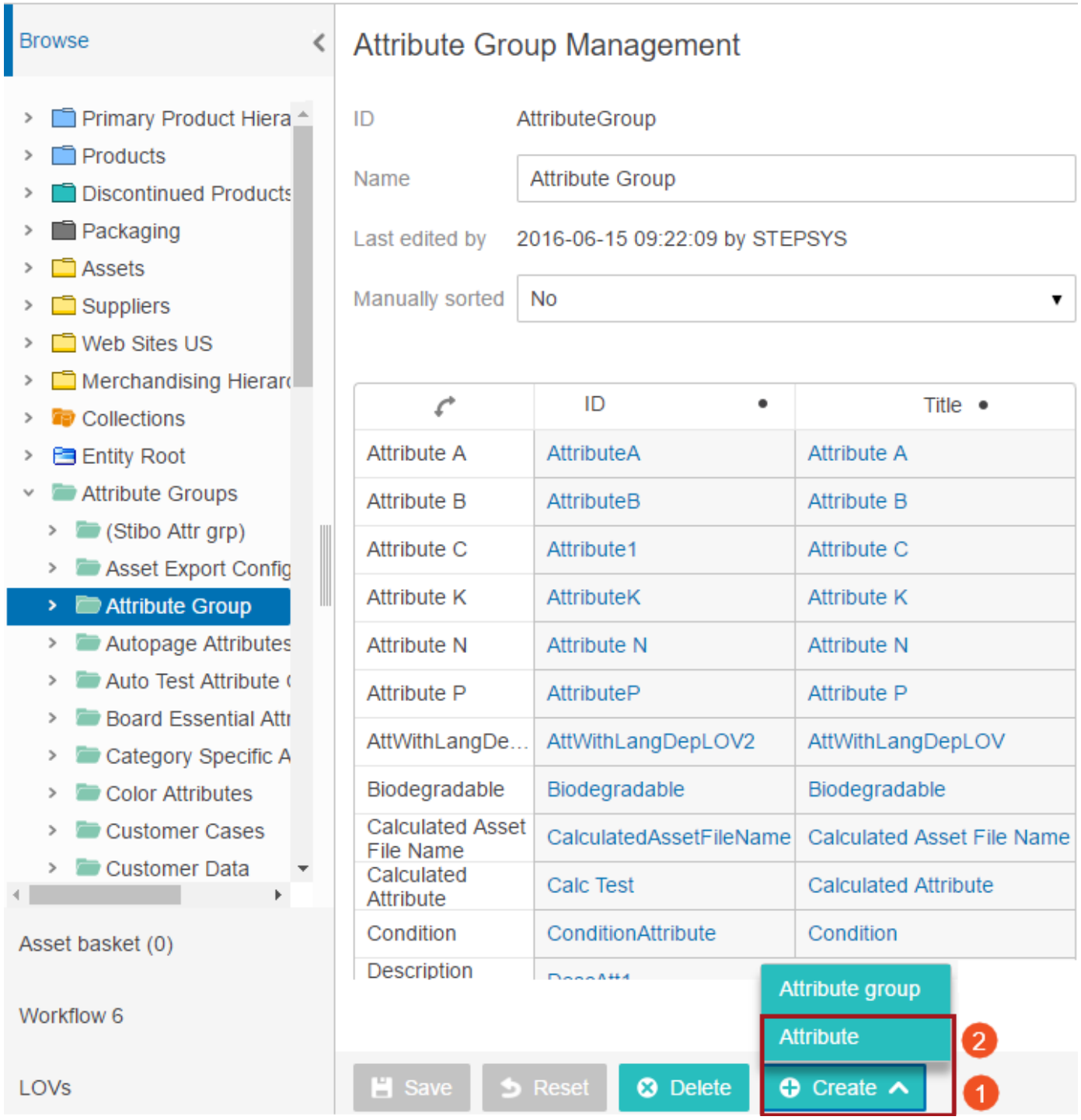
The following sections describe how to work with attributes and attribute groups within the **Attribute Group Management screen**.

Creating Attributes

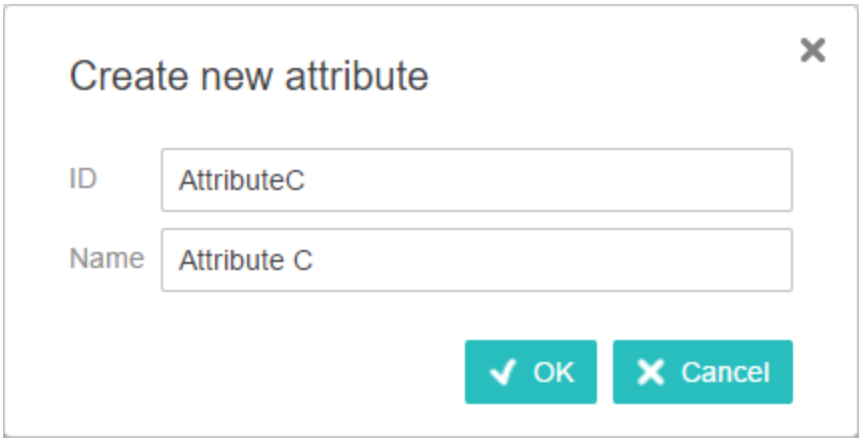
To create a new attribute in Web UI in the **Attribute Group Management screen**, follow these steps:

1. In the **System Setup** tree (located in the left navigation **Stack Panel**), select the attribute group into which you would like to add your attribute. At the bottom of the **Attribute Group Management screen**, click the **Create**

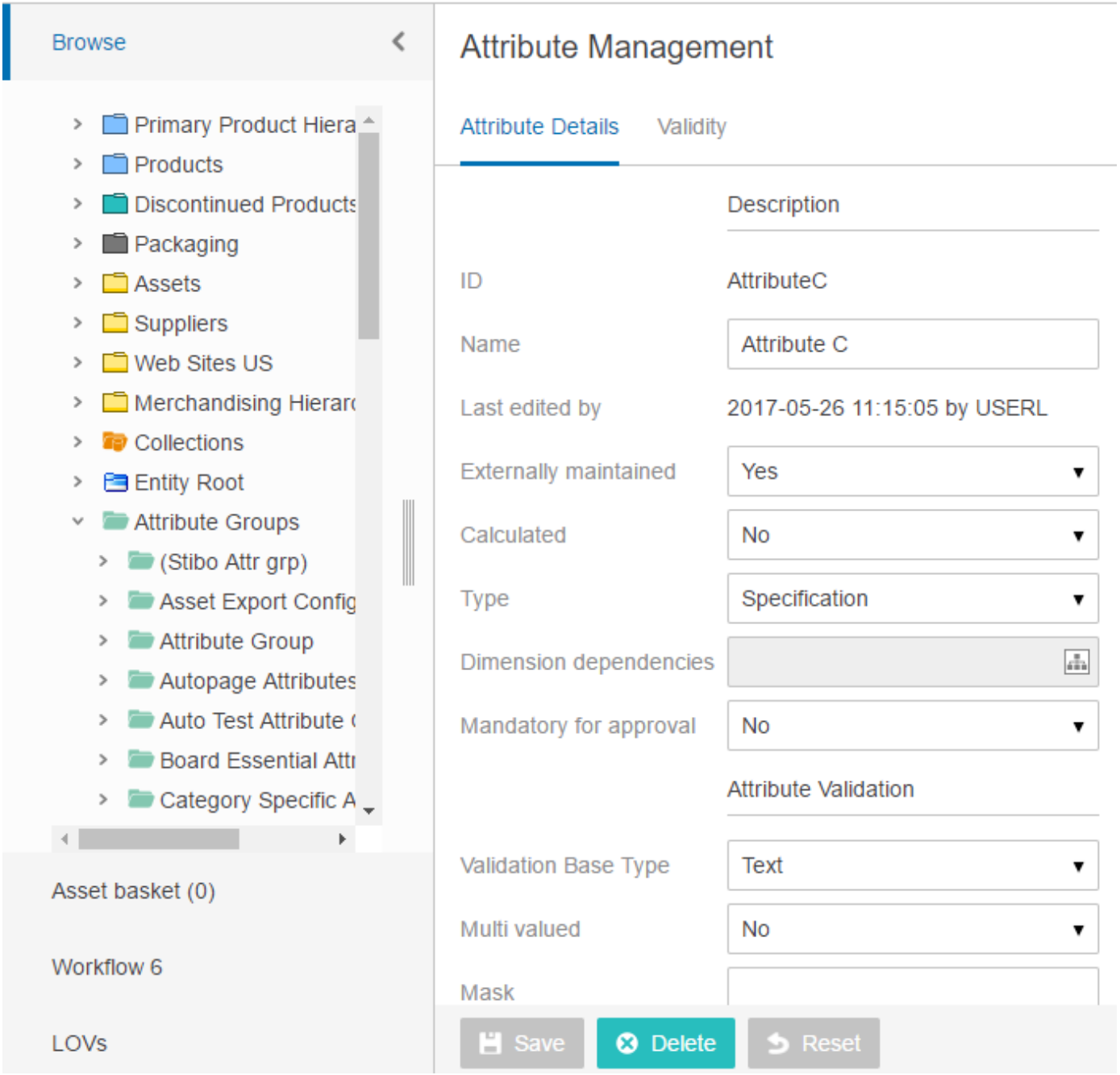
button and then select **Attribute**.



2. In the **Create new attribute** window, add the ID and Name of the attribute and then click **OK**.



3. The **Attribute Management screen** then displays. This is where you will view and edit the newly created attribute.



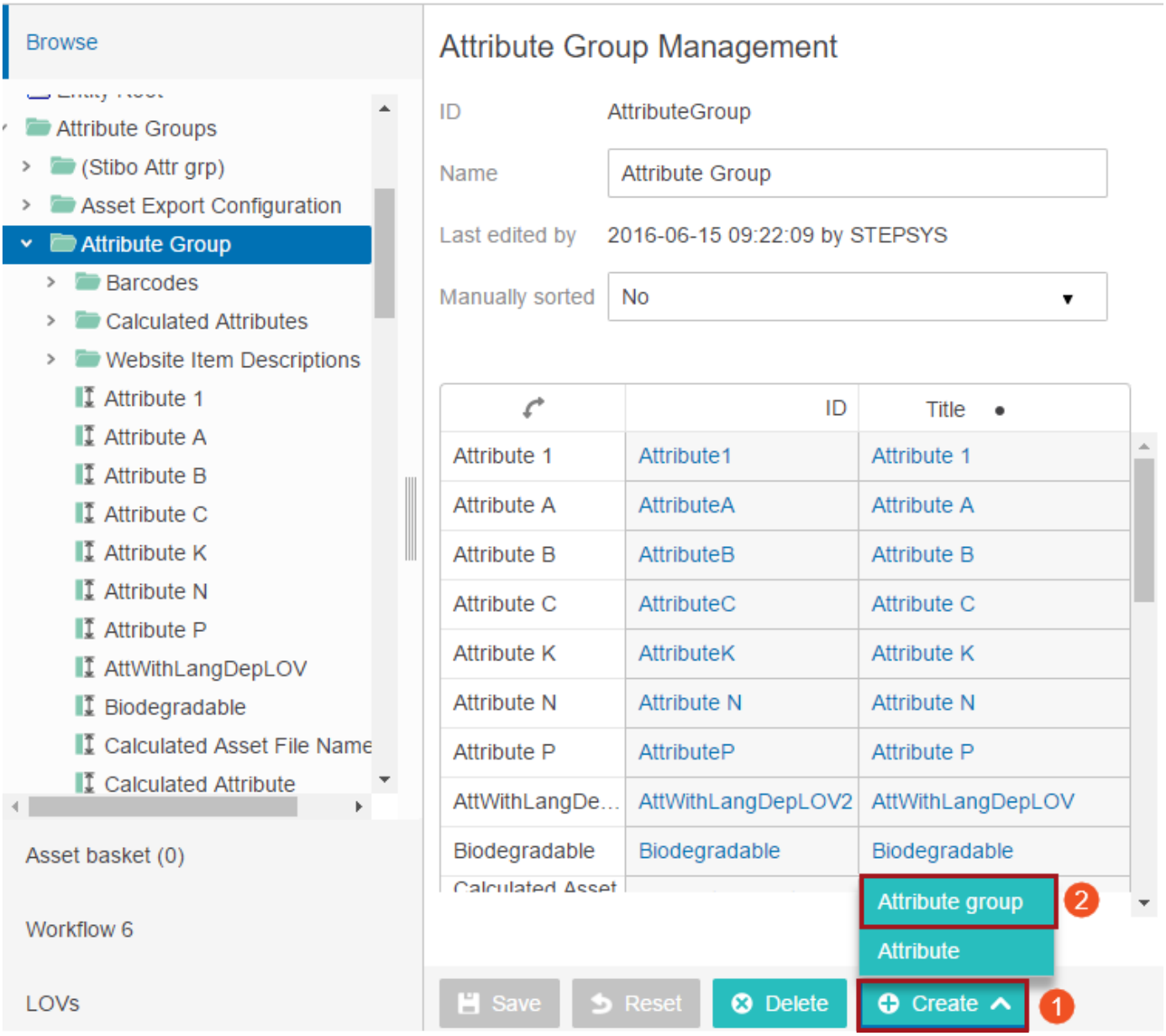
4. To edit and configure the attribute, follow the instructions outlined in the **Attribute Management screen** section of the **Web User Interfaces** documentation.

Note: In order to link attributes to hierarchies you may configure and use the **Attribute Link Editor** component in Web UI, accessible in the Tree.

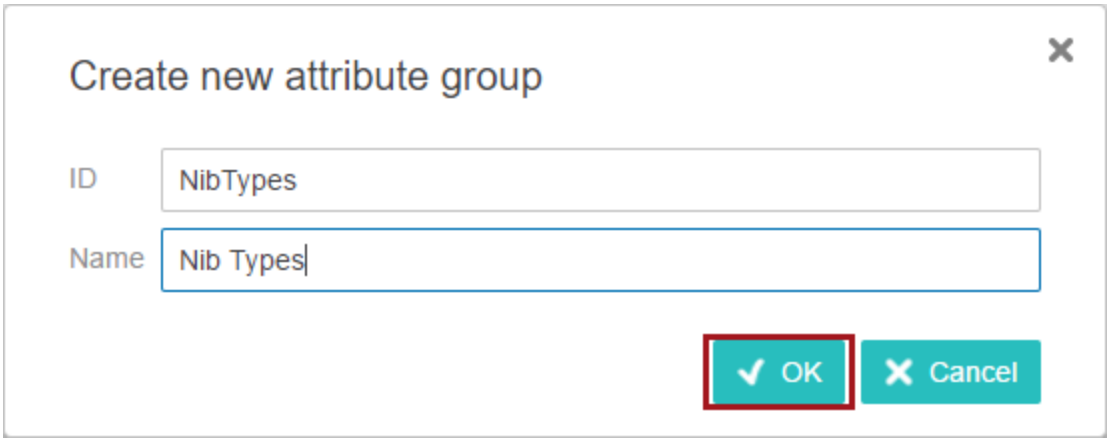
Creating Attribute Groups

To create a new attribute group in Web UI, follow these steps:

1. Select either the topmost level of the attribute group hierarchy (parent node) or another attribute group in which you would like to nest your new attribute group. The **Attribute Group Management screen** displays.
2. At the bottom of the **Attribute Group Management screen**, click **Create** and then select **Attribute group**.



3. In the **Create new attribute group** window that displays, add an ID and Name for the attribute group and then click **OK** to close the window.



4. The new attribute group is created.

Note: An attribute group can only be created as a child of a higher-level (parent) attribute group. An attribute group cannot be created when an attribute is selected. An attribute group cannot be created within a parent attribute group when 'Manually sorted = Yes' is set on the parent attribute group.

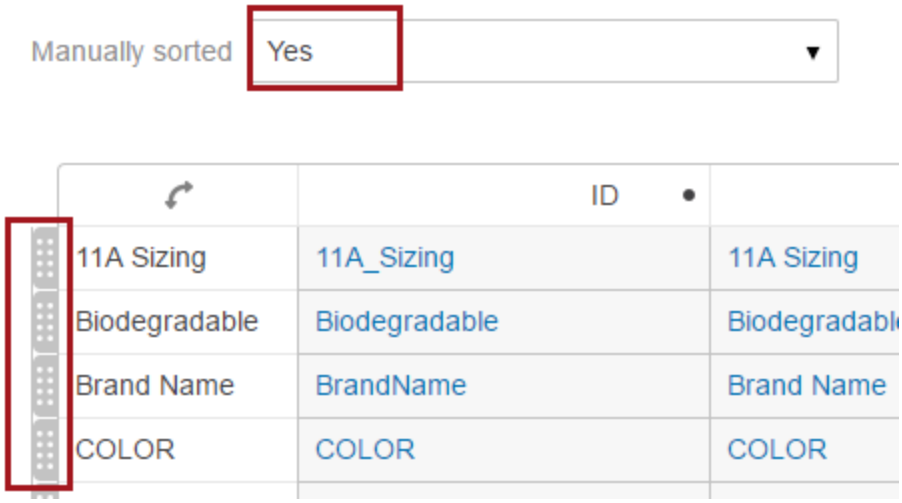
Maintaining Attribute Groups

In addition to attribute group creation, the **Attribute Group Management screen** also enables you to edit the names of attribute groups, delete attribute groups, and manually reorder attributes.

- **Edit:** To edit the name of an attribute group, make the required changes to the attribute group in the **Name** field and then click the Save button.
- **Delete:** To delete an attribute group, select the attribute group to be deleted in the left navigation area, and then click the Delete button.

Important: Only empty attribute groups can be deleted. Attribute groups that contain attributes cannot be deleted until the child attributes have been deleted or moved into another attribute group.

- **Manually sort:** To manually sort attributes in an attribute group, first select **Yes** for **Manually sorted** and then click the **Save** button. 'Drag handles' appear to the left of each attribute. Click and hold an attribute's drag handle, then drag to move it to its new location.



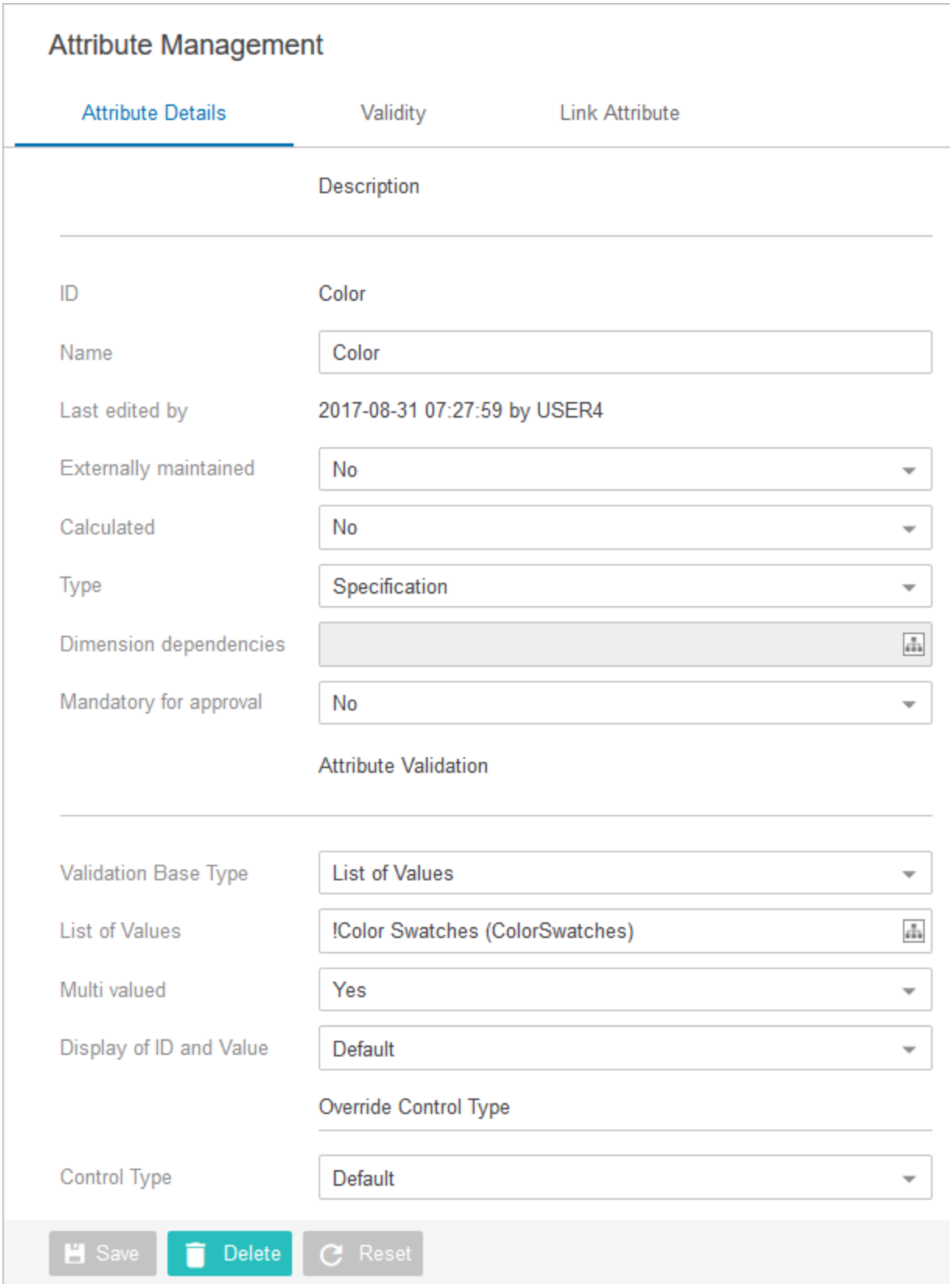
It is worth noting that the **Manually sorted** for attribute groups cannot be set to **Yes** for existing attribute groups in the below cases:

- If an attribute group contains sub attribute groups
- if an attribute group contains tag groups
- If an attribute group contains reference types

Attribute Management Screen

By using the **Attribute Management screen** in Web UI:

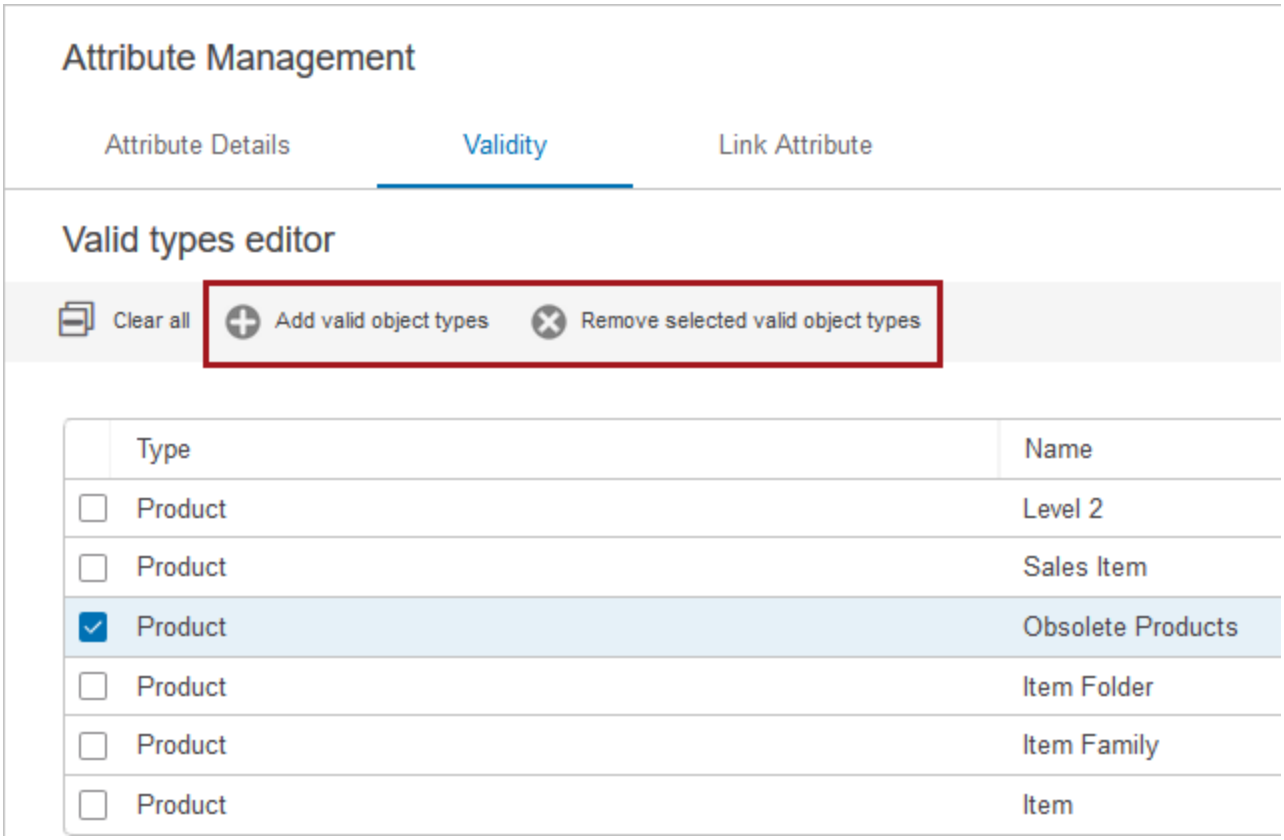
- Users can edit and configure existing attributes
- Users can efficiently manage how each attribute value should display and/or behave across all Web UI screens without requiring screen-by-screen setup by the Web UI designer


Attribute Management
Attribute Details
Validity
Link Attribute
Description
ID
Color
Name
Color
Last edited by
2017-08-31 07:27:59 by USER4
Externally maintained
No
Calculated
No
Type
Specification
Dimension dependencies
Mandatory for approval
No
Attribute Validation
Validation Base Type
List of Values
List of Values
!Color Swatches (ColorSwatches)
Multi valued
Yes
Display of ID and Value
Default
Override Control Type
Control Type
Default
Save
Delete
Reset

Using the Attribute Management screen

Once configured and mapped, the Attribute Management screen is displayed when a user has selected an attribute via navigation in the left panel, as shown in the Configuring the Attribute Management Screen section below. Three tabs display on the **Attribute Management screen** by default: **Attribute Details**, **Validity**, and **Link Attribute**.

1. **Attribute Details tab:** On this tab the user is able to edit and configure an existing attribute, and its default control type. Attribute definitions can be either configured or modified in this tab. For more information about managing the control types in Web UI, see the **Override Control Type Rule** section of the **Main Properties Overview** documentation.
2. **Validity tab:** On this tab the user can configure which object types the attribute is valid for. The user can add or remove the desired object type using the standard configured actions – 'Add valid object types' and 'Remove selected valid object types.'



   - To add valid object types, click on **Add valid object types action** and browse or search for the desired product object type.
   - To remove selected valid object types, select the object types that need to be removed, and click on **Remove selected valid object types**.
3. **Link Attribute:** On this tab the user can link the attribute to a product or classification.

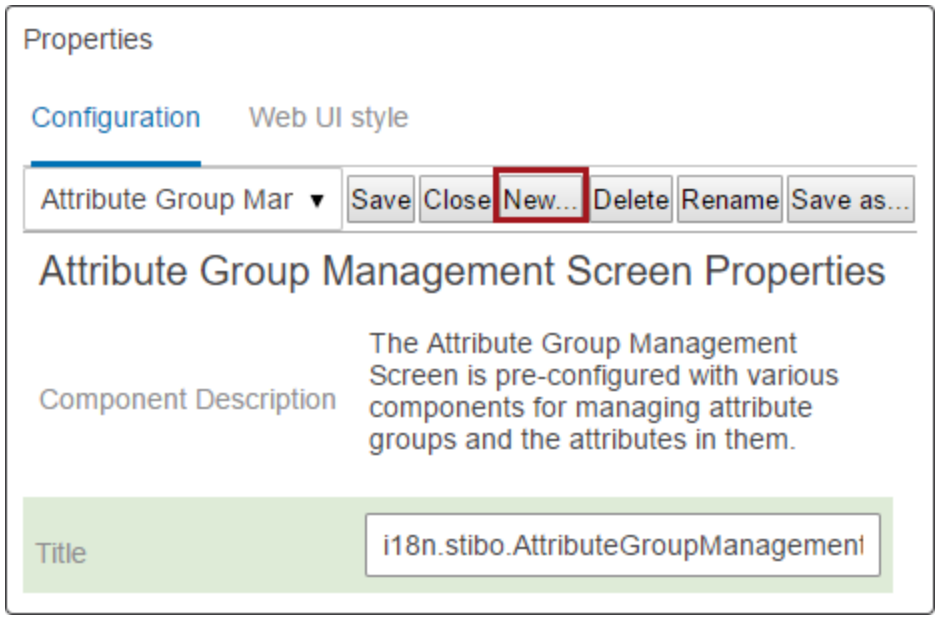
Functionality available on each tab is comparable to what is available in the workbench, though some advanced configuration options may not be available in the Web UI. For more information on creating attributes, see the **Creating Attributes** section of the **System Setup / Super User Guide** documentation. For more information on linking an attribute to a product, see the **Linking Specification Attributes** topic in the **System Setup / Super User Guide** documentation.

Configuring the Attribute Management screen

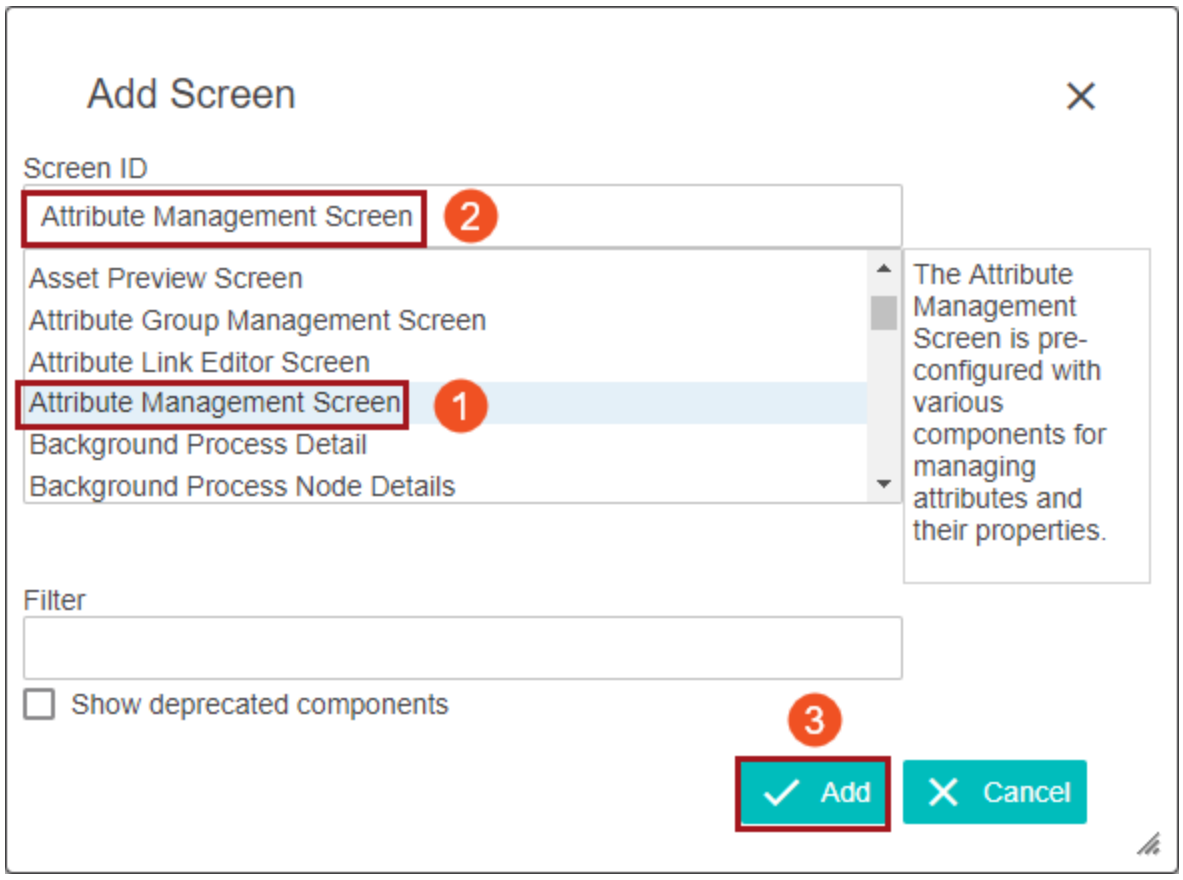
Before configuring the screen, it is assumed that the general configuration described in the **Attribute and LOV Creation and Maintenance in Web UI** section of the Web UI documentation has been completed so users can access the screen via the stack panel.

To create the **Attribute Management screen**, follow the steps below.

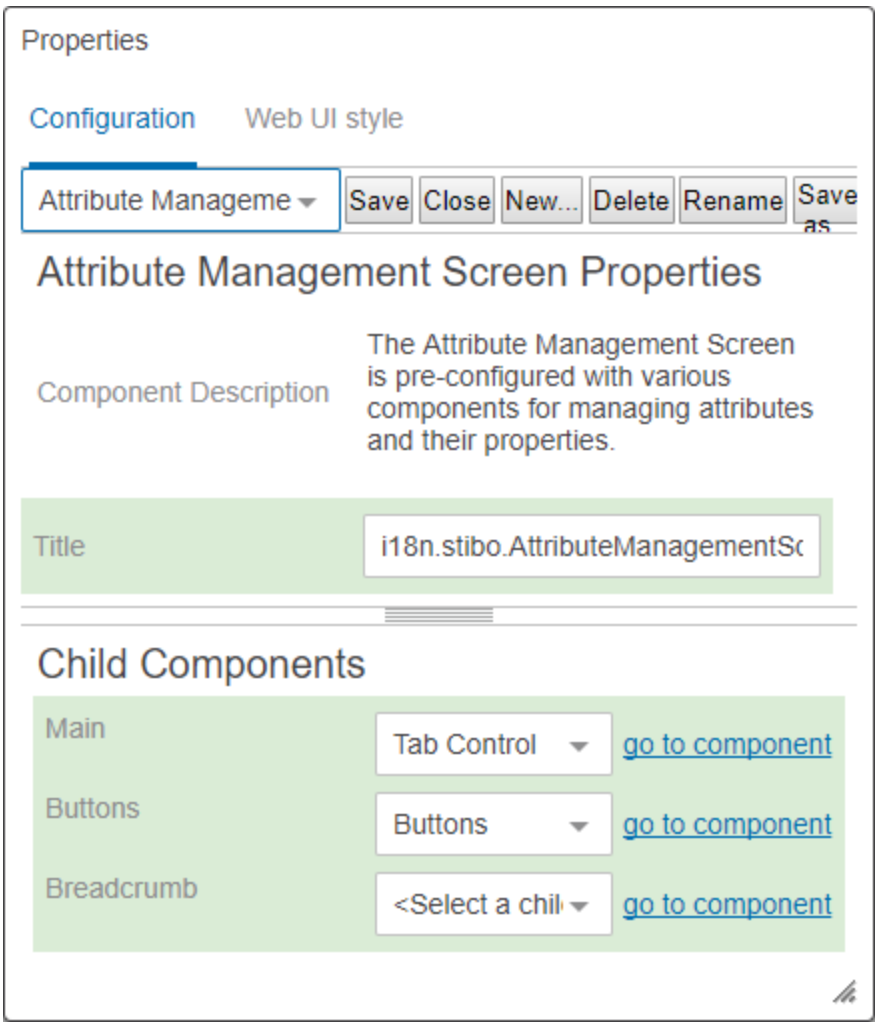
1. In the **Designer**, click the **New** button.



2. In the **Add screen** window, find **Attribute Management screen** in the list of screen names. Select it and then, in the **Screen ID** field, type the name you would like to give this screen in your Web UI. Unless there's a specific business need to change the name, it is simplest to copy the pre-configured screen name. Once the name's been added, click **Add**.



3. The screen comes pre-configured with the required child components, so additional configuration is not required.

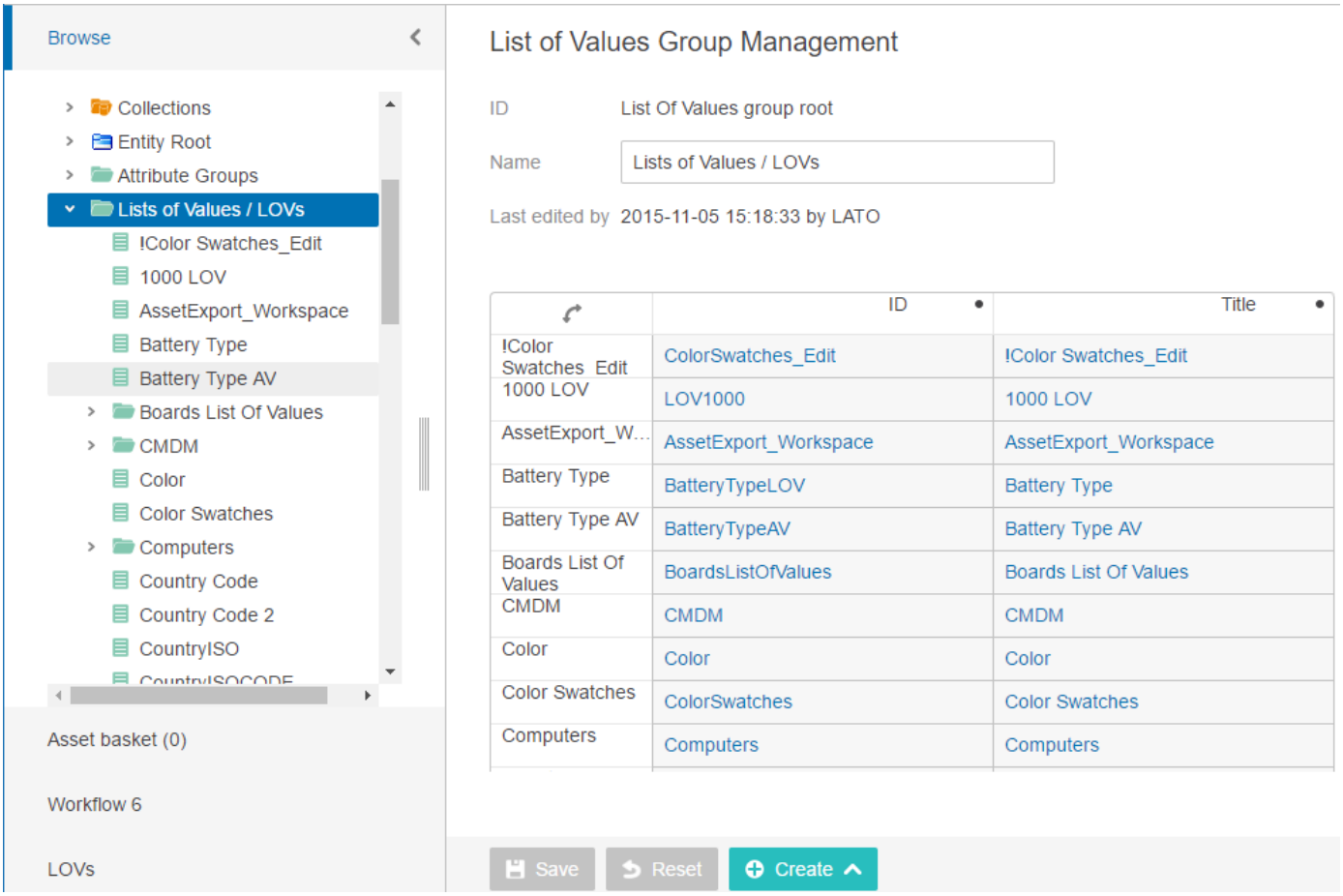


However, the screen is fully configurable and it is possible to add additional components, such as metadata attributes, using standard Web UI configuration options (e.g. addition and configuration of child components). Though possible, it is not recommended to remove the pre-configured components as it may compromise the user's ability to fully edit and maintain attributes.

4. Finally, as with all new screens, it must be mapped using the **Mappings** parameter in the **---[MAIN]---** dropdown in the Designer. The screen can be mapped using the **Object Type Condition** and selecting the **Attribute** node (under Basic Object Types > Attribute Group).

List of Values Group Management Screen

By using the **List of Values Group Management screen** in Web UI, users can create Lists of Values (LOVs) group and create and configure LOVs.

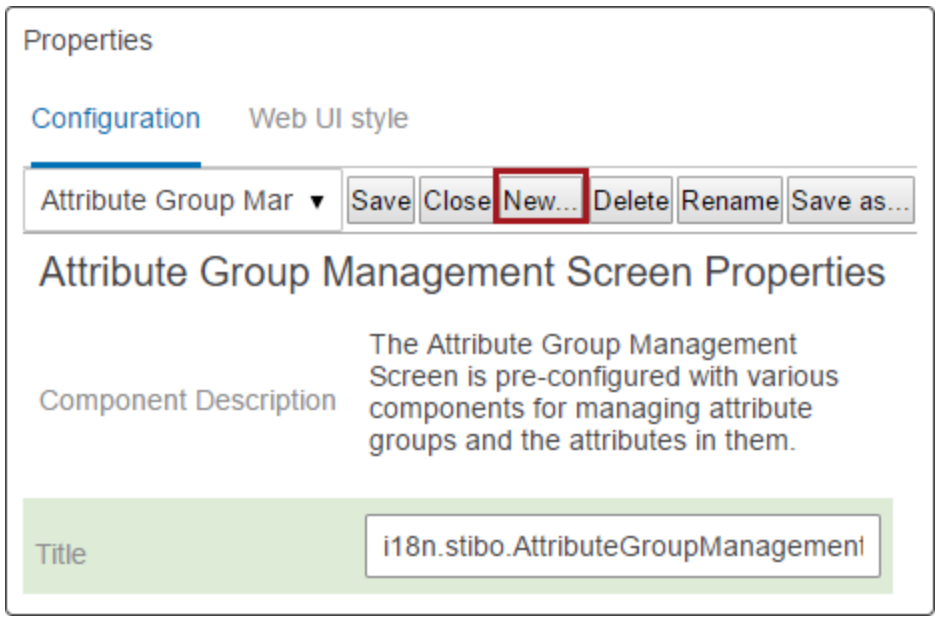


Configuring the List of Values Group Management screen

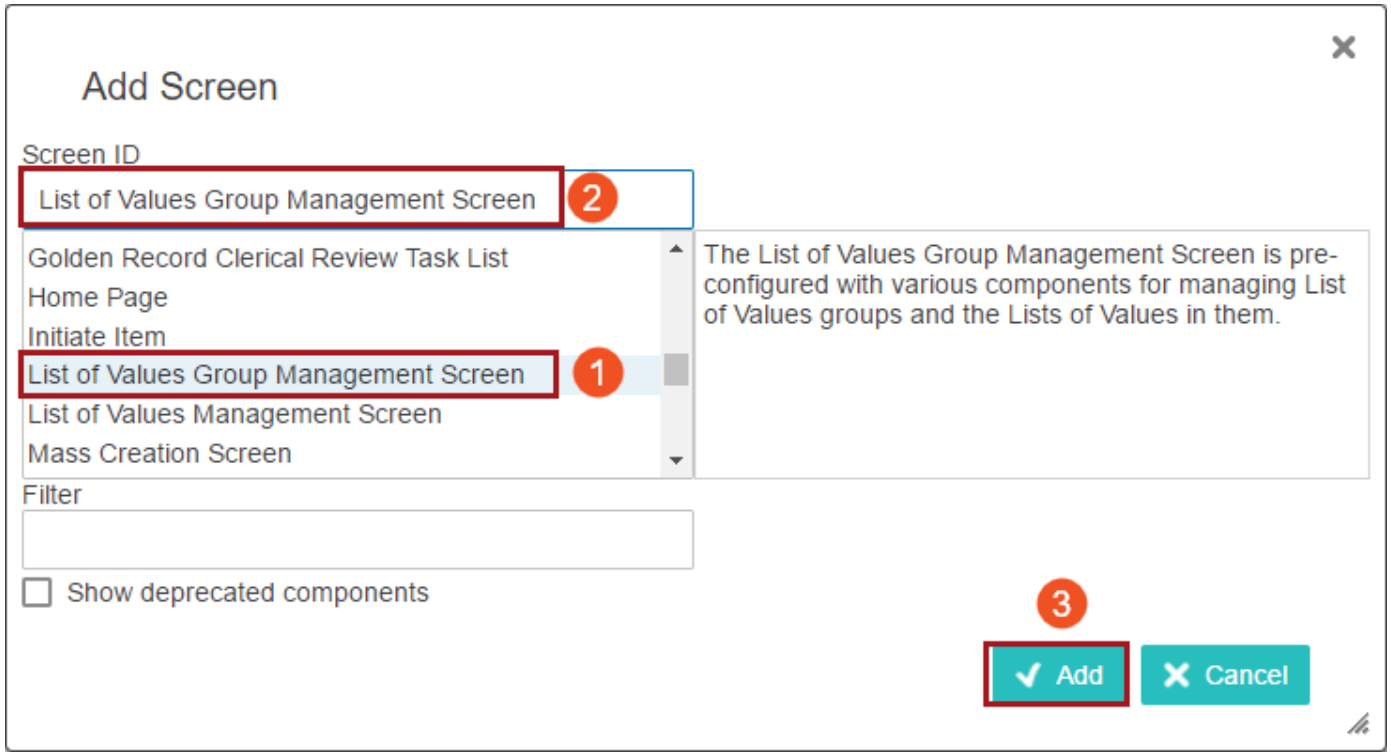
Before configuring the screen, it is assumed that the general configuration described in the **Attribute and LOV Creation and Maintenance in Web UI** section of the Web UI documentation has been completed so that users can access the screen via the stack panel.

To create the **List of Values Group Management screen**, follow the steps below.

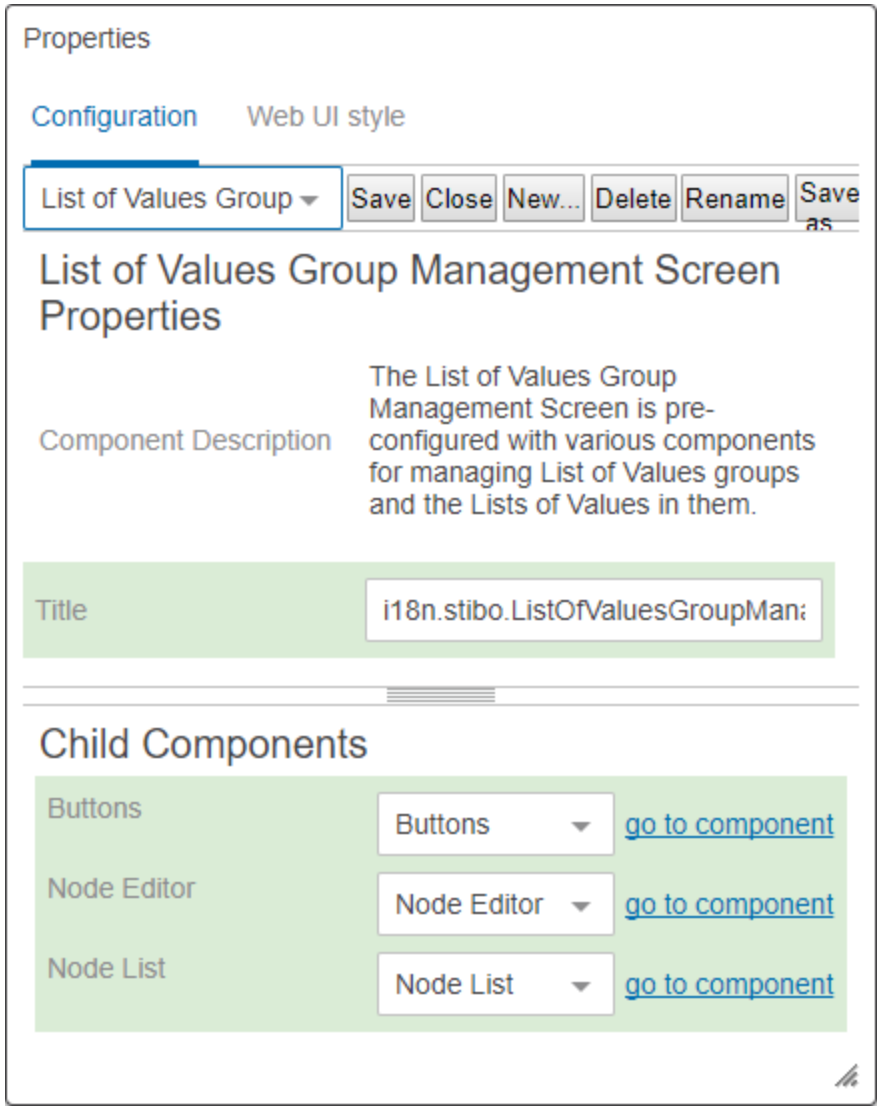
1. In the **Designer**, click the **New** button.



2. In the **Add screen** window, find **List of Values Group Management screen** in the list of screen names. Select it and then, in the **Screen ID** field, type the name you would like to give this screen in your Web UI. Unless there's a specific business need to change the name, it is simplest to copy the pre-configured screen name. Once the name's been added, click **Add**.



3. The screen comes pre-configured with all necessary child components so additional screen-specific configuration is not required.



However, as with all new screens, it must be mapped using the **Mappings** parameter in the **---[MAIN]---** dropdown in the Designer. The screen can be mapped using the **Object Type Condition** and selecting the **List Of Values Group Type** node (under Basic Object Types).

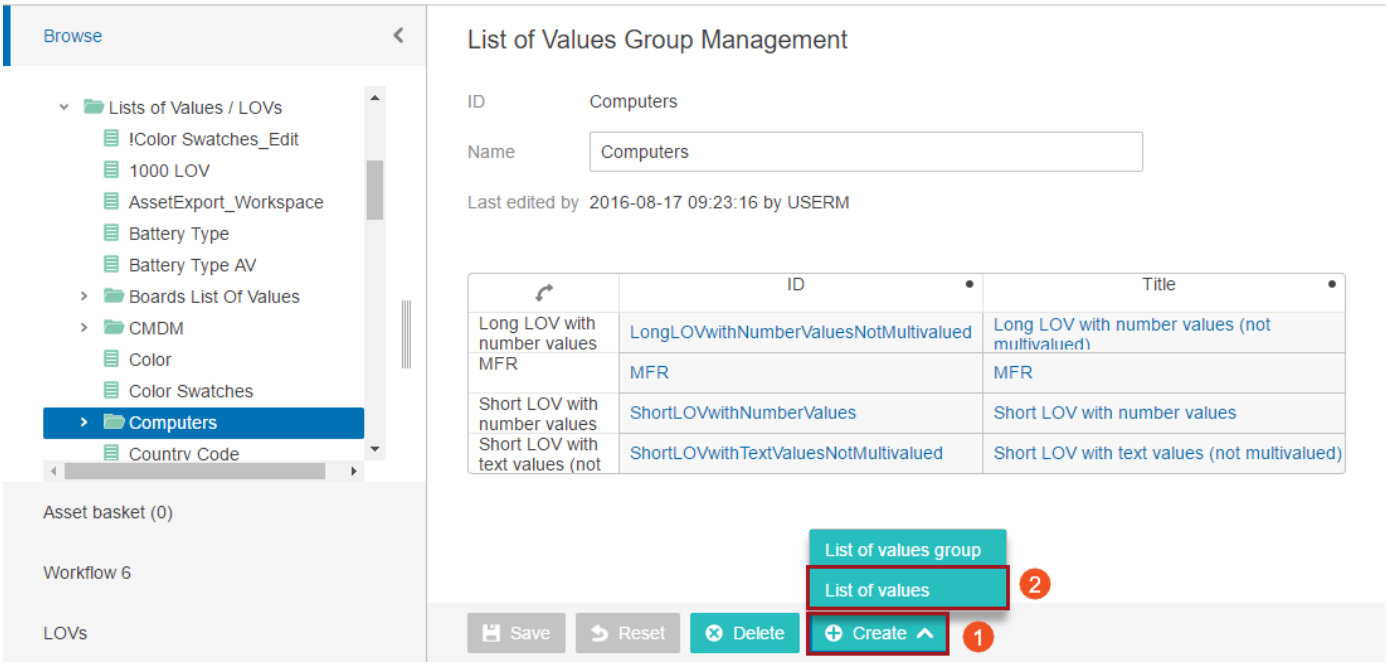
Using the List of Values Group Management screen

The following sections describe how to work with LOVs and LOV groups within the **List of Values Group Management screen**.

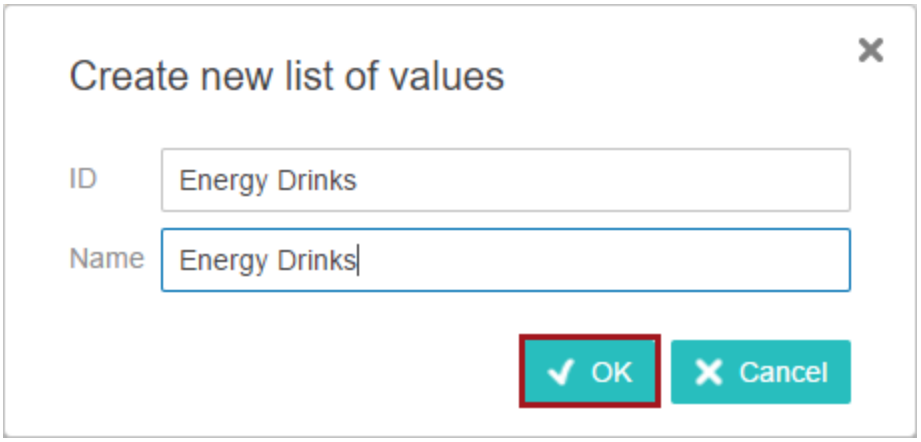
Creating Lists of Values

To create a new LOV in the **List of Values Group Management screen**, follow these steps:

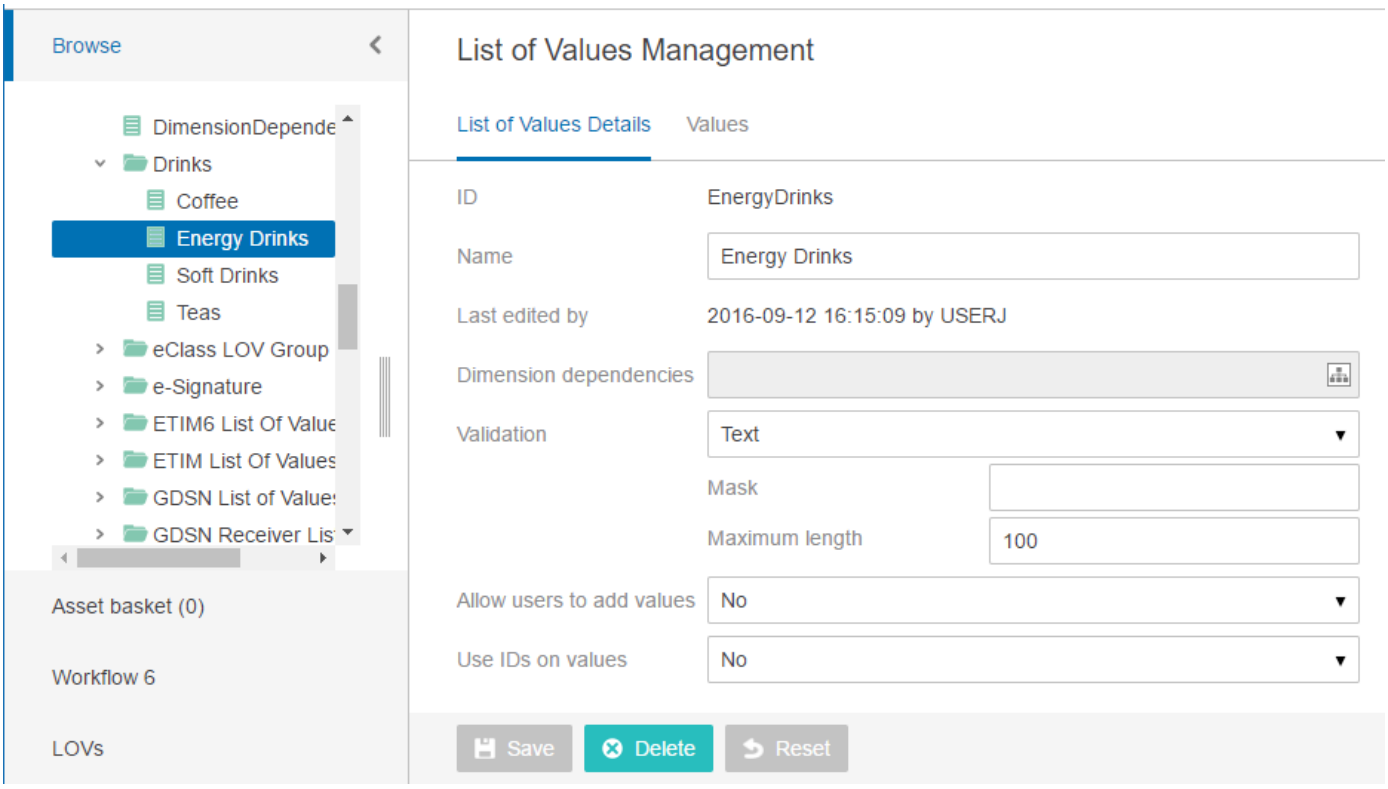
1. In the **System Setup** tree (located in the left navigation **Stack Panel**), select the LOV group into which you would like to add a new LOV. At the bottom of the **List of Values Group Management screen**, click the **Create** button and then select **List of Values**.



2. In the **Create new list of values** window, add the **ID** and **Name** of the LOV and click **OK**. If no **Name** text is supplied, the value supplied for **ID** will automatically populate the **Name** field.



3. The **List of Values Management screen** will then display. This is where you will view and edit the newly created LOV.

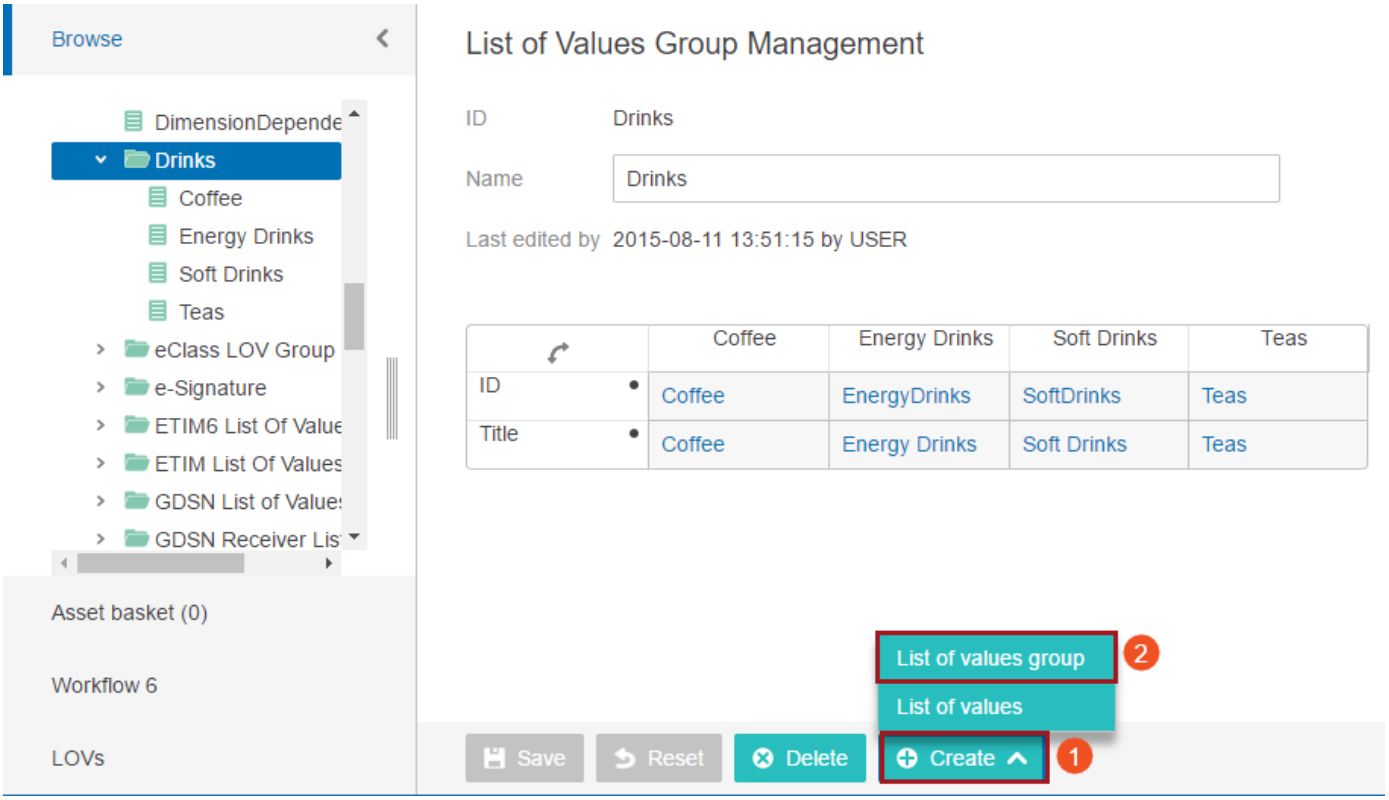


4. To edit and configure the LOV, follow the instructions outlined in the **List of Values Management screen** section of the **Web User Interfaces** documentation.

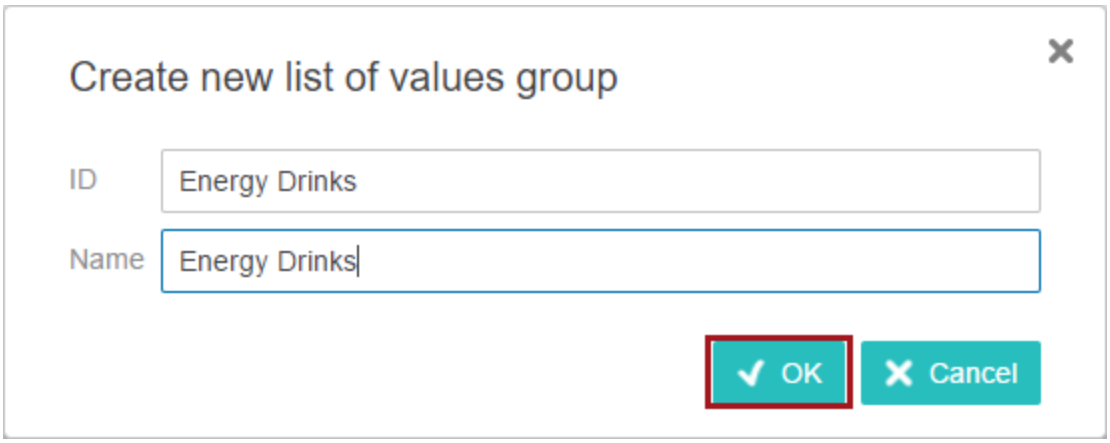
Creating List of Values Groups

To create a new LOV group in Web UI, follow these steps:

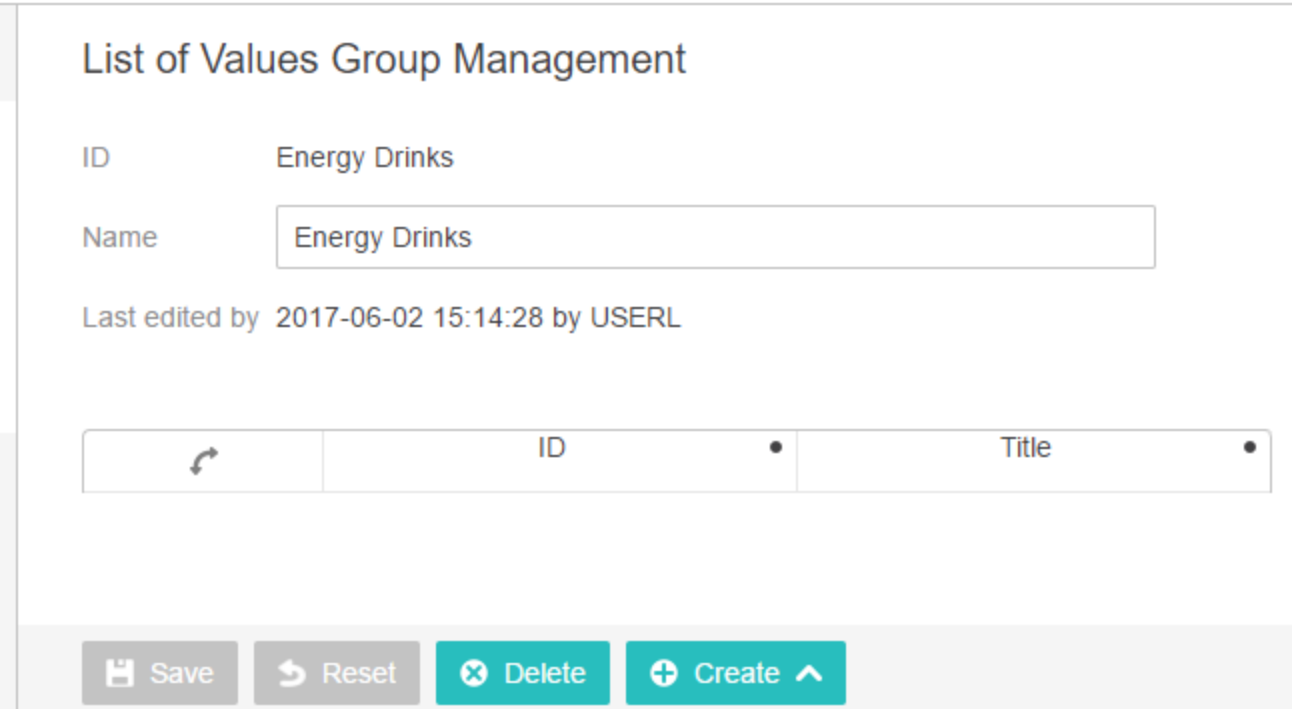
1. Select either the topmost level of the LOV group hierarchy (parent node) or another LOV group in which you would like to nest your new LOV group. Once selected, the **List of Values Group Management screen** will then display**.**
2. Click **Create** and then select **List of Values group**.



3. In the **Create new list of values group** window that then displays, add the desired **ID** and **Name** of the LOV group and click **OK**. As with creating LOVs, if no **Name** text is supplied, the value supplied for **ID** will automatically populate the **Name** field.



4. The new **List of Values group** is created.



Important: An LOV group can only be created as a child of a higher-level (parent) LOV group. An LOV group cannot be created when an LOV is selected.

Maintaining List of Values Groups

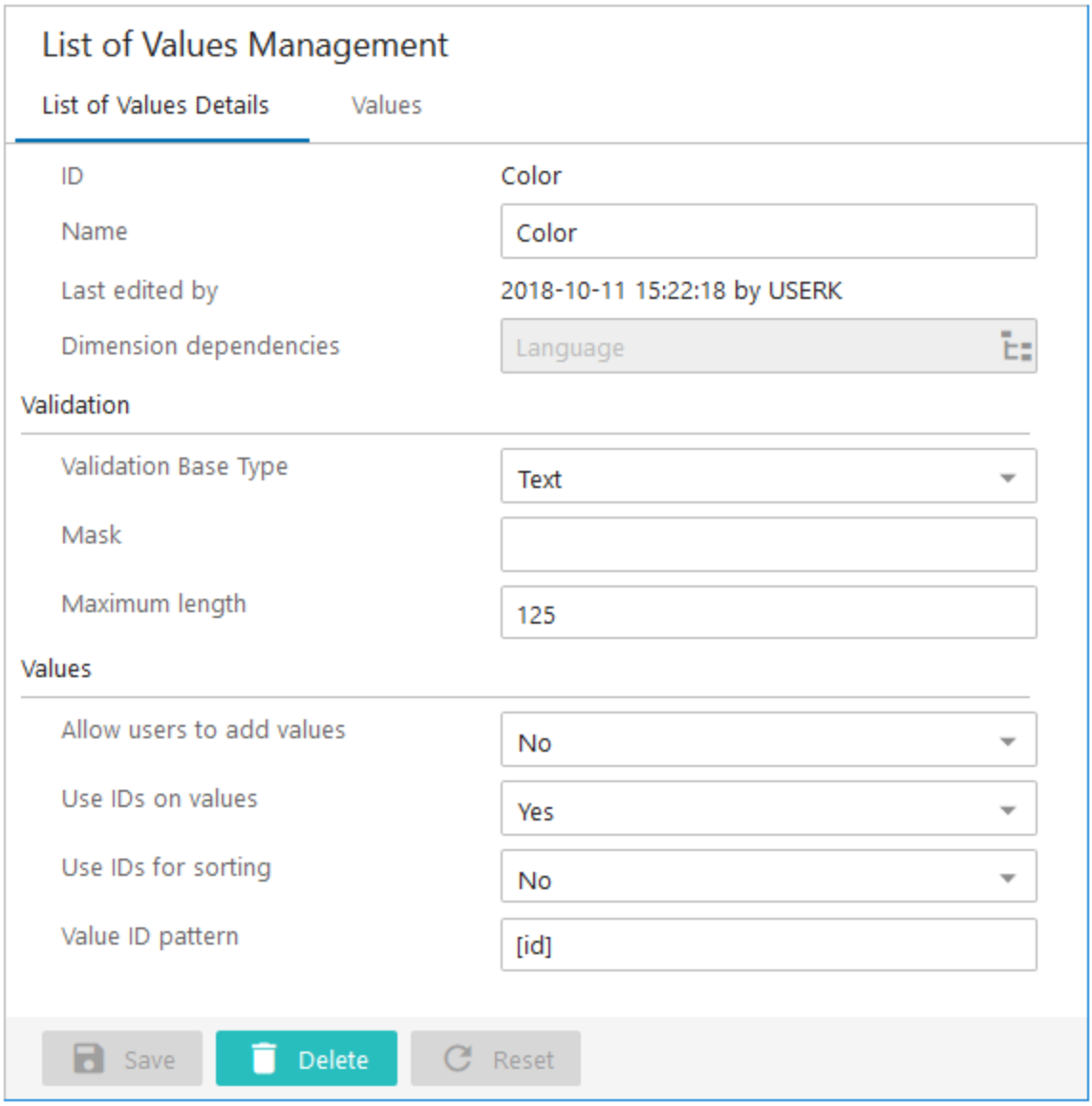
Users can edit and delete LOV groups while accessing the **List of Values Group Management screen**:

- **Edit:** To edit the name of the LOV group, make the required changes to the text in the **Name** field and then click the Save button.
- **Delete:** To delete an LOV group, select the LOV group to be deleted in the left navigation area, and then click the Delete button.

Important: Only empty LOV groups can be deleted. LOV groups that contain LOVs cannot be deleted until the child LOVs have been deleted or moved into another LOV group.

List of Values Management Screen

The **List of Values Management screen** enables users to edit and configure new and existing Lists of Values (LOVs), as well as add, edit, and delete LOV values in all configured contexts.

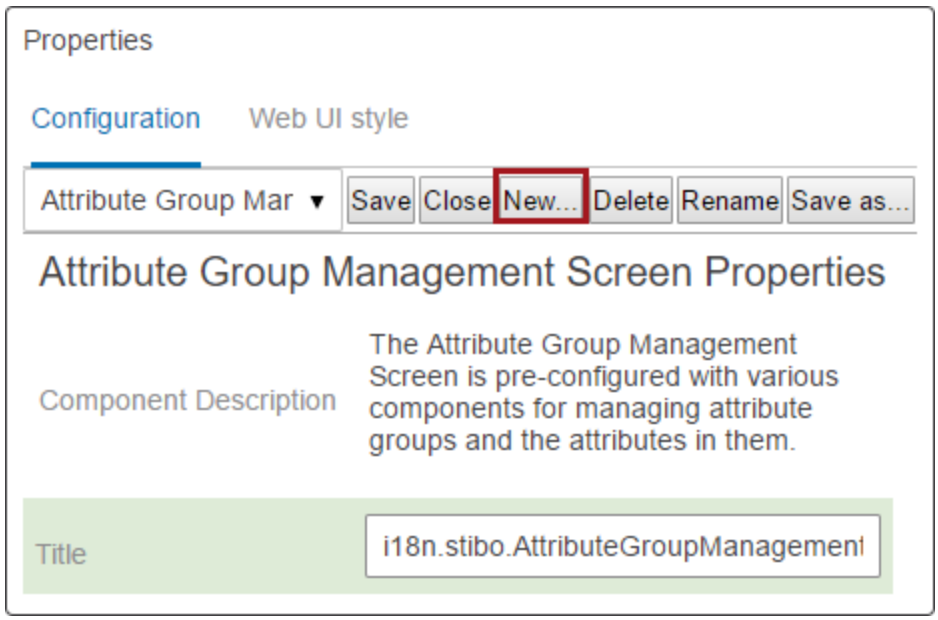


Configuring the List of Values Management screen

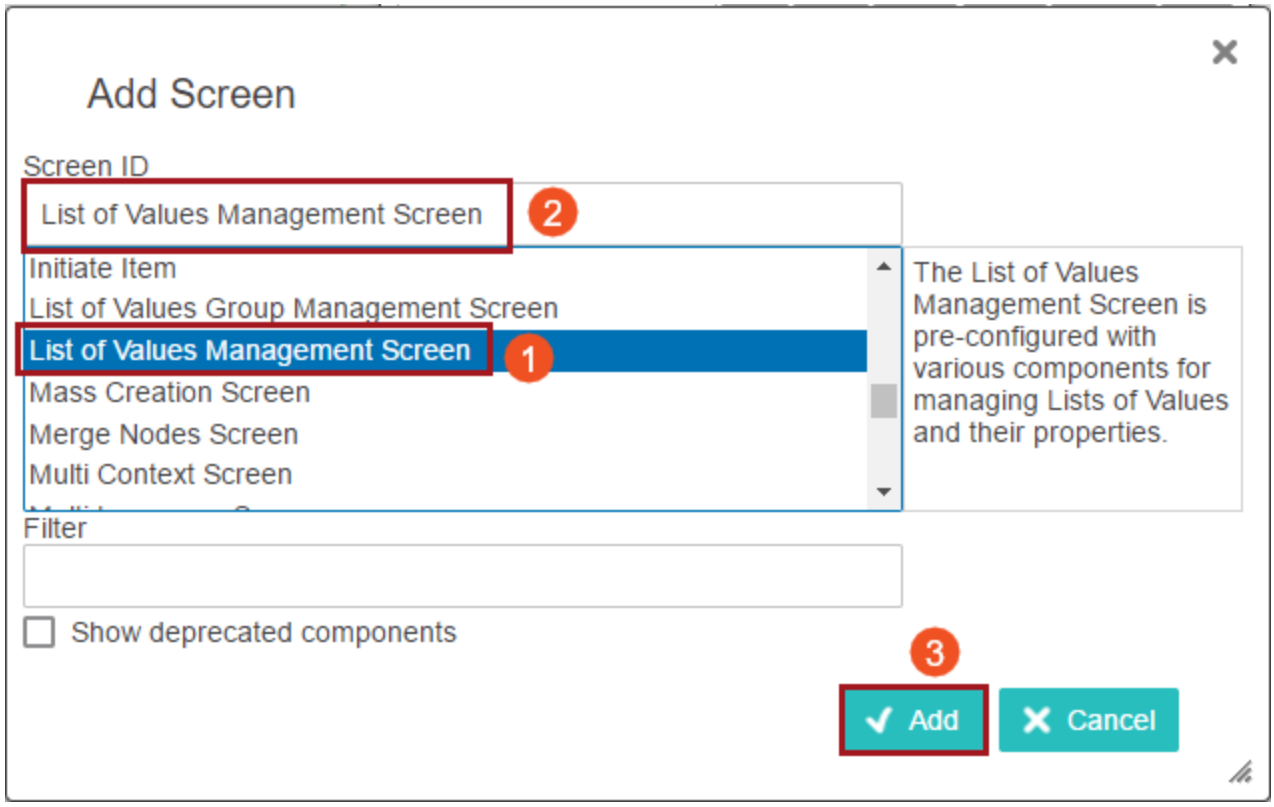
Before configuring the **List of Values Management screen**, it is assumed that the general configuration described in the **Attribute and LOV Creation and Maintenance in Web UI** section of the Web UI documentation has been completed so that users can access the screen via a stack panel.

To create the **List of Values Management screen**, follow the steps below.

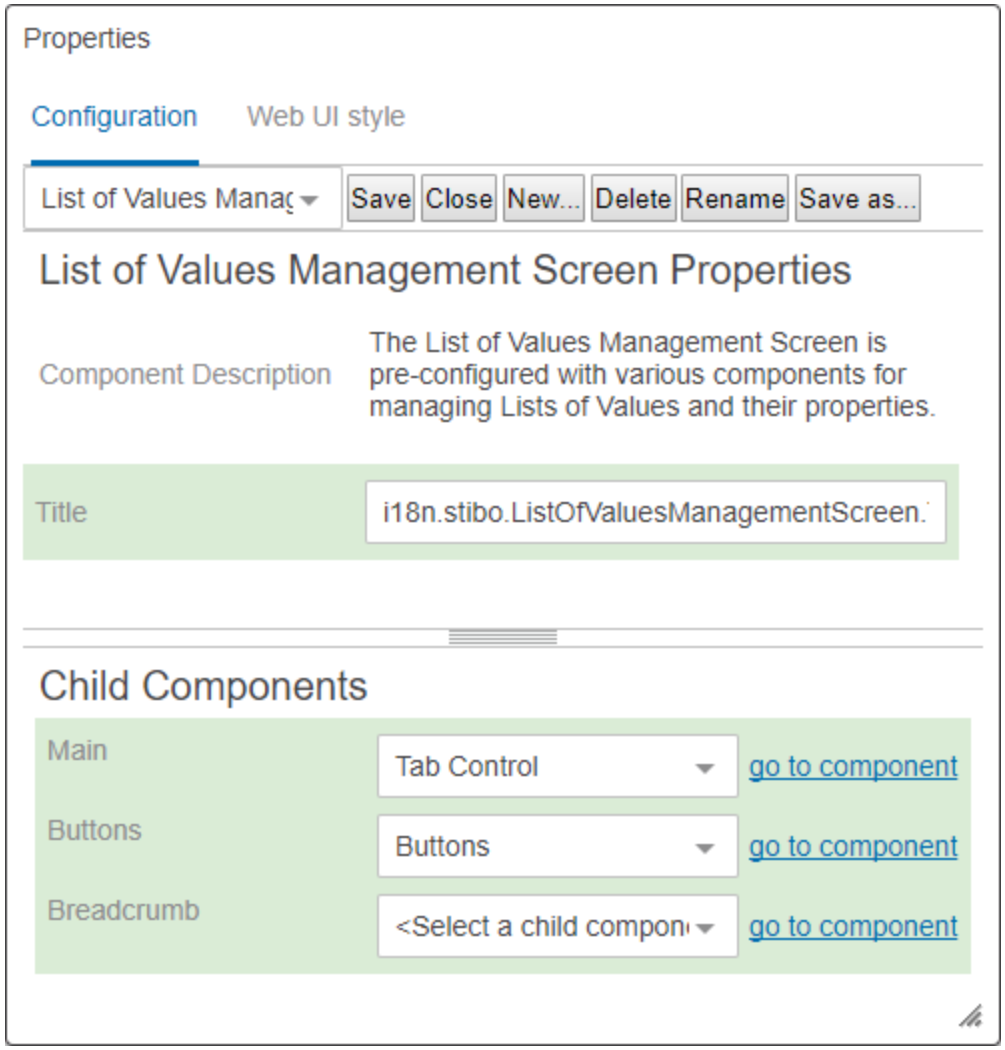
1. In the **Designer**, click the **New** button.



2. In the **Add screen** window, find **List of Values Management screen** in the list of screen names. Select it and then, in the **Screen ID** field, type the name that should display when choosing screens in the designer. Once the 'Screen ID' text has been entered, click **Add**.



3. The screen comes pre-configured with all necessary child components so additional screen-specific configuration is not required.

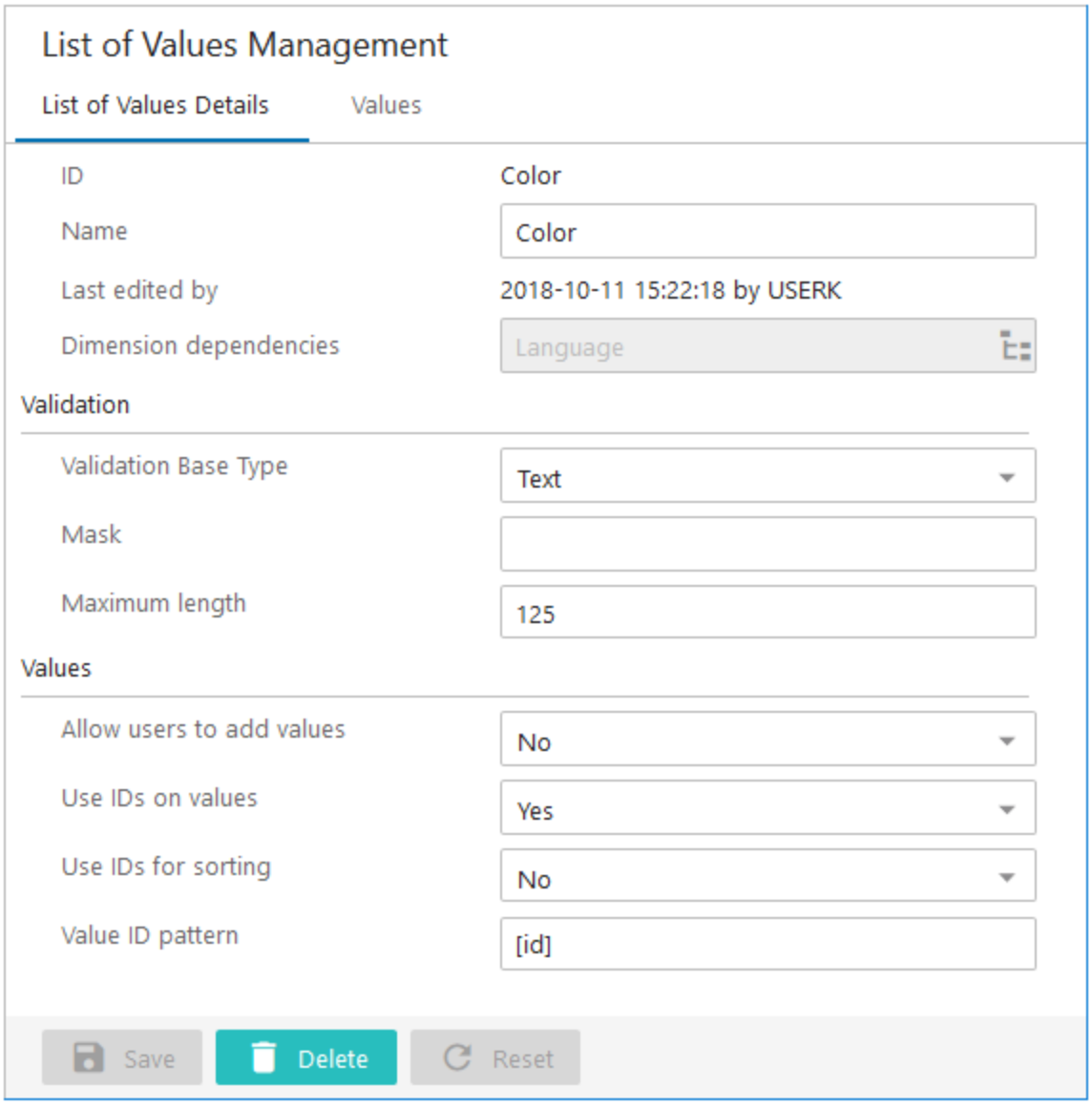


As with all new screens, the **List of Values Management screen** must be mapped using the **Mappings** parameter in the **---[MAIN]---** dropdown in the designer. For more information on mapping screens in the Web UI, see the **Mappings** topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

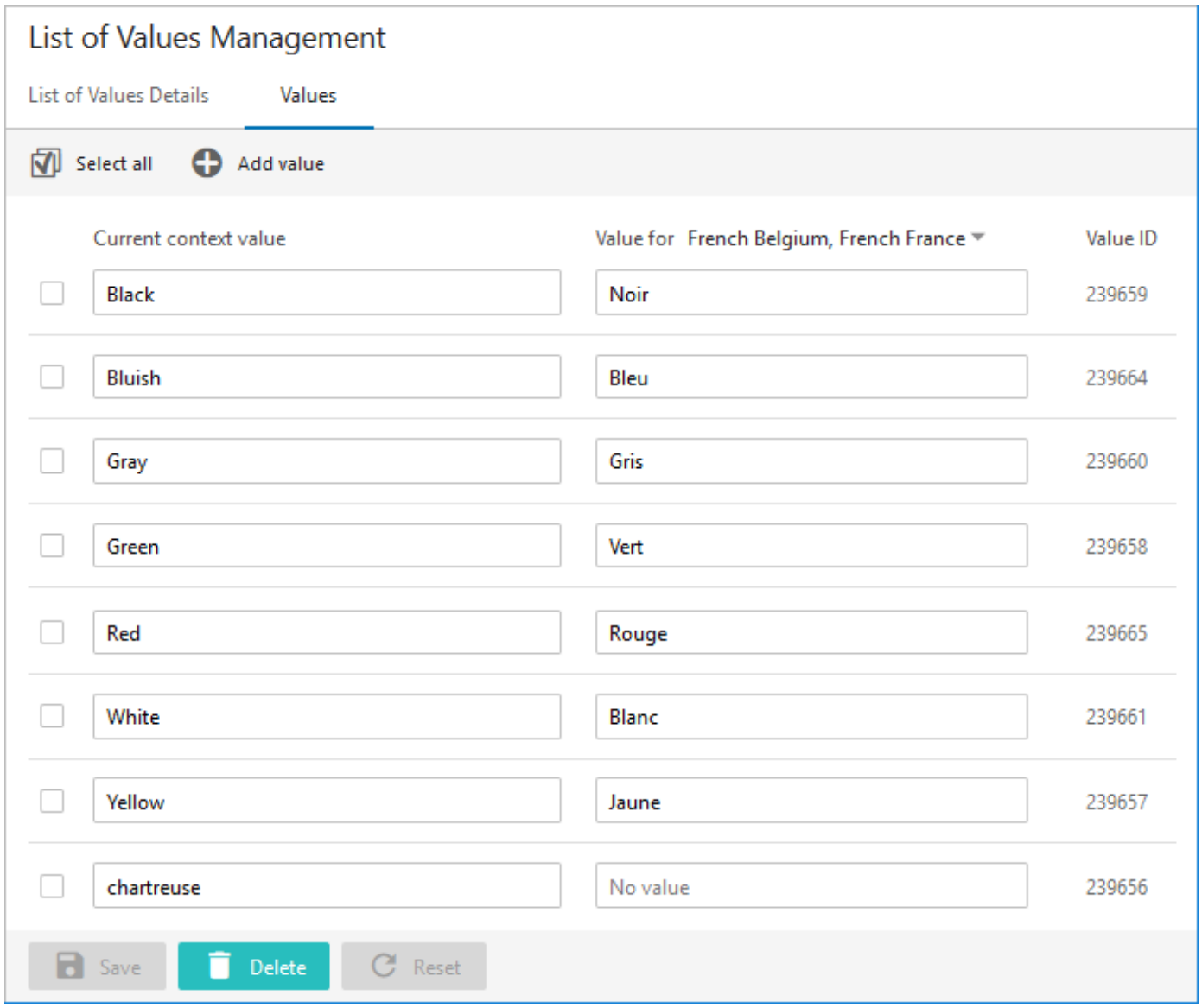
Using the List of Values Management screen

Two tabs display on the **List of Values Management screen**: **List of Values Details** and **Values**.

1. **List of Values Details tab**: On this tab, the user is able to edit and configure an LOV's settings. The parameters shown in the screenshot below represent the same LOV settings found on LOVs in the workbench. For information about creating LOVs and configuring the settings shown in this tab, see the **Creating an LOV** topic in the **System Setup / Super User Guide** documentation.

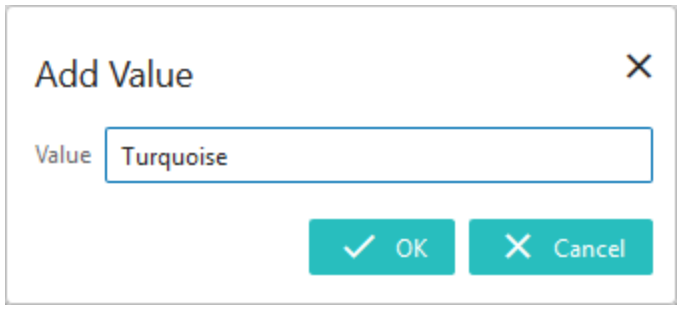


2. **Values tab**: On this tab users can manage an LOV's values in all contexts. Users can add, delete, and edit values on an LOV in the current context and one other context.

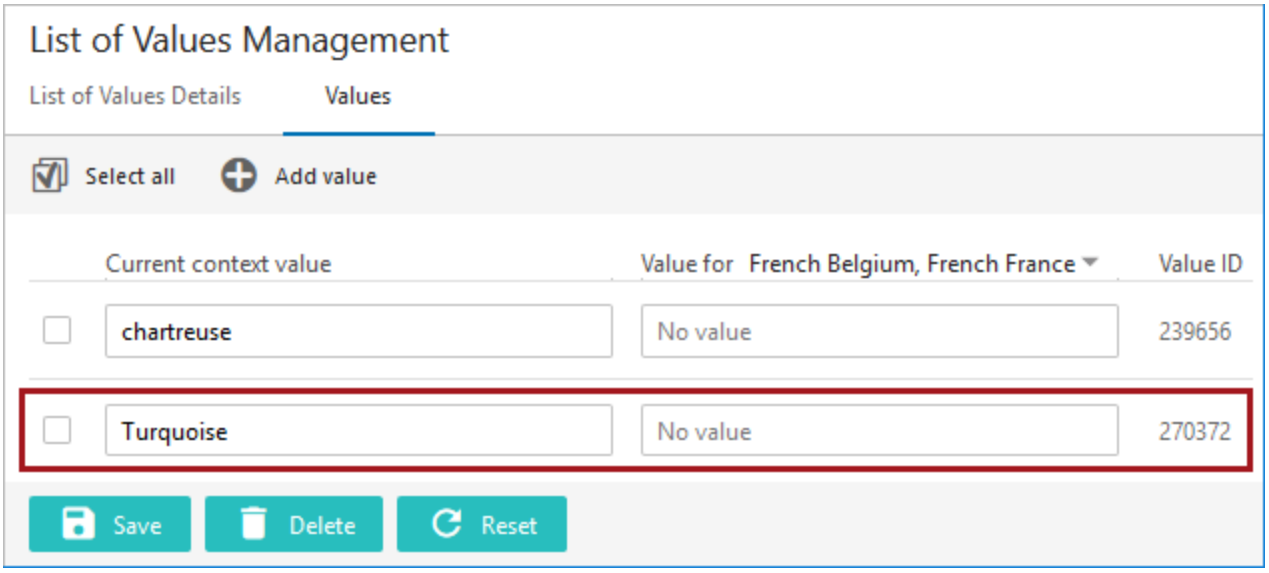


Add Value Action

1. Click on the 'Add value' action in the Values tab.
2. In the 'Add Value' dialog that displays, enter the desired LOV value and click 'OK'.



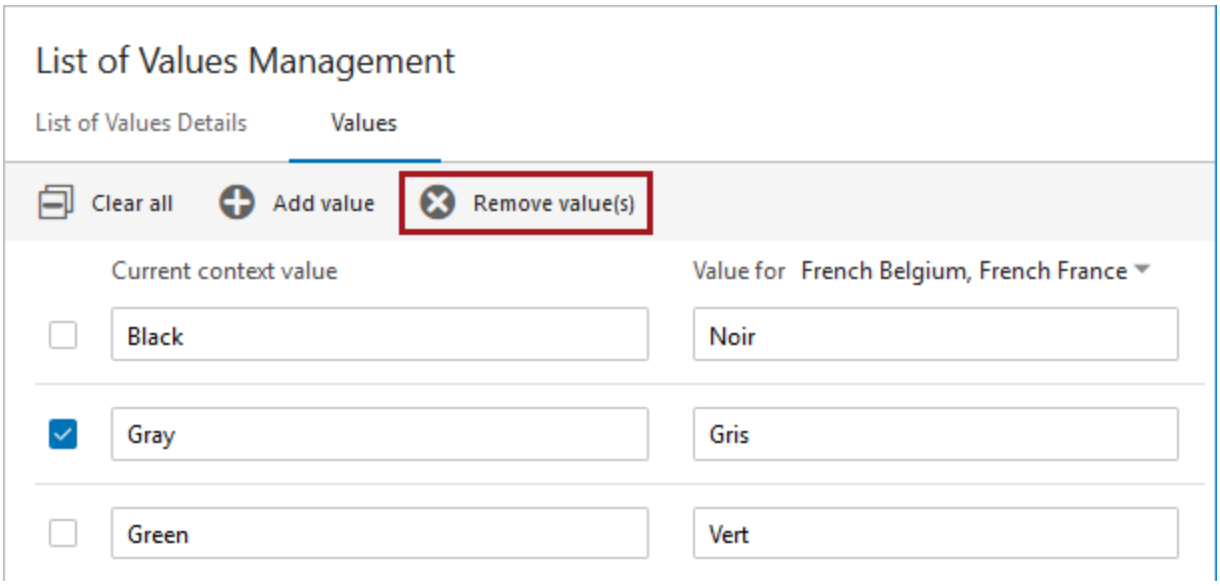
The value is added to the LOV.



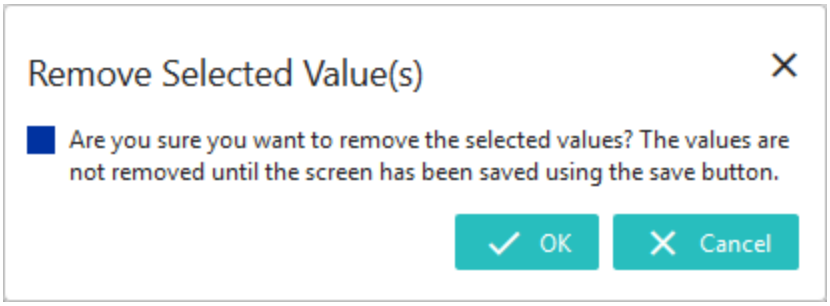
Note: If the 'Use IDs on values' option under the List of Values Details tab is enabled and set with a Value ID pattern, then an ID will be automatically added to the newly created value.

Remove value(s) action

The 'Remove value(s)' action is enabled when one or more LOV values are selected.



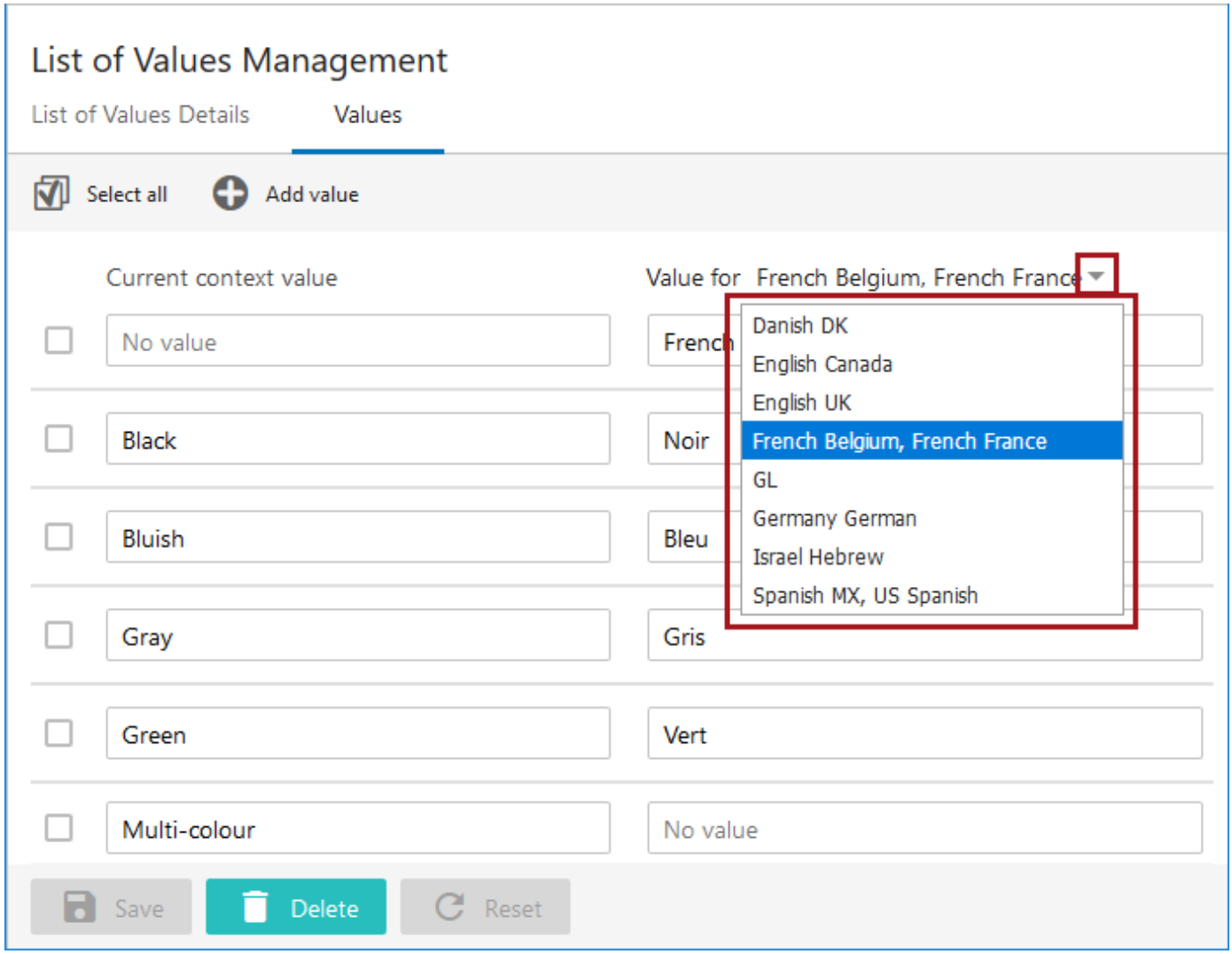
Once the 'Remove value(s)' action is clicked, a confirmation dialog will display. Click 'OK' to complete removal of the selected values.



Switching contexts

The List of Values Management screen's 'Values' tab supports management of an LOV's values in all configured contexts. The current context is displayed on the left column, and the selectable context is displayed in the right column. If the LOV is not dimension dependent, only the left column will display.

At the top of the selectable context column is a dropdown. When engaged, all configured contexts are displayed in the dropdown. When a context is selected, the LOV values for the selected context will display. A field for each value shown in the current context will display. If the values are populated for the chosen context, those values will display. If empty, 'No value' will display in gray text in the field. To add or edit values in these fields, users can type the values directly into the field.



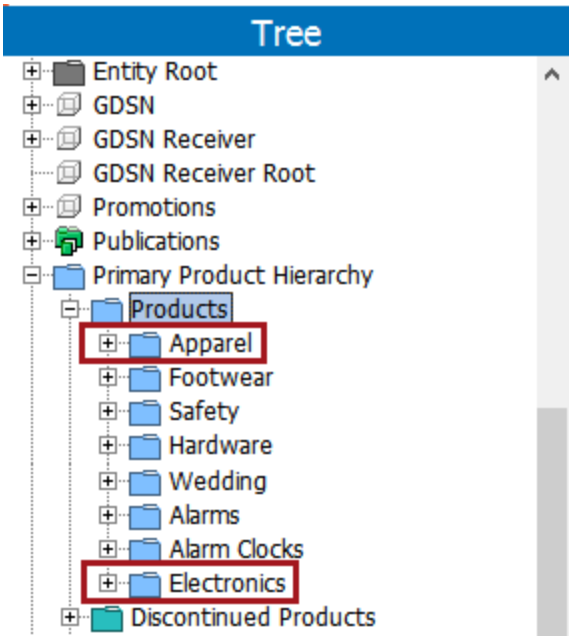
Important: In the right-hand 'Value for' column that displays the LOV for the second context, if a context is being viewed in which the LOV values do not reside natively on that context, but are instead inherited from a parent context, the fields will display with 'No value'. This is to provide the user with precise information with respect to which context the LOV values truly reside on.

For more information on creating and maintaining LOVs, see the **Creating an LOV** section of the **System Setup / Super User** documentation.

Attribute Link Editor Screen

The Attribute Link Editor screen provides users with a centralized view of information about attributes linked to a given object. One of the screen's primary uses is that it provides a view of all attributes under a parent object so that users may easily determine which are correctly linked into that position in the hierarchy, and which might be better linked elsewhere.

For example, looking at the Tree, let us say the attribute 'Battery size' is linked in the hierarchy to a parent object called Products, and made valid for the Sales Item object type. There are two child objects beneath Products called **Apparel** and **Electronics**.



Because the attribute 'Battery Size' is linked to Products, it will show on all Sales Items nested under Products. This means that 'Battery Size' will appear not only on all Sales Items under **Electronics**, but also on all Sales Items under **Apparel**, which would result in t-shirt products, for example, having 'Battery Size' listed among its attributes. Because it is not useful to have 'Battery Size' on Apparel Sales Items, a user may elect to use the functionality available in the Attribute Link Editor screen to unlink 'Battery Size' from **Products** and then link it directly to **Electronics**.

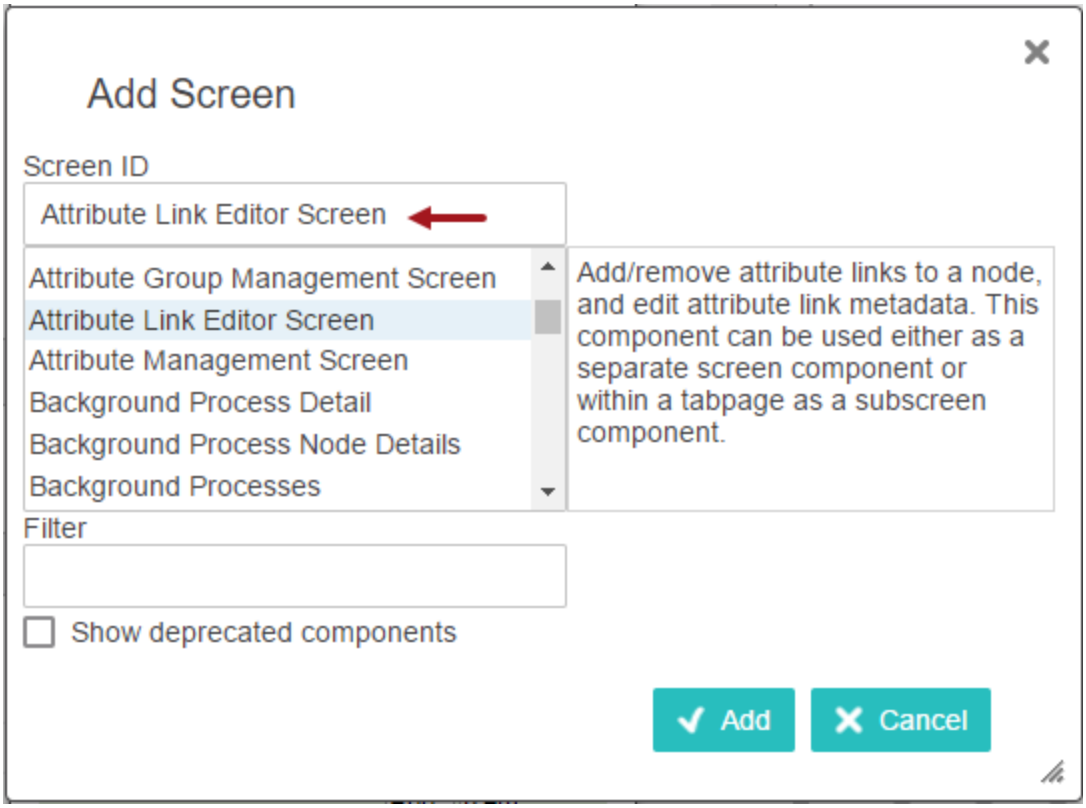
Topics on how best to configure this screen in Web UI and how an end user might use this screen are located in the **Configuring the Attribute Link Editor Screen** documentation and the **Editing Attribute Links in Web UI** documentation.

Configuring the Attribute Link Editor Screen

The Attribute Link Editor screen allows users to view, add, edit, and delete attribute links in Web UI. Configuration of this screen enables users to determine which metadata attributes are linked to the attributes on a given object, which buttons should display on the screen, and whether the screen should be read only for end users. The steps required to configure this screen are described in detail below.

Creating a New Attribute Link Editor Screen

Steps for creating a new screen are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic. Select 'Attribute Link Editor Screen' as the screen type (shown in the screenshot below).



At this point, either close the designer and configure the screen at a later time, or continue on with the steps in the next section.

Adding the Attribute Link Editor as a Sub Screen Tab

As with any screen, the Attribute Link Editor screen must be mapped appropriately in Main Properties > Mappings to enable end users to access the screen. As an alternative to mapping, the Attribute Link Editor screen can be added as a Sub Screen Tab Page on a Node Details screen. The Attribute Link Editor screen is particularly useful when linked to parent nodes in the blue (Product) hierarchy, as shown in the examples within this topic.

For more information about mapping, see **Configuring the Parameters** in the **Main Properties** topic, and for more information about sub screen tab pages, see the **Tab Pages** topic in the **Node Details Component** section of the **Web User Interface / Web UI Setup and User Guide** documentation.

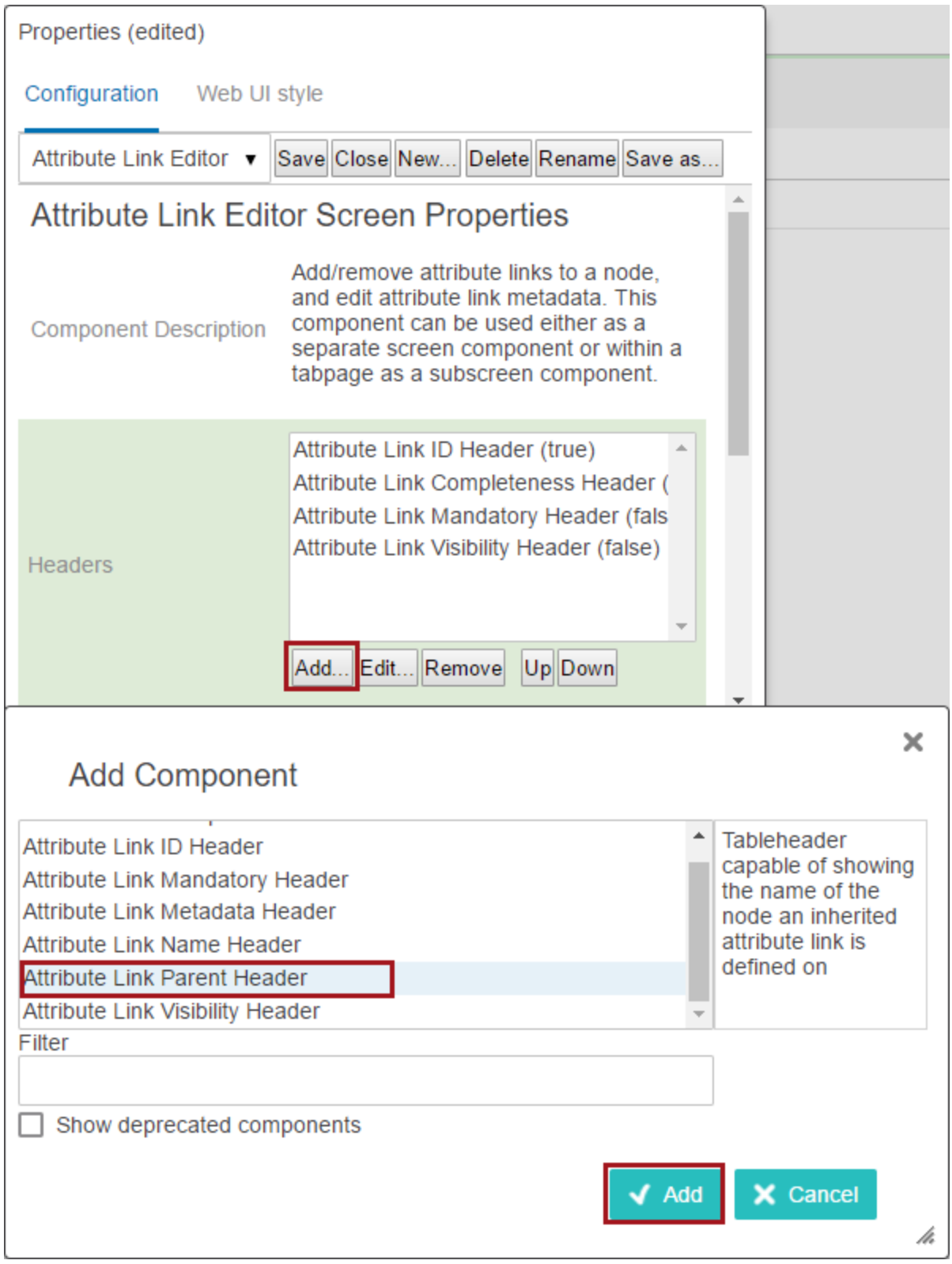
Configuring the Attribute Link Editor screen

After adding the Attribute Link Editor as a sub screen tab page, the user can configure the Attribute Link Editor screen so that it will display according to the administrator's preferences. In this section of the guidance, we will touch on each configuration option available for this screen in the order they appear in the designer.

Determining the Metadata Attribute Columns

In the **Headers** field, users can determine which metadata attributes should appear alongside the attributes on an object.

Clicking the **Add...** button displays the Add Component dialog, which includes all the description attribute columns users can add to an Attribute Link Editor screen. Adding these columns can show users specific information about the attributes linked to the selected object.

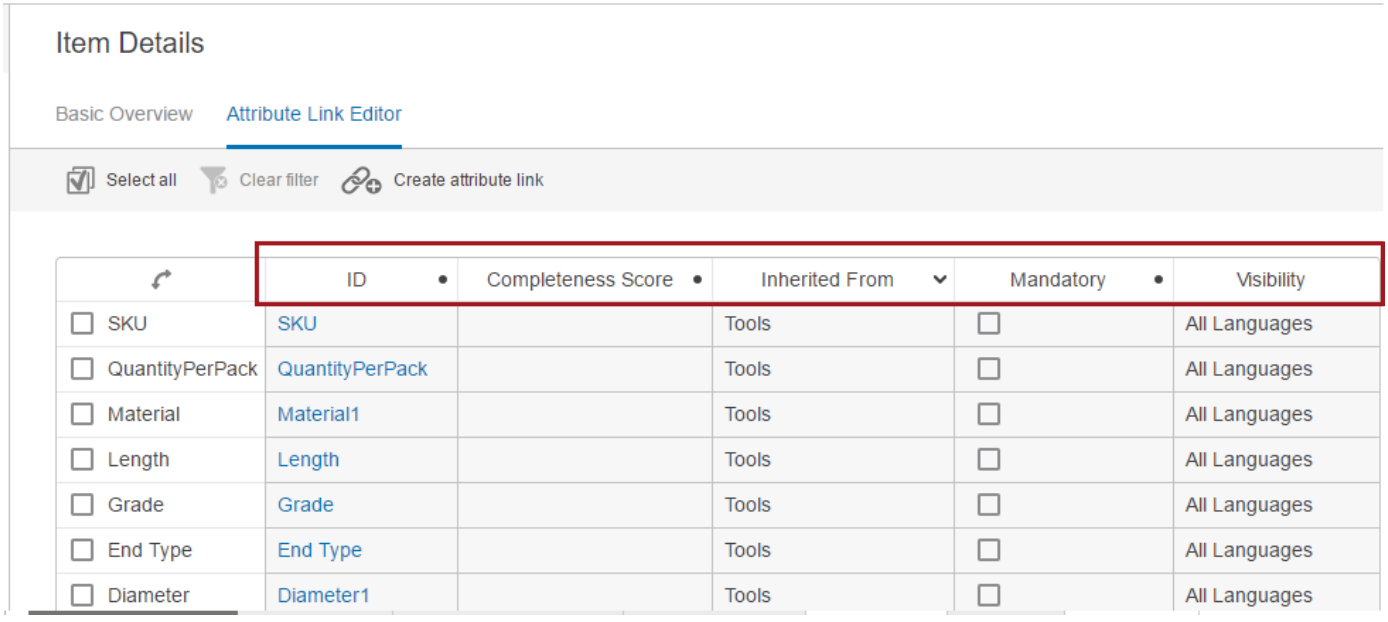

Properties (edited)
Configuration
Web UI style
Attribute Link Editor
Save
Close
New...
Delete
Rename
Save as...
Attribute Link Editor Screen Properties
Component Description
Add/remove attribute links to a node, and edit attribute link metadata. This component can be used either as a separate screen component or within a tabpage as a subscreen component.
Headers
Attribute Link ID Header (true)
Attribute Link Completeness Header (
Attribute Link Mandatory Header (fals
Attribute Link Visibility Header (false)
Add...
Edit...
Remove
Up
Down
Add Component
Attribute Link ID Header
Attribute Link Mandatory Header
Attribute Link Metadata Header
Attribute Link Name Header
Attribute Link Parent Header
Attribute Link Visibility Header
Tableheader capable of showing the name of the node an inherited attribute link is defined on
Filter
Show deprecated components
Add
Cancel

Each description attribute that displays in the table is, to a variable degree, configurable. For instance, all table headers can be changed to suit the administrator's preference. To configure the table headers, double click the relevant header listed in the Header field, and replace the default text in the Label field with the preferred text.

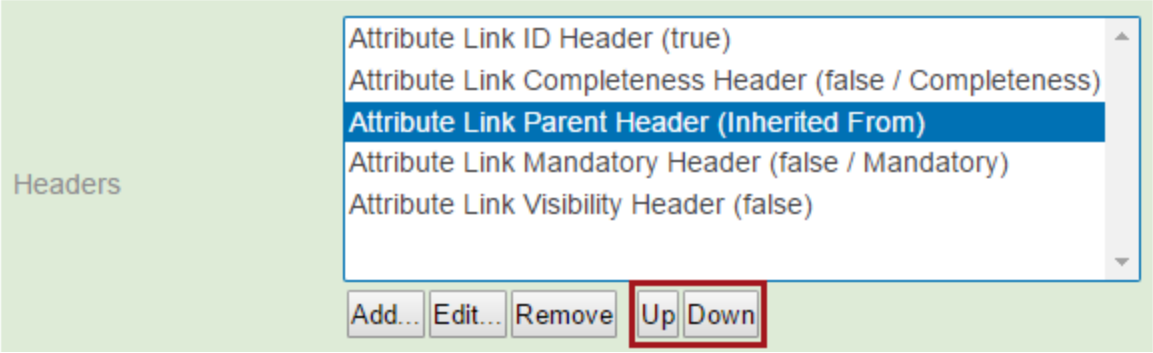
These are the description attributes (referred to below as headers) that you can add to the table in the Attribute Link Editor screen:

- Attribute Link Completeness Header – if the attributes linked to an object have been weighted, then a completeness score will appear for that attribute in the table.
- Attribute Link ID Header – will display the STEP ID for the linked attribute.
- Attribute Link Mandatory Header – will display whether the linked attribute has been set to Mandatory. This header can be configured so that data appearing under this header can be set as Read Only, or it can be set so that users may adjust whether an attribute is mandatory or not.
- Attribute Link Metadata Header – enables the user to select any suitable description attribute to link to the object. In the Attribute Link Metadata Header Properties window that displays when you edit this column, the user can either search or browse the available attributes to identify the attribute to be linked. Some users may find it useful to create a series of customized metadata headers, each linking a specific attribute.
- Attribute Link Name Header – will display the name of the attribute linked to the selected object.
- Attribute Link Parent Header – will display the node in the hierarchy to which the attribute has been linked. If this cell has content, that means the attribute has been linked through inheritance into the selected object. If the cell is blank, that means that the attribute is linked directly to the selected object.
- Attribute Link Visibility Header – will display which contexts that attribute has been made visible for.
- Attribute Link Wiki Header – will display the information icon which can include the 'Go to Wiki' link.

If the user elects to add these columns, then the Attribute Link Editor screen might appear like this:



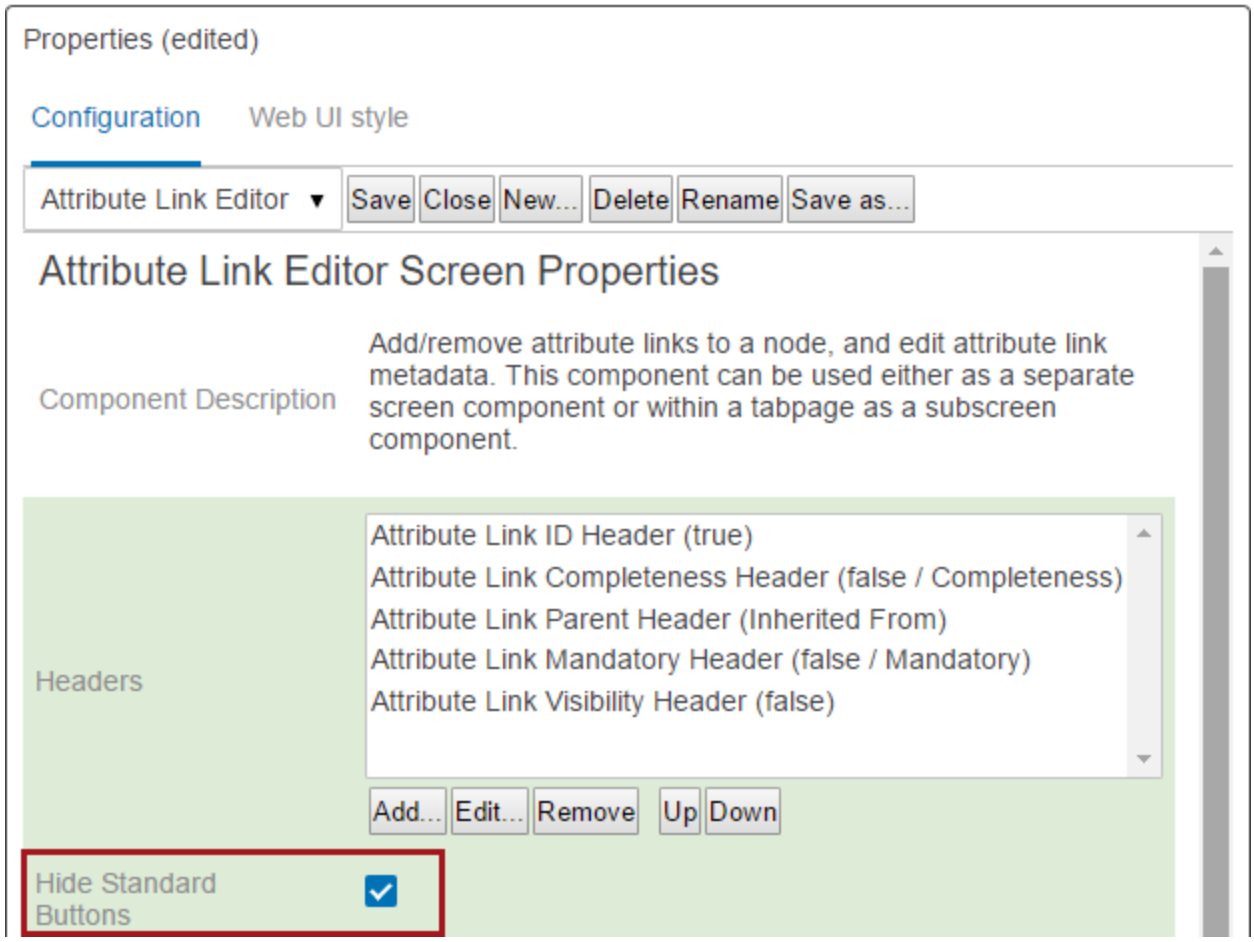
The columns will appear in the order in which the user adds them. The user may change the ordering by selecting the header in the designer and then moving the header up or down in the list using the **Up** and **Down** buttons.



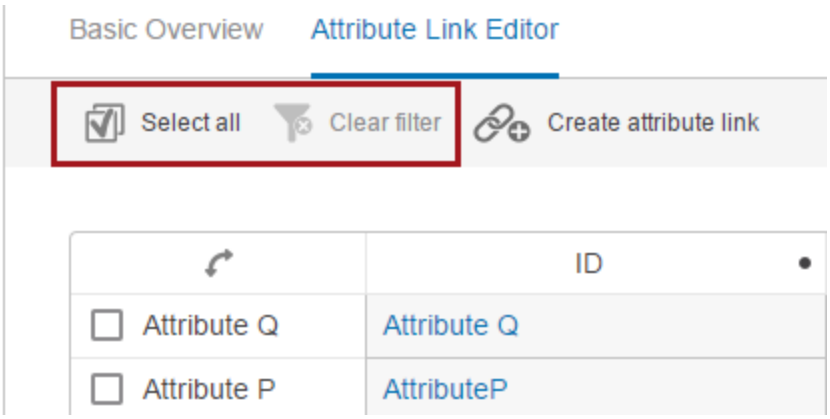
Important: Default properties for this screen, like toolbar actions and preset columns, will be applied to this screen to achieve two goals: one, to closely align the functionality with previous versions to aid backwards compatibility, and two, to provide a starter configuration that can be easily adjusted to suit the customer's needs.

Configuring display of standard buttons

Checking the **Hide Standard Buttons** box will hide the Select all / Clear all button and the Clear filter / Apply filter buttons.



Leaving this box unchecked, as it is by default, means that the standard buttons will display to the upper left of the table.

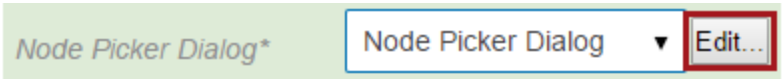


Configuration of Node Picker

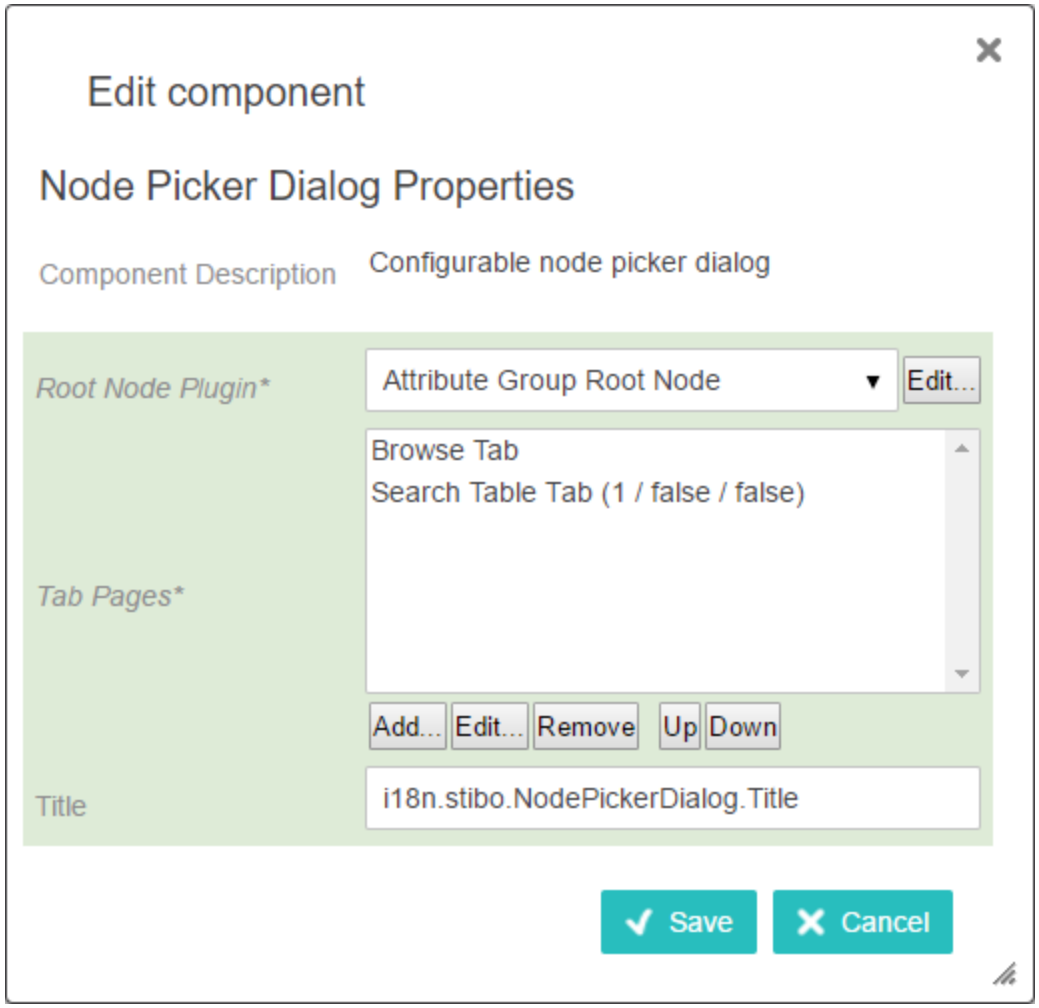
The Attribute Link Editor screen allows users to create a new attribute link on an object. For instance, it may be useful to link the attribute 'Battery Size' to the object Electronics. Doing so will cause the attribute to appear not only on Electronics, but on all objects that are children to Electronics.

The Node Picker Dialog field in the designer allows the user to configure the window that displays when a user working in the Attribute Link Editor screen clicks the **Create attribute link** button. Clicking this button allows the user to locate, either through a browse or search function, the attribute to which they want to link.

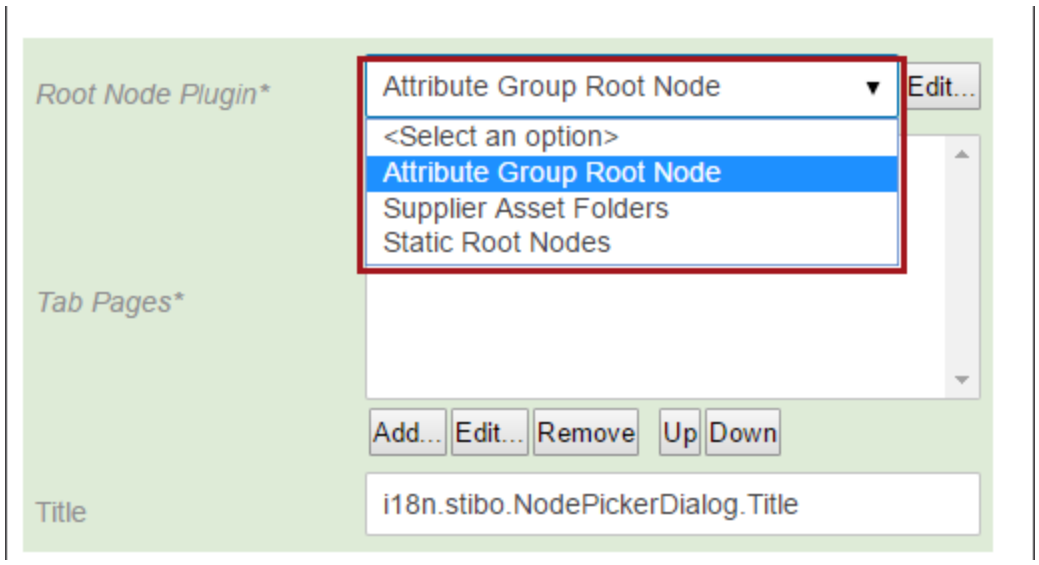
The Node Picker comes pre-configured but allows for additional changes. To configure the Node Picker, click the **Edit...** button beside the **Node Picker Dialog** field.



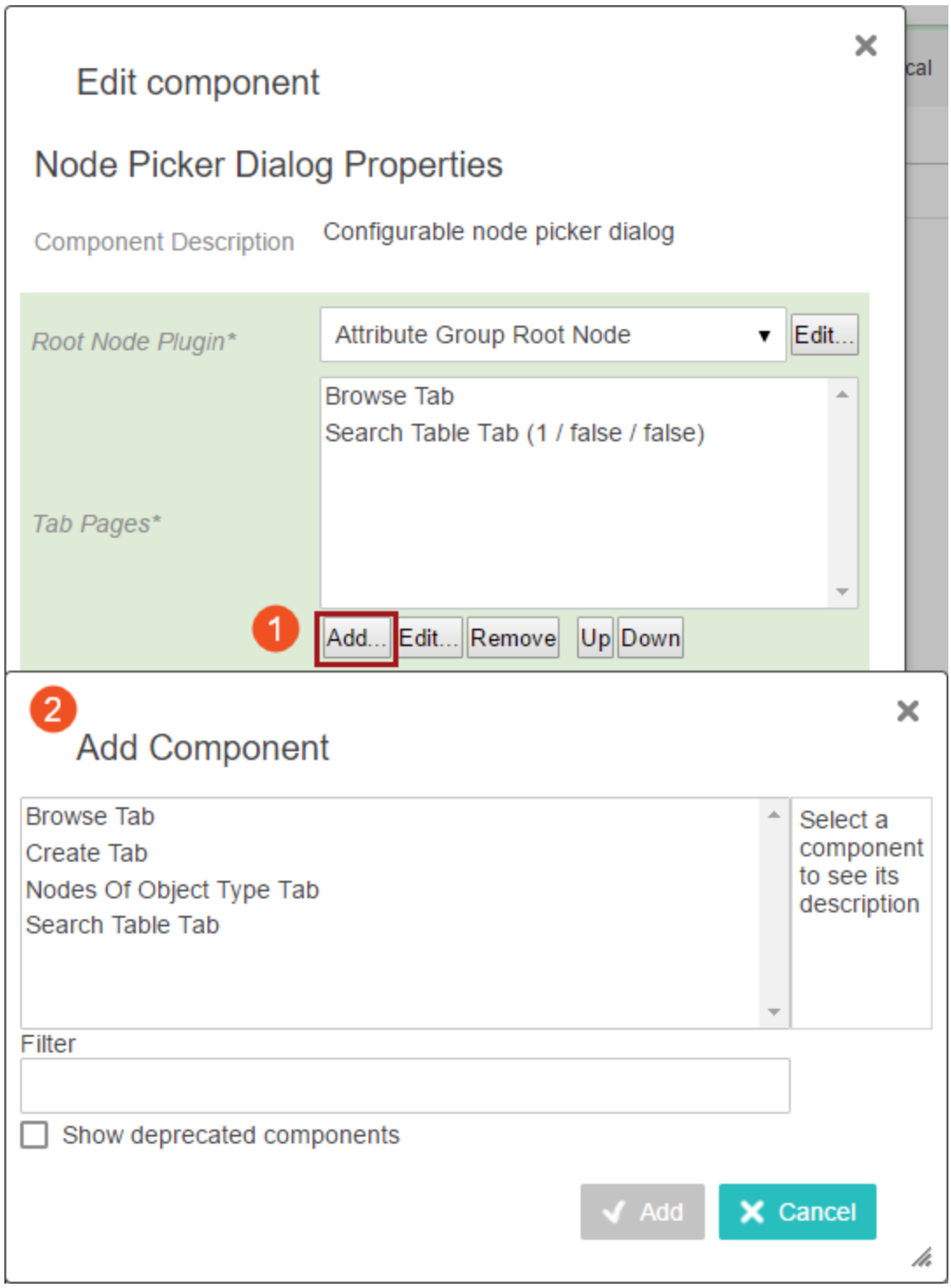
The Node Picker Dialog Properties window allows users to configure where the attributes can be selected (**Root Node Plugin**), and which methods the user may use to locate those attributes (**Tab Pages**).



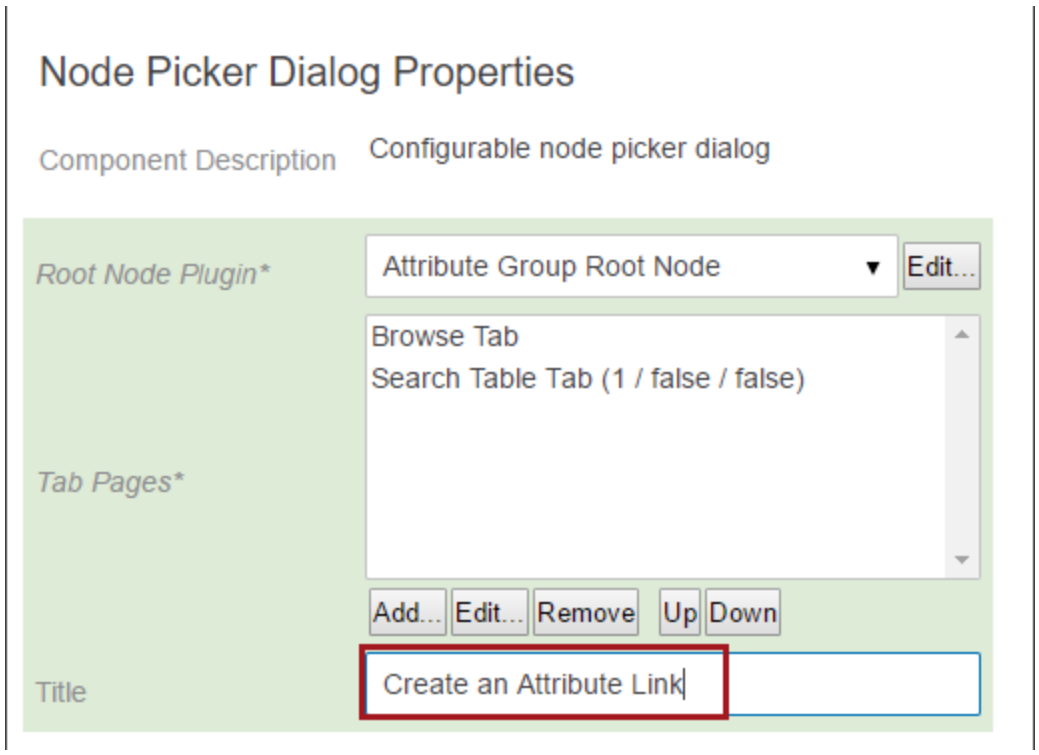
1. Root Node Plugin – allows users to select where in the hierarchy users of the Attribute Link Editor screen may select attributes when creating a new attribute link.



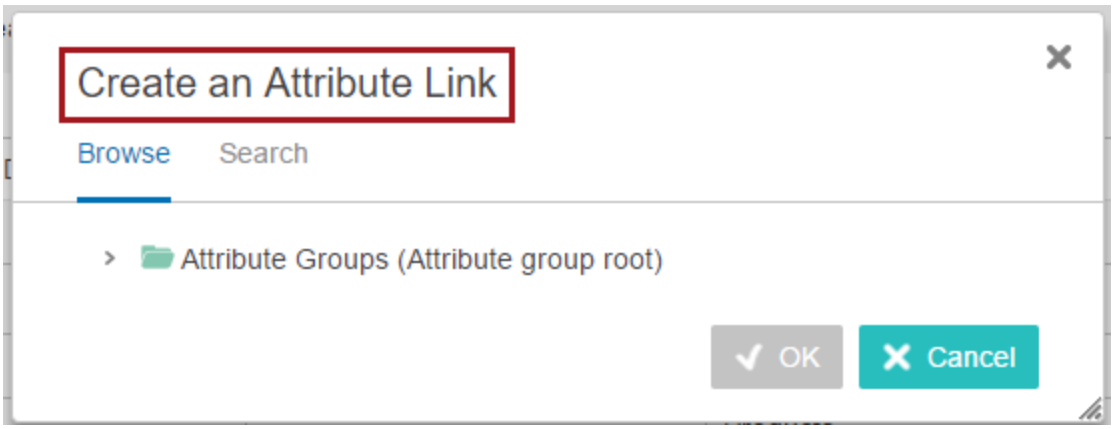
2. Tab Pages – allows users to configure the method of locating the attributes to link. It is recommended that users select the Browse Tab and Search Table Tab options. These allows users to search attributes by name (Search Table Tab), or to browse the existing attributes through manual navigation (Browse Tab).



Title – Add the text that will display at the top of the Node Picker window.

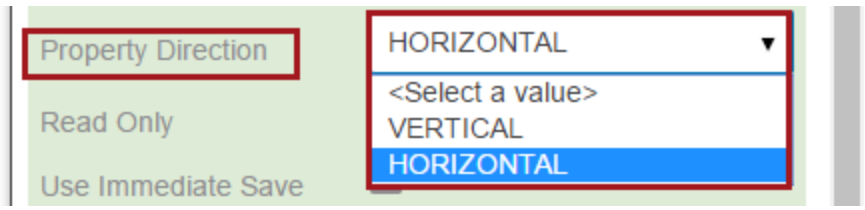


That text will display at the top of the Node Picker window when a user clicks the **Create Attribute Link** toolbar action. If no text is selected, the default title is **Select Node(s)**.



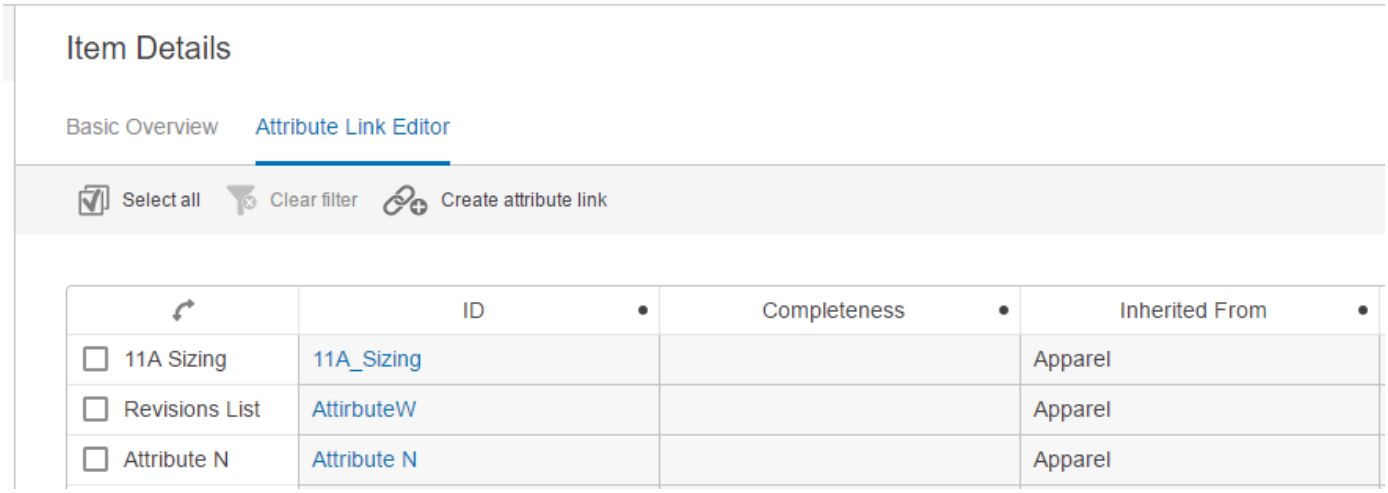
Configuring default orientation of table

Clicking the dropdown for the Property Direction field enables the user to determine how the table in the Attribute Link Editor screen will be oriented when they first open the Web UI.

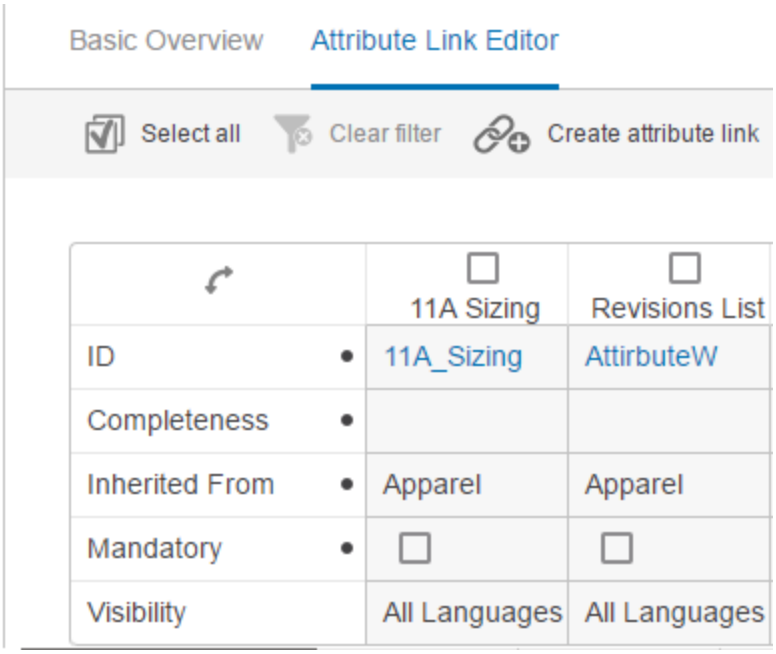


Selecting VERTICAL will show the table with the description attributes (name, ID, mandatory, etc.) appearing along the left side of the table. Selecting HORIZONTAL will display the metadata attributes along the top of the table.

Note the metadata attributes running along the top of the table in this example of a screen with the orientation set to HORIZONTAL:

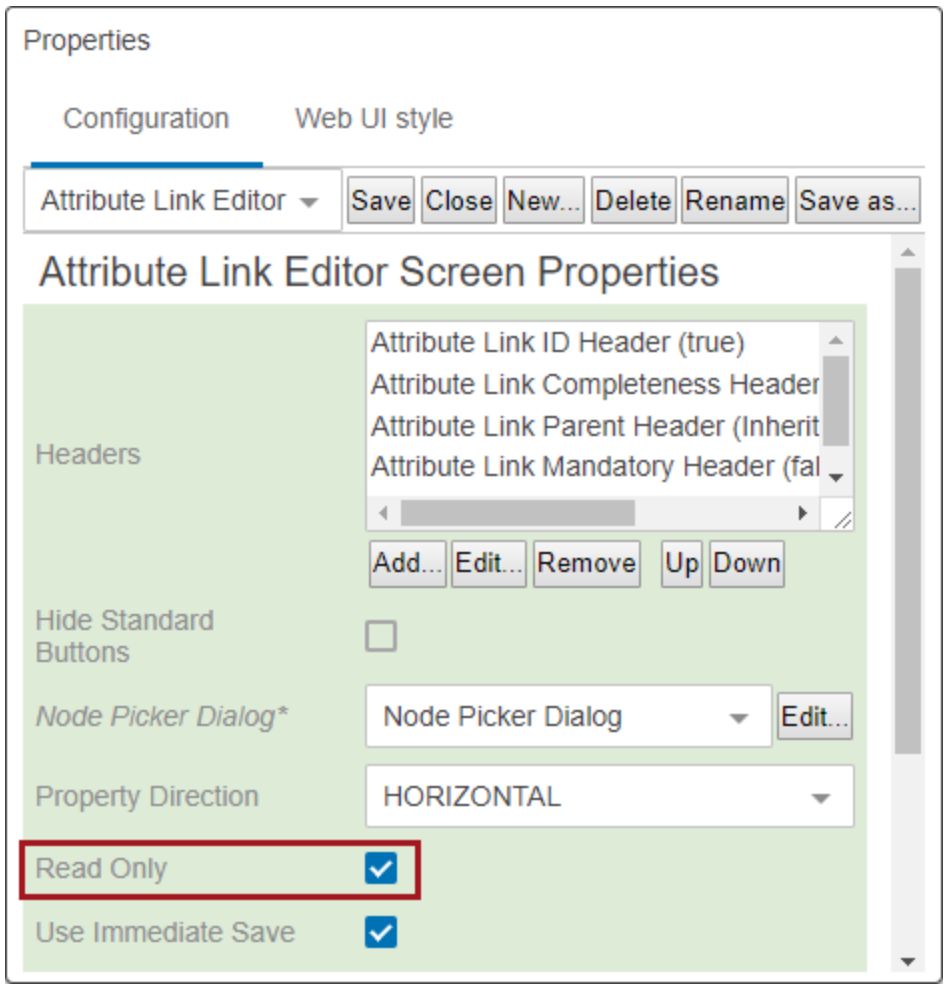


Note the metadata attributes running along the left side of the table in this example of a screen with the orientation set to VERTICAL:



Making the screen read only

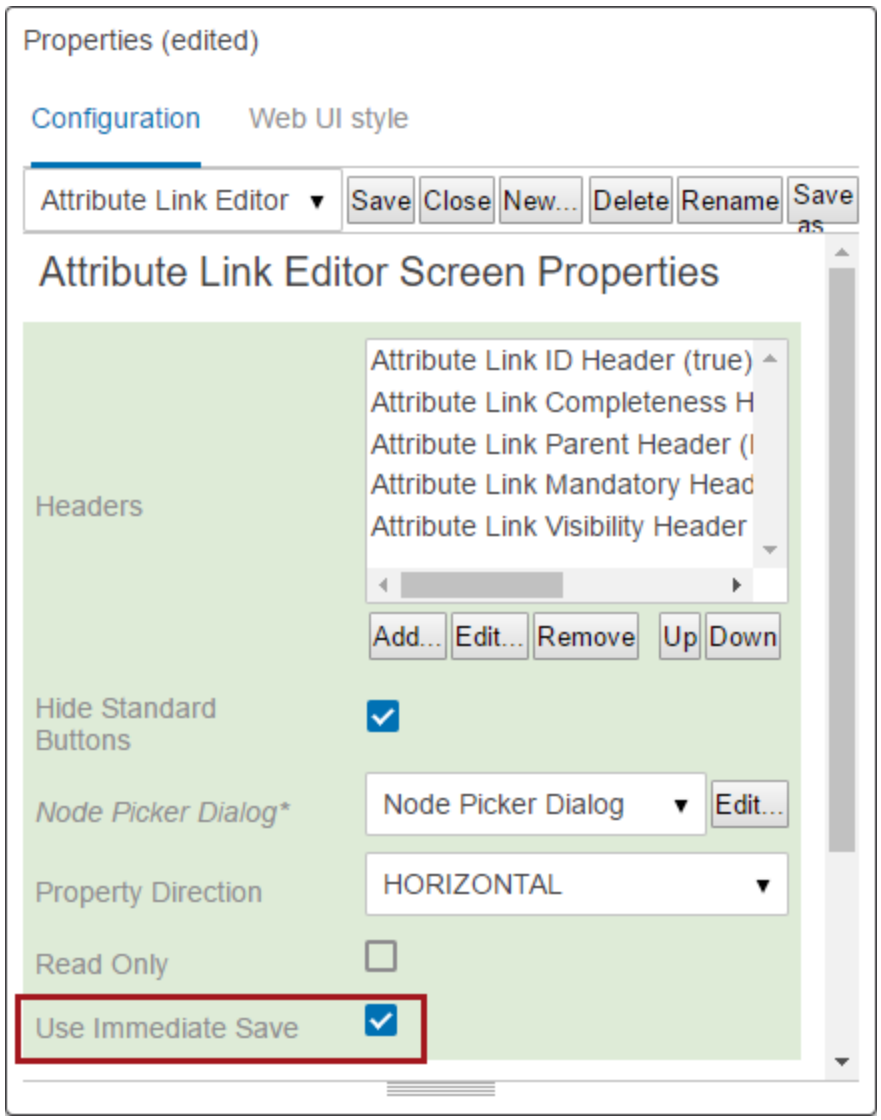
If the administrator determines that the Attribute Link Editor screen should be configured as read only for end users, they may check the box for **Read Only**. Checking this box prevents editing of all attribute links displaying on the Attribute Link Editor screen.



Note: Even if the Attribute Link Editor screen is set to Read Only, the attribute link buttons (Create, Make Local, Remove), if unhidden, are active and useable for any end user. To make the screen truly read only, the administrator should also hide the attribute link buttons. Information on how to do this is covered in the Configuring Display of the Attribute Link Buttons section of this topic.

Applying the auto-save feature

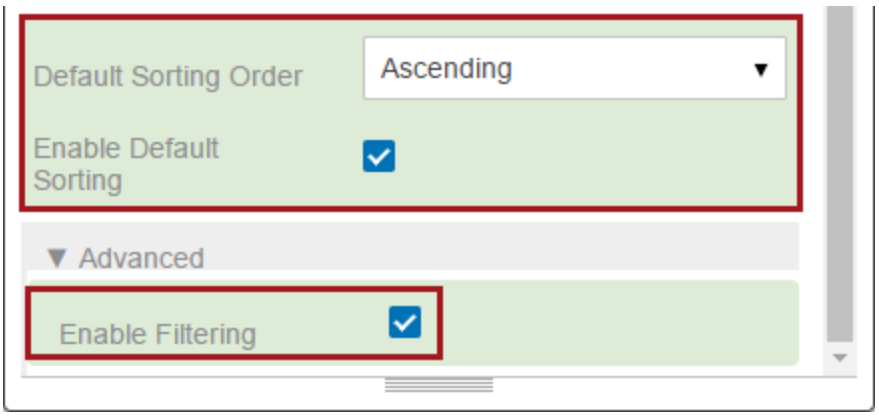
Checking the box for **Use Immediate Save** saves any value that has been added or modified the instant the user clicks out of the data field. This feature makes it less likely users will lose unsaved data when navigating away from the screen. Additionally, because users will no longer need to manually click a save button to save their data if the **Use Immediate Save** parameter is enabled, the Save button does not display on the screen. For details, see the **Auto-Save in the Web UI** topic.



Important: It is useful to note that if the user adds or modifies data and then either logs out of the Web UI or closes their browser without first clicking out of that field, that data will not be saved. Switching from one data field to another within the Attribute Link Editor screen is the sole trigger for the auto-save feature.

Configuring the default sorting and filtering

The Attribute Link Editor screen enables users to filter and sort the data appearing in the attribute link table.



When the Enable Default Sorting checkbox is checked, **Default Sorting Order** enables the user to determine whether the attributes in the attribute link table are sorted in ascending alphanumeric order (A - Z), or descending alphanumeric order (Z - A).

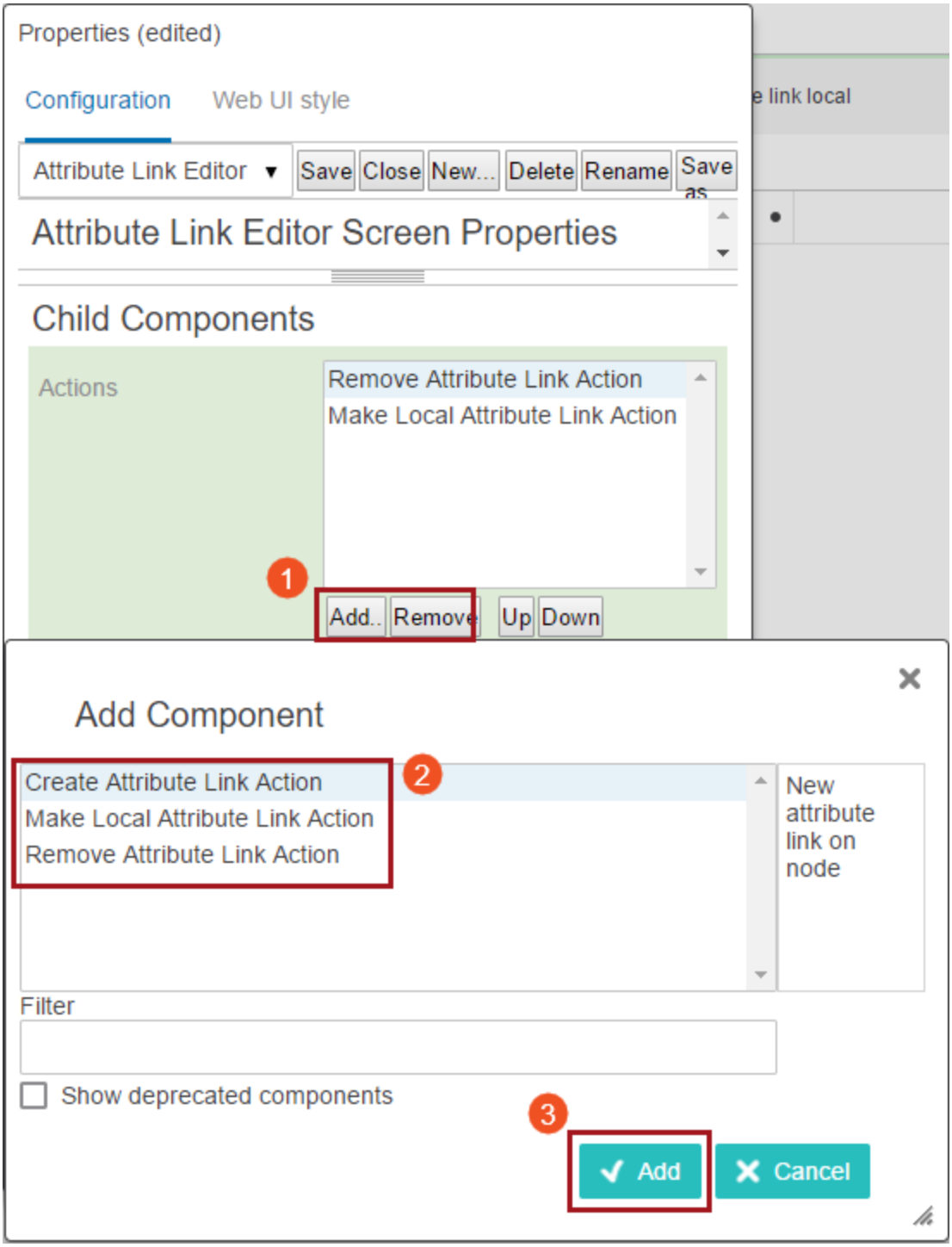
Note: Selecting (none) or no order, defaults to ascending alphabetical order.

When the **Enable Default Sorting** is unchecked, any selection the user makes in **Default Sorting Order** will not be implemented.

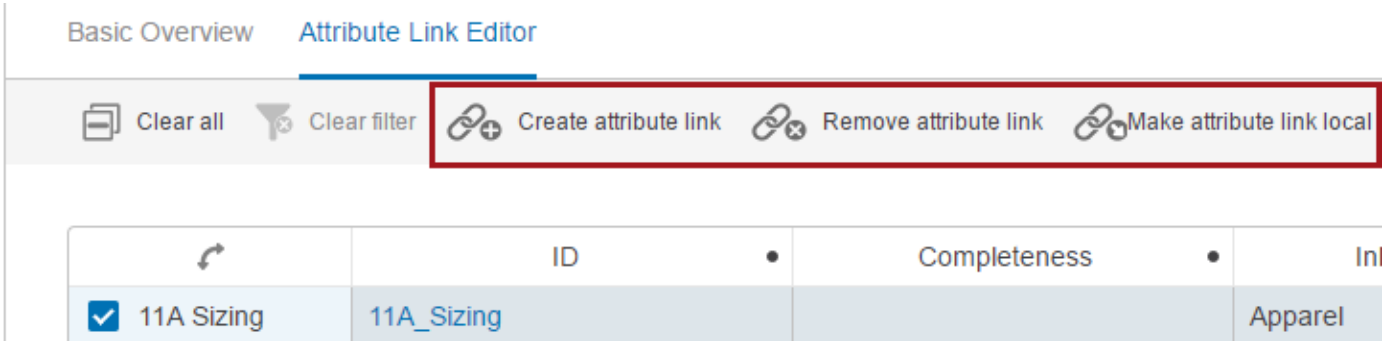
Under the collapsible **Advanced** title, the user may opt to **Enable Filtering**, as the default setting is set to 'off.' Checking this box activates the headers in the attribute link table so that, when clicked, a filtering menu displays that allows the user to adjust the display of data in a more granular way.

Configuring display of the attribute link buttons

Under Child Components is the **Actions** field. This field determines which toolbar actions display above the attribute link table on the Attribute Link Editor screen. Click the **Add..** button, and select Create Attribute Link Action, Make Local Attribute Link Action, or Remove Attribute Link Action. Multi-select is not an option, so to add all three, repeat the process for each.



For example, the following Attribute Link Editor screen displays all three buttons.



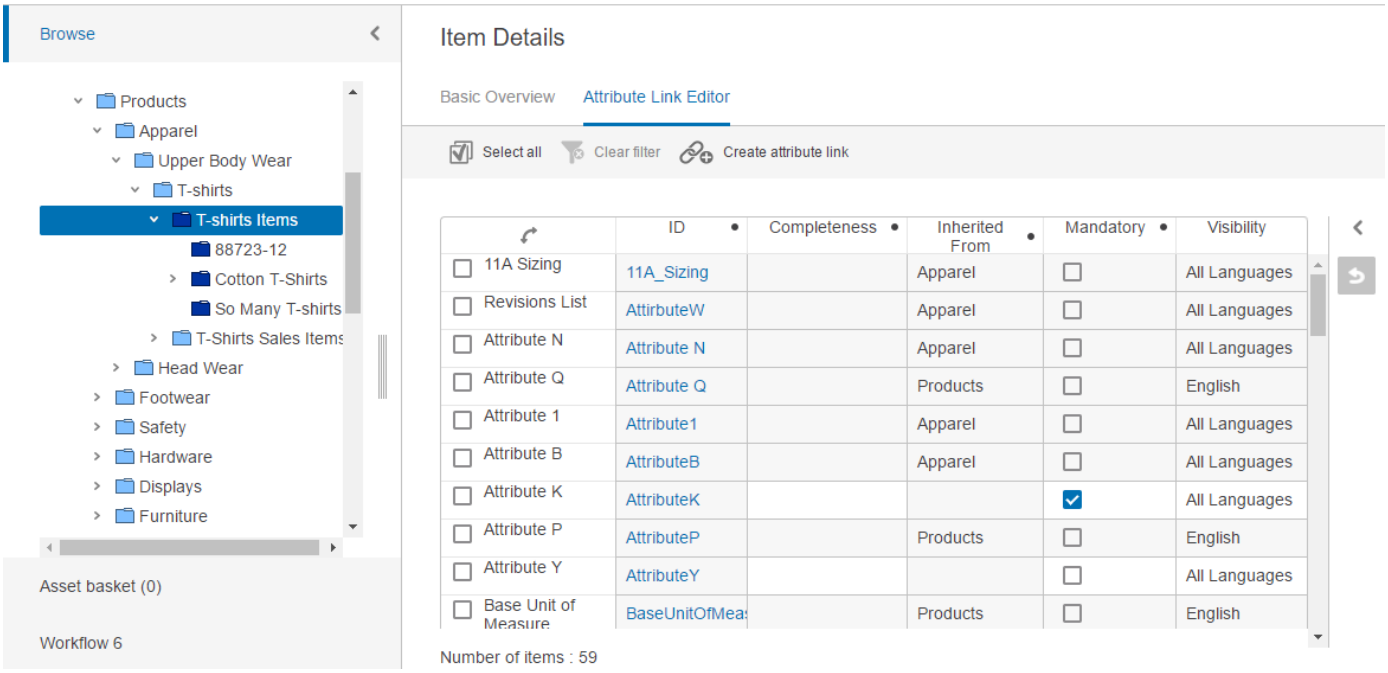
For information on using the Attribute Link Editor screen, see the **Editing Attribute Links in Web UI** documentation.

Editing Attribute Links in Web UI

This topic describes how users can best use the Attribute Link Editor screen in Web UI. For more information, see an overview of this screen's purpose by referencing the **Attribute Link Editor Screen** documentation, and for a detailed description of how to configure this screen, see the **Configuring the Attribute Link Editor Screen** documentation.

The Attribute Link Editor screen allows Web UI users to view information related to attributes linked to the object being viewed. In this topic, the various features available on the screen are described.

For reference, this is an example of one way to configure an Attribute Link Editor screen. The screen in the example has been added as a sub screen tab page on a Node Details screen.:

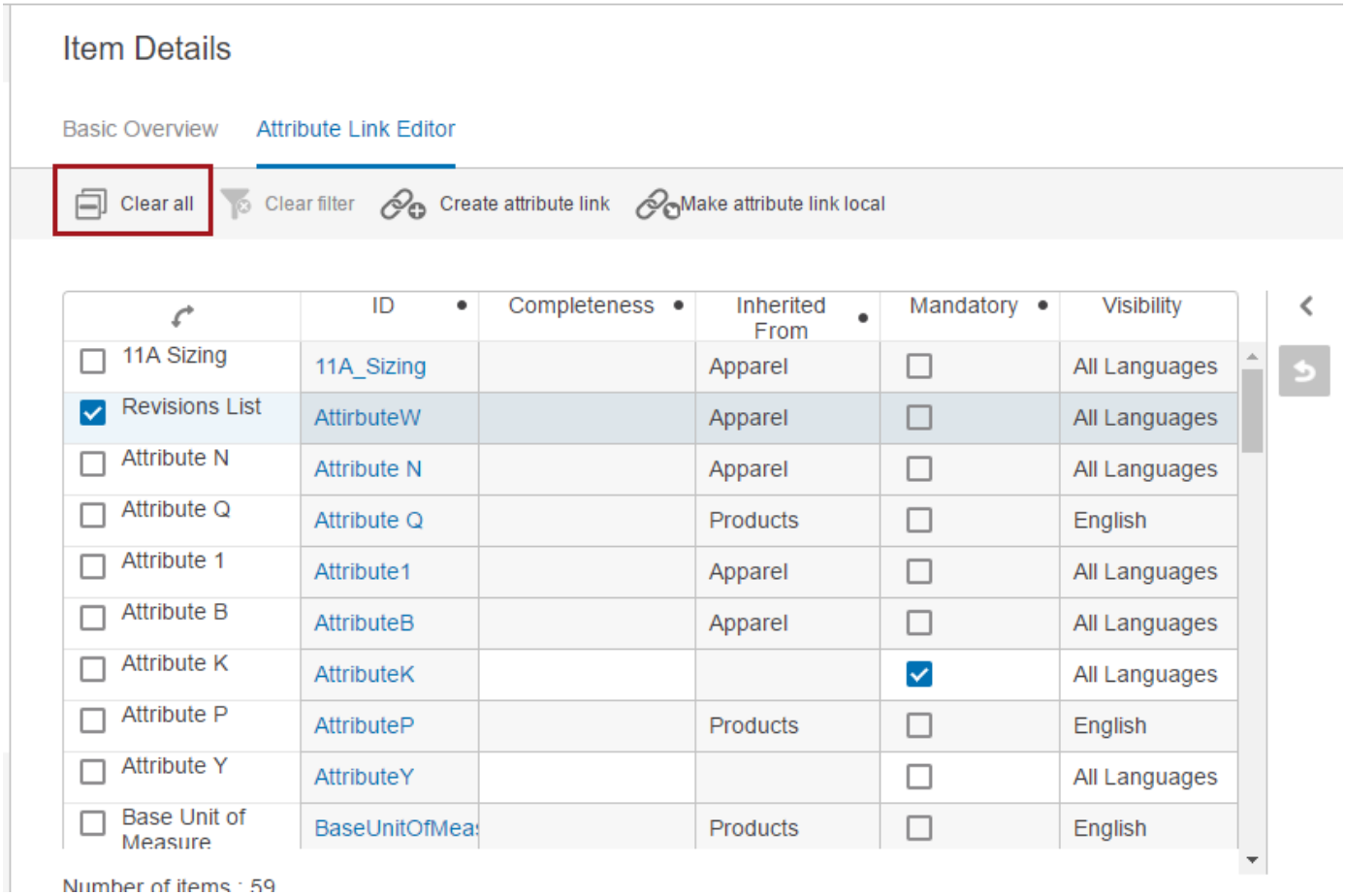


Select all / Clear all

The Select all / Clear all button displays dependent on whether the user has selected any of the object's listed attributes. They will not display at the same time.

- The Clear all button displays if one or more attributes are selected.
- The Select all button will only display if no attributes are selected.

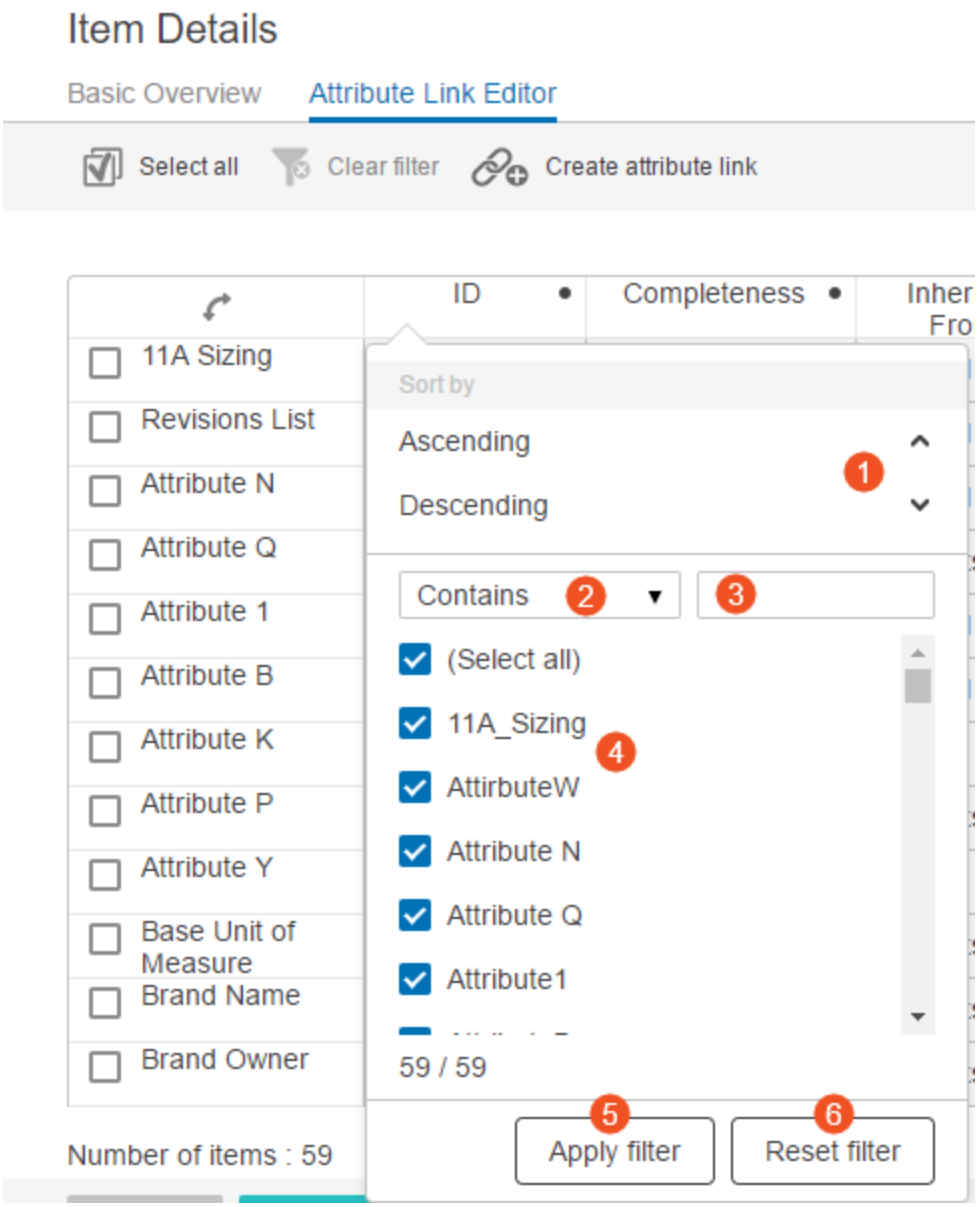
The primary use of this button is to easily establish a selection of attributes that can either be made local using the Make Attribute Link Local action, or removed using the Remove Attribute Link action.



Enable Filtering

When the Enable Filtering option is selected on this component, the ability to filter based on attribute values is enabled.

To apply a filter, click anywhere in a column's header. This brings up the sorting and filtering window highlighted in the screenshot below:



Referencing the numbered elements in the above screenshot to the corresponding numbers in the list below, functionality in the filtering window enables users to:

1. Sort the attributes in either ascending (^) or descending (v) alphabetic order.
2. Filter the linked attributes to show only attributes that:
   - 'Begins with' - The filter value begins with one or a sequence of character.
   - 'Contains' - The filter value contains one or a specific sequence of characters. This value may appear anywhere within a value string.
   - 'Does not contain' - The filter value does not contain one or a specific sequence of characters. This value may appear anywhere within a value string.

- 'Equals' - The filter value matches a precise set of characters.
- 'Wildcard' - This filter value option will display attribute values containing a repeated set of characters that includes known variable characters that can be substituted with an asterisk '*' symbol. Wildcard may be used singularly or multiple times in a filter setting. For more information, see the **Wildcard in Searches** section of the **Searching Functionality** topic of the **Getting Started / User Guide** documentation.

3. With any of the above filtering criteria in place, users may enter their search terms into the **Search** field. As characters are typed into this field, STEP returns a filtered result of attributes culled from the object's full list of attributes. From these, users may select only those attributes they want to display by adding a check beside each.

   The default filter setting is 'Contains.' For the settings 'Begins with,' 'Equals,' and 'Wildcard,' if a user just deselects any value in the search list, then the filter will revert to a 'Contains' filter once it is applied. For the settings 'Begins with,' 'Contains,' 'Equals,' and 'Wildcard,' any values entered that do not meet the filter criteria are removed from the filtered selection. For the setting 'Does not contain,' any values entered that do meet the filter criteria are removed from the filtered selection.

   Note: If you are dealing with multi-valued attributes where more than one value is populated, then All Values for that attribute are considered when creating a filter. Excluding one value by a filter does not mean the attribute will necessarily be removed from the view.

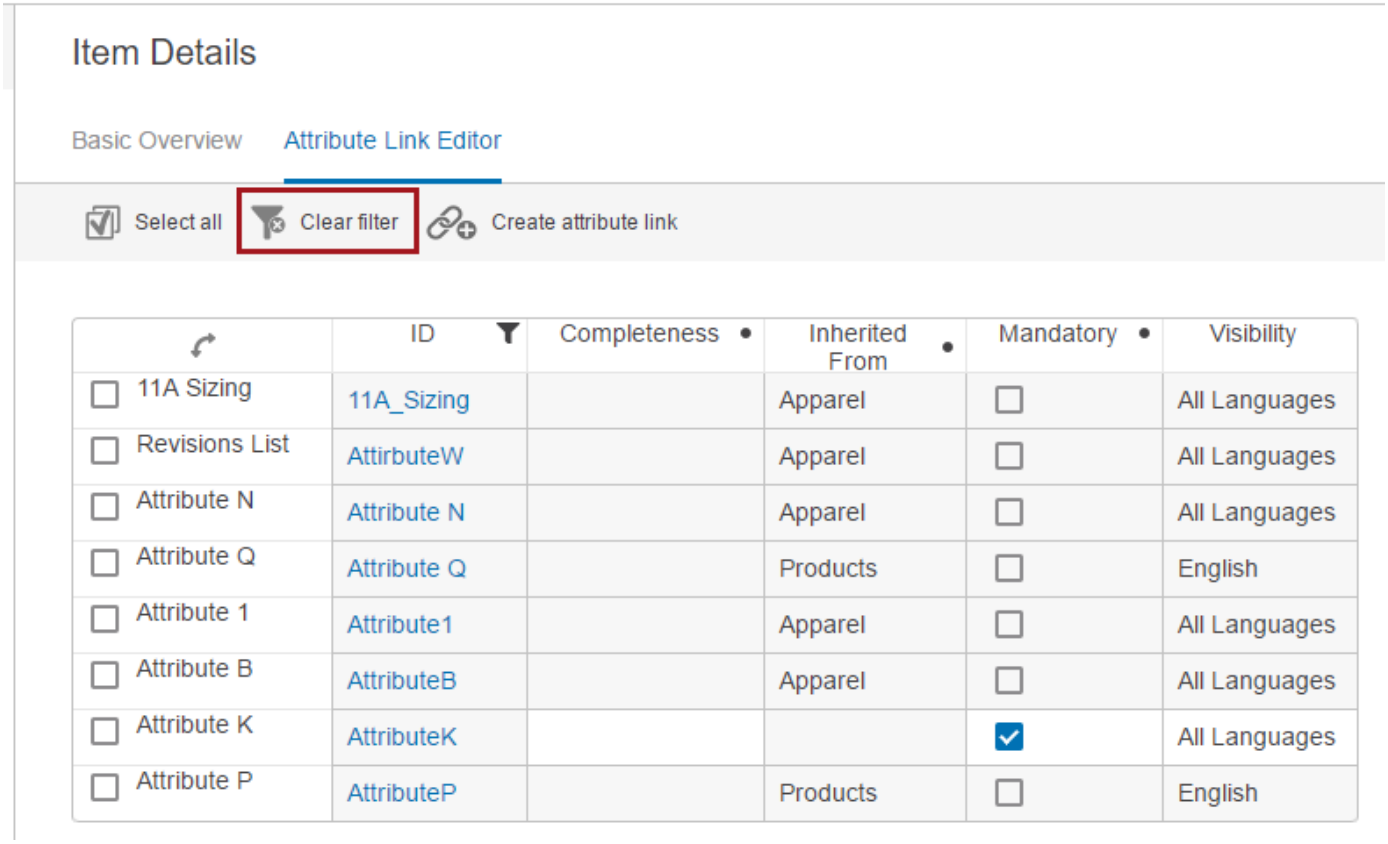
4. Users may also forgo the filtering and manually select from the full attribute list only those attributes they want to display by adding a check beside each.
5. Apply the configured filter to the attribute link table by clicking the Apply filter button.
6. Quickly clear any work you have done in the filtering window by clicking the 'Reset filter' button. The configuration you have applied remains in this filtering window, even if you clear the filter on the actual attribute link table. To clear all filtering, first clear the filter from the table, and then in the filtering window, click the 'Reset filter' button.

   Note: The sorting and filtering option applied in the attribute link editor screen of a product will be applicable only on the current selection. Once the user navigates to a different selection, sorting and filtering applied on the previous selection will be removed.

Clear Filter

The Clear Filter button is only active if a filter has been applied to the attribute link table.

If, in the designer, the configuration for the screen has been checked yes for Enable Filtering, then the attribute link table can be filtered column-by-column by clicking that column's header. This allows the user a wide array of ways to view their attribute link data. If the user has applied a filter to the data in this way, then the Clear Filter button is active and clickable.

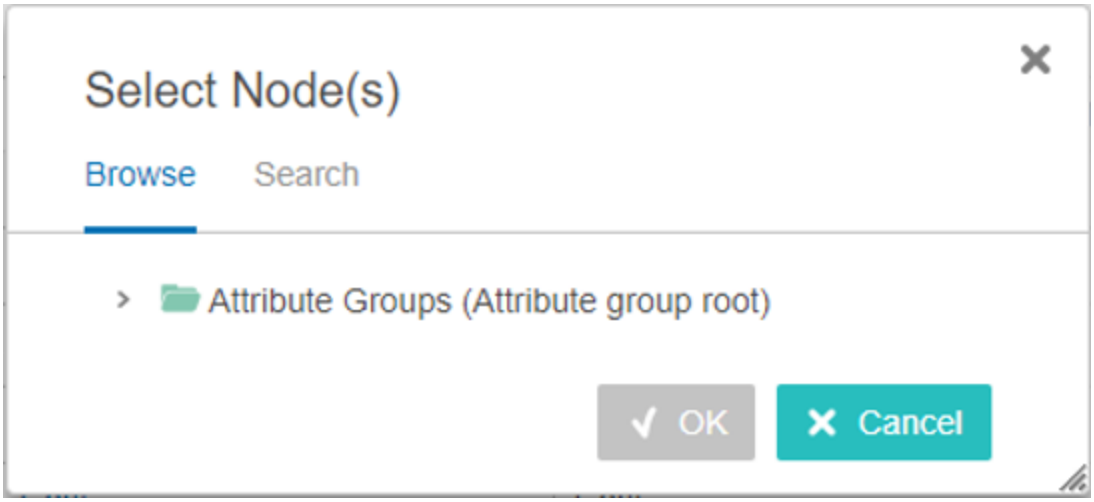


Configuring the Attribute Link Toolbar Actions

Toolbar actions are available that enables users to create new attribute links, make inherited attribute links local and, thus, editable, or remove attribute links from an object. Below is a list of those toolbar actions and the functions they perform. Users may see something different since the actions are set up by the administrator within the Attribute Editor Link Screen Properties.

Create Attribute Link

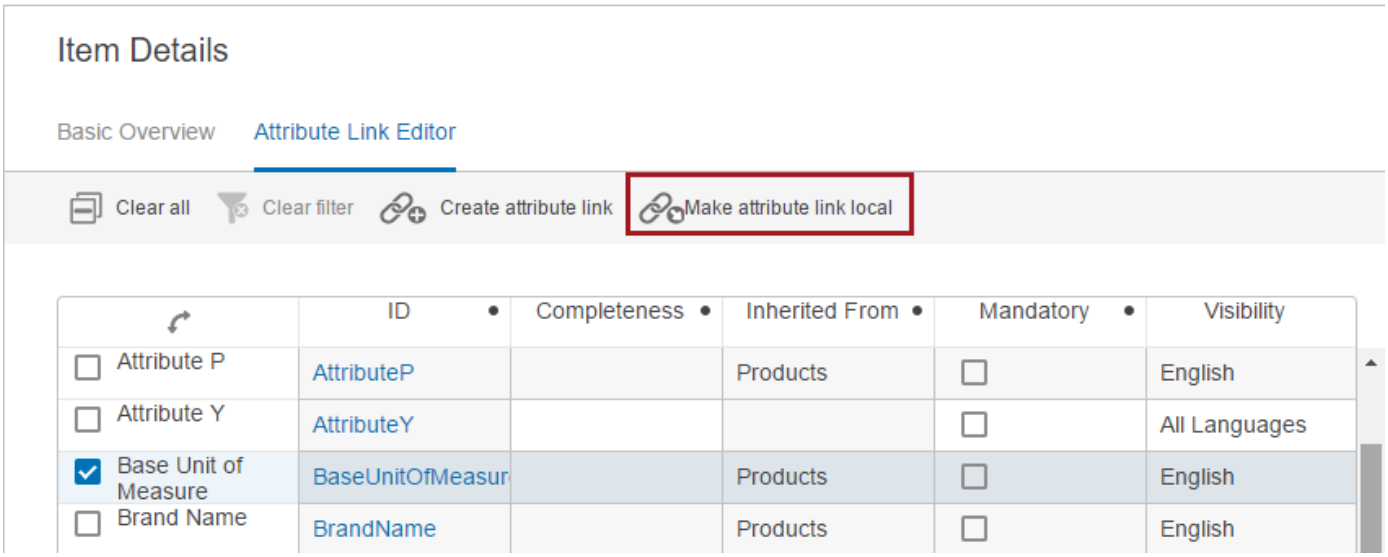
Clicking this toolbar action allows the user to link an attribute to the selected object. Dependent on how the Node Picker dialog is configured, a user may either search or browse the hierarchy to find the desired attribute.



Information related to configuration of the Node Picker can be found in the Configuring the Attribute Link Editor Screen documentation.

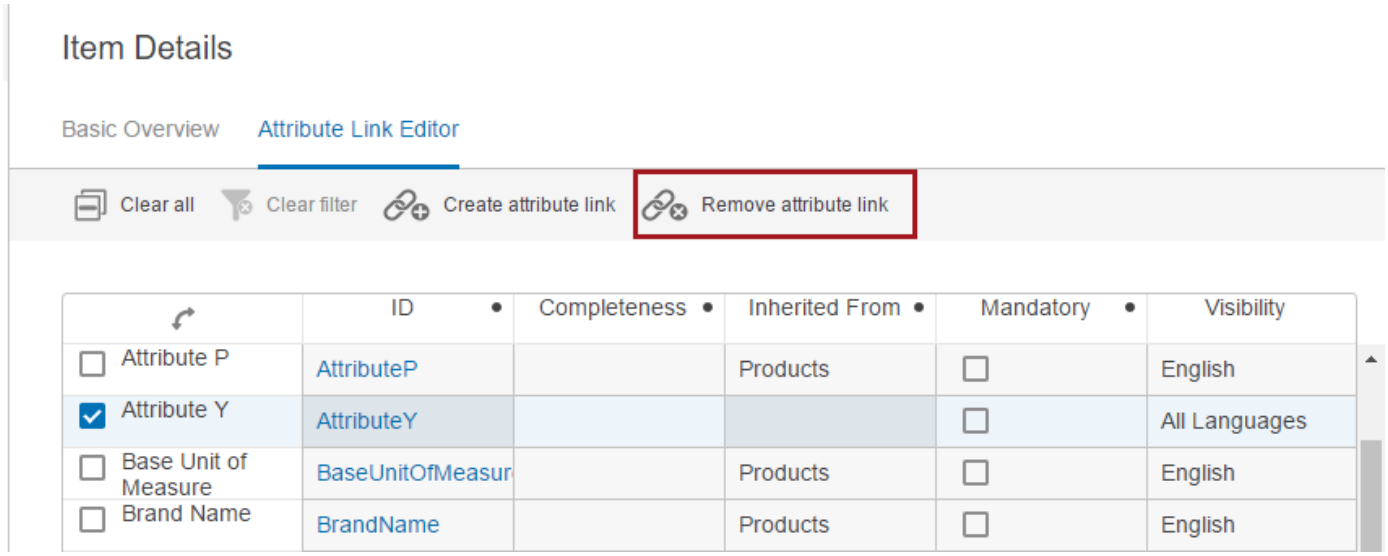
Make Attribute Link Local

When a user selects an attribute link, and the linked object is inheriting from a higher level, the Make Attribute Link Local toolbar action displays. Clicking this toolbar action allows the user to make the attribute link local and edit the link specific to the selected attribute.



Remove Attribute Link

When a user selects an attribute link and the selected attribute is linked directly to the object being worked on, the Remove Attribute Link toolbar action displays. Clicking the Remove Attribute Link toolbar action unlinks the attribute from the selected object and all its child objects.



• Inheriting attribute links cannot be removed.

Note: Inheriting attribute links cannot be removed. Inheriting attribute links which are local links on the child level can be removed by clicking on Remove attribute link action. This then removes the local link, and allows the inheriting link to be in place.

Columns

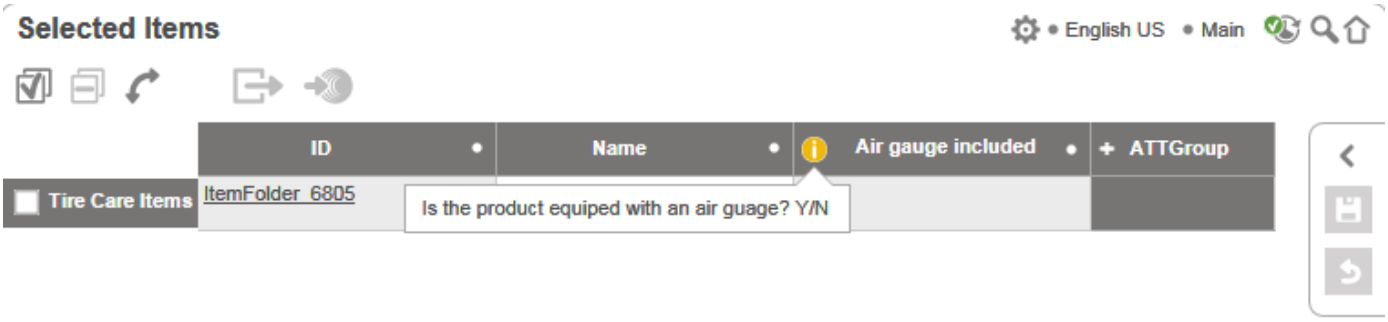
There are a series of description attributes administrators can add to this screen and configure. When using the screen, you may see any of the headers displayed in the screenshot below, dependent on the configuration of your screen:

For more information on configuring these metadata attributes, see the Configuring the Attribute Link Editor Screen documentation.

Attribute Help Text in Web UI

Help texts can be used to provide information to end users about an attribute and how it should be populated.

Help texts can be added to individual object editors (Node Editors) or to multi-object editors and grid views (Node Lists), as shown below.



Additionally, the information icon provides access to the 'Go to Wiki' link used to display Metadata Wiki pages when installed. For more information, see the **Wiki Metadata** topic in the **System Setup / Super User Guide** documentation.

This section describes the steps necessary to provide attribute help texts in Web UI.

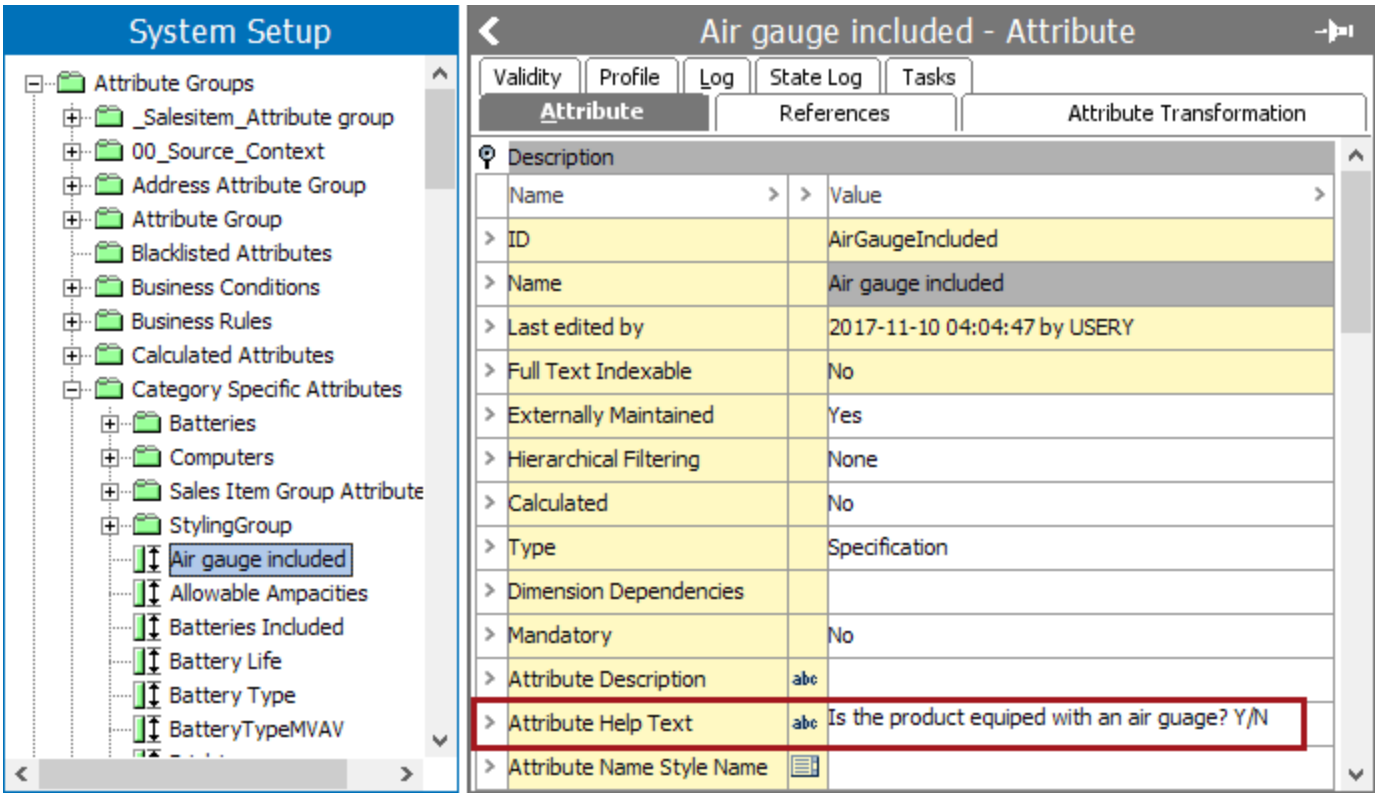
Prerequisites

To configure attribute help text, it is expected that the user has knowledge of System Setup functions and Web UI Designer.

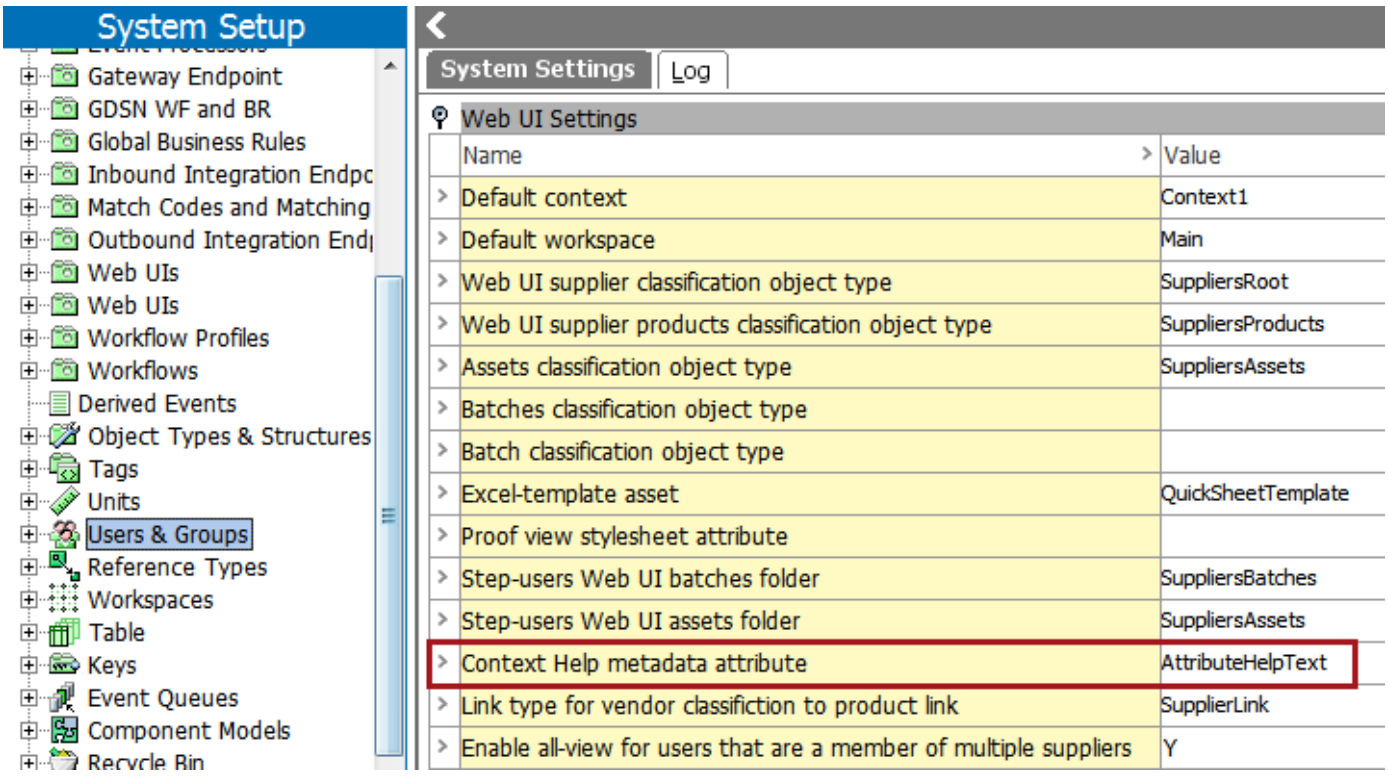
Attribute help texts can be entered individually in Web UI, per attribute and screen / component configuration, but this is a time-consuming process. Instead, it is recommended to apply global attribute help texts using the workbench, and then to provide local overrides in Web UI only as needed. For this approach, the system must first have a metadata attribute available to house the global help texts. See the **Attribute Metadata on Attributes** section in the **System Setup / Super User Guide** documentation for more information for instructions on how to complete this setup. Once complete, follow the below steps to enable attribute help text in Web UI.

Identify the metadata attribute used for help texts in System Settings

A metadata attribute must exist as valid on attribute object types, to be used to populate help text for individual attributes. For this example, an attribute with ID=AttributeHelpText is used. On any given attribute, text (and hyperlinks) can be populated in the help text attribute.

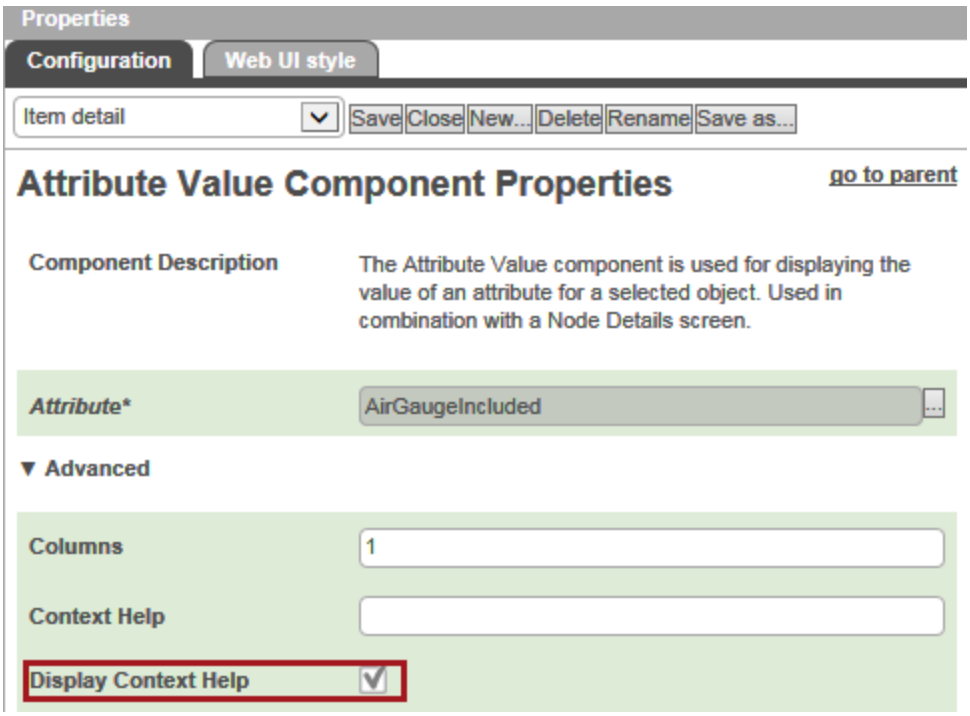


In order to inform the Web UI where to pull help texts from, the help text attribute must be specified. In **System Setup**, navigate to the **Users & Groups** root node, open the **Web UI Settings** flipper, and in **Context Help metadata attribute**, type the ID of the metadata attribute.

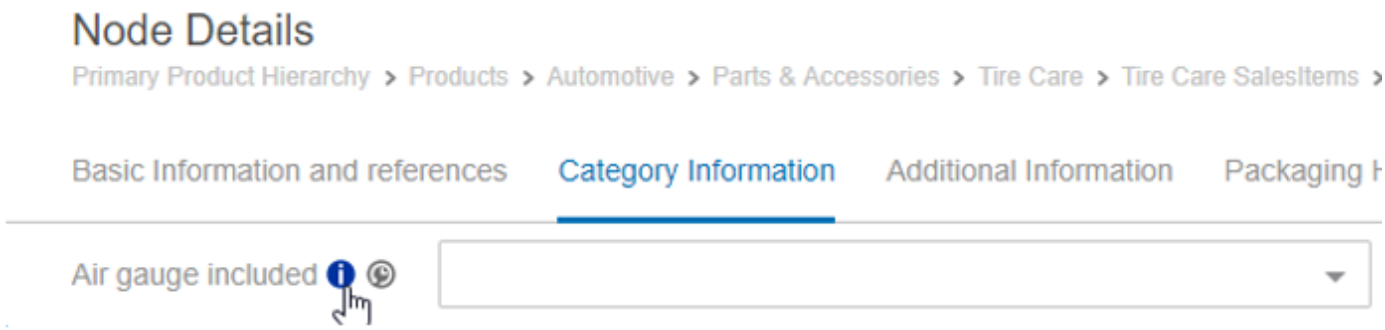


Set Component Properties in Web UI

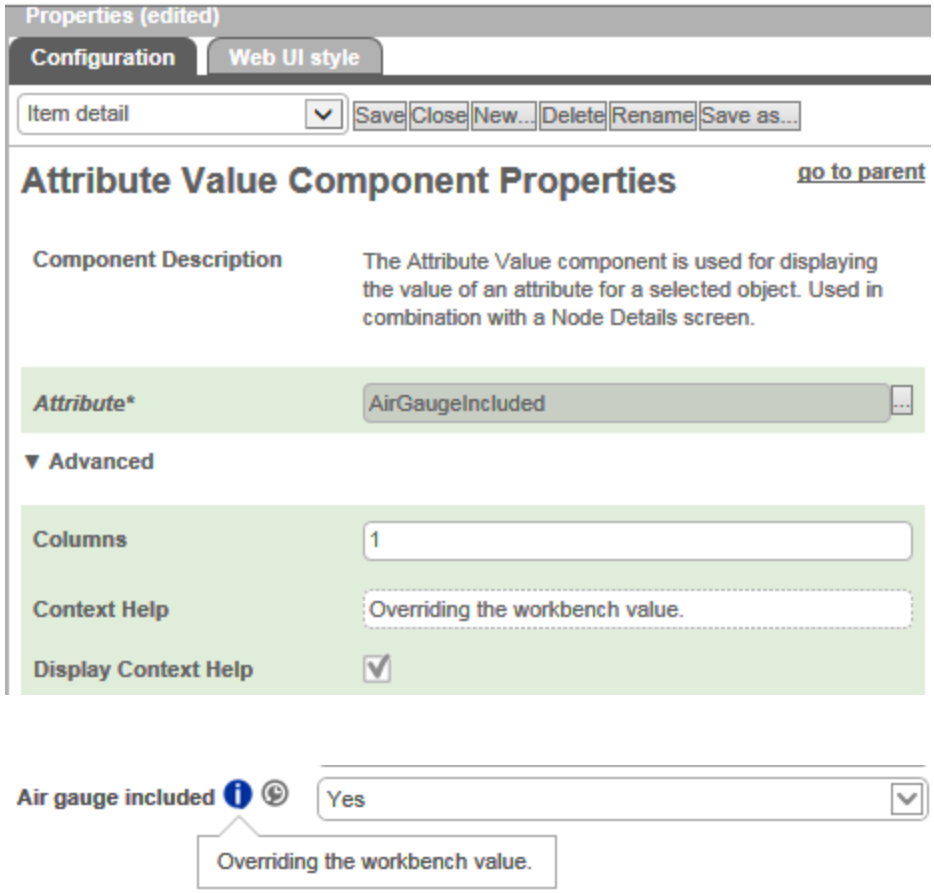
Once the workbench setup is complete, help texts must be enabled in Web UI. This is done using the **Display Context Help** parameter, which is available on attribute-related components (e.g., Attribute Value, Attribute Value Group) and attribute-related table header components (e.g., Attribute Value Header, Attribute Value Group Header, Variants Header) — all of which can be configured using a Node List with any of the following display modes: Multi Edit Display Mode, Compare View, Sequence View, and List View.



When end users access a component in which help text is enabled, the blue information icon appears when the user hovers over the attribute label, and clicking the icon reveals the help text.



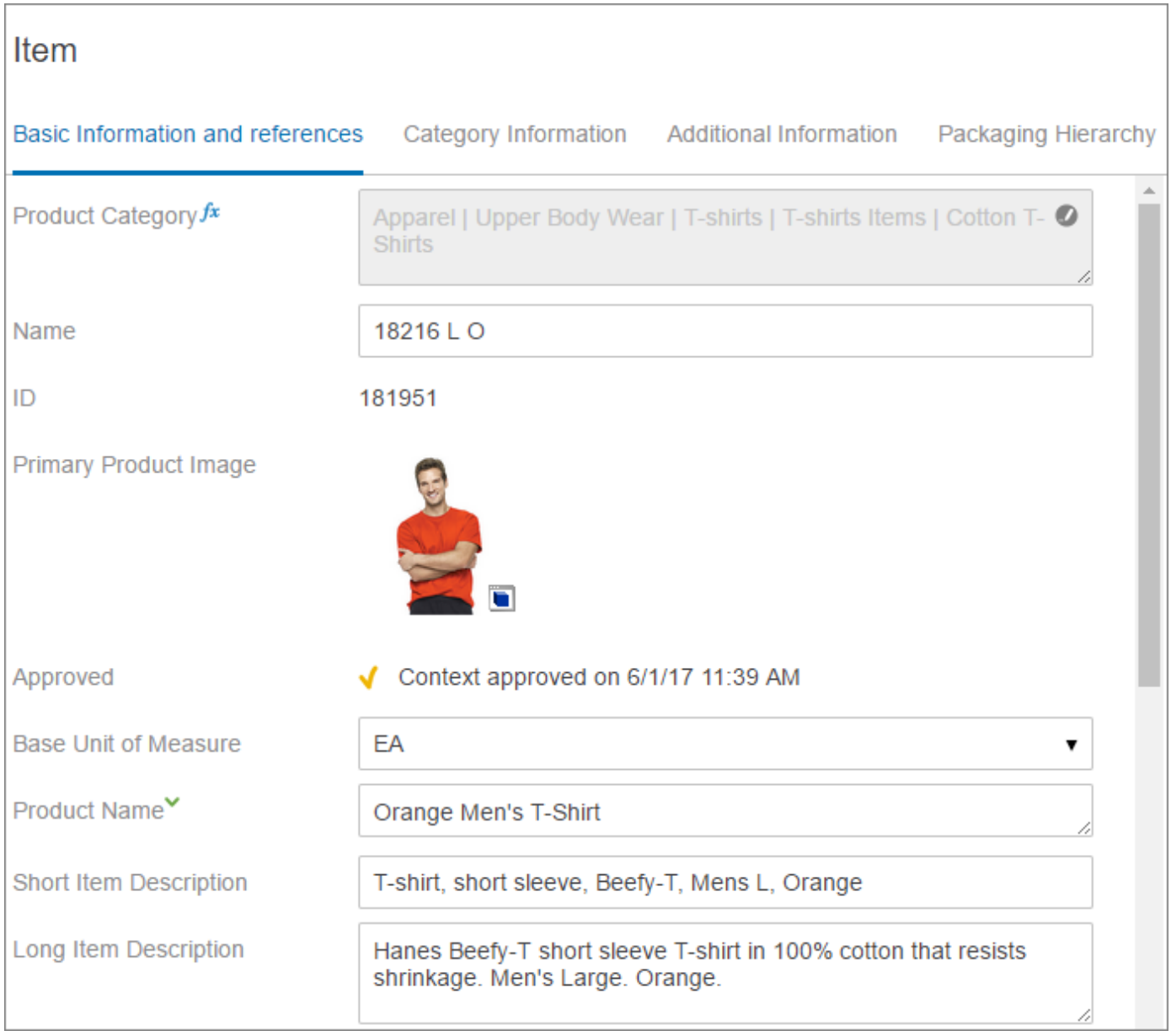
If an override to the attribute help text from workbench is required, it can be done in Web UI by entering a new value in the 'Context Help' parameter, as seen in the example below. This can be useful when some additional instruction is needed only in a particular context. For example, when introducing a new object instructions for data population may differ slightly from those for established objects. In this case, Web UI designers could populate local help text that would only be available in an item initiation screen.


Properties (edited)
Configuration
Web UI style
Item detail
Save
Close
New...
Delete
Rename
Save as...
Attribute Value Component Properties
go to parent
Component Description
The Attribute Value component is used for displaying the value of an attribute for a selected object. Used in combination with a Node Details screen.
Attribute*
AirGaugeIncluded
▼ Advanced
Columns
1
Context Help
Overriding the workbench value.
Display Context Help
Air gauge included
Yes
Overriding the workbench value.

Attribute Value Component

An Attribute Value component can be added to a Node Editor component to display the value for a single attribute.

In the example below, the Name, ID, and Product Name attributes are displayed using a Attribute Value components within a Node Editor on a Node Details screen.



Prerequisites

It is expected that anyone configuring the Attribute Value component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, users must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web**

User Interfaces / Web UI Setup and User Guide documentation.

Within this component are options related to the use of STEP Tags. Prior to making changes to the default settings related to STEP Tags and Tag Conversion, it is recommended to review the complete **Tags** documentation within **System Setup / Super User Guide**.

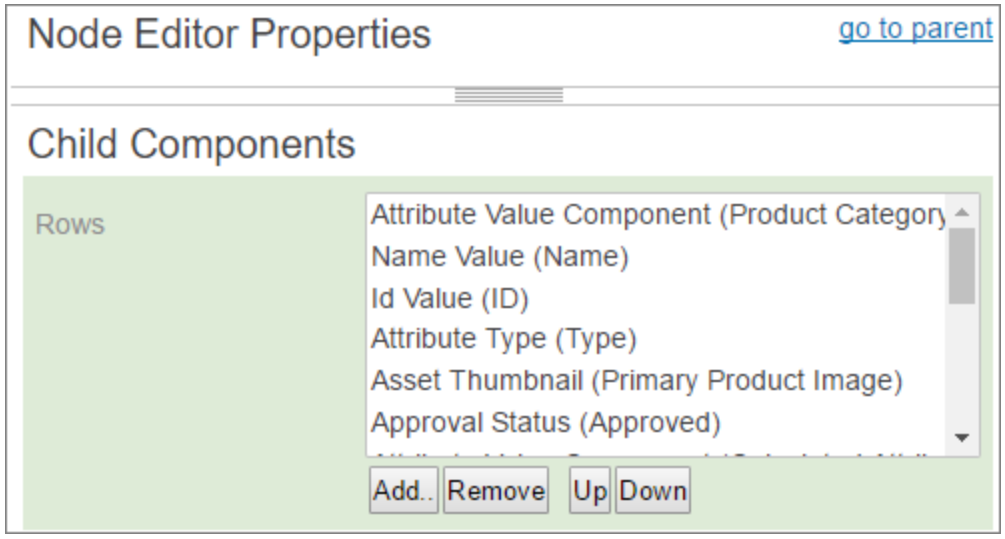
Adding an Attribute Value Component to a Node Editor

Attribute Value components are added within the Child Components section of the Node Editor Properties. They can be added and removed using the buttons below the Rows field, and the attribute values will display on the screen based on how they are ordered within the field. They can be reordered using the Up and Down buttons.

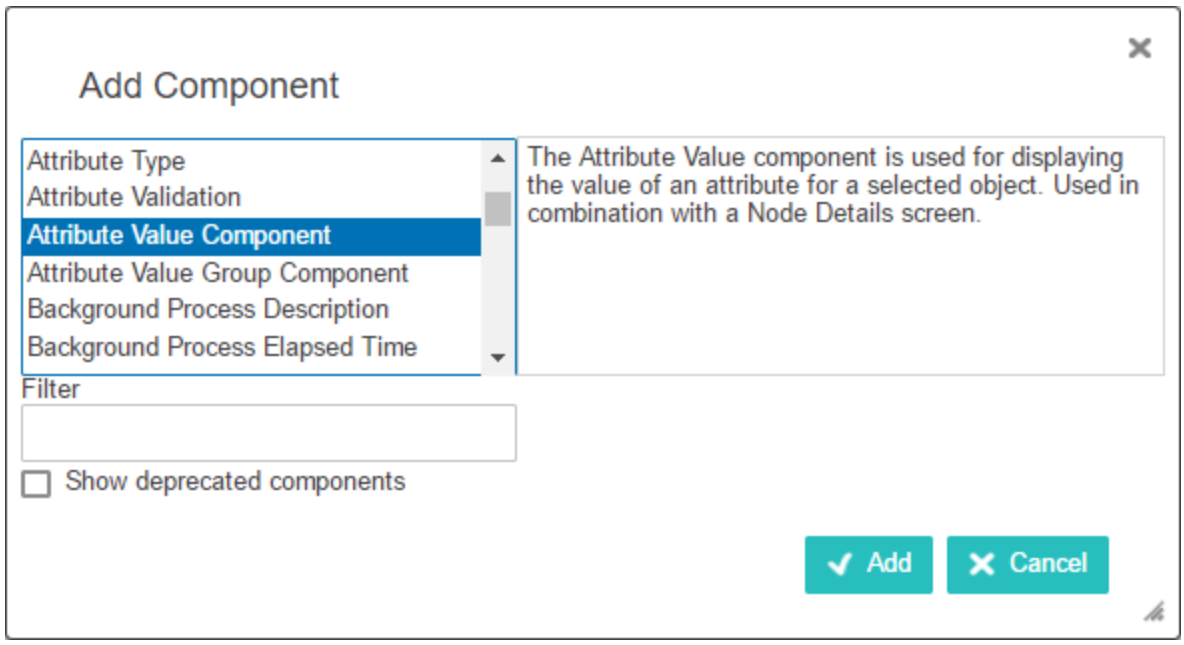
Recommended practice when displaying attributes within Web UI is to use the Attribute Value Group component and then manage the display behavior of the validation base types using one or more global rules created using the Override Control Type component. For more information, see the **Override Control Type Rule** topic within the **Web User Interfaces** documentation.

Steps for adding an Attribute Value Component to a Node Editor are below. Information for all the Attribute Value Component Properties dialog parameters are available in the Configuring an Attribute Value Component section below.

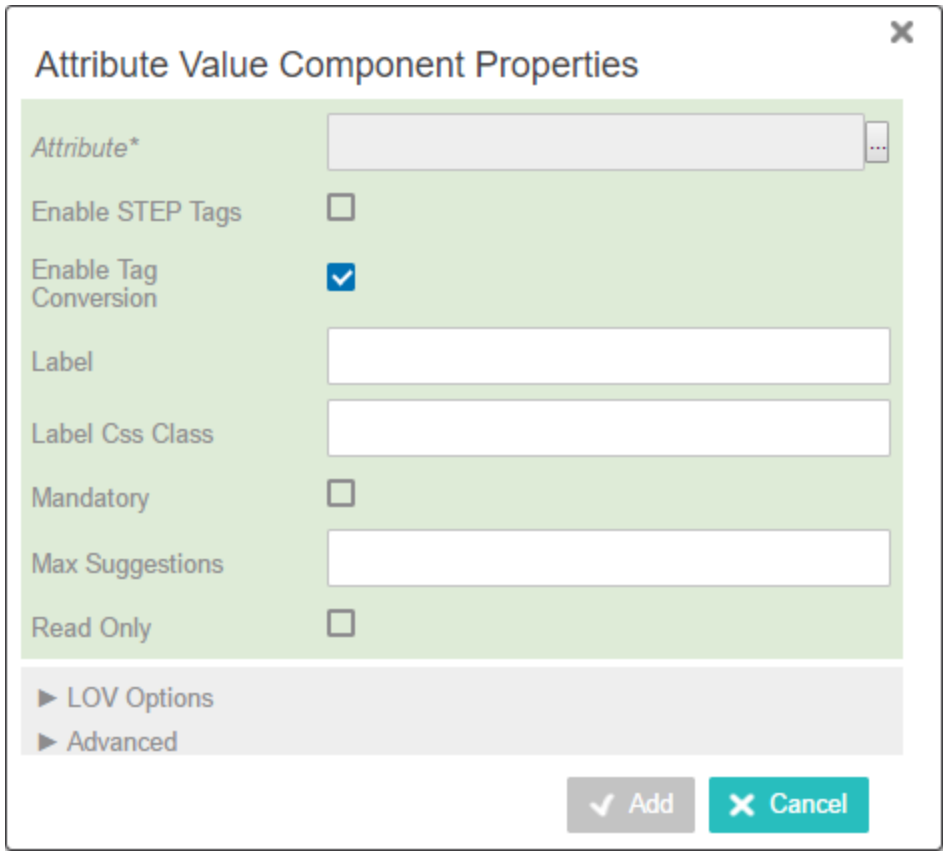
1. With the designer open, select **your Node Details screen**, navigate to **your Node Editor component**, and the Node Editor Properties will display.



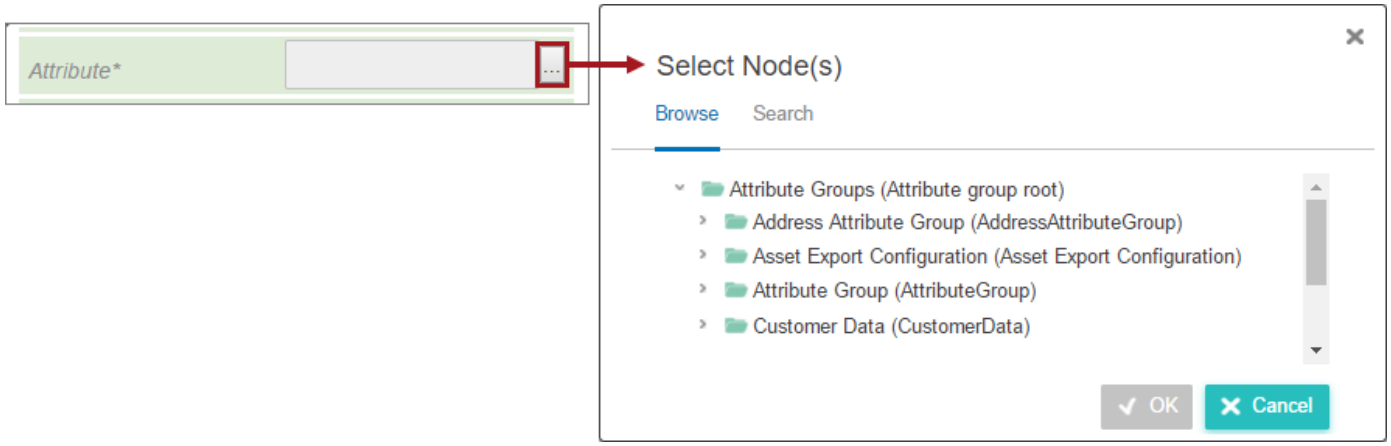
2. Click the **Add** button, the Add Component dialog will display.



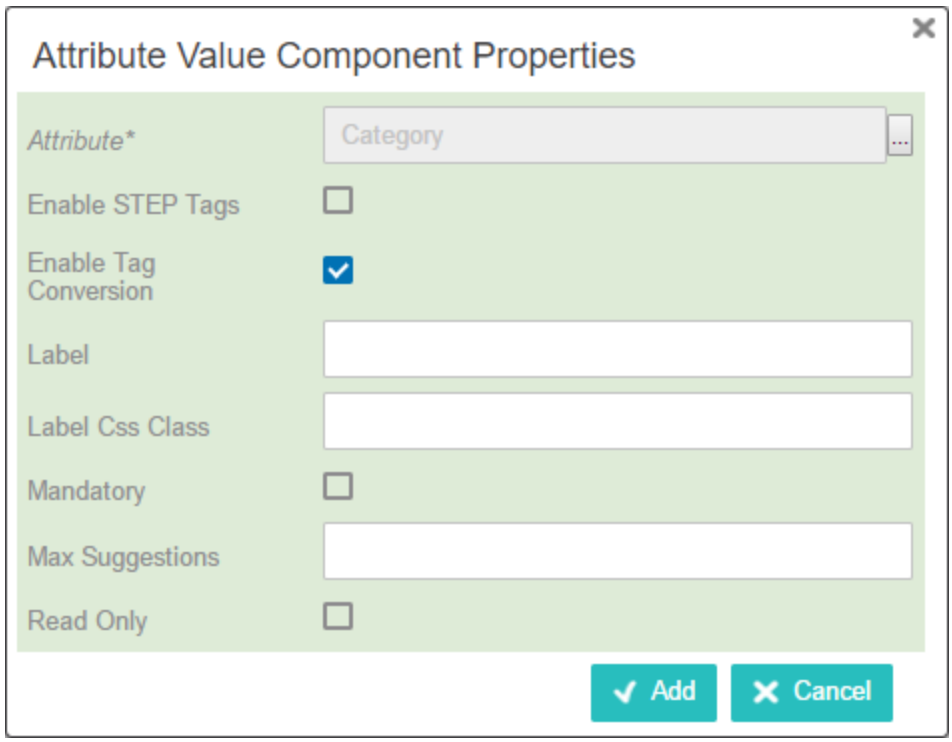
3. Select the Attribute Value Component, click the **Add** button, and the Attribute Value Component Properties dialog will display.



4. The only mandatory parameter is **Attribute**. To select an attribute, click the ellipsis button (...) to the right of the Attribute field. A Select Node(s) dialog will appear and an attribute can be selected by browsing and navigating down to the desired attribute or by using the search feature.



5. Once the appropriate attribute has been selected, click the **OK** button to close the Select Nodes dialog, and return to the Attribute Value Component Properties dialog now displaying the selected attribute and the enabled Add button.



6. Click the **Add** button, the dialog will close, and the newly added Attribute Value component will display as the last row of the Node Editor Child Components Rows.

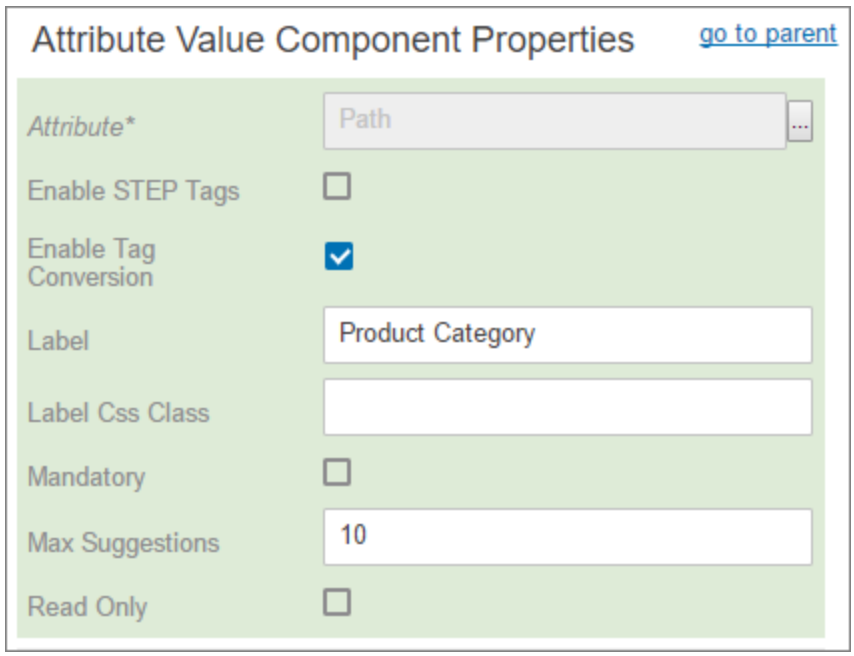
7. Optionally, use the **Up** and **Down** buttons to properly order the display of the newly added Attribute Value component.
8. Click the **Save** and **Close** buttons for the designer.

Configuring an Attribute Value Component

An Attribute Value component is highly configurable, and its parameters are found within the three sections; Main, LOV Options, and Advanced. Information for each of the parameters available for the Attribute Value Component Properties can be found below.

Main Parameters

Configure the parameters as needed.



- **Attribute:** The only mandatory parameter for this component. An attribute is selected when the component is added. To select a different attribute, click the ellipsis button (...) to the right of the Attribute value field. A Select Node(s) dialog will appear and an attribute can be selected by browsing and navigating down to the desired attribute or by using the search feature.
- **Enable STEP Tags:** Determines if users should be able to edit STEP tags.
  - If disabled (default) and the content contains a tag (other than <lt/> or <gt/>), then the component will be read only based on Override Control Type selected.

Note: If the Override Control Type is a Rich Text editor, then the component will be editable with Rich Text Editor.

- If enabled, STEP tags are shown in the value and it is possible to edit the tags.

- **Enable Tag Conversion:** By default this parameter is enabled when adding new instances of Attribute Value components.

Important: Working with tags may require setup in workbench. See the **Tags** topic in the **System Setup / Super User Guide** documentation.

  - If enabled (default) then users can more easily use < and > symbols in attribute values without having to do additional configuring because the control type for Text, Text (exclude tags), Numeric Text, and Numeric Text (exclude tags) attribute fields will default to Rich Text.

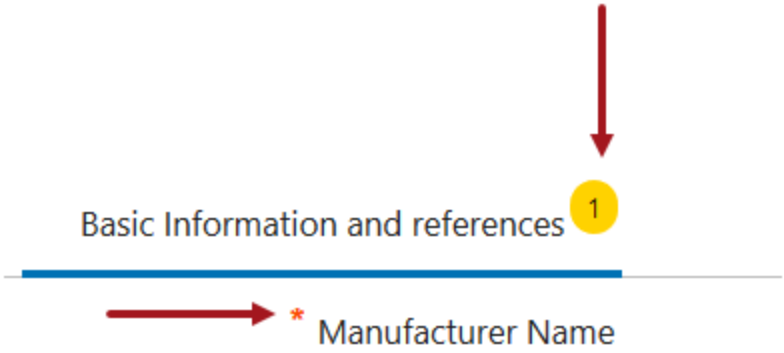
    The Override Control Type parameter (below) **will not** override the Text, Text (exclude tags), Numeric Text, and Numeric Text (exclude tags) validation base types, and the 'Edit formatted value' icon will be present for attributes with Text, Text (exclude tags), Numeric Text, and Numeric Text (exclude tags) validation base types.

    Note: When 'Enable Tag Conversion' is set to true, the 'Override Control Type' is not taken into consideration, and you will always have Rich Text Box created. 'Enable Tag Conversion' always takes precedence. If you want the Text Box instead of the Rich Text, then 'Enable Tag Conversion' parameters should be set to false.

  - If disabled and users enter the < and/or > symbols into an attribute value field. or a style is applied to a value (e.g., bold or italic), upon save, the field will become locked and Rich Text Editor is the only way to edit the values. The field can only be unlocked by accessing workbench.
  - If you experience issues while using the Rich Text Editor in Internet Explorer, use an alternate browser such as Chrome, Firefox, or Safari.

- **Label:** Override the attribute name by adding new text that will display in its place. The default label of attribute value component is the attribute title.
- **Label Css Class:** Optional name of a CSS style to be set for the label.
- **Mandatory:** When enabled, users are visually prompted to add a value to the attribute. If 'Enforce Validity' is enabled on any of the action buttons (Save, Submit, or Approve), users must provide a value for the attribute to the attribute field before any of the action buttons will be activated.
  - If enabled, the attribute name will display with an asterisk (*), and when tab pages are used, a yellow warning icon will display for each tab that contains unpopulated mandatory attribute fields.

  In the example below, the Manufacturer Name attribute value displays with an asterisk, and because the attribute value field has not been populated, the yellow warning icon appears in the right upper corner of the tab.



- **Max Suggestions:** Determines the maximum number of suggestions that will display before a scroll bar is used when the attribute is set to (or automatically uses) LOV base type and typeahead control type. Additionally, it is Used to indicate the maximum number of items returned in the typeahead result
- **Read Only:** Determines if the value field should be editable or read only.
  - If disabled (default) then users can edit the field.
  - If enabled the attribute value on the screen will be locked so end users cannot make edits.

For details on the classification-specific parameters ('Classification Link Type', 'Unit Metadata Attribute', and 'Display FValue Details') see the **Classification-Specific Attribute Value Components** topic.

LOV Options Parameters

Click the arrowhead next to the **LOV Options** heading to see the parameters available. Configure the parameters as needed.

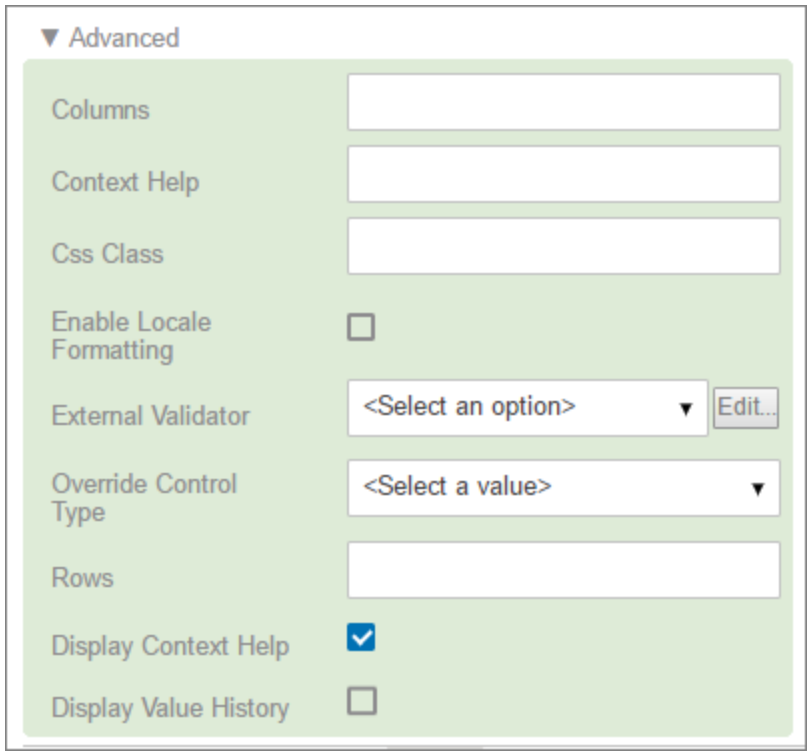
Important: Settings within the Reverse LOV Value ID Presentation parameter will only apply when the attribute LOV is configured with IDs, and the Show LOV IDs parameter is enabled. For more information, see the **Adding IDs to Values in LOV** section of the **List of Values (LOVs)** topic within the **System Setup / Super User Guide**.

- **Reverse LOV Value ID Presentation:** Determines if the LOV values display before or after the LOV ID.
  - If disabled (default) then the LOV value will display before the LOV ID.
  - If enabled then the LOV ID will display before the LOV value.

- **Show LOV IDs:** Determines if the attributes LOV ID displays for the end user.
  - If enabled (not default), and the attributes LOV has IDs enabled, then the LOV ID will display next to the value.
- **Sort LOV By ID:** Determines if the LOV displays in ascending order using the LOV name or ID.
  - If enabled (not default), and the attributes LOV has IDs enabled, then the LOV ID will display by the IDs ascending order. It is recommended to also enable the 'Show LOV IDs' parameter, because the list will appear to be sorted incorrectly if the IDs are not displayed.

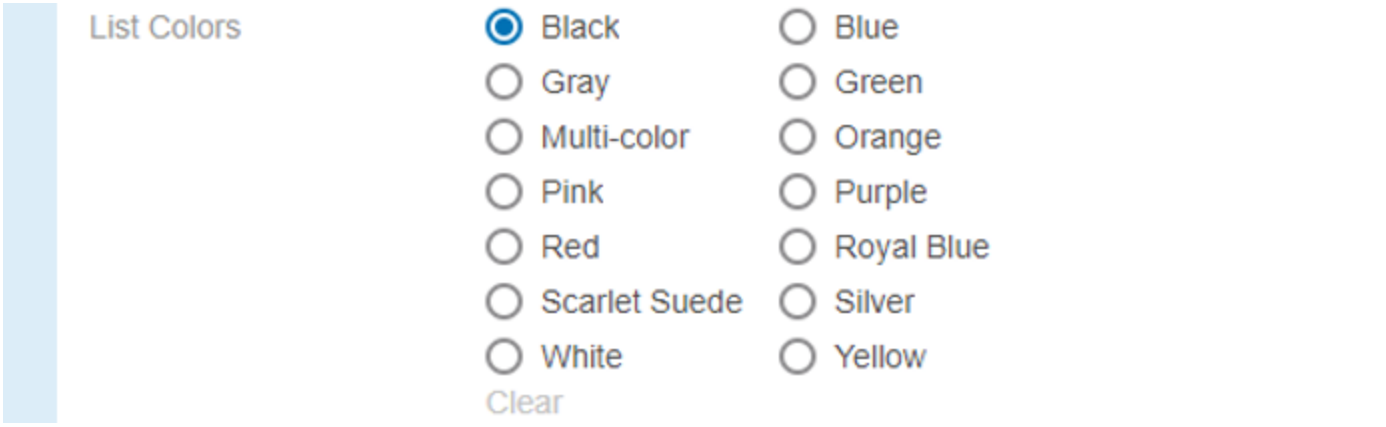
Advanced Parameters

Click the arrowhead next to the **Advanced** heading to see the parameters available. A description of each parameter follows. Configure the parameters as needed.



- **Columns:** Enter the number of columns that should be used for the distribution of the values. Settings within the Columns parameter will only apply when the attribute is set to (or automatically uses) one of the following control types: Checkbox, Radio, Radio with clear option. Also the attribute cannot be set to allow users to add values.

  In the example below, the control type is set to 'Radio with clear option', and the Columns parameter is set to 2. The 14 attribute values display within two columns, and the 'Clear' option displays to the end of the value based on the value distribution of the Column parameter setting.



Note: The radio button with Clear option displays 'Clear' within the attribute values based on the column parameter setting and total number of attribute values. It will NOT be always to the right of the last value. A single valued LOV attribute cannot be specified with the control type – Checkbox

- **Context Help:** Enter help text to display when a user hovers over the attribute name. Requires that the Display Context Help parameter below is enabled. More information about the Context Help parameter can be found in the **Set Component Properties in Web UI** section of the **Attribute Help Text in Web UI** documentation.
- **Css Class:** Enter a css-style name to be set as the primary style for this component. This will override the default determined by the attribute data type or settings applied to the Override Control Type parameter below.
- **Enable Locale Formatting:** Determines if the 'ISO Date' or 'ISO Date and Time' attribute values are displayed per the locale selection.
  - If enabled (not default), the 'ISO Date' or 'ISO Date and Time' attribute values will be displayed in the manner defined by the locale selection made during login.

Important: Additional setup is required. For more information, see the **Localizable Dates in Web UI** section of the **Web User Interfaces** documentation.

- **External Validator:** Provides access to a Validation Script parameter that allows for the insertion of a JavaScript function to perform external validation. Along with validation, the external source can also return associated data values.
- **Override Control Type:** The default control type is defined by the attribute validation base type and LOV hardness (can users add values).
  - If the attribute validation base type is LOV, then the following Override Control Type options are viable: Checkbox (only for multivalued LOVs), Radio, Radio with clear option, and Typeahead.
  - If the attribute validation base type is Text, Text (exclude tags), Numeric Text, or Numeric Text (exclude tags), then the following Override Control Type options are viable: Rich Text, Text Area, and Text Box.

For more information about managing the control types in Web UI, see the **Override Control Type Rule** section of the **Main Properties Overview** documentation.

Important: It is possible to select anyone of the control types, however if the selection is not valid, then the expected results will not display.

- **Rows:** Enter the number of rows to display before a scroll bar is displayed to the user. Settings within the Rows parameter will only apply when the attribute is set to (or automatically uses) one of the following control types: Checkbox, Radio, Radio with clear option. Also the attribute cannot be set to allow users to add values.
- **Display Context Help:** Determines if the help text supplied in the Context Help parameter above should be available to users. Help texts can be used to provide information to end users about an attribute and how it should be populated. For more information, see the **Attribute Help Text in Web UI** section of the **Using a Web UI** documentation. This is where the 'Go to Wiki' link is displayed when the Wiki Metadata feature is installed. For more information, see the **Wiki Metadata** topic in the **System Setup / Super User Guide** documentation.
- **Display Value History:** Determines if the history icon should appear displaying the attribute's historic data and information on how the value has changed over time within the Web UI. For more information, see the **Attribute Value History** section of the **Using a Web UI** documentation.

Additional Considerations

Enable Tag Conversion

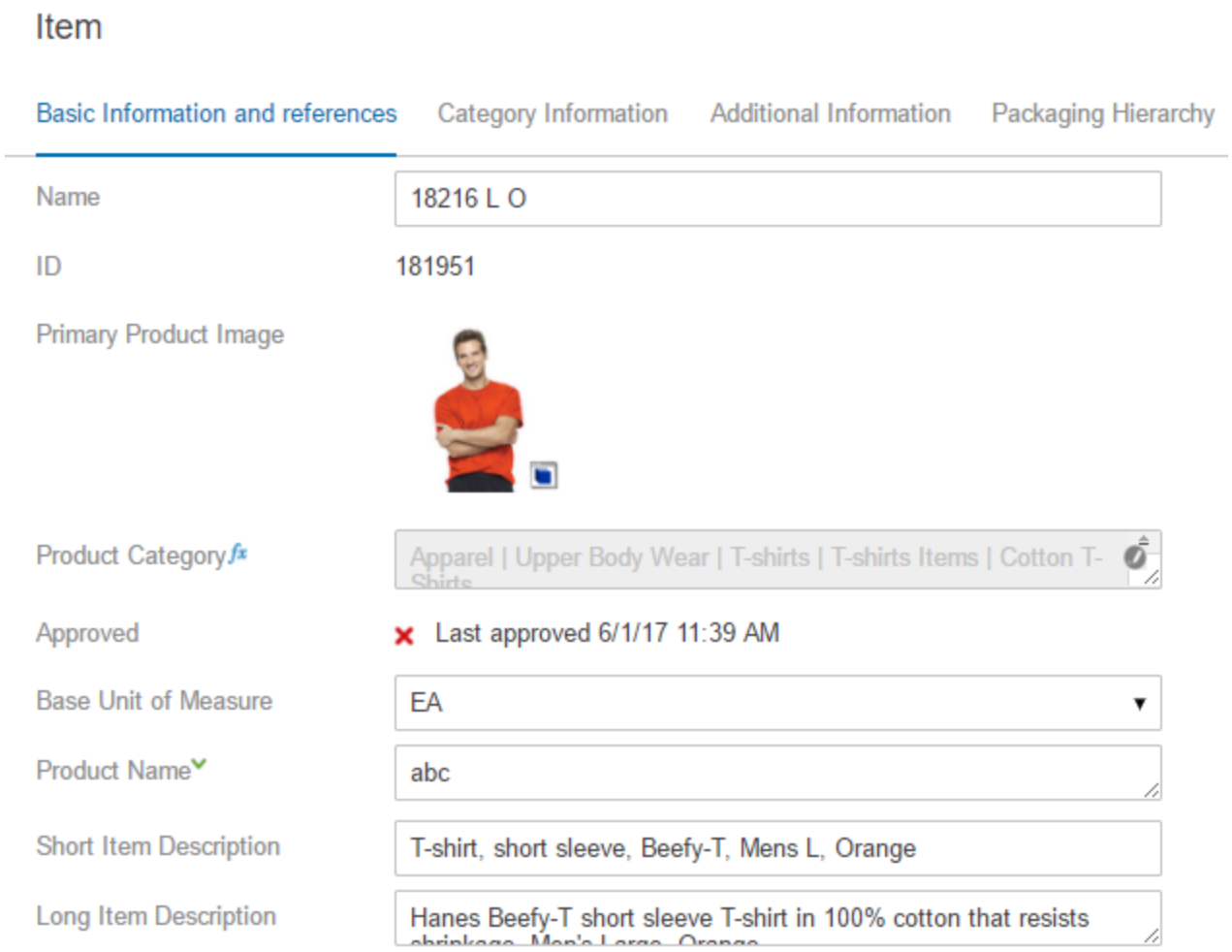
- If Enable Tag Conversion is disabled / unchecked and a style is applied to a value (e.g., bold or italic), the field locks and Rich Text Editor is the only way to edit the values.
- If you experience issues while using the Rich Text Editor in Internet Explorer, use an alternate browser such as Chrome, Firefox, or Safari.

Attribute Value Group Component

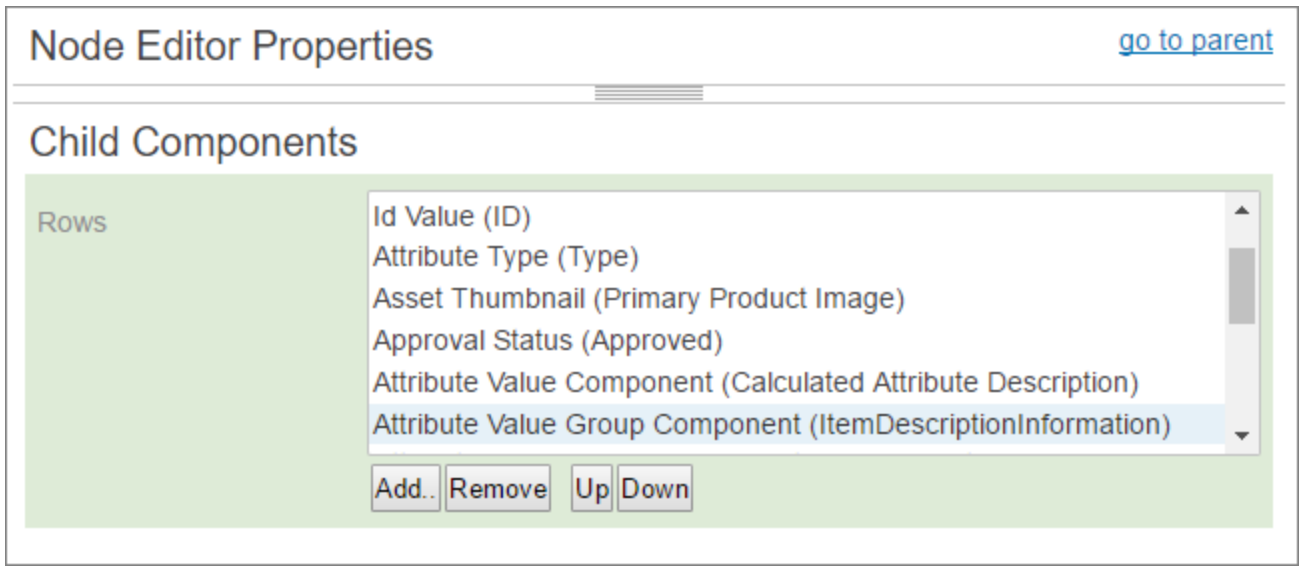
The Attribute Value Group component can be added to a Node Editor component to display the values for each attribute within a chosen attribute group.

One major benefit to using an Attribute Value Group component (versus multiple Attribute Value components) is that when attributes are added to the chosen attribute group, then the newly added attribute values automatically appear on the screen without additional Web UI configuration. If certain attributes or attribute groups within the chosen attribute group do not need to display, then the attribute value group component has several options to properly display only the desired attributes within the chosen attribute group.

In the example below, the Name, ID, Primary Product Image, and attributes from a chosen attribute group are displayed within a Node Editor on a Node Details screen.



The screenshot below displays the Web UI designer settings used for the example given above.



Prerequisites

It is expected that anyone configuring the Attribute Value Group component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, users must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

It is possible to not display certain attributes within an attribute group, for more information, see the **Handling Duplicated Attributes in Web UI** topic.

Within this component are options related to the use of STEP Tags. Prior to making changes to the default settings related to STEP Tags and Tag Conversion, it is recommended to review the complete **Tags** documentation within **System Setup**.

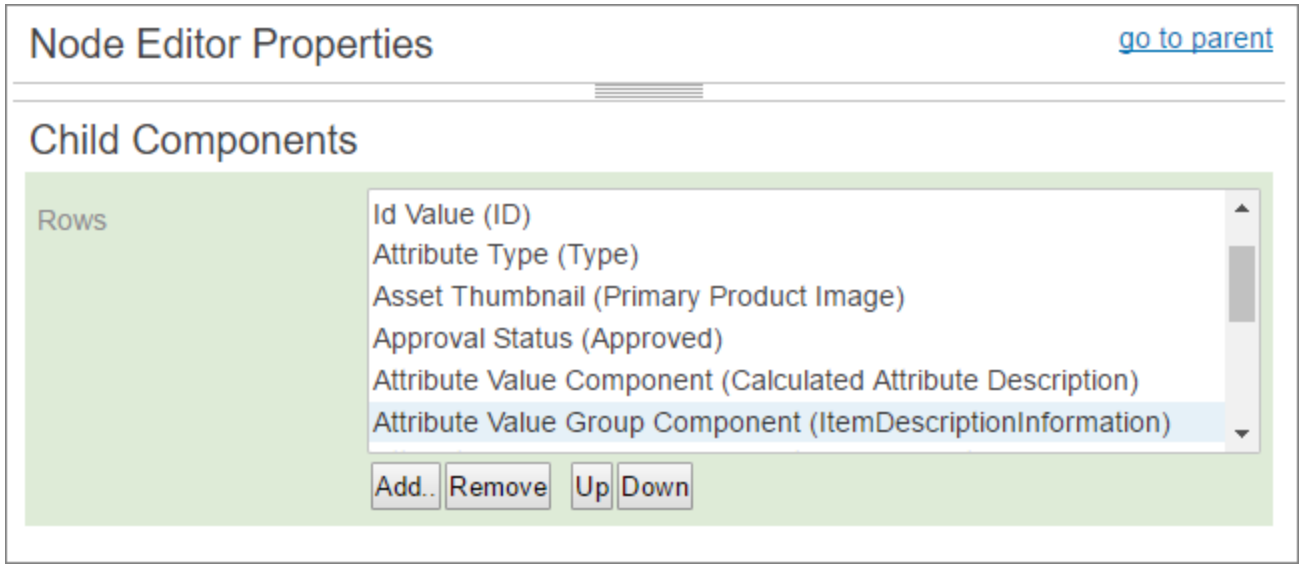
Adding an Attribute Value Group Component to a Node Editor

Attribute Value Group components are added within the Child Components section of the Node Editor Properties. They can be added, removed, and re-ordered using the buttons below the Rows parameter. The Node Editor Child Components Rows will display in the order listed within the Rows parameter. Once added, the components can be reordered using the Up and Down buttons.

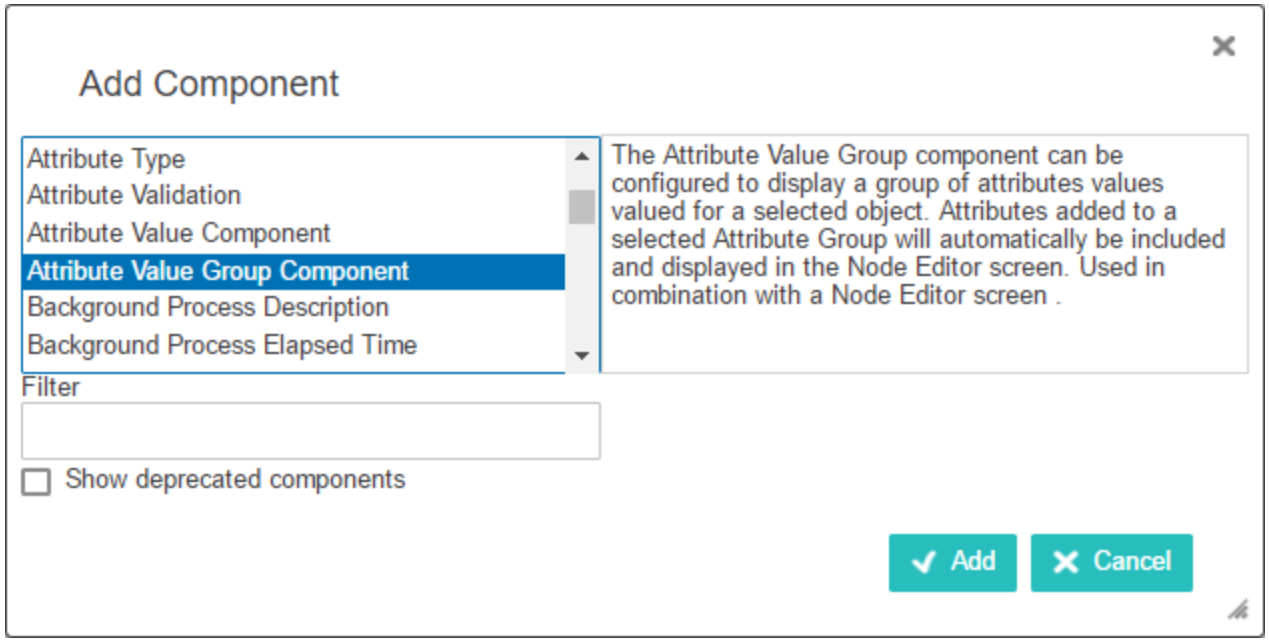
Recommended practice when displaying attributes within Web UI is to use the Attribute Value Group component and then manage the display behavior of the validation base types using one or more global rules created using the Override Control Type component. For more information, see the **Override Control Type Rule** topic within the **Web User Interfaces / Web UI Getting Started** documentation.

Steps for adding a Attribute Value Group Component to a Node Editor are below. Information for all the Attribute Value Group Component Properties dialog parameters are available in the Configuring an Attribute Value Group Component section below.

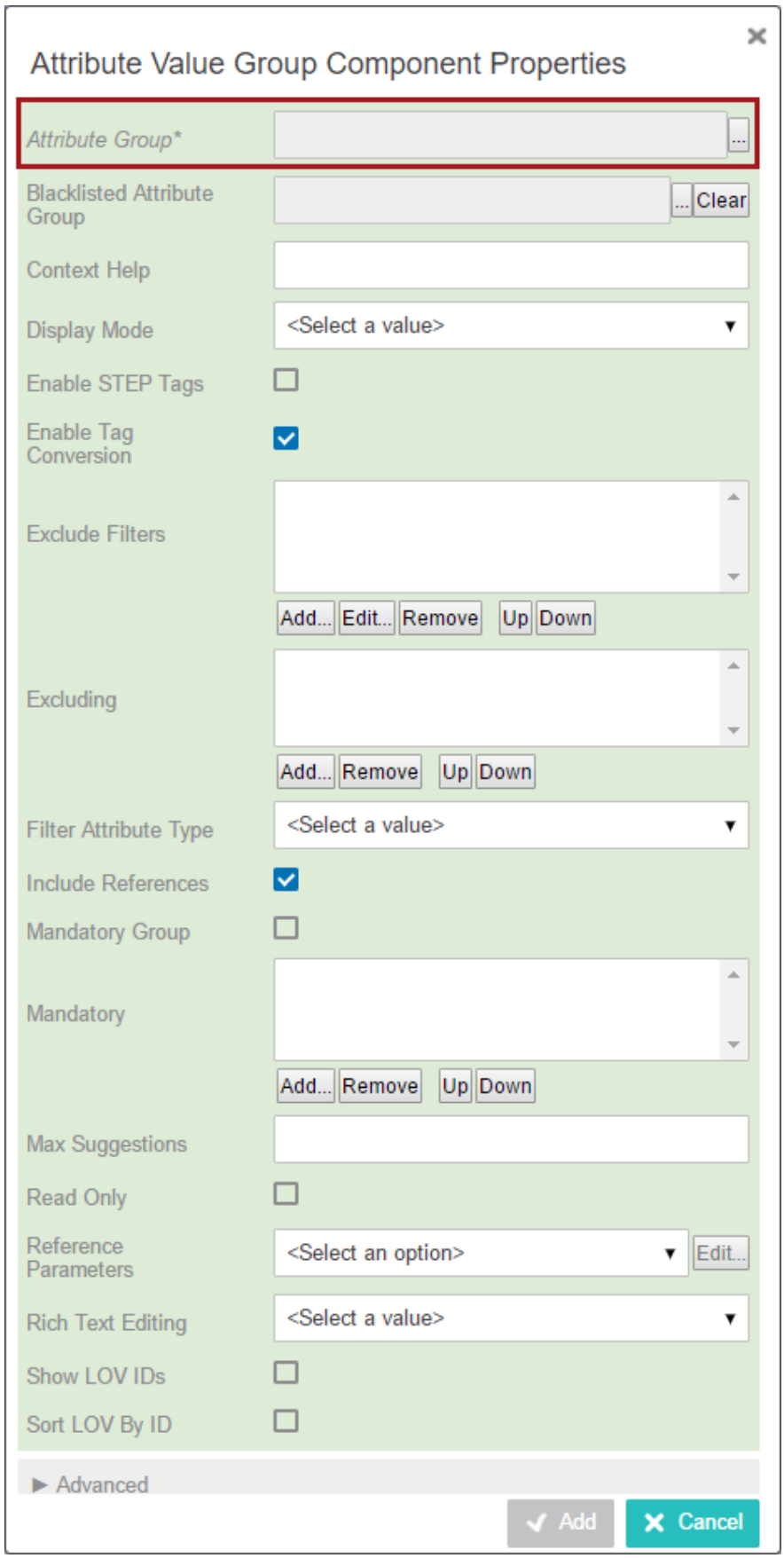
1. With the designer open, select your Node Details screen, navigate to your Node Editor component, and the Node Editor Properties will display.



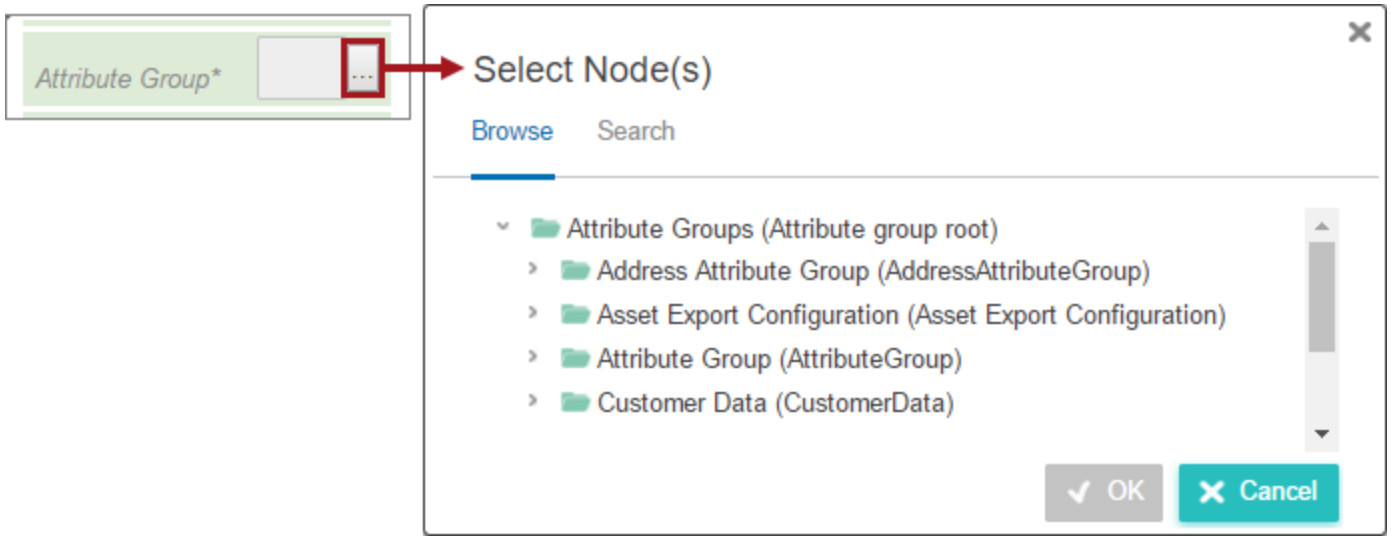
2. Click the **Add** button, and the add component dialog will display.



3. Select the Attribute Value Group Component, click the **Add** button, and the Attribute Value Group Component Properties dialog will display.


Attribute Value Group Component Properties
Attribute Group*
Blacklisted Attribute Group
Clear
Context Help
Display Mode
<Select a value>
Enable STEP Tags
Enable Tag Conversion
Exclude Filters
Add...
Edit...
Remove
Up
Down
Excluding
Add...
Remove
Up
Down
Filter Attribute Type
<Select a value>
Include References
Mandatory Group
Mandatory
Add...
Remove
Up
Down
Max Suggestions
Read Only
Reference Parameters
<Select an option>
Edit...
Rich Text Editing
<Select a value>
Show LOV IDs
Sort LOV By ID
Advanced
Add
Cancel

4. The only mandatory parameter is **Attribute Group**. To select an attribute group, click the ellipsis button (...) to the right of the Attribute Group field. A Select Node(s) dialog will appear and an attribute group can be selected by browsing and navigating down to the desired attribute group or by using the search feature.



5. Once the appropriate attribute group has been selected, click the **OK** button to close the Select Nodes dialog, and return to the Attribute Value Group Component Properties dialog now displaying the selected attribute and the enabled Add button.
6. Click the **Add** button, the dialog will close, and the newly added Attribute Value Group component will display as the last row of the Node Editor Child Components Rows.
7. Optionally, use the **Up** and **Down** buttons to properly order the display of the newly added Attribute Value Group component.
8. Click the **Save** and **Close** buttons for the designer.

Configuring an Attribute Value Group Component

An Attribute Value Group component is highly configurable, and its parameters are found within the two sections: Main and Advanced. Information for each of the parameters available for the Attribute Value Group Component Properties can be found below.

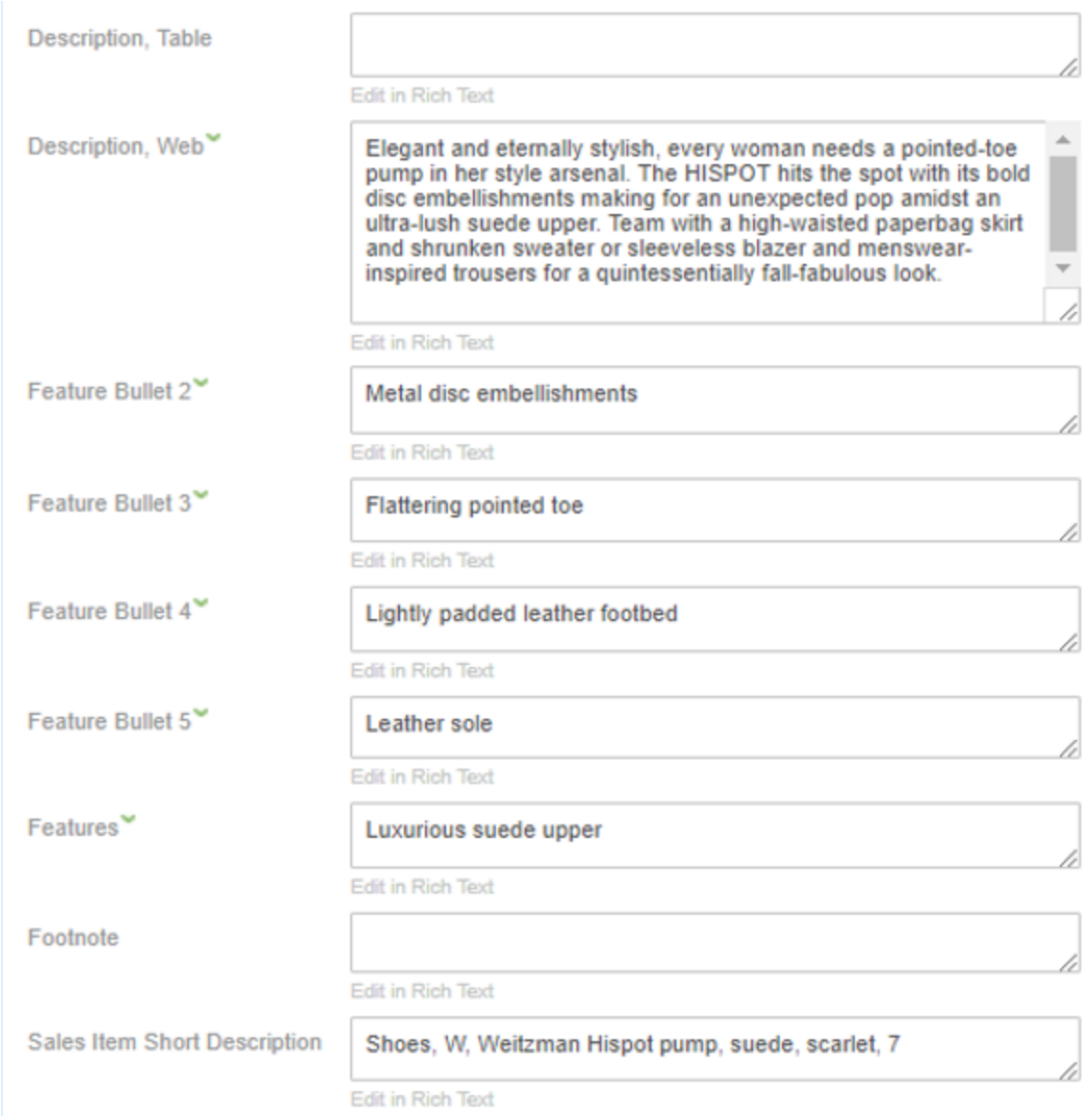
Main Parameters

Configure the parameters as needed.

- **Attribute Group:** The only mandatory parameter for this component. An attribute group is selected when the component is added. To select a different attribute group, click the ellipsis button (...) to the right of the Attribute Group value field. A Select Node(s) dialog will appear and an attribute group can be selected by browsing and navigating down to the desired attribute or by using the search feature.
- **Blacklisted Attribute Group**: Click the ellipsis button (...) and add a Blacklisted Attribute Group to hide attributes that should not be displayed on the Web UI screen. More information about the **Blacklisted**

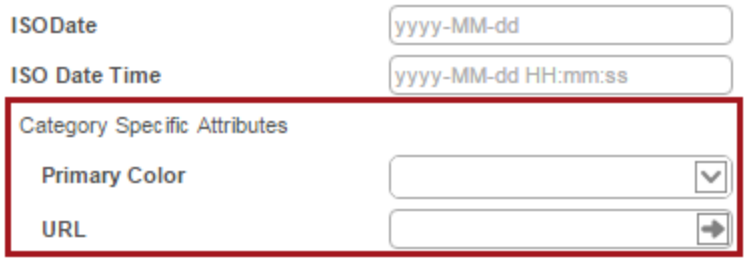
Attribute Group parameter can be found in the **Setting up Blacklisted Attribute Groups in Web UI** section of the **Handling Duplicated Attributes in Web UI** documentation.

- **Context Help:** Enter help text to display when a user hovers over the attribute group name. Requires that the Display Context Help parameter below is enabled. More information about the Context Help parameter can be found in the **Set Component Properties in Web UI** section of the **Attribute Help Text in Web UI** documentation.
- **Display Mode:** Determines how attributes within the attribute group are displayed to the end user.
  - **Merged:** Attributes below the selected attribute group and sub groups are displayed together alphabetically without attribute group as headers.

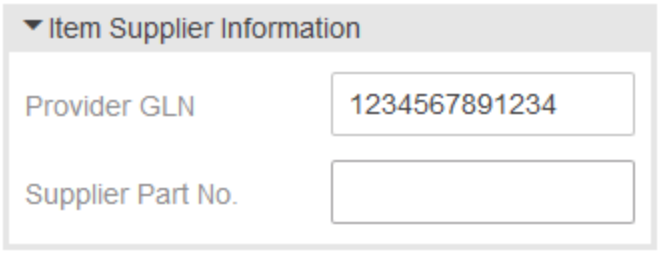


Note: If the attribute display sequence is defined on attributes, then the attributes are displayed together based on ascending display sequence order. Additionally, attribute display sequence takes precedence over the alphabetical sorting. Attributes displayed together in alphabetical order is based on the attribute's name.

- **Partitioned:** Attributes are displayed alphabetically (based on the attribute name) within their attribute groups. Attribute Group names are not displayed as headers.
- **Hierarchical:** Attribute group titles are shown with attribute titles indented below, according to the attribute group structure.



- **Sectioned**: Attributes are presented in sections; one section per attribute group; collapse and expand by clicking on the attribute group title.



Note: The attribute group title will be highlighted only when the mouse is hovered over the attribute group title.

- **Enable STEP Tags:** Determines if users should be able to edit STEP tags.
  - If disabled (default) and the content contains a tag (other than <lt/> or <gt/>), then the component will be read only based on Override Control Type selected.

  Note: If the Override Control Type is a rich text editor, then the component will be editable with the rich text editor.

  - If enabled, STEP tags are shown in the value and it is possible to edit the tags.
- **Enable Tag Conversion:** By default this parameter is enabled when adding new instances of Attribute Value Group components.

- If enabled (default) then users can more easily use < and > symbols in attribute values without having to do additional configuring because the control type for Text, Text (exclude tags), Numeric Text, and Numeric Text (exclude tags) attribute fields will default to Rich Text.

  The Override Control Type parameter (below) **will not** override the Text and Numeric Text validation base types, and the 'Edit formatted value' icon will be present for attributes with Text, Text (exclude tags), Numeric Text, and Numeric Text (exclude tags) validation base types.

Note: If the Enable Tag Conversion is set to true, then the Override Control Type will not be taken into consideration, and the Rich Text Box will always be created. Additionally, the 'Enable Tag Conversion' always takes precedence. If the Text Box is desired instead of the Rich Text, then the Enable Tag Conversion parameter should be set to false.

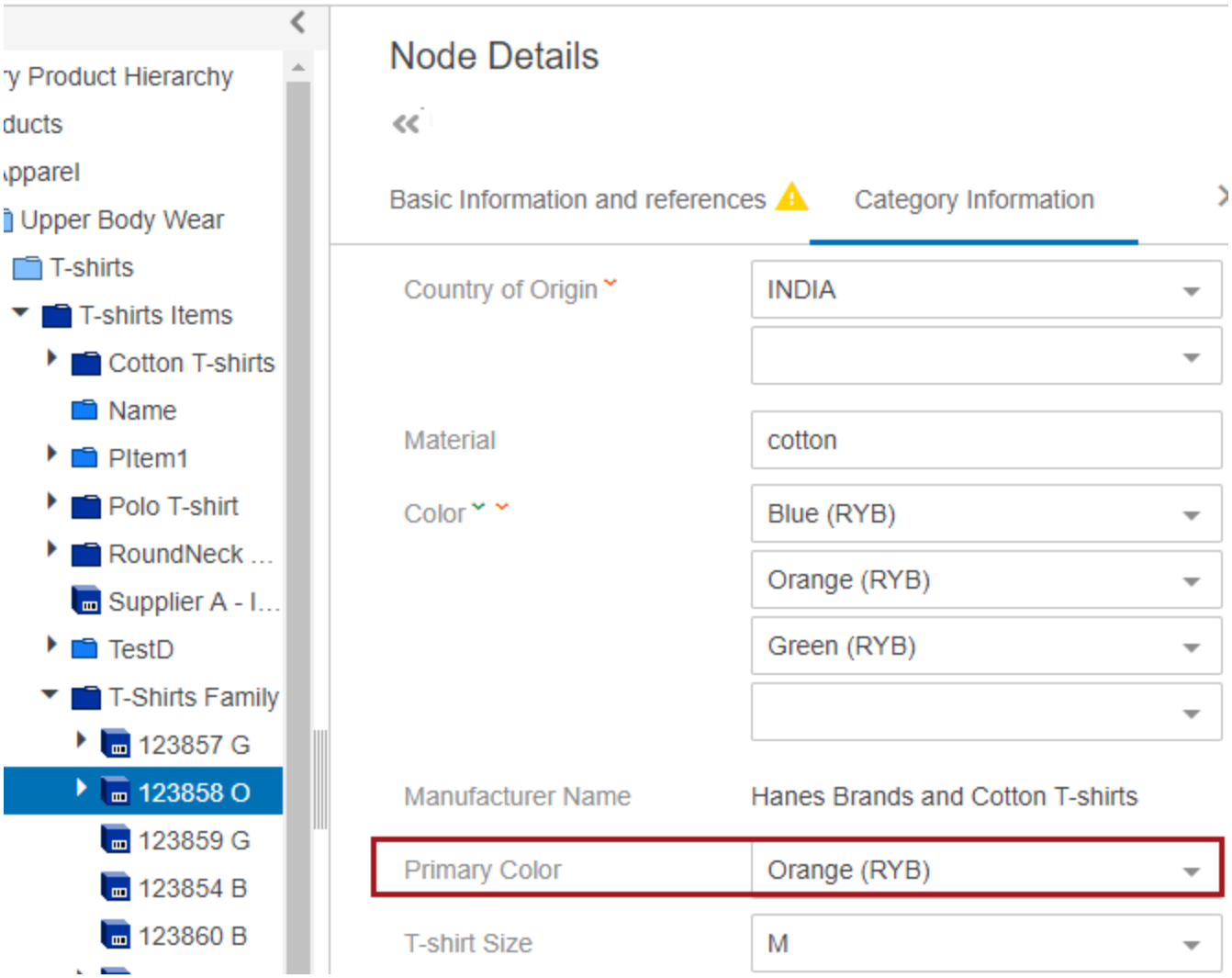
- If disabled and users enter the < and/or > symbols into an attribute value field or a style is applied to a value (e.g., bold or italic), upon save, the field will become locked. The field can only be unlocked by accessing workbench.

Important: There is more information to be aware of when enabling and disabling this parameter. See the **Enable Tag Conversion** section at the end of this topic. Also, working with tags may require setup in workbench. See the **Tags** topic in the **System Setup / Super User Guide** documentation.

- **Exclude Filters:** Hides or displays attributes based upon attribute values or fixed text by adding one or more filters. Each filter component will be applied to the collection of attributes in the group. The two filter component types to choose from are:
  - **Meta Data Lookup Filter Component:** Used for filtering attribute values in an attribute group by looking up the value of another attribute on the node and comparing that value to the value of the metadata attribute.
  - **Meta Data Text Filter Component:** Used for filtering attribute values in an attribute group by comparing a fixed text value to the value of the metadata attribute.

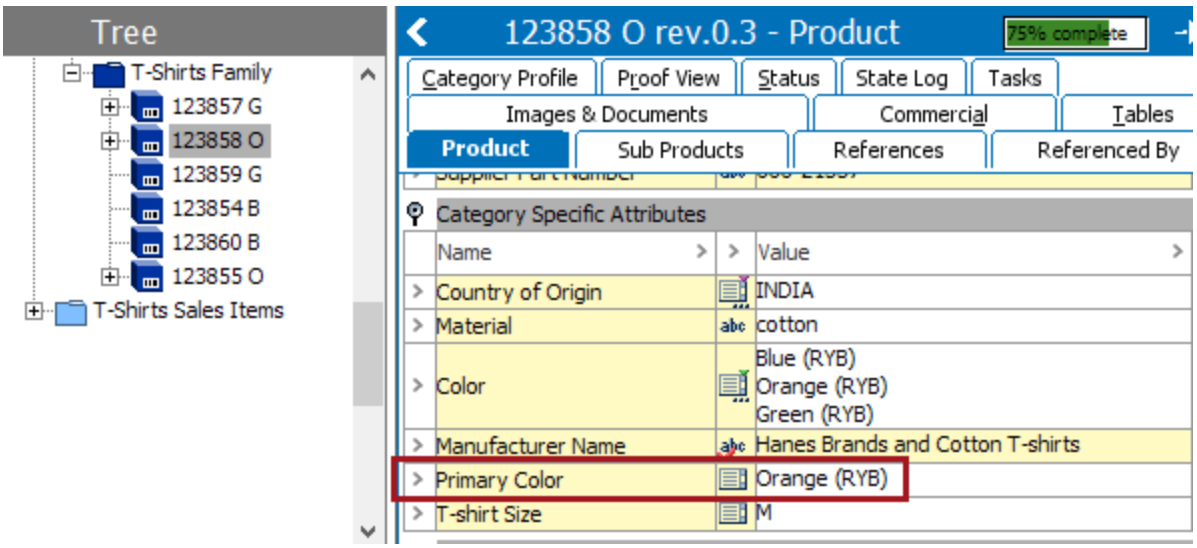
Setting the Meta Data Text Filter Component

The attribute **Primary Color** will be filtered from the group **Category Specific Attributes** in Web UI.

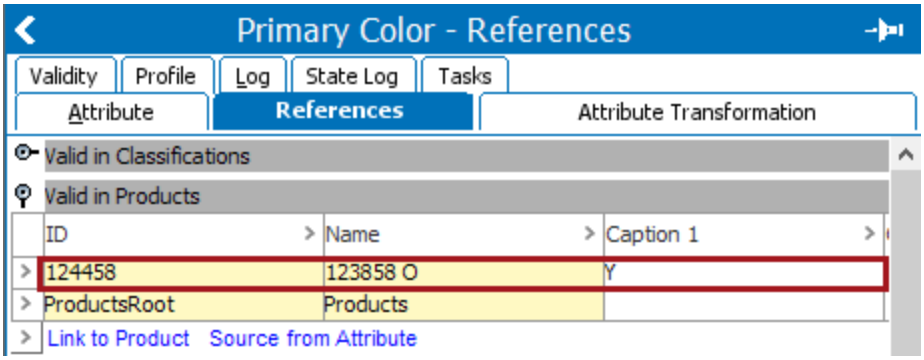


Before any setup in Web UI can take place, the following setup needs to be in place in workbench first.

In the example below, the attribute group, **Category Specific Attributes**, has been added on a product, and a specific attribute, in this case **Primary Color**, needs to be filtered from the group.

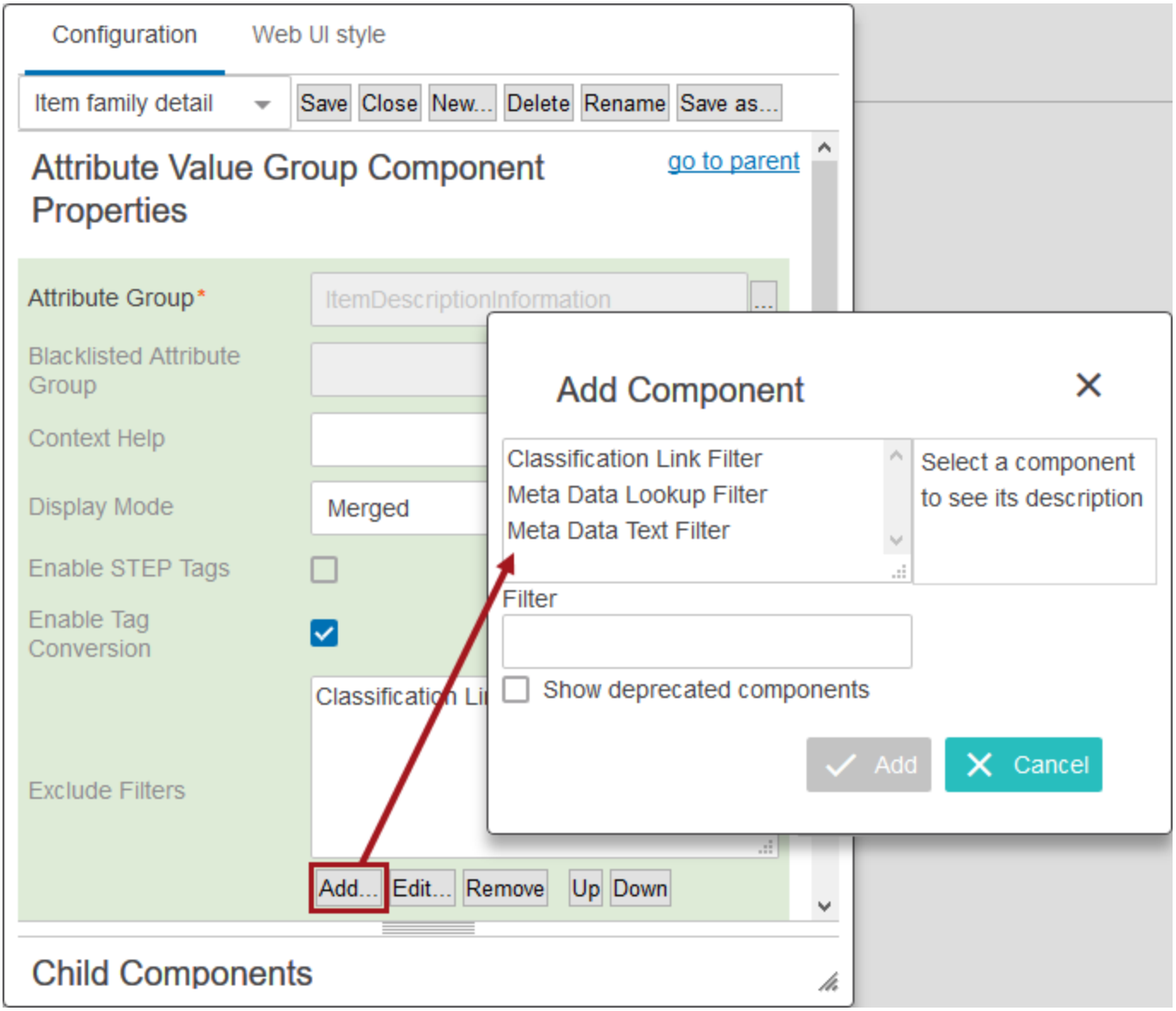


A meta data attribute, in this case **Caption 1**, with an LOV base type needs to be valid on the same object type that the attribute is used on, in this case product types. Select the attribute that needs to be excluded from the Web UI screen (Primary Color), and click on the References tab. Specify a value for Caption 1, in this case 'Y.'

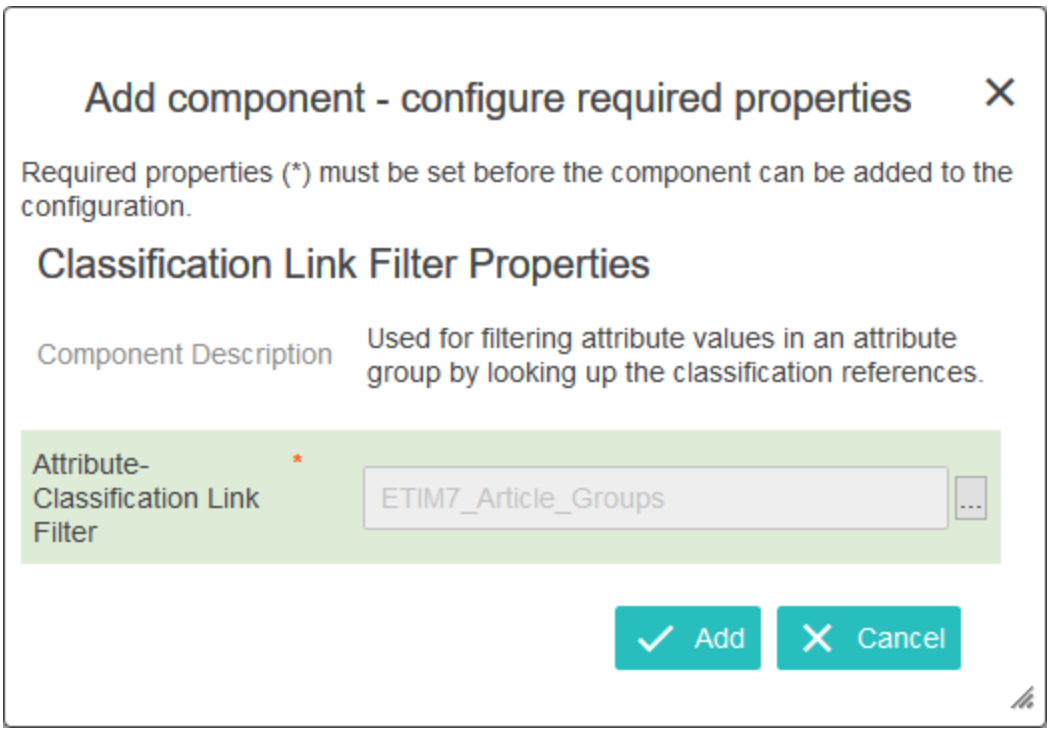


In Web UI the setup of Meta Data Text filters can be configured by following the steps below:

On **Attribute Value Group Component Properties** > Exclude Filters > click on the Add button to display the filter options.

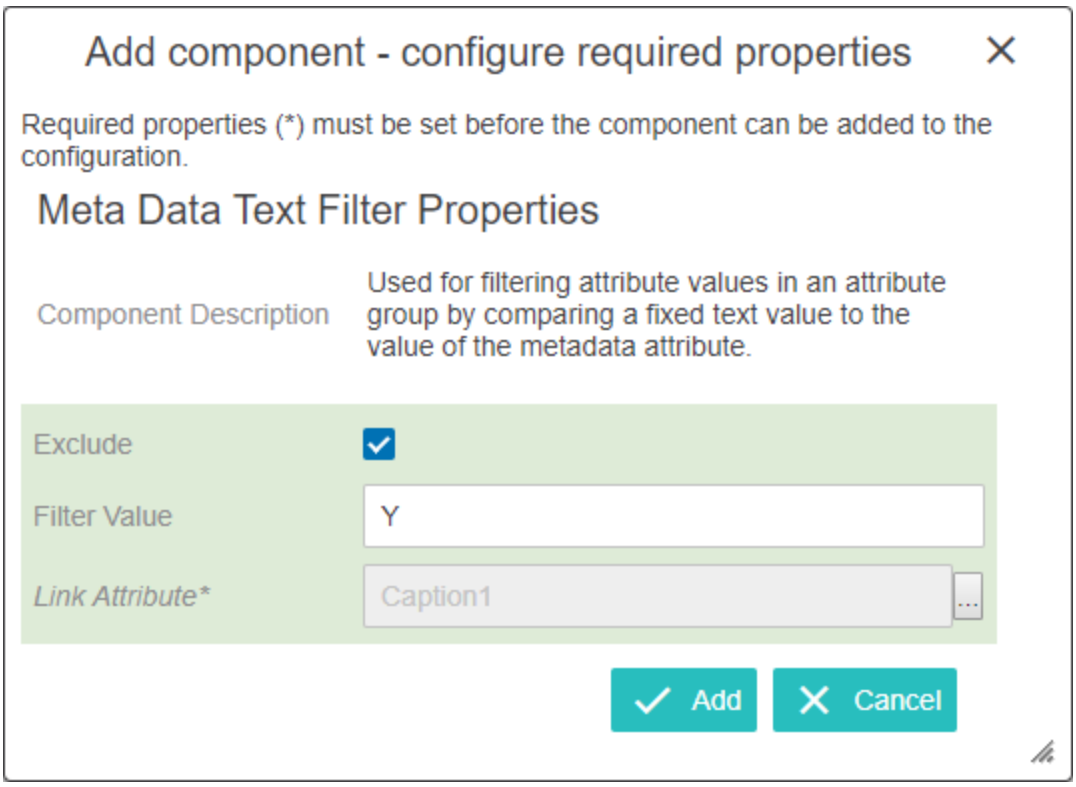


When using the classification link filter option, in the Classification Link Filter Properties dialog, click the ellipsis button (...) to display the Select Node(s) dialog. Browse or search for the desired classification and click **OK** to close the Select Node dialog. Then click the Add button to close the Classification Link Filter Properties dialog.

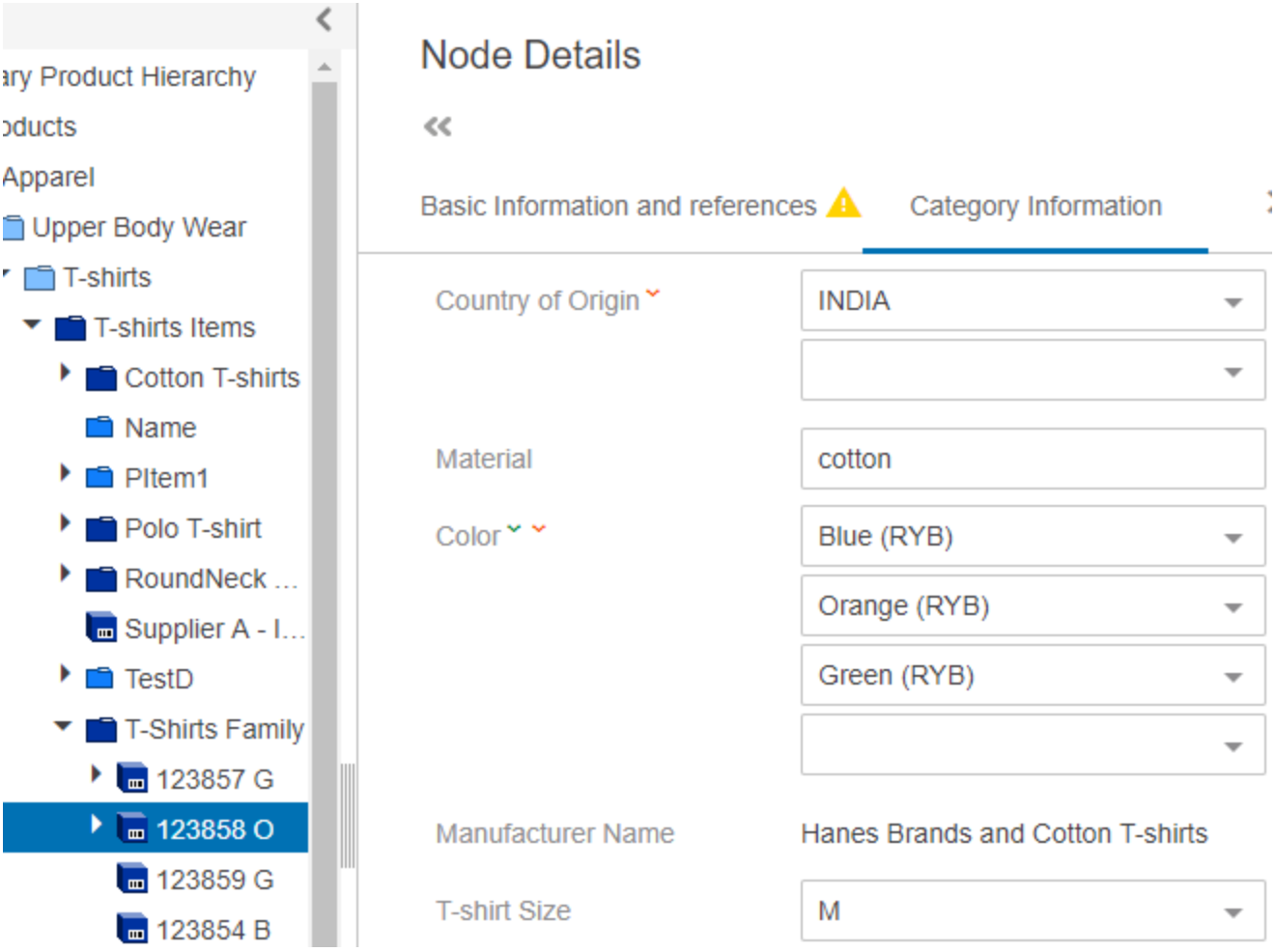


When using the metadata options, in the Meta Data Text Filter Properties or the Meta Data Lookup Filter Properties, fill out the two fields:

- **Filter Value**: a metadata attribute value to use in the filter condition (the value of Caption 1 in this example)
- **Link Attribute**: a metadata attribute that specifies whose values to filter attributes by.



Save the screen and close the Web UI designer. The attribute Primary Color will be filtered from displaying within the attribute group Category Specific Attributes in Web UI.

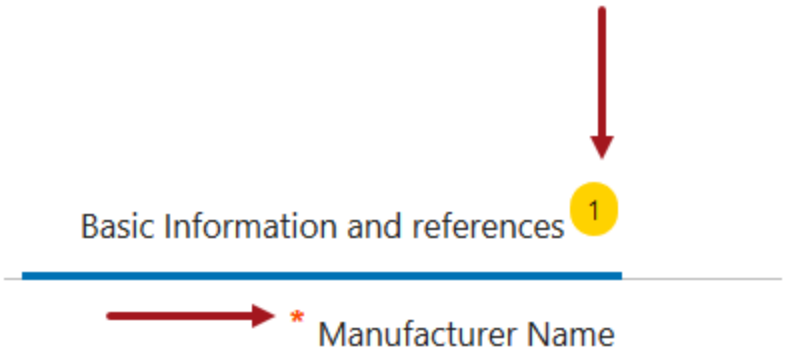


Important: The **Meta Data Lookup Filter** and **Meta Data Text Filter** components feature an **Exclude** parameter that is enabled by default, however, disabling this parameter allows the filters to become inclusive, instead of exclusive.

- **Excluding:** Prevents specified attributes (within the attribute group) from displaying for this particular Node Editor screen by adding specific attributes to the parameter.
- **Filter Attribute Type:** Determines if only Specification or Description attributes within an attribute should display.
- **Include References:** Determines if references should be displayed with the respective attributes if reference types exists in the attribute group.
- **Mandatory Group:** When enabled, users are visually prompted to add a value to all attributes in the attribute group. If 'Enforce Validity' is enabled on any of the action buttons (Save, Submit, or Approve), users must provide a value for all attributes in the group before any of the action buttons will be activated. This setting will override any attributes listed in the Mandatory parameter, described below.

- **Mandatory:** When enabled, users are visually prompted to add a value to specific attributes from the attribute group that are added to the 'Mandatory' field. If the 'Mandatory Group' parameter is enabled, attributes added to this field will be overridden and all attributes in the group will display as mandatory. If 'Enforce Validity' is enabled on any of the action buttons (Save, Submit, or Approve), users must provide a value for the attributes listed in this field before any of the action buttons will be activated.
  - Add specific attributes to the parameter that should display the attribute name with an asterisk (*), and when tab pages are used, a yellow warning icon will display for each tab that contains unpopulated mandatory attribute fields.

    In the example below, the Manufacturer Name attribute value displays with an asterisk, and because the attribute value field has not been populated, the yellow warning icon indicator appears in the right upper corner of the tab.

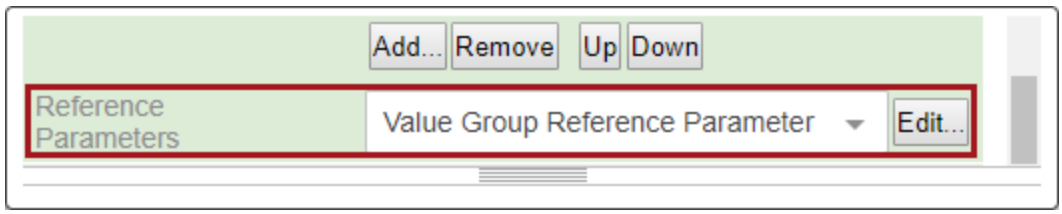


- **Max Suggestions:** Determines the maximum number of suggestions that will display before a scroll bar is used when the attribute is set to (or automatically uses) LOV base type and typeahead control type.
- **Read Only:** Determines if all attribute values within the group should be editable or read only.
  - If disabled (default) then users can edit the field.
  - If enabled the attribute value on the screen will be locked so end users cannot make edits.
- **Reference Parameters:** Determines how references pertaining to attributes within the group are displayed. Also at least one editor screen must be specified for the References to work as hyperlinks to the target.

Note: Include References option should be enabled along with Reference Parameters setting

Configuring Reference Parameters

In the attribute value group properties, go to Reference Parameters field > select Value Group Reference Parameter > click on Edit.



In the Value Group Reference Parameter set the below fields:

Editor Screens- select the screen to be displayed when the hyperlink to the target is clicked. While one screen must be selected, multiple screens can be selected.

Show Visibility Controls - the component controls the context visibility of references. It has no effect if legacy view is used however.

- If the option is disabled (default), then adjusting context visibility controls will not be displayed.
- If this option is enabled, then adjusting context visibility controls will be displayed, and the reference type should be dimension dependent.

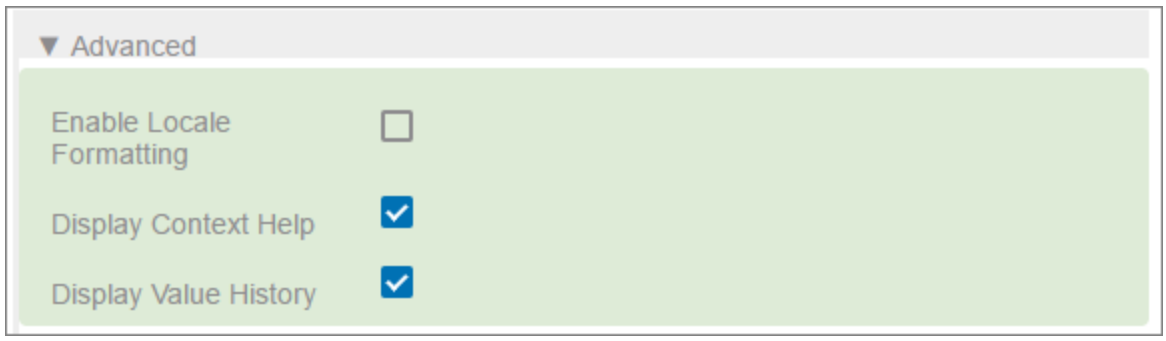
Note: The Legacy View option should be disabled when Show Visibility Controls option has to be configured for the reference parameters.

- **Rich Text Editing:** Determines when Rich Text editing should be applied to all attribute values within the group.
  - **Never:** All attribute values within the group will never display with Rich Text Editing.
  - **Always:** All attribute values within the group will always display with Rich Text Editing.
  - **Long Text:** Only attributes with validation length longer than 100 will display with Rich Text Editing.
- **Show LOV IDs:** Determines if the attribute's LOV ID displays for the end user.
  - If enabled (not default), and the attribute's LOV has IDs enabled, then the LOV ID will display next to the value.
- **Sort LOV By ID:** Determines if the LOV displays in ascending order using the LOV name or ID.
  - If enabled (not default), and the attribute's LOV has IDs enabled, then the LOV ID will display by the IDs ascending order. It is recommended to also enable the 'Show LOV IDs' parameter, because the list will appear to be sorted incorrectly if the IDs are not displayed.

For details on the classification-specific parameters ('Classification Link Type', 'Unit Metadata Attribute', and 'Display FValue Details') see the **Classification-Specific Attribute Value Components** topic.

Advanced Parameters

Click the arrowhead next to the **Advanced** heading to see the parameters available. Configure the parameters as needed.



- **Enable Locale Formatting:** Determines if the 'ISO Date' or 'ISO Date and Time' attribute values are displayed per the locale selection.
  - If enabled (not default), the 'ISO Date' or 'ISO Date and Time' attribute values will be displayed in the manner defined by the locale selection made during login.

Important: Additional setup is required. For more information, see the **Localizable Dates in Web UI** section of the **Web User Interfaces** documentation.

- **Display Context Help:** Determines if the help text should be available to users. Help texts can be used to provide information to end users about an attribute and how it should be populated. For more information, see the **Attribute Help Text in Web UI** section of the **Using a Web UI** documentation. This is where the 'Go to Wiki' link is displayed when the Wiki Metadata feature is installed. For more information, see the **Wiki Metadata** topic in the **System Setup / Super User Guide** documentation.
- **Display Value History:** Determines if the history icon should appear displaying the attribute's historic data and information on how the value has changed over time within the Web UI. For more information, see the **Attribute Value History** section of the **Using a Web UI** documentation.

Additional Considerations

Enable Tag Conversion

- If Enable Tag Conversion is disabled / unchecked and a style is applied to a value (e.g., bold or italic), the field locks and Rich Text Editor is the only way to edit the values.
- If you experience issues while using the Rich Text Editor in Internet Explorer, use an alternate browser such as Chrome, Firefox, or Safari.

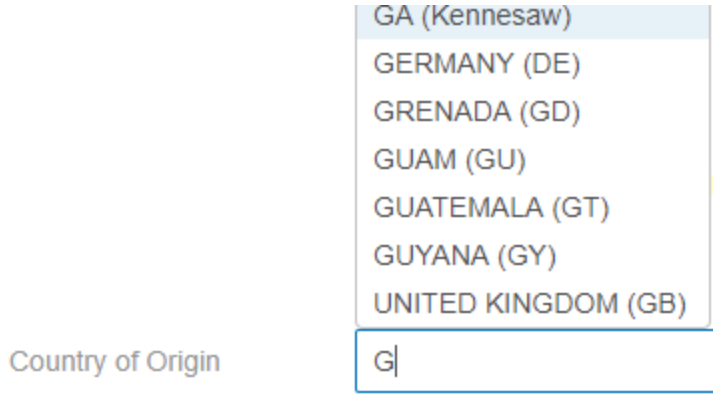
Attribute Value Group LOV Typeahead Functionality

A List of Values (LOV) is a set of values that can be selected and used for an attribute. LOV values for LOV-validated attributes configured to display as part of an **Attribute Value Group component** function differently depending on the number of values.

If a single or multi-valued LOV has greater than 5,000 values, the LOV automatically becomes typeahead-based, thereby allowing the users to narrow down the possible values to select from by typing in part of the desired value. For example, a user can type in the letters 'blu' into a color attribute field and the system will show only the configured values that start with 'blu' (e.g., blue, blueberry, blue green, and blush pink). The user then makes a selection from these choices. This significantly speeds up processing time since the user is not presented with every color (A to Z) to choose from.

If an LOV has 5,000 or fewer values, all the values are loaded into the system as soon as the Attribute Value Group component loads in a Web UI screen. This may create a Web UI performance issue if an Attribute Value Group component is configured to display multiple attributes that each have large LOVs (e.g., 2,000 - 3,000 values). Since the system is loading the entire value list for each LOV and typeahead functionality is not automatically available, users may experience system slowness as they work in Web UI. **For this very specific use case, a configuration setting change can be made to force all Attribute Value Group LOV attributes to be typeahead based.**

With typeahead, the list displayed includes both IDs and values that match the text typed, as shown below:



Property Settings

To use typeahead LOV functionality for all LOVs in Attribute Value Group components, add the following property to the **sharedconfig.properties** file:

```
Portal.ValueGroup.LOV.ForceTypeahead=true
```

Important: Carefully consider changing the configuration. The property setting will impact **all** Web UIs used within a STEP system after the application server has been restarted.

Excluding Attributes

It is possible to exclude certain LOVs from being typeahead based. To exclude any attributes from the global typeahead setting, this property will also need to be added to the **sharedconfig.properties** file:

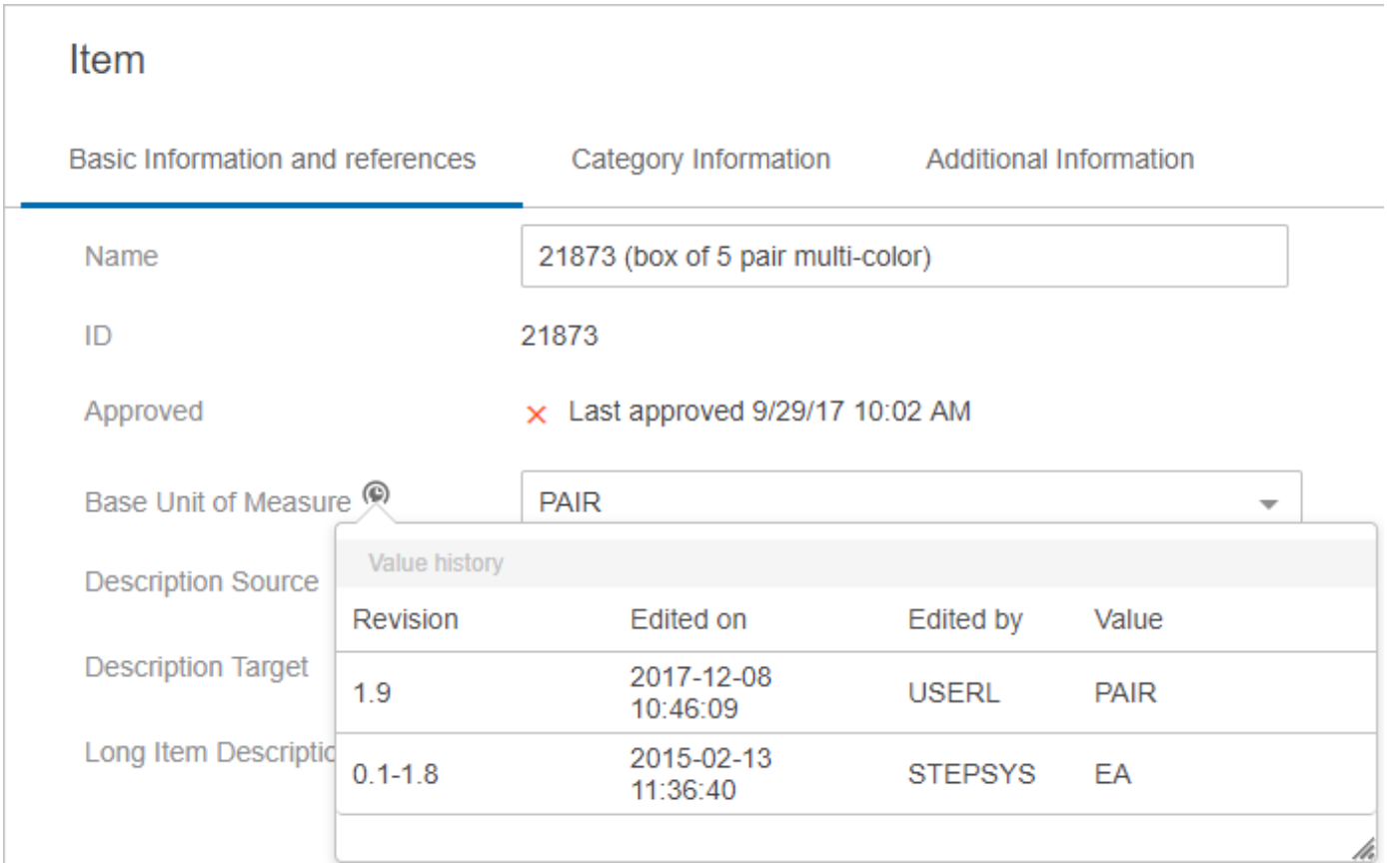
```
Portal.ValueGroup.LOV.ForceTypeahead.Exclude=[AttributeID],[AttributeID], etc.
```

The property setting shown is an example only. In place of [AttributeID], enter the actual ID of the attribute to be excluded from the typeahead functionality.

See the **List of Values (LOVs) Overview** section of the **Getting Started / User Guide** documentation for more information about setting up and using LOVs.

Attribute Value History

It is possible to see the historic data of a certain attribute value and track how the value has changed over time within the Web UI. This functionality is accessible when viewing an object details page (Node Details) in Web UI. Hovering over the attribute label makes the history icon appear for that attribute, and clicking the icon opens a simple view displaying historic information including revision, edited on (date / time), edited by, and the value of the attribute. Note that individual revisions are displayed only if the attribute value differed between them.

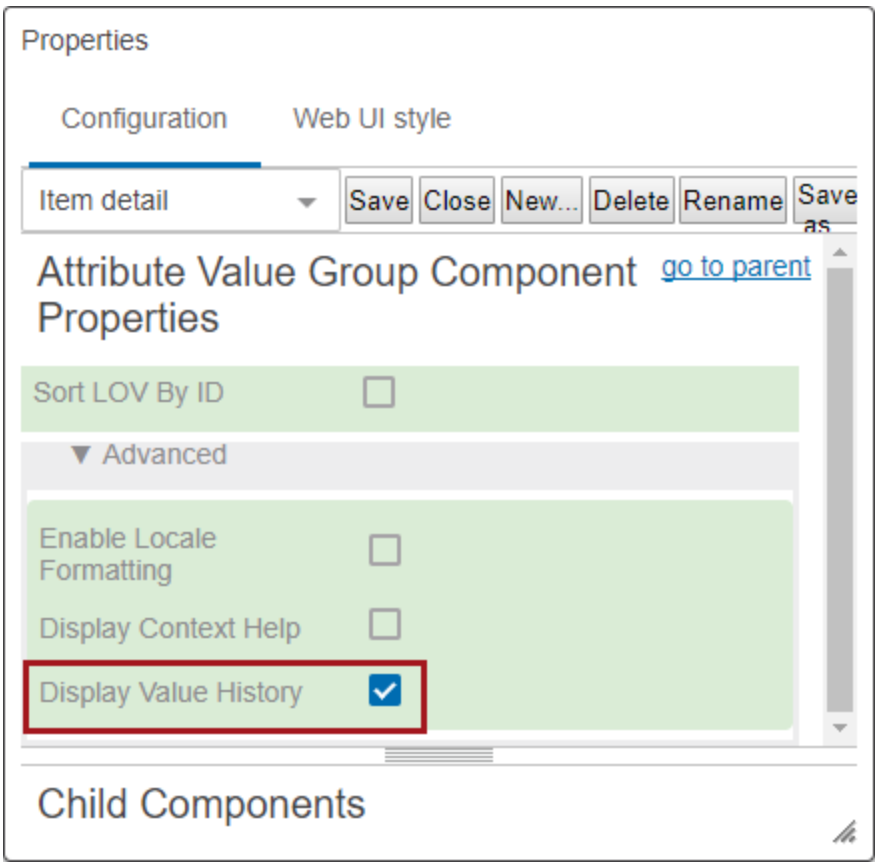


Note: Viewing the change history of a given attribute value is only available with the Node Details and Data Container Attribute View Editor components, and cannot be accessed from table or list components.

Configuring Attribute Value History

In order to have Attribute Value History text show, it needs to be configured in the designer. This can be done on either the **Attribute Value** or **Attribute Value Group** components.

In either component, scroll down to the bottom of the designer window and expand the **Advanced** flipper. Check the **Display Value History** parameter, then save and close the editor.



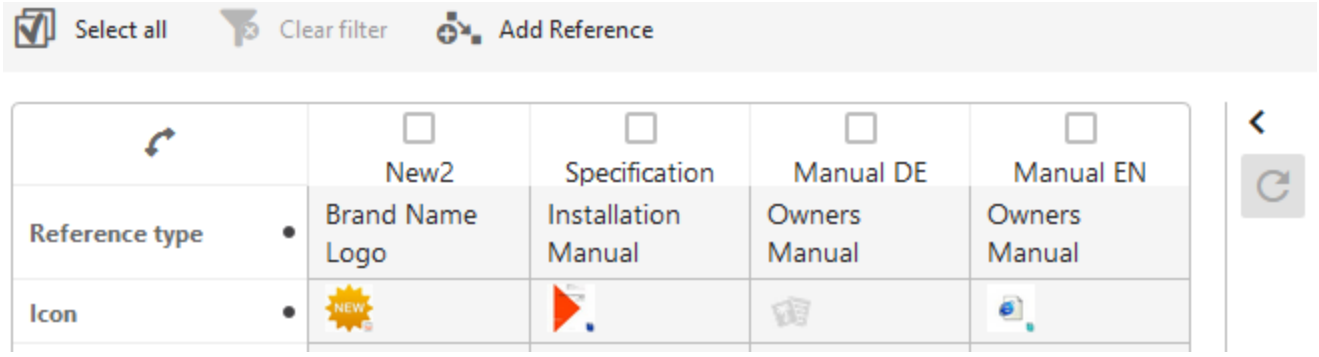
The 'Display Value History' parameter is checked by default, meaning that attribute value history is enabled. To disable, uncheck the parameter and save the configuration.

Note: The value history will not be displayed for LOV attributes which have over 5000+ values. It will also not display for LOV attributes with the Override Control Type selected.

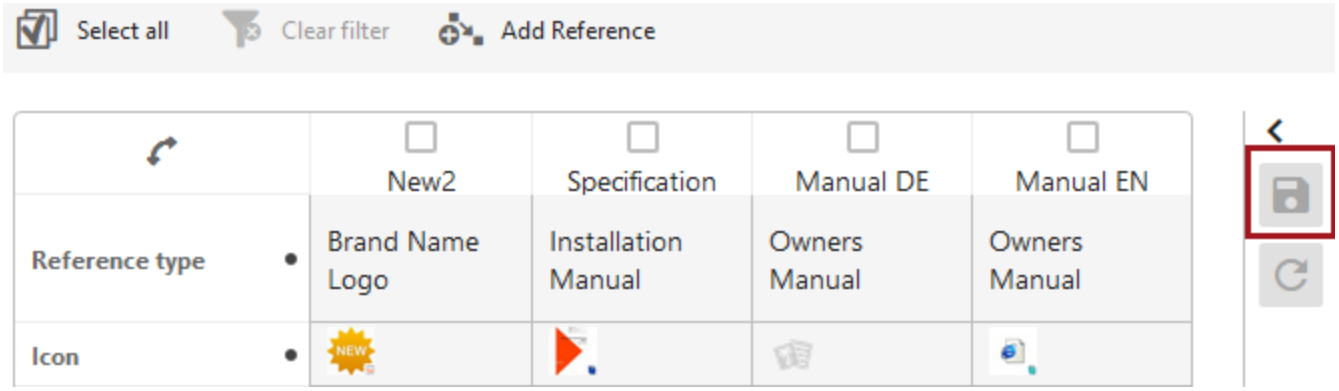
Auto-Save in the Web UI

On some Node List type screens in Web UI, the 'Use Immediate Save' parameter in the designer controls the auto-save feature. Enabling the parameter removes the manual Save button that otherwise displays to the right of a table and saves valid edits as they are made. While this is the preferred scenario, in cases where, for example, business rules are run with a save function, or additional validations are performed, displaying the manual save button may be preferred.

For example, on a multi reference node list with the 'Use Immediate Save' parameter enabled shown below, the save button is not displayed since edits are saved automatically.



Disabling the 'Use Immediate Save' parameter on the same node list shown below, allows the user to manually save edits using the save button.



In both cases, the reset button displays so that error messages and invalid values can be cleared. For example:

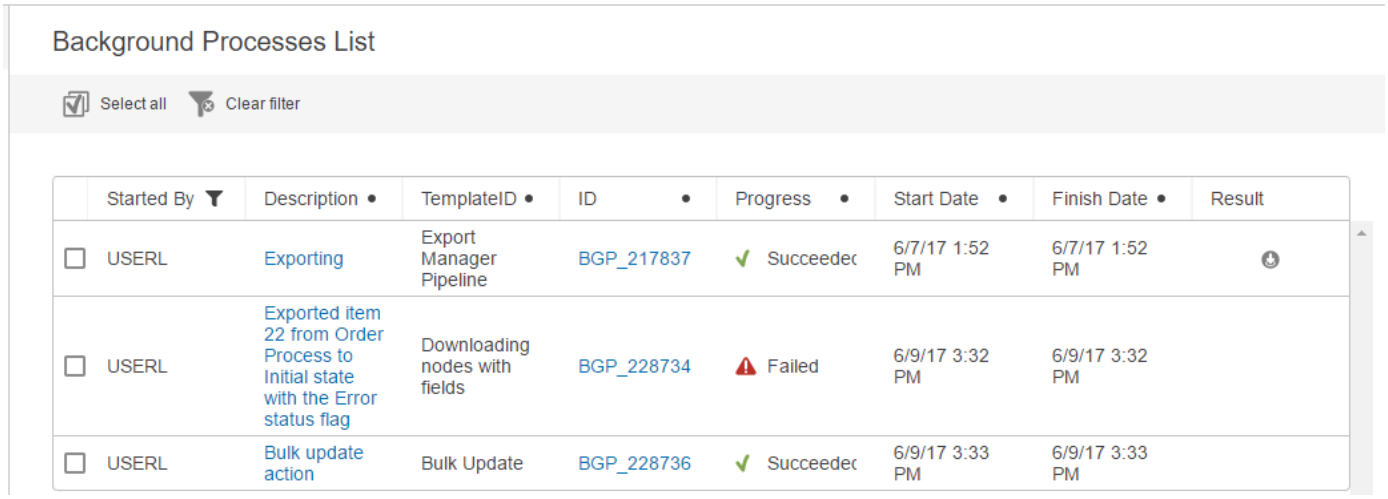
- If another user edits the same field on the same object before you make your edit, you are editing an out-of-date value. Because the screen has not been refreshed to show their changes, you will get an error: '[edited_ object] was updated by another user. Please reload the page.'
- If the value you edit cannot be saved because it does not comply with the validation base type, you will get an error: 'Invalid value [value] does not conform to the required format.'

See the following topics for information about the availability of the 'Use Immediate Save' parameter:

- Business Action with Web UI Bind Use Cases
- Configuring a Multi Language Screen
- Configuring a Multi Workspace Screen
- Configuring the Attribute Link Editor Screen
- Multi Reference Editor
- Multi Workspace Screen
- Task List

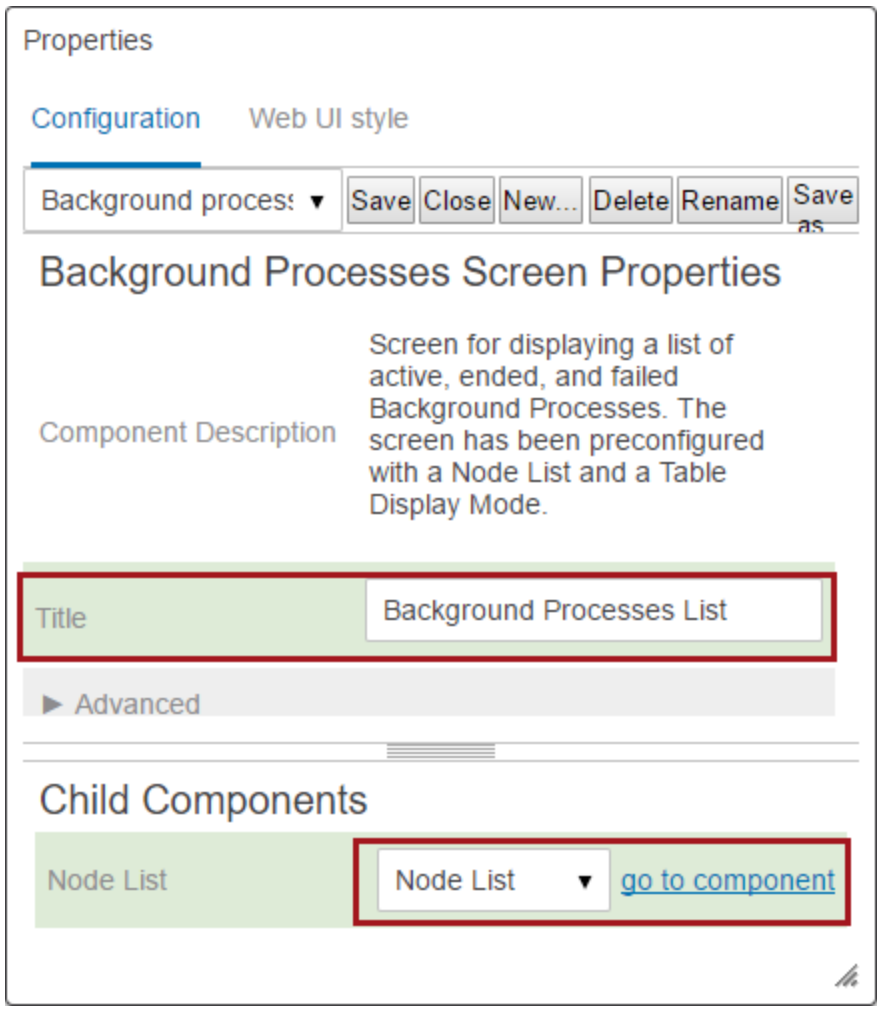
Background Process List Screen

In order to see a list of Background Processes (BGPs) in Web UI, a Background Process Screen needs to be configured. This way a user can easily track a list of active, ended, and failed BGPs such as Imports, Exports, Bulk Updates, Smartsheet downloads / uploads, etc that have been initiated by users in the Web UI.

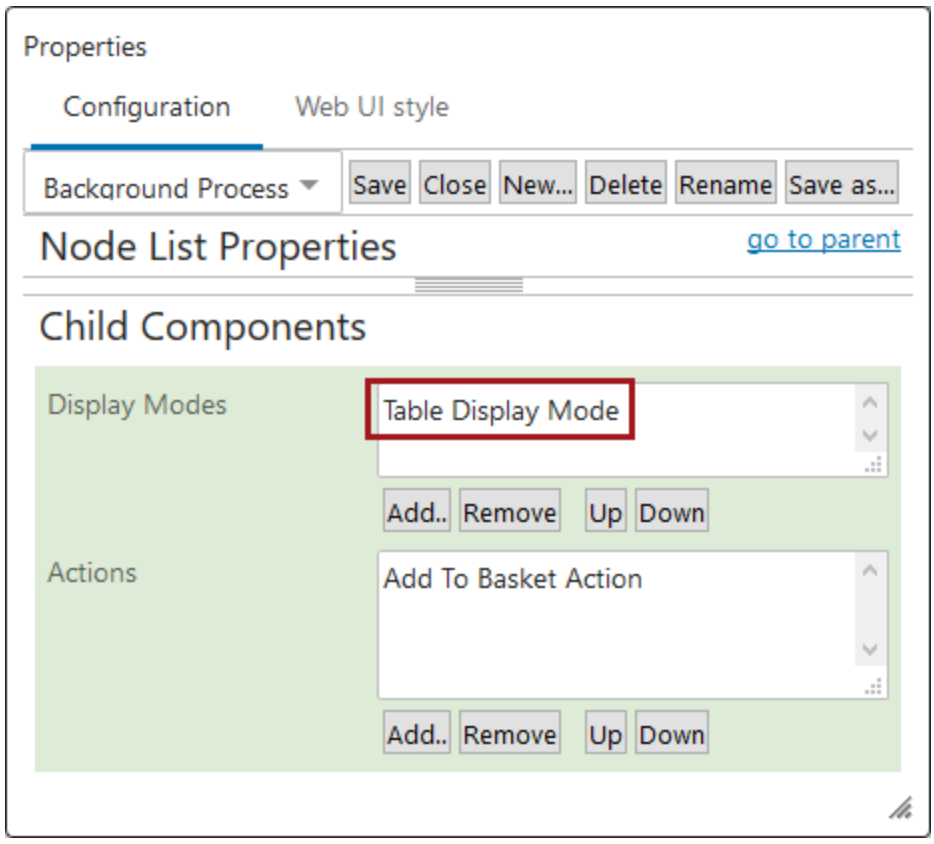


Setting up the Background Process Screen

1. Create a new screen of the type **Background Processes Screen** and mapping it using the **Background Process List Condition**.
2. Configure the new screen by selecting it from the dropdown in the upper left corner of the Web UI Designer window. Add a **Title** and under Child components, and add a **Node List**. Then click on **go to component**.



3. On the **Node List** screen under Child Components, it is recommended to add a **Table Display Mode** under **Display Modes**. Double click on **Table Display Mode**.

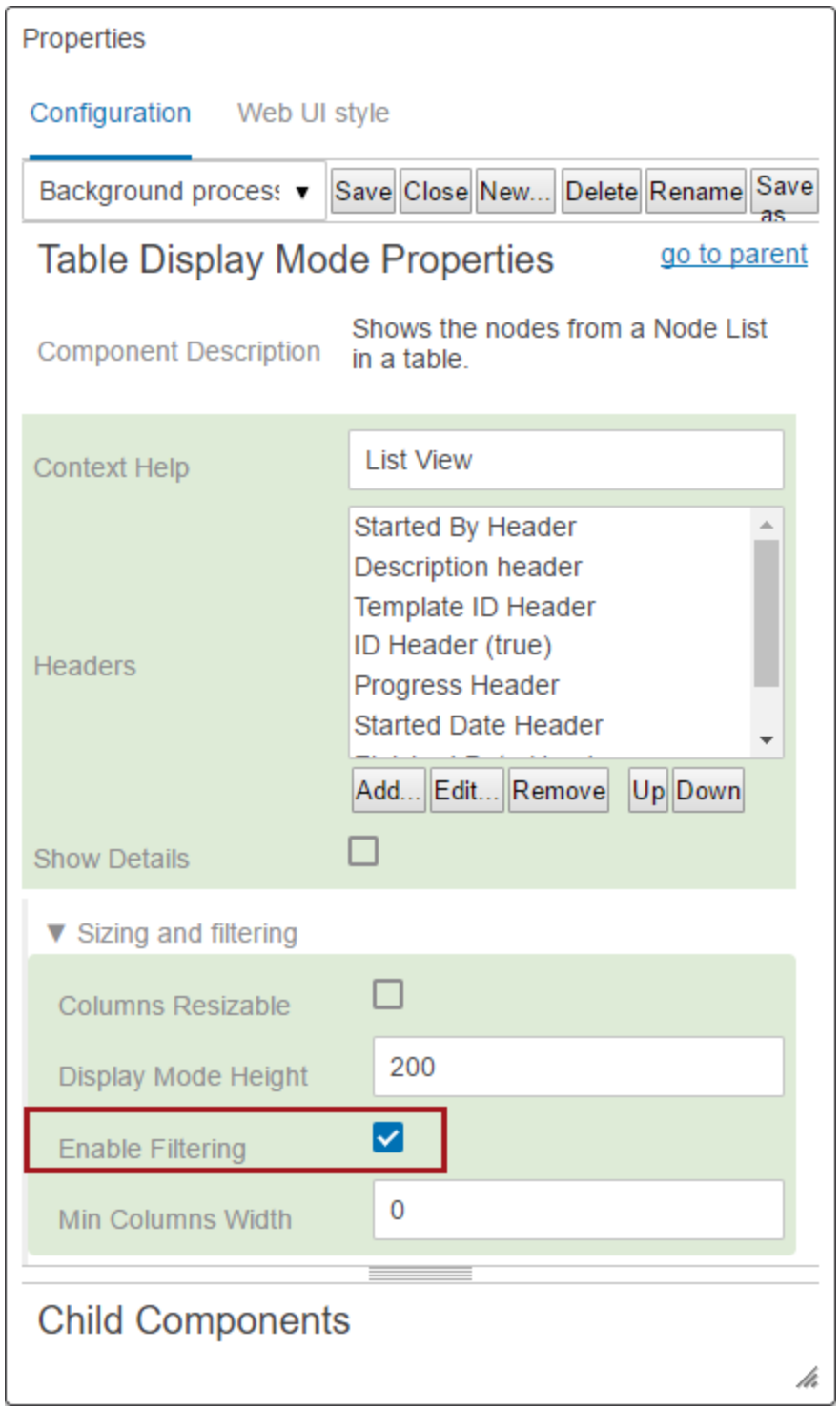


4. On the **Table Display Mode** screen, **Headers** should be configured according to user needs, although it is recommended to add the following headers: **Started By**, **Description**, **Template ID**, **ID Header**, **Progress**, **Start Date**, **Finish Date**, and **Result**.

Headers	Returned Value
Started By	Allows users to adjust and select filters as needed in the column header. **Started by Me** is the default filter.
Description	Returns the Background Processes names (if available).
Template ID	Describes the type of template used for the BGP
ID Header	Provides the automatically generated BGP ID given to the process
Progress	Gives the status of the BGP

Headers	Returned Value
Start Date	The date and time that the BGP started
Finish Date	The date and time that the BGP finished
Result	If available, the completed file that can be downloaded

5. Once all desired Headers are added, scroll down and make sure that filtering is enabled on Table Display Mode. Save and close the designer.



This completes the basic configuration required to display a list of BGPs in Web UI. Additional advanced configuration options related to background processes are described below.

Background Process Messaging and Identification

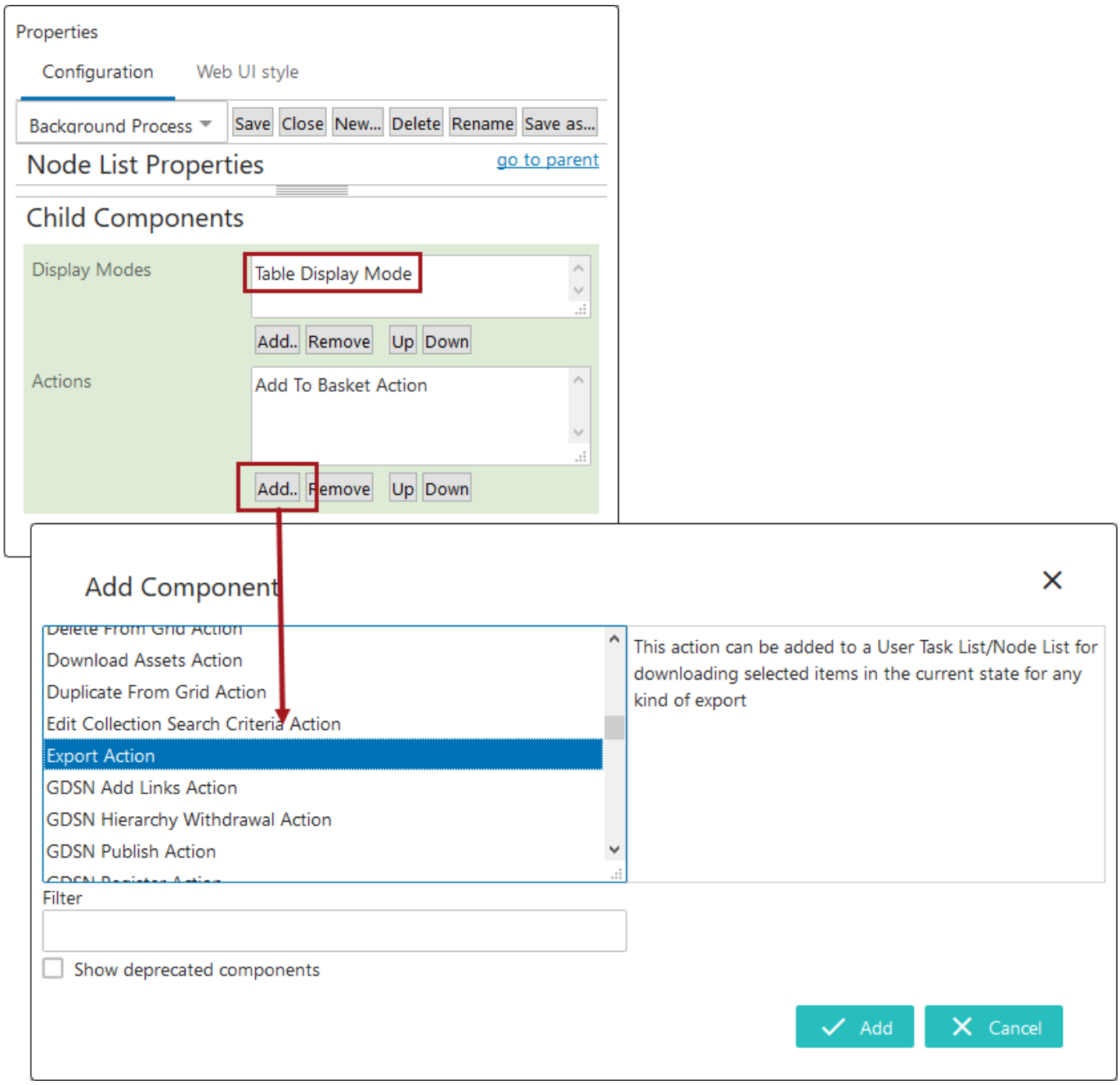
Background processes by default are identifiable by an autogenerated ID. However, should a user wish to have a more detailed or user-friendly BGP description to be displayed, this can be done by via configuration of the **Process Description** field available on actions that launch BGPs throughout Web UI. The full list of components containing the **Process Description** field for naming background processes is below:

- Bulk Update Action
- Bulk Update List Action
- Create Collection Action
- Create Publication from Existing Action
- Download Assets Action
- Export Action
- Generate PDF
- Print on demand
- Reflow from next column
- Simple Export Action
- Simple Importer Widget
- Smart Sheet Export Action
- Smart Sheet Import Widget

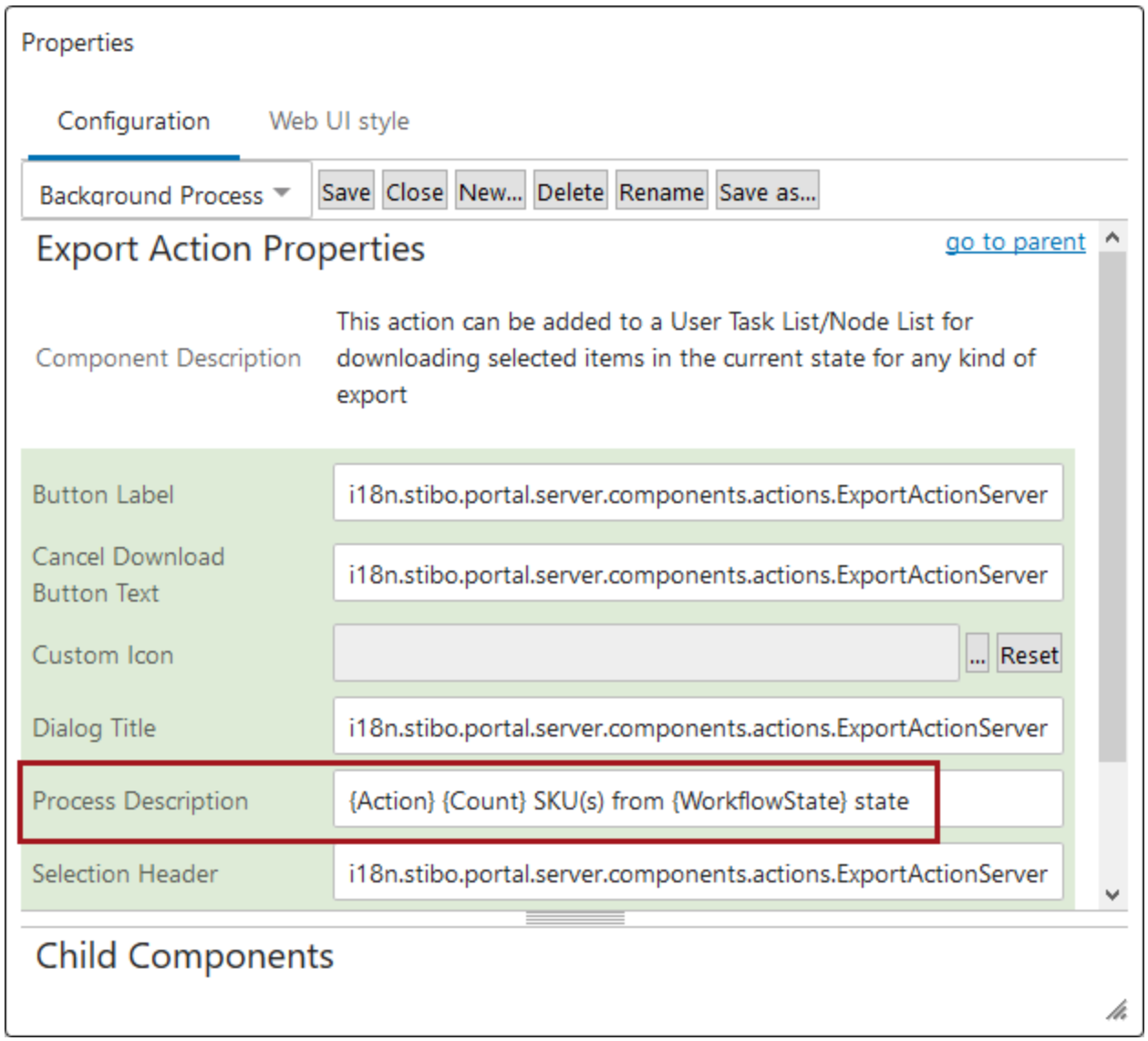
In addition to having an action-related message displayed, users can also configure BGP Node Lists to display a configured message using the **Description header** component, which will display the message defined by the associated action.

To create more detailed background process descriptions:

1. Navigate to a Node List Properties screen and add the desired **Actions** under Child Components.



2. Double click on the added Action and navigate to the **Process Description** field.



3. A combination of static text and action **Placeholders** can be added to return a coherent naming to the background process taking place if available.

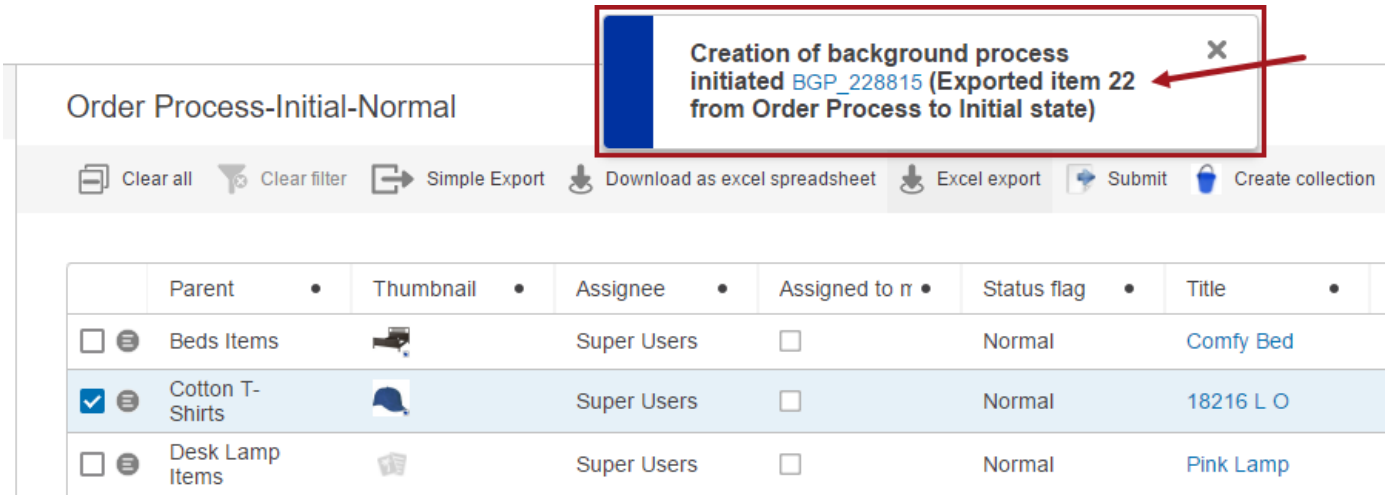
   The available **Placeholders** to use and their areas of use are listed below:

Placeholder	Returned Value	Notes on Availability
{Action}	Type of action taking place	Available on **ALL** actions.
{Configuration}	Import / Export / Bulk configuration	Available **ONLY** for: • Bulk Update Action

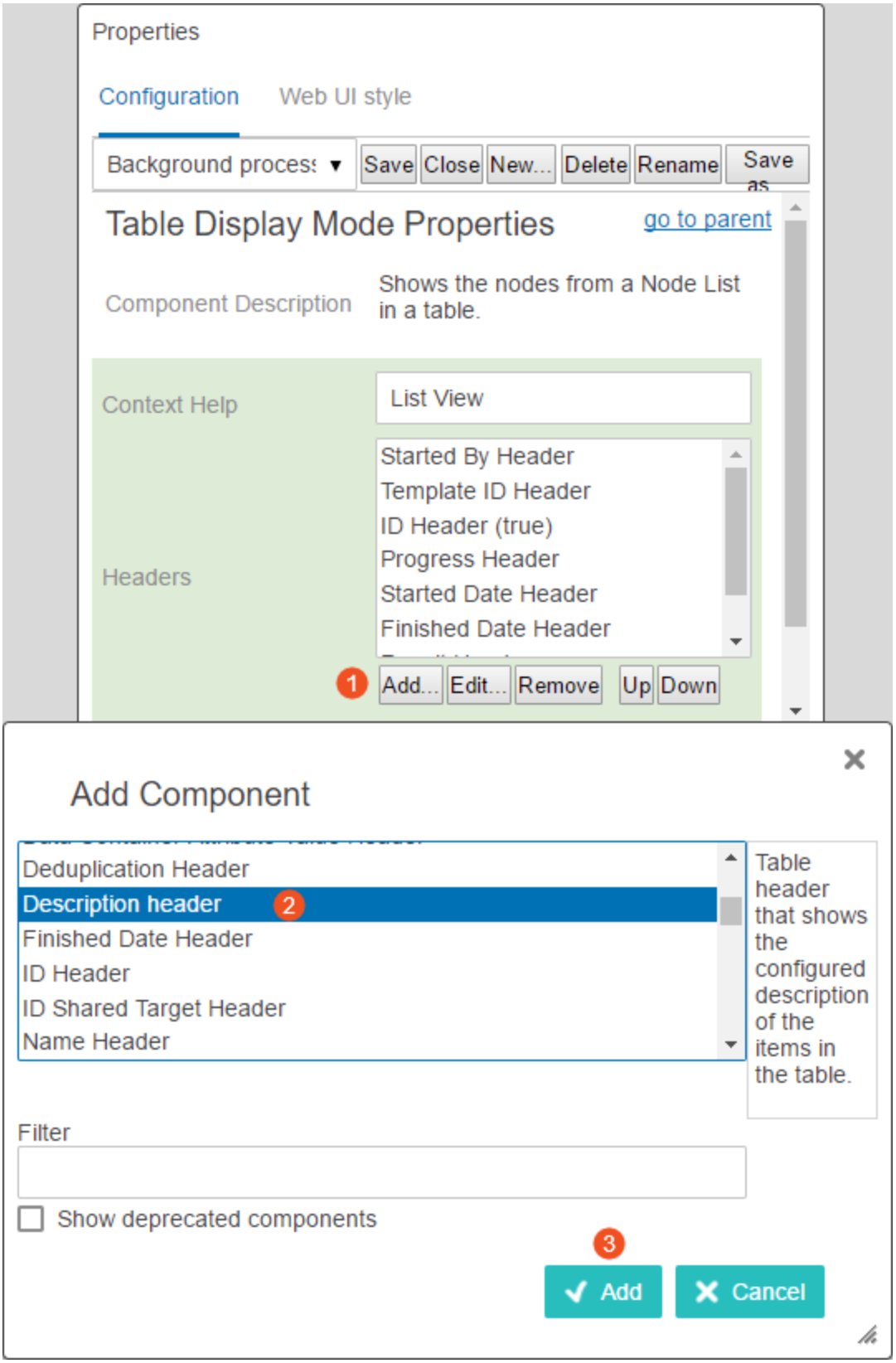
Placeholder	Returned Value	Notes on Availability
		• Bulk Update List Action • Smart Sheet Export Action • Smart Sheet Import Widget • Simple Importer Widget • Simple Exporter Action
{ImportFile}	Name of import file	Available **ONLY** for: • Bulk Update Action • Bulk Update List Action • Smart Sheet Export Action • Smart Sheet Import • Simple Importer Widget
{WorkflowName}	Name of the workflow in which the items are currently located in	**NOT** Available for: • Create Publication from Existing • Smart Sheet Import Widget • Simple Importer Widget • Print on Demand Action
{WorkflowState}	Workflow state in which the items are currently located in	**NOT** Available for: • Create Publication from Existing Action • Smart Sheet Import Widget • Simple Importer Widget • Print on Demand Action
{ItemCount}	Returns the number of selected objects to be processed by the action	**NOT** Available for: • Create Publication from Existing Action • Smart Sheet Import Widget • Simple Importer Widget • Simple Exporter Action

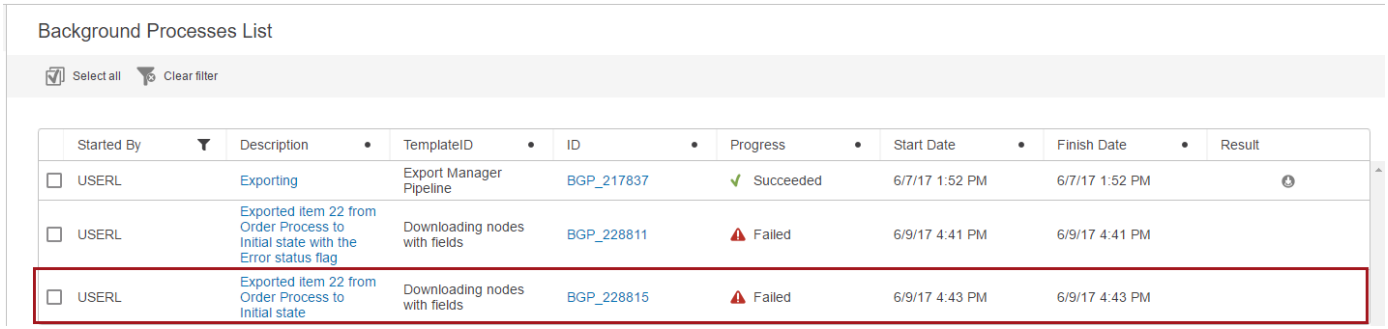
Placeholder	Returned Value	Notes on Availability
		• Reflow from next column action • Print on Demand Action
{StatusFlag}	Return the name of the status flag	Available **ONLY** for: • Create Collection Action • Download Asset Action • Generate PDF Action • Smart Sheet Export Action • Simple Exporter Action • Reflow from next Column Action

For example, if the following was written in the Process Description field of an export from a workflow: **Exported item {ItemCount} from {WorkflowName} to {WorkflowState} state**, it would return the message shown below to the user when the BGP is initiated.



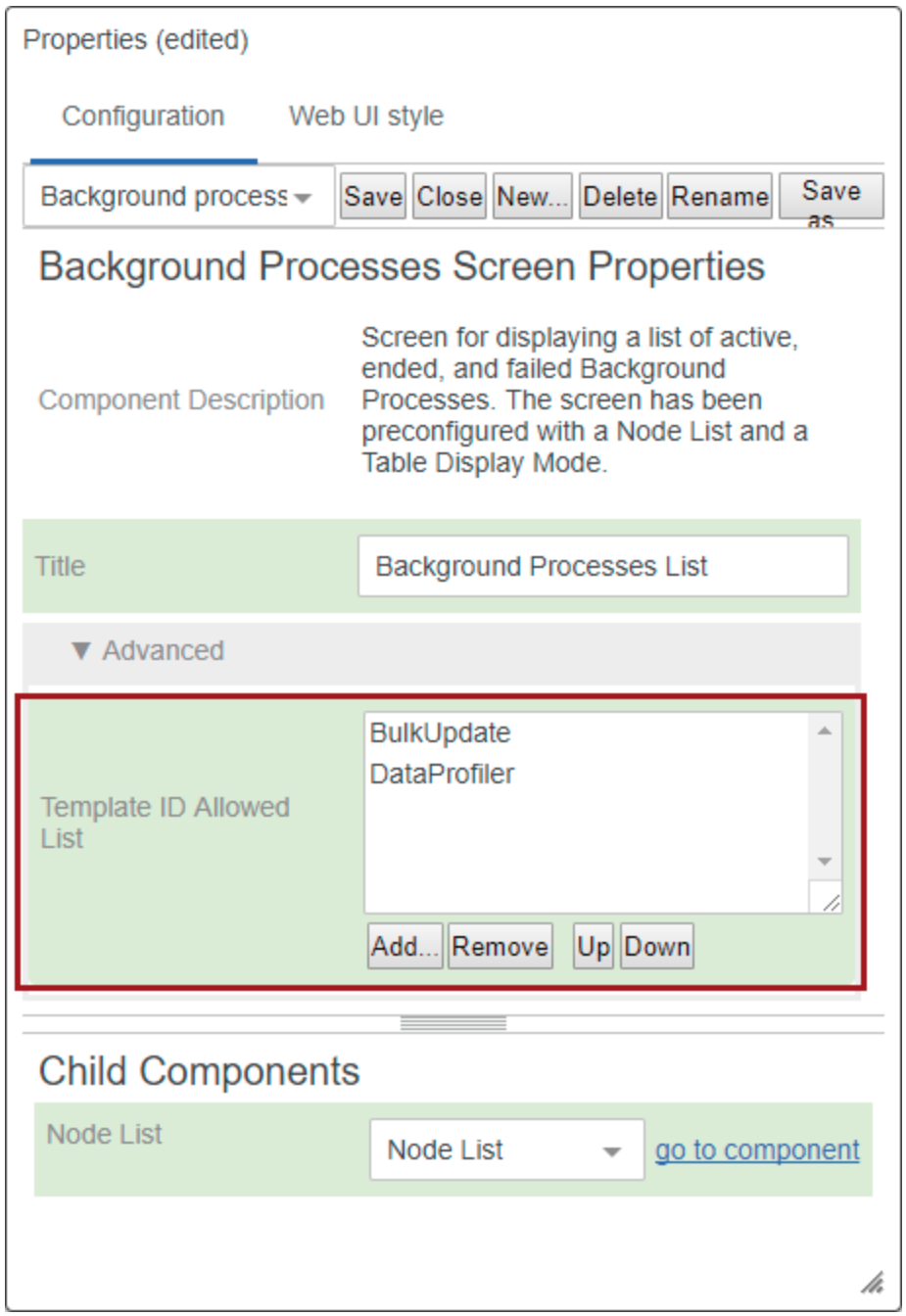
In addition, if the Description header has been added to the Node List configuration (generally via the Table Display Mode), the description will also appear in the BGP list.


Properties
Configuration
Web UI style
Background process
Save
Close
New...
Delete
Rename
Save as
Table Display Mode Properties
go to parent
Component Description
Shows the nodes from a Node List in a table.
Context Help
List View
Headers
Started By Header
Template ID Header
ID Header (true)
Progress Header
Started Date Header
Finished Date Header
1
Add...
Edit...
Remove
Up
Down
Add Component
Deduplication Header
Description header
2
Finished Date Header
ID Header
ID Shared Target Header
Name Header
Table header that shows the configured description of the items in the table.
Filter
Show deprecated components
3
Add
Cancel



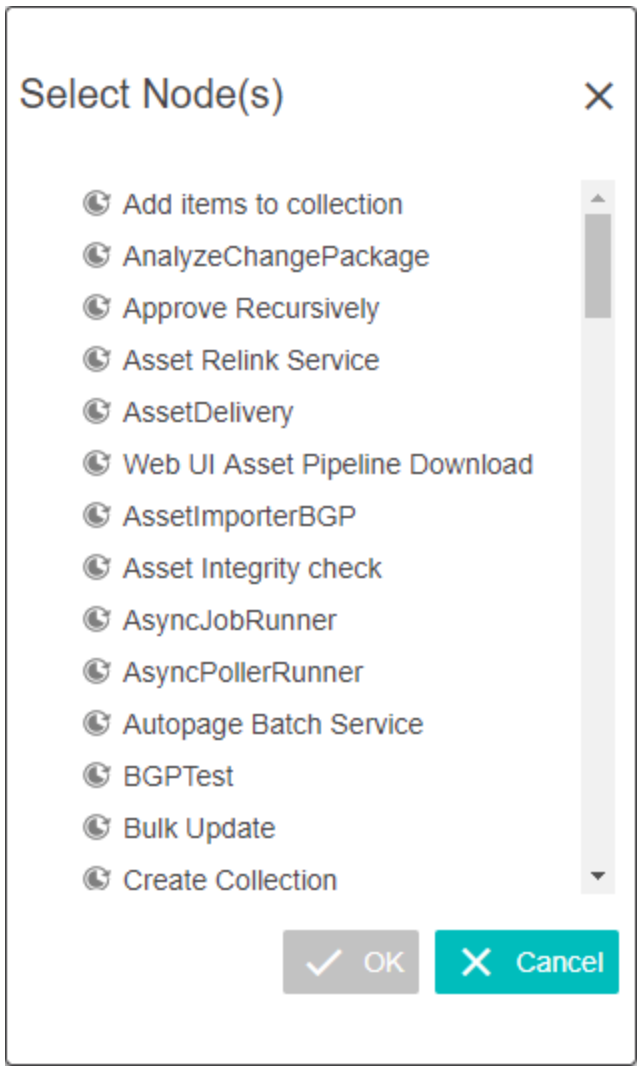
Advanced flipper in Background Processes Screen Properties

Template ID Allowed List option allows the user to restrict the Background Processes List from displaying all the processes.



To enable this, click on the **Add** button to select the required Template ID List.

A predefined template list displayed, where multiple selections can be made.



With the selections made, the Background Processes List will be restricted to display only the processes related to the templates selected. If no template ID is chosen, then by default all of the Background Processes (BGPs) in Web UI are displayed.

Calculated Attributes in Web UI

Calculated attributes are a special type of attributes whose values are not written in the database, but are calculated on the fly, based on other data in the system. The foundation for a calculated attribute is a functional programming language very similar to the language used for defining functions in Excel.

For assistance in determining if a calculated attribute is the most efficient way to meet your requirements, see the **Calculated Attribute Considerations** topic in the **Calculated Attributes** section of the **System Setup / Super User Guide** documentation.

The value of a calculated attribute is determined by a value template which can be written in the Function Editor. Many functions can include an argument, which specifies the STEP data to be accessed. Functions can access information from references, compare data between objects, round numbers, modify text, and many other options. For a step-by-step guide to creating a calculated attribute, see the **Creating a Calculated Attribute** topic in the **Calculated Attributes** section of the **System Setup / Super User Guide** documentation.

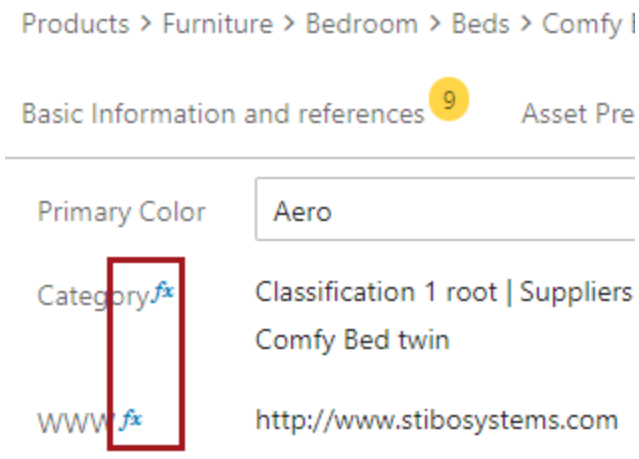
Read more about setting up and using calculated attributes in the:

- **Calculated Attributes** section of the **System Setup / Super User Guide** documentation
- **Attribute and LOV Creation and Maintenance in Web UI** section of the **Web User Interfaces / Using a Web UI** documentation

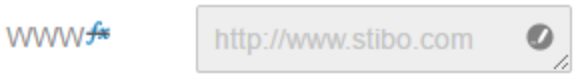
Identifying Calculated Attributes

Once a calculated attribute is set up, users can quickly identify a calculated attribute value that is configured to display in Web UI using a Node Editor (e.g., details screen) or a Node List (Multi Edit Display Mode). And, by looking at the icons, a user can also easily tell if the calculated attribute value shown on the screen has been overwritten with another value.

- *fx* indicates a calculated attribute displaying the calculated value



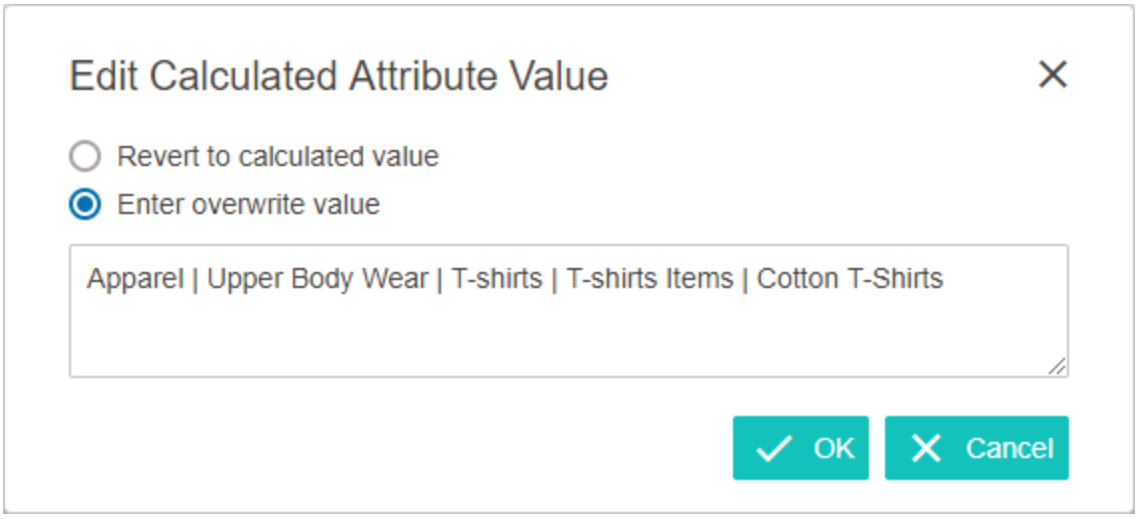
- *fx* indicates a calculated attribute displaying an overwritten (edited) value



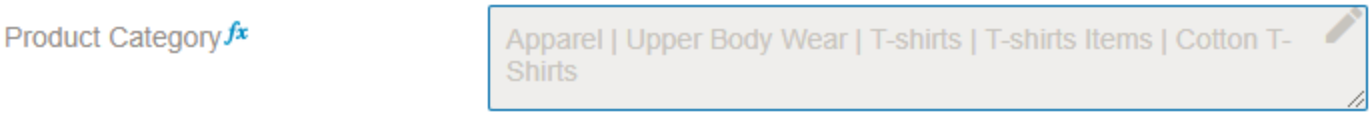
Editing Calculated Attributes

If an existing calculated attribute value needs to be edited, the user will take these steps:

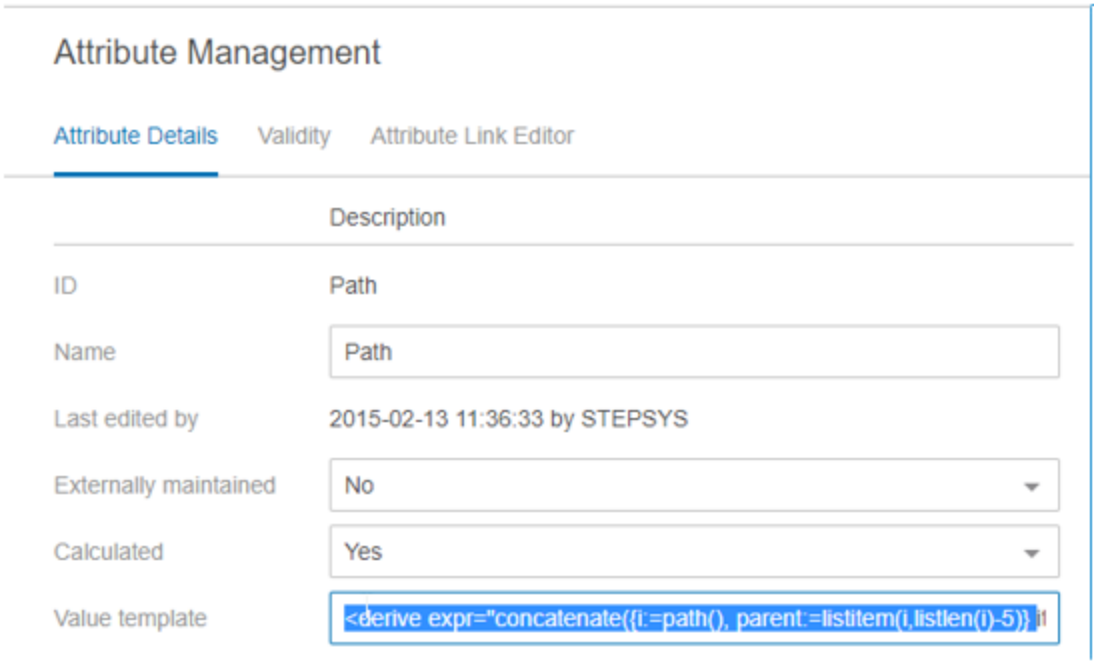
1. Click the edit icon ( ) found to the right of the value field or double-click the table cell where the attribute is displayed, whichever method applies.
2. An 'Edit Calculated Attribute Value' dialog box will display. Make a radio button selection and enter / edit the value entry, if applicable. Then click OK.
   - The default setting is 'Revert to calculated value.' The user can return to the original value.
   - Or, the user may choose 'Edit or overwrite value.' Users can edit the current value shown or completely clear the data and then replace it with a new value.



3. If making edits within rows of a Node Editor screen, click the Save button to see the changes. Changes are reflected automatically when users exit out of a table cell. However, depending on the display configuration, the user may still need to save any changes before moving to another screen.



It is worth noting that a calculated attribute editor (to insert templates, evaluate nodes, etc.) is available in the workbench only , and is not available in Web UI. Additionally, a user will have to specify the required function manually on the attribute management screen.


Attribute Management
Attribute Details
Validity
Attribute Link Editor
Description
ID
Path
Name
Path
Last edited by
2015-02-13 11:36:33 by STEPSYS
Externally maintained
No
Calculated
Yes
Value template
<derive expr="concatenate({i:=path(), parent:=listitem(i,listlen(i)-5)}

Children of Types Screen

The Children of Types screen component enables users to set a screen on a parent node and view, at a glance, children objects of a specified object type or types. For example, if a node has children objects that are of the 'Item', 'Retail item', and 'Online Sale Item' object types, but only objects of the types 'Retail Item' and 'Online Sale Item' should be displayed, the Children of Types screen can be used to limit the view of children objects on a node list to just those two object types.

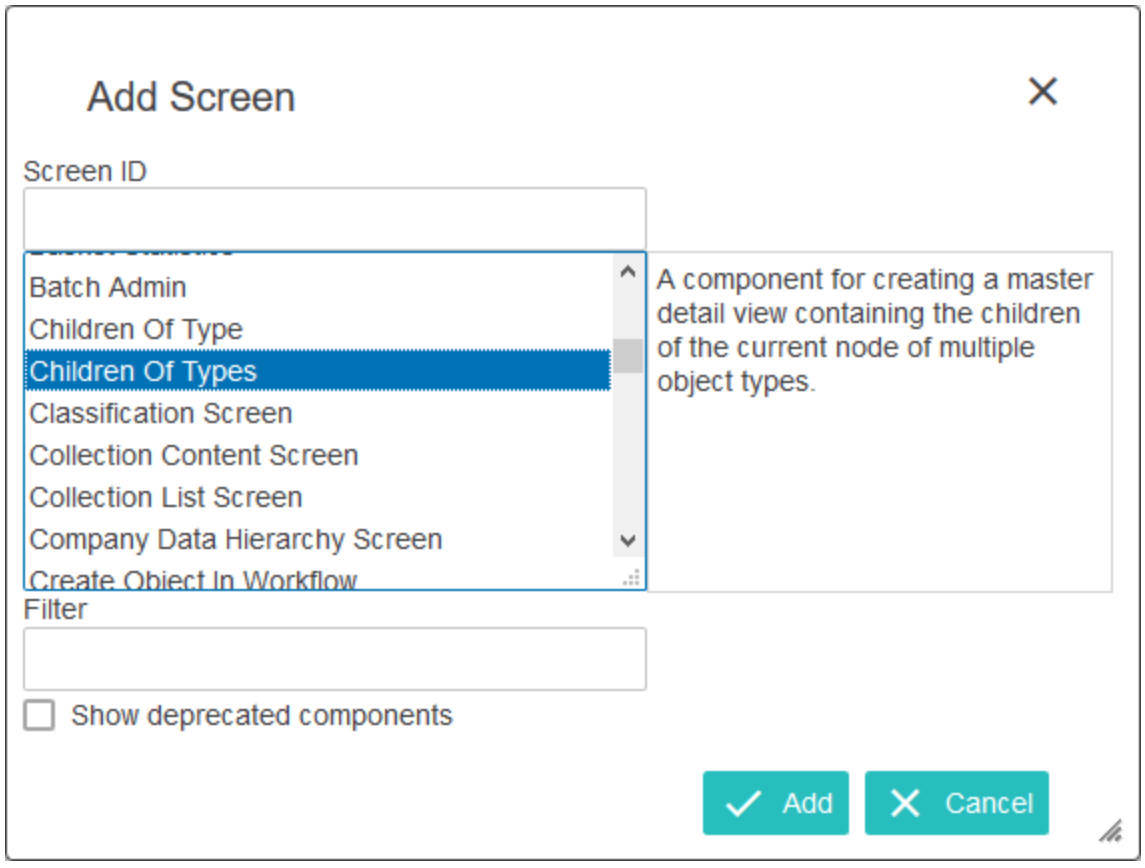
Prerequisites

It is expected that anyone configuring the Children of Types Screen component is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

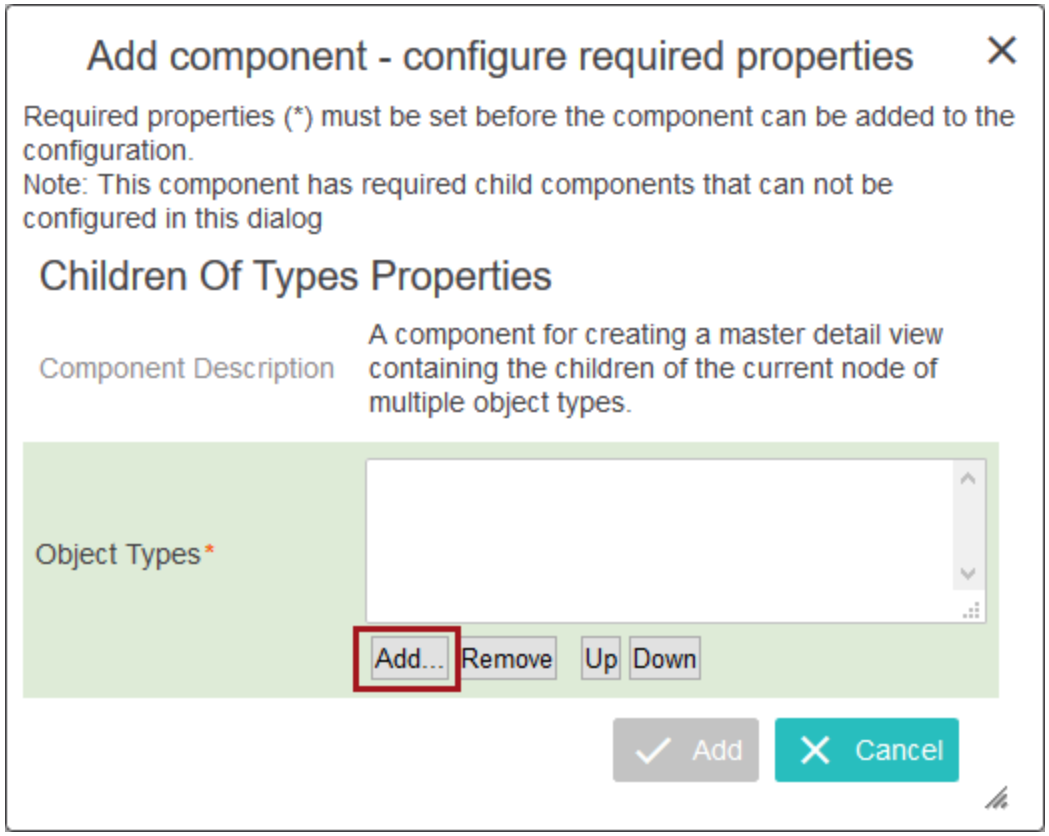
Adding and configuring a Children of Types screen

To create and configure a Children of Types screen, users must first determine the child objects of which object type or types will display in a node list. This will be dependent, in large degree, to where the screen will be set in the Web UI. Once this has been determined, users may begin the configuration process.

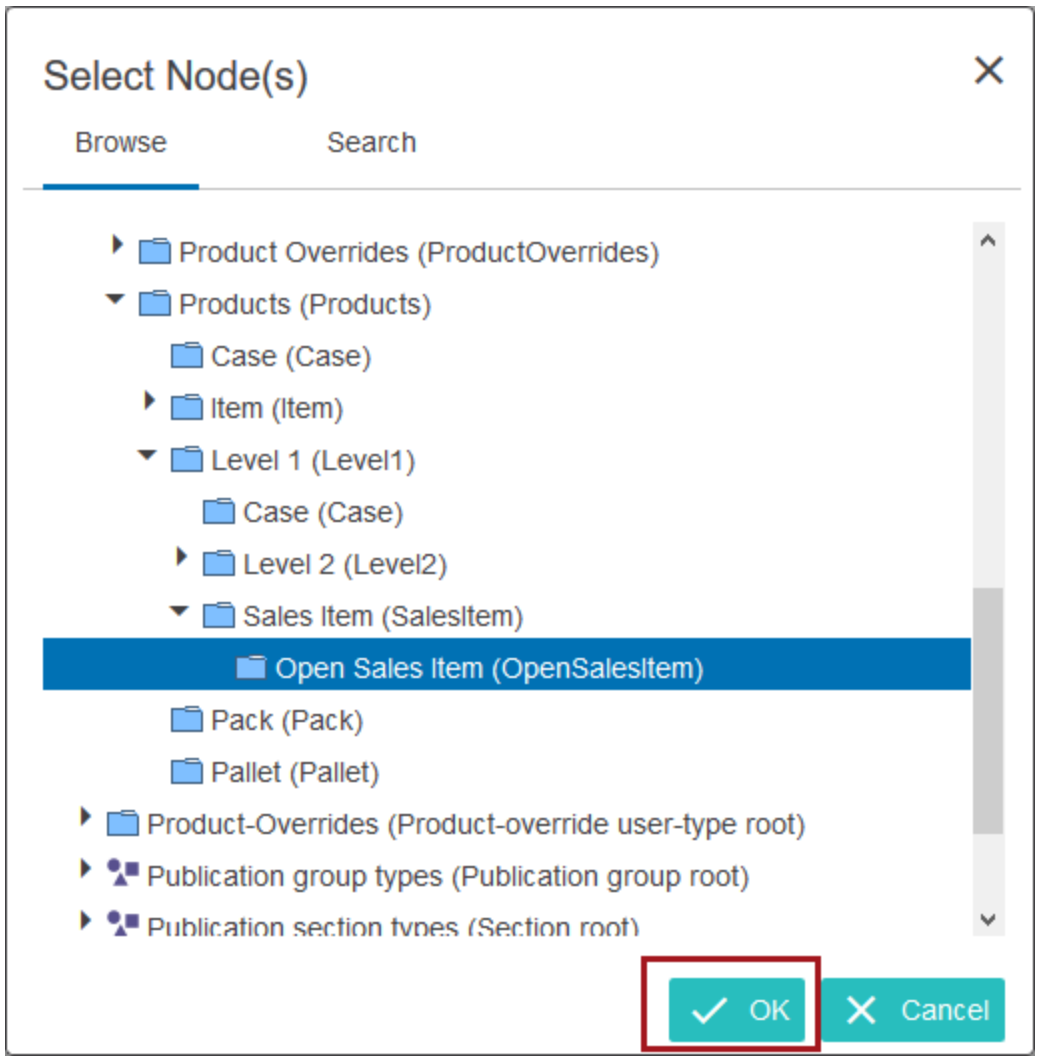
1. Create a new 'Children of Types' screen. Steps for creating a new screen are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic. Select 'Children of Types Screen' as the screen type.

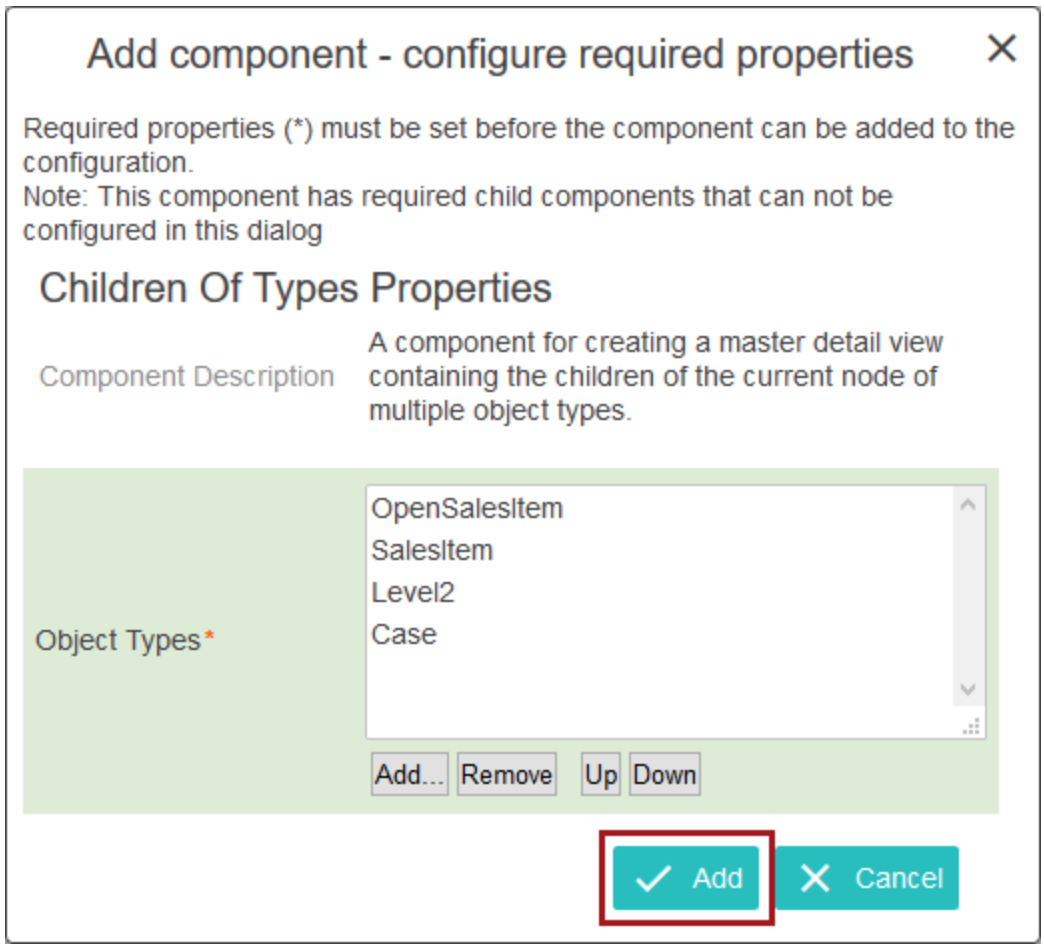


2. After creating the new 'Children of Types' screen, users must determine which object types will display on the screen. Click 'Add' to bring up a Node Selector dialog.

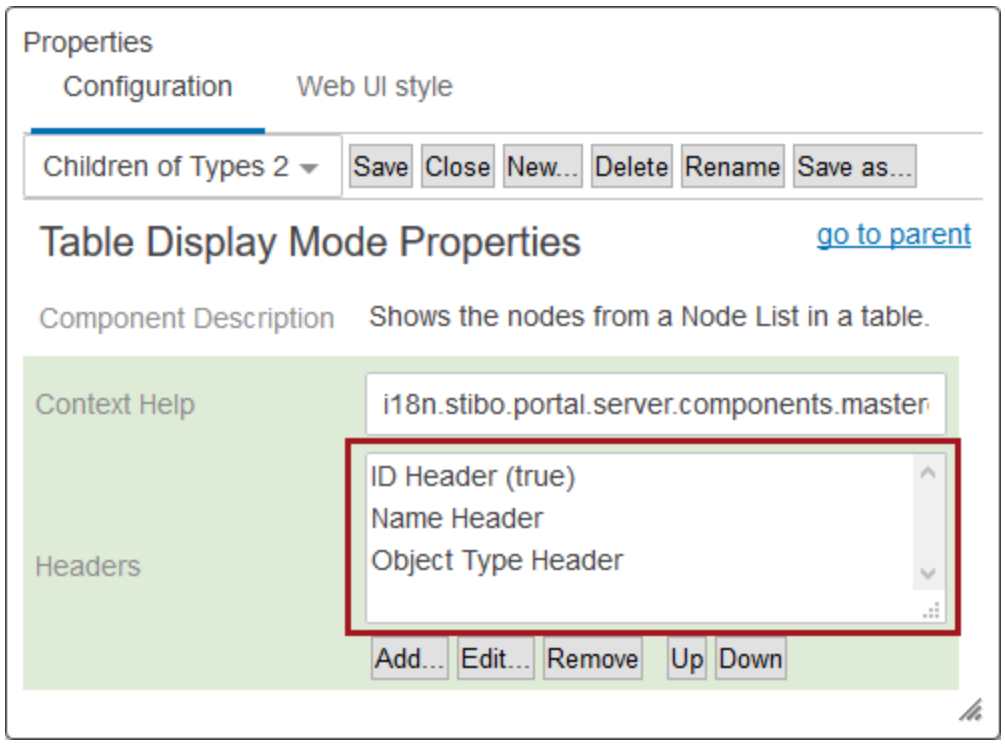


3. Using either the 'Search' or the 'Browse' option, users select the object types that can appear in the screen. Multi-select is enabled. When the selections are made, click 'OK', and then in the 'Children of Types Properties' window, click 'Add.'


Select Node(s)
Browse
Search
Product Overrides (ProductOverrides)
Products (Products)
Case (Case)
Item (Item)
Level 1 (Level1)
Case (Case)
Level 2 (Level2)
Sales Item (SalesItem)
Open Sales Item (OpenSalesItem)
Pack (Pack)
Pallet (Pallet)
Product-Overrides (Product-override user-type root)
Publication group types (Publication group root)
Publication section types (Section root)
OK
Cancel



4. Finish configuration of the screen on the Node List component. For more information about configuring a Node List, see the **Node List Component** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.
5. Configure the view mode type best suited for the screen. Table view, Multi edit view, Compare view, and List view are viable options.
6. Set the required headers for the screen. These headers will determine which columns display in the tabular view of the child objects.



Once configured and set as a Sub Screen Tab Page, the Children of Types screen will display in a tabular view all child objects that are of the configured object types that were set in step two.

Classification-Specific Attribute Value Components

The following attribute value components are available for use with classification-specific attribute values. Specifically, these components are useful for working with ETIM data. For more information, see the **ETIM Format** topic with the **Data Exchange** documentation.

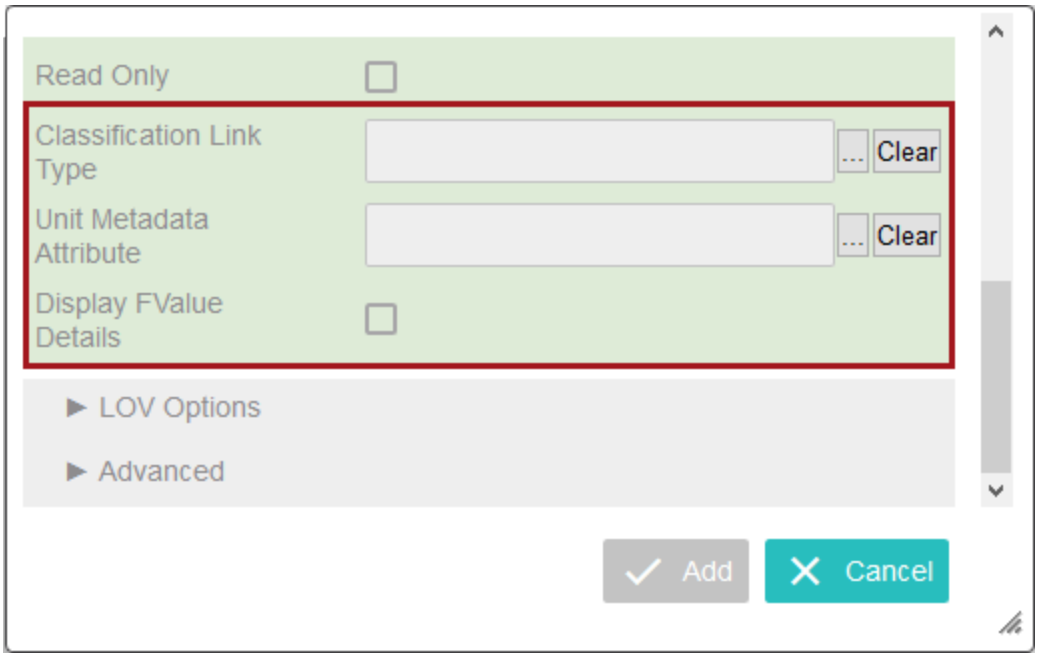
For the most part, the following components mirror the Attribute Value Component and general configuration information can be found in the **Attribute Value Component** topic.

- Classification-Specific Attribute Value Component for Node Details
- Classification-Specific Attribute Value Header Component for Node List

For the most part, the following two components mirror the Attribute Value Group Component and general configuration information can be found in the **Attribute Value Group Component** topic.

- Classification-Specific Attribute Value Group Component for Node Details
- Classification-Specific Attribute Value Group Header Component for Node List

The following sections define the classification parameters ('Classification Link Type', 'Unit Metadata Attribute', and 'Display FValue Details') displayed on the components named above.



Classification Link Type

Products must be classified into the ETIM classification via a product-to-classification link type as defined in the **Create Product to ETIM Classification Link** topic of the **Data Exchange** documentation.

For this parameter, click the ellipsis button (...) to display the Select Node(s) dialog. Choose the product-to-classification link type configured for ETIM. Click **OK** to close the dialog and display your selection on the component dialog. Click the **Clear** button to remove the selection.

Unit Metadata Attribute

During ETIM configuration, the 'ETIM Unit Description' metadata attribute is selected, as explained in the **Valid Units are Determined by Classification to Attribute Link** section of the **ETIM Format** topic in the **Data Exchange** documentation.

For this parameter, click the ellipsis button (...) to display the Select Node(s) dialog. Choose the metadata attribute used by the classification to attribute link. Click **OK** to close the dialog and display your selection on the component dialog. Click the **Clear** button to remove the selection.

Note: Invalid ETIM unit values result in a Web UI error.

Display FValue Details

Check this parameter checkbox to display FValue Details attributes that have been imported via the ETIM IXF Format and the 'CreateValue Details attributes' checkbox. When checked, Web UI displays FValue Details attributes for each of the configured ETIM attributes. For more information, see the **ETIM IXF Format** topic in the **Data Exchange** documentation.

If FValue Details are not necessary in your data model, leave this checkbox unchecked.

Note: This option is available only for the Classification-Specific Attribute Value Component and for the Classification-Specific Attribute Value Group Component. It is not available for the Header components.

Company Hierarchy Visualization and Maintenance

Customer data users can browse and edit a visual representation of company hierarchy data using a Company Data Hierarchy Screen. When using the hierarchy functionality, company hierarchy data is saved as STEP entities, and references are used to connect the entities to each other. The visualization of entities and their references may help users better understand company hierarchies, and relationships between aggregates (e.g., companies, franchises, and branches). Users may also be able to identify patterns, better organize objects, and ultimately build better data relationships.

This topic addresses:

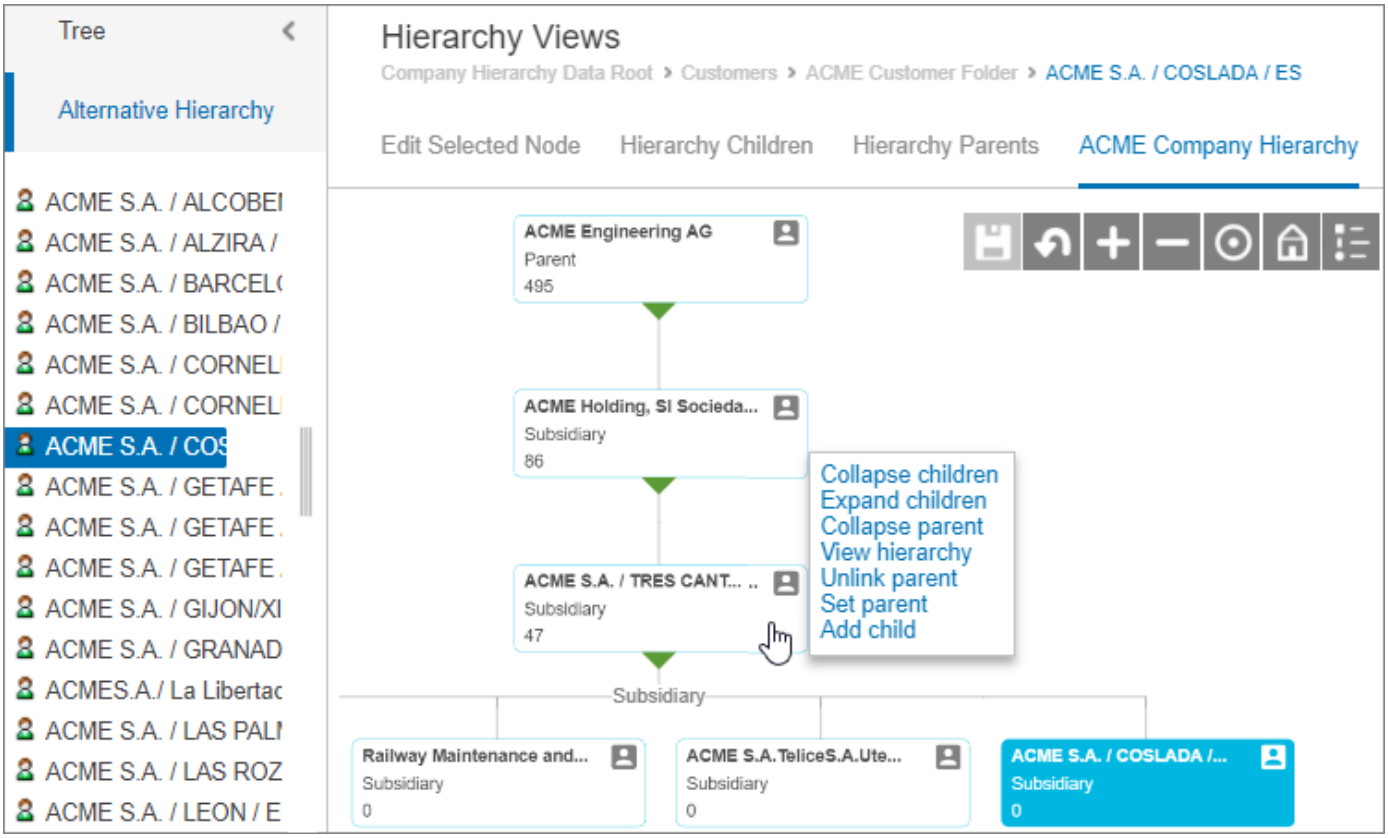
- Prerequisites
- Overview of a Company Data Hierarchy Screen
- Using a Company Data Hierarchy Screen
- Editing a Company Hierarchy
- Optional Tools for 'Set parent' and 'Add child' Actions

Prerequisites

It is very important to note that users with access to the Web UI designer will need to configure the Company Data Hierarchy Screen component before it can be used. For more information, see the **Configuring a Company Data Hierarchy Screen** topic.

Overview of a Company Data Hierarchy Screen

The below screenshot shows a sample of a Company Data Hierarchy Screen that is configured to display via a Sub Screen Tab page when a user clicks on an entity object within a Tree Navigator panel.



Using this example:

- An entity can be selected using the navigation panel on the left.
  - If the panel on the left is expanded, then the selected entity node will display shaded.
  - Selecting a different entity within the panel will render the respective company hierarchy.
  - Selecting a different hierarchy to view within the Company Data Hierarchy Screen will update the selected entity node in the navigation panel.
- The initial view responsively adapts based upon screen size, so that the hierarchy view appropriately fills the screen.
- Each linked entity is displayed within individual graphical nodes.
  - Each graphical node displays up to three configured attribute values, and a customizable icon representing the object type.

- A blue filled box represents the selected node within the hierarchy.
- A toolbar in the top right offers the following options for better viewing and editing:

- Save
- Undo
- Zoom in
- Zoom out
- Recenter hierarchy view
- Default hierarchy view
- Symbol Legend

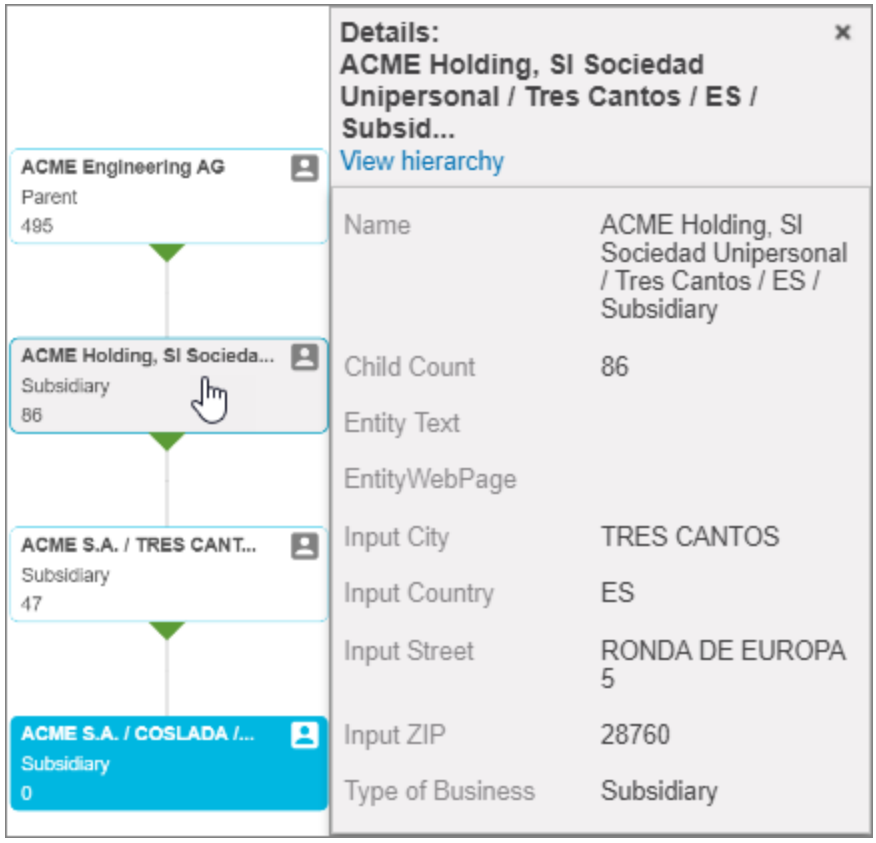
- Green arrowheads display at the bottom of a graphical node (and top, when applicable) to indicate when additional data is available but not displayed.
  - When a parent is not displayed, the green arrowhead will display at the top of the graphical node.
  - When a child is not displayed, the green arrowhead will display at the bottom of the graphical node.
- A hand shaped cursor and the following interactive options display when a user hovers over any of the entity boxes.

- Expand parent*
- Collapse parent
- Expand children
- Collapse children
- View hierarchy
- Unlink parent
- Set parent
- Add child

*Because the options are interactive, only those that are applicable display.

Users can view more information by selecting an individual node. The attributes that display are configurable in the designer by the admin users. Users also have the option to select the 'View hierarchy' link to render the hierarchy for the selected node. When this happens, the Tree Navigation (if applicable) will move to the newly selected entity object.

The below screenshot shows a sample of information that appears when a user selects any of the entity nodes within a Company Data Hierarchy Screen.



Using a Company Data Hierarchy Screen

Characteristics of many customer data models lend themselves to a hierarchical layout, even though the data model is referential. Many times the creation of customer hierarchy data does not occur in STEP but is created in surrounding applications (ERP, CRM, and eCommerce). Until now, this resulted in company hierarchy content and structure being maintained outside STEP. Orphaned hierarchies that do not naturally reside in the surrounding applications can also be created and maintained in the STEP Web UI Company Data Hierarchy Screen.

Using the Company Data Hierarchy Screen, users will be able to:

- View and maintain organizational hierarchies by making use of organic corporate data
- Make ad-hoc changes as needed
- Associate account and other organizational data (e.g., revenue to date, credit score, etc.) to nodes within an organizational hierarchy
- Associate account and other organizational data received from third-party data providers to nodes within an organizational hierarchy

- Construct and manage differing perspectives of a singular hierarchy so as to accurately model the differing views stakeholders within an organization (e.g., Sales, Marketing, Finance / Legal) have for a given corporate customer organization
- Map and manage relationships between nodes across different hierarchies

A node can be a member of multiple hierarchies, but only one hierarchy can be viewed at a time. Though only one hierarchy can be displayed at the same time, more than one hierarchy can be defined and displayed using multiple Company Data Hierarchy screens within the same Web UI.

Editing a Company Hierarchy

Users have many options to help them edit a company hierarchy. When using a company hierarchy screen, a user can hover over a graphical node and see the relative options for editing the company hierarchy. However, when working in an 'Approved' workspace, the hover menu options 'Unlink parent,' 'Set parent,' and 'Add child' are not available. Edits to the company hierarchy structure can only be done in the 'Main' workspace.

The screenshot below is an example of options displayed when hovering over a graphical node in a 'Main' workspace.

Each of these options is described below.

Collapse children

If the graphical node has any visible children, then the 'Collapse children' action will display. When selected, the children and underlying descendants will collapse into the node above.

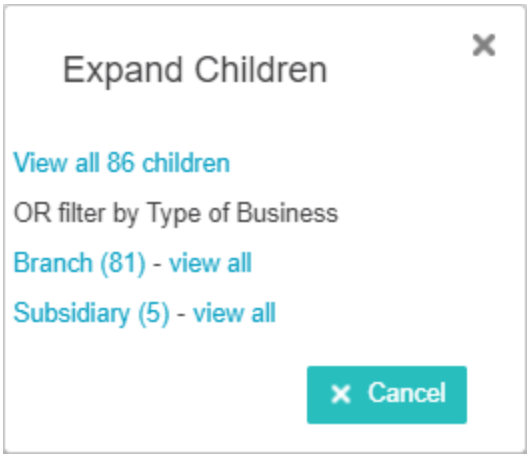
Expand children

If the graphical node has a green indicator on the bottom, upon hover, the 'Expand children' action will display. If there is enough available space to fit all children on the screen, then the children will expand under the graphical node. If there is not enough available space and the Expand Plugin has not been configured, then all children will be displayed, but potentially outside the visible area.

Using the zoom in, zoom out, and panning tools is helpful when this occurs.

If there is not enough available space and the Expand Plugin has been configured, then an Expand Children dialog will display.

In the screenshot example below, the Expand Plugin has been configured to use a filter type of Branch and Subsidiary. The user can select to view all children, view all children within the Branch filter type, view all children within the Subsidiary filter type, or drill down into the Branch or Subsidiary filter types.



In the screenshot example below, the user selected the Branch filter type, and the dialog now displays the available additional filter types. In this example all the Branch children are located in the same country, 'ES.'

The user can select the Back button to return to the previous dialog, or the Cancel button to return to the Company Data Hierarchy Screen.

Note: If a user selects 'Expand children' on a node with more than 1,000 children, then an error message will display informing the user that there are too many nodes to display. The user will not be able to display the nodes. If somehow 1,000 nodes are displayed on the screen, then a warning will display informing the user that browser performance may be impacted.

Collapse parent

If the graphical node has a visible parent, then the 'Collapse parent' action will display. When selected, the parent and all siblings will collapse into the node.

Expand parent

If the graphical node has a green indicator on the top, upon hover, the 'Expand parent' action will display. When selected, all direct ancestors are expanded, potentially outside the visible area. Using the zoom in, zoom out, and panning tools is helpful when this occurs.

View hierarchy

If a Hierarchy screen is defined for the target node, then the 'View hierarchy' link will be available. Selecting 'View hierarchy' will navigate away from the originally rendered node hierarchy to the selected node hierarchy. The once white graphical node will display filled with blue, indicating it is the selected node. If the left panel is enabled, the panel will display the newly selected node.

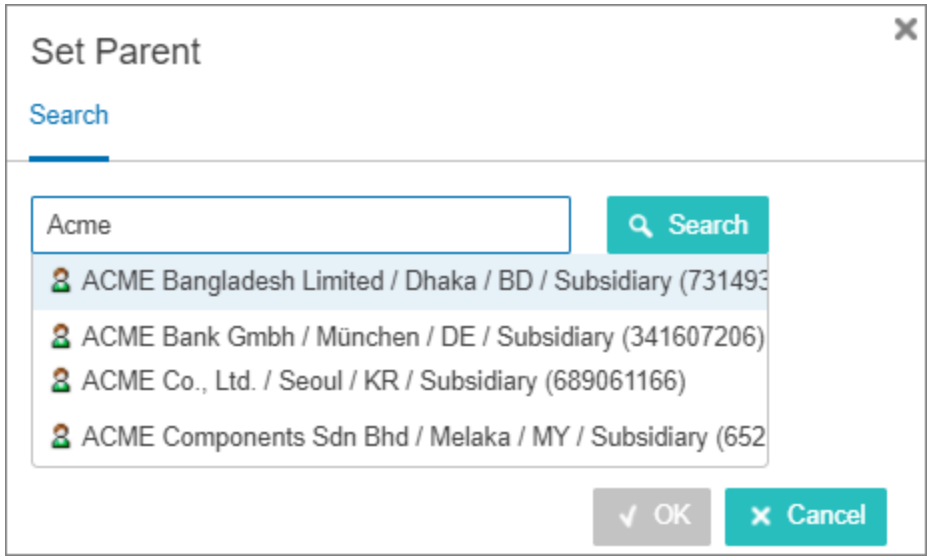
Unlink parent

Selecting 'Unlink parent' will remove the reference link between the node and its parent. However, the user must click the Save button for the changes to formally take affect. When selected, the graphical reference link (the line connecting the two graphical nodes) will no longer display, but the graphical node itself will remain displayed on the screen. This allows a user to edit the graphical node in other ways, or view the existing hierarchy prior to saving.

Set parent

'Set parent' can be used to change the parent to either an existing object or a new object that is created within the 'Set parent' dialog. When selected, the 'Set parent' dialog will display with at least a Search tab; however, if STEP has been configured with the optional 'Set parent' and 'Add child' settings, then a 'Find Similar Search' tab and/or a 'Create' tab will display. More information on these tabs can be found in the **Optional Tools for 'Set parent' and 'Add child' Actions** section below.

The screenshot below is an example of the default Search option displayed when using **Set parent**.

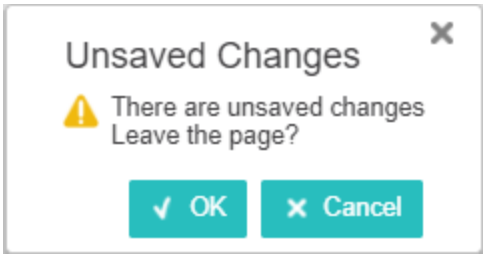


1. Using the Search tab, find the desired entity.
2. Select the new parent entity.
3. Click **OK**.
   - The link between the node and its original parent are removed, and the parent link is added to the newly selected node.
   - The 'Set parent' dialog will close and the hierarchy will display with the original remaining graphical nodes disconnected from the newly linked graphical node and its parent.
4. Click **Save** in the Company Data Hierarchy Screen toolbar.

Important: Changes will not take affect until the **Save** button is clicked.

If a user tries to navigate away from the Company Data Hierarchy tab, then the following warning will display.

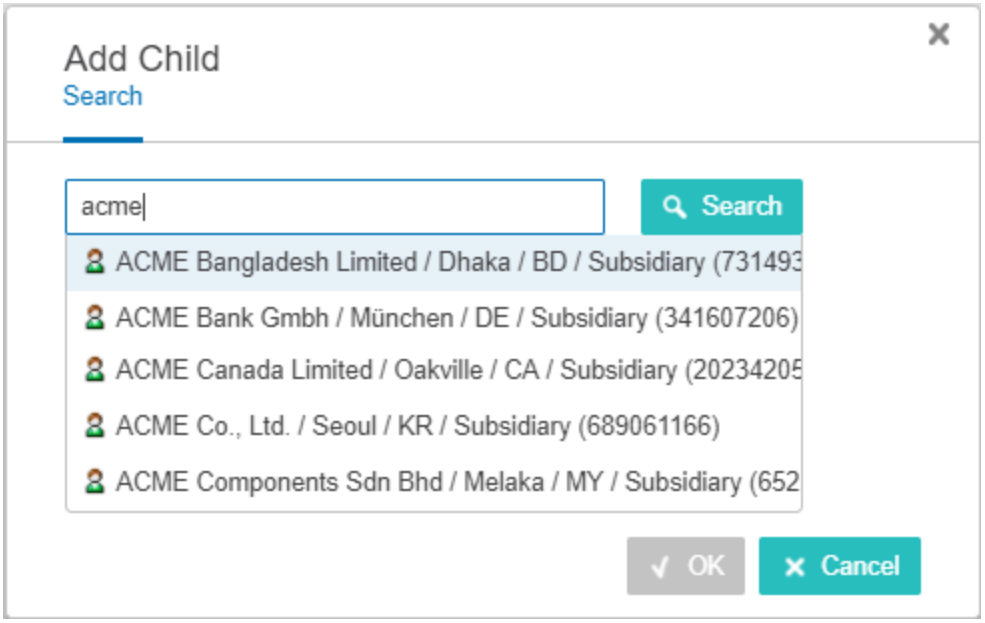
If a user selects a different entity from the left panel (if enabled) then the following dialog will display, and if the user clicks **OK** then the changes will be lost.



Add child

'Add child' can be used to add a child to the selected node. When selected, the 'Add child' dialog will display with at least a Search tab; however, if STEP has been configured with the optional 'Set parent' and 'Add child' settings, then a 'Find Similar Search' tab and/or a 'Create' tab will display. More information on these tabs can be found in the **Optional Tools for 'Set parent' and 'Add child' Actions** section below.

The screenshot below is an example of options displayed when using **Add child**.

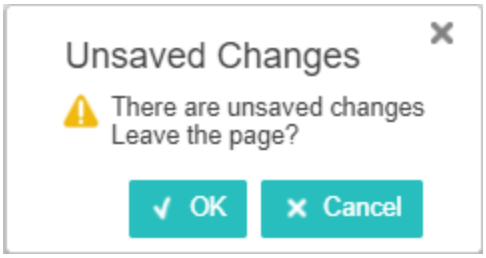


1. Using the Search tab, find the desired entity.
2. Select the new child.
3. Click **OK**.
   - The child link is added to the newly selected node.
   - The 'Add Child' dialog will close and the hierarchy will display the graphical node with its newly linked child.
4. Click **Save** in the Company Data Hierarchy Screen toolbar.

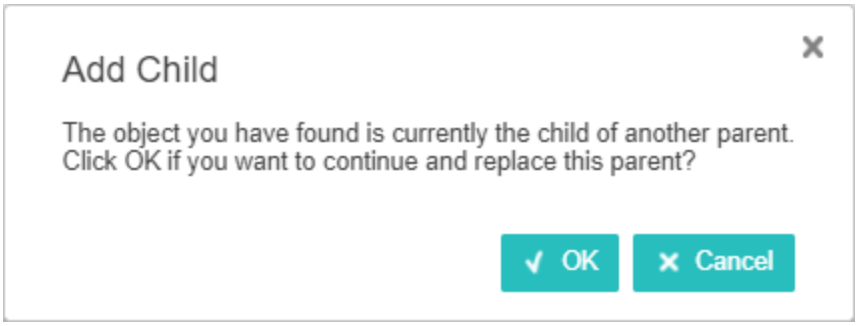
Important: Changes will not take affect until the **Save** button is clicked.

If a user tries to navigate away from the Company Data Hierarchy tab, then the following warning will display.

If a user selects a different entity from the left panel (if enabled) then the following dialog will display, and if the user clicks **OK** then the changes will be lost.



If the user selects an object that is currently the child of another parent, the user must confirm that they want to replace the parent.



Optional Tools for 'Set parent' and 'Add child' Actions

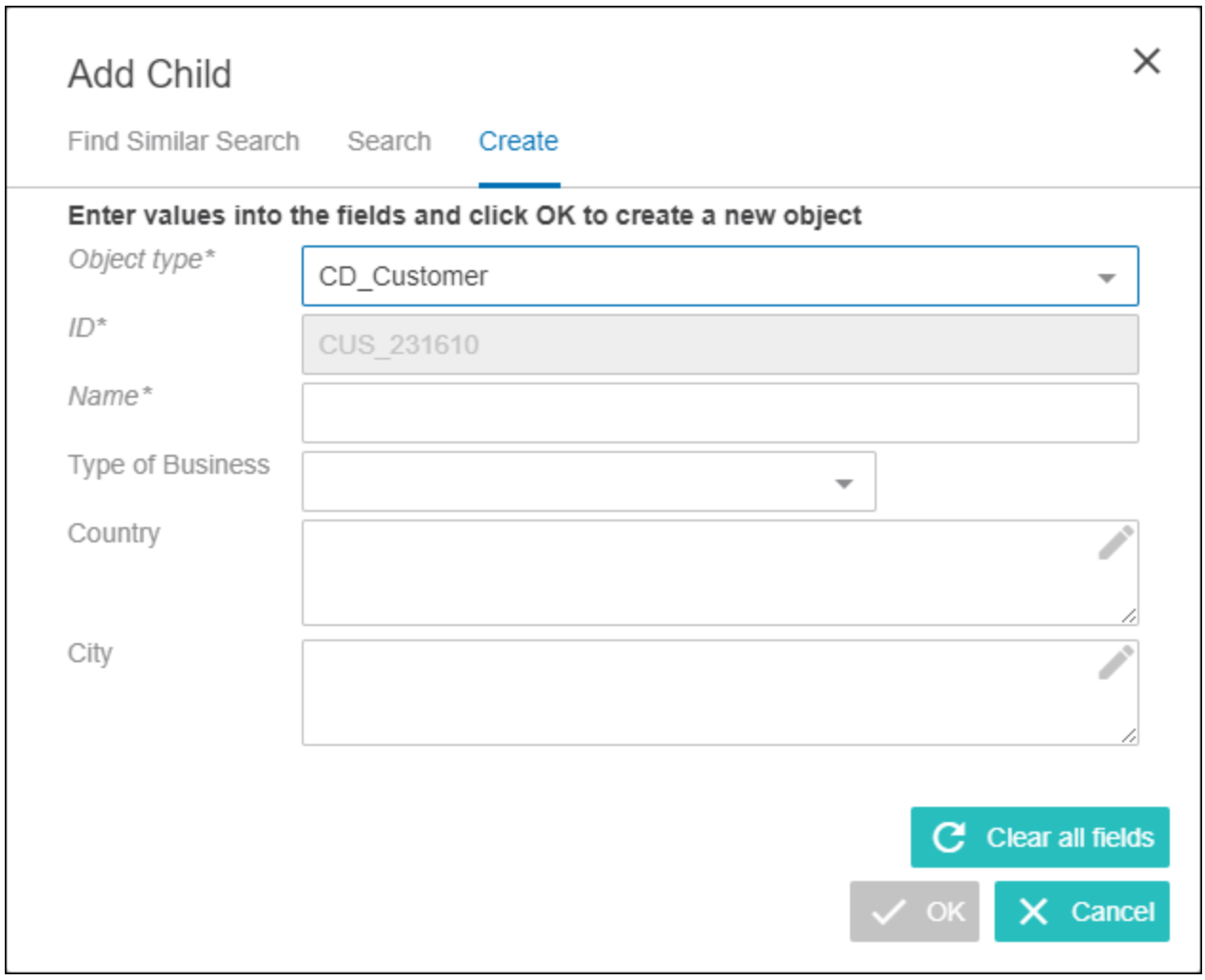
The 'Set parent' and 'Add child' actions offer optional functionality to assist users in properly editing a company hierarchy. The 'Create' tab and 'Find Similar Search' tab functionality are described below.

Create Tab

The Create tab will only display when a user selects the 'Set parent' and/or 'Add child' action, if a designer has set up the optional configurations. More information can be found in the **Optional Configurations for the Hierarchy Representation Component** topic.

Using the Create tab allows users to create new objects. Optionally, the user can also enter values into the attribute fields that have been configured in the designer to be applied to the new object. The attributes that display will depend on the selected Object Type.

The screenshot below is an example of a Create tab configured with attributes to populate.

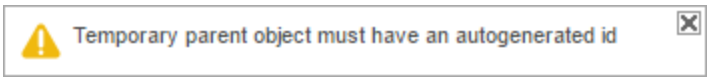


Clicking the **Clear all fields** button will remove all values from the visible fields.

When a user clicks the **Cancel** button, the actions are canceled and the dialog closes.

1. Select the Object Type from the dropdown list (if more than one is configured).
2. Complete any additional value fields, if displayed.
3. Click the **OK** button.

If the following warning displays, the Web UI designer should update the temporary parent object selection to an object with an autogenerated id, or contact your system administrator to have the current temporary parent object configured with an autogenerated id.



When a user clicks **OK**, the new object and relevant reference are created based on the choice of the user. (The reference type is specified in the hierarchy screen for the object type in question.) A message displays notifying the user of the success of the new object creation back on the hierarchy screen.

Find Similar Search Tab

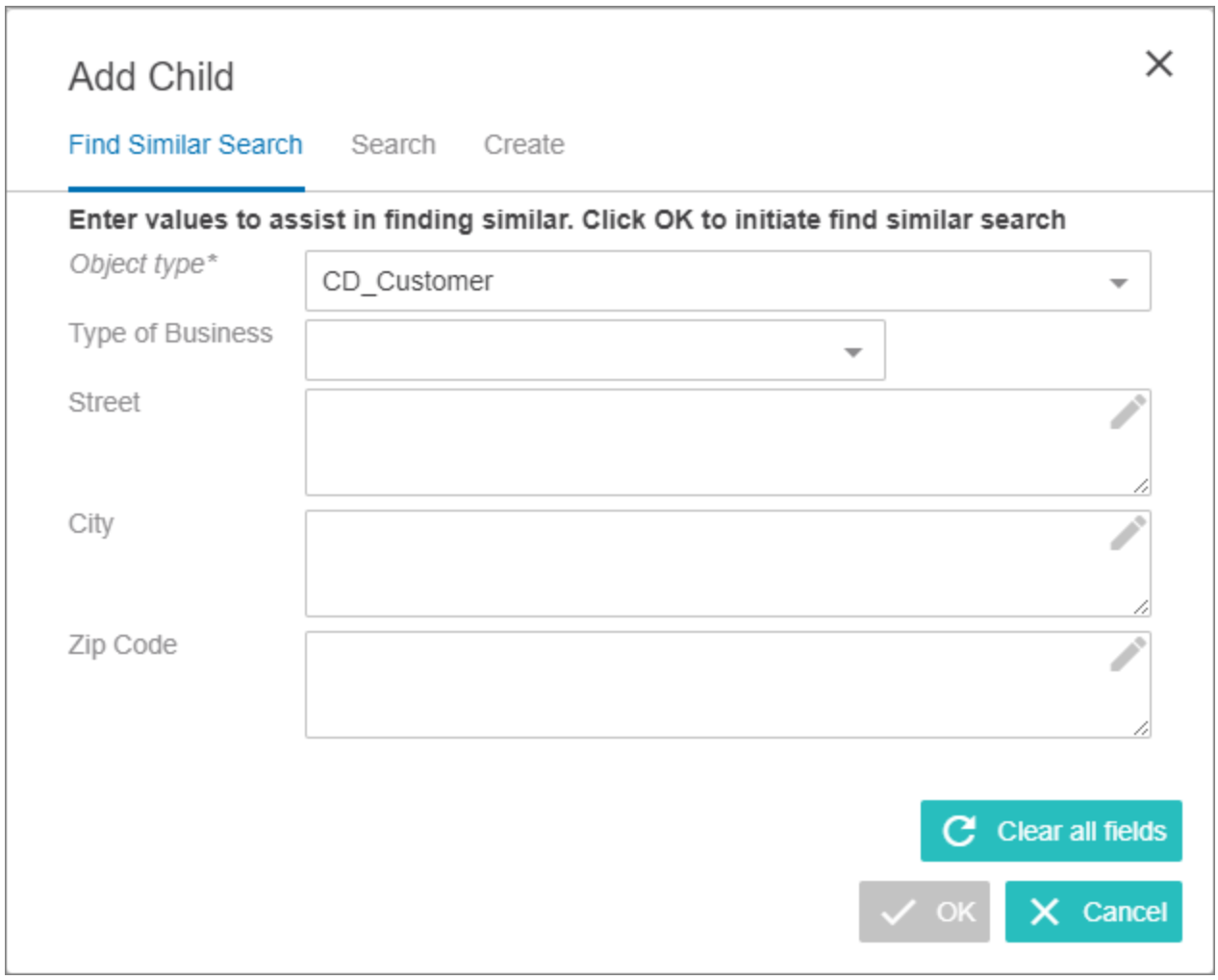
The Find Similar Search tab will only display when a user selects the 'Set parent' and/or 'Add child' action, if a designer has set up the optional configurations. More information can be found in the **Optional Configurations for Hierarchy Representation Component** topic.

In an effort to prevent users from creating duplicate objects in the STEP system, users can use the Find Similar Tab to identify similar objects prior to creating new ones when working in Company Data Hierarchy screens in Web UI. This functionality can be accessed through the 'Set parent' and/or 'Add child' actions while editing a company hierarchy. Using Find Similar allows users to search for potential duplicates on a more granular level.

The key to Find Similar functionality is the matching setup that the customer creates and uses for duplicate handling. Every time a user enters data into the search fields and clicks OK, the Find Similar search checks the match code values involved, executes the relevant matching algorithm, and provides a set of results, if any are found.

If a user is not getting the results they expect, then the first place to check is the algorithm configured in the Duplicate Handler parameter in Object Type Specific Find Similar Properties. A relevant Match Code and Matching Algorithm needs to be set up before attempting to use the Find Similar Search tab. For more information about setting up and using matching algorithms, see the **Configuring Matching Algorithms** section of the **Matching, Linking, and Merging** documentation.

The screenshot below is an example of a configured **Find Similar Search** tab.

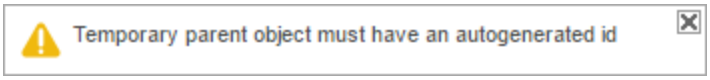


Clicking the **Clear all fields** button will remove all values from the visible fields.

When a user clicks the **Cancel** button, the actions are canceled and the dialog closes.

1. Select the Object Type from the dropdown list (if more than one is configured).
2. Enter searchable values for the attributes.
3. Click the **OK** button.

If the following warning displays, the Web UI designer should update the temporary parent object selection to an object with an autogenerated id, or contact your system administrator to have the current temporary parent object configured with an autogenerated id.



Important: The attributes being searched must be part of the list of attributes that Match Codes are generated for. If not, the search will not work as expected.

If similar objects are found after running the action / algorithm, the user is provided with the results in a admin user-configured detailed dialog list.

If a similar object cannot be found, then click Cancel to return to the 'Set parent' or 'Add child' dialog.

4. Select an object.
5. Click **OK.**

The system creates the reference to the similar object selected by the user, and the reference type is specified in the hierarchy screen for the Object Type in question. The dialog closes and the Company Data Hierarchy Screen displays.

Configuring a Company Data Hierarchy Screen

The purpose of the Company Data Hierarchy Screen is to allow users to graphically explore company structures. Any number of Company Data Hierarchy screens can be added to a Web UI. Once added, as with any screen, an admin user must configure how users access a Company Data Hierarchy Screen.

To use the Company Data Hierarchy functionality, an admin user will need to do the following:

1. Define the entity object type and reference type pair(s).
2. Configure a way for users to access the Company Hierarchy Screen.
3. Determine the visual representation of an object type.

This topic addresses:

- Prerequisites
- Creating a Company Data Hierarchy Screen
- Configuring access to a Company Data Hierarchy Screen
- Configuring Hierarchy Representation Properties
- Optional Configurations for the Hierarchy Representation Component

Prerequisites

It is expected that anyone configuring the Company Data Hierarchy Screen and the Hierarchy Representation component is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

To use this functionality:

- The data must form a hierarchy before the Company Data Hierarchy Screen can be configured.
- A hierarchy must be defined by a list of valid Object Type and Reference Type combinations.
- The Reference Type to be used, must have the 'Allow multiple references' equal to 'No.'
- The Reference Type cannot be dimension dependent.
- An object type can only belong to a given hierarchy via one reference type, however it may belong to multiple hierarchies via the same or other reference types.

Creating a Company Data Hierarchy Screen

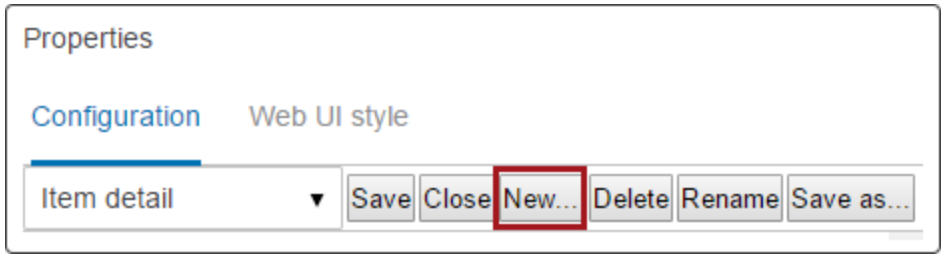
A Company Data Hierarchy Screen powers the visualization of company hierarchies. When using this screen, configuration must be done to define a hierarchy via a list of valid object type and reference type pairings.

Though only one hierarchy can be displayed in a Web UI screen, more than one hierarchy can be defined and displayed using multiple Company Data Hierarchy screens within the same Web UI.

The steps below cover how to add a new Company Data Hierarchy Screen. Additional details for creating new screens are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic.

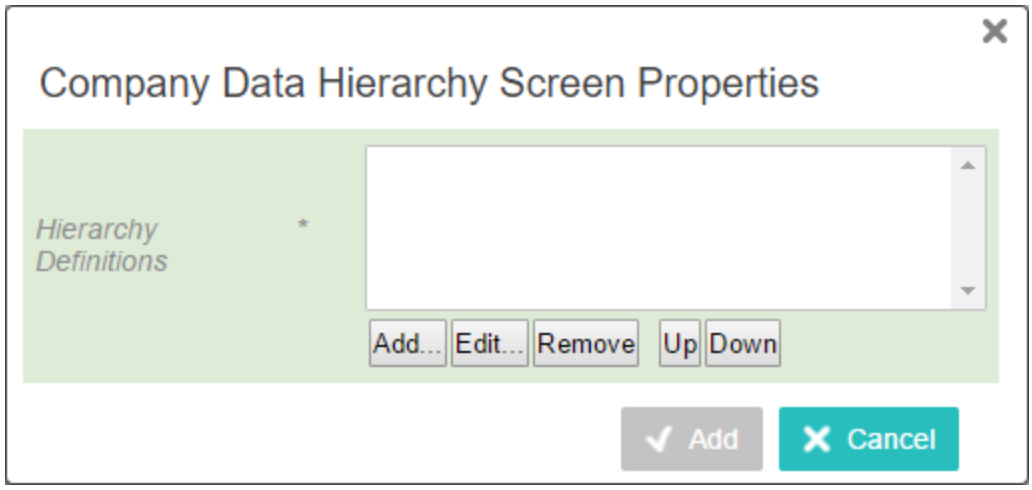
To create and configure a new Company Data Hierarchy Screen:

1. With the designer window open, click the **New** button to create a new screen.



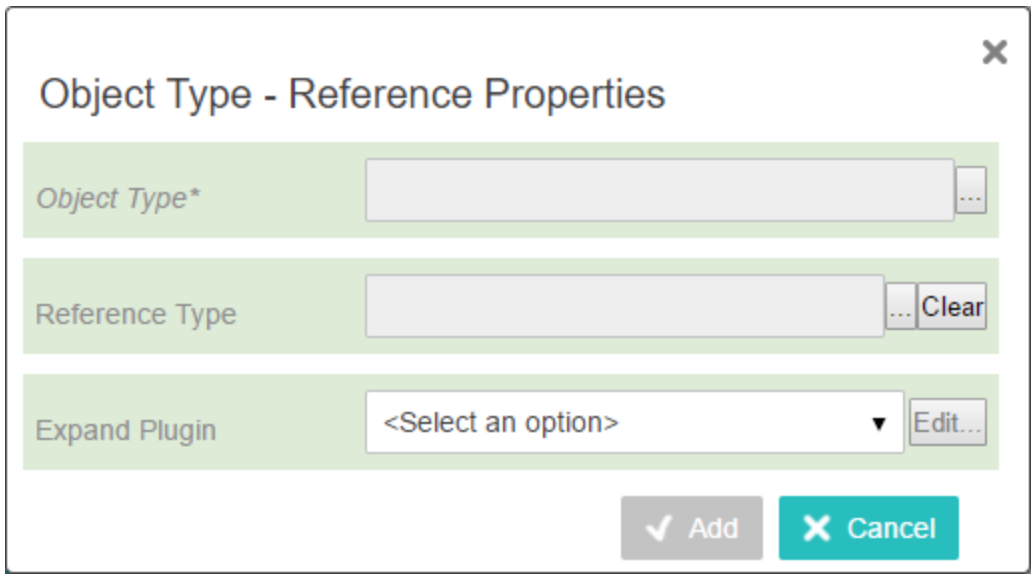
2. Choose **Company Data Hierarchy Screen** from the screen list.
3. Type in a descriptive Screen ID.
4. Click **Add**.

   The Company Data Hierarchy Screen Properties dialog will display.



5. Click **Add** to define an Object Type and parent Reference Type pair that are allowed in the hierarchy visualization.

   The Object Type - Reference Properties dialog will display.



6. Click the ellipsis button (...) and select one **Object Type** to be shown in the hierarchy screen.
7. Optionally, select one **Reference Type** to be shown in the hierarchy screen.
   - The Reference Type will be used to identify the parent object.
   - If no Reference Type selection is made, objects of the designated Object Type will not have parents in the hierarchy.
8. Optionally, enable the Expand Plugin parameter by selecting **Expand By Attributes** from the dropdown.
   - This parameter is suggested for larger hierarchies where users will benefit from selecting specific data dimensions (pre-configured filters) to properly navigate a large hierarchy.
   - Once enabled, click **Edit** to add specific attributes for users to select from while expanding children within a large hierarchy.
9. Click **Add.**

Note: Multiple Hierarchy Definitions can be added, if necessary, repeat steps 5 - 9 to add the desired additional parings.

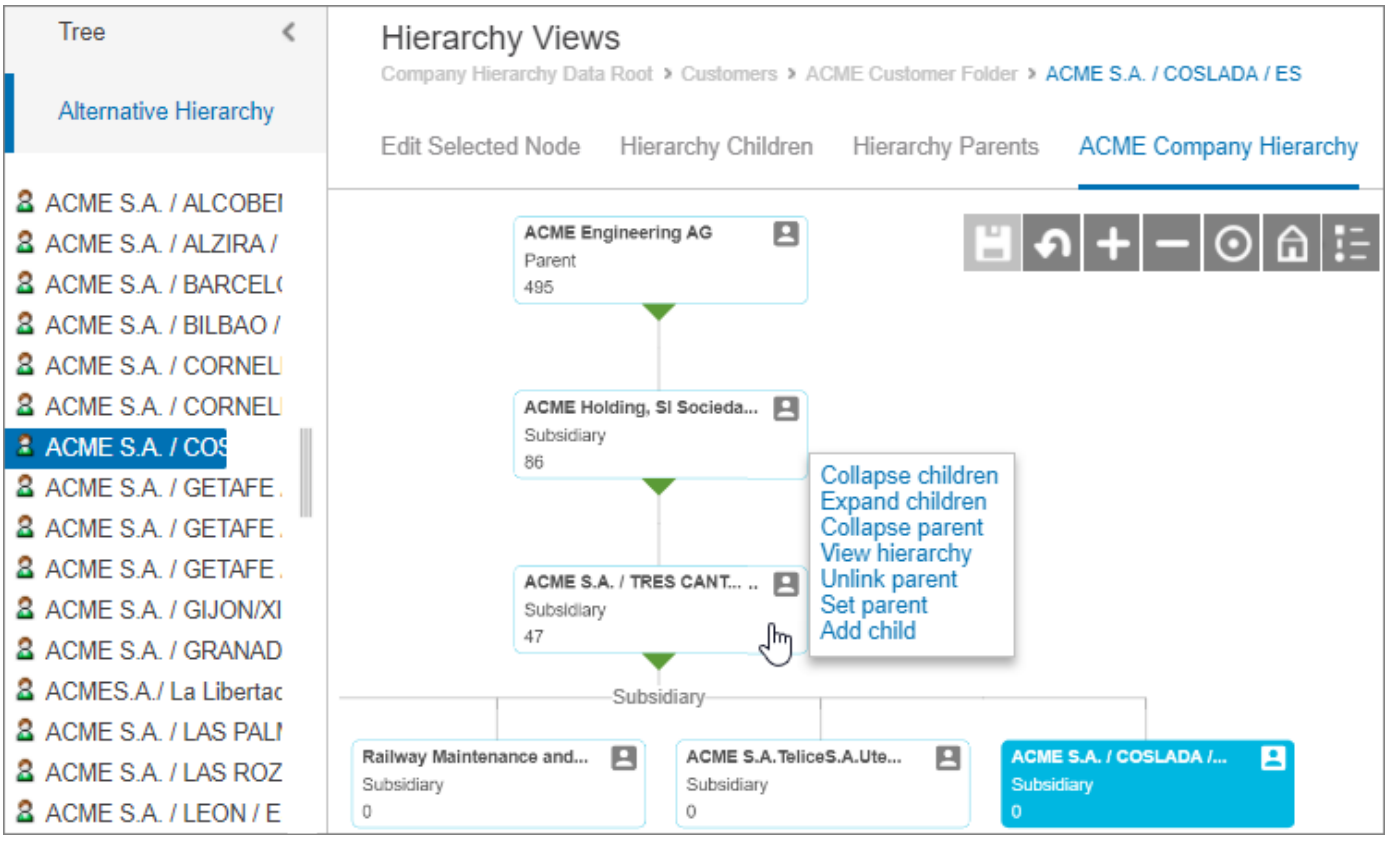
10. Click **Add** on the Company Data Hierarchy Screen Properties once the Hierarchy Definitions are complete.
11. Click **Save**.
12. Click **Close**.

Configuring Access to a Company Data Hierarchy Screen

An admin user must configure how an end user will access a Company Data Hierarchy Screen. The Company Data Hierarchy Screen can be either mapped using Main Properties or added as a Sub Screen Tab Page on a Node Details Screen.

For more information about mapping, see **Configuring the Parameters** in the **Main Properties** topic, and for more information about Sub Screen Tab Pages, see the **Tab Pages** topic in the **Node Details Component** section of the **Web User Interface / Web UI Setup and User Guide** documentation.

The example below shows the Company Data Hierarchy Screen displayed via a Sub Screen Tab Page on a Node Details screen and is displayed when an entity is selected.



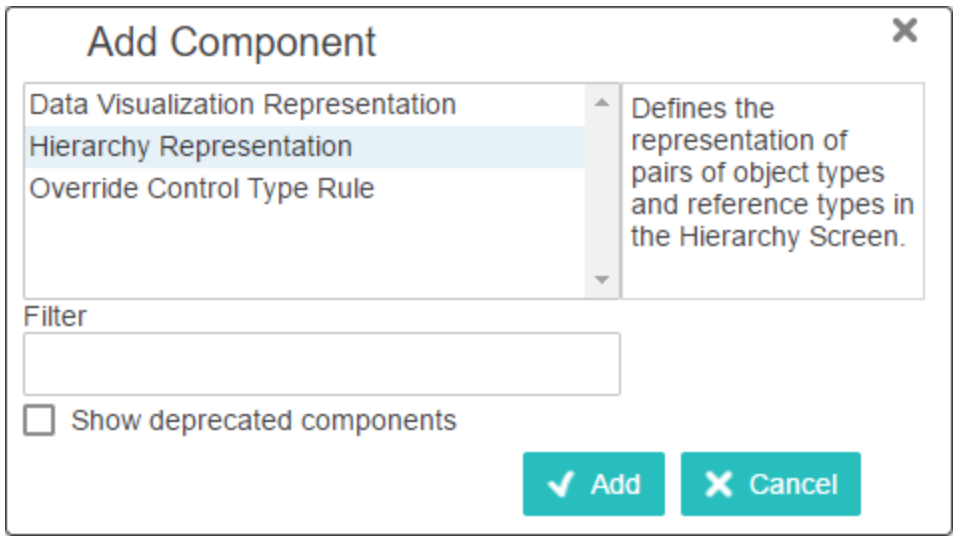
Configuring Hierarchy Representation Properties

The Hierarchy Representation Properties determine the overall look of the graphical interface. Styling needs to only be set up one time and is applied throughout a specific Web UI, regardless of how many Company Data Hierarchy screens are configured.

To configure the Hierarchy Representation Properties:

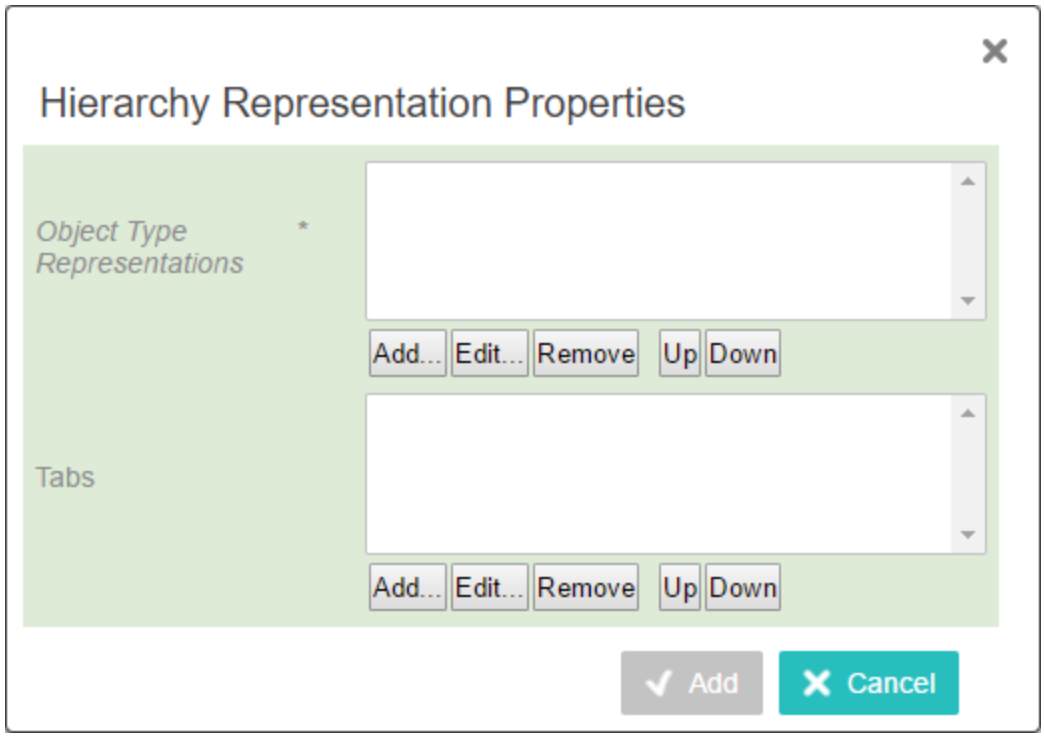
1. In Web UI designer, go to the MAIN (Screen) Properties > Global Representation List > Click **Add.**

   The 'Add Component' dialog will display.



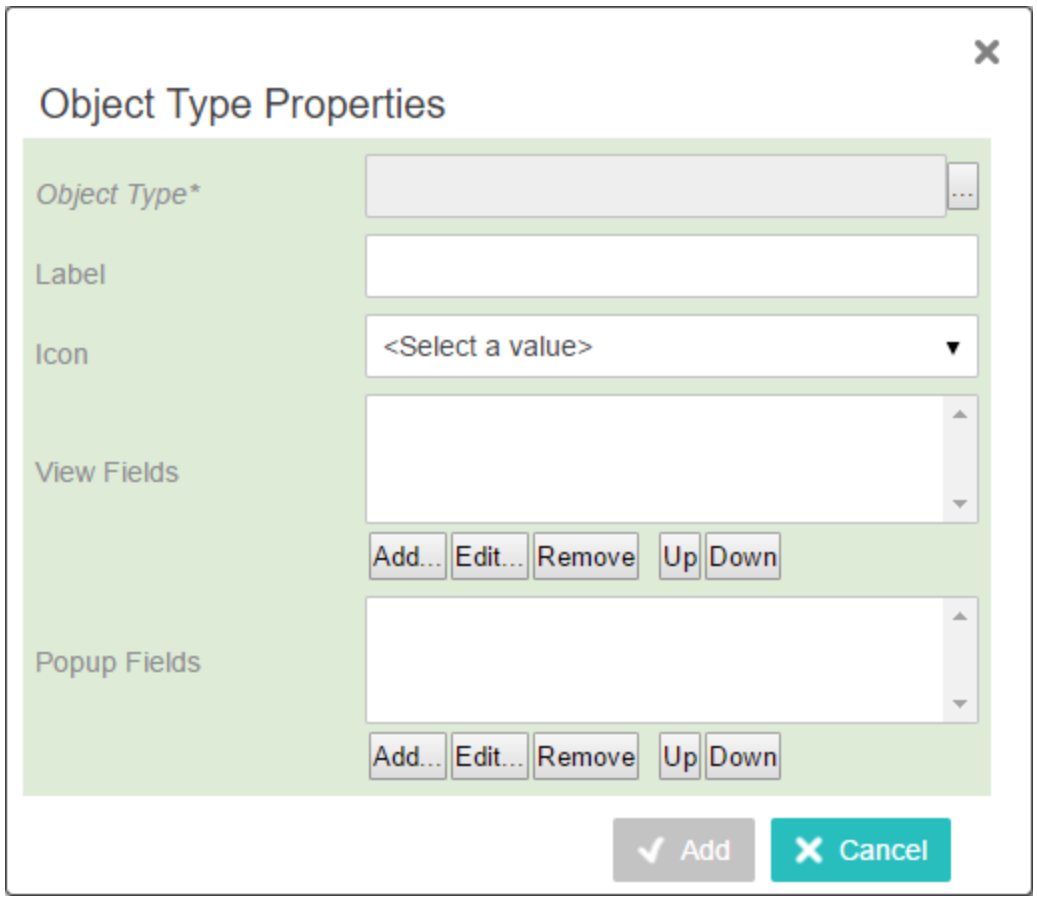
2. Select **Hierarchy Representation**.
3. Click **Add**.

   The Hierarchy Representation Properties will display.



4. For the Object Type Representations parameter, at least one object type representation must be added. If more than one is added, then the order listed within the parameter field determines the order for horizontal sorting in the Hierarchy screen. Click **Add**.

   The Object Type Properties dialog will display.



5. Click the ellipsis button (...) to select the **Object Type** to be defined and displayed in the hierarchy.
6. Optionally, enter an alternate label for the Object Type used in the Company Data Hierarchy Screen. If no Label is entered, the Object Type is used.
7. Optionally, select an icon to represent the Object Type. Each value on the list represents a different icon to be used within the hierarchy.

   The following icon options are available for selection:

   - Account
   - Aggregate
   - Branch
   - Classification
   - Customer
   - Division
   - Employee
   - Folder
   - Legal

- Location
- Parent
- Region
- Sales-manager
- Subsidiary
- Territory
- Top-flag

8. Optionally, select up to three View Fields to display on the graphical node when the hierarchy renders. If making an Attribute Value Field selection, then the attribute must be specified and an additional dialog will display.
9. Popup Fields is also an optional parameter. Click **Add** to select attributes and/or attribute groups to display in the popup when a user selects a graphical node. Selecting 'Attribute Group Value Field' and/or 'Attribute Value Field' brings up additional dialogs for property selection.
10. Click **Add** on Object Type Properties, and the Hierarchy Representation Properties will display.
11. Click **Add** to return to the Main (Screen) Properties.
12. Click **Save**.
13. Click **Close**.

Optionally, when a user is adding or creating new objects in the hierarchy screen (Set parent, Add child), tabs can be configured to display, to help the user find or create an appropriate object. This can be done by clicking **Add** for the Tabs parameter within the Hierarchy Representation Properties.

Configuring options for 'Set parent' and 'Add child' are described in the **Optional Configurations for the Hierarchy Representation Component** documentation.

For an example regarding how to use the screen once configured, see the **Company Hierarchy Visualization and Maintenance** topic.

Optional Configurations for the Hierarchy Representation Component

A Web UI designer can customize how a user searches, looks for similar objects, and/or creates an entity when using the 'Set parent' and/or 'Add child' actions.

When using the Company Data Hierarchy Screen to edit a company hierarchy, a user can edit the parent and/or child for a selected entity by using the default search tab component that is always visible, even if no search tab configuration has been added. However, a Web UI designer has the option to configure settings so that the standard search results are limited and/or additional tabs are visible in the dialog when a user is editing the parent and/or child in a hierarchy screen.

This topic addresses adding and configuring the Search Tab, Create Tab, and Find Similar Search Tab.

Important: Each tab can only display once.

Prerequisites

The required configuration of the Company Data Hierarchy Screen must be completed before the optional configurations found within this topic can be applied. See the **Configuring a Company Data Hierarchy Screen** topic.

The Find Similar Search Tab relies on the configured matching algorithm configuration. Only after a well established matching algorithm has been configured, does it make sense for the Find Similar Search tab to be configured. For more information about setting up and using matching algorithms, see the **Configuring Matching Algorithms** section of the **Matching, Linking, and Merging** documentation.

The Find Similar Search functionality for company hierarchies is very similar to the Find Similar functionality used when adding a reference via the Multi Reference Editor. More info regarding this setup is described in the **Find Similar** topic. The Find Similar topic also goes in to more details on how to configure the Dialog List used to display Find Similar search results.

Search Tab

The Search Tab is visible in the dialog used by the 'Set parent' and 'Add child' actions that can be used when editing a company hierarchy within the company hierarchy screens. By default, the Search Tab will always be visible, and users will be able to search by entity name and/or ID. However, the Search Tab can be configured, by a Web UI designer, to limit the Object Types users will find in a search and/or to allow users to search not only by Name and/or ID but also by specific attribute(s).

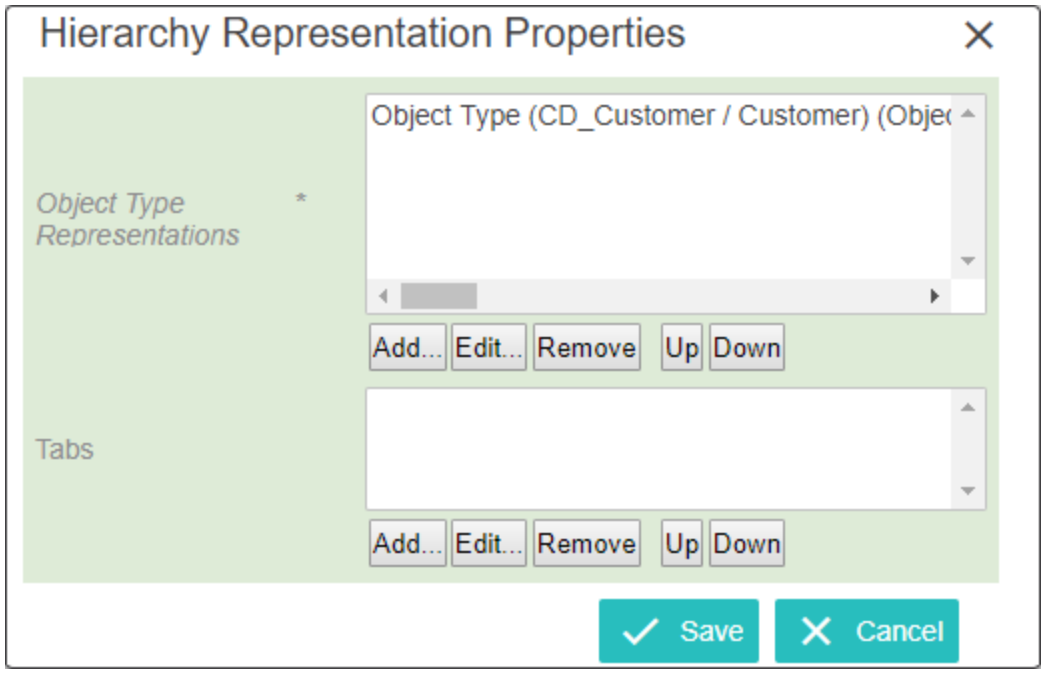
Once the Search Tab has been added to the Hierarchy Representation Properties, the Object Type Limitations and Search Plugins can be added and configured.

Add the Search Tab

Steps for adding the Search Tab so that it can be optionally customized are below:

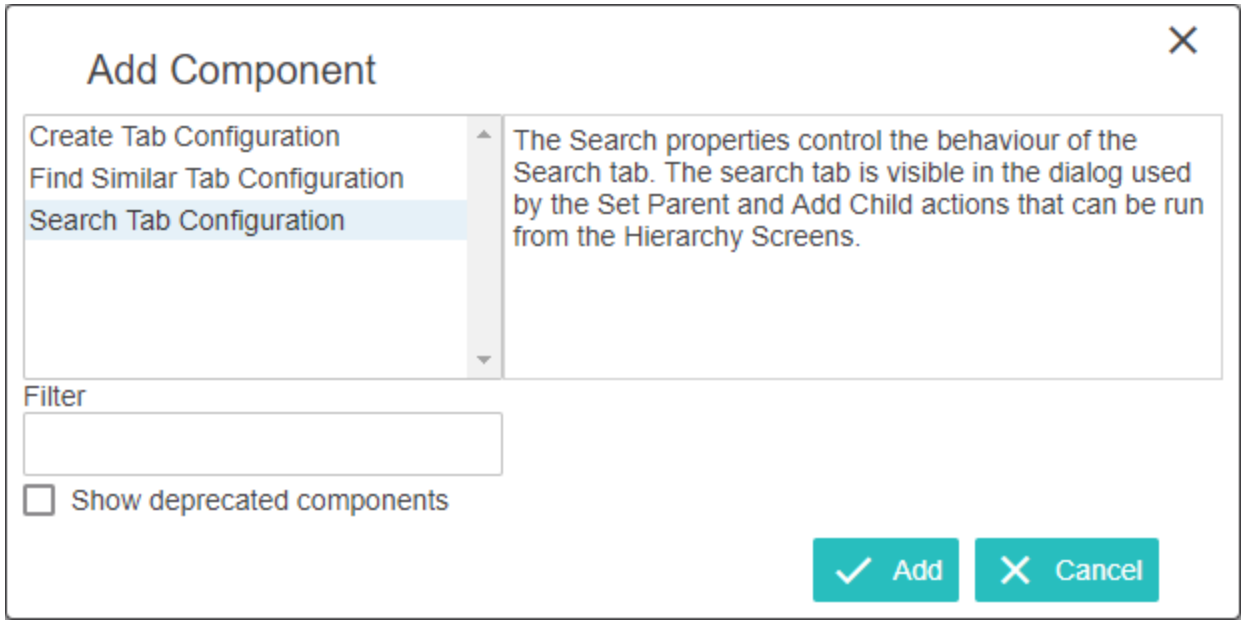
1. Go to the MAIN (Screen) Properties > Global Representation List and double click **Hierarchy Representation**.

The Hierarchy Representation Properties will display with at least one configured Object Type Representation.



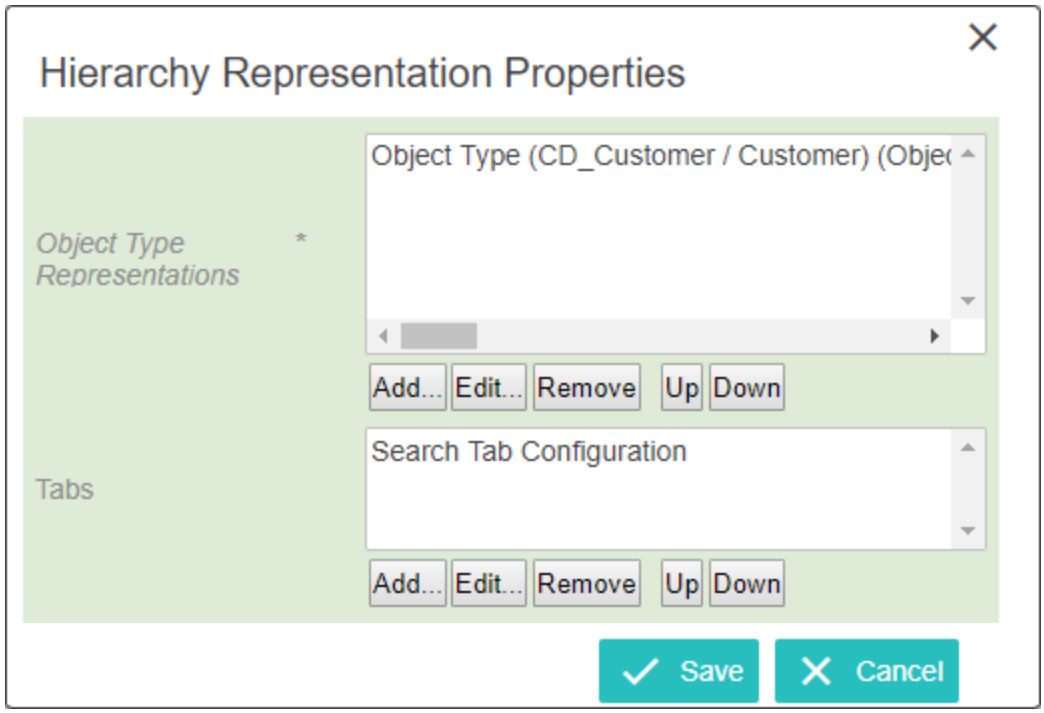
2. Go to the Tabs parameter > Click **Add**.

The Add Component dialog will display.



3. Select **Search Tab Configuration**.
4. Click **Add**.

The Hierarchy Representation Properties Tabs parameter will list the Search Tab configuration.



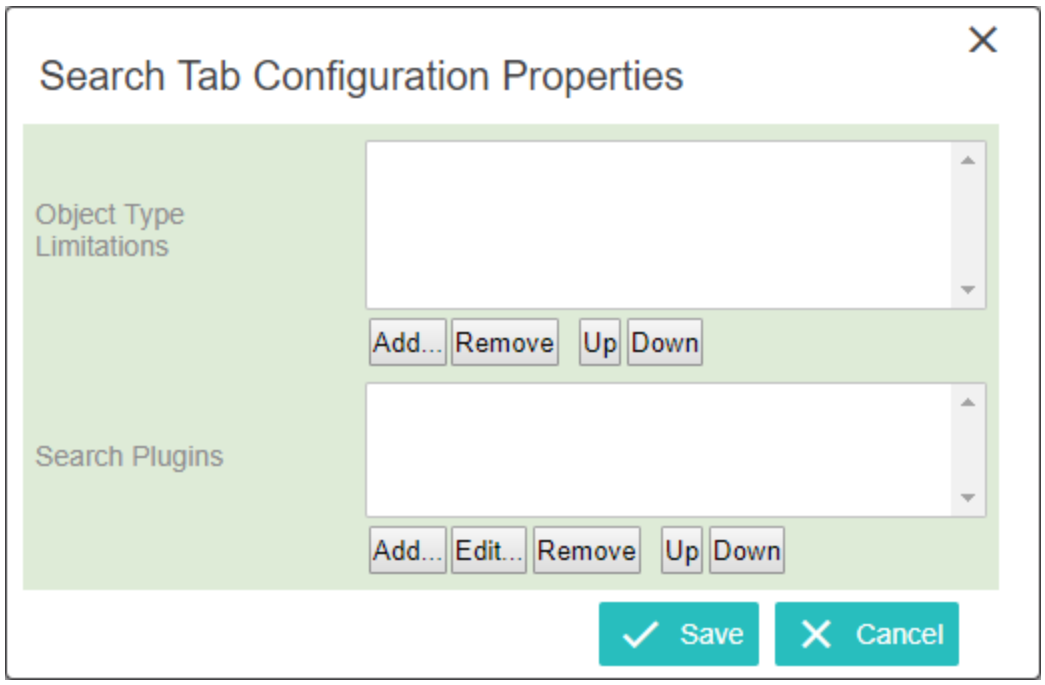
5. Click the **Save** button.

Limit Object Type Search Results (Optional)

To limit the Object Types(s) a user can find in the customized search:

1. From the Hierarchy Representation Properties Tabs parameter, double click **Search Tab Configuration.**

The Search Tab Configuration Properties will display.



2. Within the Object Type Limitations parameter, click **Add**, and select the desired Object Type.

Repeat these steps to add additional Object Types, if desired.

3. Click the **Save** button.

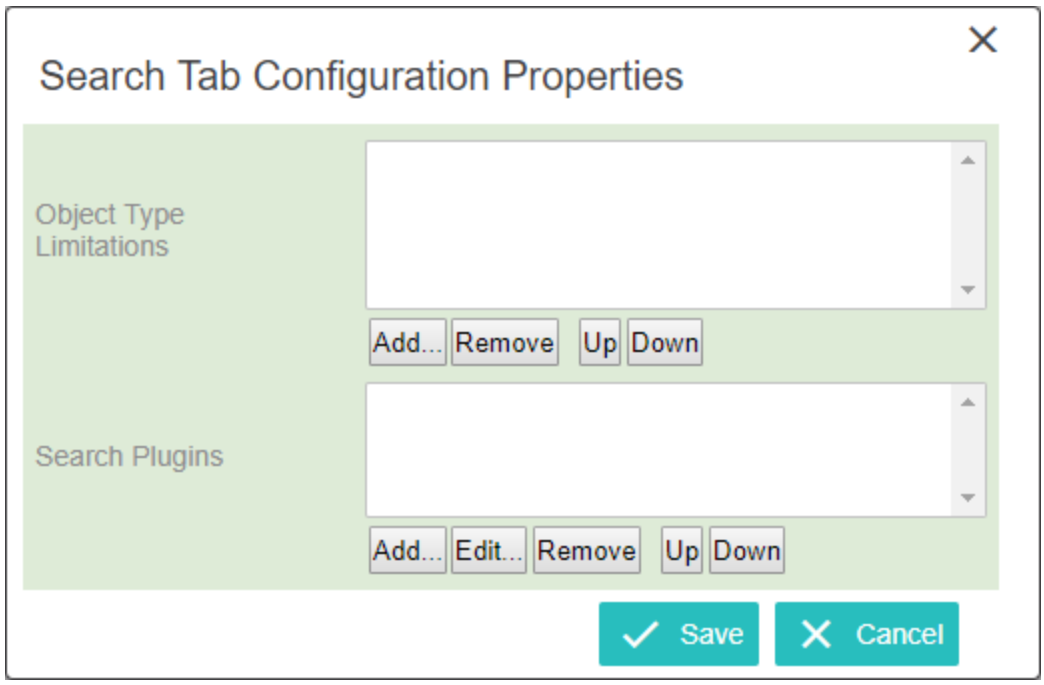
Add Search Plugins (Optional)

The 'Name Or Id or Attributes' search plugin allows users to not only search by name and ID, but also to search values for specific attribute(s).

Adding the 'Name Or Id Or Attributes' component

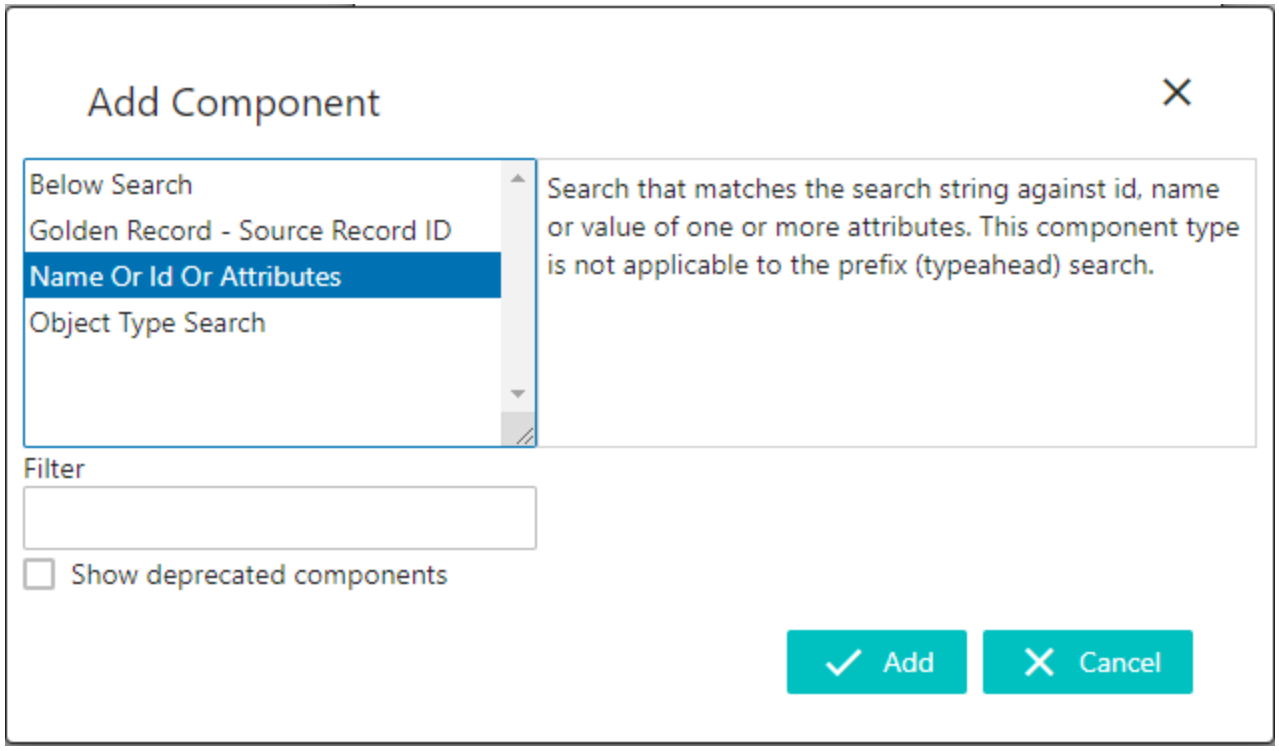
1. From the Hierarchy Representation Properties Tabs parameter, double click **Search Tab Configuration**.

The Search Tab Configuration Properties will display.



2. Within the Search Plugins parameter, click **Add**.

The Add Component dialog will display.



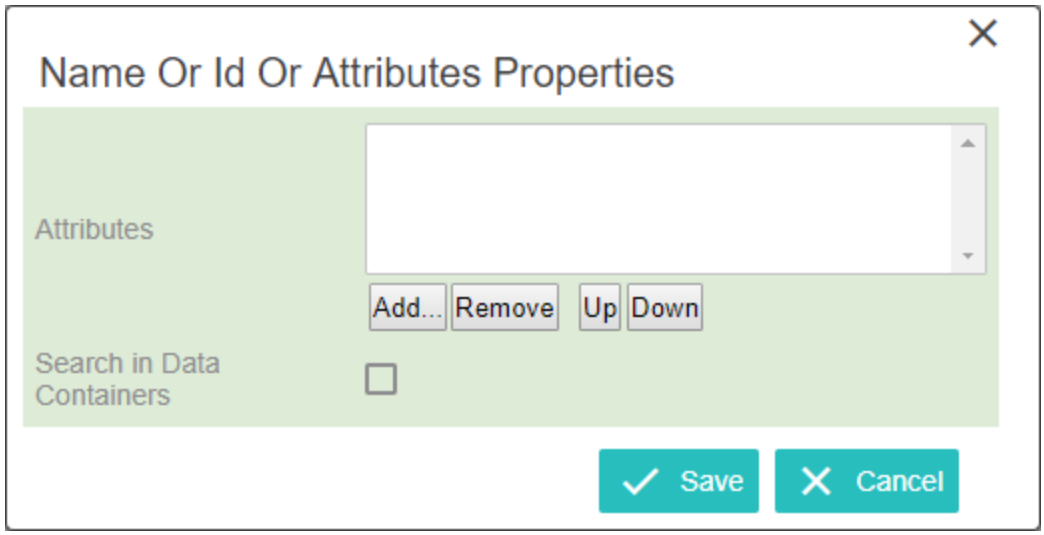
3. Select '**Name Or Id Or Attributes**.'
4. Click the **Add** button.

The Search Tab Configuration Properties > Search Plugins parameter will display the 'Name Or Id Or Attributes' component.

Configure Attributes to Include in the Search Tab

1. Double click '**Name Or Id Or Attributes.'**

The 'Name or Id Or Attributes Properties' will display.



2. Click **Add**.
3. Select a desired attribute.
4. Click the **OK** button.

Optionally, repeat these steps to add multiple attributes.

5. Optionally, enable the 'Search in Data Containers' parameter if the user needs to search for attribute values on attributes also associated with data containers.
6. Click the **Save** button to return to the Hierarchy Representation Properties.
7. Click the **Save** button to return to the MAIN (Screen) Properties.
8. Click the **Save** and **Close** buttons for the designer.

Create Tab

The Create Tab is visible in the dialog used by the 'Set parent' and 'Add child' actions that can be used when editing a company hierarchy within the company hierarchy screens.

It is possible to create new objects using this tab. The object type must first be established, then configured attribute fields can be populated by the user.

Once the Create Tab has been added to the Hierarchy Representation Properties, then the Attribute Values At Create can be added and configured.

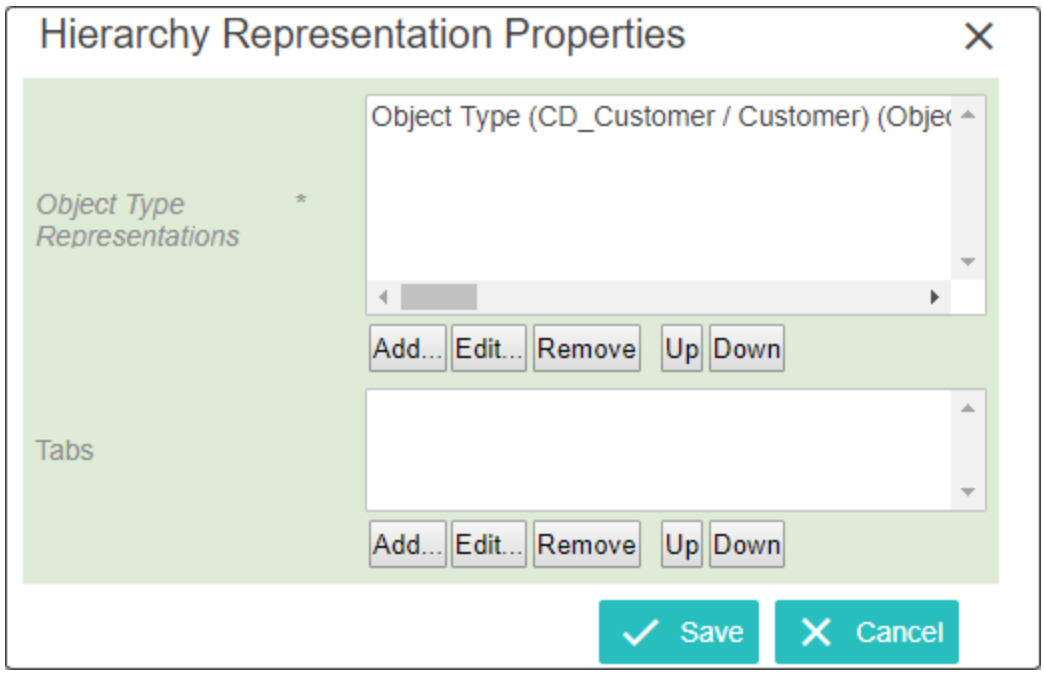
Add and Configure the Create Tab

Only one Create Tab can be added to the Hierarchy Representation Properties. Object Type Specific Setup is required when adding the Create Tab.

To add and configure the Create Tab:

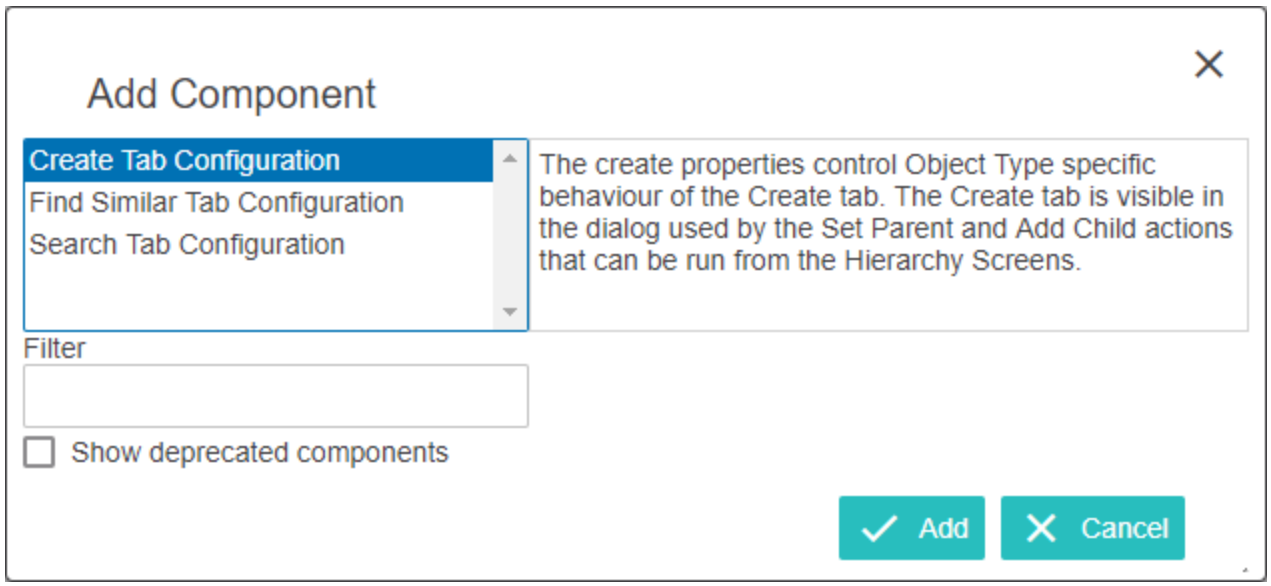
1. Go to the MAIN (Screen) Properties > Global Representation List and double click **Hierarchy Representation**.

The Hierarchy Representation Properties will display.



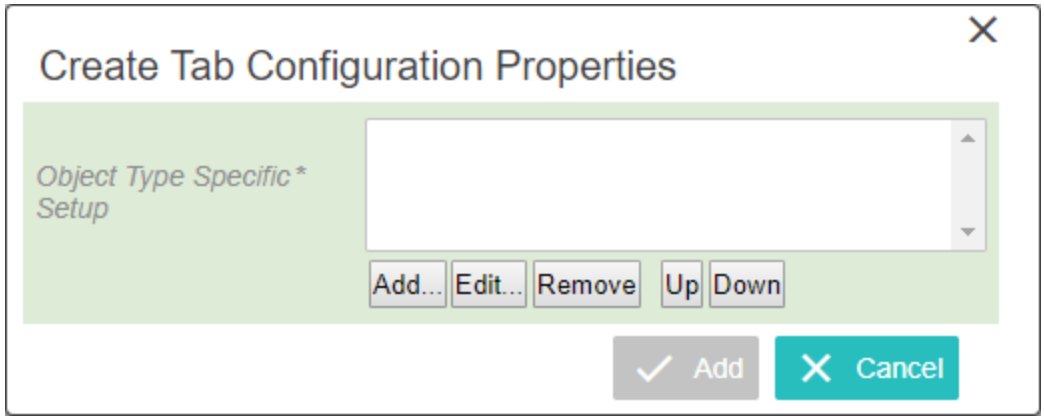
2. Go to the Tabs parameter > Click **Add**.

The Add Component dialog will display.



3. Select **Create Tab Configuration**.
4. Click **Add**.

The Create Tab Configuration Properties will display.

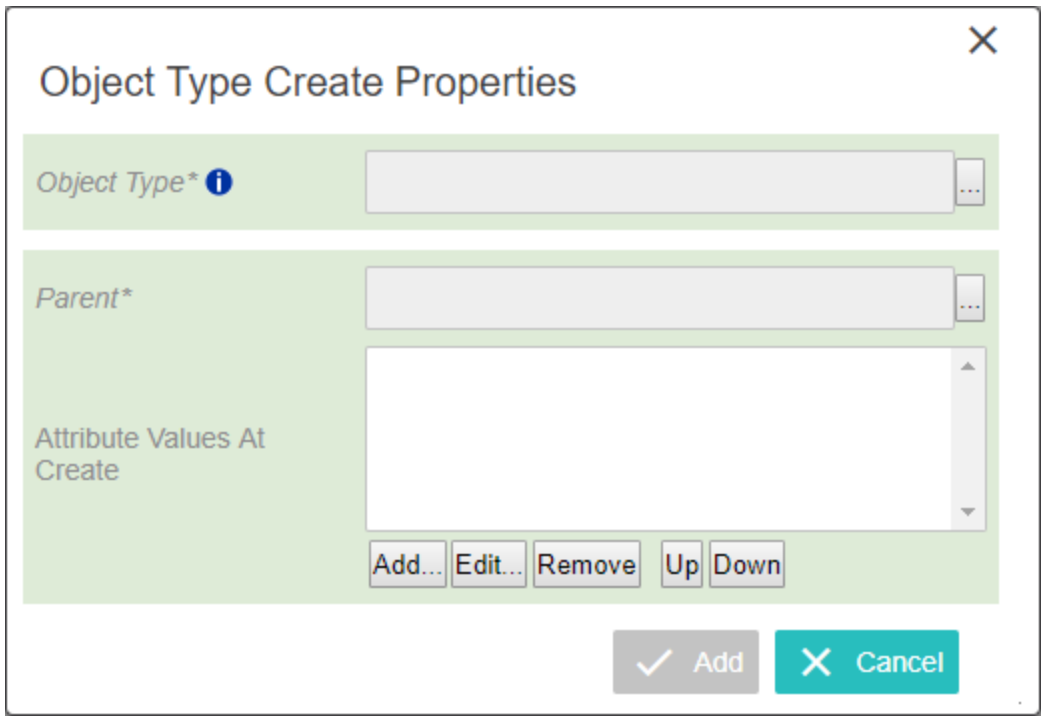


The Create Tab Configuration Properties control the Object Types a user can select from when creating a new object, the automatic STEP parent to be assigned to the new object, and attribute values a user can populate (optional). Also, the Web UI designer can configure mandatory attribute values upon creation.

More than one Object Type Specific Setup can be configured, allowing users to choose the Object Type from a dropdown list when creating a new object.

5. Click **Add**.

The Object Type Create Properties will display.



6. Click the ellipsis button (...) and select the Object Type these parameters are valid for.
7. Click the ellipsis button (...) and select the Parent object to be used when objects are created in the Create Tab.

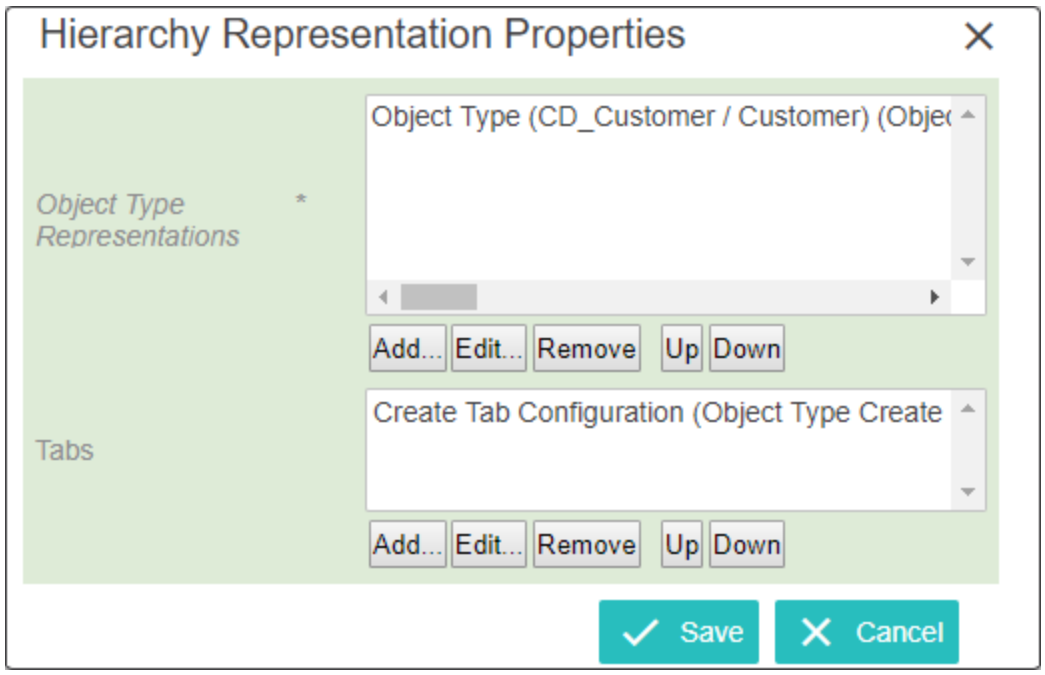
Note: The Parent object selected must be set up with auto-generated IDs, otherwise users will receive an error message and will not be able to create the object.

8. Optionally, add attributes to display when the user creates a new object. The user will need to fill in the attribute values before creating a new object. Steps can be found in the **Add Attributes for Users to Populate When Creating a New Object** section below.
9. Click the **Add** button.

The Create Tab Configurations Properties dialog will display. Optionally, add additional Object Type Specific setups.

10. Click the **Add** button.

The Hierarchy Representation Properties will display with the Create Tab Configuration.



11. Click the **Save** button.

The MAIN (Screen) Properties will display.

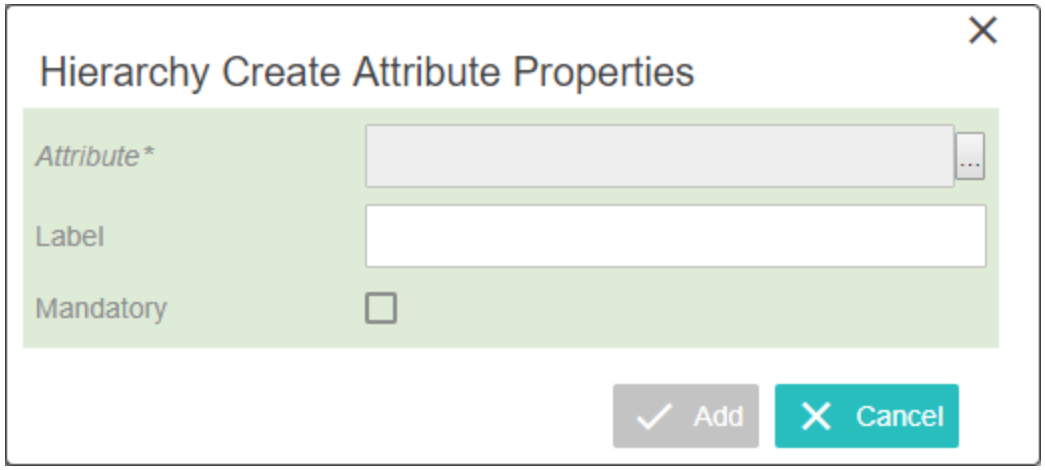
12. Click the **Save** button.
13. Click the **Close** button to exit the Web UI designer.

Attribute Values At Create

Steps to add and configure attributes to display on a Create Tab for users to populate when creating new objects are below:

1. From the Object Type Create Properties > Attribute Values At Create parameter > Click **Add**.

The Hierarchy Create Attribute Properties will display.



2. Click the ellipsis button (...) to find and select the desired attribute.
3. Optionally, enter a label to display to the user when they are creating the new object. If left blank then the attribute name will display.
4. If the attribute value should be mandatory during create, then enable the Mandatory parameter.
5. Click the **Add** button.

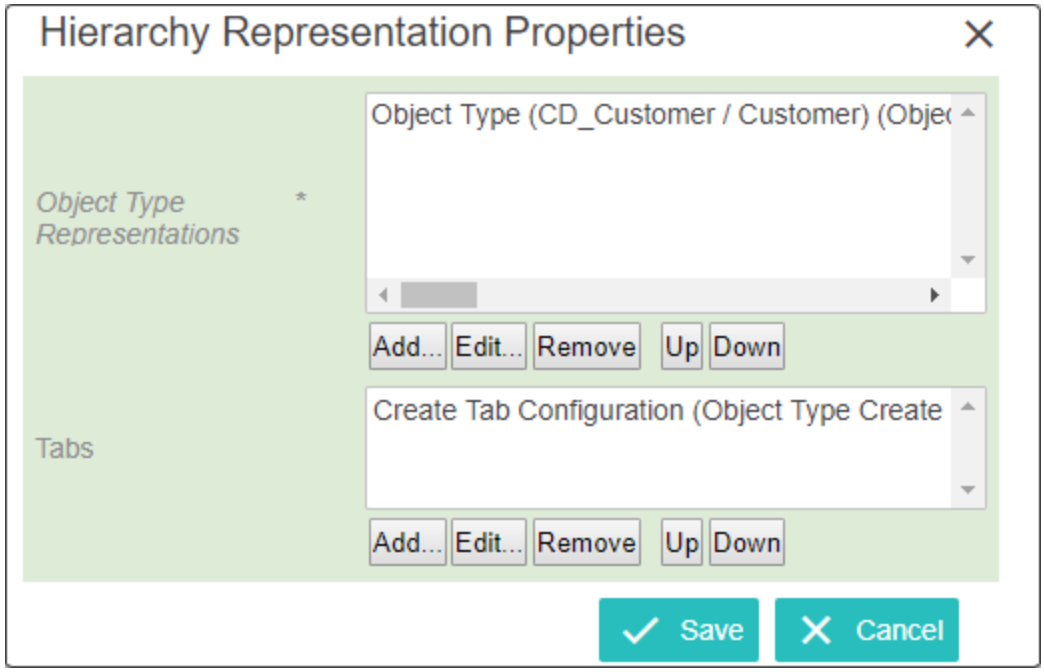
The Object Type Create Properties dialog will display with the added attribute values.

6. Click the **Save** button.

The Create Tab Configurations Properties dialog will display. Add additional Object Type Specific setups, if desired.

7. Click the **Add** button.

The Hierarchy Representation Properties will display with the Create Tab Configuration.



8. Click the **Save** button.

The MAIN (Screen) Properties will display.

9. Click the **Save** button.
10. Click the **Close** button to exit the Web UI designer.

Find Similar Search Tab

In an effort to prevent users from creating duplicate objects in the STEP system, users can use the Find Similar Search Tab to identify similar objects prior to creating new ones when working in Company Data Hierarchy screens in Web UI. When configured to display (optional), the Find Similar Search Tab is visible in the dialog used by the 'Set parent' and 'Add child' actions that can be used when editing a company hierarchy within the Company Hierarchy screens.

The key to Find Similar Search functionality is the matching setup created and used for duplicate handling. Every time a user enters data into the search fields and clicks **OK**, the Find Similar Search checks the match code values involved, executes the relevant matching algorithm, and provides a set of results, if any are found.

If a user is not getting the results set they expect, then the first place to check is the algorithm configured in the Duplicate Handler parameter in the Object Type Specific Find Similar Properties.

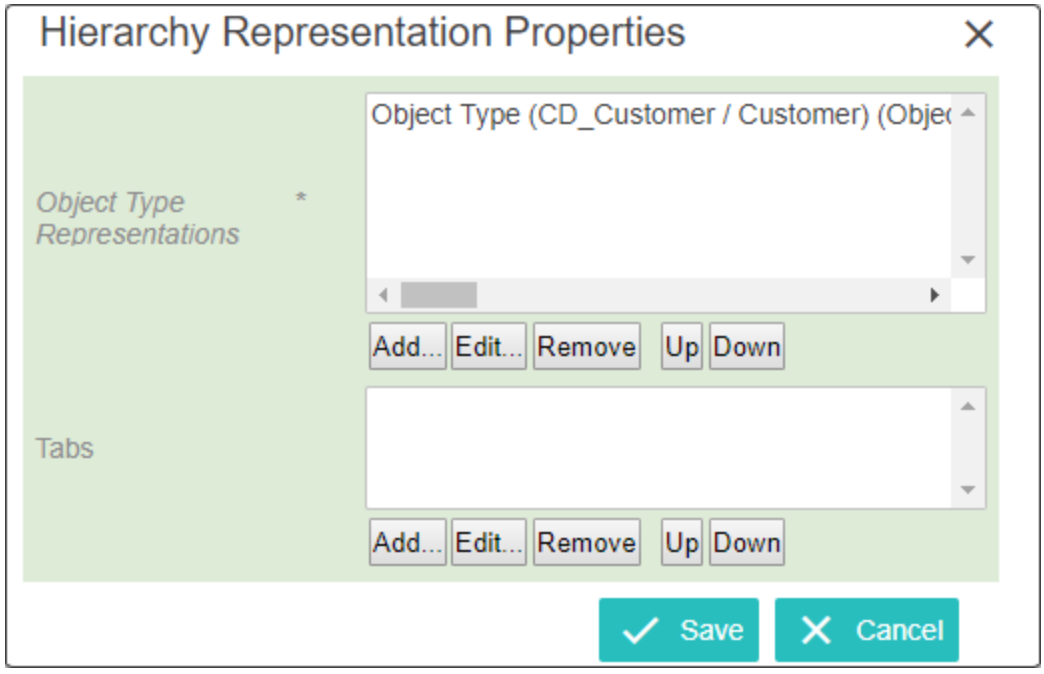
Once the Find Similar Search Tab has been added to the Hierarchy Representation Properties, then the Object Type Specific Setup can be added and configured. Within the Object Type Specific Setup, the Duplicate Handler, Find Similar Search Fields, Temp Parent For Find Similar, and List Dialog are all required.

Add the Find Similar Search Tab

To add the Find Similar Search Tab:

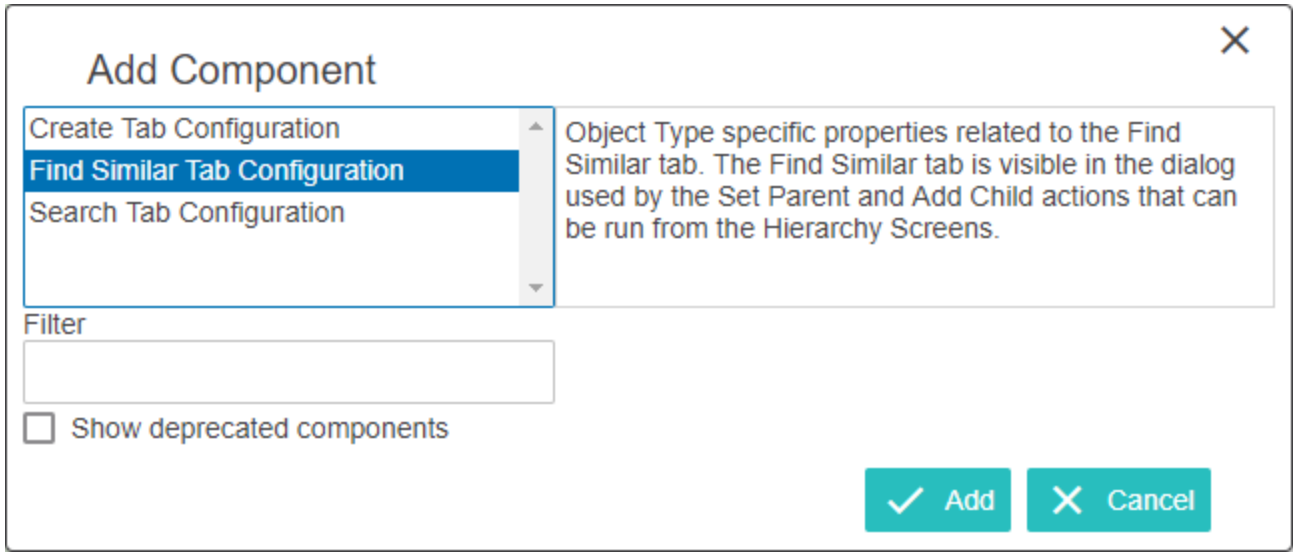
1. Go to the MAIN (Screen) Properties > Global Representation List and double click **Hierarchy Representation**.

The Hierarchy Representation Properties will display with at least one Object Type Representation.



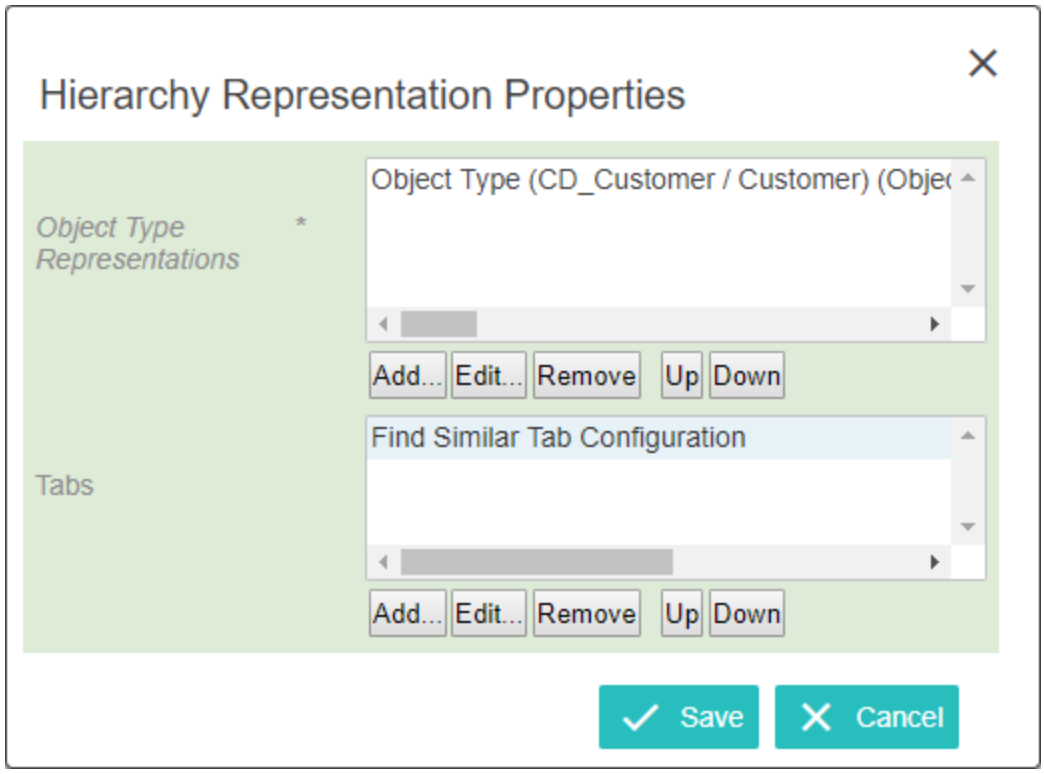
2. Go to the Tabs parameter > Click **Add**.

The Add Component dialog will display.



3. Select **Find Similar Tab Configuration**.
4. Click the **Add** button.

The Hierarchy Representation Properties Tabs parameter will list the Find Similar Tab Configuration.



5. Click the **Save** button.

The Main (Screen) Properties will display.

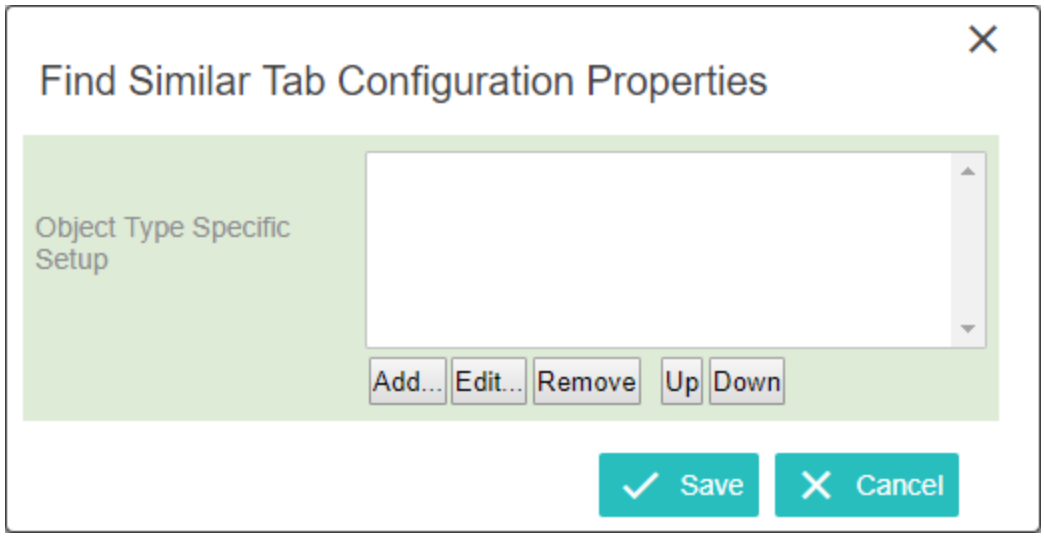
6. Click the **Save** button.
7. Click the **Close** button to exit the designer.

Configure the Find Similar Search Tab

To configure the Find Similar Search Tab:

1. From the Hierarchy Representation Properties Tabs parameter, double click **Find Similar Tab Configuration.**

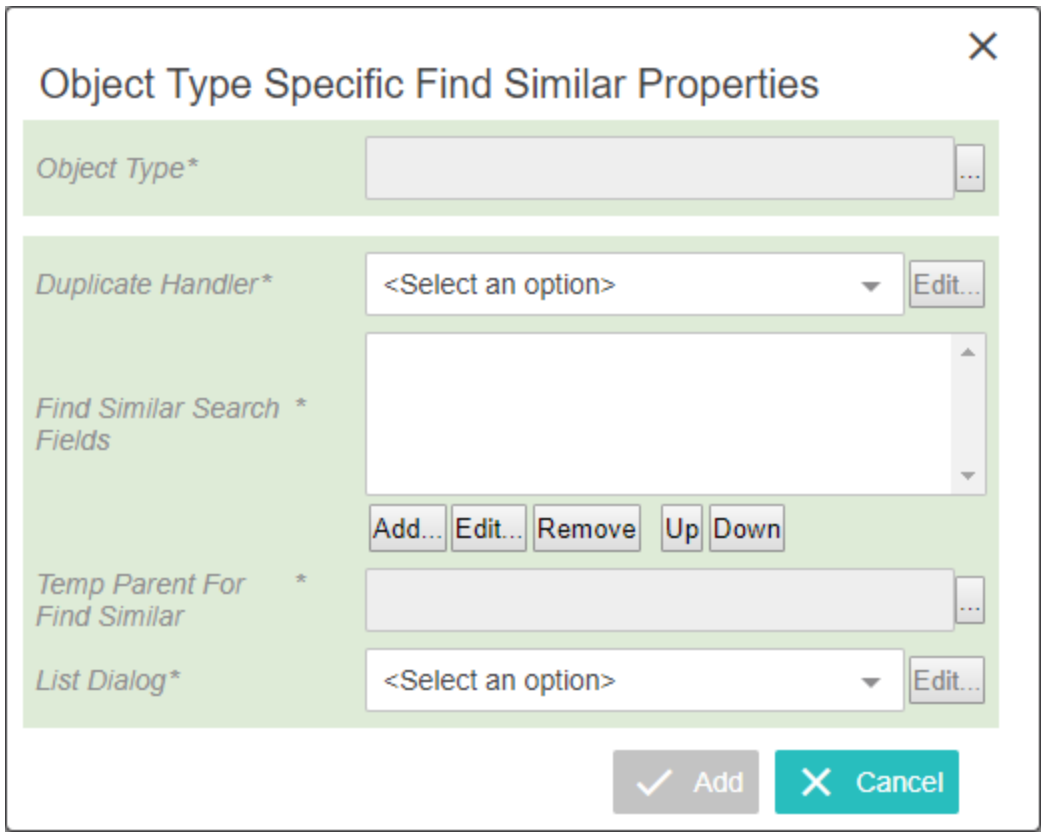
The Find Similar Tab Configuration Properties will display.



This is where the Web UI designer configures what Object Types a user can add to a hierarchy via the Find Similar Search Tab.

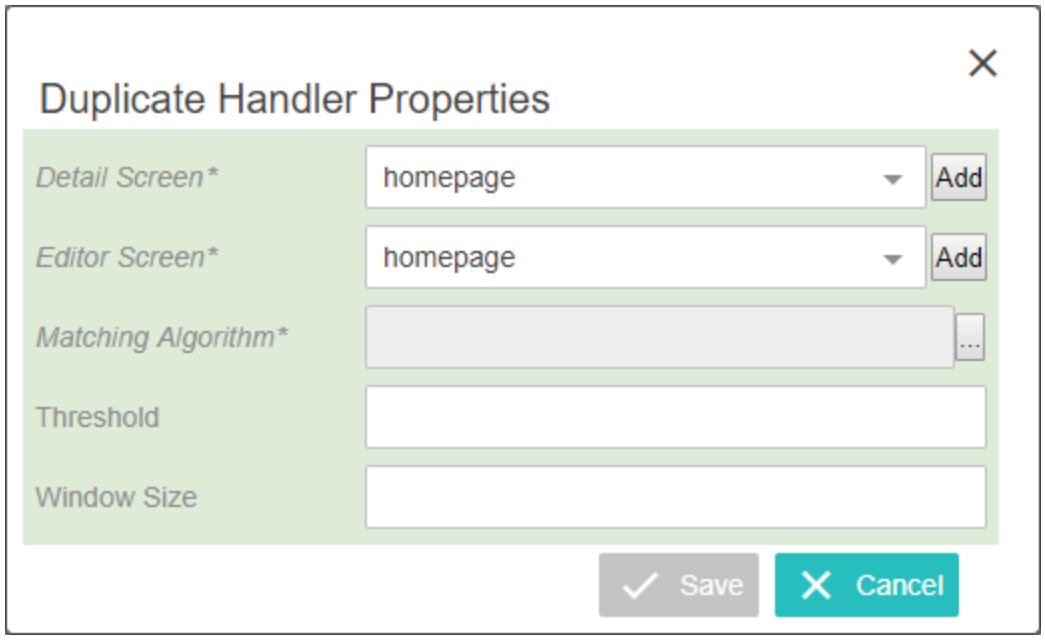
2. Within the Object Type Specific Setup parameter, click **Add**.

The Object type Specific Find Similar Properties will display.



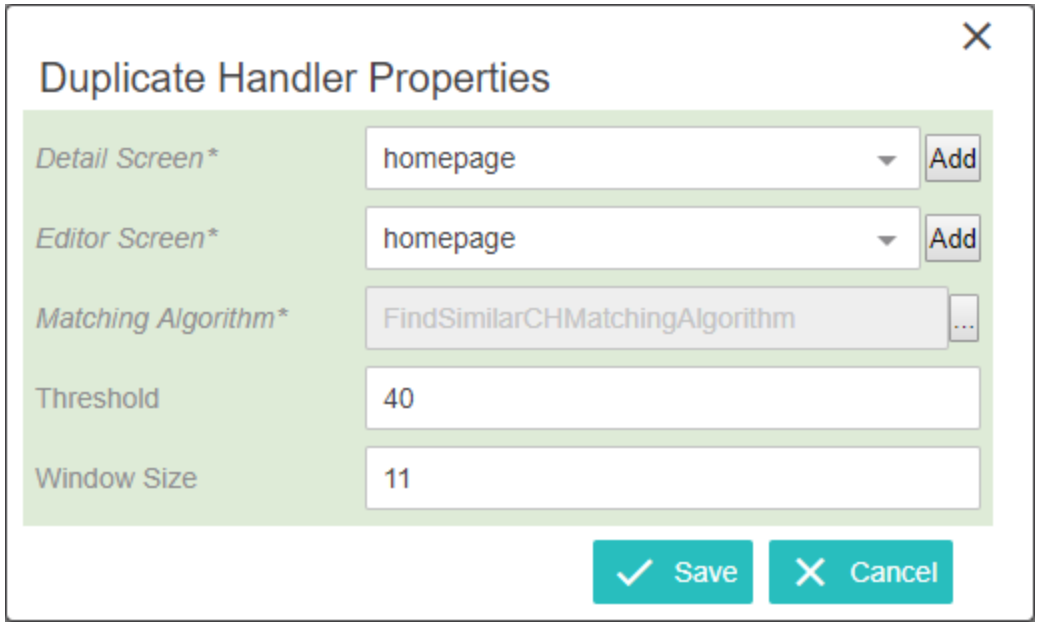
3. Select the desired 'Object Type.'
4. Select 'Duplicate Handler' from the dropdown.

The Duplicate Handler Properties will display.

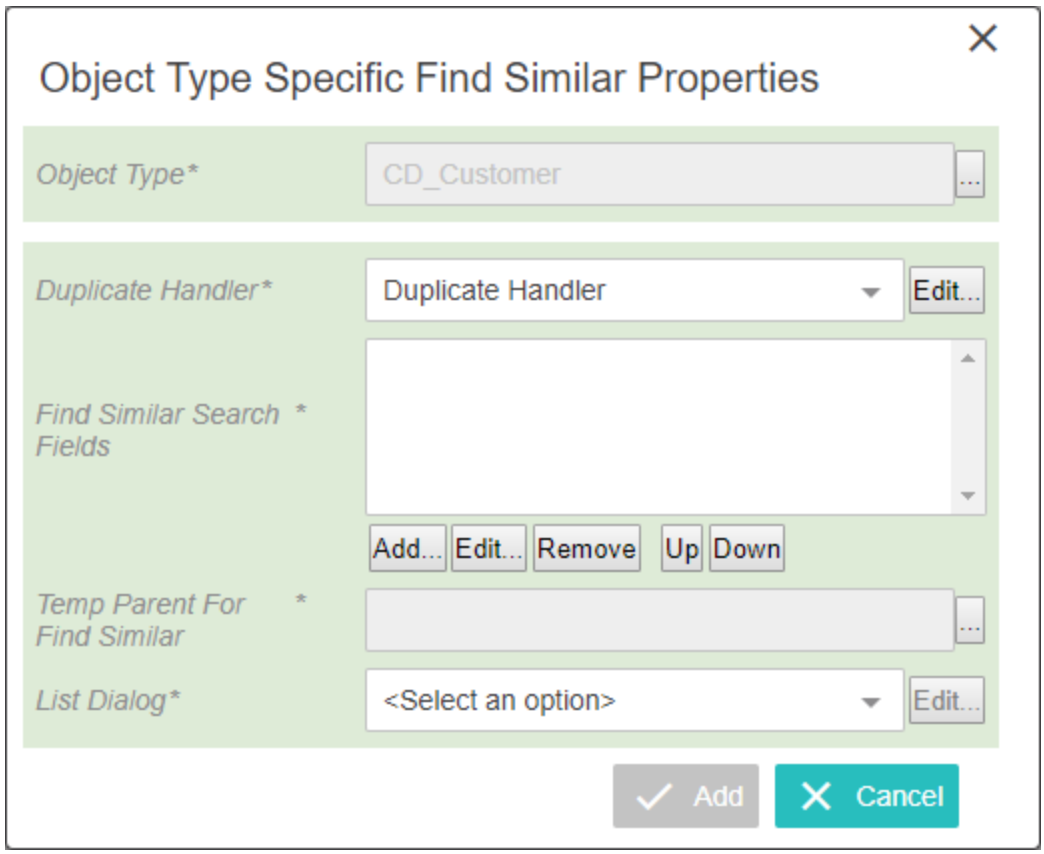


5. 'homepage' is the default selection for the **Detail Screen** parameter. Make another selection, if desired.
6. 'homepage' is the default selection for the **Editor Screen** parameter. Again, make another selection; changing this is optional.
7. Within the 'Matching Algorithm' parameter, click the ellipsis button (...) and a list of available matching algorithms will display.
8. Select the desired algorithm, and then click the **OK** button.

The Duplicate Handler Properties dialog will display with the Matching Algorithm populated.



9. Optionally enter a threshold rate to apply to the selected matching algorithm. The threshold specifies how equal two objects must be to be considered possible duplicates / similar objects. The lower the threshold number, the less strict the matching algorithm will be. In the example shown above, duplicates / similar objects will only be reported if the Matching Algorithm rate is higher than a threshold value of 40.
10. Optionally enter the number of objects within a window to run the matching algorithm against. The number must be uneven and represents the number of comparisons an individual object can make. Window Size is described in detail within the **Matching, Linking, and Merging Elements** topic.
11. Click the **Save** button, and the Object Type Specific Find Similar Properties dialog will display with the Duplicate Handlers parameter populated.



12. Click **Add** for Find Similar Search Fields to indicate which attribute or attributes end users can search by, remembering that the attributes must match those used by the matching algorithm.

Important: The attributes being searched must be part of the list of attributes that Match Codes are generated for. If not, the search will not work as expected.

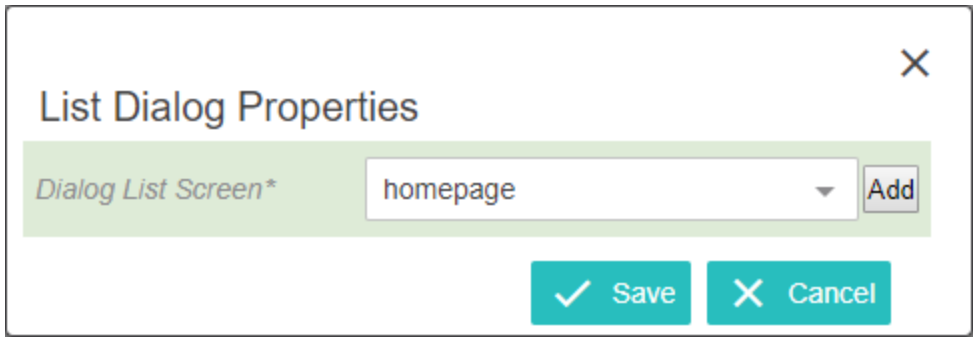
13. Click the ellipsis button (...) to select a Temp Parent for Find Similar.

    When the matching algorithm is run, it creates temporary objects based on the input in the search fields. These objects are then used in the algorithm to compare and find similar objects. The temporary objects need a parent and object type to be created. After the user finishes the operation, the temporary objects are deleted by the system. These parameters have to be configured for the functionality to work. The object types of both the direct objects and the referenced objects need to be made valid under the location used for the Temp Parent For Find Similar parameter.

    The node selected for Temp Parent For Find Similar in the configuration, must also be included in the category specified in the match code definition, if a category is specified. If this is not done, the match codes will not generate properly and the match results will be incorrect.

Note: The Parent object selected must be set up with auto-generated IDs, otherwise users will receive an error message and will not be able to create the object.

14. Select List Dialog from the List Dialog dropdown, and the List Dialog Properties will display.



15. Create / set up a Dialog List Screen specific to company hierarchies or use an existing list.

    A maximum of fifty (50) objects are shown at one time on the results list. If the end user finds a reference on the results list that they want to use, they click in the row they want. When that selection is made, the OK button will be available. The end users clicks OK and now that reference is saved. If the user does not find a result to use, they can click cancel and create a new reference using the Create function.

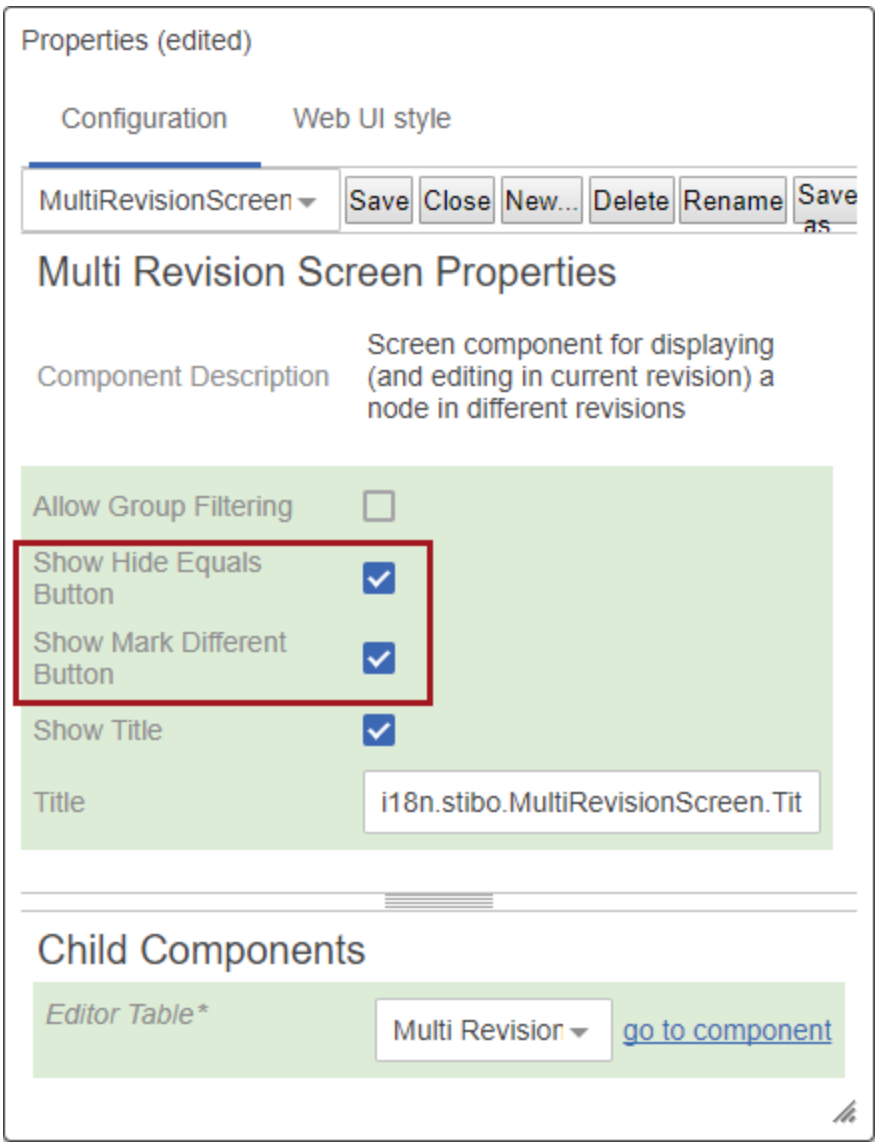
16. Click the **Save** button, and the Object Type Specific Find Similar Properties dialog will display with the List Dialog parameter populated.
17. Click the **Add** button to close the Object Type Specific Find Similar Properties dialog and return to the Find Similar Tab Configuration Properties.
18. Click the **Save** button for all the properties dialogs until they all close.
19. Click the **Save** and **Close** buttons for the Web UI designer window.

Comparing Data Using Hide Equal and Mark Different

A number of components in Web UI offer the ability to easily identify differences and similarities between multiple objects via the 'Hide Equal' and 'Mark Different' actions. The 'Hide Equals' action hides all equal values from the user, while the 'Mark Different' action highlights all values that are different. These actions are available on the following components: Multi Workspace Screen, Multi Revision Screen, Deduplication Screen, and Potential Duplicates List. For the Deduplication and Potential Duplicates screens these actions are automatically available so long as at least one other action is configured.

For Multi Workspace Screen and Multi Revision Screen components, these actions need to be manually configured.

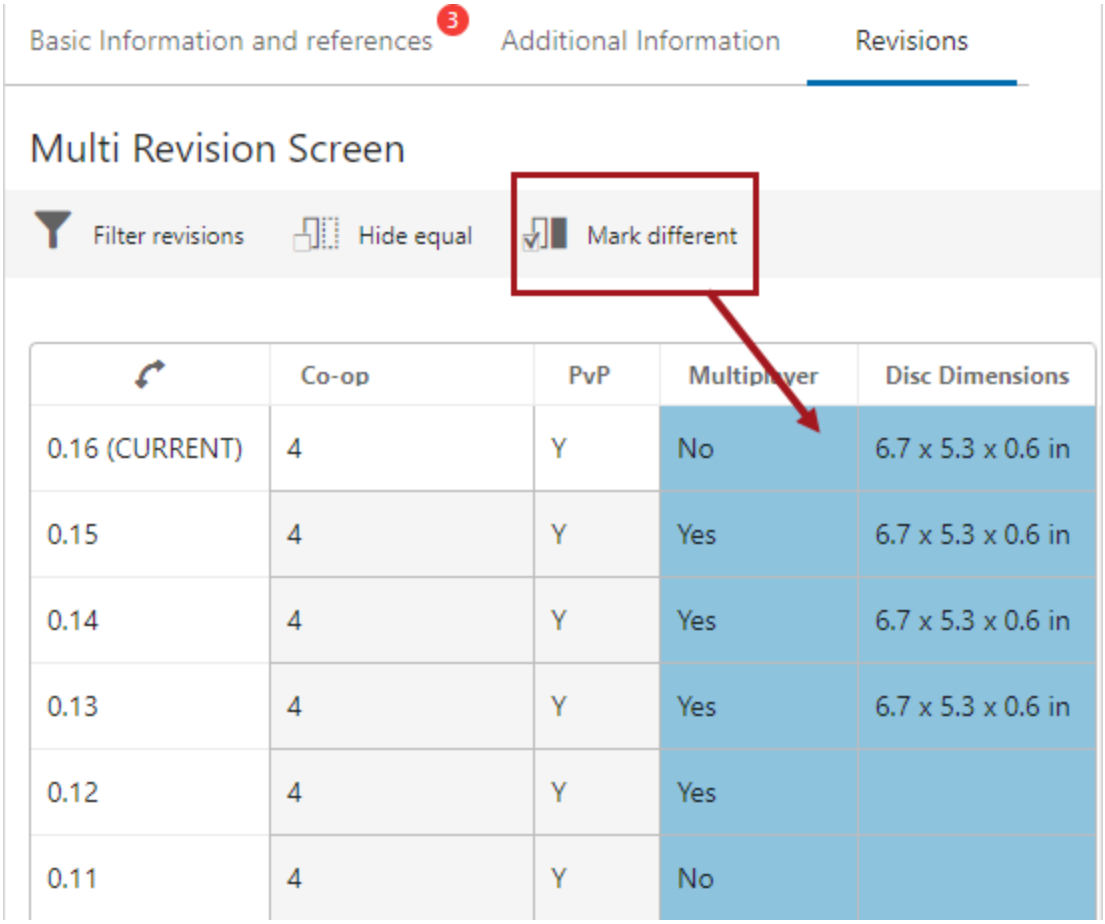
1. In design mode, navigate to the screen component you wish to configure via the dropdown.
2. In the screen properties for the applicable component, check the 'Show Hide Equals Button' and the 'Show Mark Different Button'.



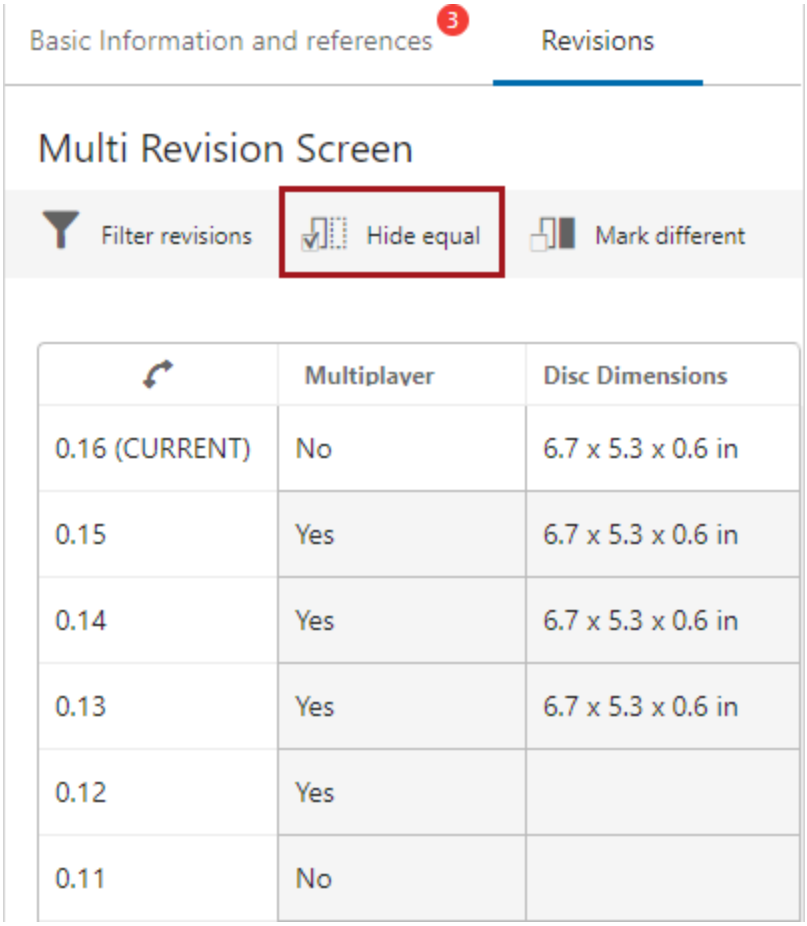
3. Click **Save**.

Example

In the image below, the 'Mark Different' action has highlighted the attributes 'Multiplayer' and 'Disc Dimensions' because the displayed revisions have different values for those attributes.



In the image below, the 'Hide Equals' action hid the 'Co-op' and 'PvP' attribute values columns(pictured above) because the displayed revisions have the same values for those attributes.



Note: Hide equal and Mark different actions works the same way for Multi Context and Multi Workspace as described above for Multi Revision screens.

Conditional Attribute Display

As is often the case, an attribute may not be relevant unless another attribute holds a certain value. For example, attributes specific to hazardous materials may become valid if the attribute 'Has Lead' has a value of 'Yes'. To facilitate this, STEP allows for attributes to be conditionally displayed in Web UI and Smartsheets.

A condition can be configured in two ways: as metadata on a Description Attribute or as a Specification Attribute link. When configured, it indicates the circumstances under which the relevant attribute is valid.

This enables business users to steer the Web UI and Smartsheets behavior for end users without requiring use of the STEP Web UI Designer.

Note: Conditional attribute support does not apply to STEP Workbench as all attribute visibility in the workbench is determined solely by user privileges.

Terminology

For additional context, see relevant definitions below:

- **Conditional Attribute** - This attribute appears as a metadata field on Description attributes and on Specification attribute links in the Product Hierarchy. Conditional expressions are stored in this attribute.
- **Conditional Expression** - Validity rules for the Conditionally Valid Attribute. Expressions are stored in the Conditional Attribute field for the relevant attribute or attribute link.
- **Conditionally Valid Attribute** - These attributes are only valid under the conditions specified by a conditional expression. In Web UI, Conditionally Valid Attributes are only displayed to the user when the Conditionally Driving Attribute is populated according to the Conditional Expression.
- **Conditionally Driving Attributes** - Attributes that are specified in a conditional expression. Conditionally Valid Attributes rely on populating this attribute with the correct value. In Web UI, Conditionally Driving Attributes are always displayed.

Creating the Conditional Attribute

Before conditions can be set on attributes, the Conditional Attribute must be created.

Note: Only one Conditional Attribute can be active on the system at any given time. To be clear, the Conditional Attribute is the attribute that holds the logic for the Conditionally Valid Attributes. Therefore, any number of Conditionally Valid Attributes and their associated expressions can be configured using a single Conditional Attribute.

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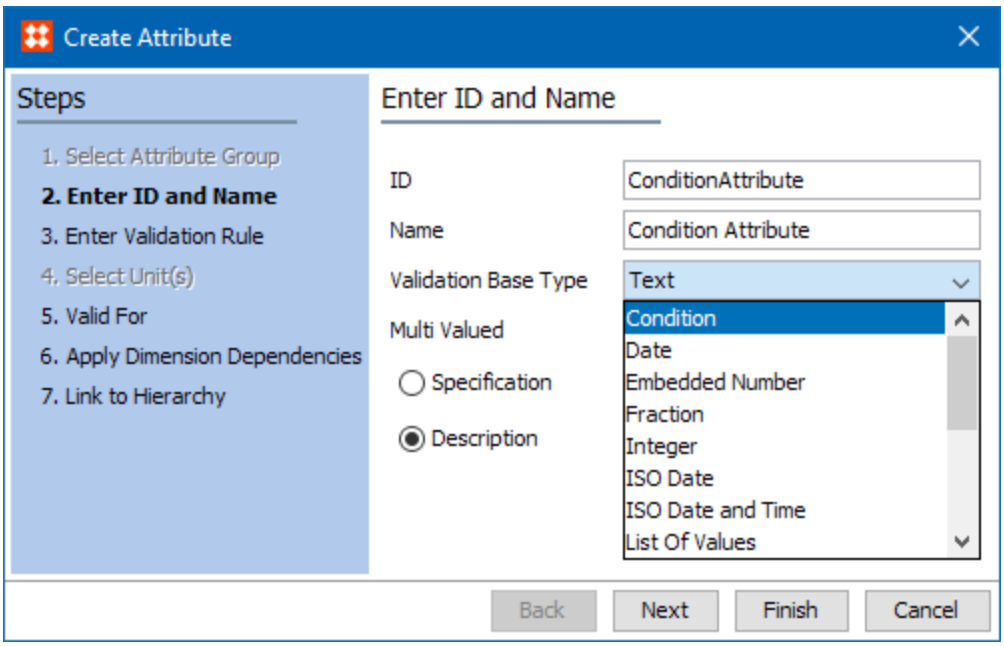
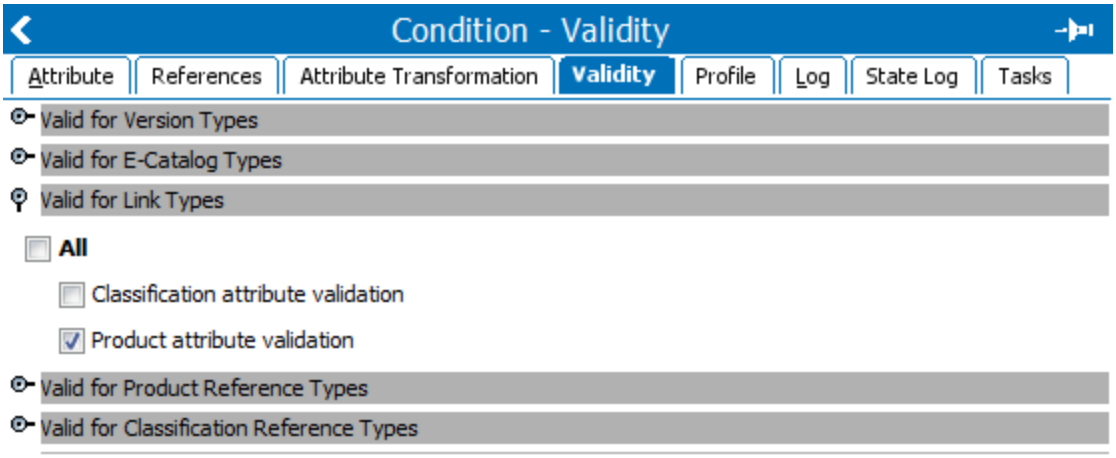
1. In a relevant **Attribute Group** in **System Setup**, create a **Description Attribute** with the **Base Validation Type** called **Condition**.



2. Fill out the rest of the relevant information and **Finish** the creation of the attribute.

Important: It is recommended that attributes used for conditional validity (as the Conditional Attribute or as a Conditionally Driving Attribute) do not have dimension dependencies.

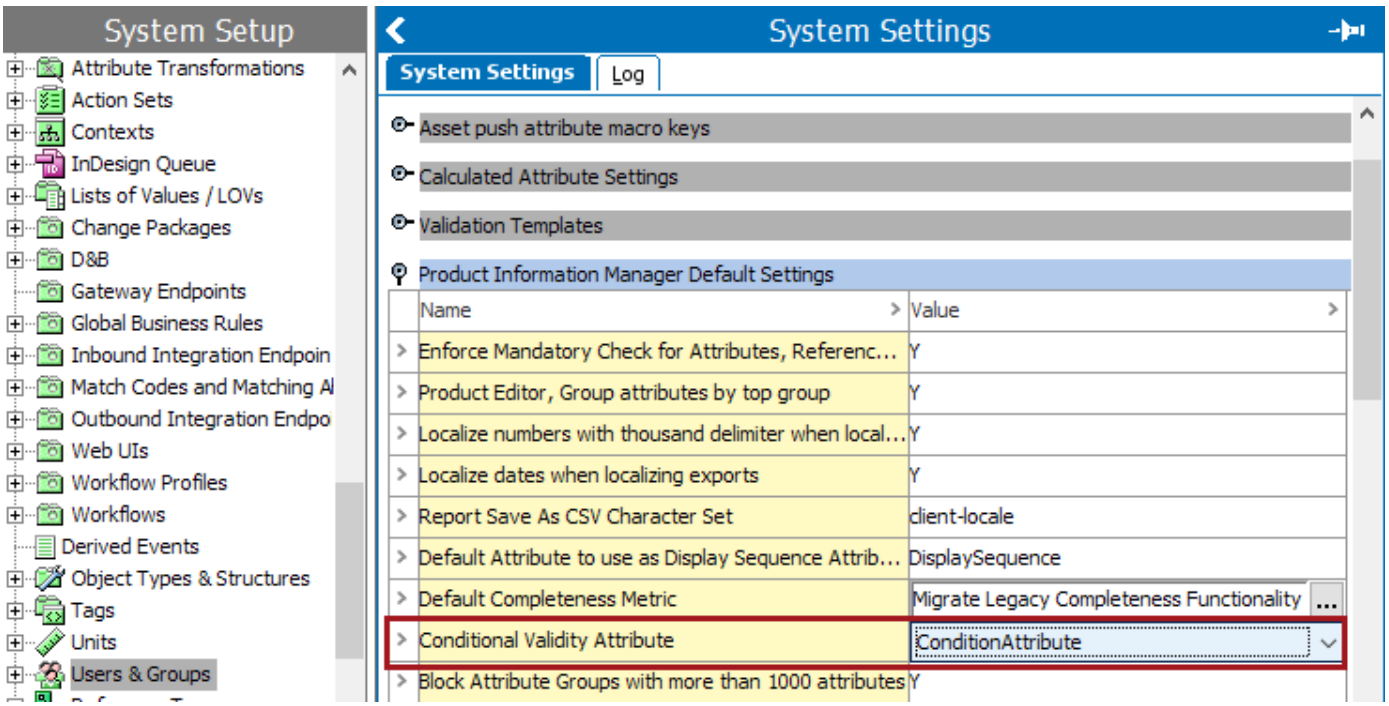
3. Set the validity of the attribute for the **Link Type** called **Product attribute validation**.



Activating a Conditional Attribute

Once created, the Conditional Attribute must be activated.

1. Navigate to **System Settings** and select **Users & Groups**.
2. Locate the **Product Information Manager Default Settings** section.
3. In the **Conditional Validity Attribute** field, select the Conditional Attribute configured in the previous section.



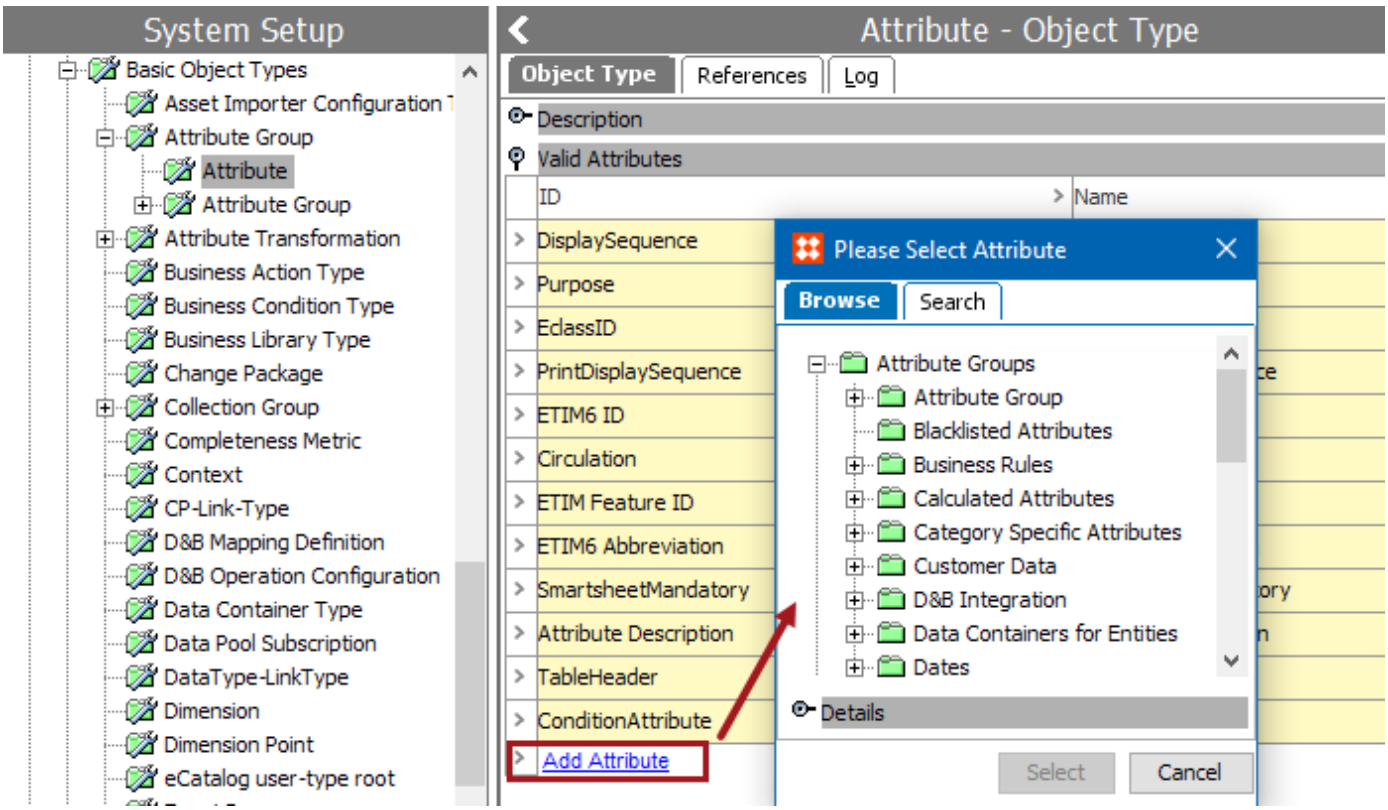
Configuring Conditionally Valid Attributes

Where and how you configure a condition for an attribute depends on whether it is a Description or Specification attribute.

Description Attributes

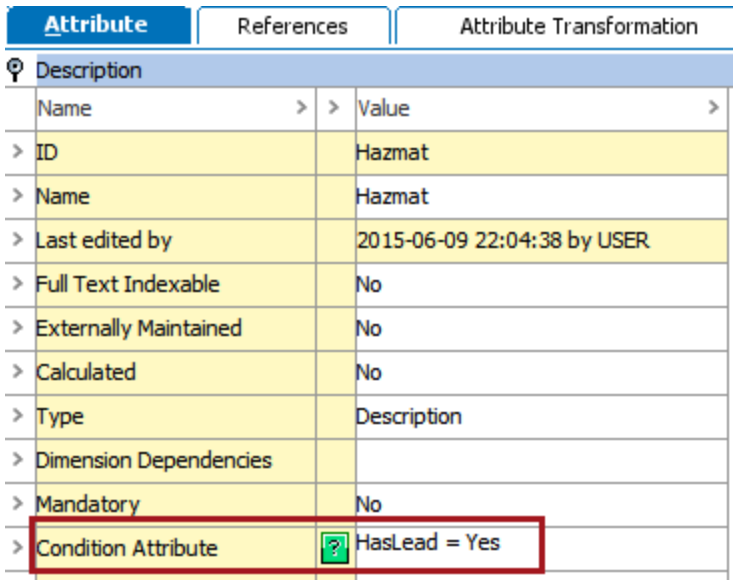
The condition for a Description Attribute is configured as metadata on the attribute itself. Before you can add it to an attribute, however, the Conditional Attribute must be made valid for the Attribute object type.

1. In **System Setup**, navigate to **Objects & Structures** and expand **Basic Object Types**, then **Attribute Groups**, and then click on **Attribute**.
2. In the **Valid Attributes** section of the **Object Type** tab, click **Add Attribute** and browse or select the Conditional Attribute from the list that appears.



For more information, see the **Description Attribute** section of the **System Setup / Super User Guide** documentation.

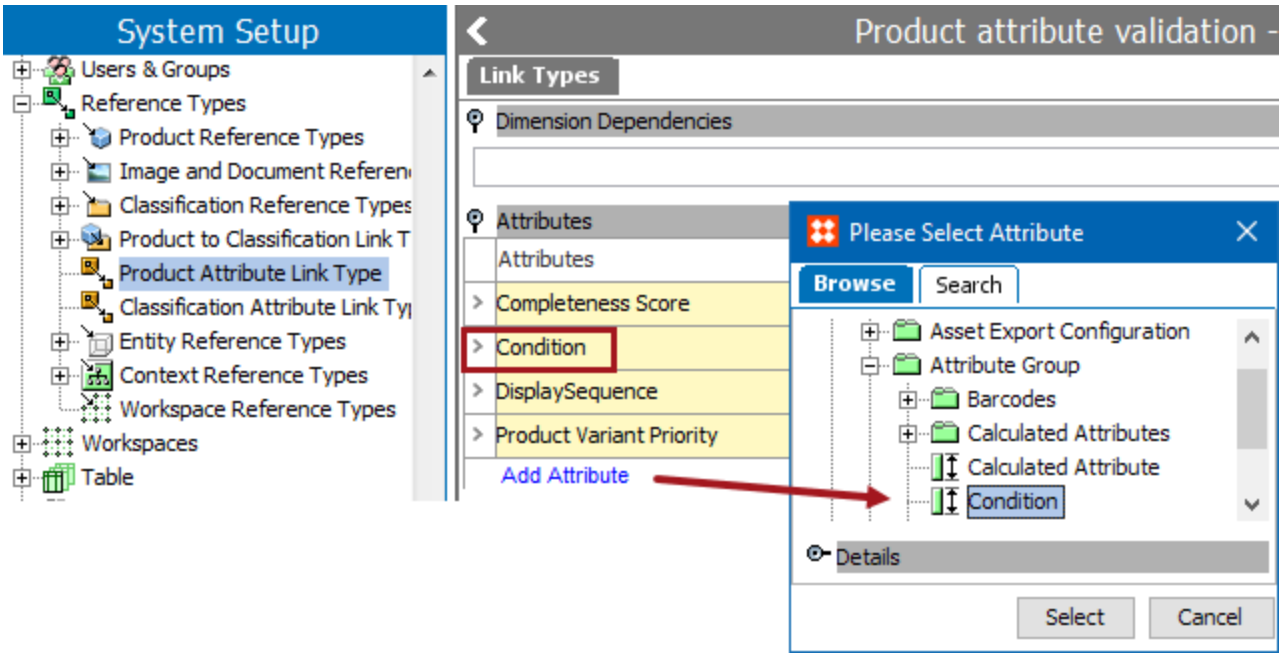
3. Navigate to **System Setup** and select the desired Description Attribute.
4. In the Conditional Attribute field, enter the desired condition rules for the Conditionally Valid Attribute to follow.



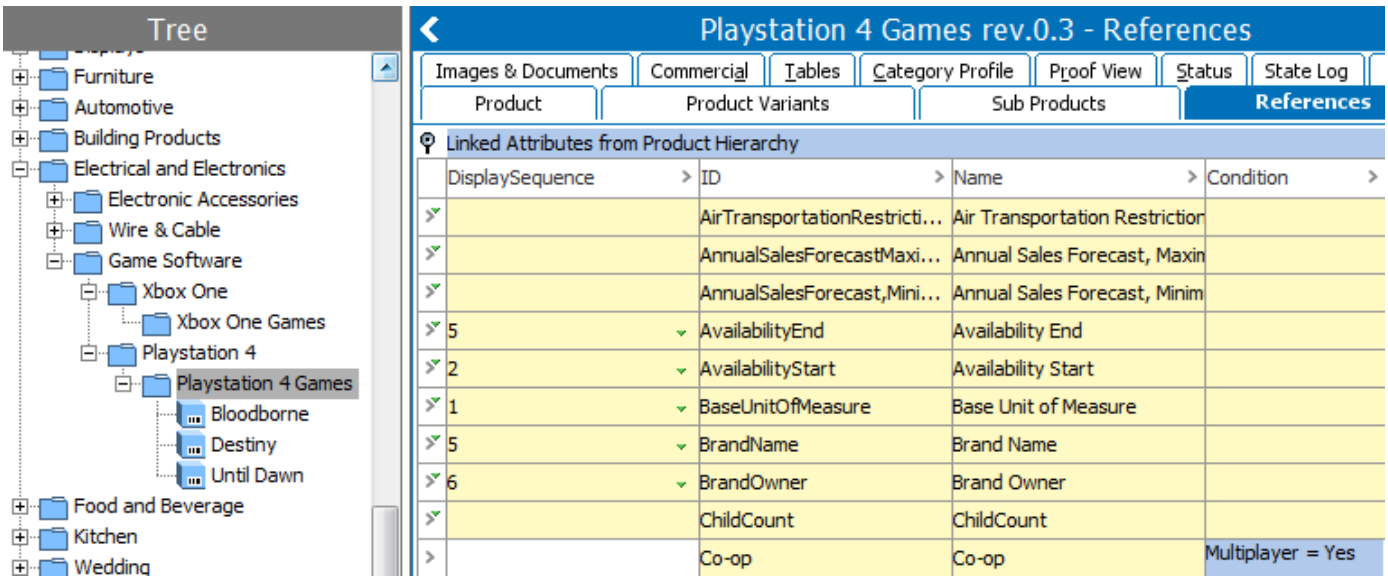
Specification Attributes

The condition for the Specification Attribute is configured by linking it to the relevant products on the References tab. Before you can add it to a product, however, the Conditional Attribute must be made valid for the Product Attribute Link Type object type.

1. In **System Setup**, expand **Reference Types** and open the **Product Attribute Link Type** node.
2. Click **Add Attribute** and browse or select the Conditional Attribute.



3. Next, navigate to the **Tree** and open the relevant node in the product hierarchy.
4. On the list of linked attributes, locate the desired Specification Attribute. In Conditional Attribute column, enter the conditional expression.



Writing Conditional Expressions

Conditional expressions are written directly in the STEP Workbench text editor.

The expressions are written in a simple syntax in the format [AttributeID] = [Value1];[Value2], where multiple values act as an 'OR' operator. For example, a Condition Attribute called 'Condition Attribute' specifies that the 'Hazmat' attribute will only appear if the 'HasLead' attribute has a value of true, using the syntax [AttributeID] = [Value1]:

Syntax forms:

- Condition: <language id><attribute id> = <value list>
- Language ID: .*:|<nothing>
- Value list: <value>;<value list>
- Value: .*

Rules that must be observed for the conditions:

- The used attribute must not have spaces in its ID.
- The used attribute must not have ':' in its ID.
- If a value contains ';' it must be escaped with \'
- If a value contains '\' it must be escaped with \'

Note: Conditional expressions using attributes with LOVs that utilize value IDs will evaluate the value ID. For example, assume a Yes / No LOV exists that uses value IDs , where 1=Yes and 2=No. The conditional expression for this must use the value ID, e.g. 'AttributeA = 1' if the attribute should only be available when the value of AttributeA is 'Yes'.

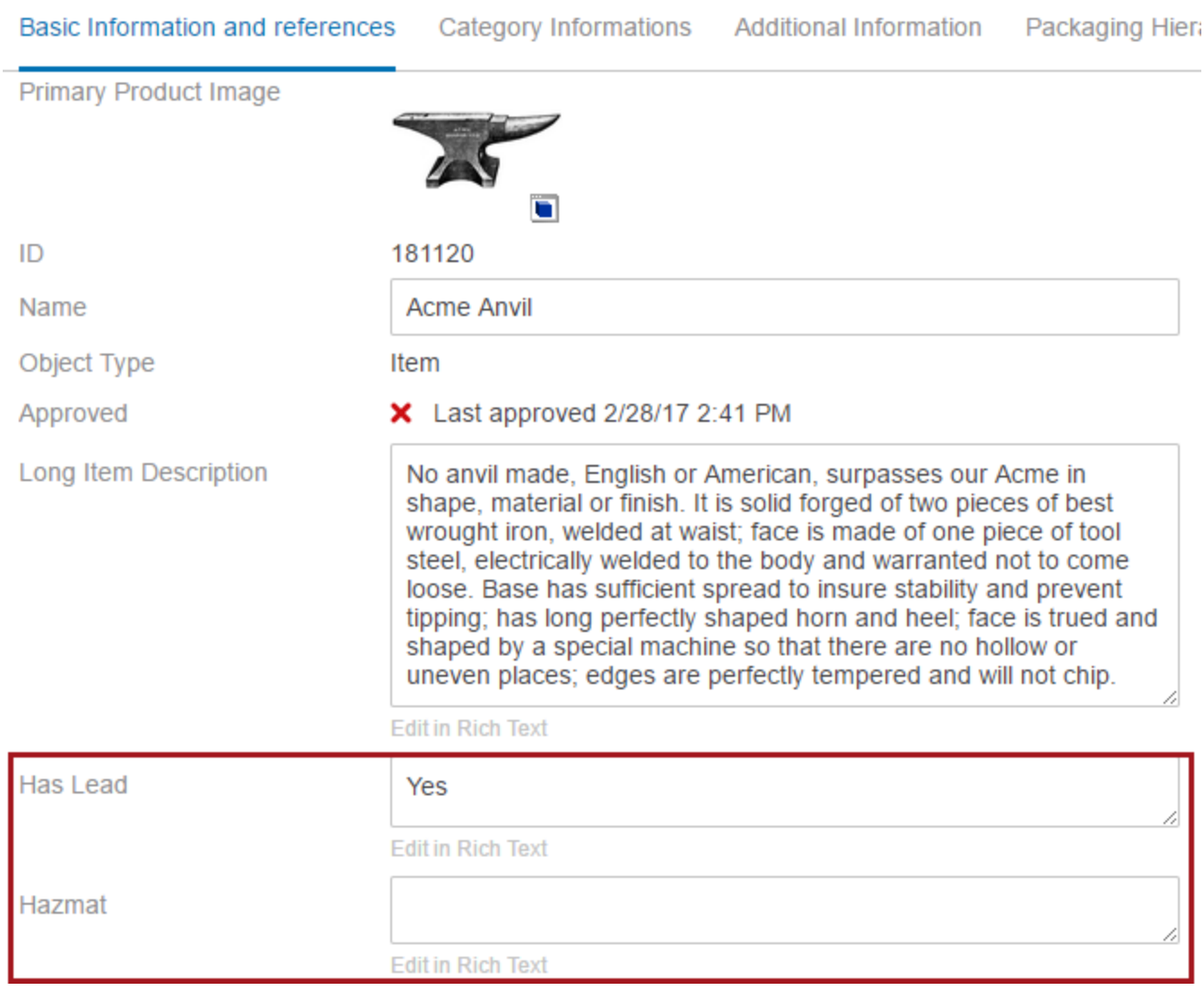
For more information see the **Business Rules with Conditional Attributes** section of the **Business Rules** documentation.

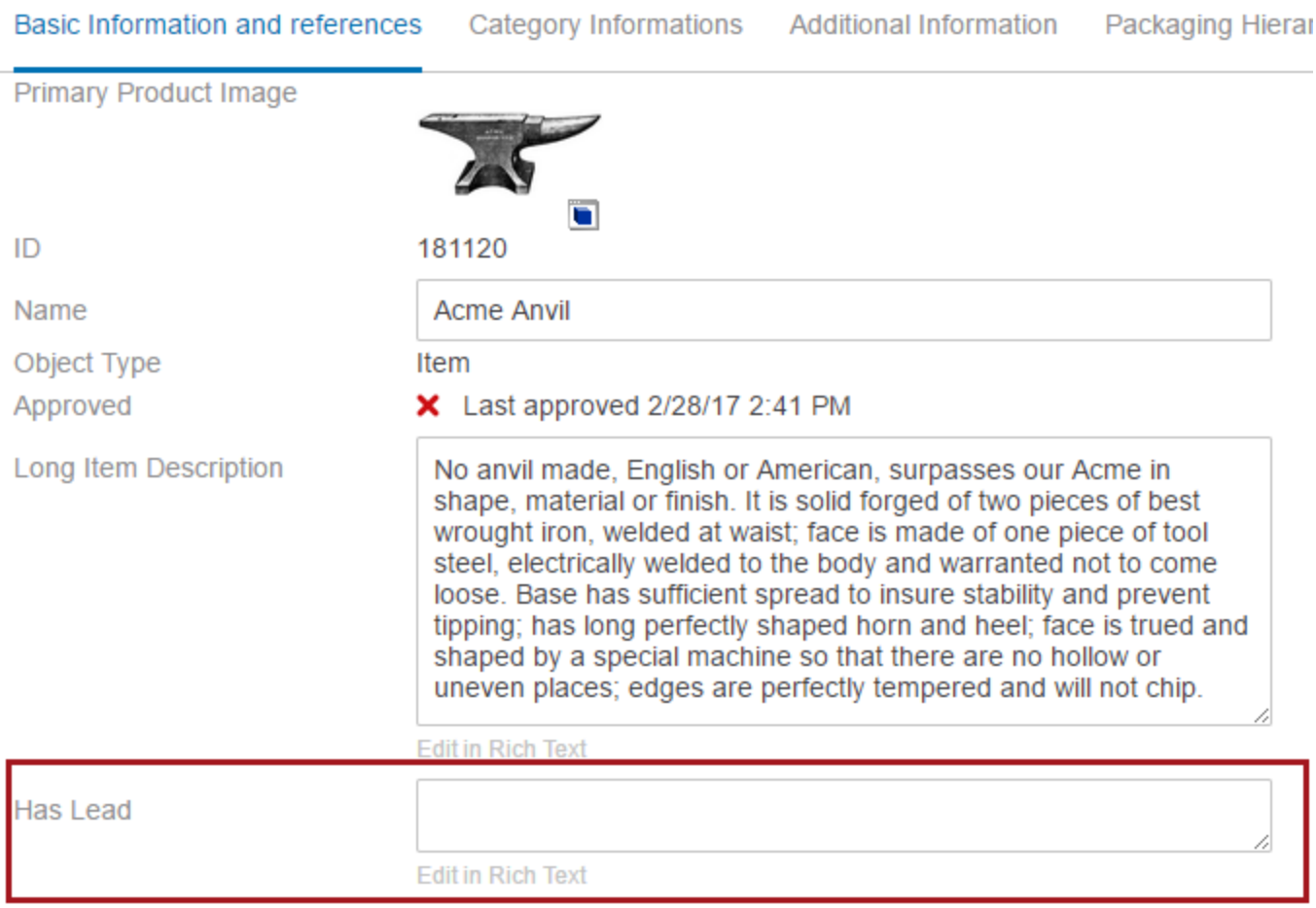
Note: Conditional attributes can also be exported using Smartsheets. When exporting products with conditional attributes any cells containing invalid conditionally displayed values will be automatically locked for editing. In order to unlock the cell and make changes, the user must first fulfill the proper conditions for the attribute and then validate the sheet. For more information on creating Smartsheets exports, see the **Smartsheet Data and Template Configurations** section of the **Smartsheets** documentation.

Conditional Attribute Example

A number of Web UI components centered around the Task List and Node Editor components are enabled to deal with the conditional validity of attributes. These components honor the conditional validity settings and only allow for display and/or editing of attribute values if they are valid based on the driving conditions.

For example, notice that the 'Hazmat' attribute is available when 'Has Lead' is set to 'Yes', but is unavailable when 'Has Lead' is left unpopulated (or set to 'No').





Note: Hazmat attribute will not be available, If 'Has Lead' attribute is set to 'No' or 'Left Blank.'

Conditional attribute functionality can be used with Web UI elements:

- ParentValue
- TargetAttributeColumn
- TargetAttributeLinkColumn
- TargetValueHeader
- Value
- ValueHeader
- ValueGroup
- ValueLinkHeader
- ValueGroupHeader
- Attribute Value Component
- Attribute Value Group Component

Note: Before working on Conditional Attributes, it is important to make sure that attributes have validity and are linked on the object where conditions should match. In our example, Has Lead and Hazmat attributes are linked and have validity on the Item object. If the attribute is linked on the parent level, specify the condition on the parent level. Validity must be available on object.

Configuring a Deduplication Clerical Review

A clerical review is the process of manually examining pairs that are not clear duplicates or non-duplicates by the algorithm.

During matching, objects that score between the clerical review threshold and the auto threshold are placed in a clerical review workflow. The potential duplicates from the clerical workflow are then displayed in a Web UI where a user can review them manually.

Prerequisites

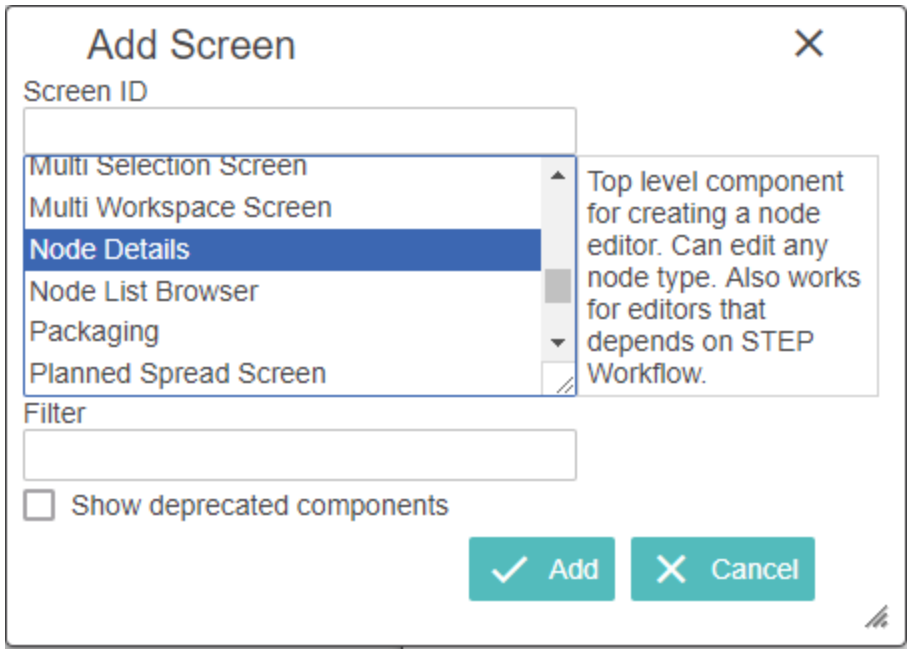
1. This documentation assumes that you are familiar with STEP Web UI design. If you are new to designing Web UIs, we recommend that you review the **Web User Interfaces** / **Getting Started** documentation.
2. For more information about creating a workflow, see the **Workflows** documentation.
3. For details on configuring the Web UI for Merge Golden Record clerical reviews, see the **Matching and Merging in Web UI** section of the **Matching, Linking, and Merging** documentation.

Log in to the Web UI, and click the gear wheel icon ( ) to enter design mode.

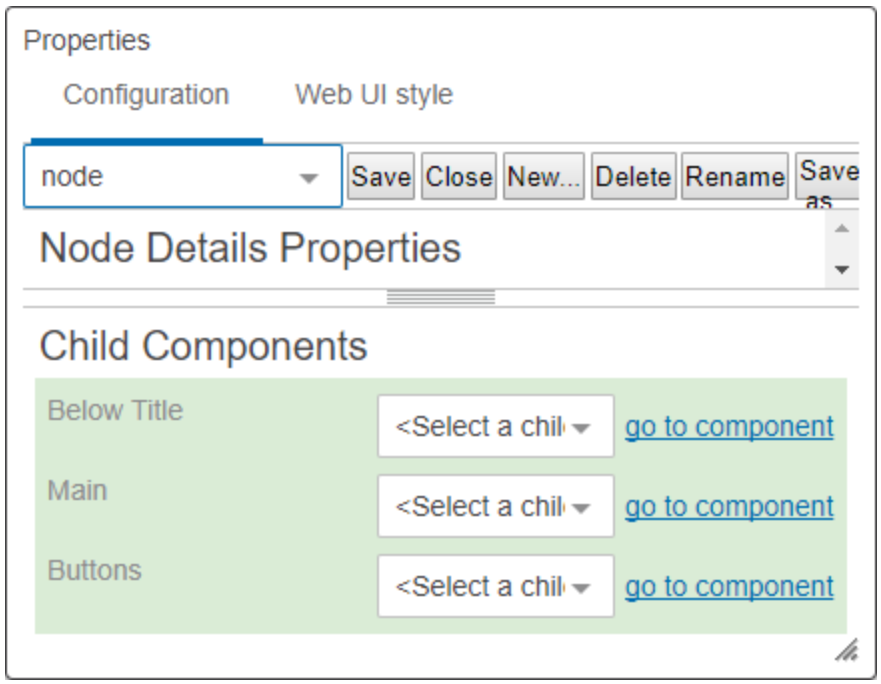
Create and Configure the Deduplication List

You must place the deduplication list inside a tab page.

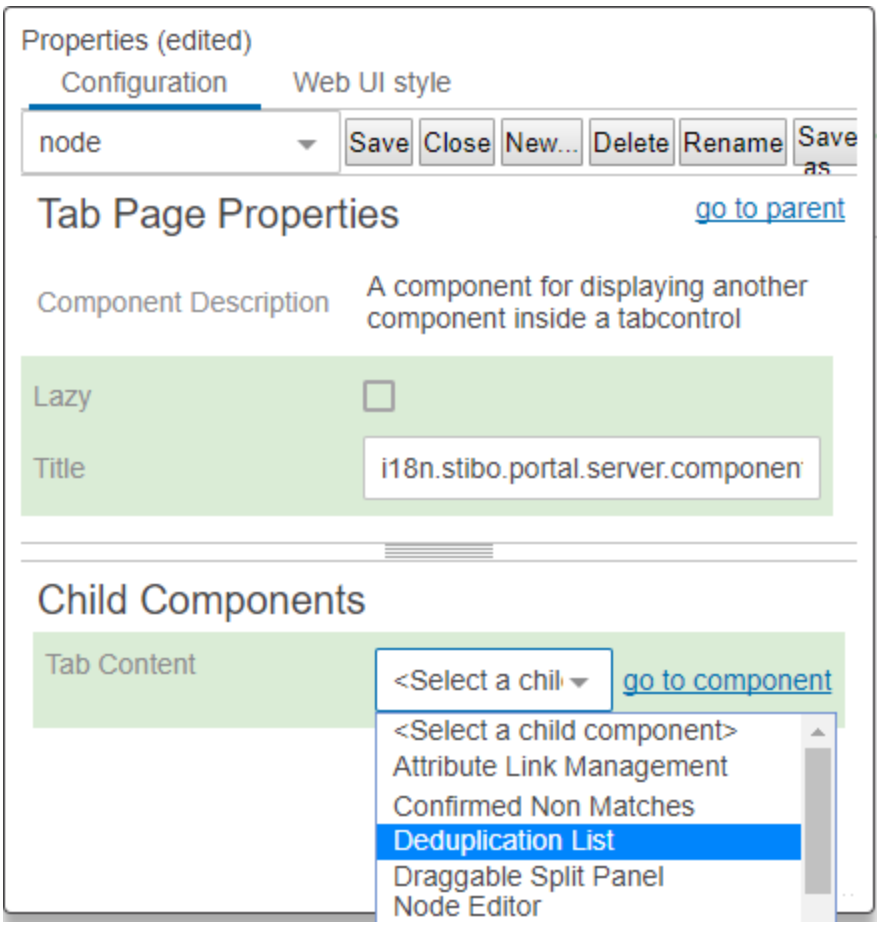
1. Click **New**, and then select the **Node Details** screen type.



2. Enter a **Screen ID** and click **OK**.
3. In the **Child components** area, in the **Main** list, select **Tab Control**.

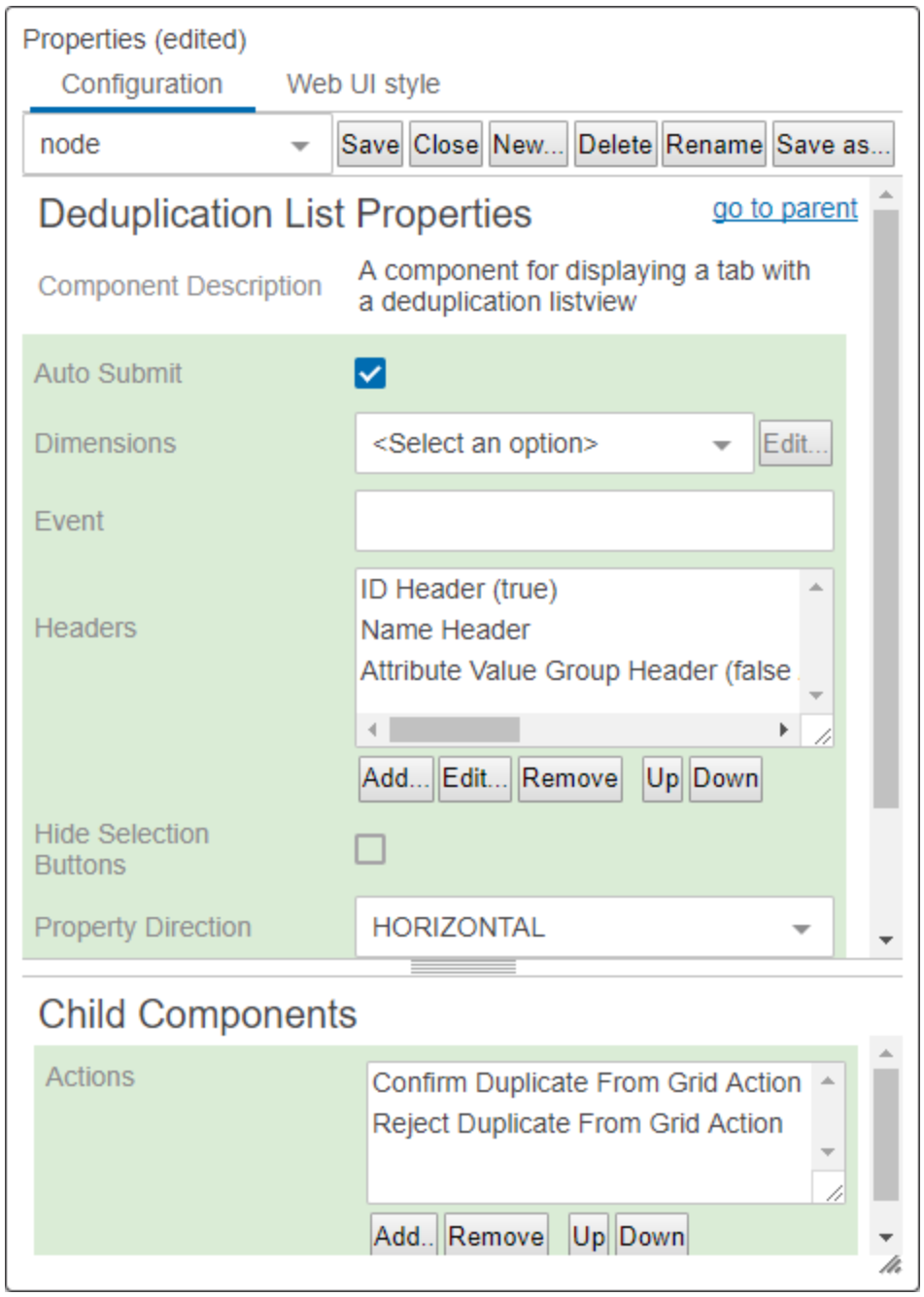


4. Click **go to component** to configure the Tab Control component.
5. Add a **Tab Page** to the Tab Control.
6. On the **Tab Page**, set **Tab Content** to **Deduplication List**.



7. Click on the 'go to component' link to configure Deduplication List Properties.
8. In **Headers**, click **Add**, and then select the attribute headers you want to use for the list. Choose meaningful headers that will assist the user with confirming or rejecting potential duplicates.
9. Select **Auto Submit** if you want the task to be automatically submitted when all duplicate candidates have been confirmed or rejected.
10. If you selected **Auto Submit**, in the **Event** field, specify the workflow event to use after auto submit.
11. Select the Hide Selection Buttons option to hide selection buttons such as, ‘Select All’, ‘Show Details,’ etc.
12. Select the Property Direction option if you want to display the data based on the selection from the dropdown. If Horizontal is selected then columns will be displayed horizontally. If Vertical is selected, then columns will be displayed vertically. If no option is selected, then by default it will be displayed as horizontal.
13. Select 'Show Group Headers' if the attribute group headers should be displayed.
14. Select 'Use Immediate Save' option if you want to save the entered / changed data automatically without clicking the 'Save' button.

15. In the **Child** components area, click **Add**, and then select the actions **Confirm Duplicate From Grid Action** and **Reject Duplicate From Grid Action**.
16. Click **Save** to save the changes.



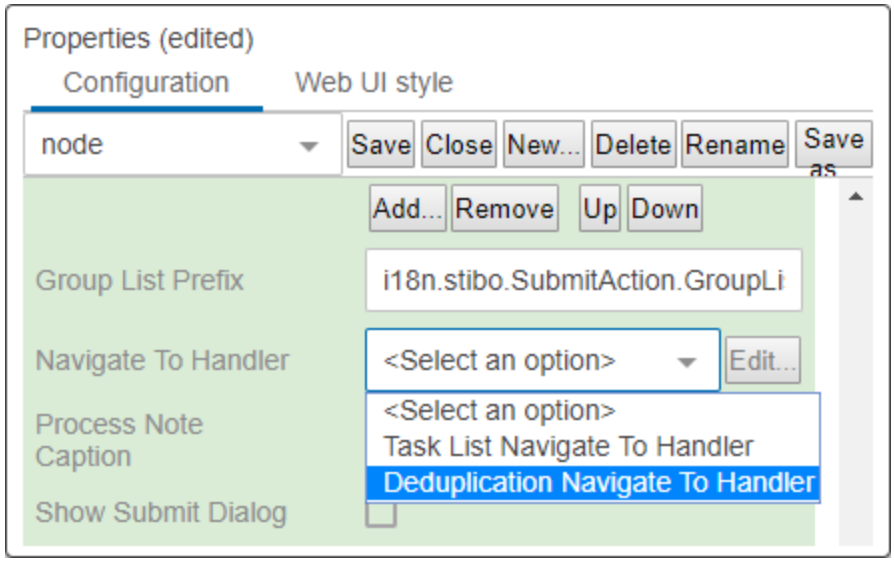
The 'Hide Equal' and 'Mark Different' actions will automatically appear alongside any other actions configured on the Deduplication List. For more information, see the **Comparing Data Using Hide Equal and Mark Different** section of the **Web User Interfaces / Using a Web UI** documentation.

Specify Node Details Buttons

1. Select the **Node Details** screen you just created.
2. In the **Child component** area, from the **Buttons** list, select **Buttons**.
3. Click **go to component**.
4. In the **Child component** area, click **Add**, and then select the **Submit Action**.
5. Double-click the **Submit** action. The **Submit Action Properties** window appears.

   In this window, you can specify where the Web UI navigates to after the **Submit** action. You do this by setting up a **Navigate To Handler**. If you cannot see the **Navigate To Handler** list, drag the sizing handle until you can see all properties.

6. In the **Navigate To Handler** list, select **Deduplication Navigate To Handler**.



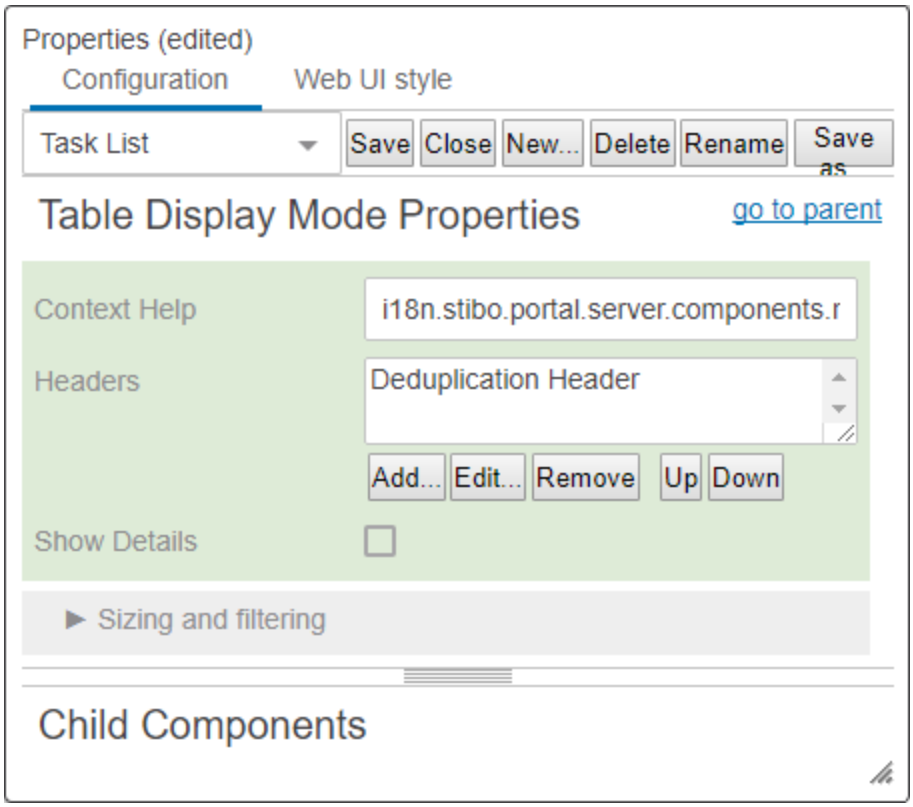
7. Deduplication Navigate To Handler Properties screen will be displayed.
8. In the **Matching Algorithm ID** field, specify the ID of the relevant matching algorithm.
9. In **State ID**, enter the review state of the clerical review workflow, and then click **Save**.

Create a Task List

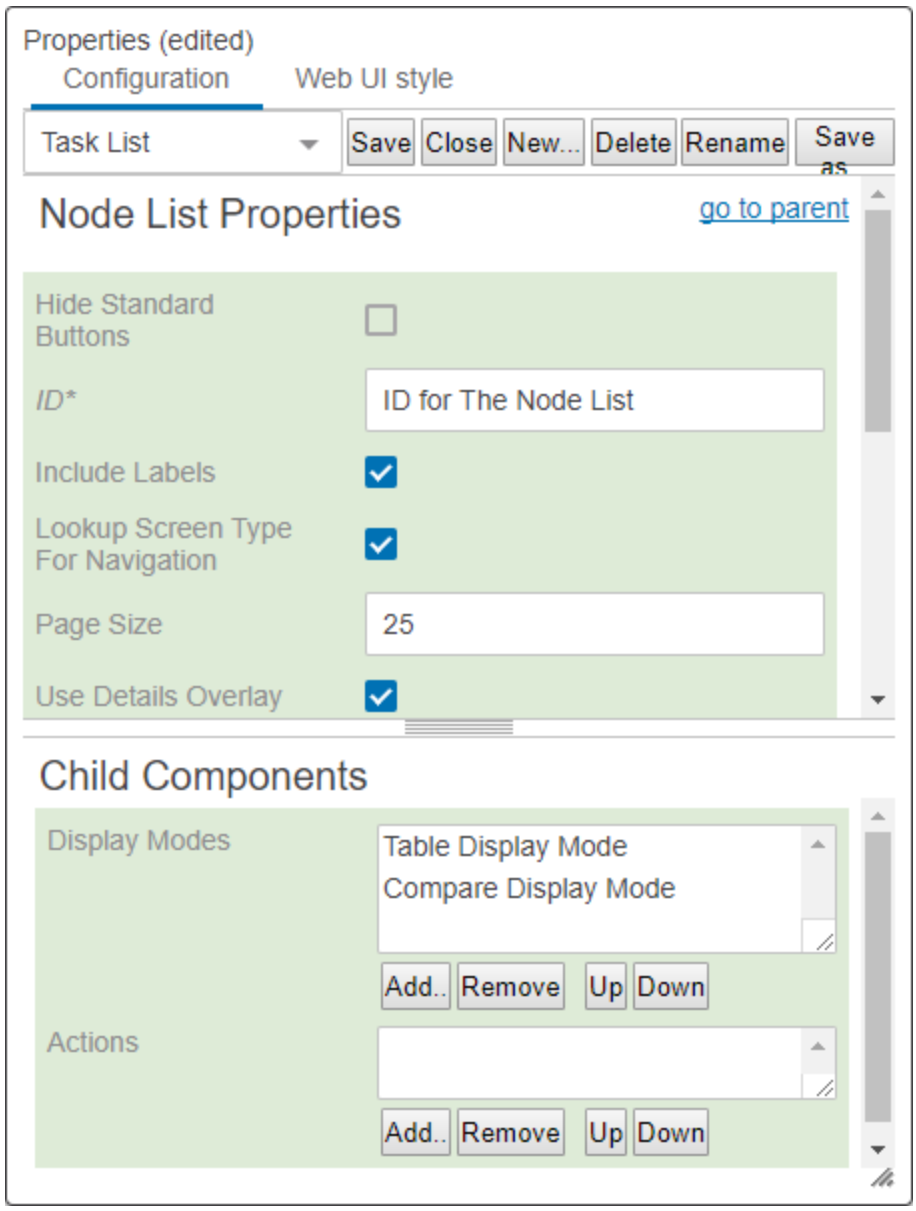
The next step is to create a screen to hold the Clerical Review task.

1. Click **New**, in the **Add Screen** window, select **Task List**, and then click **Add**. The **Task List Properties** window appears.
2. In the **Child component** area, in the **Node List**, choose **Node List** and click **go to component**.
3. In the **Node List Properties** window, in the **ID** field, enter an ID for the Node List, and then click **Add**.
4. In the **Task List Properties** window, in the **Child components** area, click **go to component**. The **Node List Properties** window appears.

5. In the **Child components** area, in **Display Modes**, click **Add**.
   - In the **Add component** window, choose **Table Display Mode**, and then click **Add**.
   - Double-click **Table Display Mode** and edit the table properties. For **Headers**, click **Add**, and then select **Deduplication Header**. This header generates the link to the deduplication screen. Add any other headers that you want to use for the list. Choose headers that are meaningful to the users.



   - Click the **go to parent** link. The **Node List Properties** dialog appears again.
   - If necessary, repeat the bullets in this step to add additional Display Modes (e.g., Compare Display Mode).
6. Back in Node List Properties, enable **Use Details Overlay** to make processing Clerical Review tasks a quicker process. Enabling this parameter means that when after a users clicks either the Confirm Duplicate or Reject Duplicate buttons from the deduplication screen, the user is returned to the clerical review task list after each update, instead of returning to the homepage. Additionally, the clerical review task list is refreshed after each update for confirm or reject action, removing items that have been addressed.

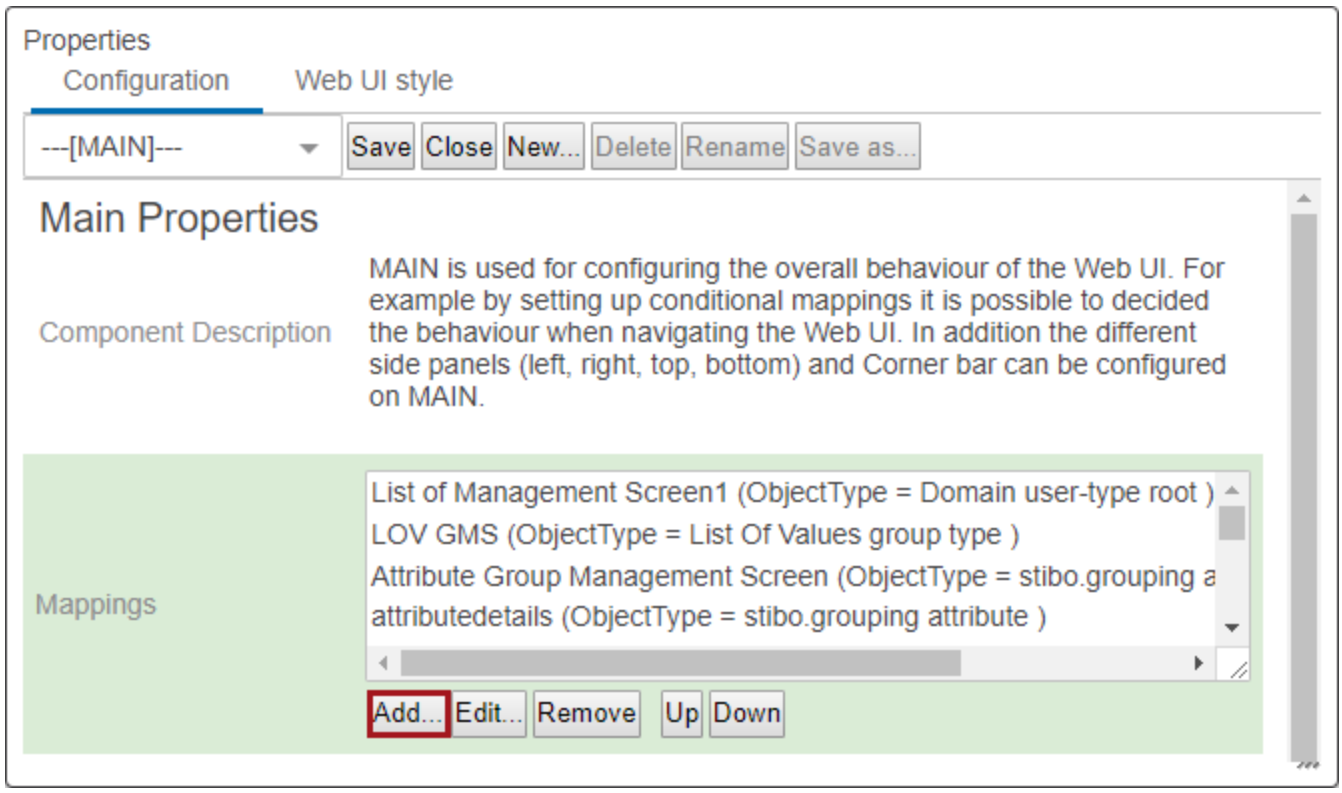


7. Click **Save**.

For information about individual table properties, see 'Tables and Lists' in the 'Web UI component configuration reference' available at [system]/webui/docs for more information.

Specify Mappings

1. From the screen list, select **Main** to go to the main screen of the designer.
2. In **Mappings**, click **Add**.



3. In the **Screen Mapping properties** window, in **Conditions**, click **Add**.
4. Select the **Matching Algorithm** condition, and then click **Add**.
5. Double click on the Matching Algorithm to configure the Matching Algorithm Condition Properties.

Note: Matching Algorithm must exist to select in Matching Algorithm Condition Properties screen.

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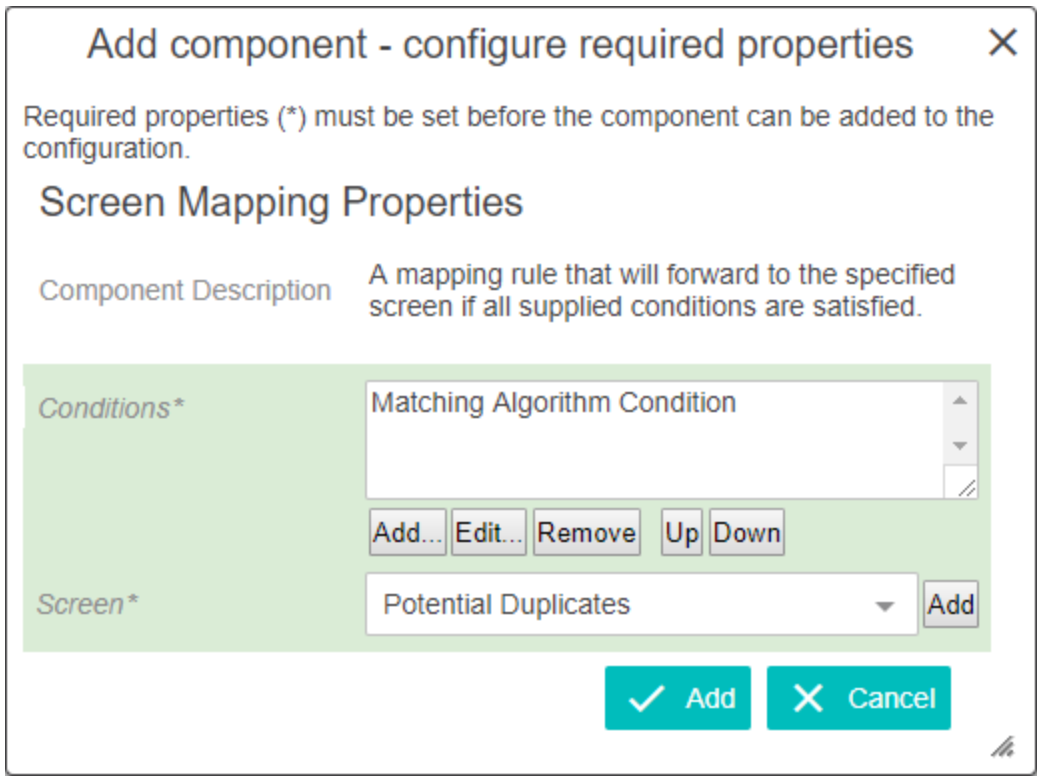
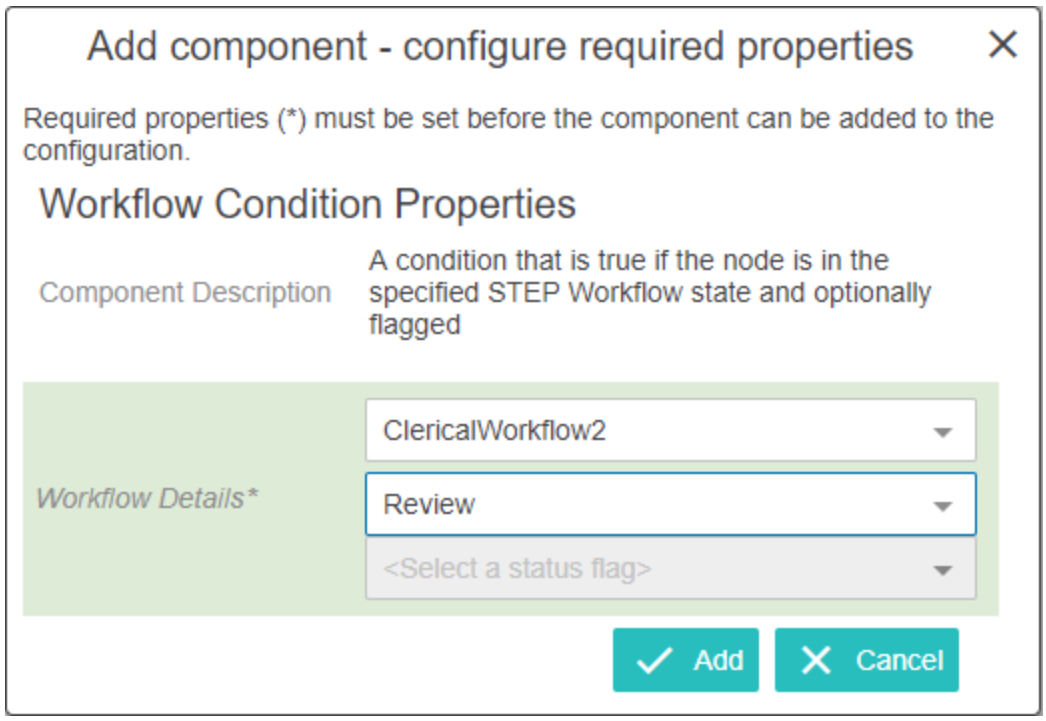
6. In the **Screen** list, select the screen you created for deduplication, click **Add**, and then click **Save**.



7. In the **Mappings** list, select the mapping you just created, and then click **Up** to move the screen mapping higher up in the list. Next you will create another mapping.
8. In **Mappings**, click **Add**.
9. In the **Screen Mapping properties** window, in **Conditions**, click **Add**.
10. Select the **Status Selector Selection** condition, and then click **Add**. The **Status Selector Selection Condition properties** window opens.
11. In the **Workflow** list, select the clerical review workflow.
12. In the **Select a state list**, select the start state of the clerical review workflow, click **OK**, and then click **Add**.

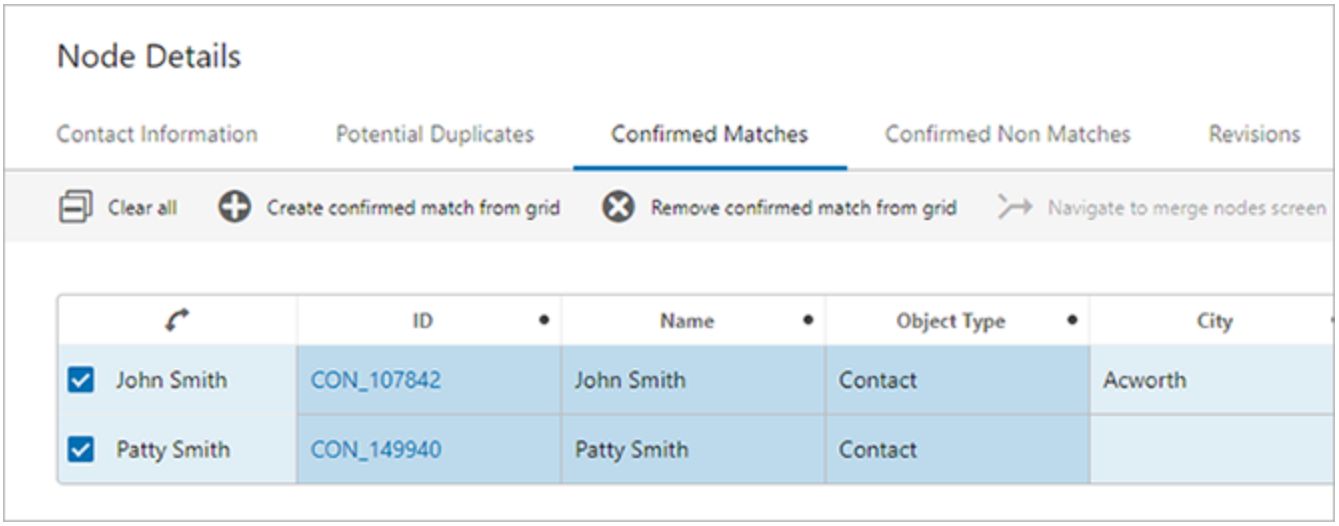


13. In the **Screen Mapping properties** window, in the **Screen** dropdown list, select the Task List screen you just created, and then click **Save**.
14. In the **Mappings** list, select the mapping you just created, and then click **Up** to move the screen mapping higher up in the list.

Confirmed Matches Component

From the Confirmed Matches component screen, users can view all objects that have been confirmed as matches for the currently selected object, and may choose to either merge the selected object with one of the listed matches, or reject an object(s) as a viable match.

Important: The option to merge is not applicable to Golden Record configurations.



Matches listed on this screen must be confirmed via the Potential Duplicates List or Deduplication List screens before they can appear.

For more information on the Potential Duplicates List component, see the **Potential Duplicates List** section of the **Web User Interfaces** documentation.

For more information on the Deduplication List component, see the **Configuring a Deduplication Clerical Review** section of the **Web User Interfaces** documentation.

If applicable to the configuration, a merge nodes button can be added to the screen. To merge two matching nodes, select the relevant object from the list and click the 'Merge' ( ) icon. For more information, see the

Merging Confirmed Matches section of the **Web User Interfaces** documentation.

To reject a confirmed match, select the relevant object from the list and click the 'remove' ( ) icon. Doing so will send the selected object back to the Potential Duplicates List / Deduplication List screen.

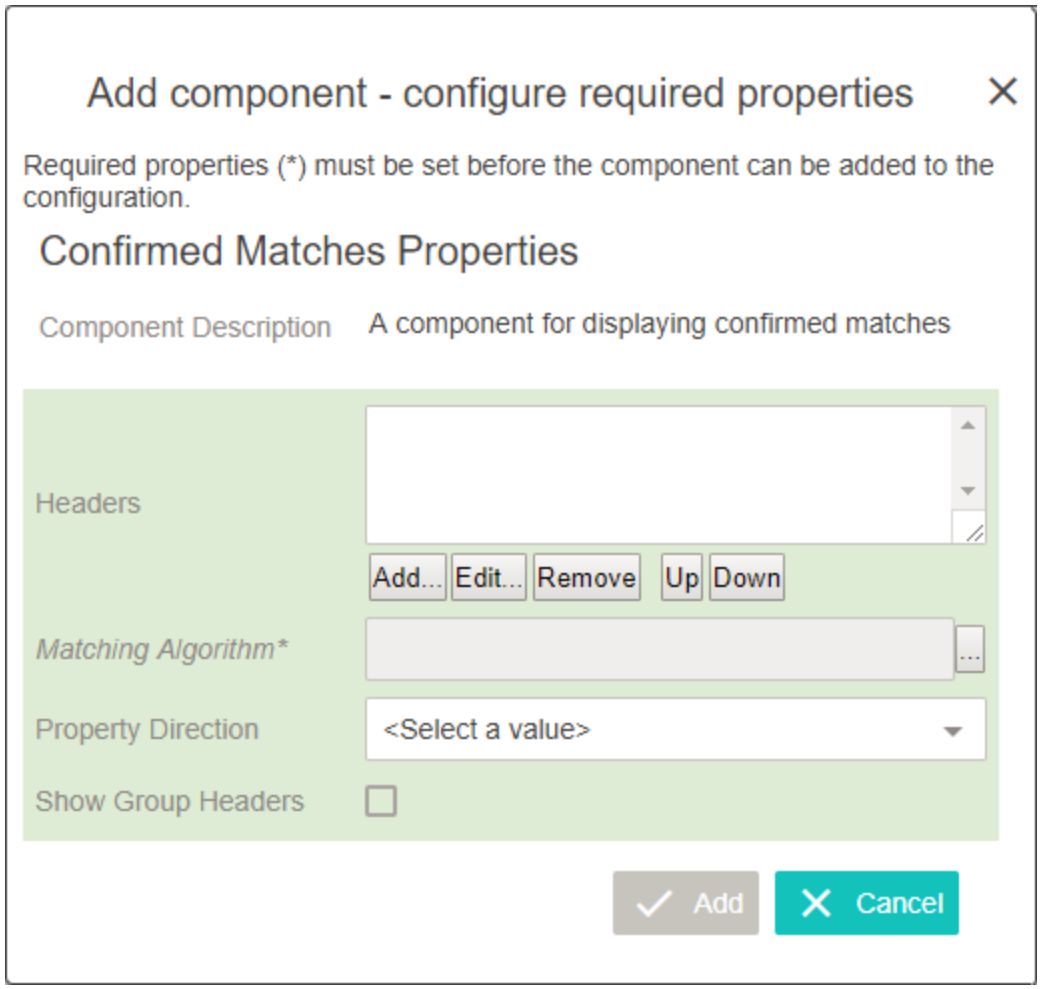
Prerequisites

It is expected that anyone configuring the Confirmed Matches component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring the Confirmed Matches component

A number of configuration options are available for this component that allow users to customize how the table is formatted. Additionally, a matching algorithm and corresponding action button(s) must be configured.

1. Select the **Node Details** screen. Example: Subscriber Details
2. In the **Child components** area, in the **Main** dropdown, select **Tab Control**.
3. Click on '**go to component**' to configure the Tab Control component.
4. Add a **Tab Page** to the Tab Control.
5. On the **Tab page**, enter Title name. Example: Confirmed Matches.
6. On the **Tab Page**, set **Tab Content** to **Confirmed Matches**.
7. Confirmed Matches Properties screen will be displayed as shown in the image below.

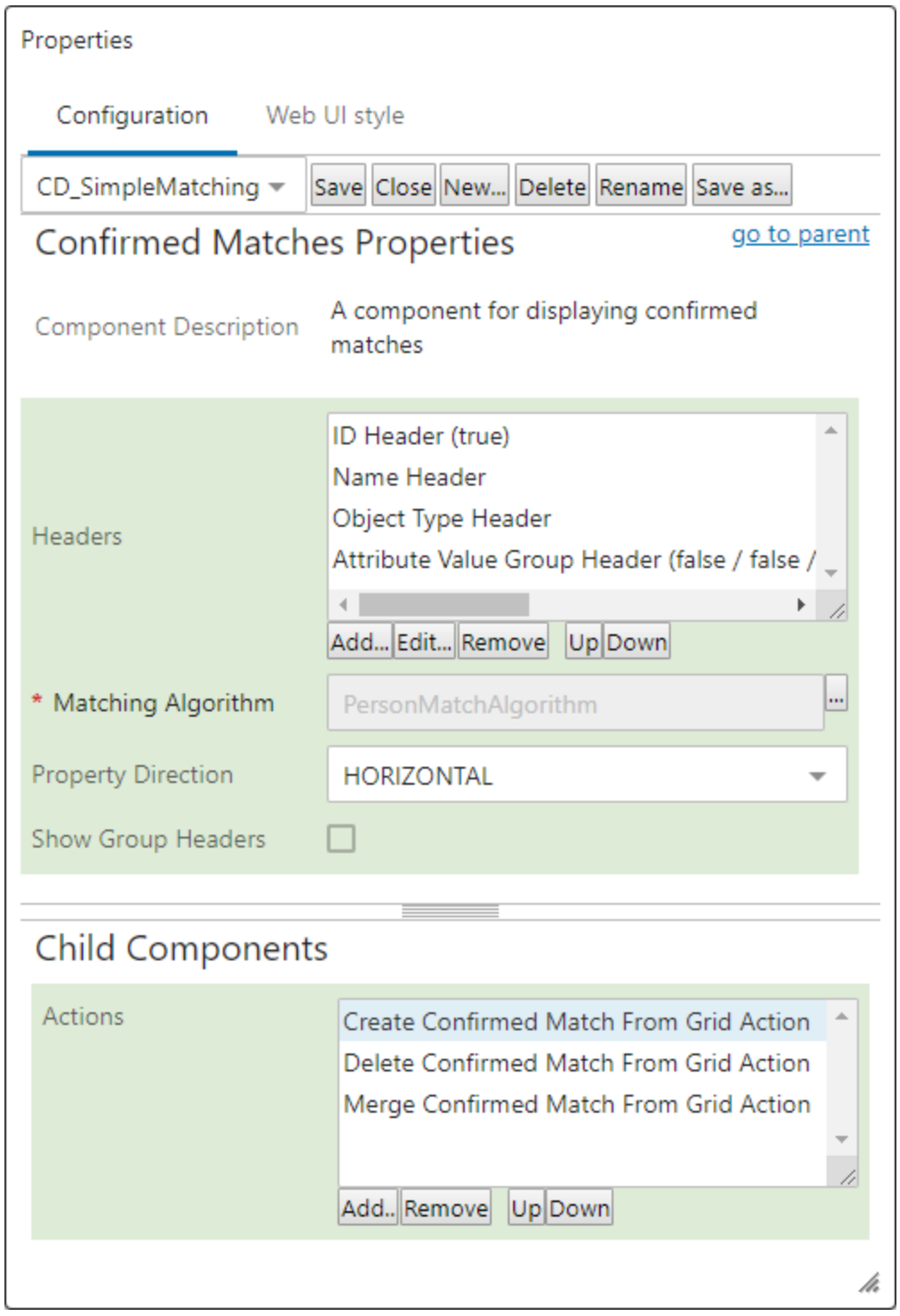


- **Headers**: In this parameter, specify which headers will appear on the table by clicking **Add...** and selecting the desired header. Depending on the header selected, additional configuration steps may be required. Ideally,

attributes most relevant to matching should be specified.

- **Matching Algorithm**: In this parameter, click the ellipsis button (...) and select the relevant matching algorithm.
- **Property Direction**: For this parameter, determine whether to display the data in a horizontally or vertically aligned list via the dropdown.
- **Show Group Headers**: Check the box for this parameter if attribute group headers should be displayed.

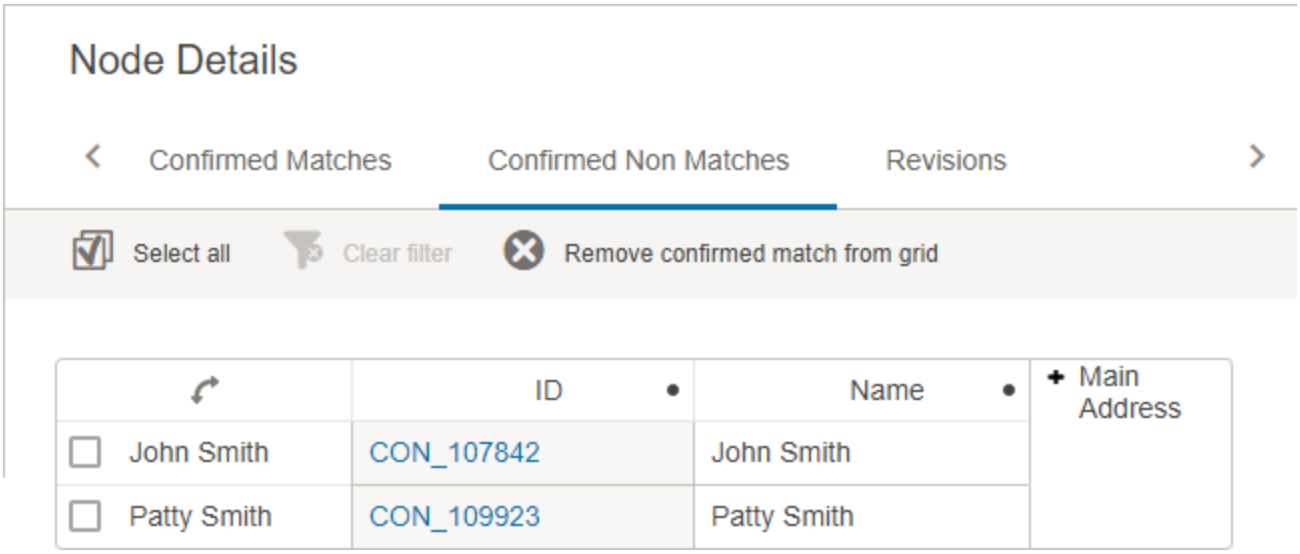
Once the tab has been created and configured, an additional field is made available as a child component:



- **Actions**: In this parameter, click the **Add...** button to add actions to this component. The available actions are the 'Create Confirmed Match From Grid Action,' which adds a button to add new confirmed matches from the screen, the 'Delete Confirmed Match From Grid Action,' which adds a remove node button to the screen, and the 'Merge Confirmed Match from Grid Action' button, which allows confirmed matches to be merged. The 'Create Confirmed Match from Grid Action' requires configuration.

Confirmed Non Matches Component

From the Confirmed Non Matches component screen, users can view all objects that have been rejected as matches for the currently selected object, and send them back to the Potential Duplicates List / Deduplication List screen to be reevaluated, if necessary.



Matches listed on this screen must be rejected via the Potential Duplicates List or Deduplication List screens before they can appear.

For more information on the Potential Duplicates List component, see the **Potential Duplicates List** section of the **Web User Interfaces** documentation.

For more information on the Deduplication List component, see the **Configuring a Deduplication Clerical Review** section of the **Web User Interfaces** documentation.

To send a rejected match back to the Potential Duplicates List / Deduplication List screen, select the relevant object from the list and click the 'Remove' ( ) icon.

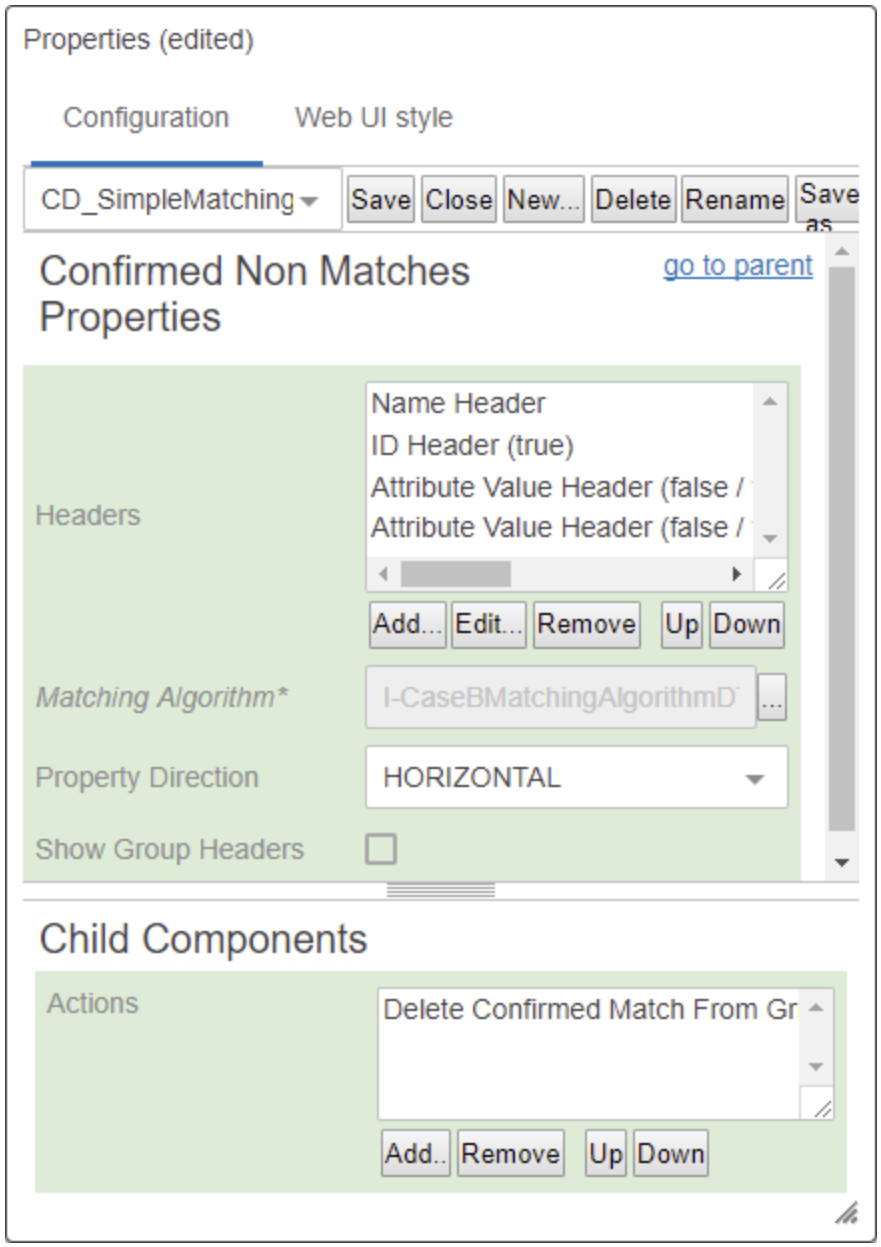
Prerequisites

It is expected that anyone configuring the Confirmed Non Matches component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring the Confirmed Non Matches component

A number of configuration options are available for this component that allow users to customize how the table is formatted. Additionally, a matching algorithm and corresponding action button(s) must be configured.

1. Select the **Node Details** screen. Example: Subscriber Details
2. In the **Child components** area, in the **Main** dropdown, select **Tab Control**.
3. Click on '**go to component**' to configure the Tab Control component.
4. And a **Tab Page** to the Tab Control.
5. On the **Tab Page**, enter Title name. Example: Confirmed Non Matches.
6. On the **Tab Page**, set Tab Content to **Confirmed Non Matches**.
7. Confirmed Non Matches Properties screen will be displayed as shown in the image below.



- **Headers**: In this parameter, specify which headers will appear on the table by clicking **Add...** and selecting the desired header. Depending on the header selected, additional configuration steps may be required. Ideally, attributes most relevant to matching should be specified.
- **Matching Algorithm**: In this parameter, click the ellipsis button (...) and select the relevant matching algorithm.
- **Property Direction**: For this parameter, determine whether to display the data in a horizontally or vertically aligned list via the dropdown.
- **Show Group Headers**: Check the box for this parameter if attribute group headers should be displayed.
- **Actions**: In this parameter, click the **Add...** button and select the 'Delete Confirmed Match From Grid Action'. This will add the remove node button to the screen.

Data Containers in Web UI

When working with product or entity objects in Web UI, there are two components you can use to display and edit data containers. Users are encouraged to incorporate these components into their Web UI in a way that best fits their needs.

Data Container / Attribute Maintenance

Two components are available for displaying and maintaining data containers in Web UI:

- Data Container Attribute View Editor
- Data Container Table View Editor

Note: The Data Container Attribute View Editor can only be used for entity objects. It is also important to note that multi-valued data containers cannot be edited in Web UI. For more information, see the **Data Container Attribute View Editor** topic in this documentation.

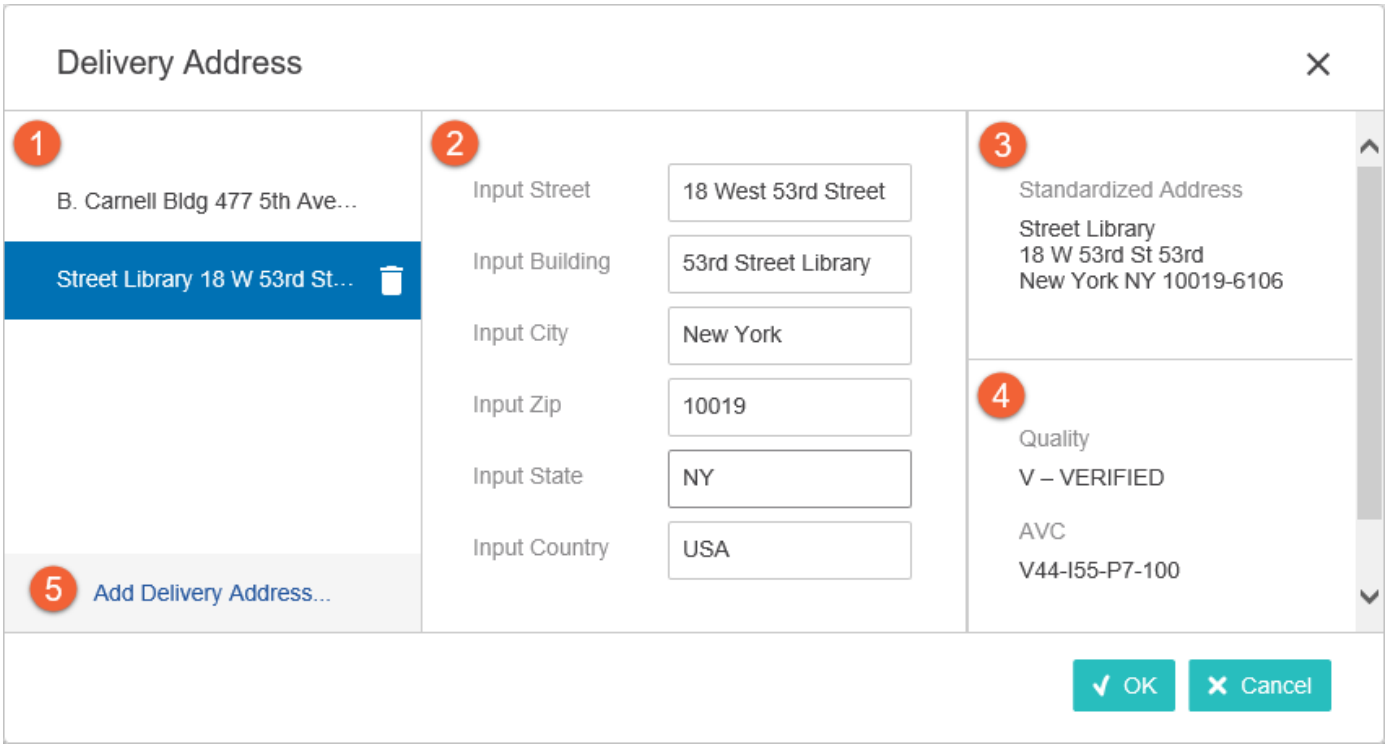
Data Container Attribute View Editor

The **Data Container Attribute View Editor** component allows users to edit attribute values for data container attributes, and add / delete data containers on an entity object.

The editor can be configured as a Node Editor child component, set up to display on a Tab Page within a Node Details screen. For information on configuring the Data Container Attribute View Editor, see the **Data Container Attribute View Editor** topic in the **Web User Interfaces** documentation.

To edit an existing data container, click on the relevant data container from the component. To add a new data container to the entity object, click the **Add** link below the component display. Regardless as to how you choose to access the editor dialog, options to edit existing data containers and add new ones will be available.

The **Data Container Attribute View Editor** dialog is split into several different sections:



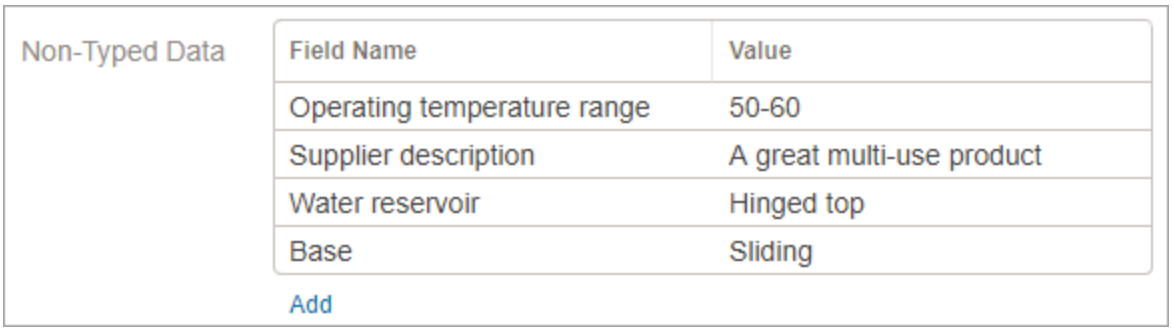
1. The data container selector on the left-hand side of the dialog displays all of the data containers of a specified type that are currently on the entity object. The specific data container type is defined in the component configuration. The name of the data container is derived from the Display Attribute configured on the component, and is typically comprised of different attribute values that define the data container. Newly added data containers appear on this list and can be removed by clicking the 'trashcan' icon.
2. The selected data container's editable attributes are listed in the middle section of the dialog. Each attribute value can be edited in their respective fields. The attributes that appear in this section are derived from the attribute group specified by the Editable Attributes parameter in the configuration.
3. The selected data container's standardized attributes are listed in the upper right-hand side of the dialog. These attributes cannot be edited. The attributes that appear in this section are derived from the attribute group specified by the Standardized Attributes parameter in the configuration.
4. The selected data container's metadata attributes are listed in the lower right-hand side of the dialog. These attributes cannot be edited. The attributes that appear in this section are derived from the attribute group specified by the Metadata Attributes parameter in the configuration.
5. To add a new data container, click the **Add** link in the bottom left-hand corner of the dialog.
6. Once finished, click **OK**.

Data Container Table View Editor

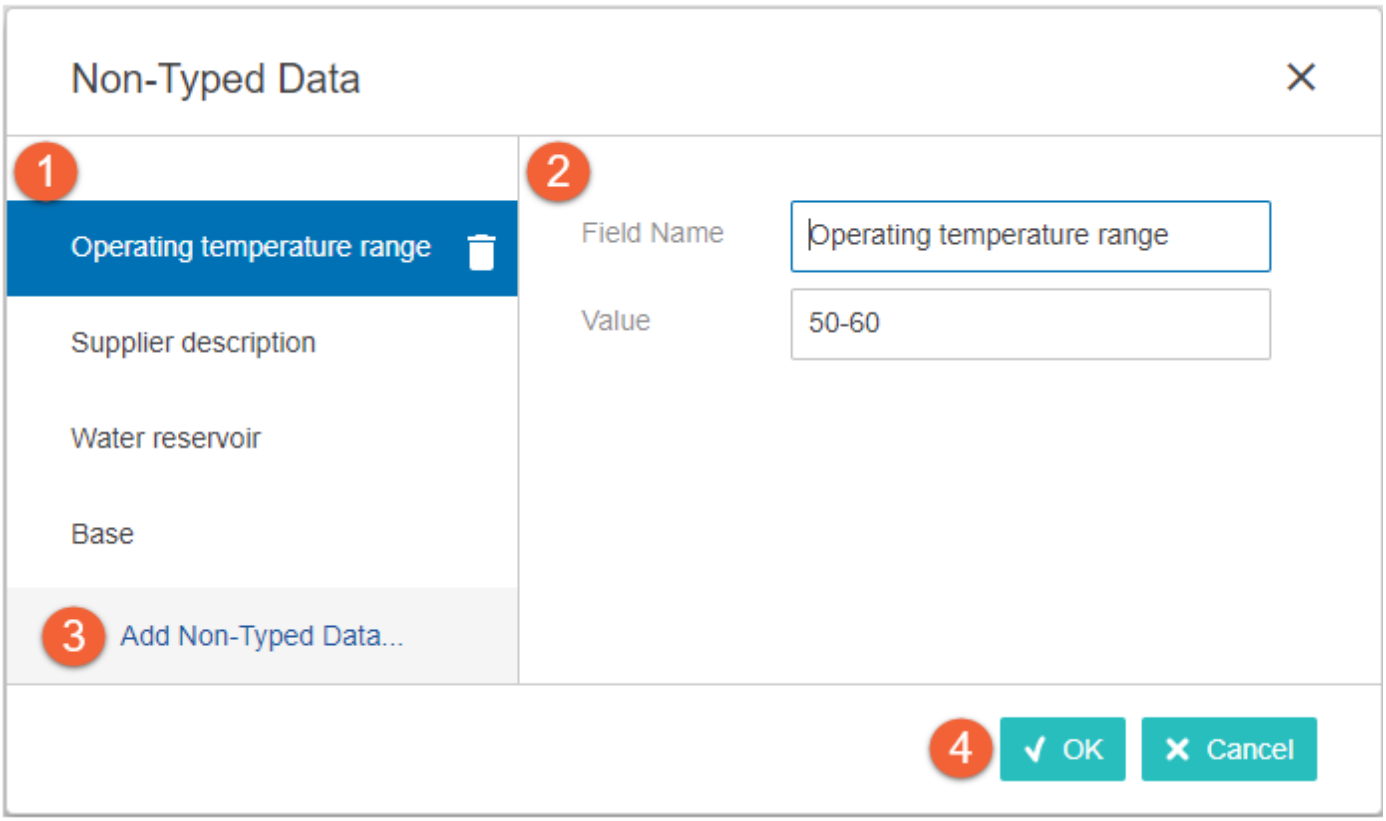
The **Data Container Table View Editor** component allows users to edit attribute values for data container attributes, and add / delete data containers on an entity object. Unlike the Data Container Attribute View Editor, these data containers appear as rows on a table.

The editor can be configured as a Node Editor child component, set up to display on a Tab Page within a Node Details screen. For information on configuring the Data Container Table View Editor, see the **Data Container Table View Editor** topic in the **Web User Interfaces** documentation.

To edit an existing data container, click on the relevant data container from the table. To add a new data container to the object, click the **Add** link below the table. Regardless as to how you choose to access the editor dialog, options to edit existing data containers and add new ones will be available.



The **Data Container Table View Editor** dialog is split into several different sections:



1. The data container selector on the left-hand side of the dialog displays all of the data containers of a specified type that are currently on the object. The specific data container type is defined in the component configuration.

The name of the data container is derived from the Display Attribute configured on the component, and is typically comprised of different attribute values that define the data container. Newly added data containers appear on this list and can be removed by clicking the 'trashcan' icon.

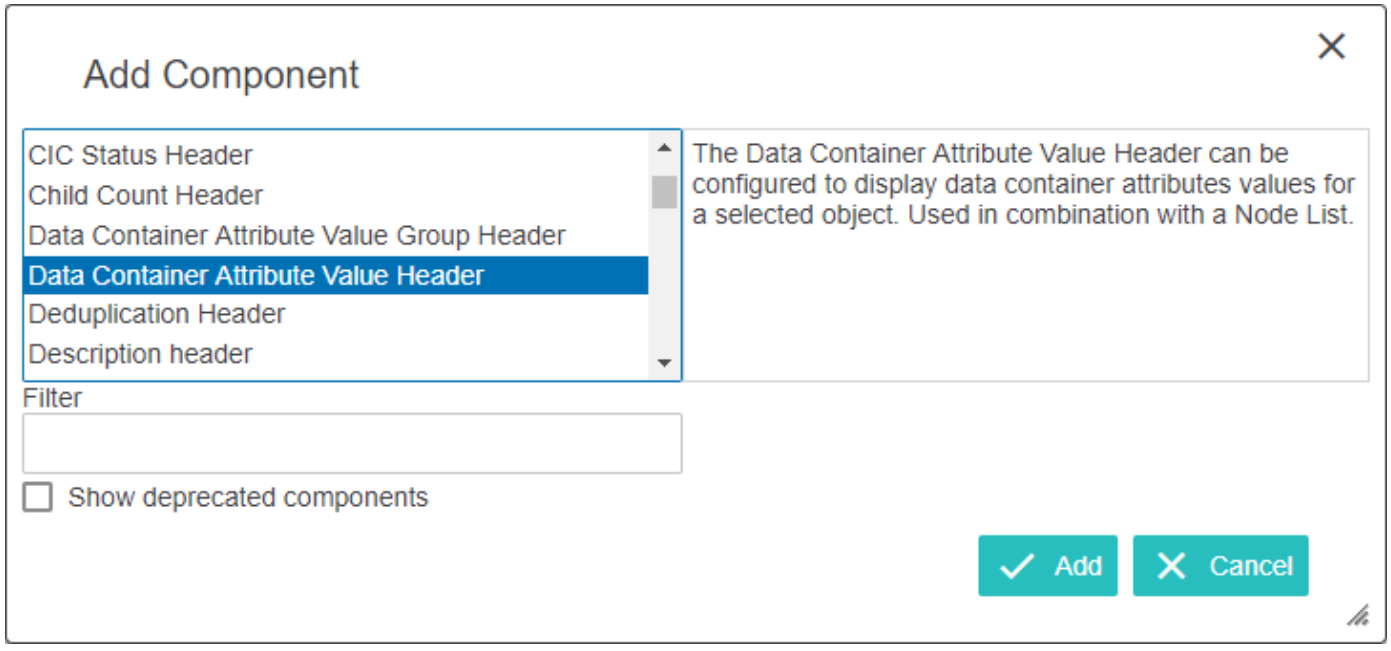
2. The selected data container's editable attributes are listed in the middle section of the dialog. Each attribute value can be edited in their respective fields. The attributes that appear in this section are derived from the attribute group specified by the Editable Attributes parameter in the configuration.
3. To add a new data container, click the **Add** link in the bottom left-hand corner of the dialog.
4. Once finished, click **OK**.

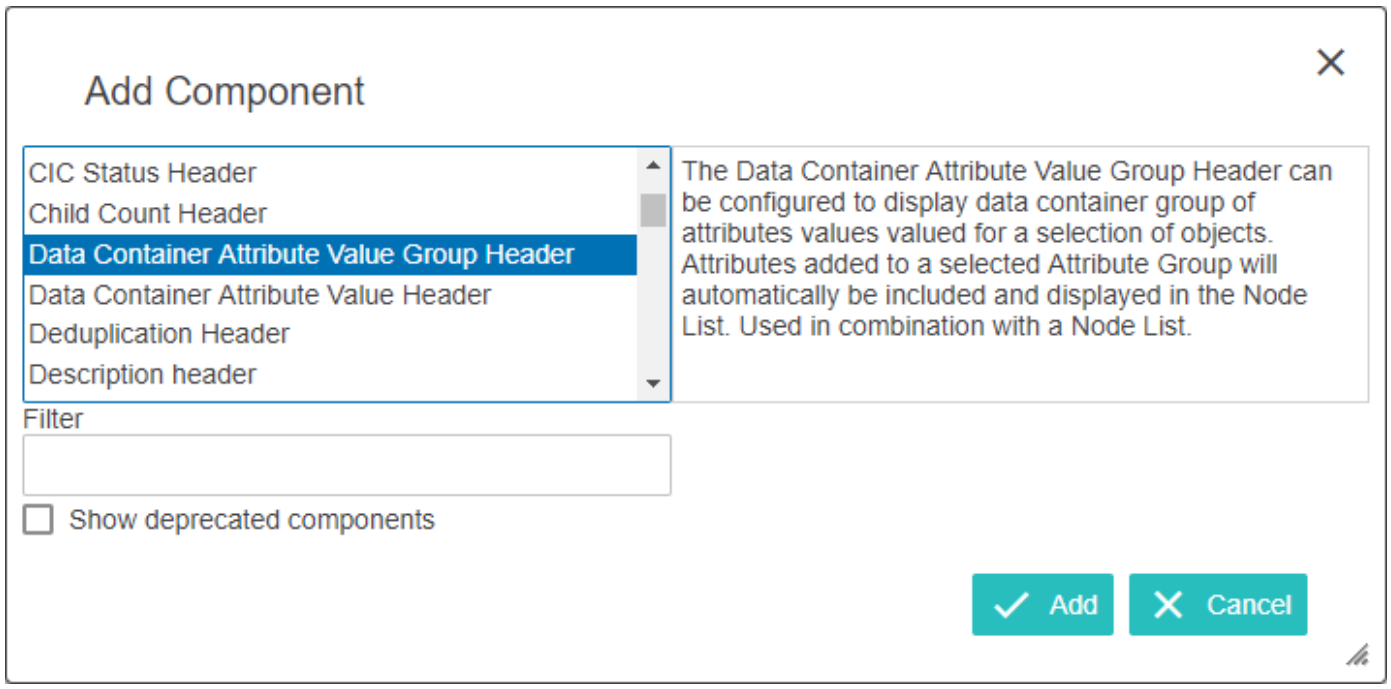
Additional Web UI Functionality

There are other areas of Web UI in which users can view data containers and their associated attributes as read-only. It is expected that working with objects that have data containers is like working with any other object, keeping in mind the functionality list and the limitations outlined in the **Data Containers** introduction in the **System Setup / Super User** documentation.

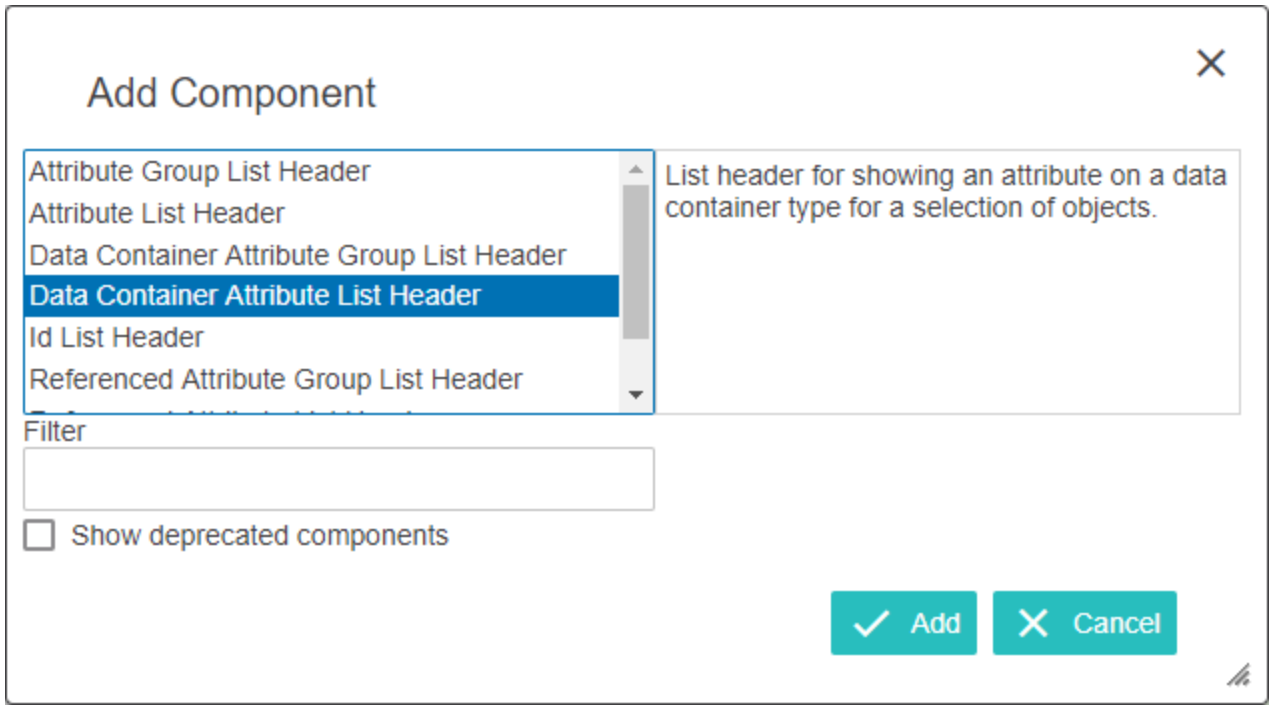
Depending on the screen / component you are working with, there are Data Container components that can be used when you look at entities in various situations. Additional functionality may be described in greater detail in relevant topics and the bullets below do not represent an all-inclusive list nor do they show end-user functionality.

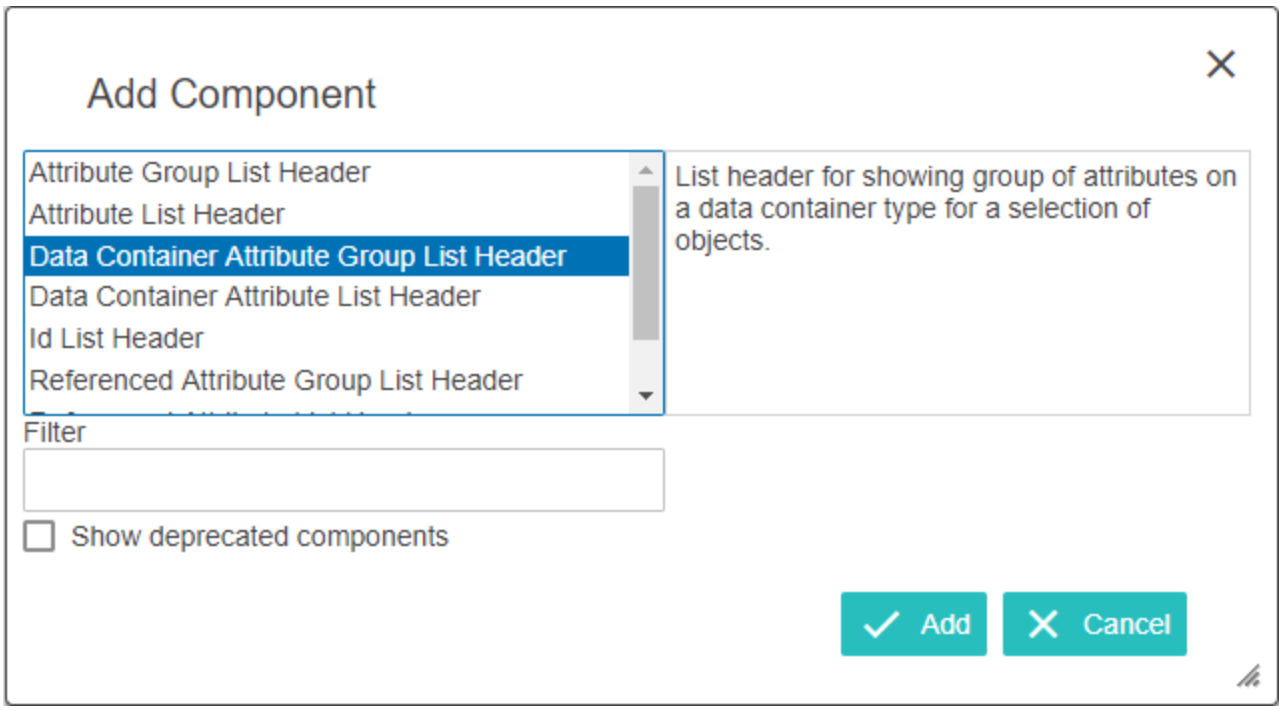
- Data Container Value Header and Data Container Value Group Header (to be used within a Node List in Multi Edit or Table display modes; read only)





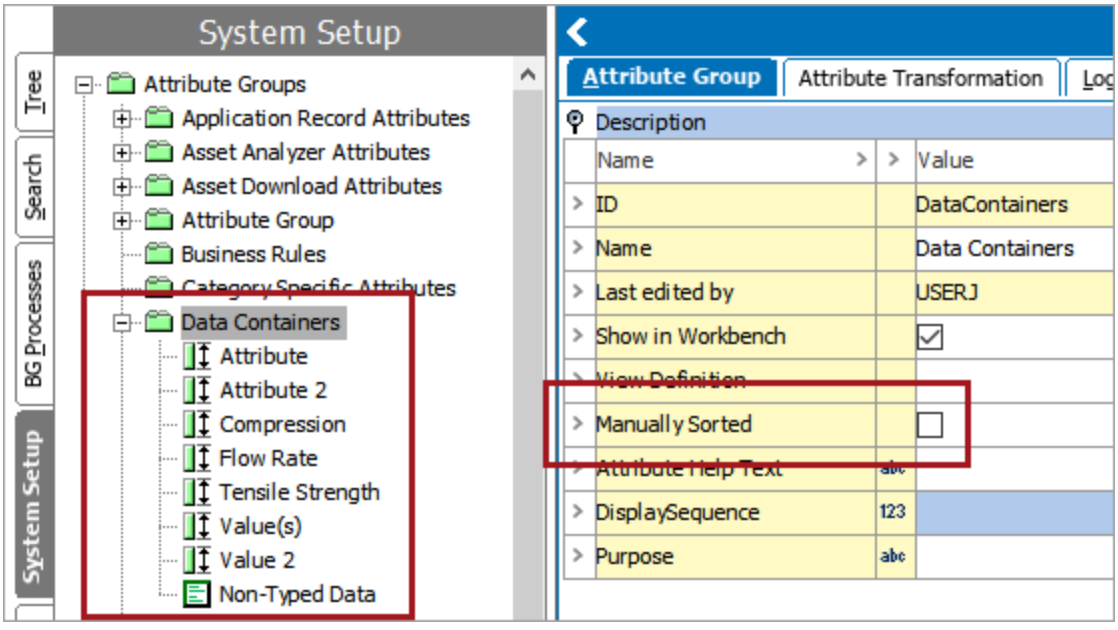
- Data Container Attribute List Header and Data Container Attribute Group List Header (to be used within a Dialog List Screen used to display a list of results for template selection and finding similar objects using Find Similar / Find Existing actions).



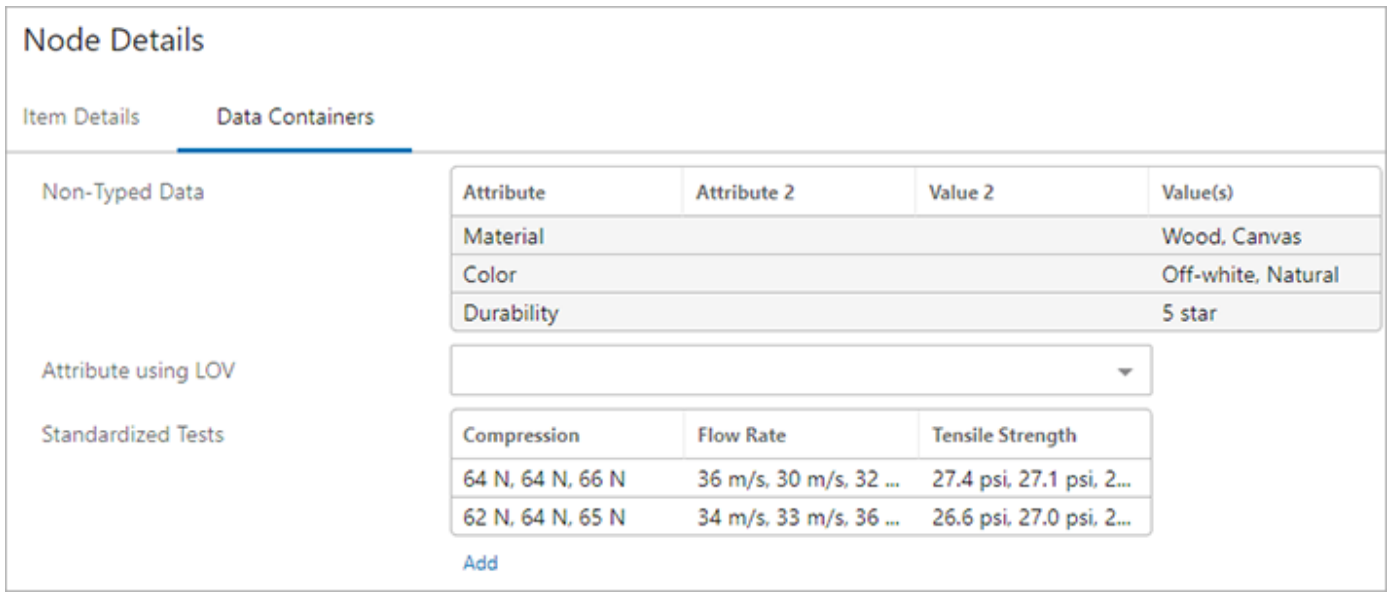


See the **Web User Interfaces** documentation for more information regarding how to configure and use Web UI screens and components.

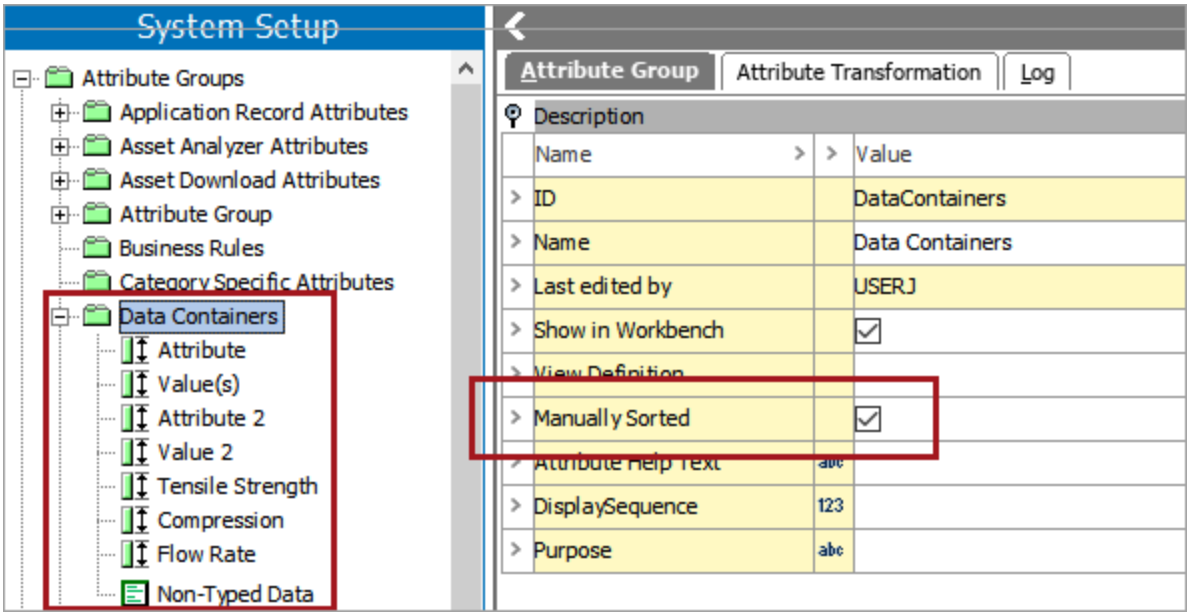
It is possible to change the visual sorting order of the attributes in the Data Container in Web UI. From the STEP Workbench, navigate to the parent folder of the data container with the associated attributes. Notice in the following image that the attributes are listed alphabetically because the 'Manually Sorted' option is unchecked.



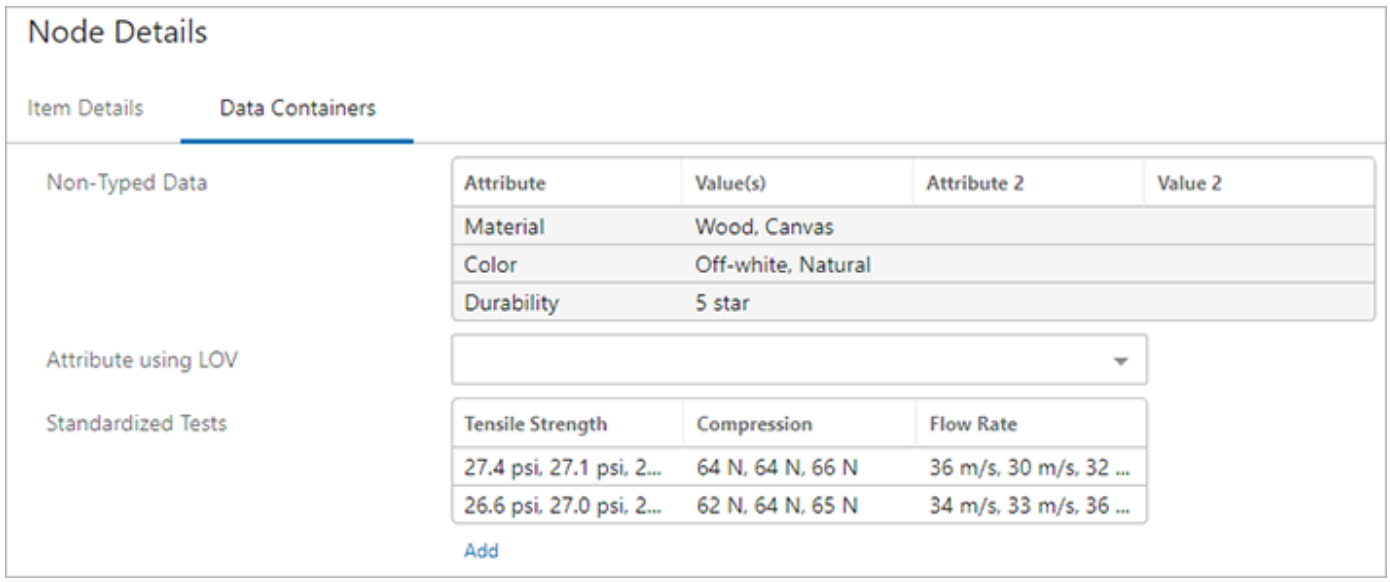
In Web UI, the Data Container for this object shows the attributes in this alphabetical order.



Once the 'Manually Sorted' option is selected and the attributes are rearranged in the desired order, the results will appear like so in the workbench.



In Web UI, the order mimics how it was set in Web UI.



Note: This changing of order only affects the order in Web UI. The alphabetical order is maintained no matter what is done in the workbench.

Data Container Attribute View Editor

The Data Container Attribute View Editor component can be used to display and edit data container attribute values, and add / remove data containers in Web UI. For details regarding how the editor is used, see the **Data Containers in Web UI** topic.

Note: This component is optimized for customer data such as addresses, emails, and phone numbers. It can only be used for entity objects.

Prerequisites

It is expected that anyone configuring the Data Container Attribute View Editor component is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Also, before adding the Data Container Attribute View Editor component, it is expected that Data Containers and their associated attributes are already set up. For details, see **Setting Up Data Container Types in Workbench** in the **System Setup / Super User Guide** documentation.

Adding a Data Container Attribute View Editor

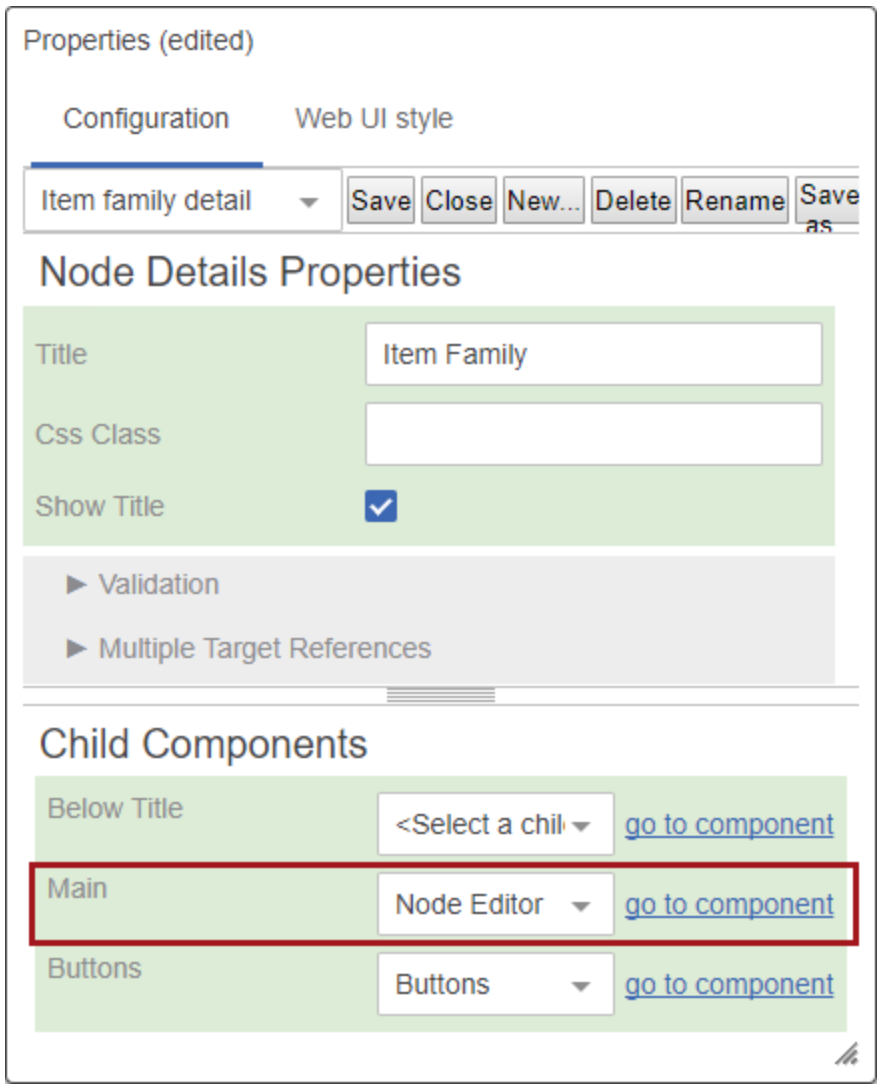
The Data Container Attribute View Editor component must be created on a Node Details screen type, and more specifically, on a Node Editor child component. The first step in configuring this component is to select an existing Node Details screen to add the component to or to create a new screen.

Steps for creating a new Node Details screen are outlined in the adding a new **Node Details Screen** topic in the **Web User Interface** documentation.

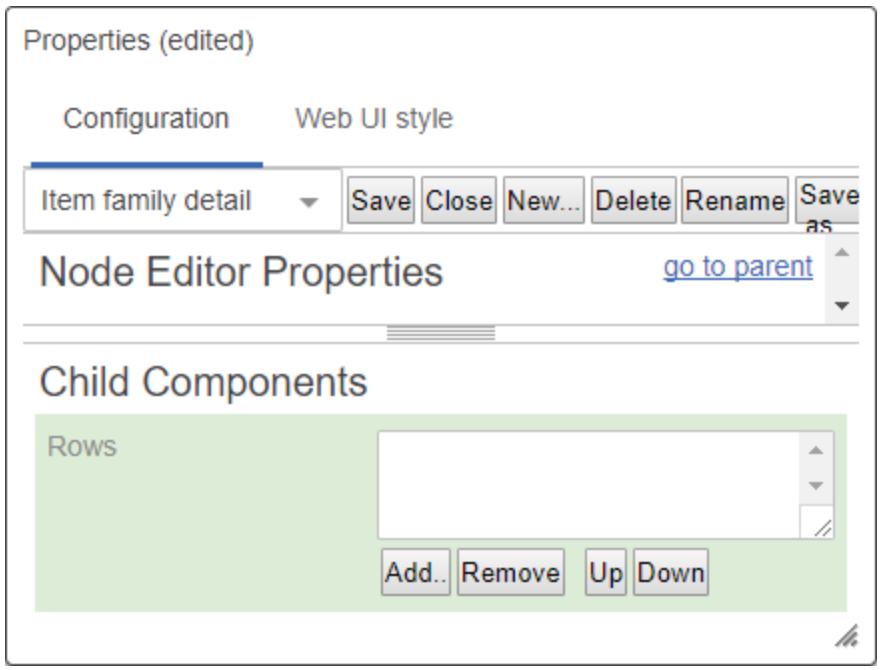
Additionally, the Save action button should be added to the Node Details screen so that users may save any changes they make to the data containers and attribute values.

Data Container Attribute View Editor can display both single-valued and multi-valued data container types in a similar manner to how attribute values are displayed.

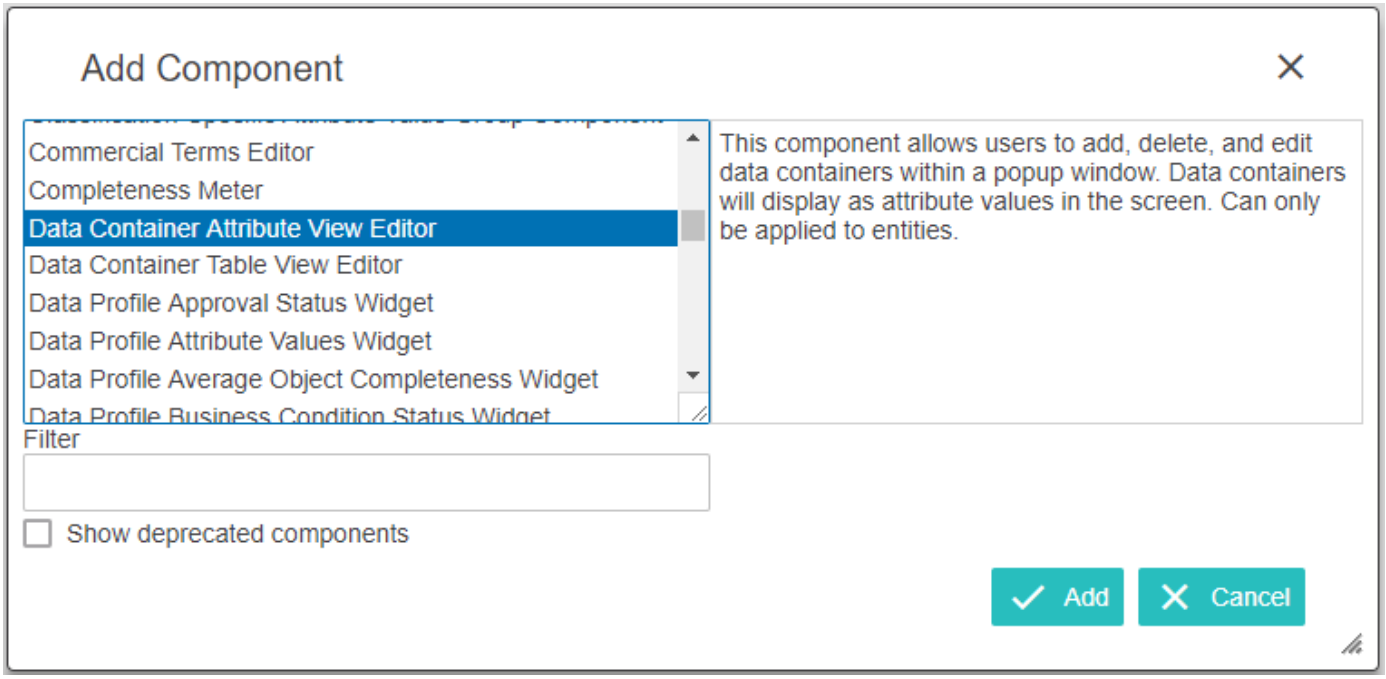
1. Once set up, navigate to the applicable Node Editor > **go to component**.



2. In Child Components > Rows, click Add.



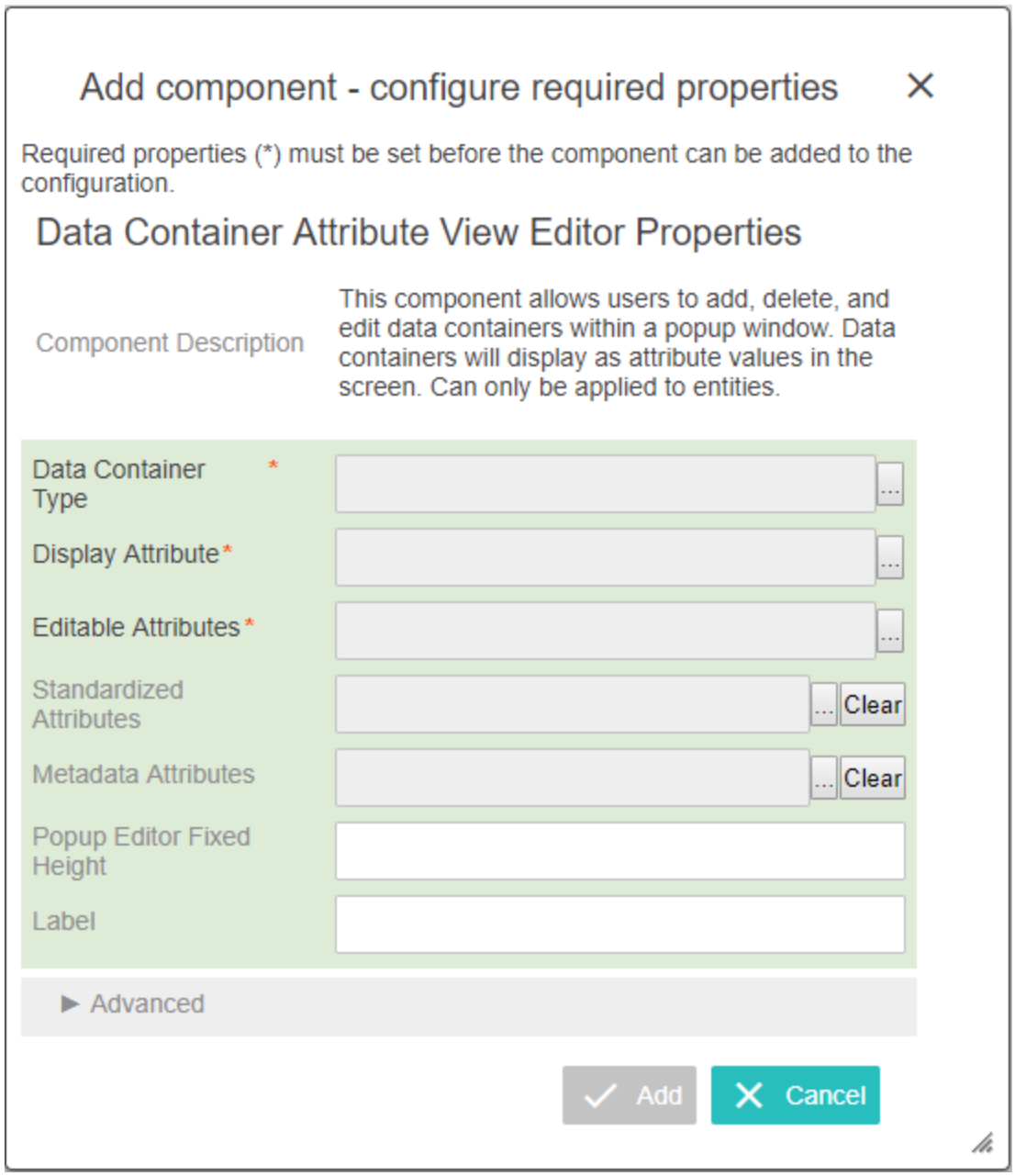
3. Select **Data Container Attribute View Editor** from the Add Component dialog and click **Add**.



Data Container Attribute View Editor Properties Dialog opens and prompts the user to enter mandatory information.

Configuring the Data Container Attribute View Editor

1. In Node Editor Properties > Child Components > Rows, double click on the Data Container Attribute View Editor.



2. For the Data Container Type parameter, click the ellipsis button (...) and browse or search for the relevant data container type to display attributes from.

Note: The selected data container type must be configured with an Auto ID pattern.

3. For the Display Attribute parameter, click the ellipsis button (...) and browse or search for the relevant calculated attribute to display data containers listed in the editor. This calculated attribute should convey the most important details for differentiating the individual data containers.

   For more information on calculated attributes, see the **Calculated Attributes** section of the **System Setup / Super User Guide** documentation.

   When used to display address data, it is recommended to use a formatted address attribute. For more information, see the **Address Formatting Functions** section of the **Resource Materials** online help.

Note: It is not recommended to use LOVs that are configured to allow users to add values for this calculated attribute.

4. For the Editable Attributes parameter, click the ellipsis button (...) and browse or search for the attribute group that contains attributes whose values should be editable.

Note: Multi-valued attributes that are configured in this parameter cannot be edited.

5. For the Standardized Attributes parameter, click the ellipsis button (...) and browse or search for a relevant attribute group that displays standardized values for data containers listed in the editor.

   See the **Data Containers in Web UI** topic.

6. For the Metadata Attributes parameter, click the ellipsis button (...) and browse or search for a relevant attribute group that displays meta values for data containers listed in the editor.

   This parameter is relevant for a data model where, for example, emails are modeled with data containers that contain attributes for storing the validation status received from third-party validation services.

7. For controlling the height of the popup editor dialog, enter the required value (numeric) in Popup Editor Fixed Height.
8. For the Label parameter, specify a label for the header.
9. For the Display Value History parameter under **Advanced**, check the box if attribute value history should be displayed.

Note that the Data Container Attribute View Editor can also be used during the clerical review step of the Match and Merge process in order to edit data containers that appear within Advanced Merge Data Container header component of the Advanced Merge Dialog. For more information on the Golden Record Advanced Merge dialog, see the **Golden Record Advanced Merge Dialog** section of the **Web User Interfaces** documentation.

Data Container Table View Editor

The Data Container Table View Editor component can be used to display data container attribute values in a table view on a Node Details screen. It can also be used to edit data container attributes, and add / remove data containers. For details regarding how the editor is used, see the **Data Containers in Web UI** topic.

Prerequisites

It is expected that anyone configuring the Data Container Table View Editor component is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Also, before adding the Data Container Table View Editor component, it is expected that Data Containers and their associated attributes are already set up. For details, see **Setting Up Data Container Types in Workbench** in the **System Setup / Super User Guide** documentation.

Adding a Data Container Table View Editor

The Data Container Table View Editor component must be created on a Node Details screen type, and more specifically, on a Node Editor child component. The first step in configuring this component is to select an existing Node Details screen to add the component to or to create a new screen.

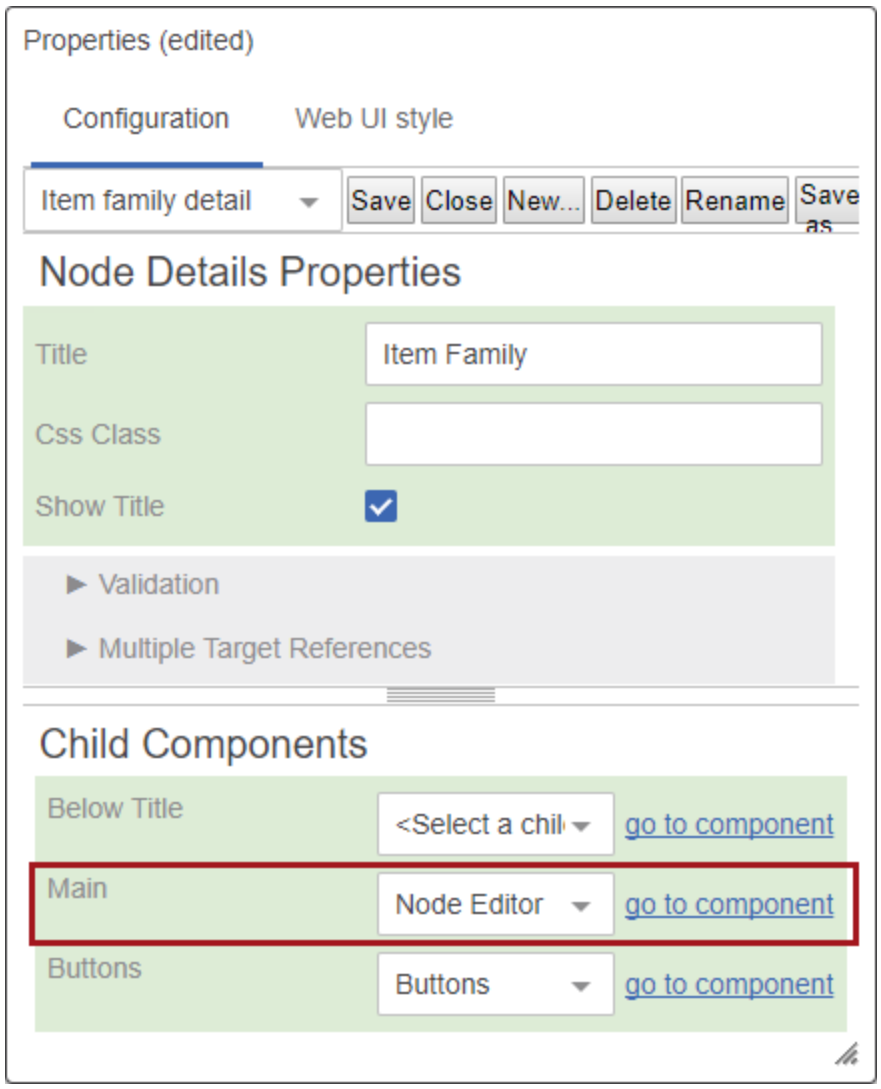
Note: This component can be used for product and entity objects.

Steps for creating a new Node Details screen are outlined in the adding a new **Node Details Screen** section of the **Web User Interfaces** documentation.

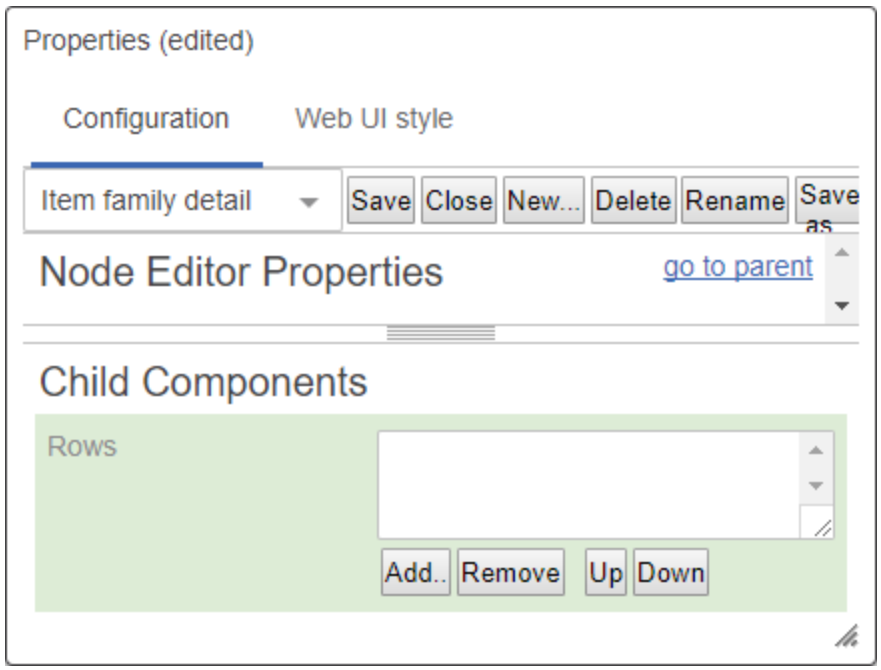
Additionally, the Save action button should be added to the Node Details screen so that users may save any changes they make to the data containers and attribute values.

Data Container Table View Editor can display both single-valued and multi-valued data container types in a similar manner to how attribute values are displayed.

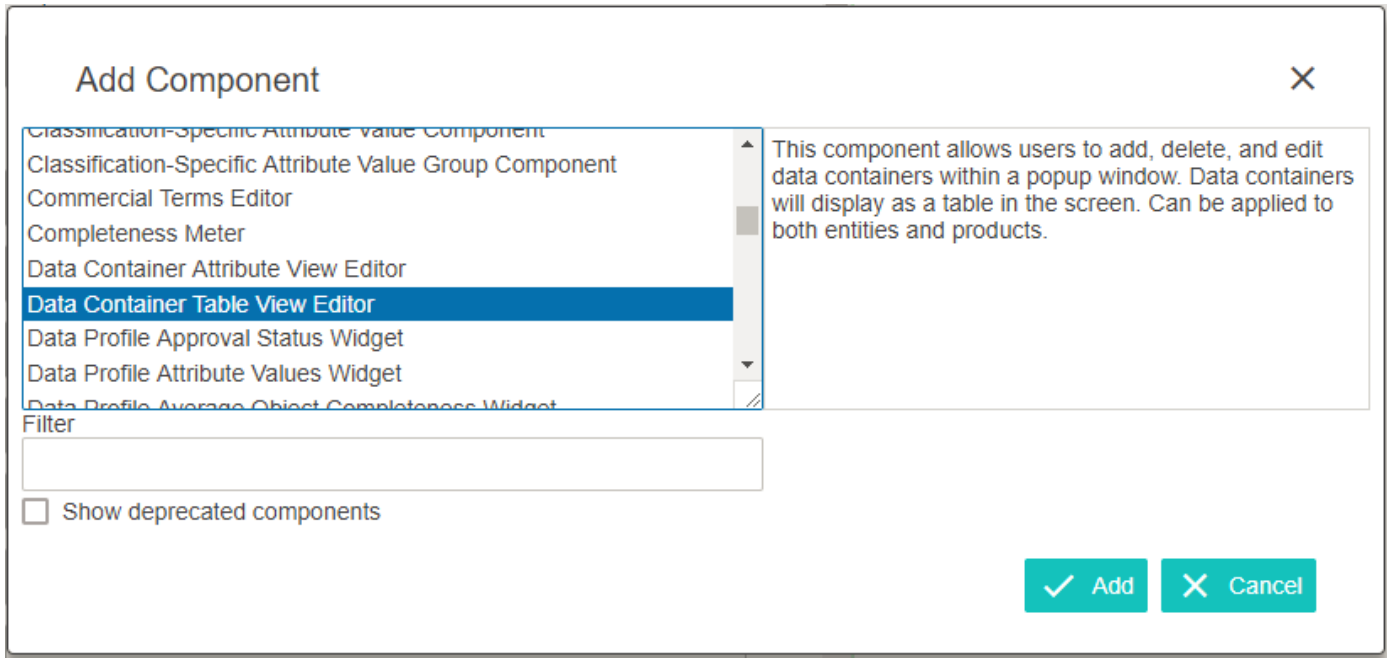
1. Once set up, navigate to the applicable Node Editor > **go to component**.



2. In Child Components > Rows, click Add.



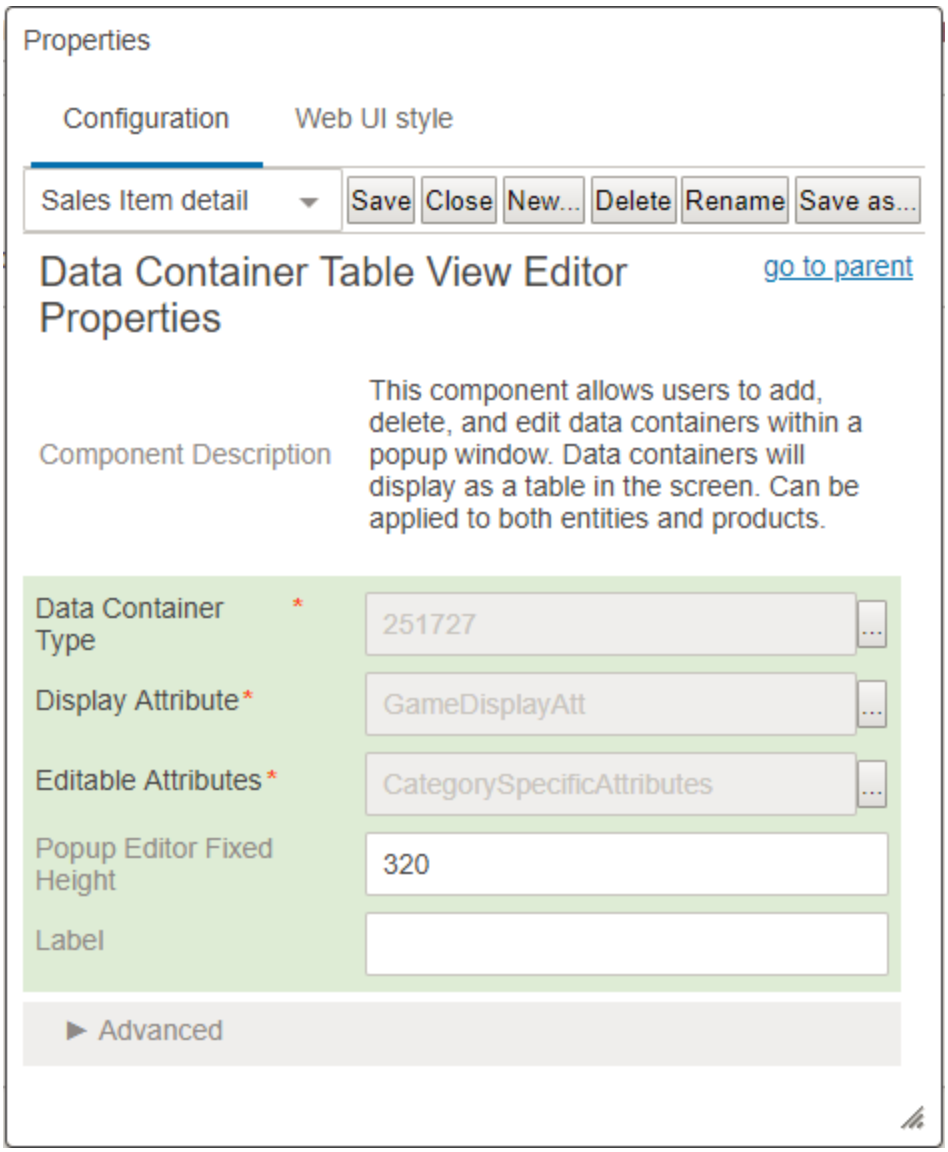
3. Select **Data Container Table View Editor** from the Add Component dialog and click **Add**.



Data Container Table View Editor Properties Dialog opens and prompts the user to enter mandatory information.

Configuring the Data Container Table View Editor

1. In Node Editor Properties > Child Components > Rows, double click on the Data Container Table View Editor.



2. For the Data Container Type parameter, click the ellipsis button (...) and browse or search for the relevant data container type to display attributes from.

Note: The selected data container type must be configured with an Auto ID pattern.

3. For the Display Attribute parameter, click the ellipsis button (...) and browse or search for the relevant calculated attribute to display data containers listed in the editor. This calculated attribute should convey the most important details for differentiating the individual data containers.

   For more information on calculated attributes, see the **Calculated Attributes** section of the **System Setup / Super User Guide** documentation.

Note: It is not recommended to use LOVs that are configured to allow users to add values for this calculated attribute.

4. For the Editable Attributes parameter, click the ellipsis button (...) and browse or search for the attribute group that contains attributes whose values should be editable or displayed (if read-only).

Note: Multi-valued attributes that are configured in this parameter cannot be edited.

5. For controlling the height of the popup editor dialog, enter the required value (numeric) in Popup Editor Fixed Height.
6. For the Label parameter, specify a label for the header.
7. For the Display Value History parameter under **Advanced**, check the box if attribute value history should be displayed.
8. Enable **Read Only** if the data container should be viewable but users should not make any edits.

Data Exchange in Web UI

Data import and export components, actions, and options are available in Web UI. See the following topics for a starting point for importing to and export from Web UI.

Import

- Action Buttons
- Asset Importer Widget
- Simple Importer Widget
- Smartsheet Import Action

Export

- Action Buttons
- Exporting Web UI Definitions as Comments
- Simple Export
- Smartsheet Export Action
- Smartsheet Export Widget
- Smartsheet Export Action

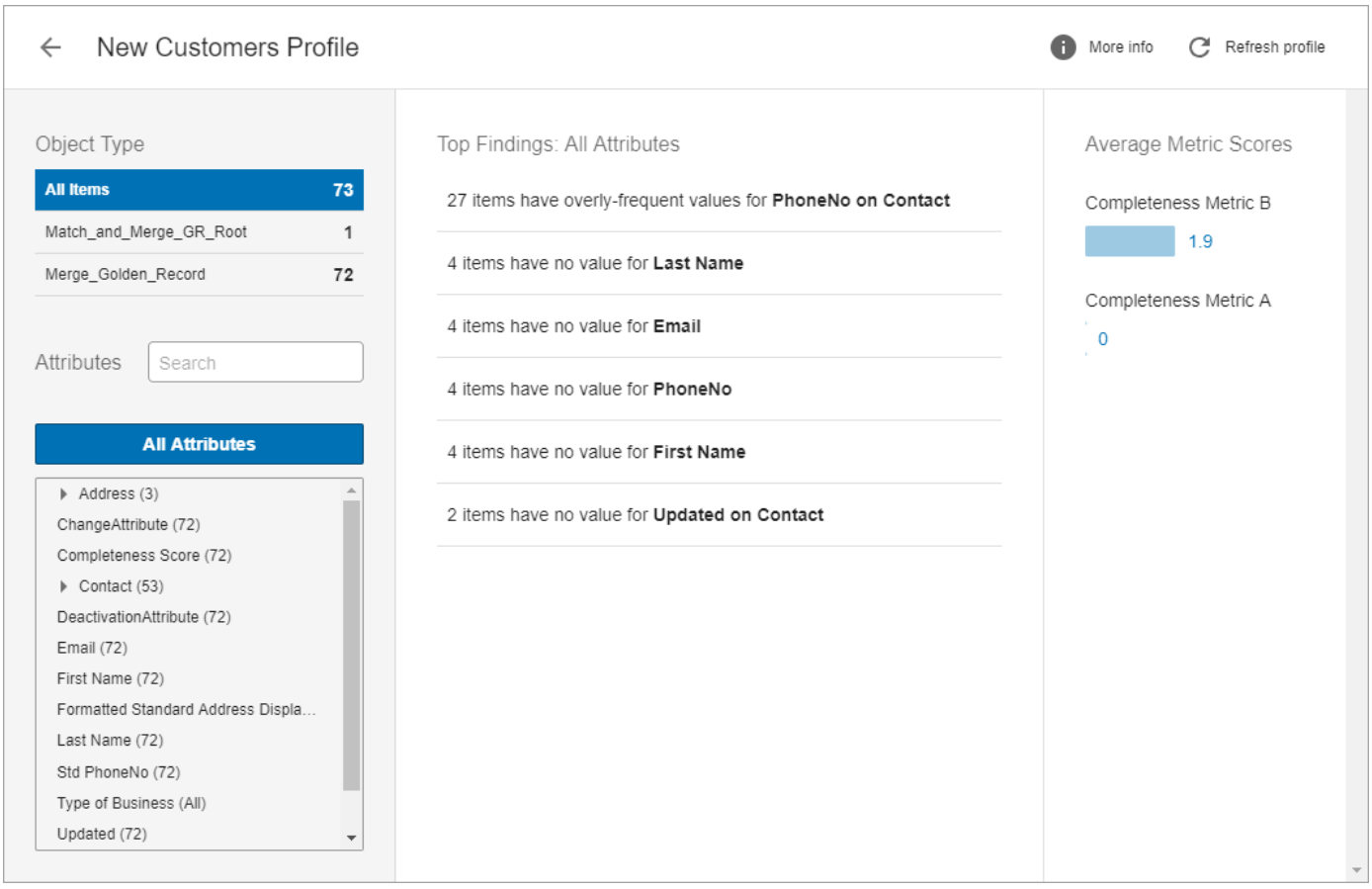
Data Profile Screen

The Data Profile screen allows users to view entity and collection data profiles. Much of the same functionality found in the workbench is also accessible from this screen.

Key features include:

- Top profile findings (unique to this screen)
- Filtering by object type, attribute, and data container
- Attribute data analytics

Note: This screen is only accessible for entities / collections that have already been profiled.



Prerequisites

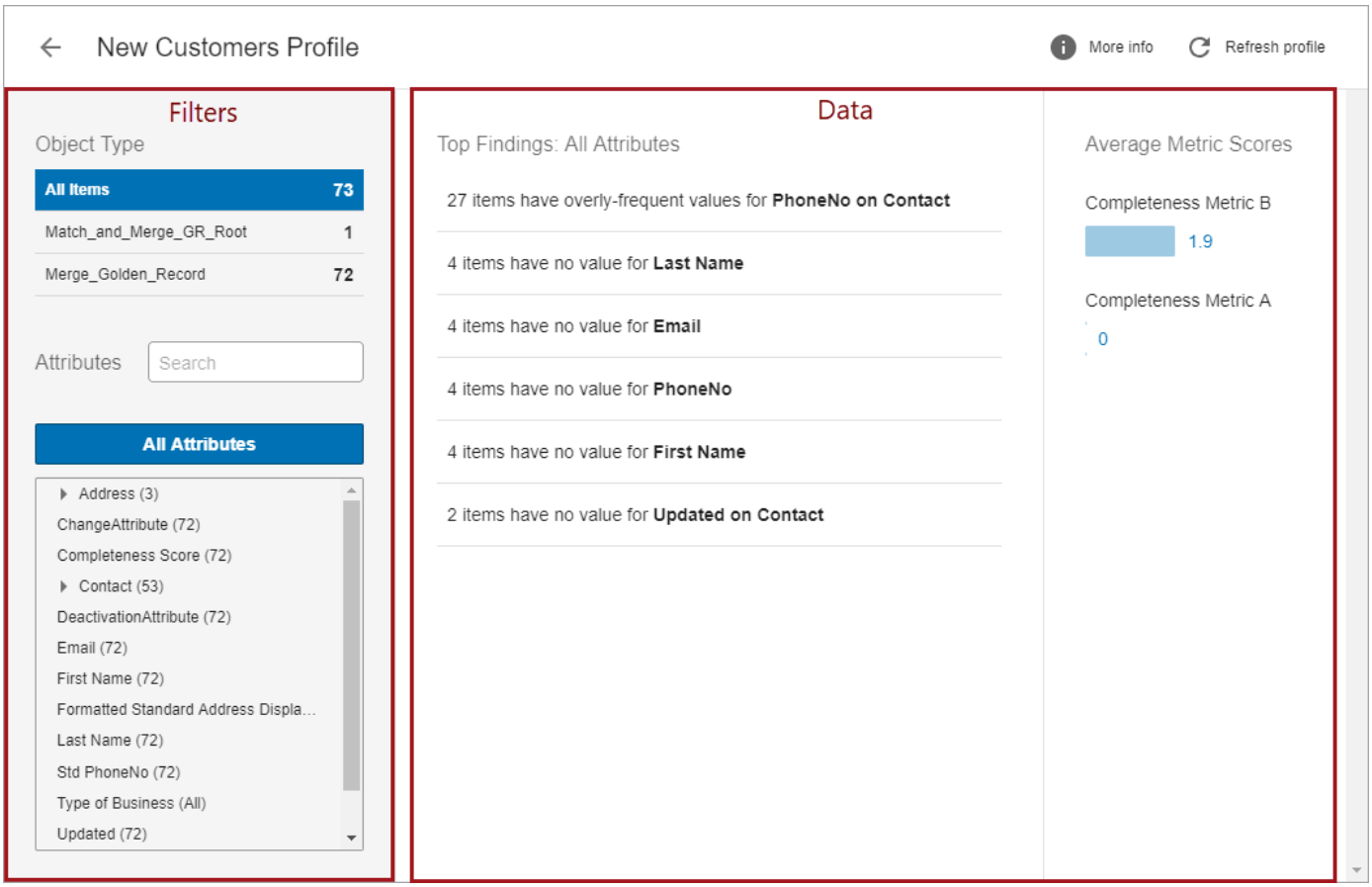
It is expected that anyone configuring the Data Profiling screen is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

For more information on configuring the Web UI to handle data profiling, see the **Data Profiling in Web UI** section of the **Data Profiling** documentation.

Note: No configuration is required for this component, specifically.

Navigating the Data Profile Screen

The Data Profile screen provides a dynamic view of the data that transforms based on what filters have been applied. The filters on the left-hand side of the screen remain constant and any selections made there impact what data appears on the right-hand side of the screen:



How to use these filters and how they impact the data displayed is detailed below.

Filter by Object Type

The Object Type filter can be used to view data for specific object types in a collection. Though the actual data displayed on the right-hand side of the screen changes to reflect the applied filter, the actual format of the screen remains unchanged.

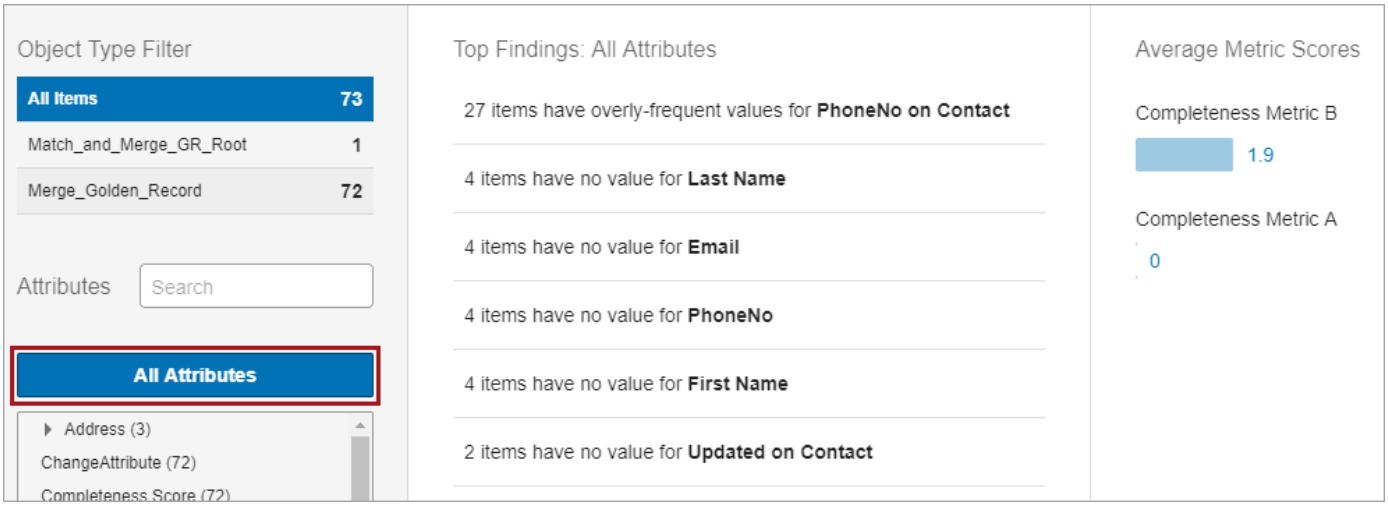
For example, in the image below 'All Items' has been selected, and no object type filter is applied. The Top Findings section in the right-hand side of the screen represents the top findings for all object types included in the profile:

If a filter is applied to only display data for the 'Individual Customer' object type, the top findings presented on the right-hand side of the screen will only display the top findings relevant to objects of that type:

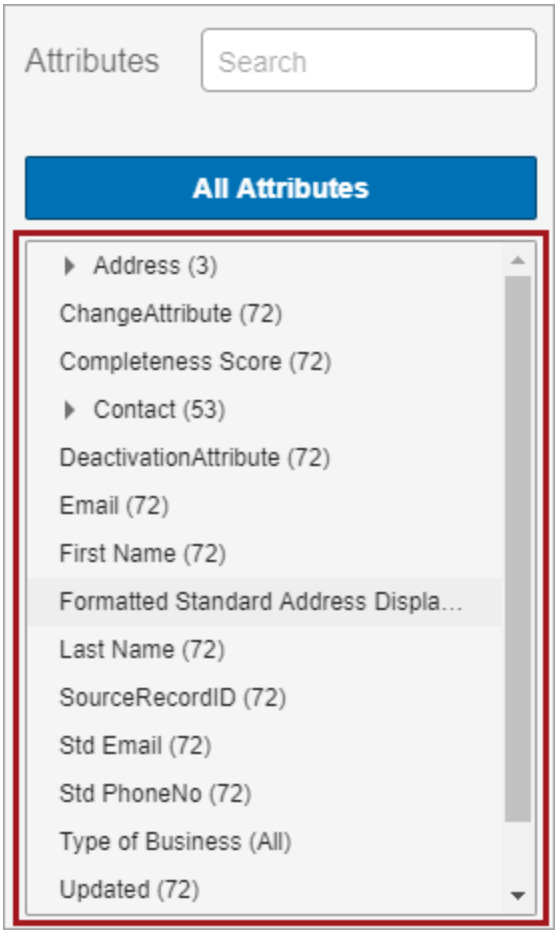
This principle also applies to other aspects of the data profile such as the Average Metric Scores and Attribute data widgets.

Filter by Attribute

The Attribute filter can be used to view data for specific attributes in the profile. By default, 'All Attributes' is selected, and the Top Findings and Average Metric Scores widgets display:

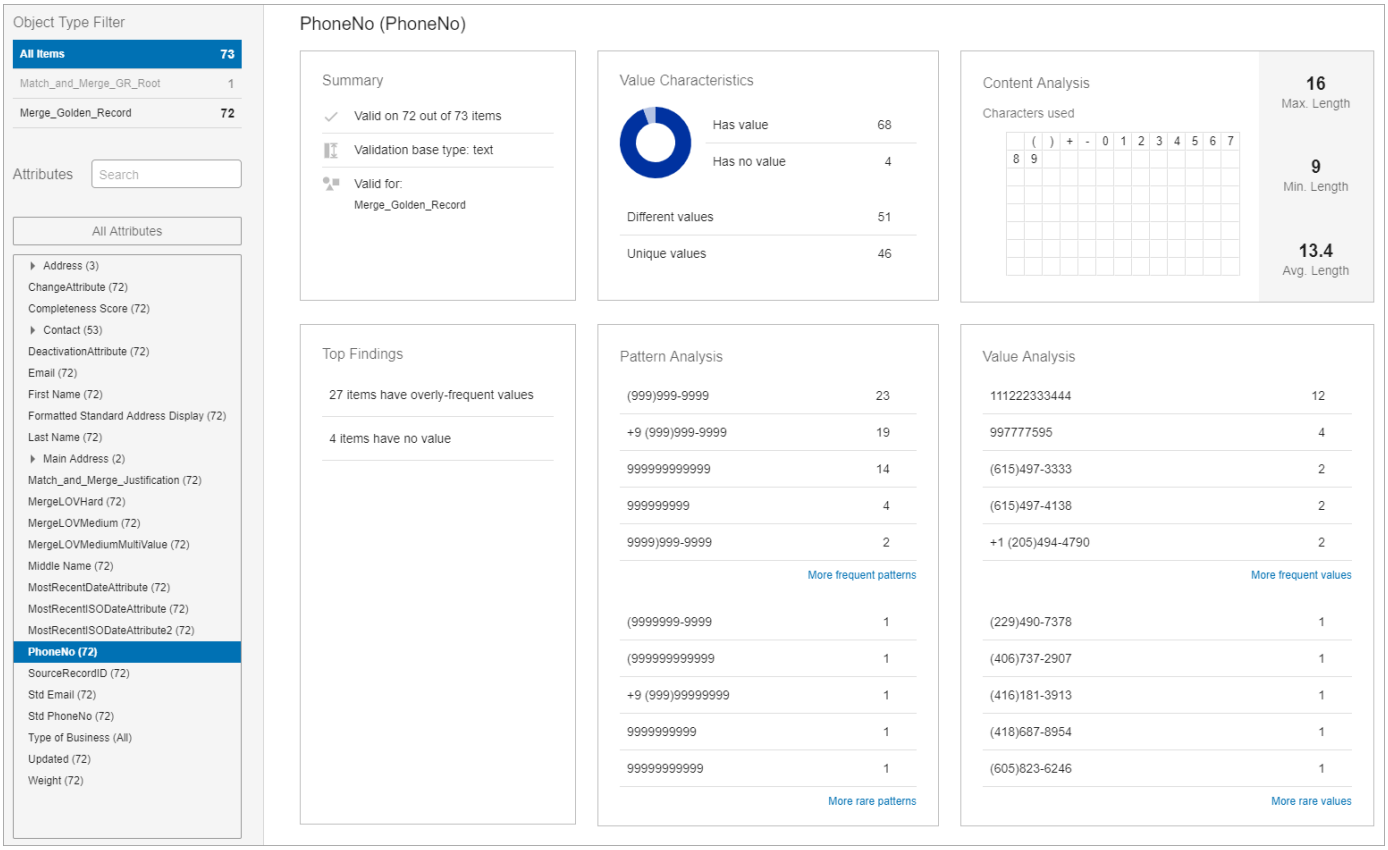


To apply an attribute filter, select an attribute / data container from the attribute list:



Note: The search bar can be used to filter what attributes are displayed in the list for easy selection.

When an attribute filter is applied, the right-hand side of the screen changes to display data relevant to the selected attribute. The Average Metric Scores widget is removed, and five other widgets join Top Findings on the screen:



These additional widgets include Summary, Value Characteristics, Content Analysis, Pattern Analysis, and Value Analysis. All these widgets are detailed in the **Data Widgets** section below.

Note: Applying a data container attribute filter will only display the Summary widget on the right-hand side of the screen.

Data Widgets

There are eight data widgets in all, but most only appear when an attribute filter is applied:

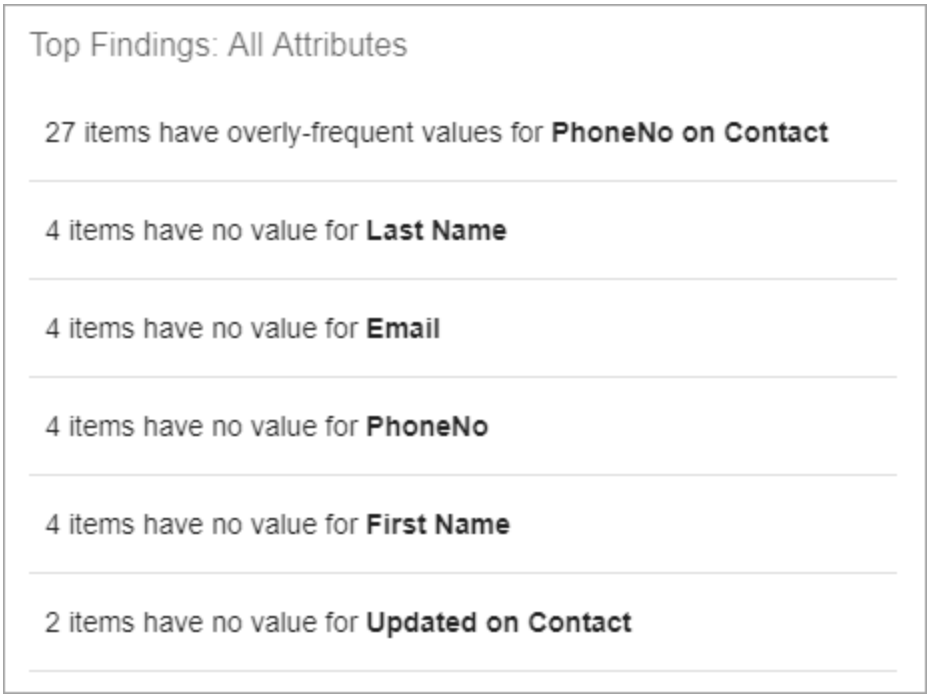
Attribute Filter	Data Widgets
All Attributes	• Top Findings • Average Metric Scores
Specific Attribute	• Summary • Value Characteristics

Attribute Filter	Data Widgets
	• Content Analysis • Top Findings • Pattern Analysis • Value Analysis
Specific Data Container	• Summary

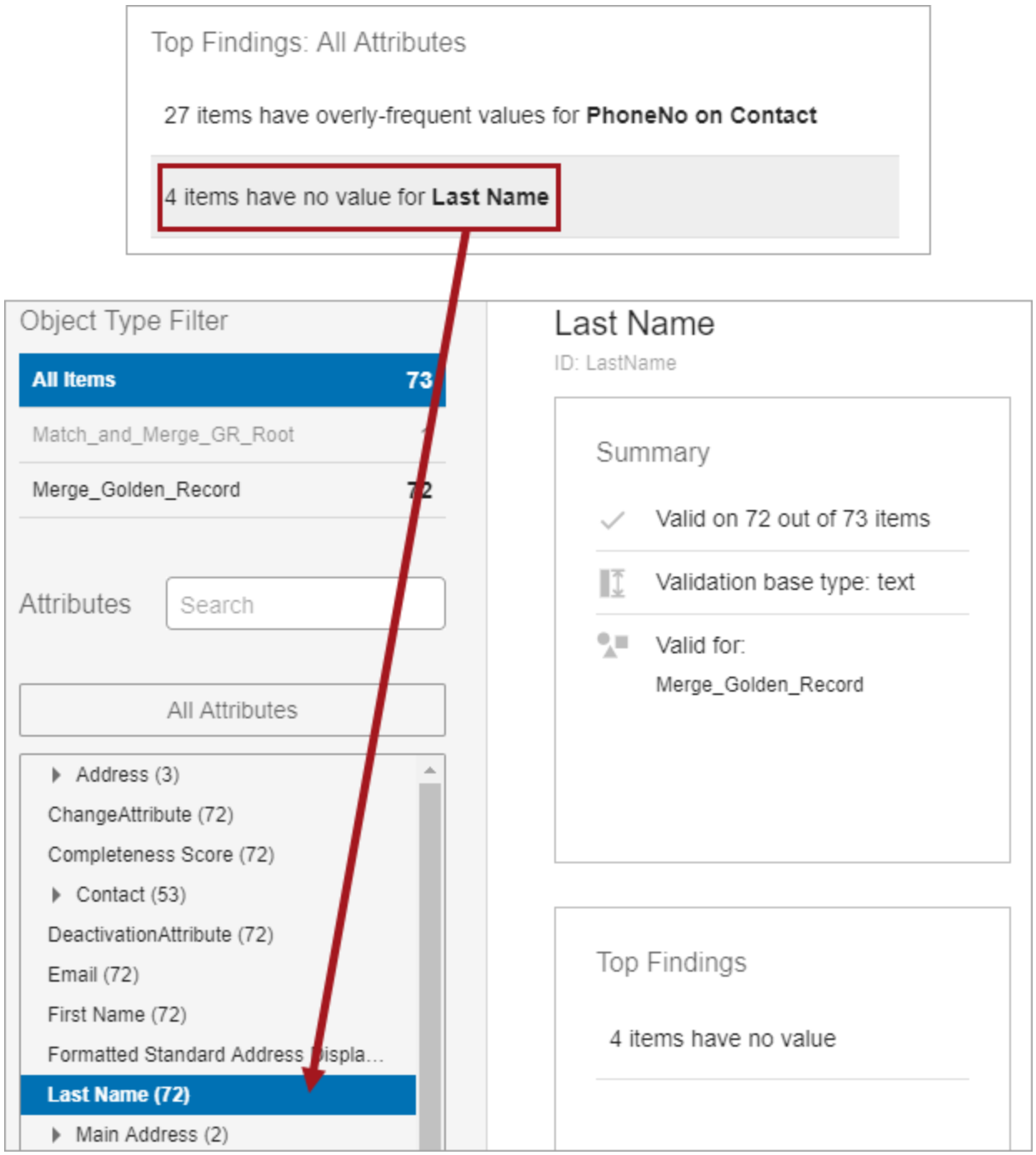
Top Findings

The Top Findings widget provides users with a list of outliers found in the data. These outliers may indicate issues with the data, but are not conclusive and require analysis by a data steward.

A full list of Top Findings for the entire profile can be viewed when the 'All Attributes' filter is applied.



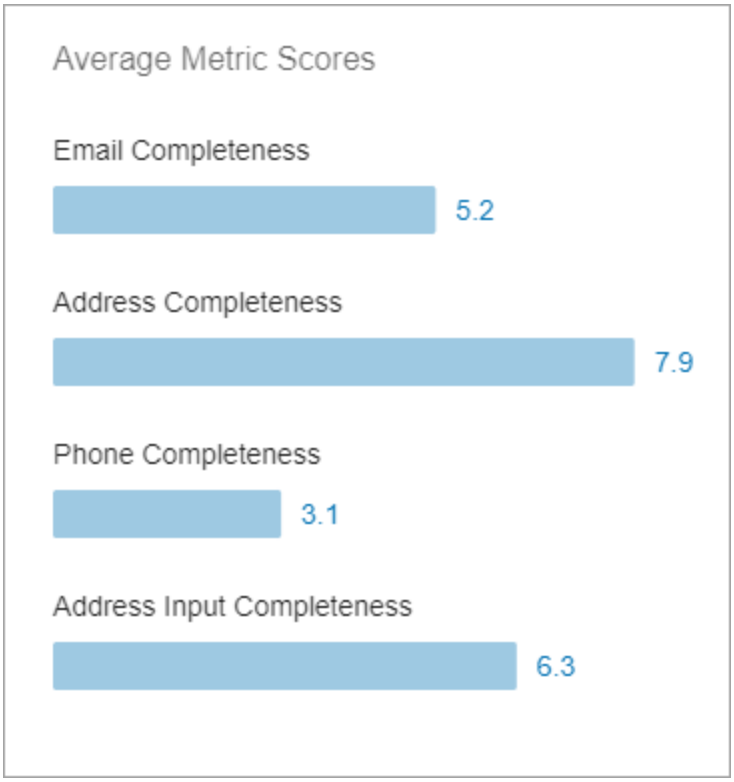
To investigate any particular finding from this list, click on it and the relevant attribute filter will be automatically applied.



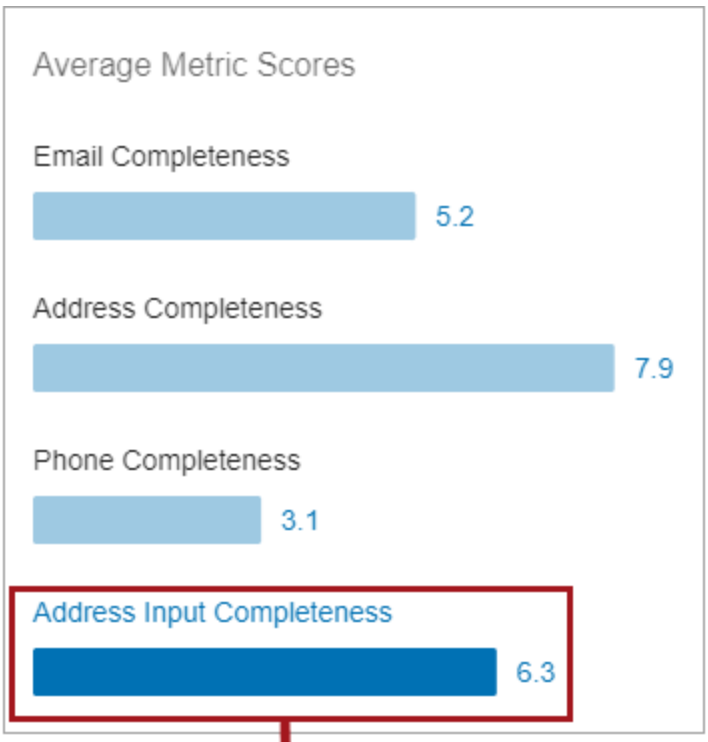
With the filter applied, the data steward can analyze the attribute data via the accompanying Attribute data widgets. Additionally, the Top Findings widget will now only display findings relevant to the attribute in question.

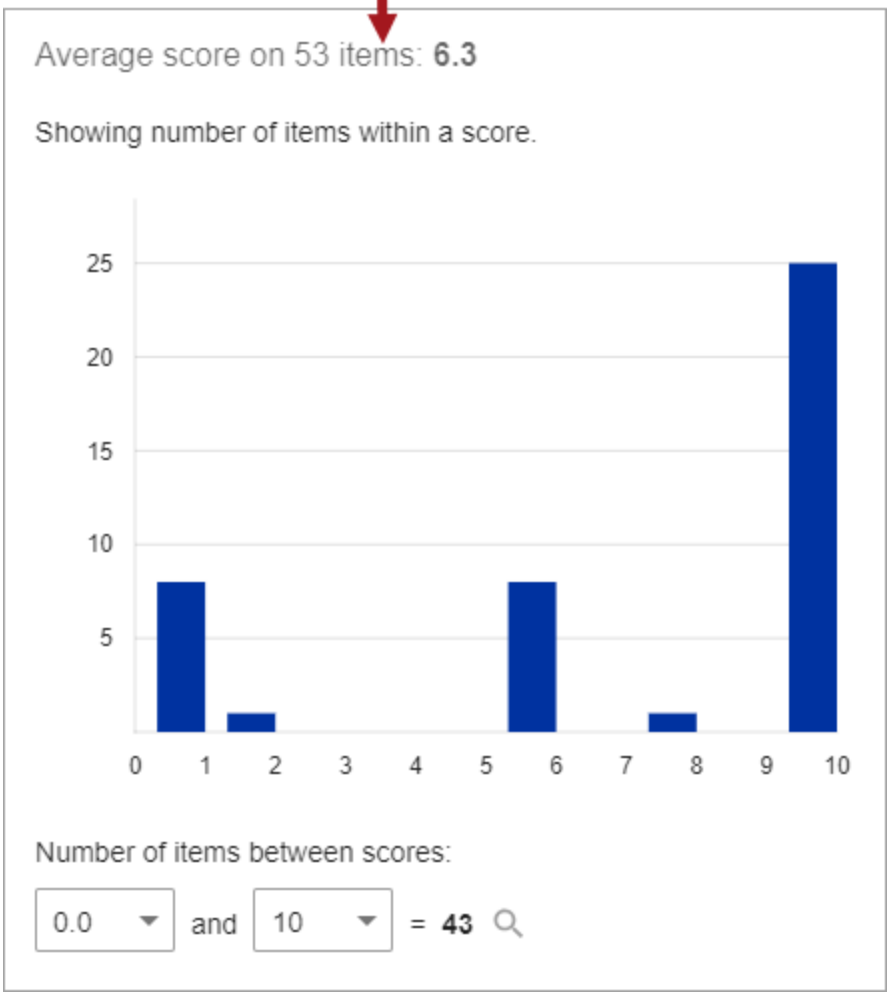
Average Metric Scores

The Average Metric Scores widget provides the average score of each metric applied to the data across the entire profile.



Clicking any particular metric will transform the widget to display a more granular view of the data specific to that metric.


Average Metric Scores
Email Completeness
5.2
Address Completeness
7.9
Phone Completeness
3.1
Address Input Completeness
6.3

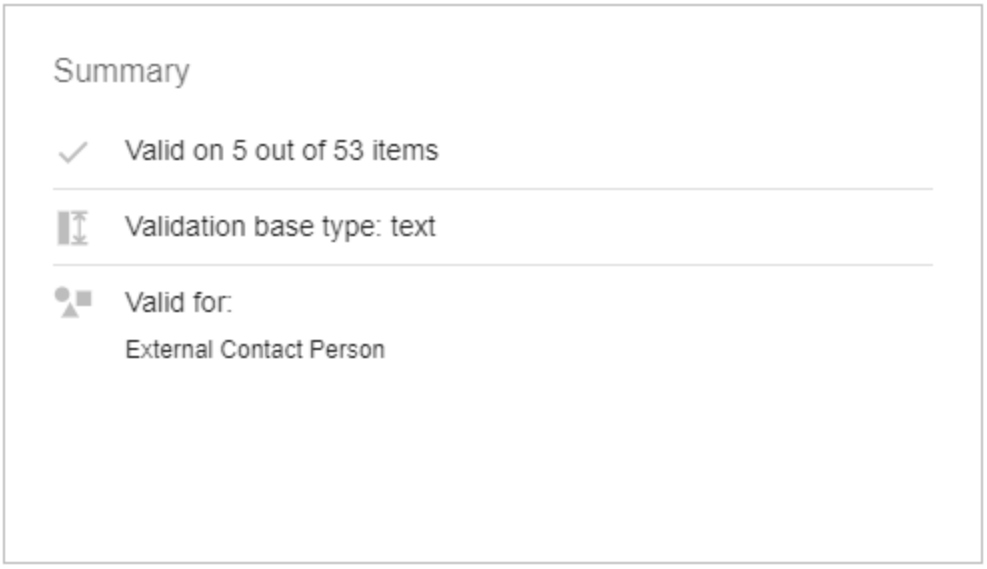

Average score on 53 items: 6.3
Showing number of items within a score.
25
20
15
10
5
0 1 2 3 4 5 6 7 8 9 10
Number of items between scores:
0.0
and
10
= 43

The **Number of items between scores** parameter can be used to see how many objects are scored within the designated range. This range can be changed via the dropdown, and once set, an advanced search can be run by clicking the magnifying glass icon ( ).

Summary

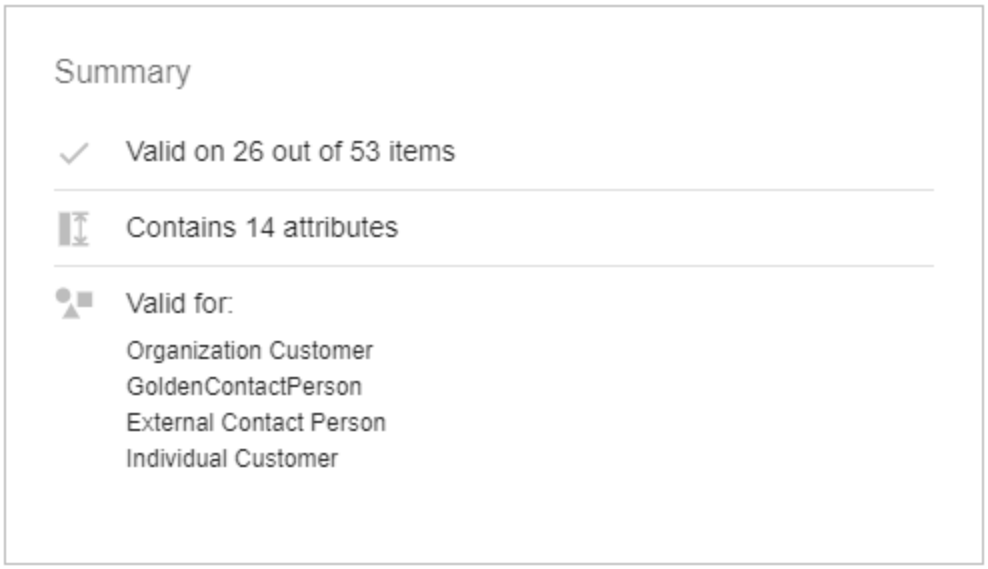
The Summary widget provides a brief overview of the attribute within the context of the data profile. Three particular data points are presented:

- The number of objects the attribute is valid on within the profile
- The validation base type of the attribute
- Which object types the attribute is valid for within the profile



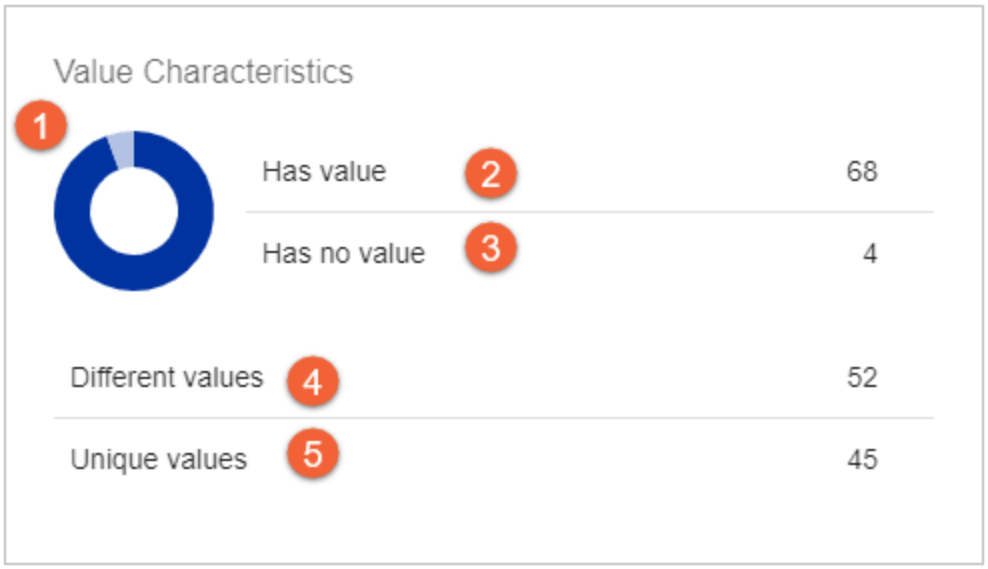
When viewing a data container, these data points vary slightly from those highlighted by an attribute:

- The number of objects the attribute is valid on within the profile
- The number of attributes contained within the data container
- Which object types the attribute is valid for within the profile



Value Characteristics

The Value Characteristics widget provides a breakdown of an attribute's values by how many objects have values for said attribute, and how many different and unique values exist, all within the context of the profile:

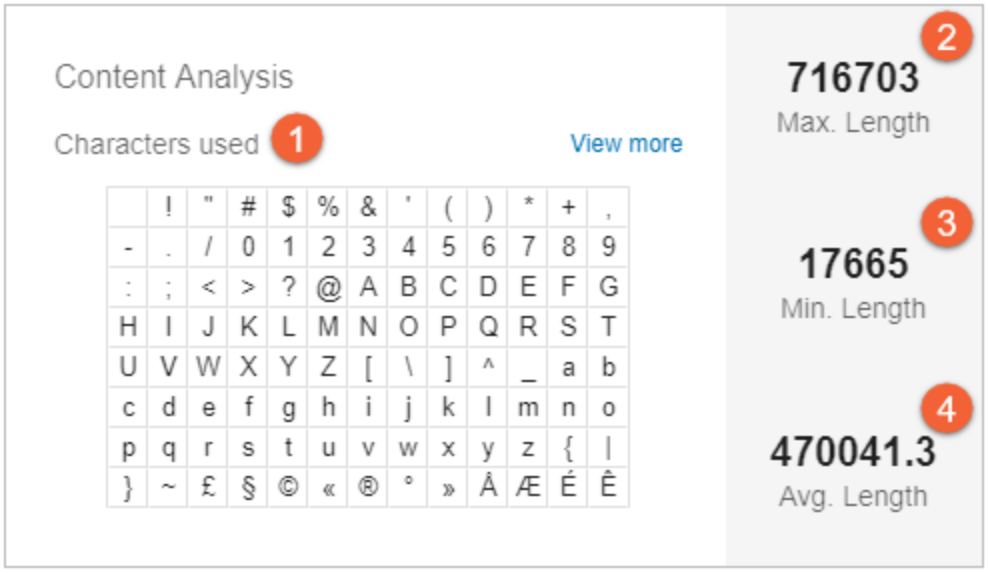


1. The graph illustrates how many objects have values for the attribute.
2. The **Has value** parameter indicates the number of objects that have a value for the attribute. Clicking on this parameter will execute an advanced search for the relevant objects.
3. The **Has no value** parameter indicates the number of objects that do not have a value for the attribute. Clicking on this parameter will execute an advanced search for the relevant objects.

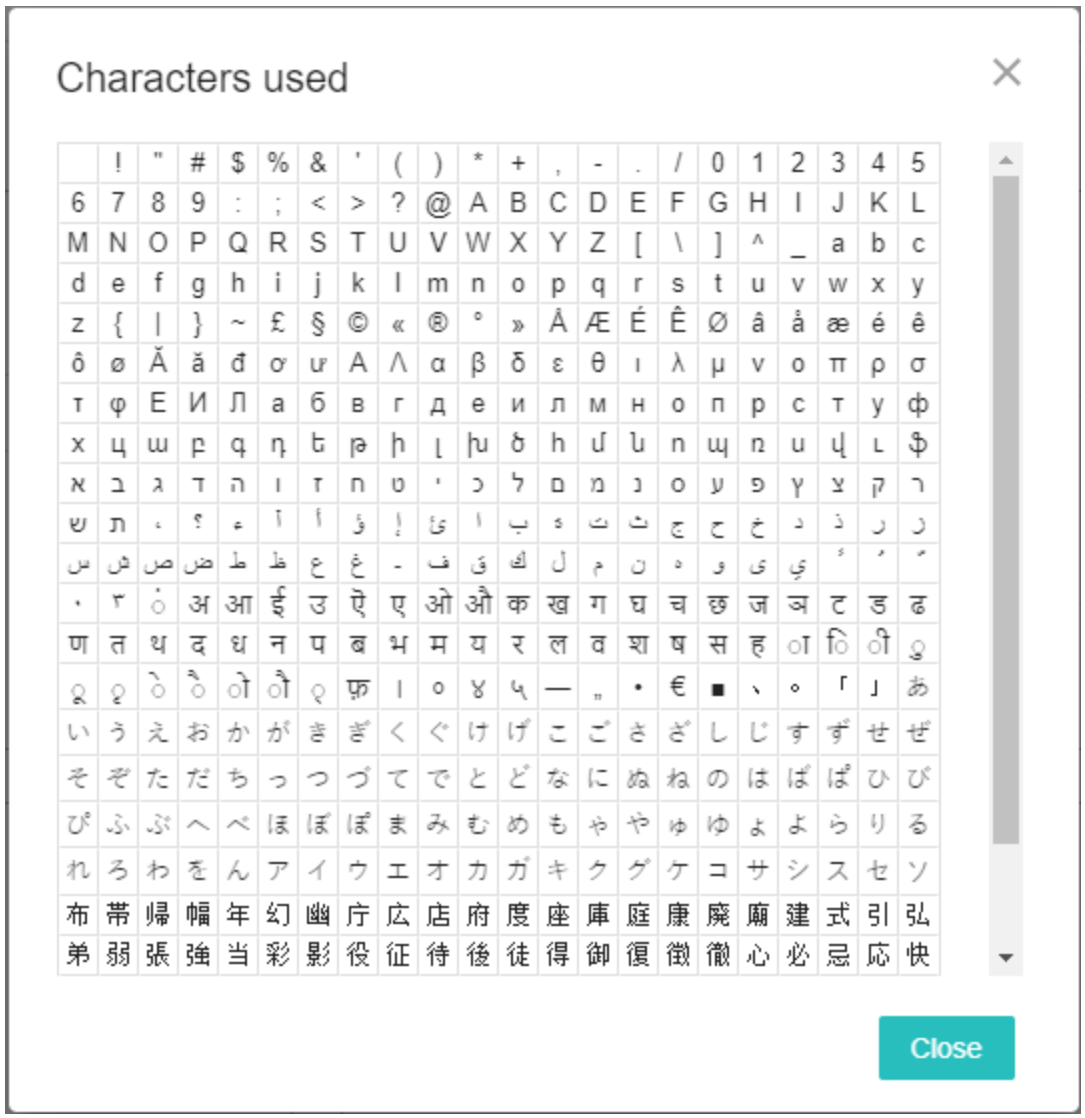
4. The **Different values** parameter indicates how many different values exist for the attribute. For example, if three objects have the value 'Blue' for the same attribute, it will only be counted once for this parameter.
5. The **Unique values** parameter indicates the number of values that occur exactly once for the attribute.

Content Analysis

The Content Analysis widget provides a breakdown of an attribute's values by minimum, maximum, and average character length, as well as which characters appear in said values, all within the context of the profile:



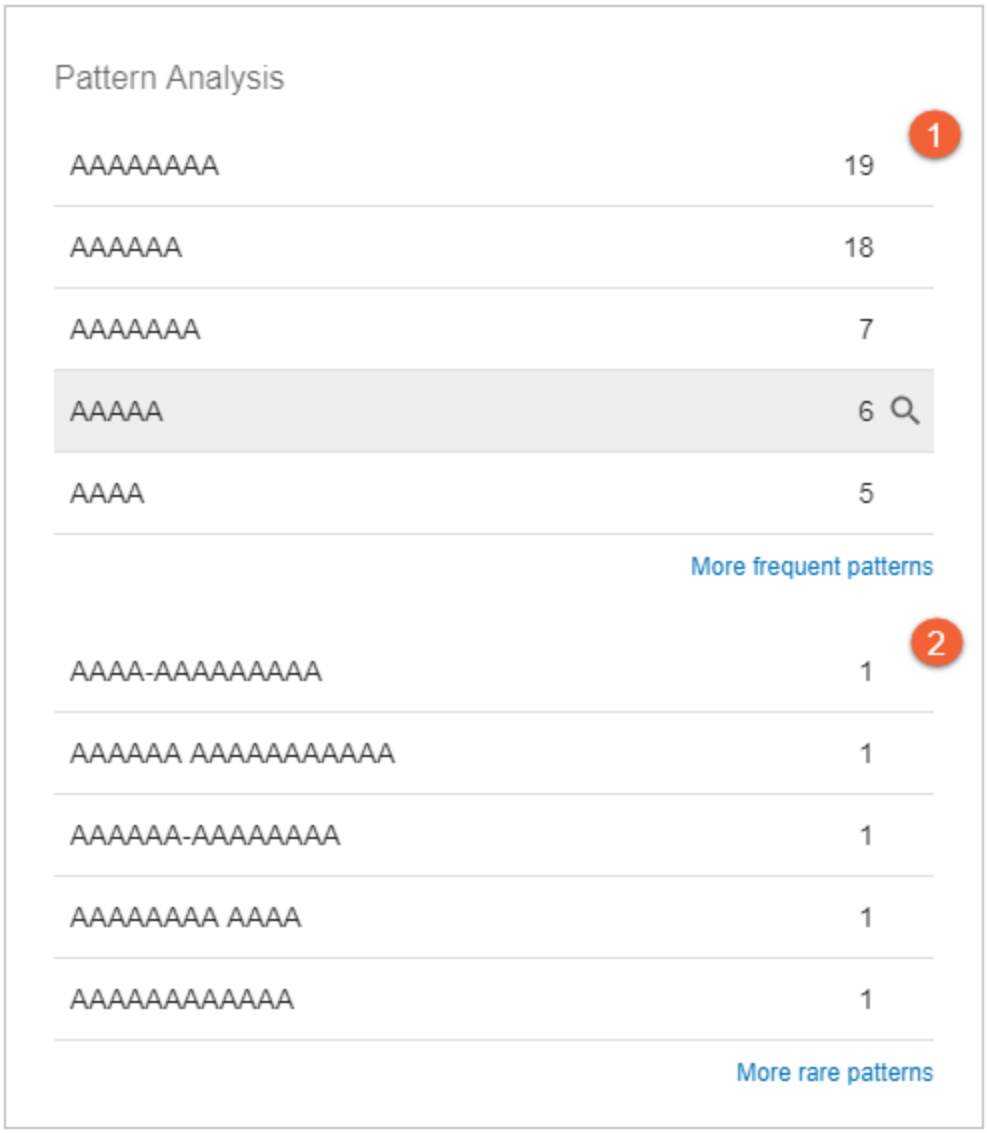
1. The **Characters used** table indicates which characters appear within the values of the attribute. If there are too many characters to fit into the widget, click the **View more** link to display all characters in a separate window.



2. The **Max. Length** parameter indicates the longest character length of any value for the attribute.
3. The **Min. Length** parameter indicates the shortest character length of any value for the attribute.
4. The **Avg. Length** parameter indicates the average character length of all values for the attribute.

Pattern Analysis

The Pattern Analysis widget provides a breakdown of an attribute's most frequent value patterns and rarest value patterns within the context of the profile:

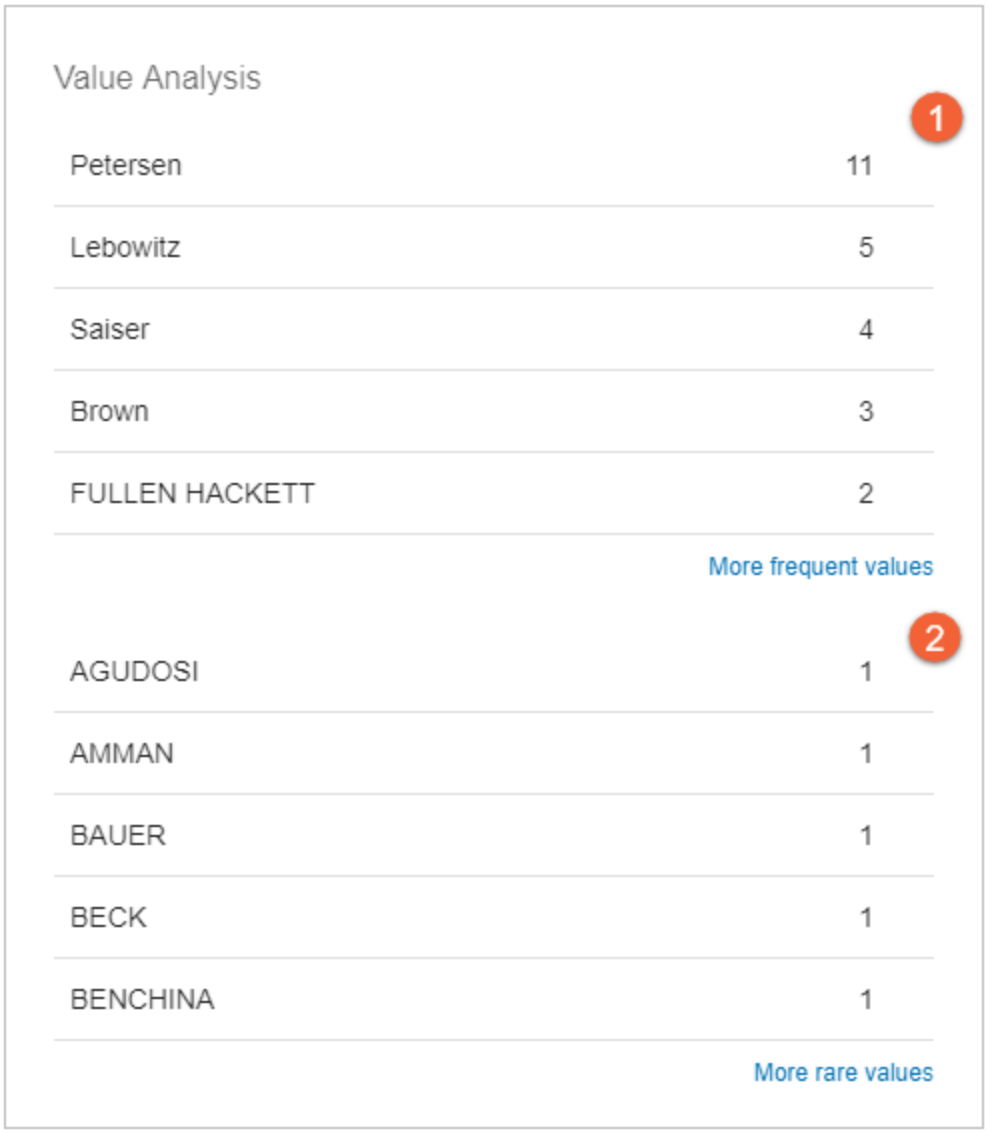


1. The **Frequent Patterns** list (appearing at the top of the widget) provides a list of the most frequent value patterns in descending order. If there are too many patterns to fit into the widget, click the **More frequent patterns** link to display all value patterns in a separate window.
2. The **Rare Patterns** list (appearing at the bottom of the widget) provides a list of the rarest value patterns in descending order. If there are too many patterns to fit into the widget, click the **More rare patterns** link to display all value patterns in a separate window.

Any value pattern can be clicked to execute an advanced search for all objects that share that value pattern within the profile.

Value Analysis

The Value Analysis widget provides a breakdown of an attribute's most frequent values and rarest values within the context of the profile:



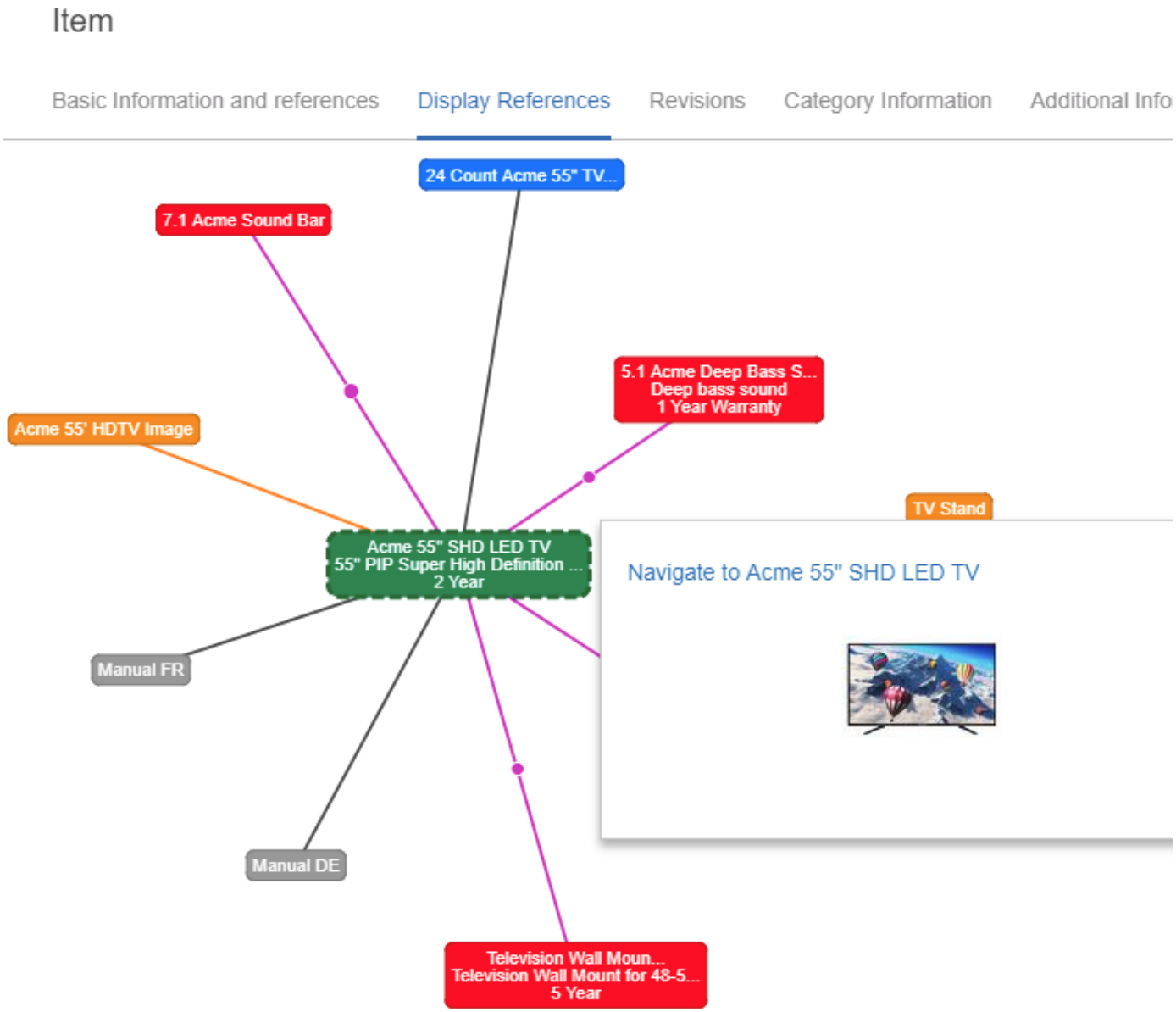
1. The **Frequent Values** list (appearing at the top of the widget) provides a list of the most frequent values in descending order. If there are too many values to fit into the widget, click the **More frequent values** link to display all values in a separate window.
2. The **Rare Values** list (appearing at the bottom of the widget) provides a list of the rarest values in descending order. If there are too many values to fit into the widget, click the **More rare values** link to display all values in a separate window.

Any value can be clicked to execute an advanced search for all objects that share that value within the profile.

Data Visualization

Data visualization functionality in Web UI allows users to see a visual representation of objects in STEP and how they relate to each other. The visualization of object types and their reference objects can help users better understand data and identify patterns, find better ways to organize objects, and ultimately build better data relationships.

The highly customizable interface is interactive, allowing users to click on and mouse over graphical objects on the screen to get more information on an object, expand outward from it to display additional references, or navigate directly to it.



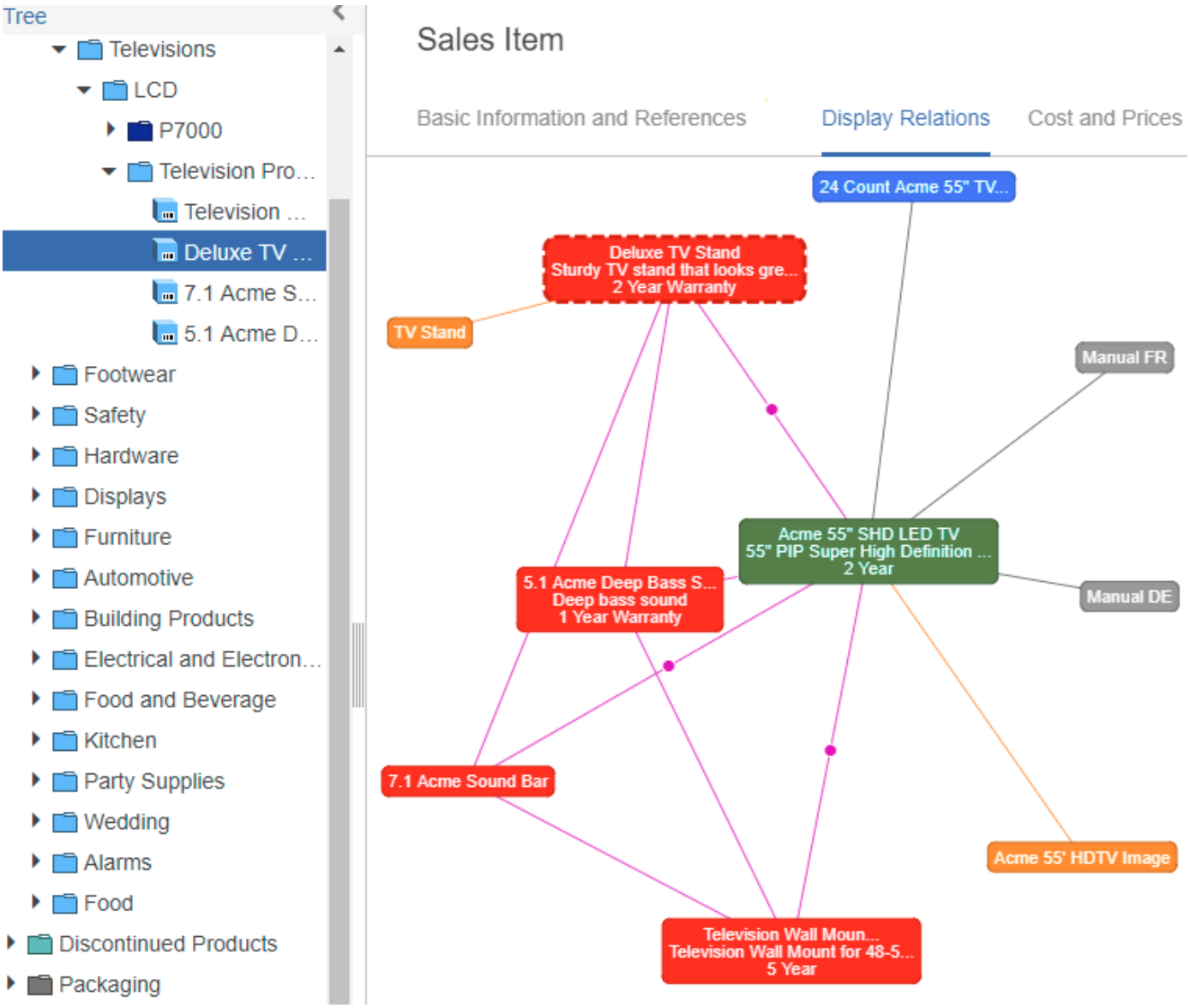
Using Data Visualization

When a user clicks on an object, the interface displays the object and related objects. If the user clicks on a related object node, then the interface updates based on the new selection.

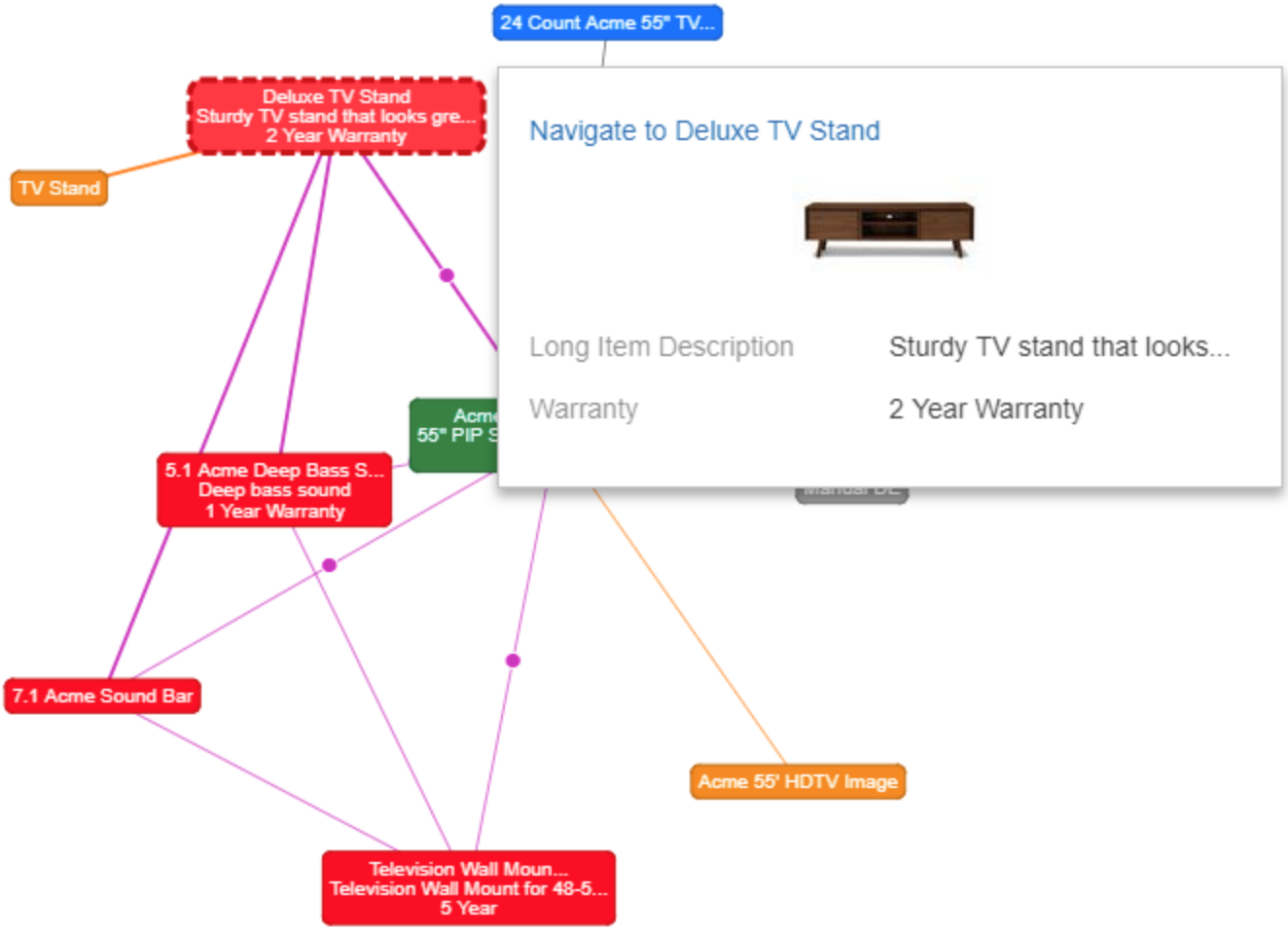
By default, when an object is selected the system displays one (1) 'step' (the object and a single level of references). If the user wants to see more expanded data, then the Expansion Distance parameter can be changed to show more steps.

Below is an example:

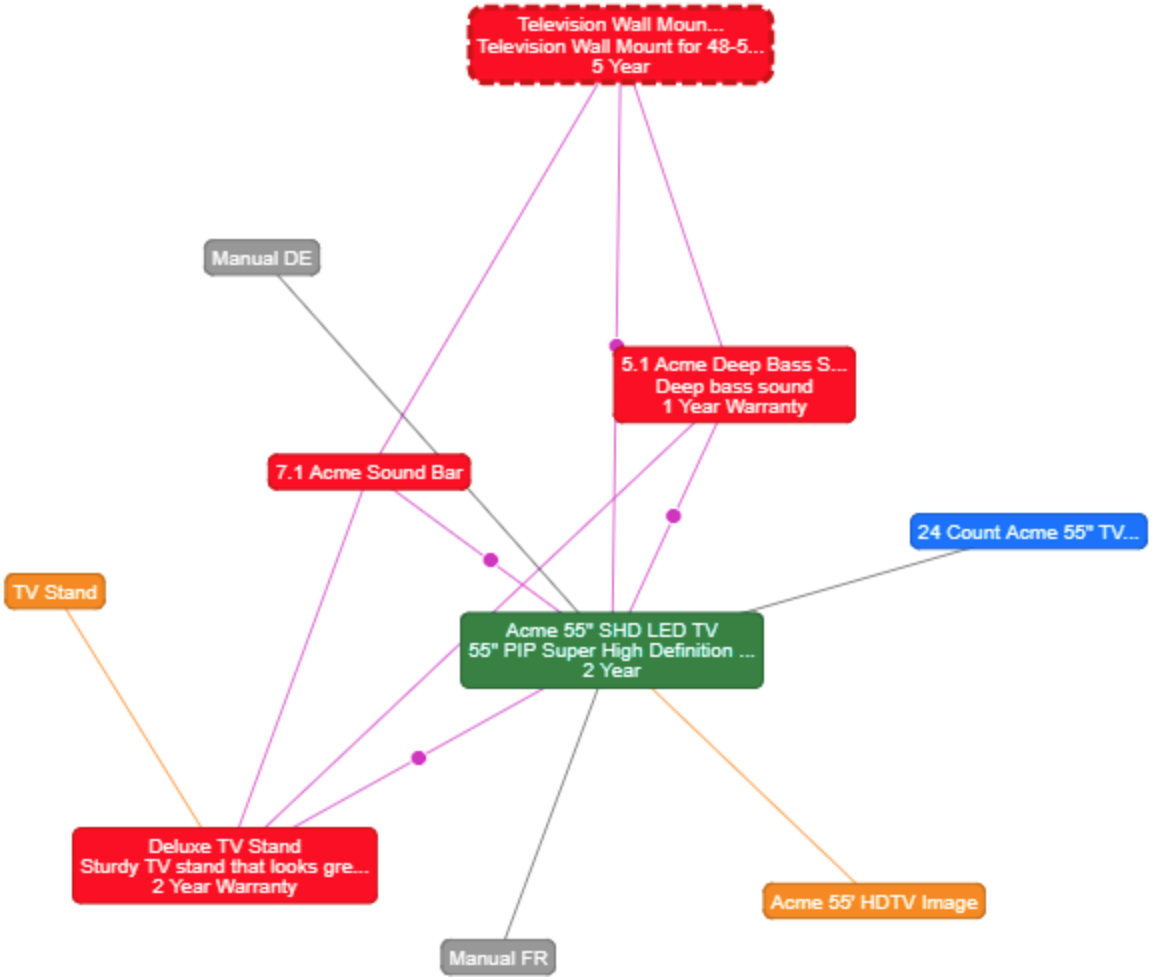
The end user clicks on a Sales Item named 'Deluxe TV Stand' and views the graphical interface on a Display Relations screen configured as a Sub Screen Tab Page on a Node Details screen (Sales Item). The object the user is on is identified by the dotted line around the node.



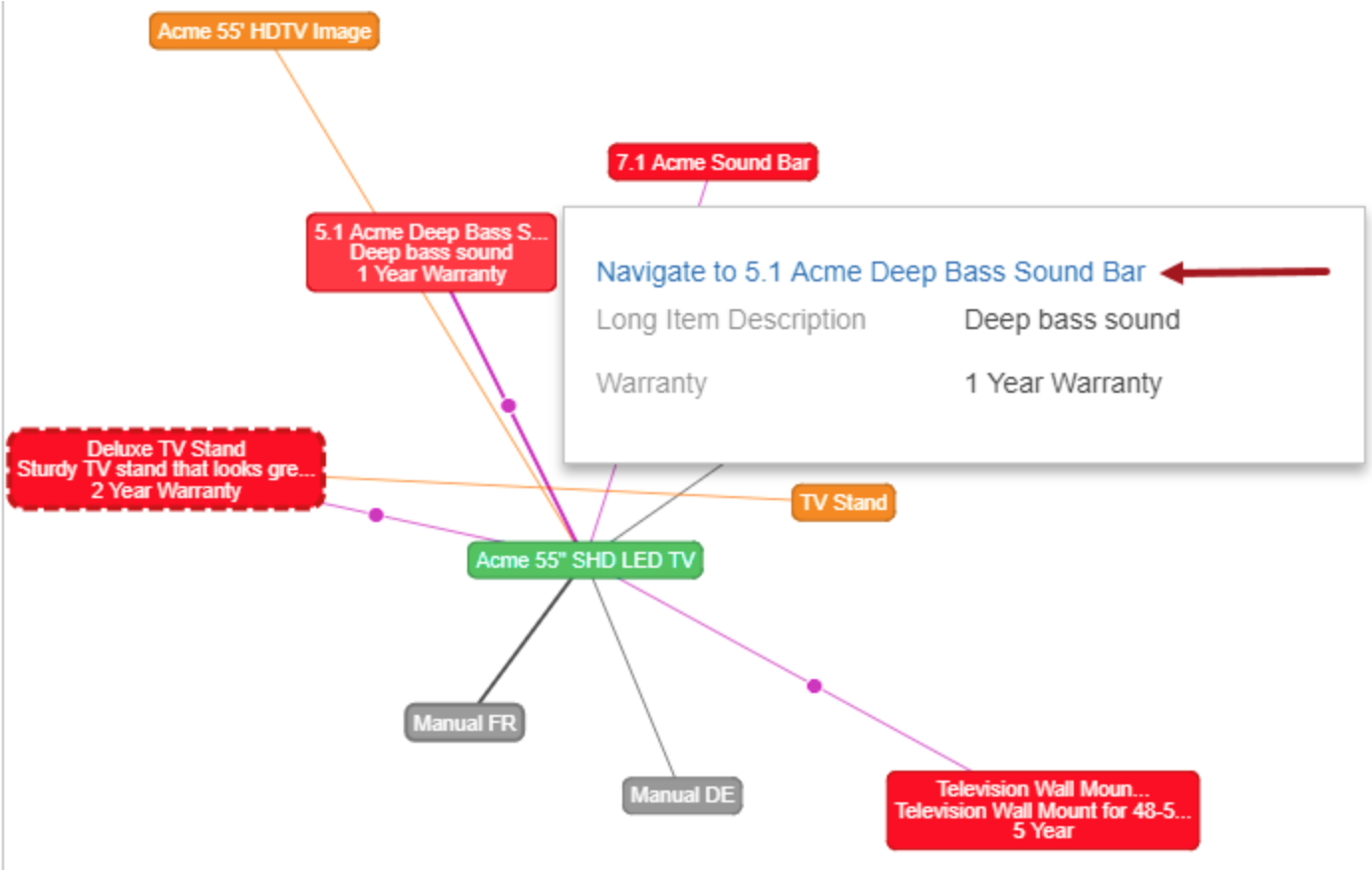
Mousing over the object node displays a hover popup showing the primary product image and configured attributes.

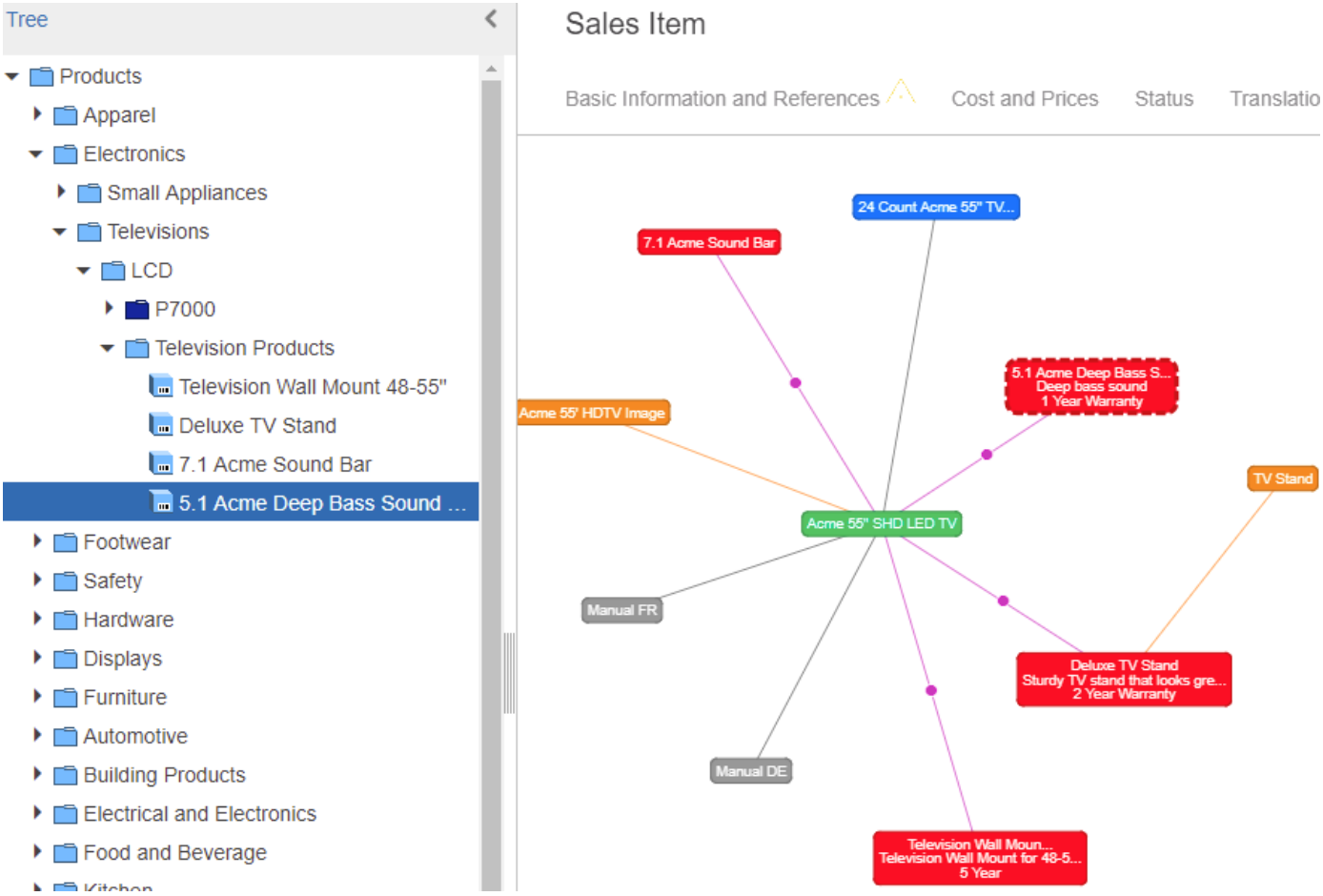


Clicking on a reference node 'Television Wall Mount' adjusts the visual representation accordingly.

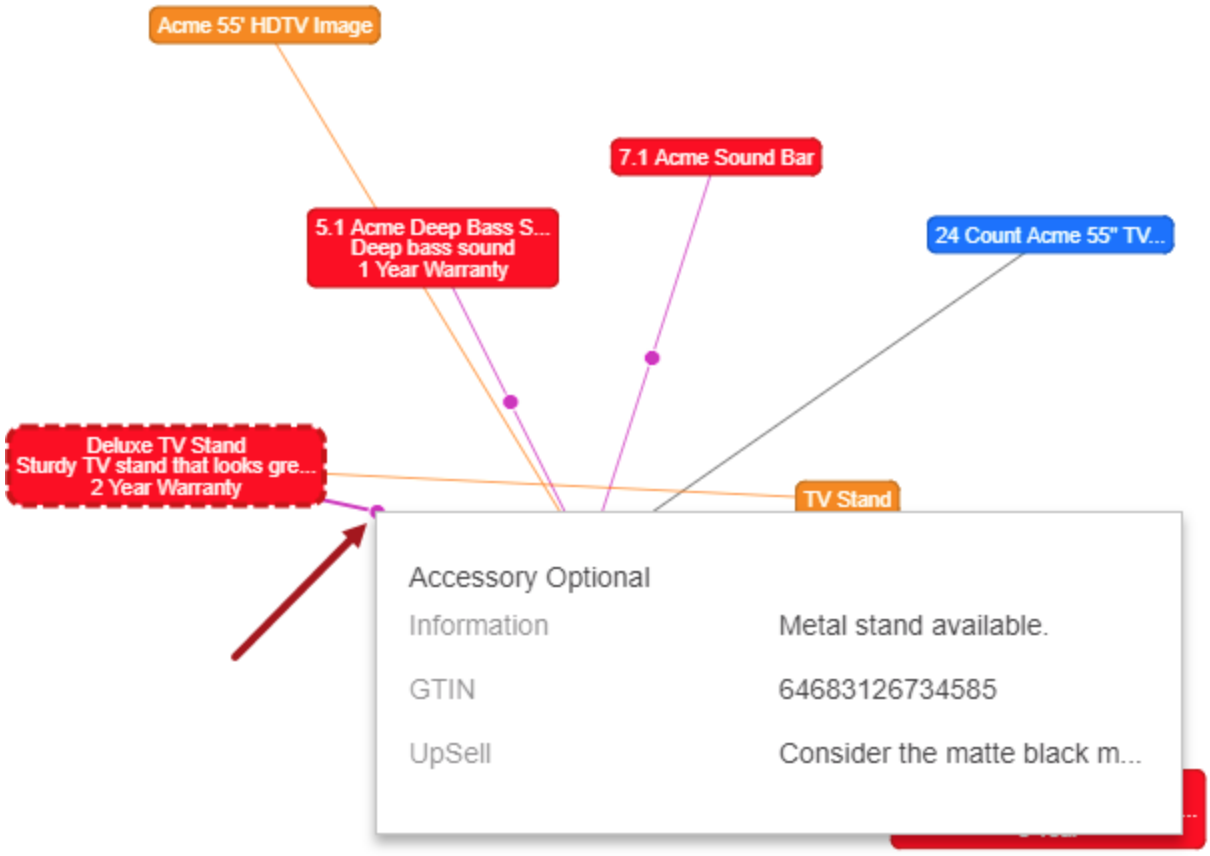


Alternatively, mousing over a reference node and then clicking on the 'Navigate to 5.1 Acme Deep Bass Sound Bar' link will take the user to object '5.1 Acme Deep Bass Sound Bar.' '5.1 Acme Deep Bass Sound Bar' becomes the new selected object.


Acme 55' HDTV Image
7.1 Acme Sound Bar
5.1 Acme Deep Bass S...
Deep bass sound
1 Year Warranty
Navigate to 5.1 Acme Deep Bass Sound Bar
Long Item Description
Deep bass sound
Warranty
1 Year Warranty
Deluxe TV Stand
Sturdy TV stand that looks gre...
2 Year Warranty
TV Stand
Acme 55" SHD LED TV
Manual FR
Manual DE
Television Wall Moun...
Television Wall Mount for 48-5...
5 Year



Users also can view metadata attributes on references by mousing over the dot on the reference type.



Product | Sub Products | References | Referenced By | Images & Documents | Commercial | Tables | Category Profile | Proof View | Status | Stat

Attribute Group

Reference Type	Target	Information	GTIN	UpSell
Accessory Optional +	5.1 Acme Deep Bass Sound Bar	Promotional offer.	58347928647120	Suggest Acme 7.1 sound bar.
	7.1 Acme Sound Bar	Promotional offer.	58997734928632	Not applicable.
	Deluxe TV Stand	Metal stand available.	64683126734585	Consider the matte black metal stand.
	Television Wall Mount 48-55"	Our finest.	32993375877225	Not Applicable.

Users can also zoom in and zoom out using their mouse scroll on the Display Relations screen. They can click on and move nodes to different positions on the screen (with no impact to data / relationships).

Important: The maximum object limit is 500 and controlled by a configurable setting in the sharedconfig.properties file (DisplayRelations.MaxObjectsLimit). If a user clicks on an object or reference object that has over 500 related objects to be displayed on screen, then a message displays that says 'Maximum limit of 500 objects has been exceeded.' Changing the maximum object limit to a higher number is not recommended. In addition, if you experience issues with Web UI performance while using this functionality, you may want to lower the maximum object limit and/or lower the Expansion Distance value to find the optimal setup for your system.

Configuring Data Visualization

Data Visualization in Web UI allows users to see a visual representation of objects in STEP and how they relate to one another. The visualization of object types and their reference objects may help users better understand data and identify patterns, better organize objects, and ultimately build better data relationships. The customizable interface is interactive, allowing users to click on and mouse over graphical objects on the screen to get more information on an object, or navigate directly to it.

This topic addresses:

- Prerequisites
- Creating a New Display Relations Screen
- Configuring a Display Relations Screen
- Configuring Main Properties

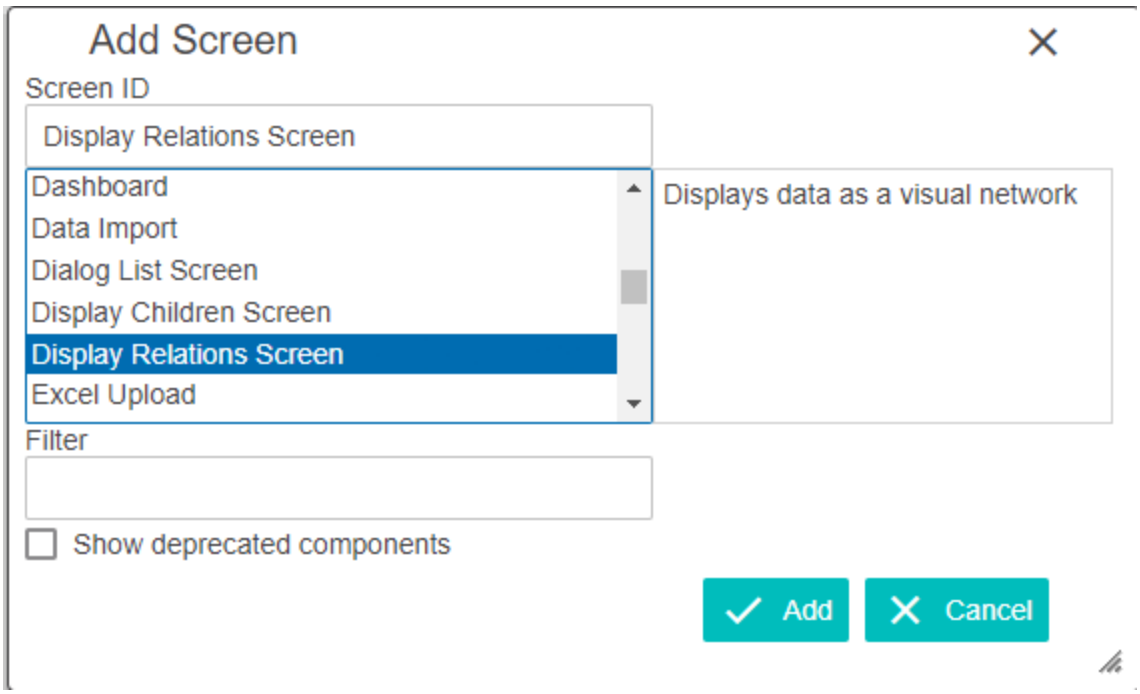
Prerequisites

All of the configuration steps provided in this topic assume the Web UI designer is in design mode and that all users (designers and end users) have the proper privileges to work with these features. For more information about privileges and user setup, see the **Users and Groups** section and **Adding User Privileges for a Group** section of the **System Setup / Super User Guide** documentation.

Creating a New Display Relations Screen

The **Display Relations Screen** screen type is dedicated to visually display objects and references.

1. In the designer window, click the **New** button in the action icon row.
2. Choose **Display Relations Screen** from the screen list and type in a Screen ID. The screen ID should be something easily identifiable when it is time to configure the screen and/or set up screen mapping.



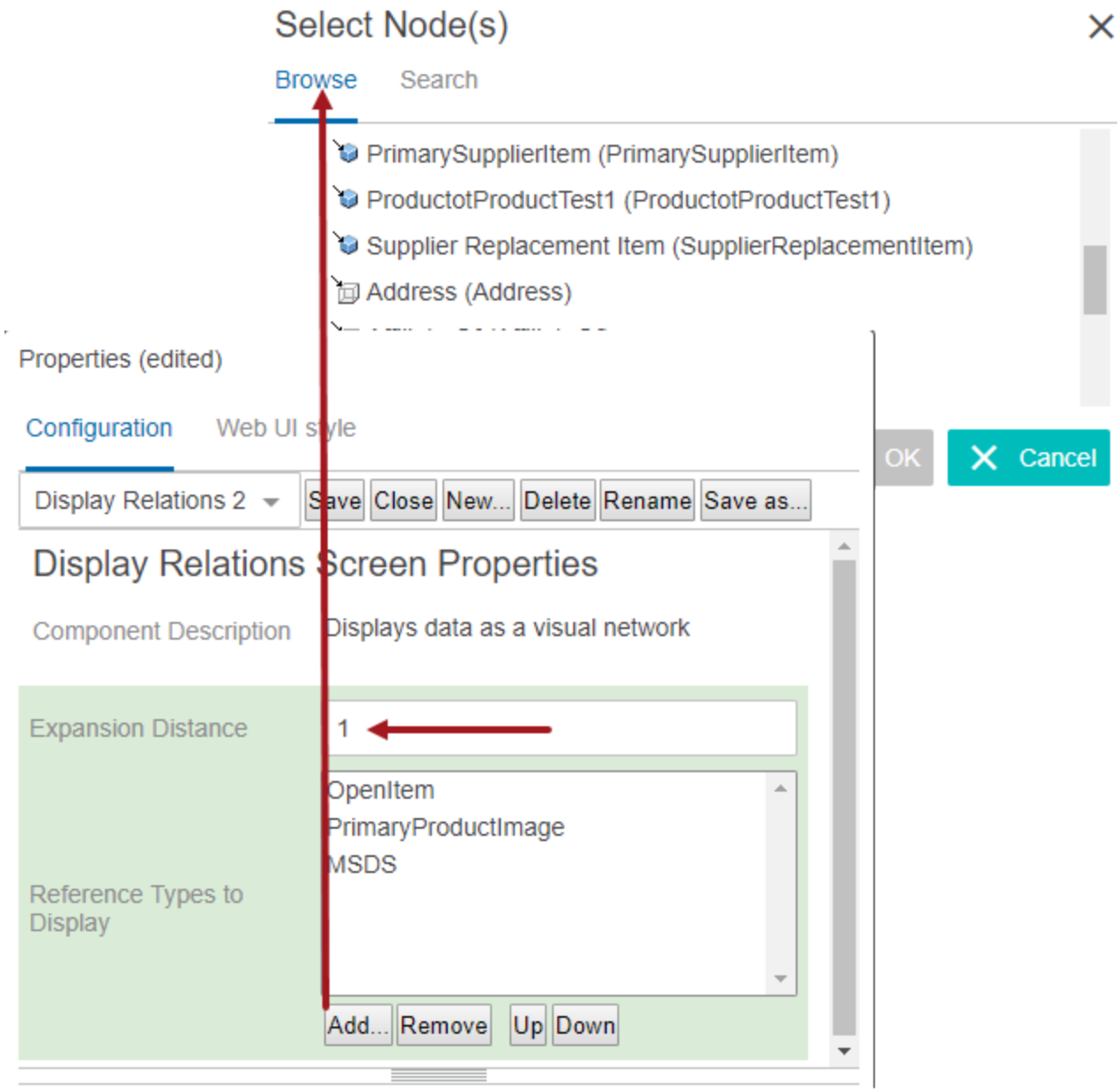
3. Click **Add**.
4. Click **Save**. At this point, either close designer and configure the screen at a later time, or continue on with the **Display Relations Screen** configuration.

Configuring a Display Relations Screen

Each parameter should be configured as needed and features help text, accessible by clicking the yellow info icon to the right of each parameter name (as shown in the next screenshot).

1. Select the **Display Relations Screen** you just created by selecting the screen ID from the screen dropdown.
2. Enter a number in the **Expansion Distance** parameter value field. This must be a whole integer and determines how far the display will branch out from the selected object (e.g., one reference 'step' away from the object or five reference 'steps' away from the object). This determines both the default number of 'steps' shown from the original selection, as well as the expansion distance when an object in the relations screen is clicked. Care should be taken in setting the expansion distance as a high number could cause performance issues. It is recommended to set this number between 1 and 3.
3. Determine which reference types will be displayed. Click **Add** under the **Reference Types to Display** field, and make a selection from the **Select Node(s)** screen. Reorder or remove the Reference Types as needed. If no selection is made, then all reference types will be shown.
4. **Save** the changes.
5. As with any screen, it must be mapped appropriately in **Main Properties** > **Mappings** for end users to be able to access it. As an alternative to mapping, the Display Relations Screen can be added as a **Sub Screen Tab Page** on a **Node Details** screen.

6. **Close** design mode to return to normal operation, or move on to the **Configuring Main Properties** section to continue the configuration steps.

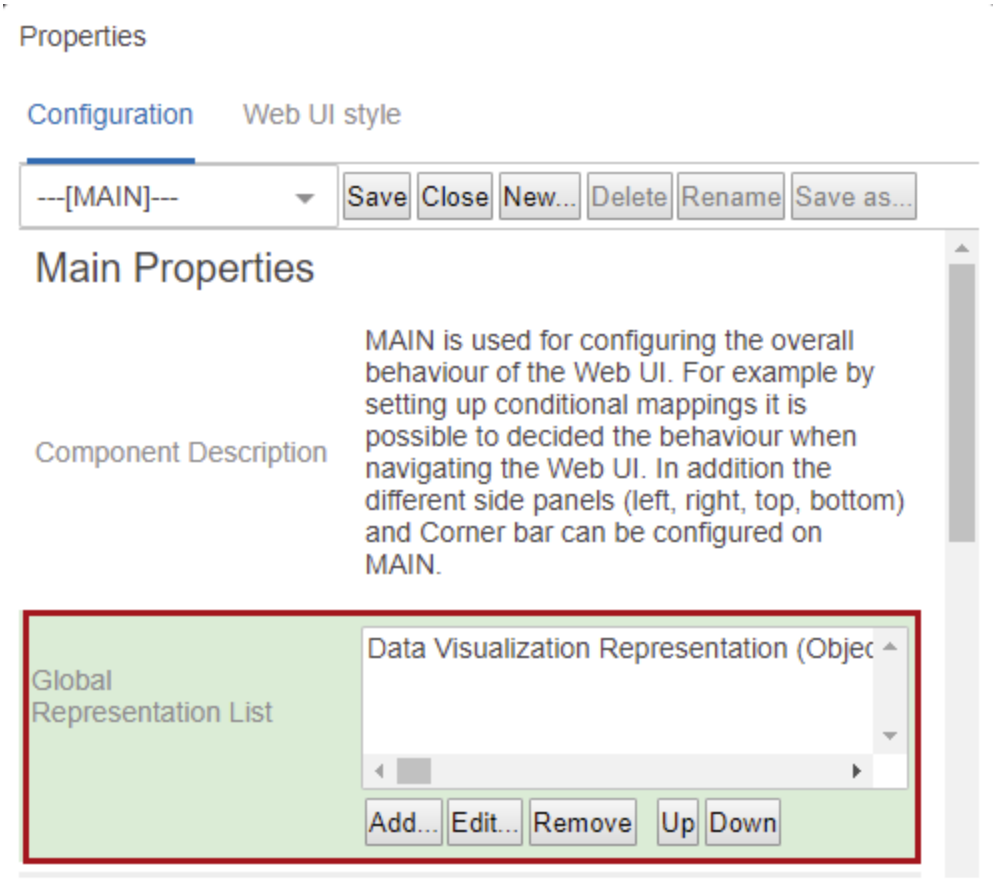


Configuring Main Properties

Within the **Main Properties**, which are used for configuring the overall behavior of the Web UI, configuration can be done to set up the look of the graphical interface that users will see when using any Display Relations screen. Object type and reference styling only needs to be set up one time, and the selections will be applied to usage throughout a specific Web UI, regardless of how many Display Relations screens are used.

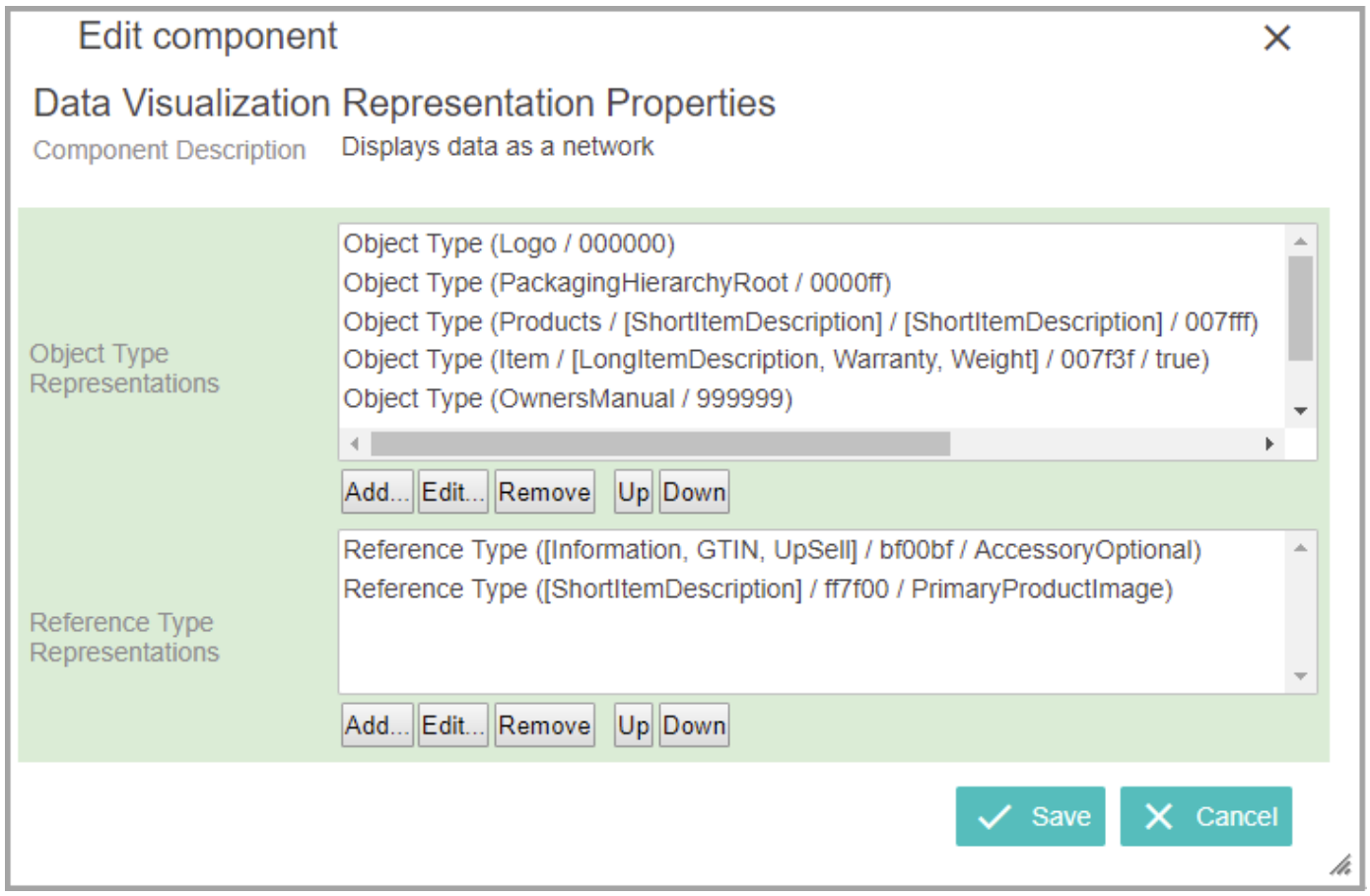
1. Enter design mode and select **---[MAIN]---** from the screen dropdown list.
2. Go down to the **Global Representation List** parameter.

3. Click the **Add...** button under the value field.
4. Select **Data Visualization Representation** from the Add Component dialog.
5. Double click the **Data Visualization Representation** title that populates the value field and configure the Data Visualization Representation Properties.
6. Click **Save**.

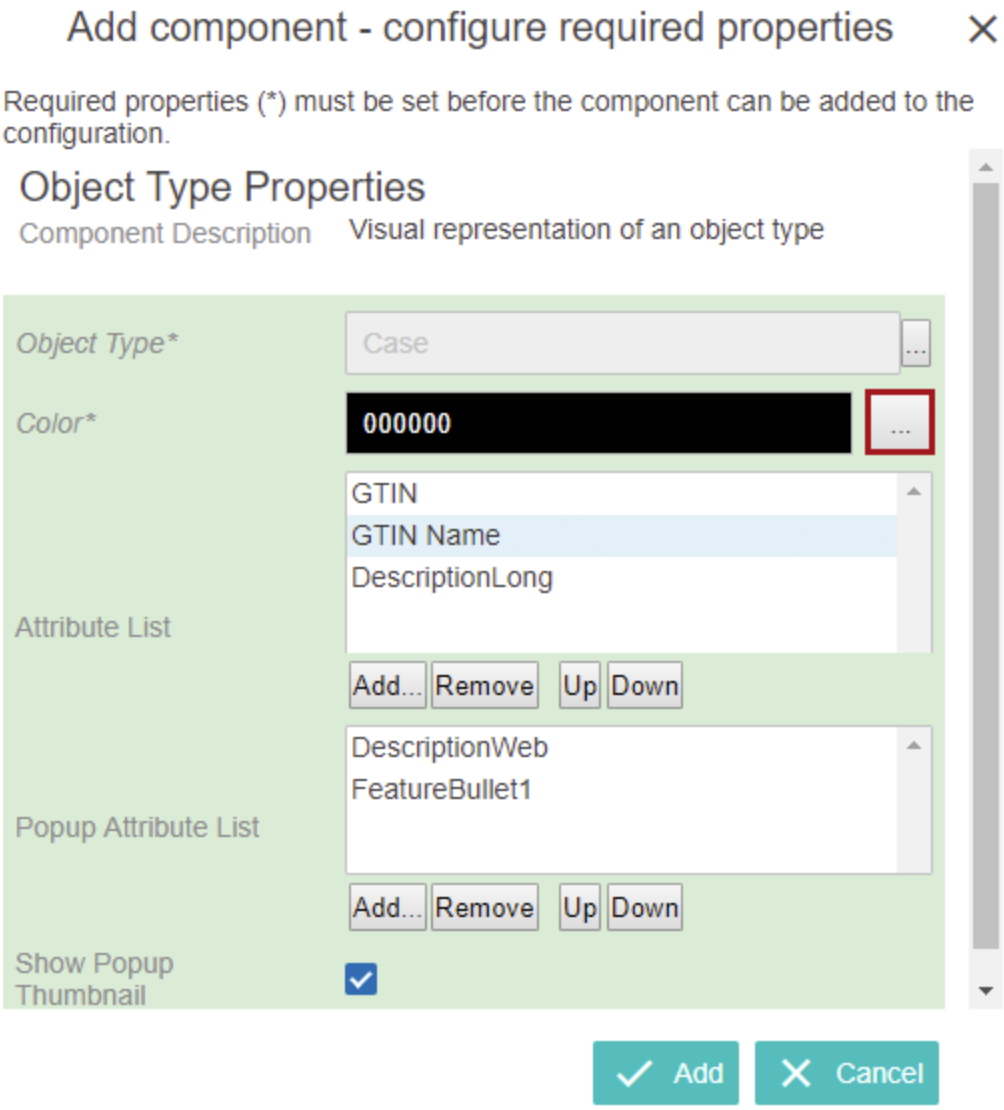


Next the **Data Visualization Representation Properties** value fields need to be populated.

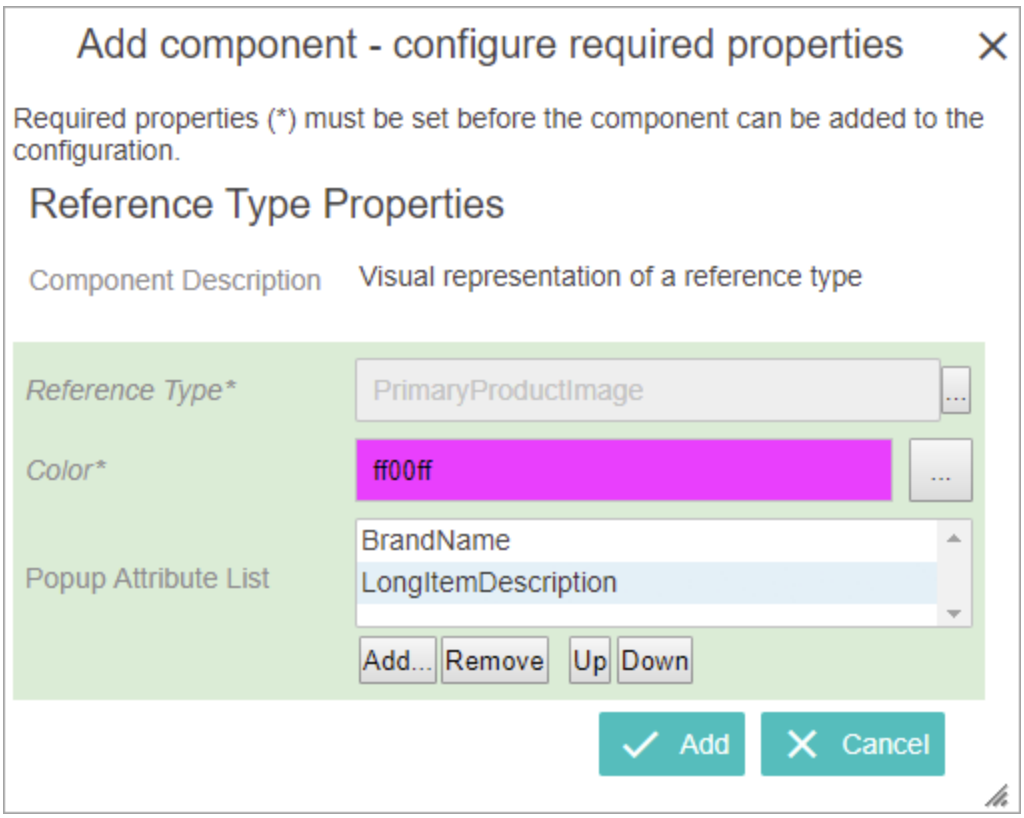
For easy identification, you can configure all nodes of the same type (e.g., all assets, all products, all entities, or all classifications) so that all object type nodes under that object structure hierarchy are represented by the same color and same attributes. You can configure display settings on a more granular level, too, or do a combination of both. For example, you can designate all products to display one color / attribute combo except for objects representing direct sellable units, which could be a different color and/or attribute combo). The display settings are highly configurable to fit the needs of your object structure. A sample configuration is shown below.

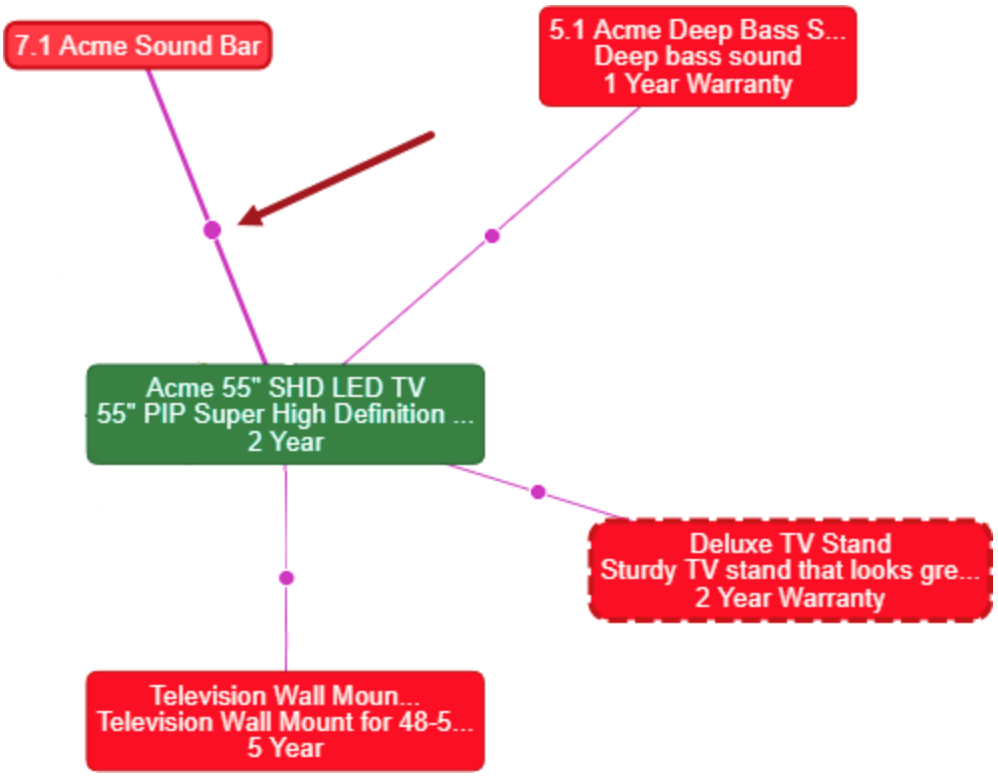


7. Click the **Add** button under the **Object Type Representations** field.
   - Click the ellipsis button (...) to select **Object Type**.
   - Enter a hex color code in the **Color** field, or click the ellipsis button (...) to the right of the field to select a color. If you choose to enter the hex color code yourself, the format is a six-digit hex color code. The '#' sign that is usually associated with hex color coding is applied automatically. Use this color coding to visually distinguish between different types of data.
   - Add individual attributes to the **Attribute List** field. The attribute values will display on the object in the interface. The name of the object displays by default and is not a configurable setting.
   - Make **Popup Attribute List** selections. The attribute values will display on the hover information that displays when mousing over the nodes within the interface. The name of the object displays by default along with a link to the object.
   - The primary product image will also display on the hover popup if the **Show Popup Thumbnail** parameter is enabled / checked.
   - When done, click **Add** to save the selections.



8. Next, click the **Add** button under the **Reference Type Representations** field.
   - Click the ellipsis button (...) to make **Reference Type** selections.
   - Enter a hex color code in the **Color** field or, click the ellipsis button (...) to the right of the field to select a color. If you choose to enter the hex color code yourself, the format is a six-digit hex color code. The '#' sign that is usually associated with hex color coding is applied automatically. Use this color coding to visually distinguish between different types of data.
   - If desired, enter the metadata attributes that you want to see displayed when you hover over the **Reference Type**. These are the metadata attributes that are on the object to the target.
   - Click **Add** to save the settings.





9. Click **Save** and **Close** design mode to return to normal Web UI operation.

Dimension Dependent Attributes in Web UI

Dimension dependent attributes in both Web UI and workbench behave in a similar fashion. For more information on dimension dependent attribute behavior in workbench, see the **Dimension Dependent Attributes** section of the **System Setup / Super User Guide** documentation.

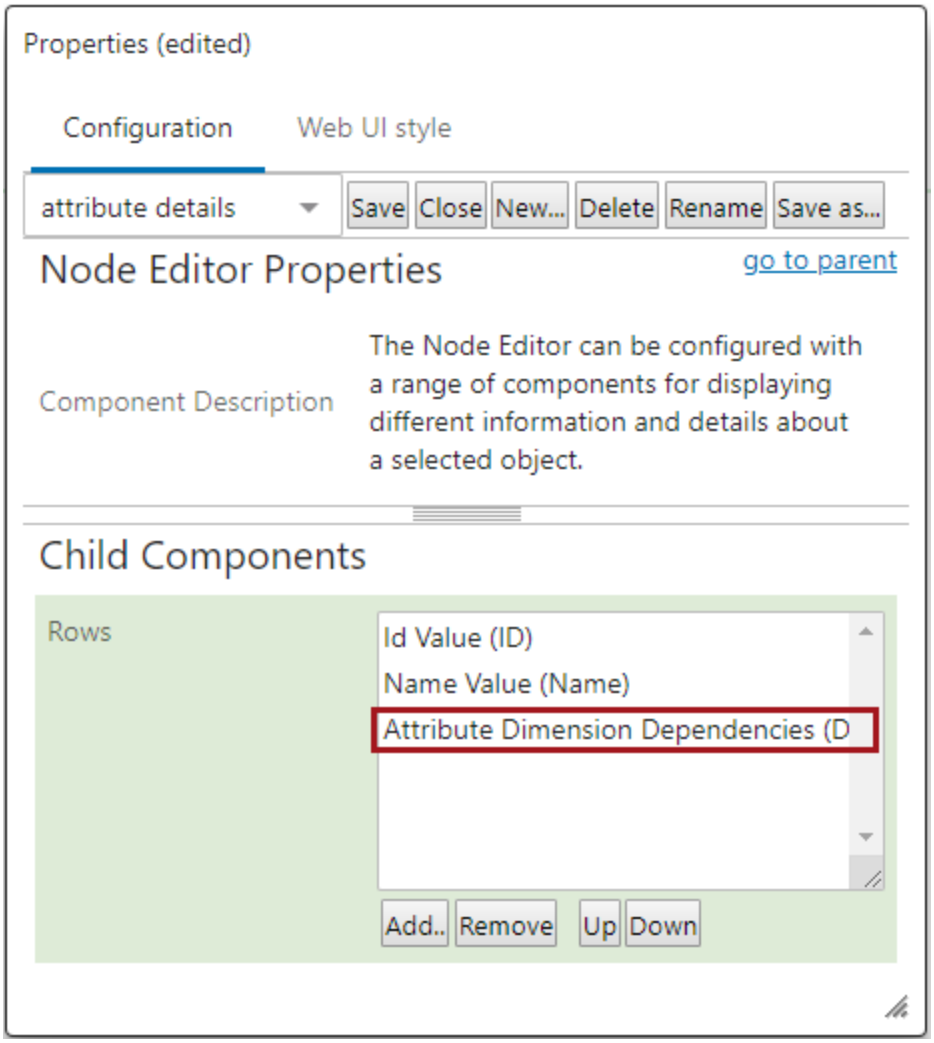
For more general information on dimension dependencies, see the **Dimensions and Dimension Points** section of the **System Setup / Super User Guide** documentation.

Web UI Configuration

Attribute Dimension Dependencies component

With the Attribute Dimension Dependency component, users can add dimension dependencies on an attribute. Dimension dependent attributes can have different values for different dimensions, e.g. language, country, etc.

Note that the instructions provided below assume the user is adding the Attribute Dimension Dependencies component to an Attribute Management screen. The primary business case for the Attribute Dimension Dependencies component is for the purpose of editing and managing attributes in the Web UI, which is done on the Attribute Management screen. Recommended practice is to configure this component on the Attribute Management screen. A full description of how to configure the Attribute Management Screen can be found in the **Attribute Group Management Screen** section of this documentation.



The Attribute Dimension Dependencies component does not require configuration. A field is available for users to add customized help text.

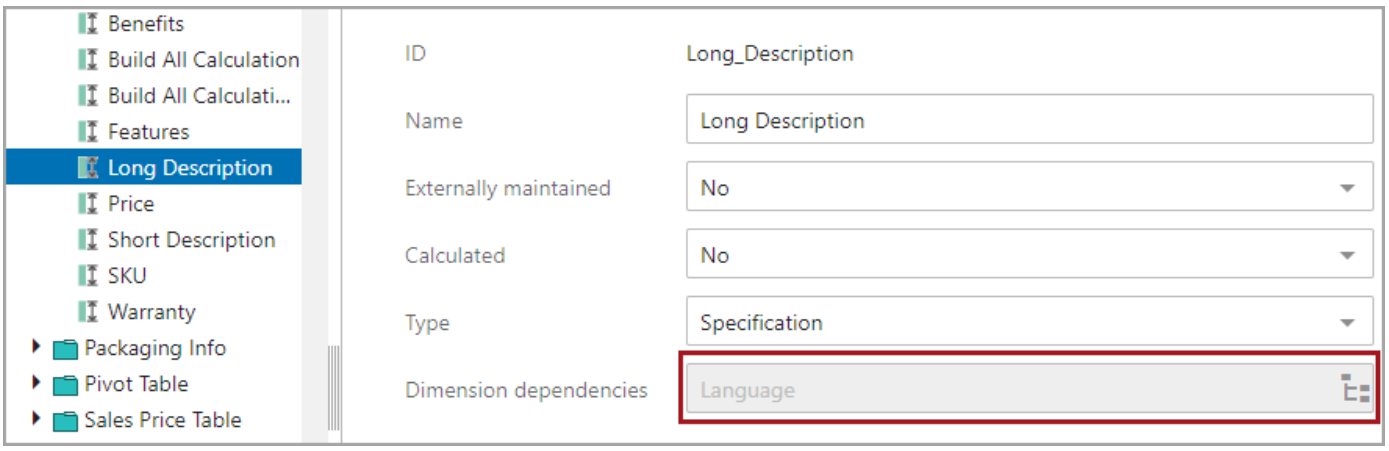
Note: The 'Attribute Dimension Dependencies' component is pre-configured on a 'Attribute Management' screens. Though possible, it is not recommended to remove any of the pre-configured components, including 'Attribute Dimension Dependencies', as it may compromise the user's ability to fully edit and maintain attributes.

Handling Dimension Dependent Attributes in Web UI

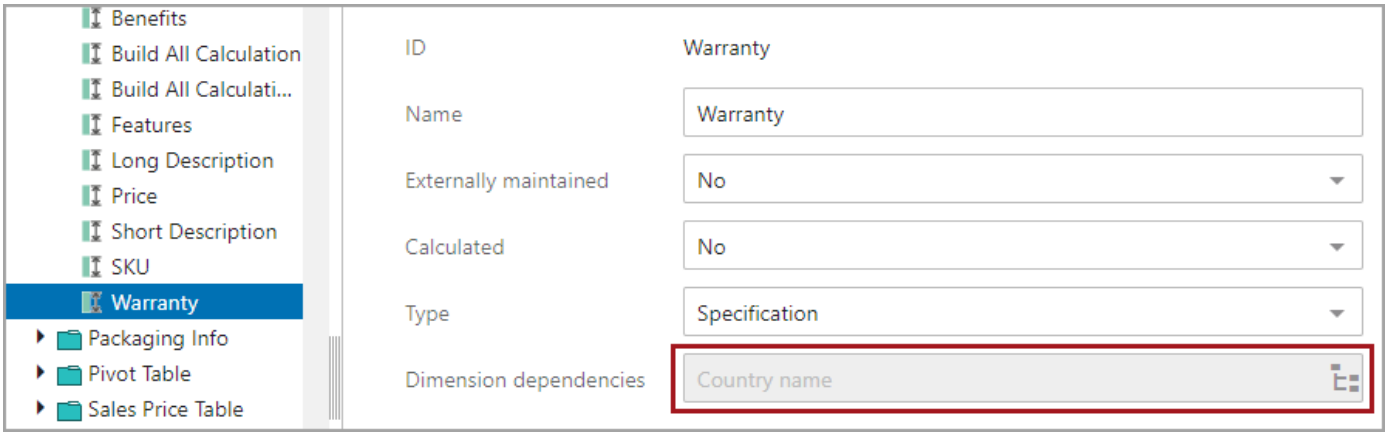
Dimension Dependent Attribute Values in Web UI

The screenshots below provide two examples of dimension dependent attributes. The first is dependent on a language dimension and the second is dependent on a country dimension.

1. The attribute **Long Description** has a 'Language' dimension dependency, meaning its content may differ based on the language context in which it is viewed.



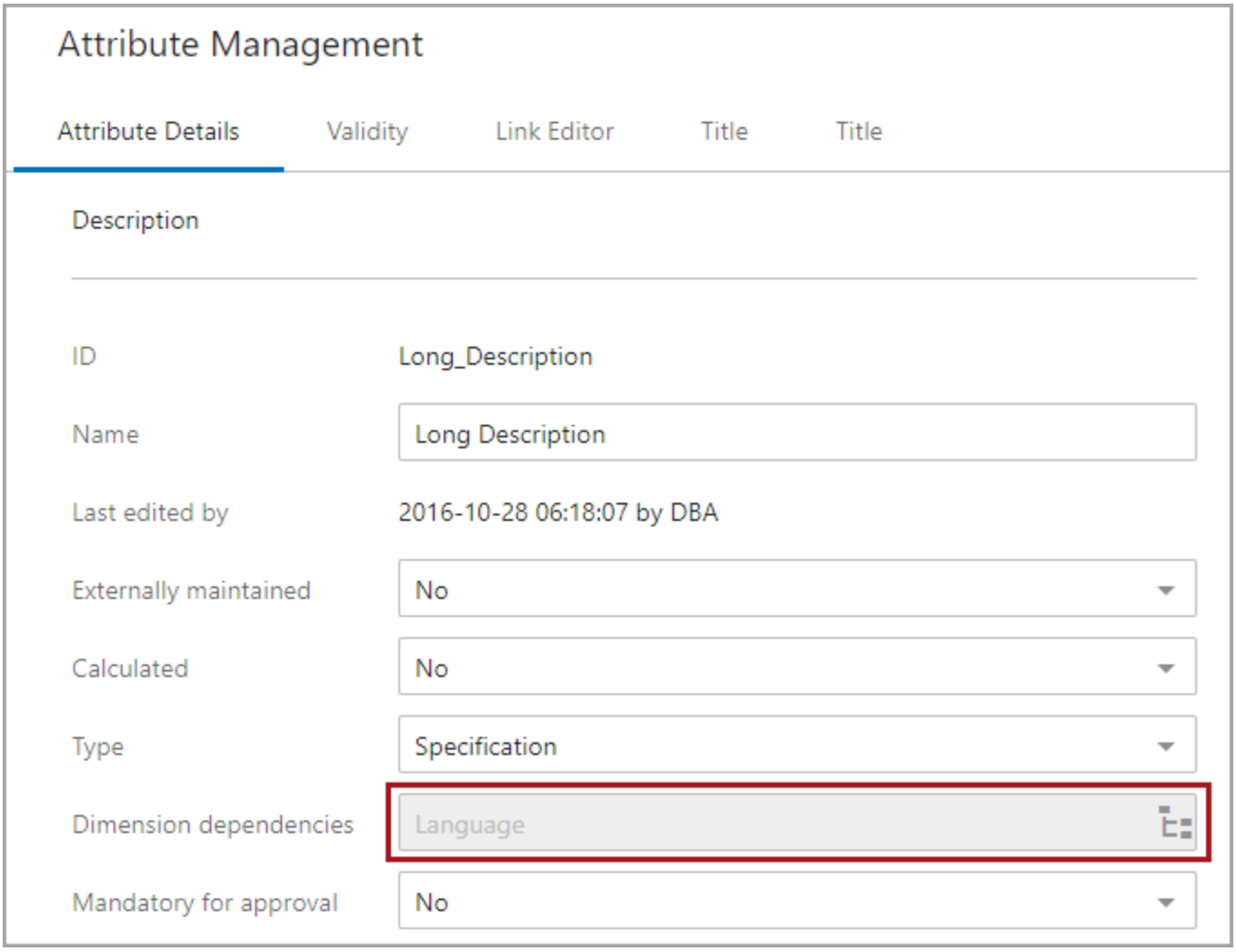
2. The **Warranty** attribute shown below has a 'Country' dimension dependency, meaning that its content may differ based on the country context in which it is viewed. In this example, this dependency has been applied because the product's warranty information may vary based on the country in which it is sold.



A context that uses the 'Language' dimension point of 'English' and the 'Country' dimension point of 'USA' would contain an English-language value for 'Long Description' and USA-specific 'Warranty' content. Additionally, the **Warranty** attribute could also be made language dependent to ensure the warranty text is always in English.

Setting Dimension Dependency on Attributes in Web UI

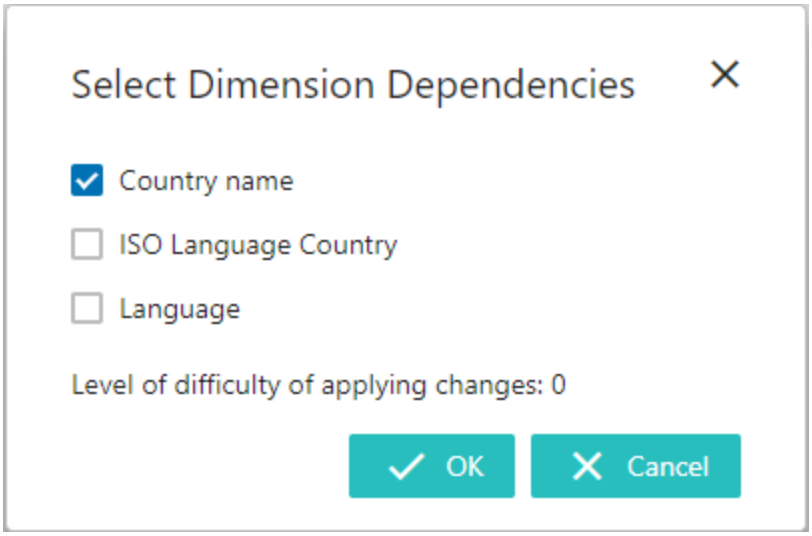
To set a dimension dependency for attributes in the Web UI, users must first navigate to the attribute to be edited. If configured correctly in the Web UI, the Attribute Management screen will display.



Note: If users are creating or editing attributes whose information will never vary by language or country, no dimension dependency should be applied to it. If a dimension dependency is applied to an attribute for which data has been added for many objects, new data will be stored on the specified dimension point, and all existing data will remain at the 'All' level. Because this requires information to be moved from the 'All' dimension to the specified dimension, this can be difficult to correct. For more information on this problem and how to correct it, see the **Adding a Dimension Dependency After Loading Data** topic.

To set the dimension dependency on an attribute, follow these instructions:

1. In the **Dimension Dependencies** parameter of the desired attribute, click the hierarchy button .
2. In the **Select Dimension Dependencies** dialog box that appears, check the box(es) for the relevant dimension(s), then click **OK** to set the dimension dependency.



Value Inheritance in Dimension Dependent Attributes in Web UI

Value inheritance functions in a similar manner between both Web UI and workbench. For more information on value inheritance in workbench, see the **Dimension Dependent Attributes** section of the **System Setup / Super User Guide** documentation.

To better understand how value inheritance works in Web UI, consider the following scenario:

- 'US English' is the parent language dimension.
- 'UK English' is the child language dimension of 'US English'.
- A description was added to the 'Language' dimension dependent attribute **Long Item Description** using the English US context:

Even if not translated, the value of the attribute **Long Item Description** will inherit to the child context of UK English as-is. This essentially means that if users switch to the UK English context, they will see whatever was entered into the **Long Item Description** parameter while in the US English context.

Inheritance of the value is indicated by a red downward facing arrow.

In any other 'Language' context (such as French, Danish, etc.), the **Long Item Description** would remain empty until a description is entered for the parameter while in that context.

After being translated, the content for UK English appears as follows.

If the UK English content is deleted, the US English content will reappear. The red arrow is gone, as the value is no longer inherited but has been overwritten by the inherited content.

Using Dimension Dependent LOVs With Attributes in Web UI

Lists of Values (LOVs) can also be made dimension dependent. Dimension dependent LOVs are commonly used alongside non-dimension dependent attributes, though other combinations are also applicable. This behavior is similar to how dimension dependent LOVs are handled in workbench. For more information, see the **Using Dimension Dependent with Attributes** section of the **System Setup / Super User Guide** documentation.

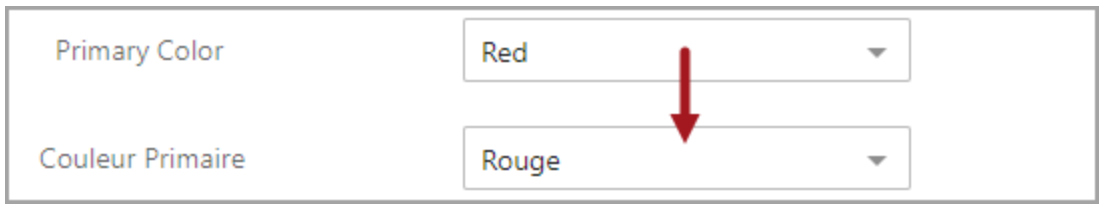
Note: There is also an **LOV Dimension Dependencies** component that functions in a similar manner to the **Attribute Dimension Dependencies** component, but is optimized for LOVs.

See the sections below for guidance on handling different scenarios of dimension dependency between attributes and LOVs.

Attribute with No Dependency / LOV with a Dependency

In the following scenario the attribute has no dimension dependency and the LOV has a language dependency.

- A user working in English chooses the color 'Red' for a new product.
- If the LOV has already been translated, the French value 'Rouge' will automatically populate when working in the French context, so there is no need to retranslate this text.
- Every time Red is chosen, the translation is already in place.



Attribute with No Dependency / LOV without a Dependency

In this scenario, neither the attribute nor the LOV it is using are dimension dependent. The value of the LOV is the same in every context.

Attribute with a Dependency / LOV with a Dependency

In the following scenario, both the attribute and the LOV it is using are dimension dependent.

- If an English US user chooses 'Red,' a value will not display in the French FR context until a French FR user chooses a value from the dropdown.
- In this case the value of every dimension needs to be manually entered.

Attribute with a Dependency / LOV without a Dependency

In the following scenario, the attribute is dimension dependent while the LOV it is using is not.

- If an English US user chooses a value, nothing will appear in the Danish DK or French FR contexts until a user in one of those contexts makes a choice from the same dropdown list.

Experian Email Validation Integration in Web UI

The Experian email validation integration provides easy maintenance of valid email contact data and provides an overview of email data quality through use of the Experian Data Quality asynchronous Clean Web Service (Experian).

Prerequisites

This section of the Experian Email Validation integration requires an understanding of the Web UI, how to create screens, and the necessary user permissions to do so. See the **Web User Interfaces** documentation for more information on these topics.

Additionally, users should be familiar with the Experian Email Validation integration setup and processes. For more information, see the **Experian Email Validation Integration** section of the **Data Integrations** documentation.

Once all setup is complete, the Experian Email Validation integration allows users to perform email validations on a node list with one click of the 'Validate Emails' button. Users can choose one or more customer objects (containing email account data) that need to be validated from a list of emails, then click on the 'Validate Emails' button to run the background process (Experian Email validation Job). In the background, the Experian Email Validation Job will continue to poll for an answer from the Experian batch API and wait for a status message on all emails. Whenever an update is received, some status information will be written into the execution report of the background process, and the corresponding email data quality fields will be updated and visible to the user in the Web UI.

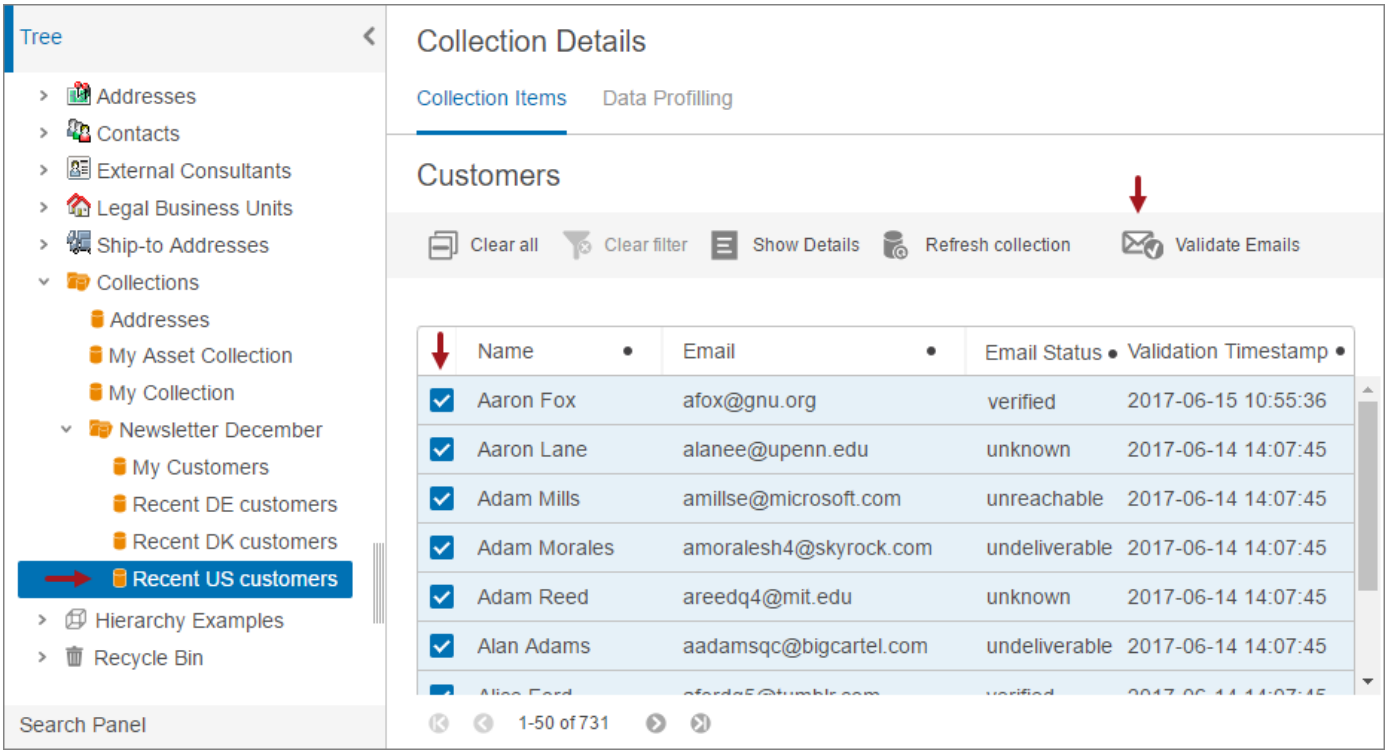
It is possible to monitor the progress of an Experian Email Validation Job using the Background Process Notification component. Also, Email data that is not validated correctly, can be easily identified.

Important: To use the Experian Email Validation Integration functionality, the applicable recipe must be applied, and the Experian License must be obtained from Stibo Systems in order to have access to the Experian API key. Contact your Stibo Systems account manager for more information and licensing terms.

Using Web UI to Validate Email Addresses

Once all setup is complete, users can navigate to a node or collection of objects with email address information stored as data containers, select all necessary objects from the displayed node list, and click the 'Validate Emails' button.

In the example below, the 'Recent US customers' collection is selected and displays the 'Collection Details' screen. On this screen the 'Collection Items' tab is selected and displays the 'Customers' list of objects with the tool bar. The 'Select all' button is used to select all 731 objects within the list which is signified by a check mark within the checkbox. Additionally, the 'Validate Emails' button displays.



When the 'Validate Emails' button is clicked, a background process notification will display (if configured). Since the Experian service does not return immediate responses, it is recommended that the corner bar background notification component be configured so that users can easily follow up with the status of the email data submitted for validation. For more information, see the **Background Process Notification Component** section of the **Corner Bar Component** documentation.

Note: The Experian service is an asynchronous service, aimed at validating large batches of email data. Therefore it will not return immediate responses. The response times depend on the number of emails sent, and email data quality. The guaranteed response times are from 2 (less than 1,000 email addresses) to 20 hours (less than 100,000 email addresses).

When a response is received, one of the following result values will be written into the 'Email Status' email data quality field:

- **(blank):** Email has never been sent for validation. Typically only seen when information is first imported into STEP.
- **Disposable:** Domain is administered by a disposable email provider (e.g. Mailinator).
- **Illegitimate:** Seed, spam trap, black hole, technical role account or inactive domain.
- **Malformed:** The email is identified by STEP as having an illegal format.
- **Undeliverable:** Mailbox or domain does not exist, or mailbox is full, suspended or disabled.
- **Unknown:** We were unable to conclusively verify or invalidate this address.

- **Unreachable:** Domain has no reachable mail exchangers.
- **Verified:** Mailbox exists, is reachable, and not known to be illegitimate or disposable.

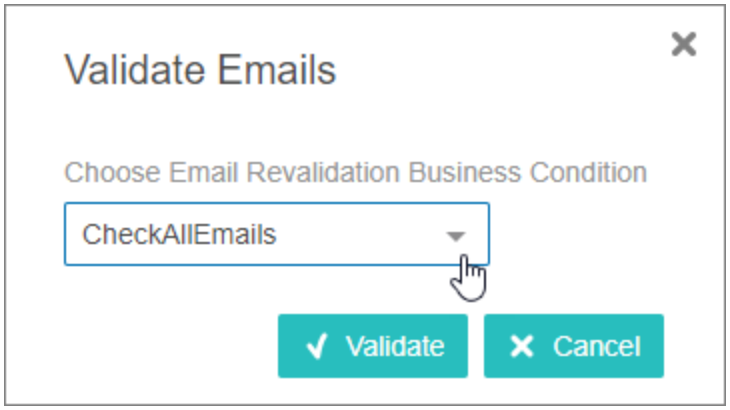
The 'Validation Timestamp' field will be updated with the date and time the email address was last received from the Experian service.

For more information, see the **Experian Email Validation Processing Plugin Parameters and Triggers** section of the **Processing Plugins** documentation.

Validate Emails by Selecting from a List of Revalidation Conditions

Optionally, more than one email revalidation condition can be configured, allowing users to quickly and easily narrow down their Experian email validation request by selecting from common business conditions (i.e., Validate new emails only, Validate new emails and emails that have not been validated in the last 30 days, Validate emails with specific domains).

When more than one email revalidation condition is configured within the designer, and a Web UI user clicks the Validate Emails action button (as described in the previous section), they will be prompted to choose from a dropdown list of available email revalidation business conditions (as shown below).



Once the desired email revalidation condition is selected from the dropdown list, and the user clicks the Validate button, then the background process notification will display (as described in the previous section).

For information on configuring multiple email revalidation business conditions, see the **Configuring a Validate Email Action Button for a Node List** topic within this guide.

Configuring a Validate Emails Action Button for a Node List

The Validate Email action button must be added to a node list and configured with a previously created Experian Email Validation Configuration. Optionally one or more email revalidation business conditions can be added, allowing users to refine the collection of emails selected to be sent for email validation.

Prerequisites

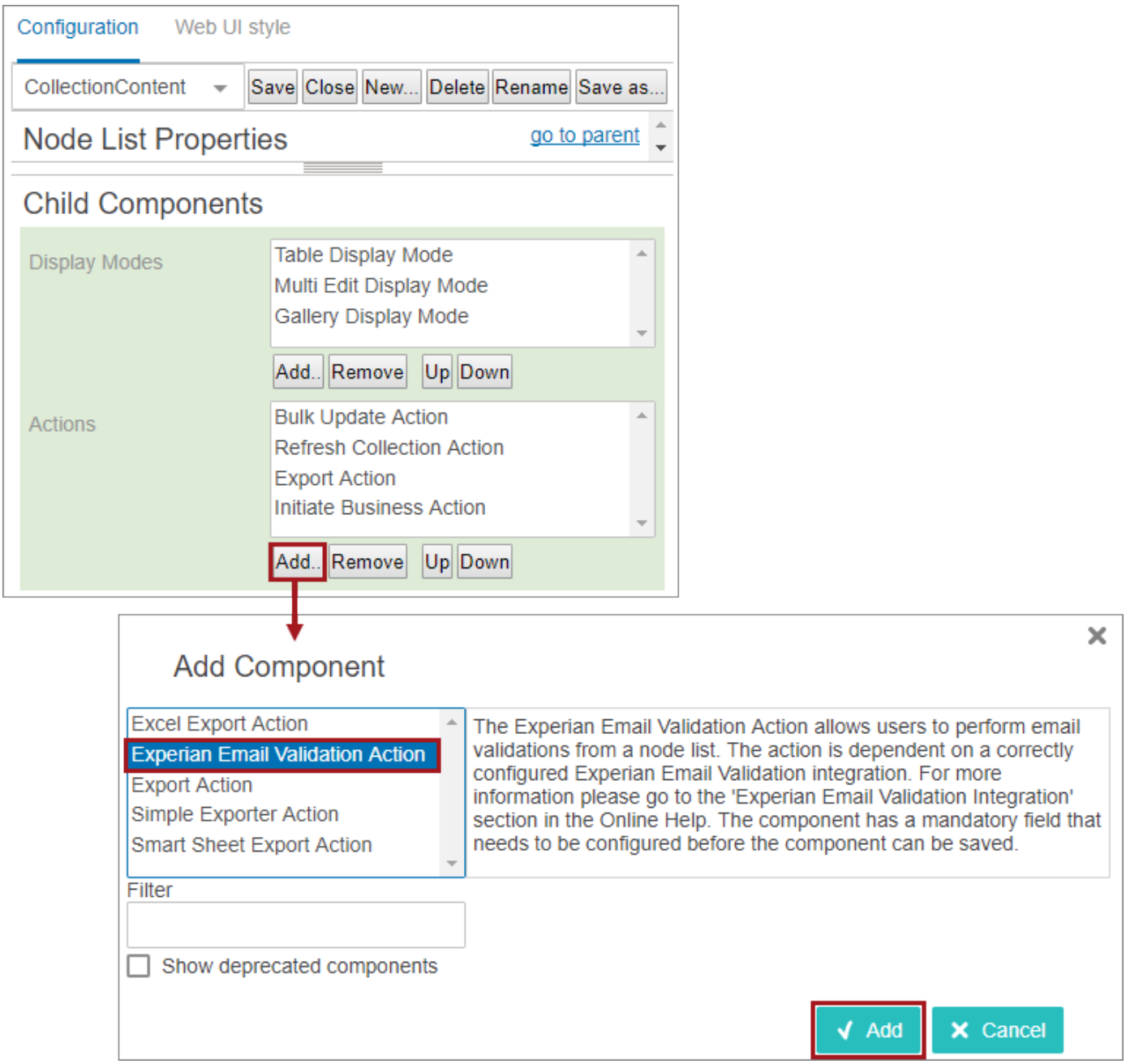
Before configuring a Validate Emails action button, it is recommended to have a firm understanding of the **Experian Email Validation Integration** section of this guide, and to have created the mandatory Experian Email Validation Configuration using the Experian Configuration object type.

For more information about action buttons on Node List, see the **Action Button Configuration on a Node List** section of the **Using a Web UI** documentation.

Add a Validate Email Action Button to a Node List

Steps for adding a Validate Email action button to a node list are below.

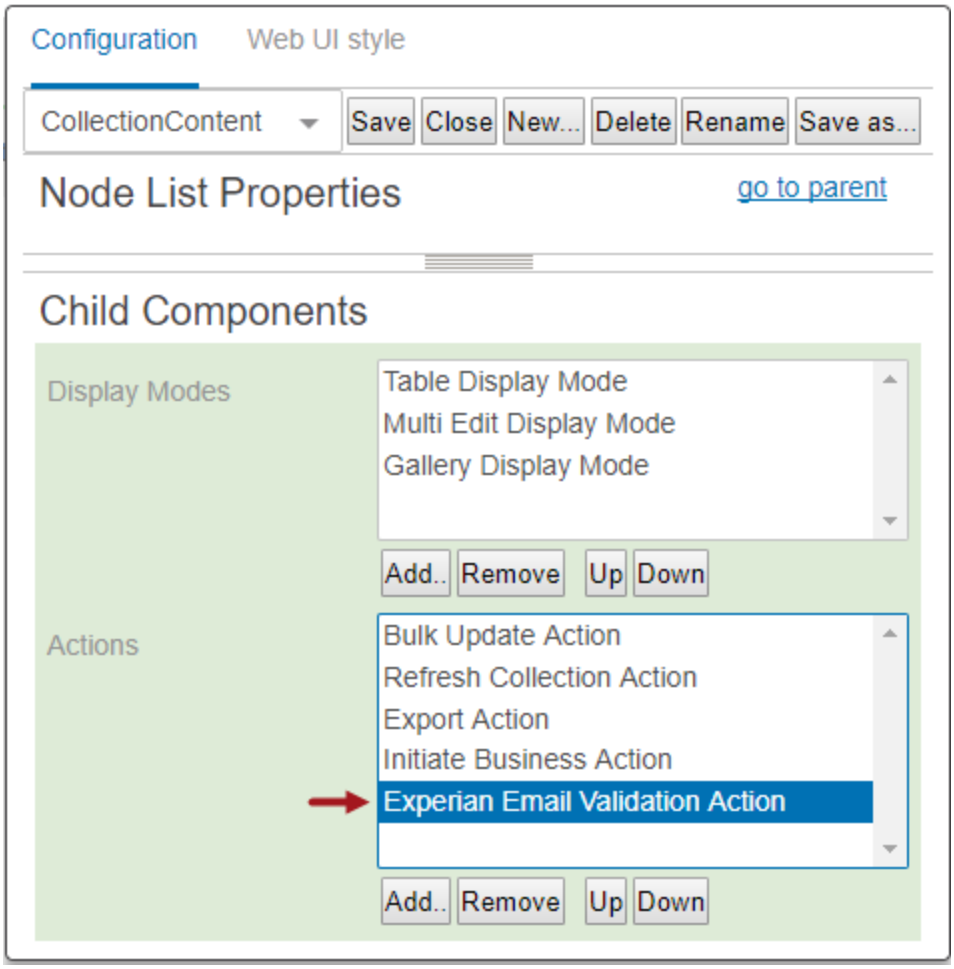
1. Go to your Node List Properties > Child Components > Actions parameter
2. Click the **Add** button, and the Add Component dialog will display.
3. Select **Experian Email Validation Action**, click the **Add** button to close the dialog, and continue to the configuration steps.



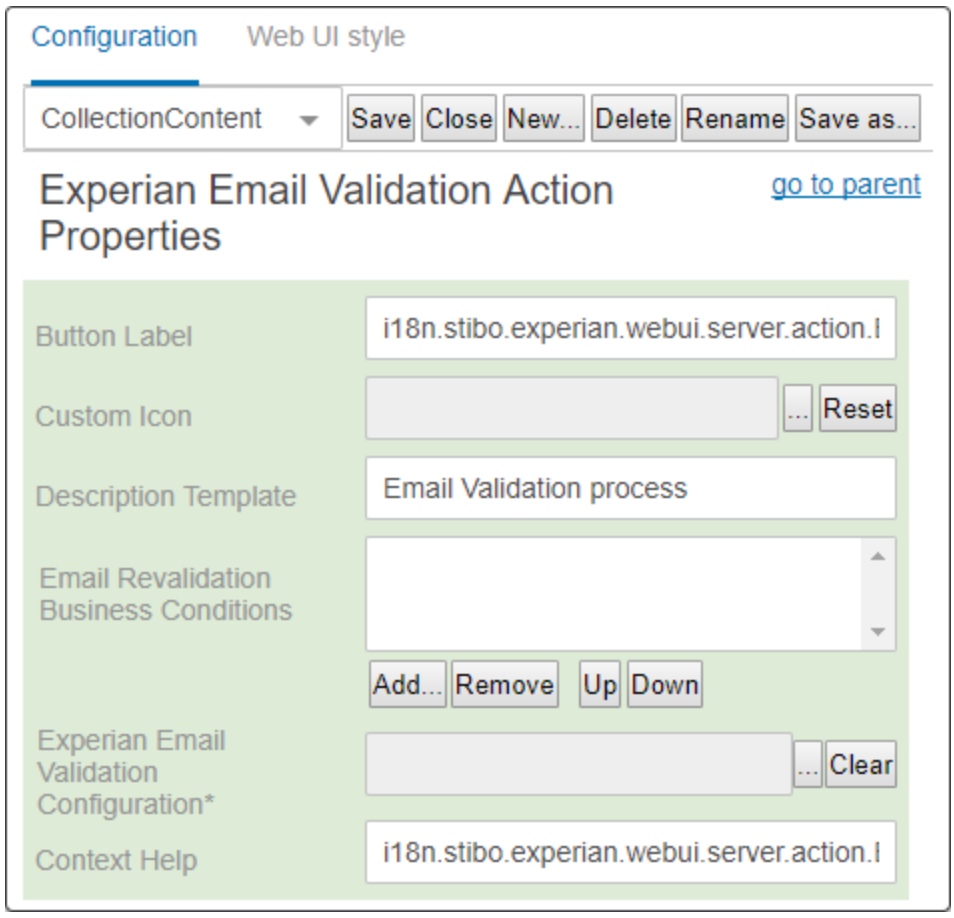
Configure a Validate Email Action Button for a Node List

Once the Experian Email Validation Action component is added to the Node List Actions parameter, follow the steps below to complete the configuration.

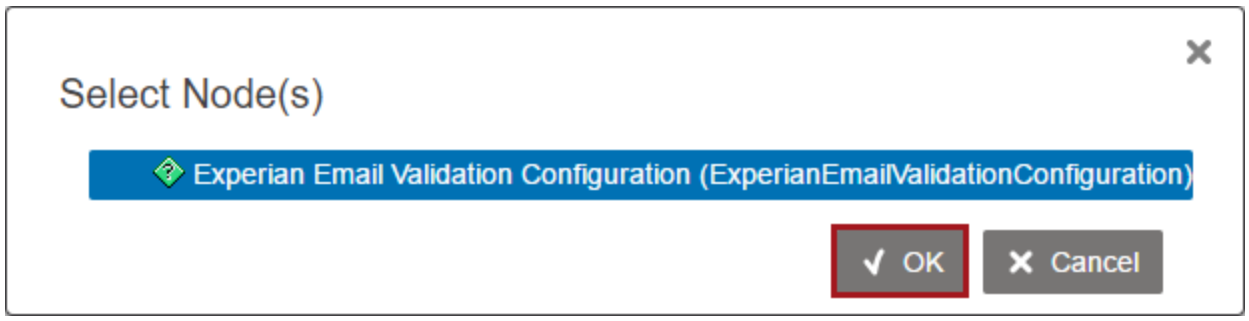
1. From the Actions parameter list, double click the newly added **Experian Email Validation Action** (as shown below).



The Experian Email Validation Action Properties dialog will display as shown below.



2. It is mandatory to populate the Experian Email Validation Configuration parameter with an Experian Configuration object. Click the ellipsis button (...) next to the Experian Email Validation Configuration parameter, and a Select Node(s) dialog will display Experian Configuration object types only.



Note: If the Email Component model easy setup wizard was used to automatically create the Experian Email Validation Configuration object, then the configuration option will appear as shown above.

3. Select **your Experian Configuration object**, and click the **OK** button. The Select Node(s) dialog will close, and the selected Experian Configuration object will display within the Experian Email Validation Configuration

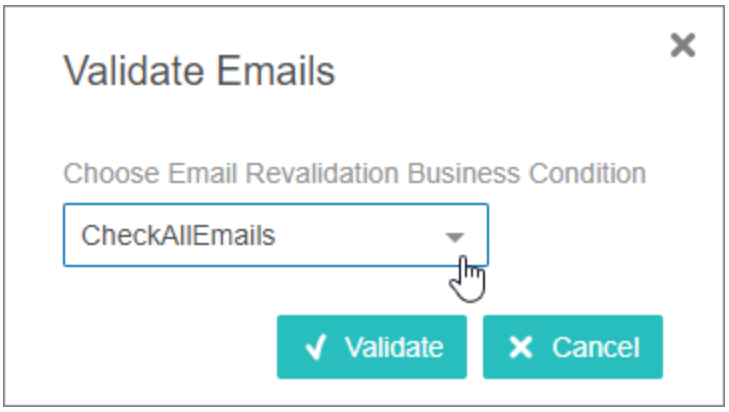
parameter.

4. Click the **Save** and **Close** buttons on the designer.

Optionally, additional parameters within the Experian Email Validation Action properties can be configured. The optional parameters are described below.

Configure Optional Parameters for the Experian Email Validation Action Properties

- **Button Label:** Enter the text to be displayed as the label for the action button icon. The label will only be displayed if the 'Include Label' parameter on the parent Node List properties is enabled.
- **Custom Icon:** Adding a custom icon will overwrite the default icon displayed in Web UI. The recommended size of the icons is 20 (height) x 35 (width) pixels. It is recommended that icons use deep jewel toned colors that fade well when disabled.
- **Description Template:** Enter the text to be used to identify the corresponding background process.
- **Context Help:** Enter text to be displayed when a user hovers over the action button in Web UI.
- **Email Revalidation Business Conditions:** Adding multiple Email Revalidation Business Conditions can help users quickly and easily narrow down their Experian email validation request by selecting from common business conditions (i.e., Validate new emails only, Validate new emails and emails that have not been validated in the last 30 days, Validate emails with specific domains).
  - When business conditions are added to this parameter, they will display for selection when a user clicks the Validate Emails action button in Web UI (as shown below).

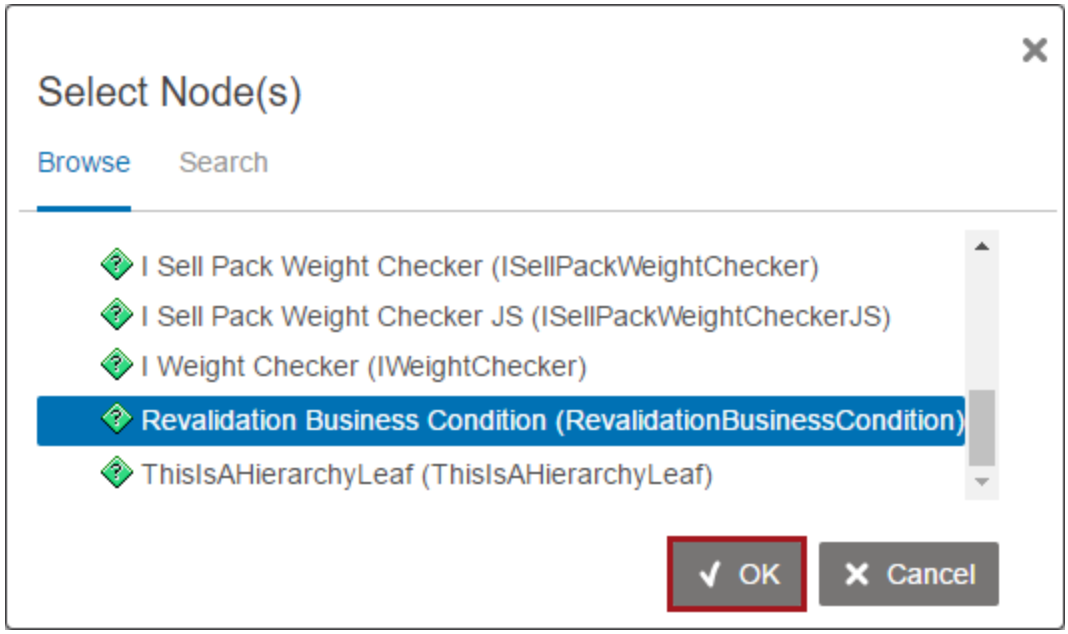


  - When the parameter is empty, and the Web UI user clicks the Validate Emails action button, the user is not prompted to select a business condition, and all selected emails will be sent for email validation.

Add Email Revalidation Business Conditions

Below are steps to add a previously configured business conditions to the Email Revalidation Business Conditions parameter.

1. Click the ellipsis button (...) next to the Email Revalidation Business Condition parameter to display a Select Node(s) dialog.

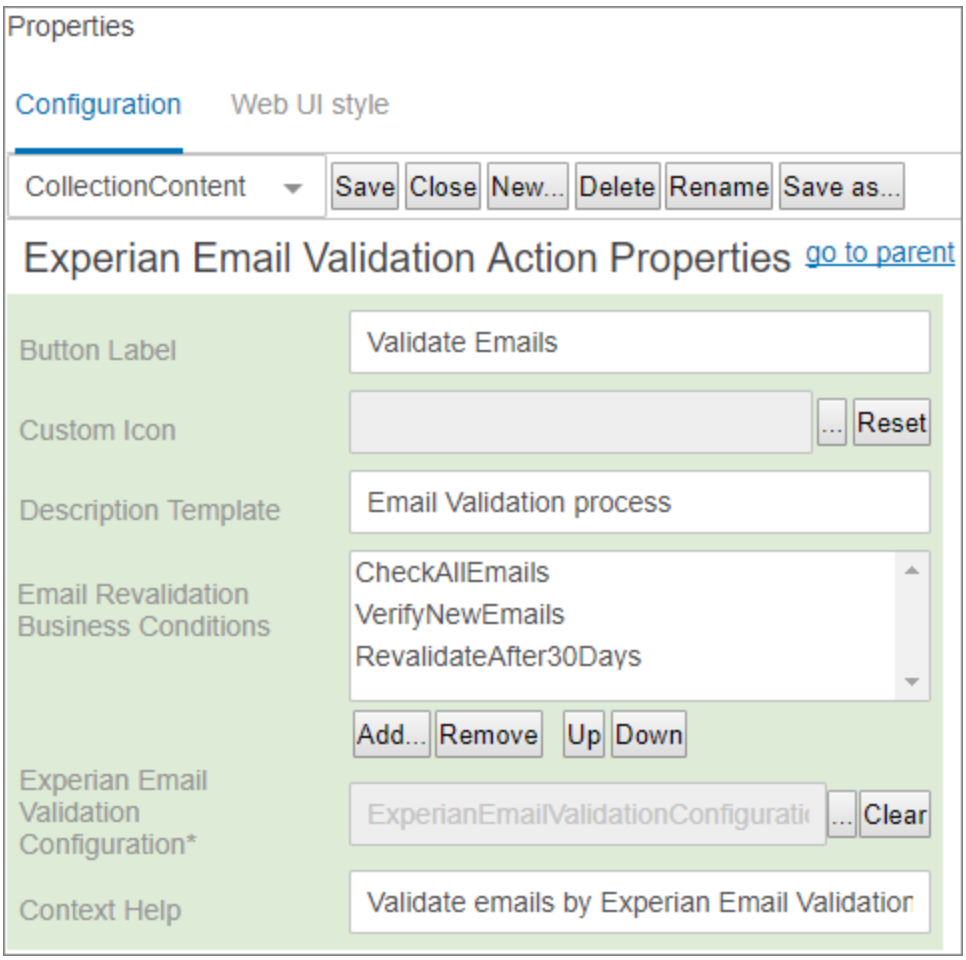


Note: If the Email Component model easy setup wizard was used to automatically create the revalidation business condition, then the condition will appear as shown above.

2. Browse or search to select **your revalidation business condition**.
3. Click the **OK** button, the Select Node(s) dialog will close, and the selected revalidation business condition will display within the Email Revalidation Condition parameter.
4. Optionally, repeat the above steps to add more than one email revalidation business condition.

Note: If one email revalidation business condition is added to the Email Revalidation Business Condition parameter, and the Web UI user clicks the Validate Emails action button, the user will not be prompted to select a business condition, and only the selected emails that comply with the configured email revalidation business condition will be sent for email validation. To allow Web UI users to choose a 'Check All Emails' option along with the added email revalidation business condition, then an additional 'Check All Emails' email revalidation business condition needs to be created and added to the Email Revalidation Business Condition parameter.

Below is an example of configuring multiple email revalidation business conditions.



For information on and images of the Email Validation business condition in the workbench, see the **Email Revalidation Business Condition** section of the **Experian Email Validation Integration** topic in this guide

Exporting Web UI Definitions as Comments

Web UI configuration definitions can be exported as comments using Advanced STEPXML. These exports are intended to be used for submission to external source control systems for comparison purposes. Users can import them into source code repository systems where they can be compared from version to version. Editing and/or import of these files is not supported (e.g., users may not export, edit the comments, and re-import in STEP).

To export a Web UI definition for external comparison, Advanced STEPXML must be used and the DefinitionsAsComments tag must be set to 'true'.

On the Select Format step of the outbound tool, choose the Advanced STEPXML format, then copy and paste the following text into the Template field:

```
<?xml version='1.0'?>
    <STEP-ProductInformation DefinitionsAsComments="true">
        <PortalConfigurations ExportSize="All"/>
    </STEP-ProductInformation>
```

An example of the output for a Web UI definition as comments is shown below:

```
<PortalConfigurations...>
    <!--Definition:[This is the Web UI definition. Removed for brevity.-->
   [Remaining configuration]
</PortalConfigurations>
```

Note: The content of the comment field is not part of the STEPXML XSD and therefore Stibo Systems reserves the right to change the format of the output content at any time.

For more information, see the **STEP-ProductInformation Tag in STEPXML** section of the **Data Exchange** documentation.

Find Existing

In an effort to avoid the creation of duplicate addresses in STEP, Find Similar functionality can be added to the Store Single Referenced Target Web UI component via the **Find Existing** action.

The Find Existing action searches objects to identify similar objects using a matching setup that the customer creates and uses for duplicate handling. If similar objects are found after running the action / algorithm, the user is provided with the results in a user-configured detailed list.

The key to Find Existing functionality is the **matching setup** that the customer creates and uses for duplicate handling. Every time a user enters data into the search fields and clicks OK, the Find Existing search checks the match code values involved, executes the relevant matching algorithm, and provides a set of results, if any are found. If a user is not getting the results set they expect, then the first place to check is the algorithm selected for the Duplicate Handler parameter in the component properties. Bind types are not required for Find Existing functionality since a simple comparator expression, written to compare attributes of the same object type, is used.

Prerequisites

All the steps provided in this topic assume the Web UI designer is in design mode and on the applicable **Properties** screen prior to starting the configuration process. It is also assumed that all users (designers and end users) have the proper privilege to work with these features. For more information about privileges and user setup, see the **Users and Groups** section and **Adding User Privileges for a Group** section of the **System Setup / Super User Guide** documentation.

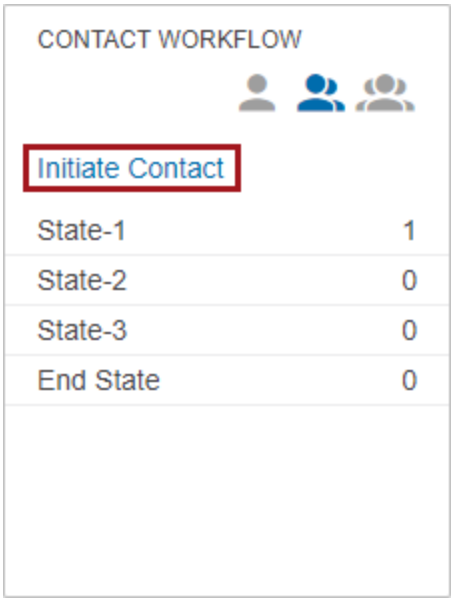
A relevant Match Code and Matching Algorithm needs to be set up before attempting to use the Find Existing action. For more information about setting up and using matching algorithms, see the **Configuring Matching Algorithms** section of the **Matching, Linking, and Merging** documentation.

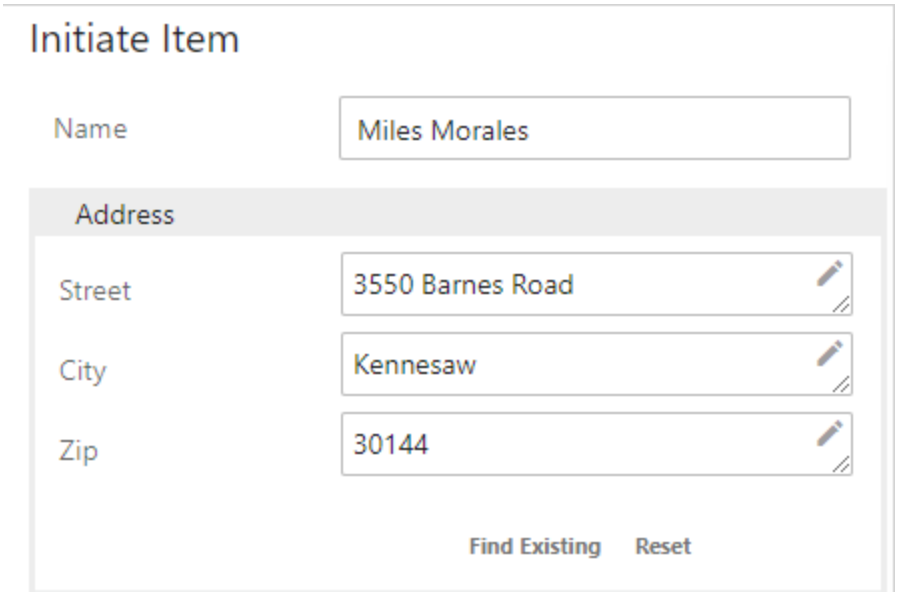
Using Find Existing on Store Single Referenced Target

This is a very basic example of how the Find Existing action can be used within a Store Single Referenced Target component on an Initiate Item screen. Configuration instructions are after this section.

The end user begins the object (Contact) initiation process by clicking Initiate Contact on the Status Selector Homepage Widget. On the Initiate Screen, the user may enters data into the referenced object attribute value fields. If the user will be doing a Find Similar search after checking for duplicate references, then the user should also enter data for the direct object attribute values.

Before doing an overall Find Similar search on both the direct object and its referenced object, the user clicks the Find Existing button within the Store Single Referenced Target framework to first search for similar objects within that object type. In the example below, the Find Existing action is comparing address objects against address objects to see if a similar address exists in STEP.


CONTACT WORKFLOW
Initiate Contact
State-1 1
State-2 0
State-3 0
End State 0


Initiate Item
Name
Miles Morales
Address
Street
3550 Barnes Road
City
Kennesaw
Zip
30144
Find Existing
Reset

The algorithm runs in the background and the configured Dialog List Screen displays. Remember that this is not a standard search and results are based on the matching algorithm running in the background.

Important: As stated at the beginning of this topic, the key to Find Existing functionality is the matching setup that the customer creates and uses for duplicate handling. This is important because the attributes being searched *must* be part of the list of attributes that Match Codes are generated for. If not, the search will not work as expected.

A maximum of fifty (50) objects are shown at one time on the results list. The user can select one of the objects shown in the results list. Once a selection is made, the OK button is engaged. Clicking OK indicates that you want to use the selected referenced object and use it with creating the direct object.

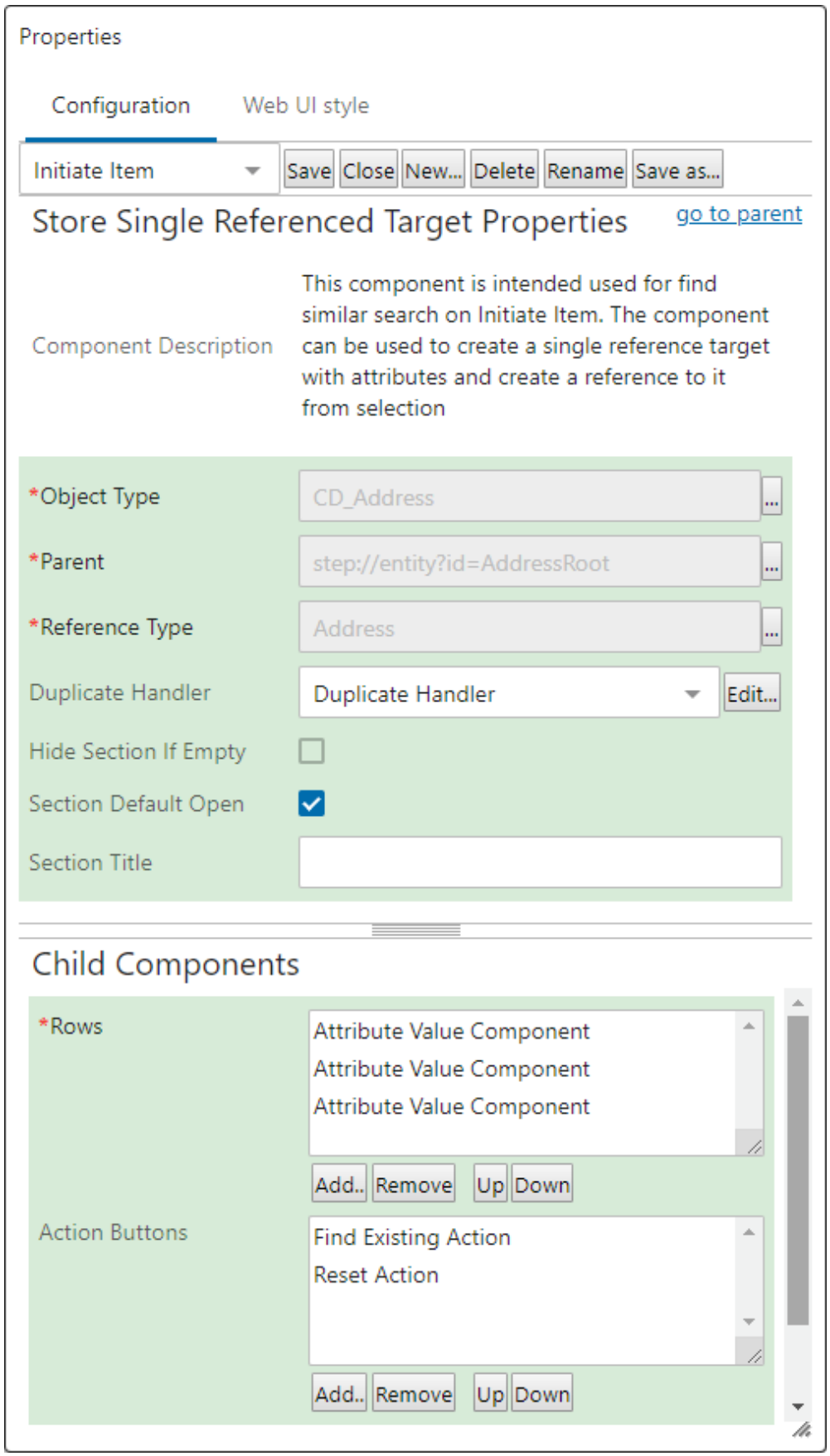
The attribute value fields within the Store Single Referenced Target component become read only. If the user wants to create a new reference object with the attribute values entered instead of using one from the results list, the user clicks Cancel to exit the results list.

The user can run a Find Similar search, to see if there is a similar contact object that has an address reference that exactly matches the attribute values within the Store Single Referenced Target. See the **Find Similar** topic for more information on using that functionality after running a Find Existing action.

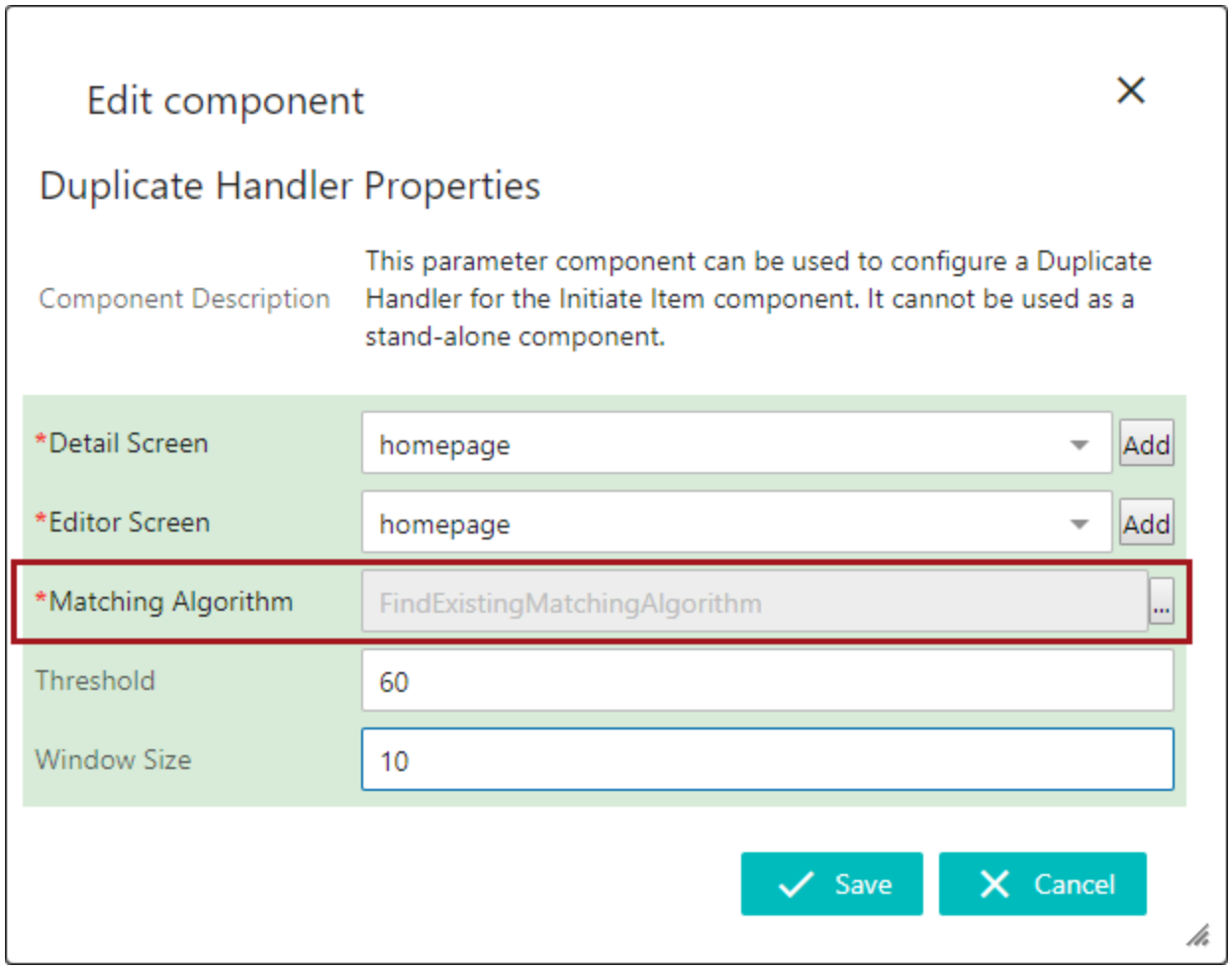
Configuring Find Existing on Store Single Referenced Target

Following the configuration steps below allows end users to search on referenced objects to identify matches within a single object type. If a similar address is found and used, then the direct object will be initiated and linked to selected existing referenced object rather than creating a new referenced object.

1. Create a new **Initiate Item** screen (or use an existing one) and complete configuration, making sure to add and configure the **Store Single Referenced Target** component. Complete details on configuration can be found in the **Initiate Item Screen** topic and within the **Find Similar** topic.
2. While in Web UI designer, navigate to where the Store Single Referenced Target component is located (within a Node Editor on an Initiate Item screen). Double click on **Store Single Referenced Target** in Child Components > Rows to configure the component.


Properties
Configuration
Web UI style
Initiate Item
Save
Close
New...
Delete
Rename
Save as...
Store Single Referenced Target Properties
go to parent
Component Description
This component is intended used for find similar search on Initiate Item. The component can be used to create a single reference target with attributes and create a reference to it from selection
*Object Type
CD_Address
*Parent
step://entity?id=AddressRoot
*Reference Type
Address
Duplicate Handler
Duplicate Handler
Edit...
Hide Section If Empty
Section Default Open
Section Title
Child Components
*Rows
Attribute Value Component
Attribute Value Component
Attribute Value Component
Add..
Remove
Up
Down
Action Buttons
Find Existing Action
Reset Action
Add..
Remove
Up
Down

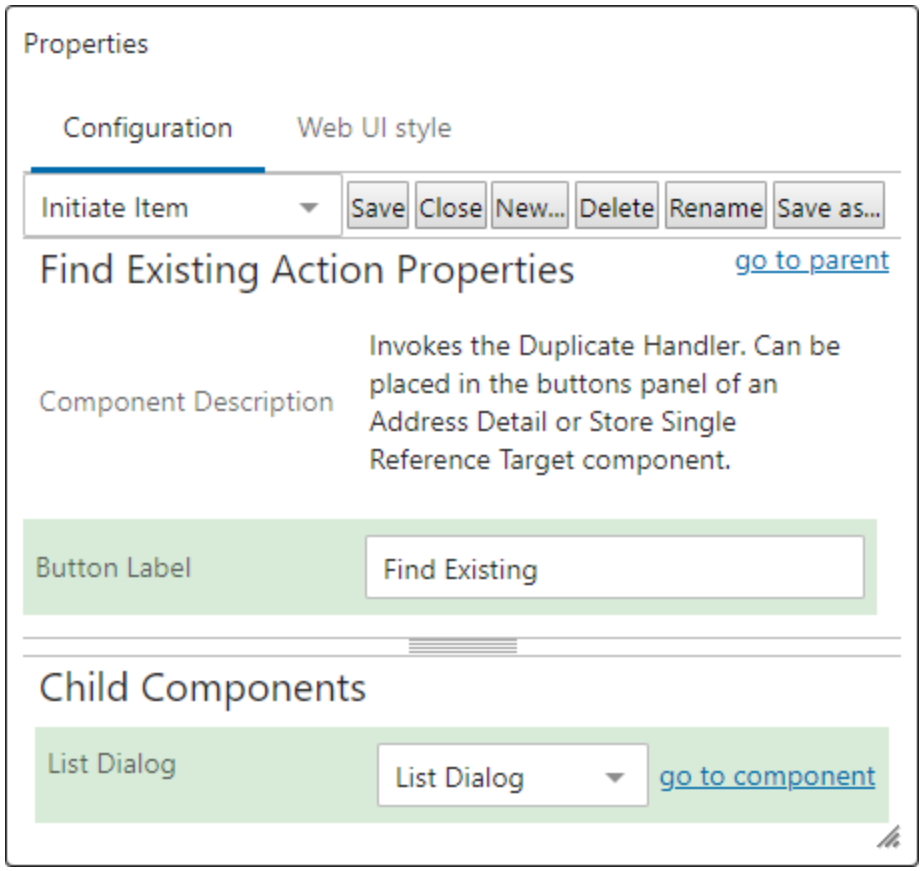
3. Click the ellipsis button (...) to make selections for each of the required parameters. Determine the:
   - **Object Type** of the objects being searched and that will be initiated in to STEP as a reference to the direct object being created.
   - **Parent** to be used for the object type when object is created on save.
   - **Reference Type** to be used when object is created on save.
4. Select **Duplicate Handler** in the dropdown for the Duplicate Handler parameter.
5. The **Duplicate Handler Properties** screen will display. The only required setting is the **Matching Algorithm** parameter. Click the ellipsis button (...) to the right of the value field and select a matching algorithm. Click **Save**.



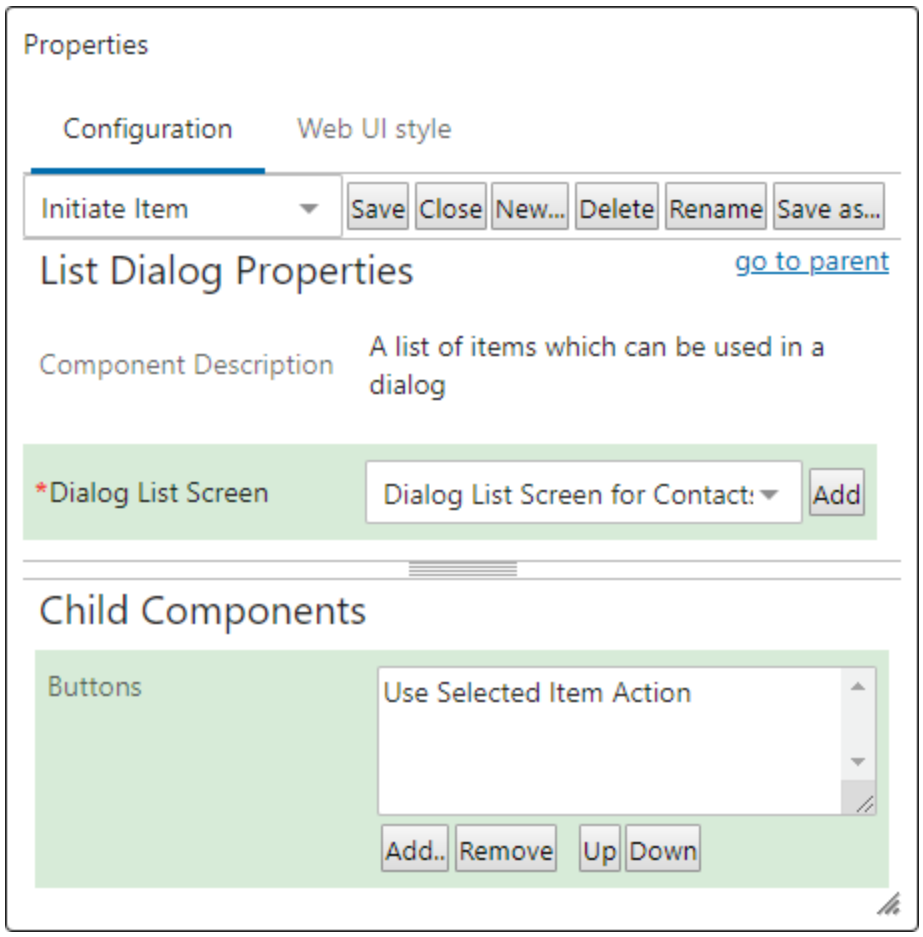
6. For Child Components > Rows, click the **Add** button.
7. Next, select the applicable component (Attribute Value or Attribute Value Group) and choose attributes to be used on the Initiate Item screen (within the Store Single Referenced Target framework) and that are also used within the algorithm. Click **Add** within the 'Add Component' dialog and you will be returned to the Store Single

Referenced Target Properties.

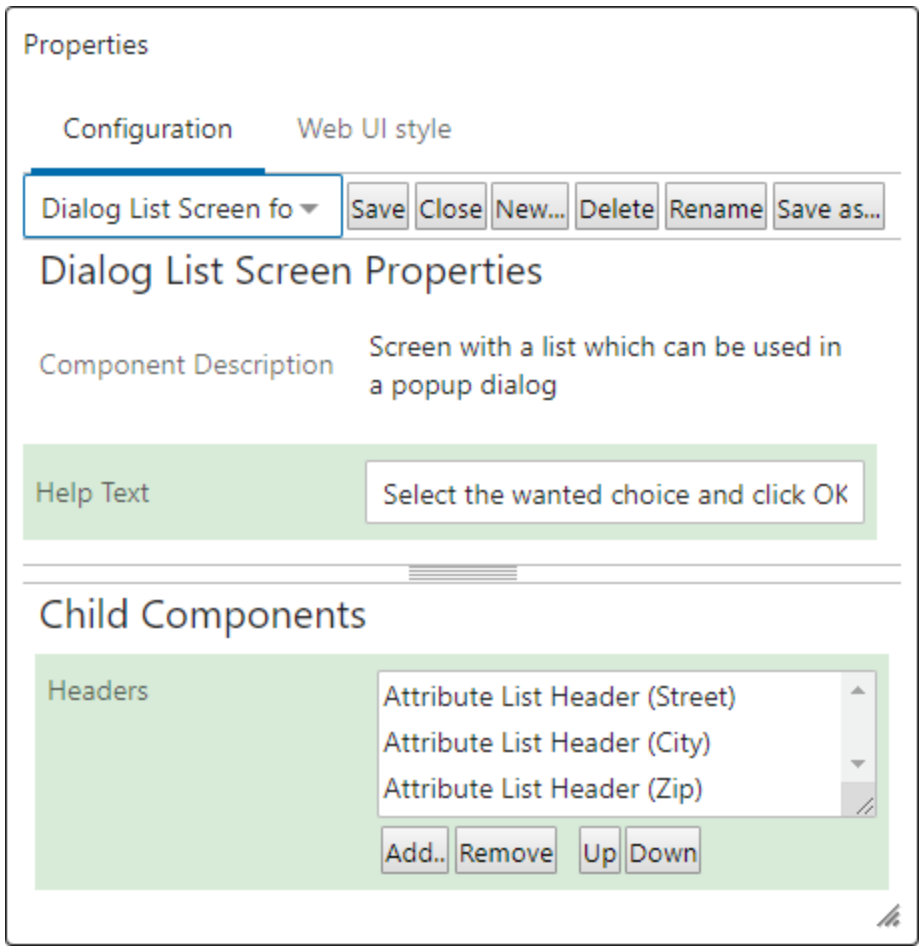
8. Under Child Components > Action Buttons, click **Add**.
   - Select **Find Existing Action**and click Add.
   - Repeat this step and add the **Reset Action**.
9. Double click the **Find Existing Action** title and open the **Find Existing Action Properties**.



10. Edit the **Button Label**, if desired. Under **Child Components** > **List Dialog**, select **List Dialog** from the dropdown menu.
11. On **List Dialog Properties**, click **Add** to the right of the Dialog List Screen value field.
12. Create a new screen by selecting **Dialog List Screen** from the list of available screen types / components. Enter an easily identifiable Screen ID, click **Add**. The screen ID will automatically populate in the Dialog List Screen value field.
13. If a **Dialog List Screen** already exists, skip the previous two steps and on the **List Dialog Properties**, select the **Dialog List Screen** using the dropdown.



14. Also on the **List Dialog Properties** screen, in the **Child Components** > **Buttons** field, click **Add** and select **Use Selected Item Action**. Click **Add**, and then click **Save** in the designer window.
15. Before exiting design mode, select the Dialog List Screen ID of the screen you just created from the dropdown menu. In the example above, the screen ID is Dialog List Screen for Contacts.
16. Configure the **Child Components** > **Headers** section of the **Dialog List Screen Properties**. Click **Add** under the value field to set up the attributes that will display in the search results list.



17. Add different Dialog List Screen **Help Text**, if desired. It will display at the top of the template results list.
18. Click **Save** and **Close** the designer.

Find Similar

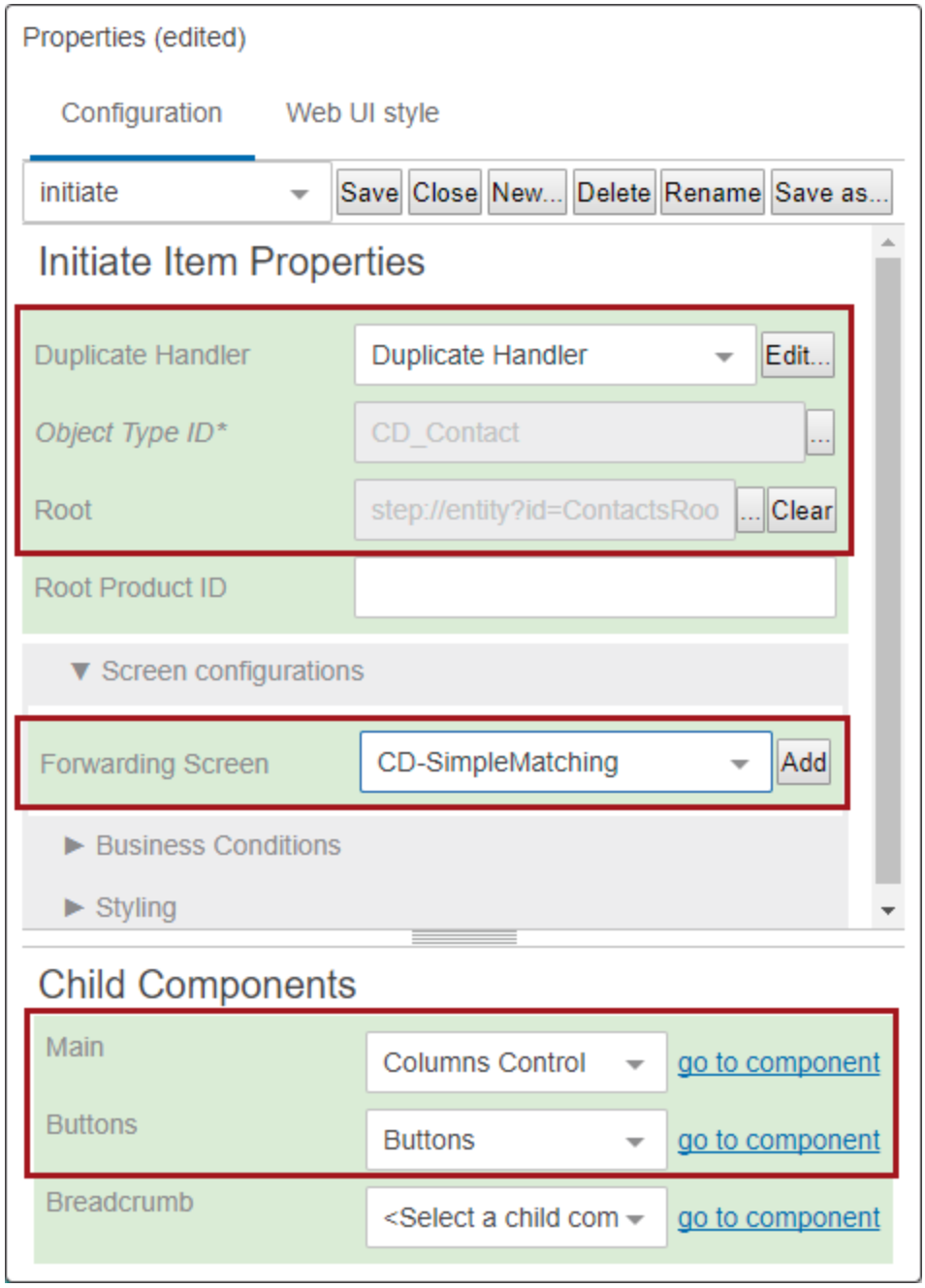
In an effort to prevent users from creating duplicate objects in the STEP system, users can use the **Find Similar Action** to identify similar objects prior to initiating new ones when working in Initiate Item screens in Web UI. Also, users can use **Find Similar** functionality to search for and identify similar objects prior to adding references and creating target objects within a Multi-Reference Editor. Using Find Similar allows users to search for potential duplicates on a more granular level.

The key to Find Similar functionality is the **matching setup** that the customer creates and uses for duplicate handling. Every time a user enters data into the search fields and clicks OK, the Find Similar search checks the match code values involved, executes the relevant matching algorithm, and provides a set of results, if any are found. If a user is not getting the results set they expect, then the first place to check is the algorithm configured in the Duplicate Handler parameter in the Add Reference Action Properties. Two bind types work with the Find Similar functionality. They are: **First Match Object** and **Second Match Object**. A relevant Match Code and Matching Algorithm needs to be set up before attempting to use the Find Similar Search tab. For more information about setting up and using matching algorithms, see the **Configuring Matching Algorithms** section of the **Matching, Linking, and Merging** documentation.

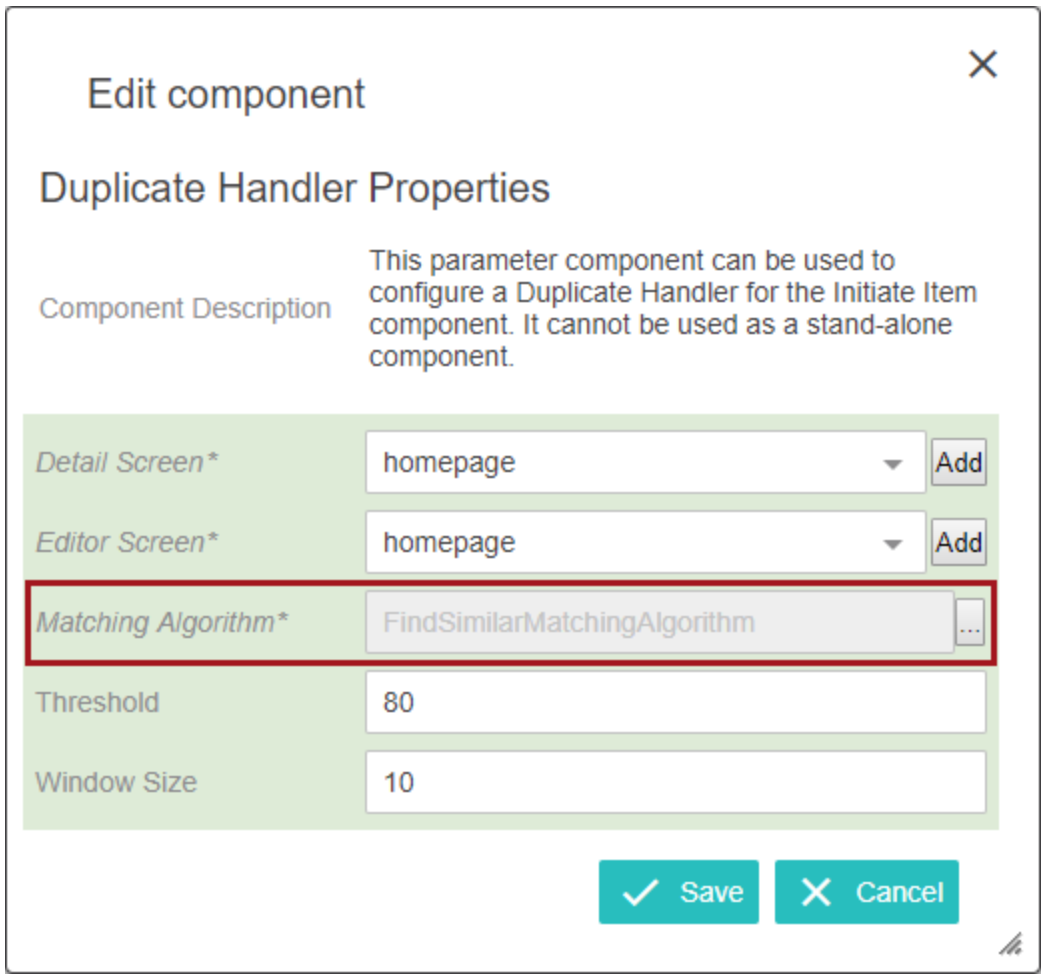
Prerequisites

All the steps provided in this topic assume the Web UI designer is in design mode and on the applicable **Properties** screen prior to starting the configuration process. It is also assumed that all users (designers and end users) have the proper privilege to work with these features. For more information about privileges and user setup, see the **Users and Groups** section and **Adding User Privileges for a Group** section of the **System Setup / Super User Guide** documentation.

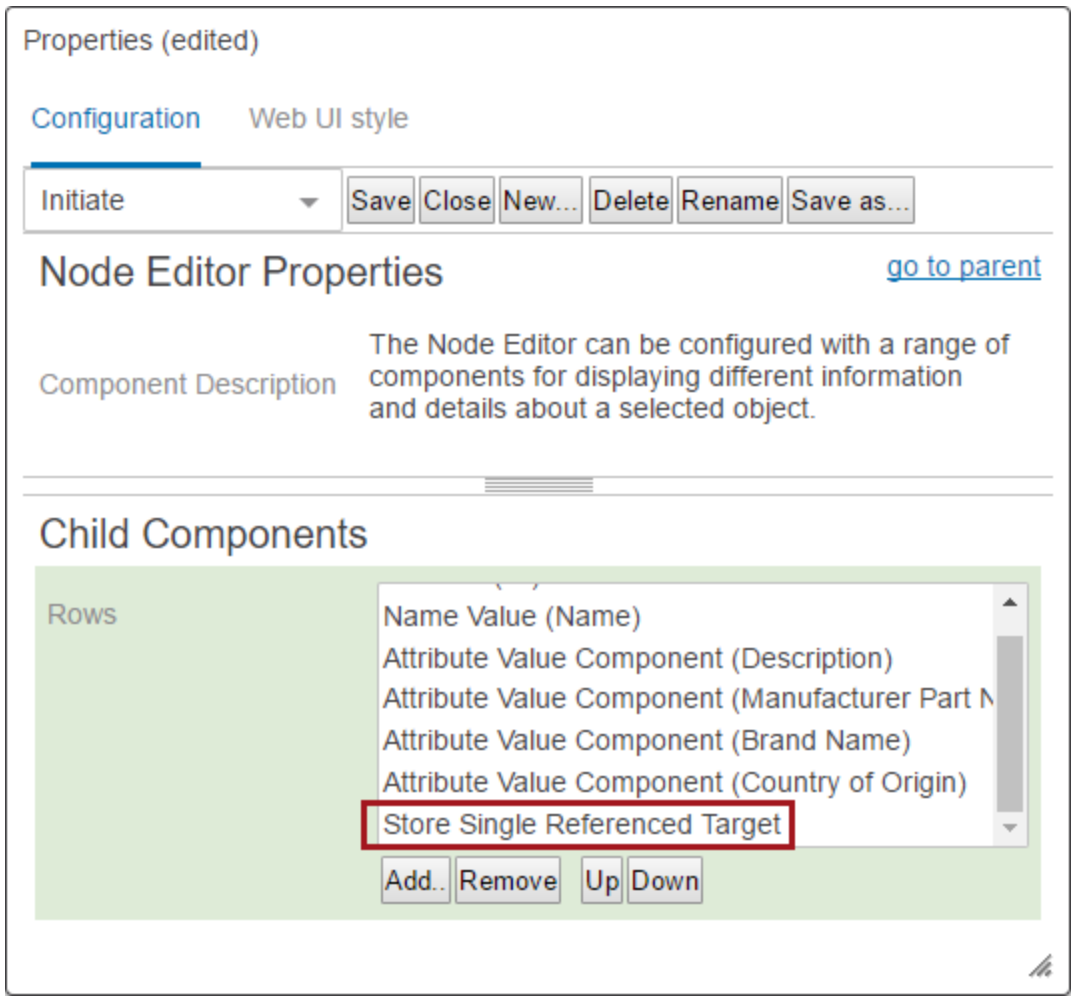
Configuring Find Similar on an Initiate Item Screen



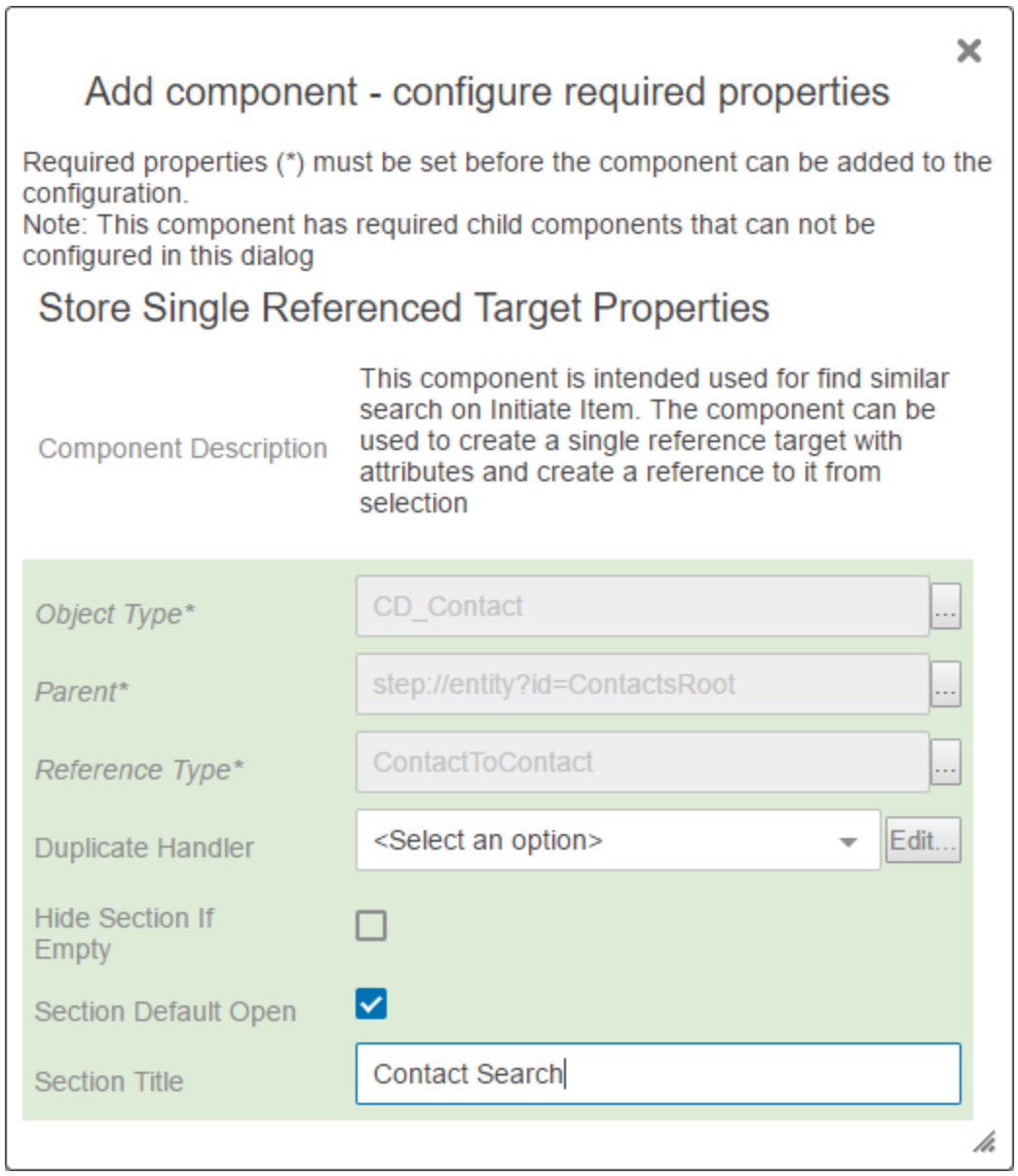
1. Create a new **Initiate Item** screen or use an existing one.
2. In **Initiate Item Properties**, select **Duplicate Handler** in the dropdown for the **Duplicate Handler** parameter.
3. The **Duplicate Handler Properties** screen will display. The only required setting is the **Matching Algorithm** parameter. Click the ellipsis button (...) to the right of the value field and select a matching algorithm. Click **Save**.



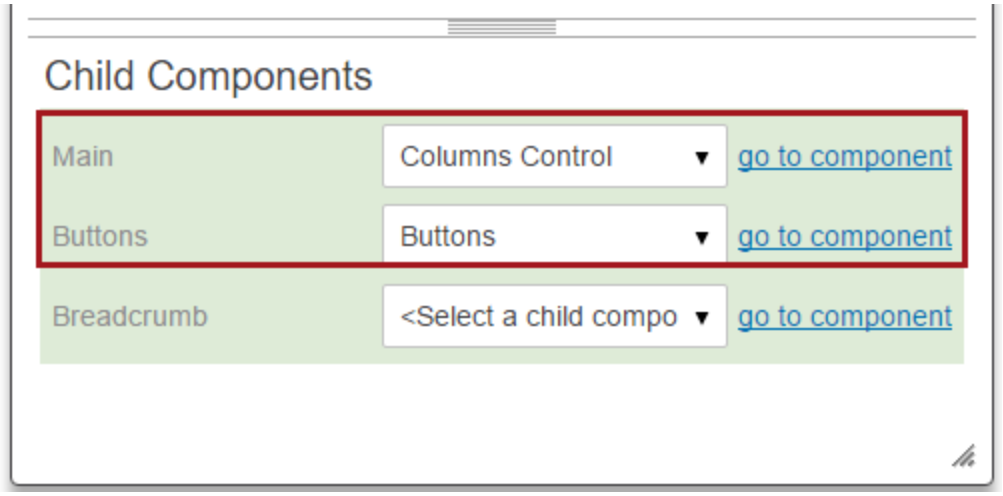
4. Click the ellipsis button (...) to the right of the **Object Type ID** parameter to select the object type of the objects that will be initiated in to STEP.
5. Click the ellipsis button (...) to select a **Root**. New items will be created below the designated root.
6. Make a **Forwarding Screen** selection. This is the screen that will be shown once an object is created. (Using the example setup portrayed in the screenshots, when you click on a CD_Contact object in the Web UI Tree, you are taken to the CD-SimpleMatching screen. So, if you are creating a new CD_Contact object using the Initiate Screen, after saving the object, you want to go to the CD-SimpleMatching screen to view that object.)
7. For **Child Components** > **Main**, choose **Columns Control** from the dropdown. Then click on **go to component** and select **Node Editor** in the **Child Components** > **Columns** of the **Columns Control Properties**.
8. Within the **Node Editor Properties**, the search attributes need to be configured within the **Child Components** > **Rows** value field using the Add, Remove, Up and Down buttons. These search attributes are for searching direct objects.



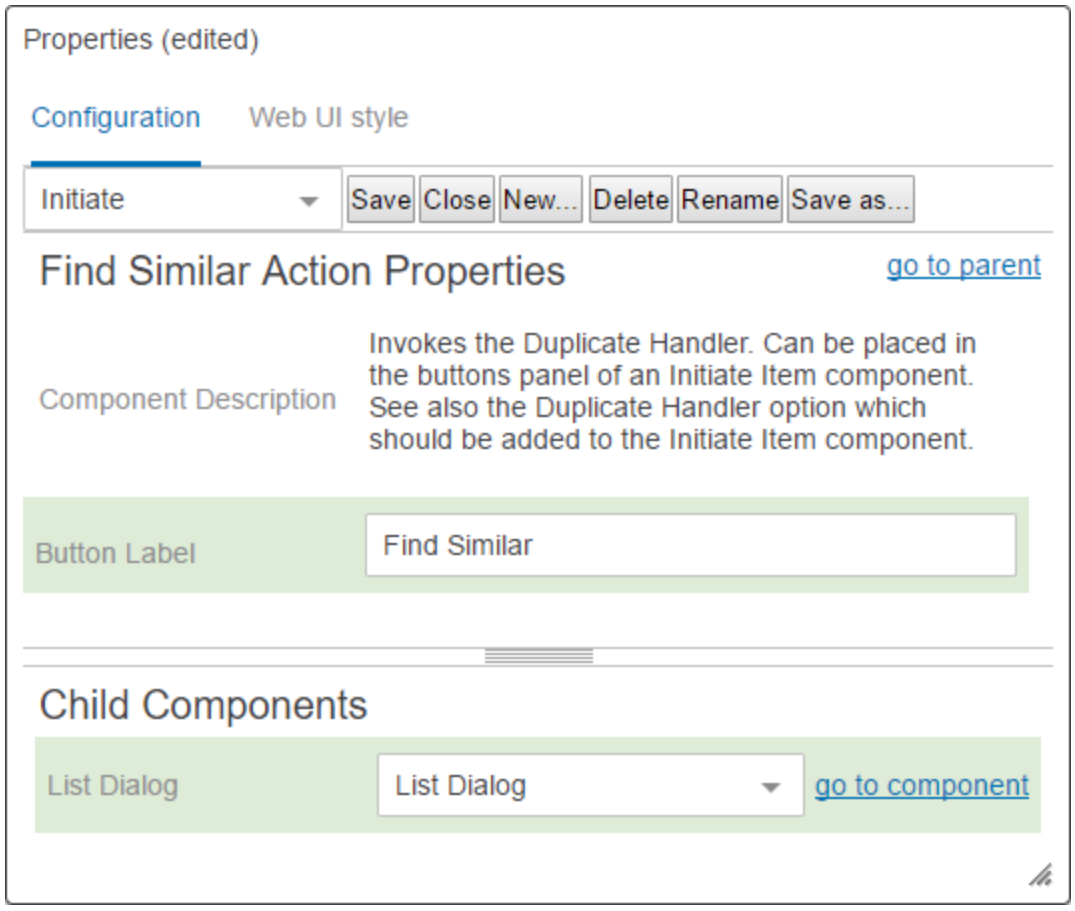
9. Add the **Store Single Referenced Target** component if end users will be searching on referenced objects in addition to direct objects (see example above).
10. Double click on **Store Single Referenced Target** to configure the component. **Object Type**, **Parent**, **Reference Type**, and **Child Component** > **Rows** (not shown) are required parameters / components. Go through each parameter one-by-one to complete the configuration.



11. Back on the **Initiate Item Properties** screen, go to **Child Component** > **Buttons** and click on 'go to component.' In the **Actions** value field, click **Add** and select **Find Similar Action**.

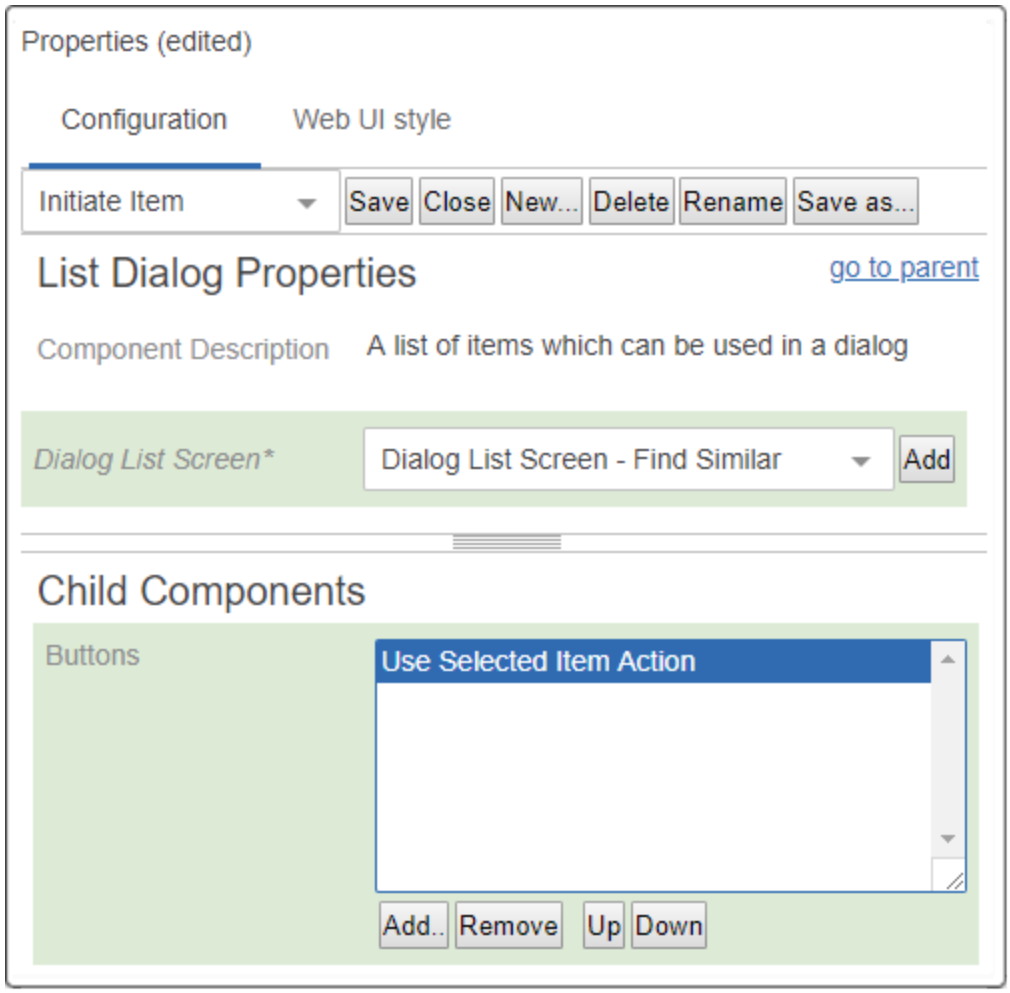


12. Double click on the **Find Similar Action** title and open the **Find Similar Action Properties**.

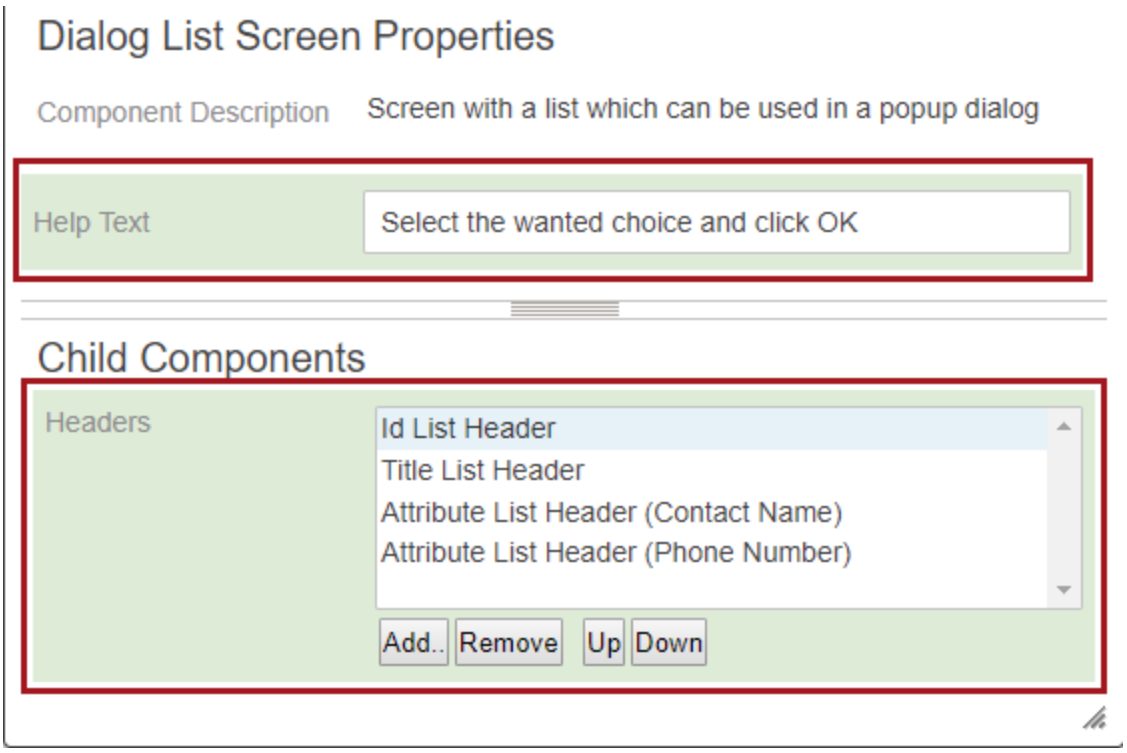


13. Edit the **Button Label**, if desired. Under **Child Components** > **List Dialog**, select **List Dialog** from the dropdown menu.

14. On **List Dialog Properties**, select a Dialog List Screen. If a **Dialog List Screen** does not exist, follow the next two steps to create one.
15. Click **Add** to the right of the Dialog List Screen value field.
16. Create a new screen by selecting **Dialog List Screen** from the list of available screen types / components. Enter an easily identifiable Screen ID, click **Add**. The screen ID will automatically populate in the Dialog List Screen value field.



17. Also on the **List Dialog Properties** screen, in the **Child Components** > **Buttons** field, click **Add** and select **Use Selected Item Action**. Click **Add**, and then click **Save** in the designer window.
18. Before exiting design mode, select the Dialog List Screen ID of the screen you just created from the dropdown menu. In the example above, the screen ID is Dialog List Screen - Find Similar.
19. Configure the **Child Components** > **Headers** section of the **Dialog List Screen Properties**. Click **Add** under the value field to set up the attributes that will display in the Find Similar Search tab for the results list. The **Help Text** is editable and will display at the top of the results list.

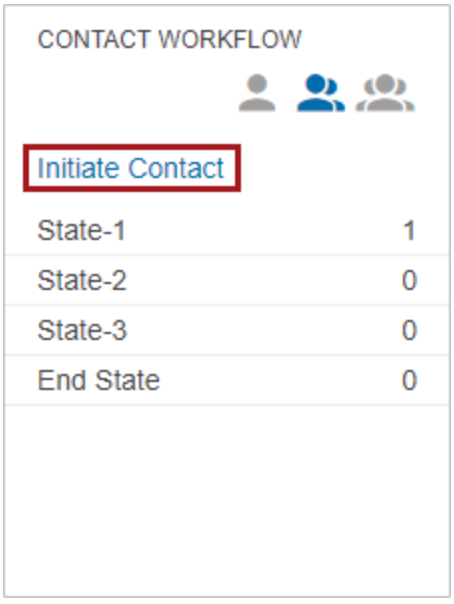


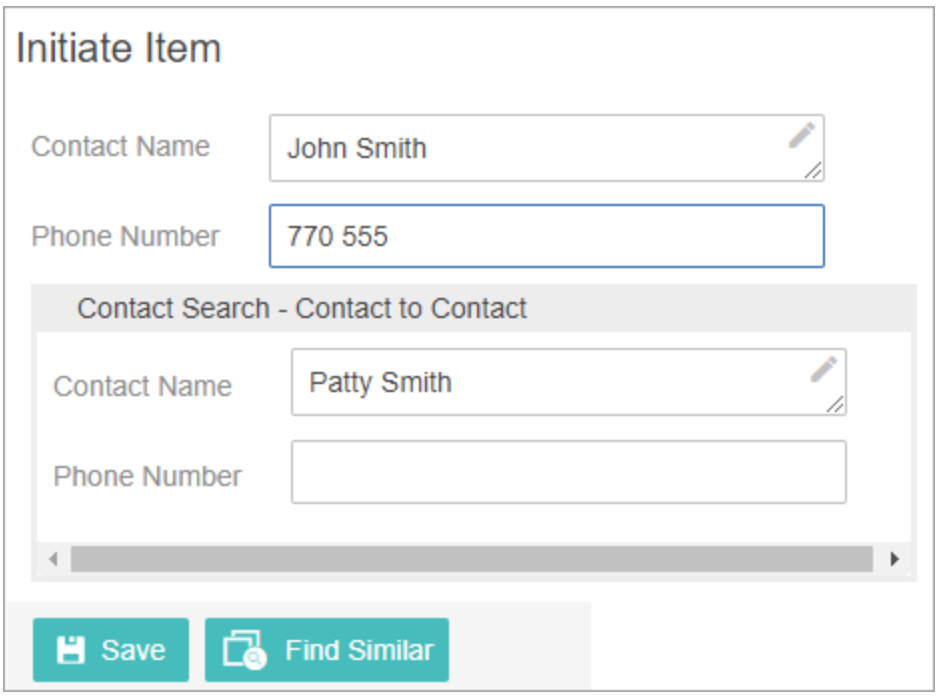
20. Click **Save** and **Close** design mode to return to normal Web UI mode.

Using Find Similar on an Initiate Item Screen

This is a very basic example of how **Find Similar** is used on an **Initiate Item** screen.

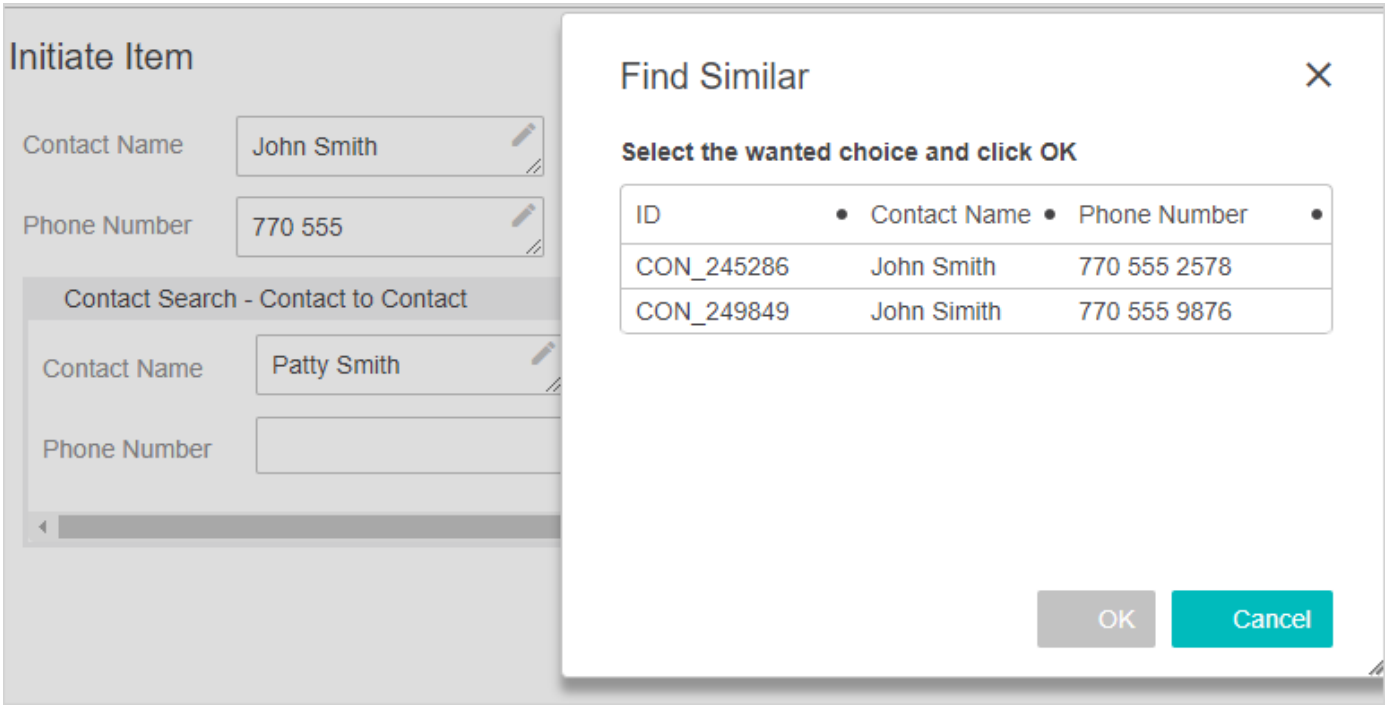
The end user begins the object (Contact) initiation process by clicking Initiate Contact on the Status Selector Homepage Widget. On the Initiate Screen, the user enters data into the direct object search fields and also into the referenced object search fields and then clicks the Find Similar button.



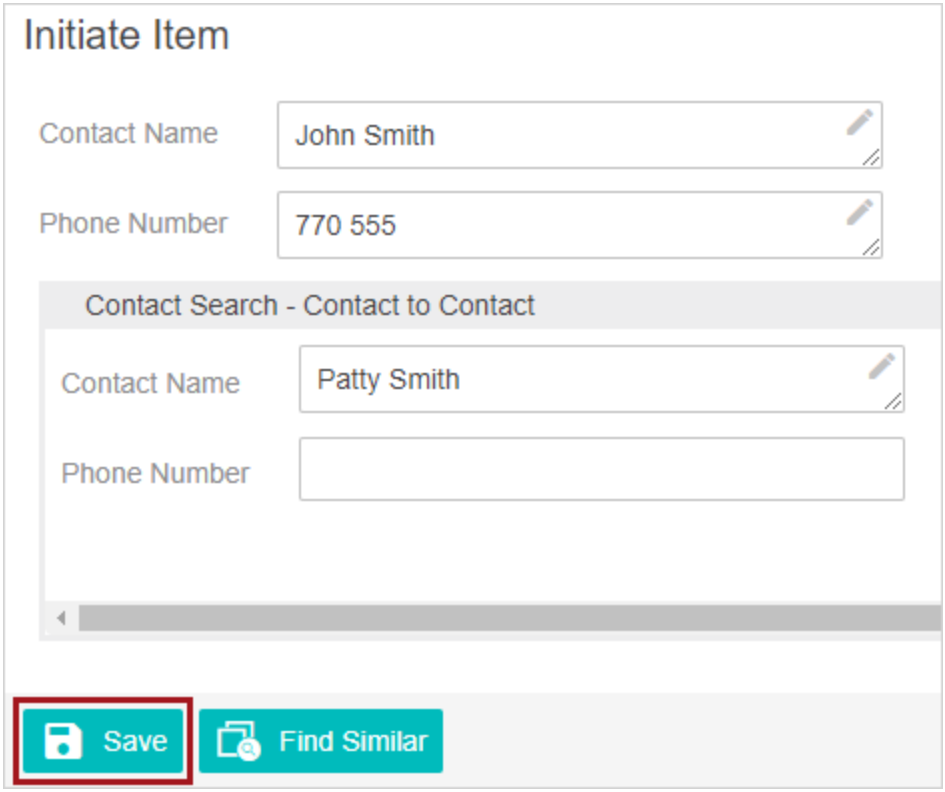


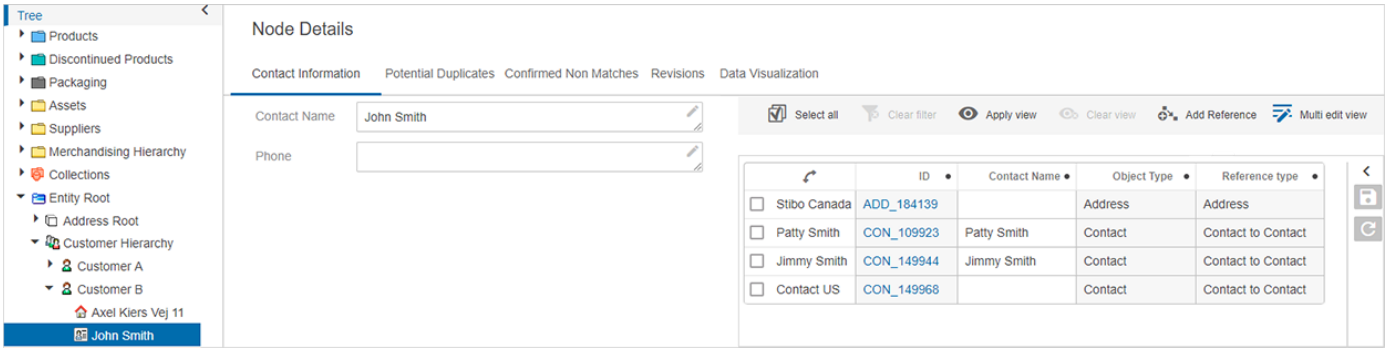
The algorithm runs in the background and the configured Dialog List Screen displays. Remember that this is not a standard search and results are based on the matching algorithm running in the background.

Important: As stated at the beginning of this topic, the key to Find Similar functionality is the matching setup that the customer creates and uses for duplicate handling. This is important because the attributes being searched *must* be part of the list of attributes that Match Codes are generated for. If not, the search will not work as expected.



A maximum of fifty (50) objects are shown at one time on the results list. The user can select one of the objects shown in the results list. Once a selection is made, the OK button is engaged. Clicking OK takes the user directly to that object via the appropriate Web UI screens. If the user wants to create a new object with the search data entered, the user clicks Cancel to exit the results list. Back on the Initiate Screen, the user will click Save and be taken directly to the new object. The data entered into the attribute value fields (configured in the Store Single ReferencedTarget Properties) is also used to create the referenced object and the reference between these objects is also created.

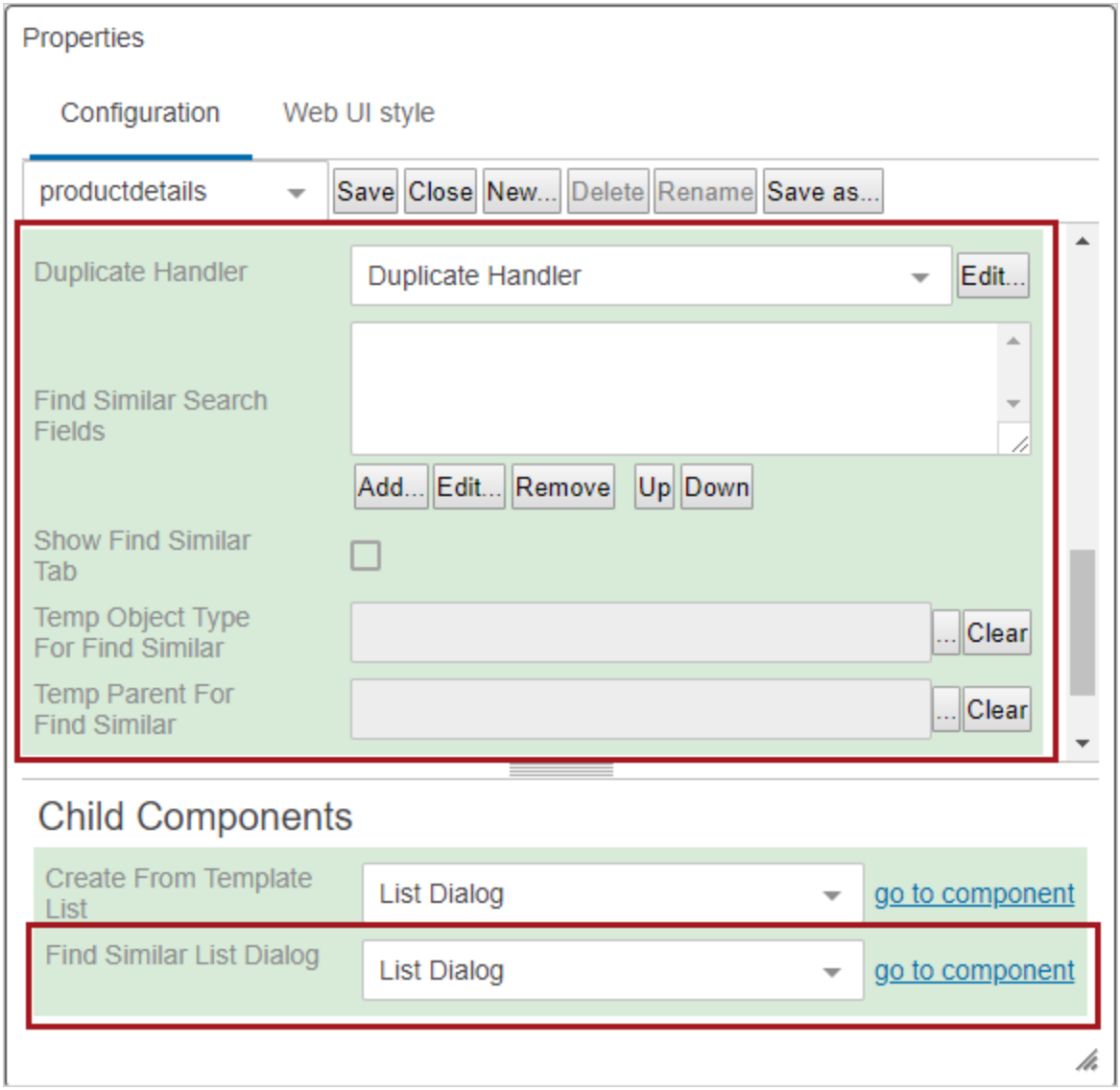




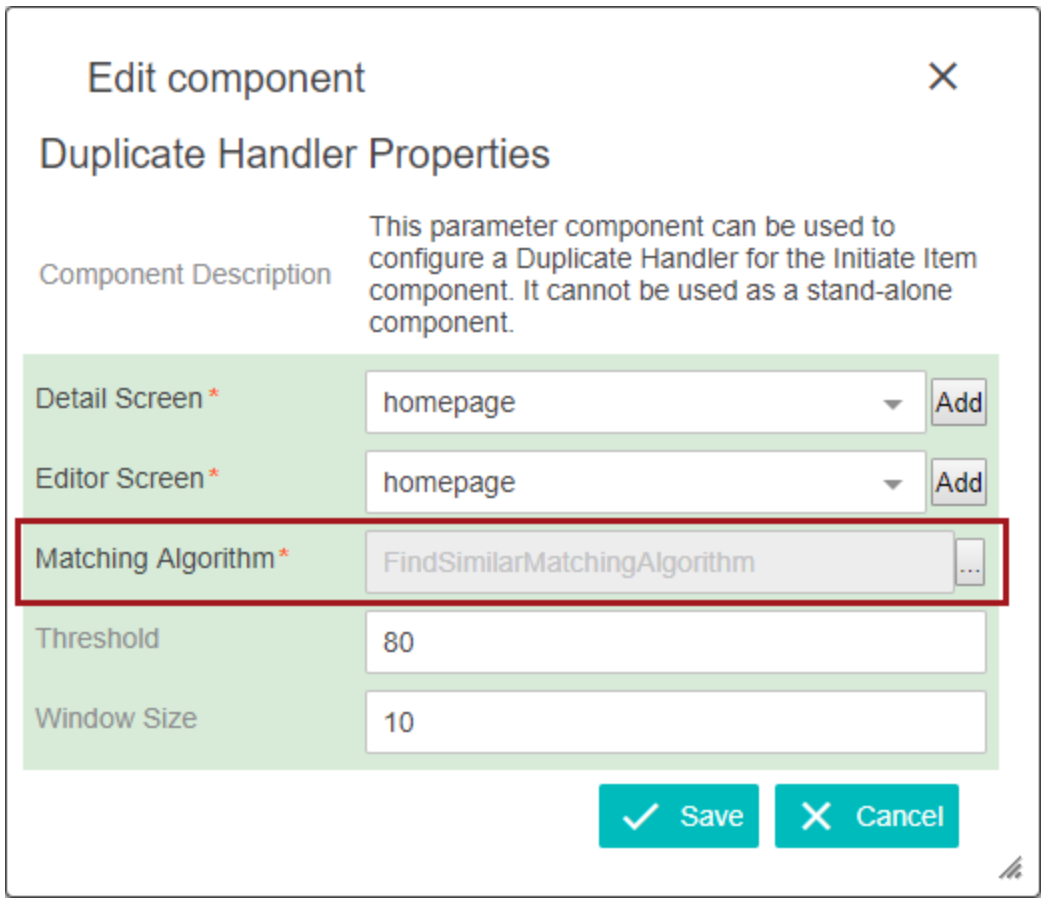
If applicable, the new object will automatically be initiated into a workflow or workflows based on existing workflow rules. For more information about workflows and auto-initiation, see the **Auto-Initiation of Tasks in Workflows** topic in the **Workflows** documentation. It is advisable to also make use of standard STEP tools like business rules and workflows to manage the referenced objects that are created in this manner.

Configuring Find Similar on an Add Reference Action

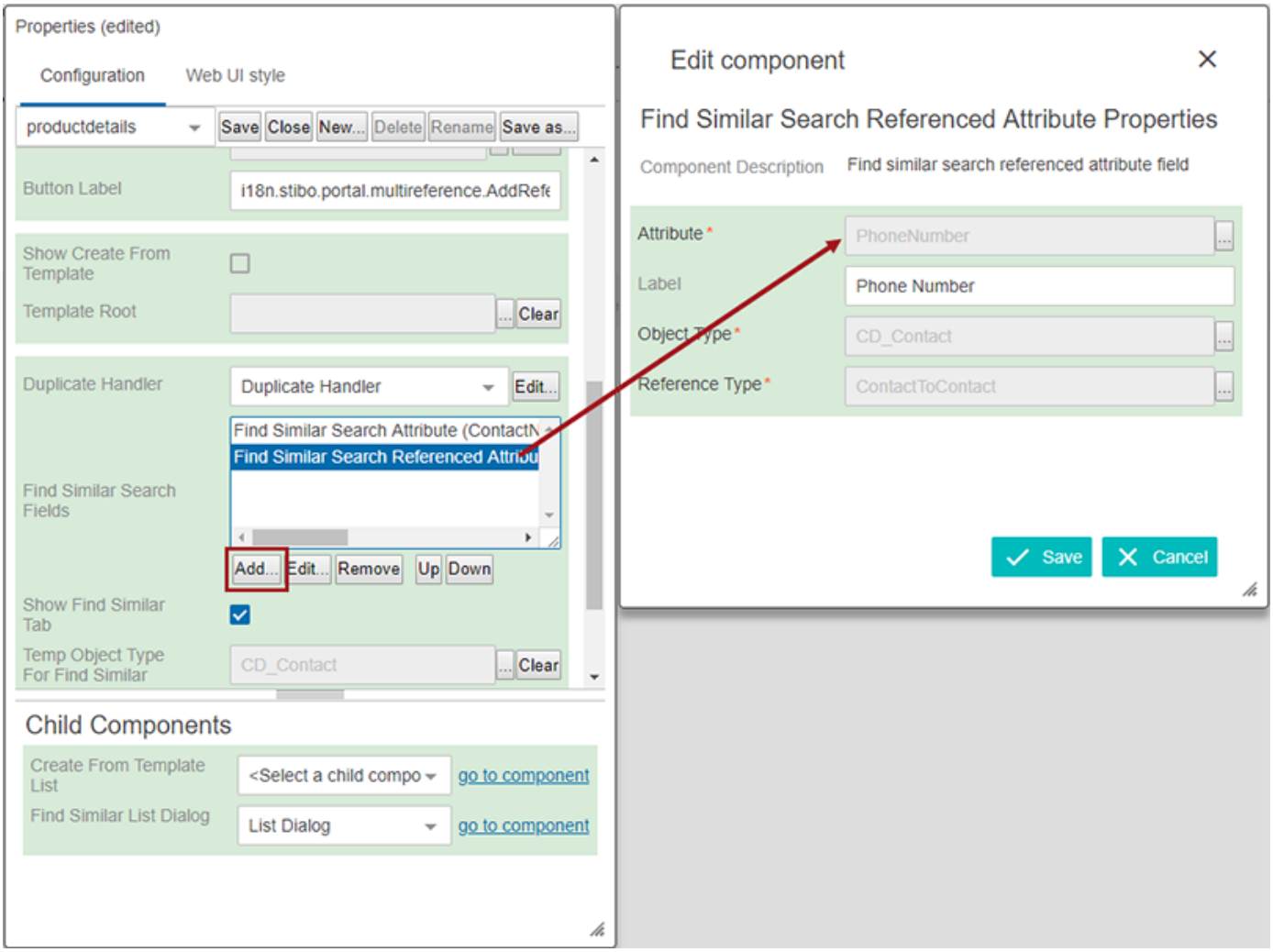
This setup information is also available in the **Add Reference Action** section of the **Web User Interfaces / Using a Web UI** documentation.



1. Edit the properties for an existing **Add Reference Action** configured for a **Multi-Reference Editor**, or add an Add Reference Action and complete the configuration.
2. In the **Add Reference Action Properties**, select **Duplicate Handler** in the dropdown for the **Duplicate Handler** parameter.
3. The **Duplicate Handler Properties** screen will display. The only required setting is the **Matching Algorithm** parameter. Click the ellipsis button (...) to the right of the value field and select a matching algorithm. Click **Save**.



4. Back on **Add Reference Action Properties**, click **Add** under the **Find Similar Search Fields** value box. Add, remove, and re-order **Attribute** and **Referenced Attributes** as desired. Remember that these search fields will need to be incorporated into the matching algorithm configured in the Duplicate Handler parameter.
5. It is important to fill in the **Label** fields during the **Find Similar Search Fields** configuration. These labels will appear on the Find Similar Search tab. If adding a **Find Similar Search Referenced Attribute**, fill in the **Attribute**, **Label**, **Object Type**, and **Reference Type** values. Save all changes.



6. Enable the **Show Find Similar Tab** setting back on the **Add Reference Action Properties**.
7. Click the ellipsis button (...) to make a selection for the **Temp Object Type For Find Similar** parameter and the **Temp Parent For Find Similar** parameter. (When the matching algorithm is run, it creates temporary objects based on the input in the search fields. These objects are then used in the algorithm to compare and find similar objects. The temporary objects need a parent and object type to be created. After the user finishes the operation, the temporary objects are deleted by the system. These parameters have to be configured for the functionality to work. The object types of both the direct objects and the referenced objects need to be made valid under the location used for the Temp Parent For Find Similar parameter.)

Important: The node selected for Temp Parent For Find Similar in the configuration, must also be included in the category specified in the match code definition, if a category is specified. If this is not done, the match codes will not generate properly and the match results will be incorrect.

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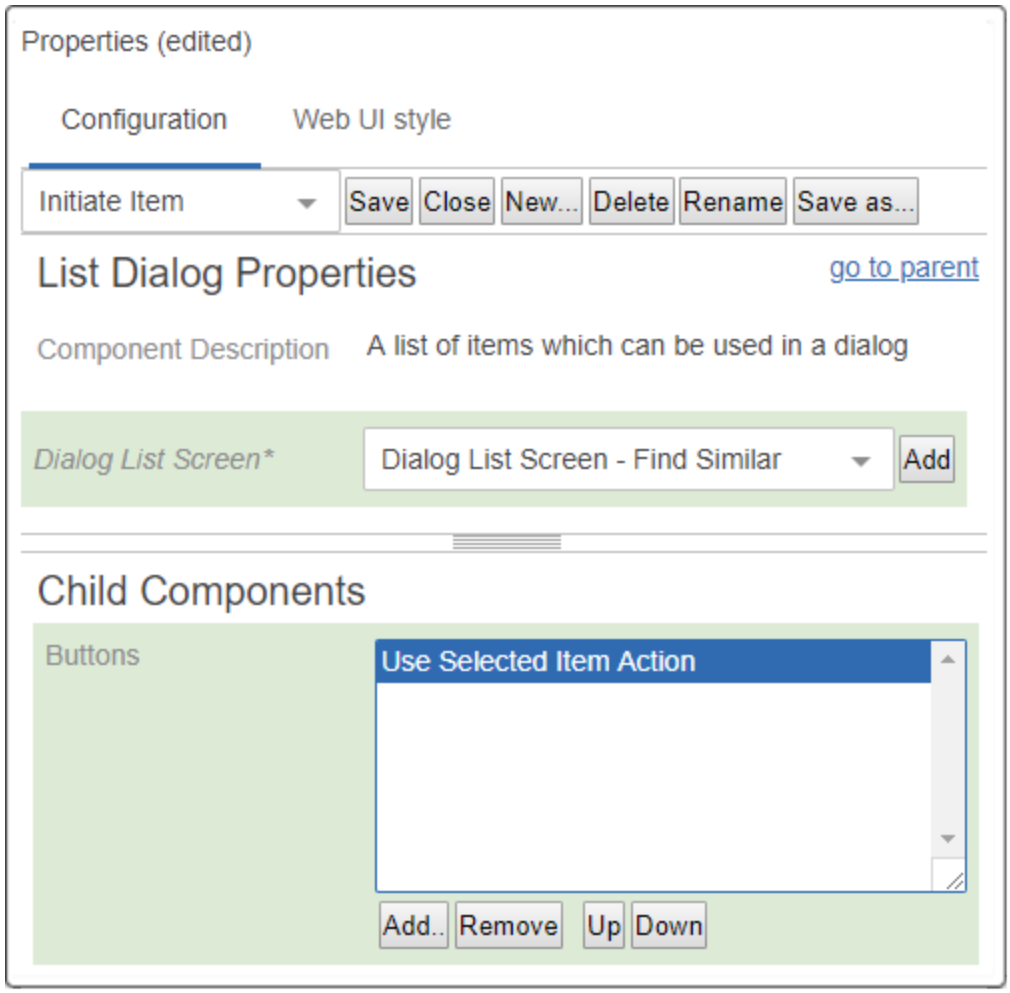
8. Under **Child Components** > **Find Similar List Dialog**, select **List Dialog** from the dropdown menu.
9. On **List Dialog Properties**, click **Add** to the right of the Dialog List Screen value field.

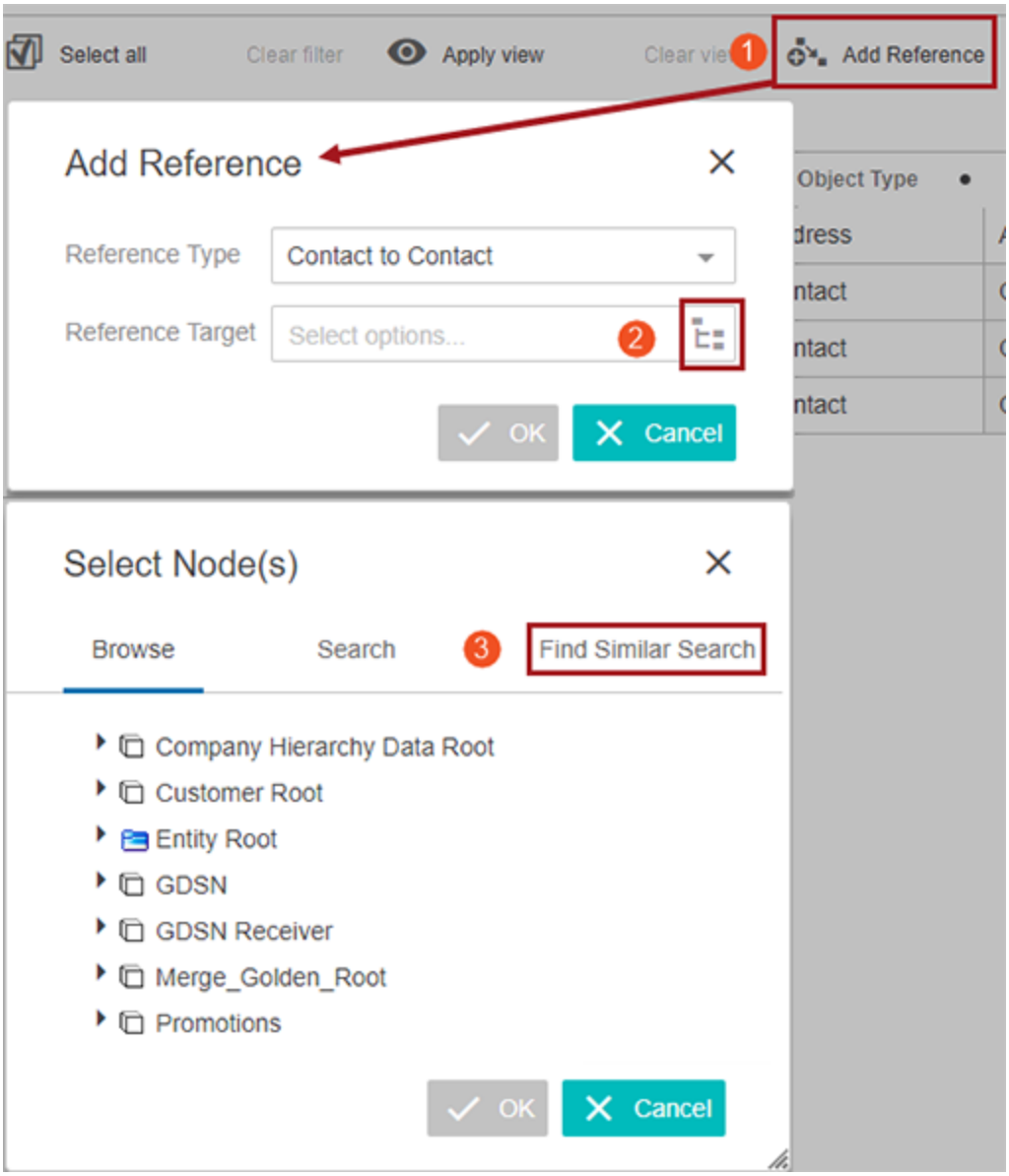
10. Create a new screen by selecting **Dialog List Screen** from the list of available screen types / components. Enter an easily identifiable Screen ID, click **Add**. The screen ID will automatically populate in the Dialog List Screen value field.
11. If a **Dialog List Screen** already exists, skip the previous two steps and on the **List Dialog Properties**, select the **Dialog List Screen** using the dropdown.
12. Also on the **List Dialog Properties** screen, in the **Child Components** > **Buttons** field, click **Add** and select **Use Selected Item Action**. Click **Add**, and then click **Save** in the designer window.

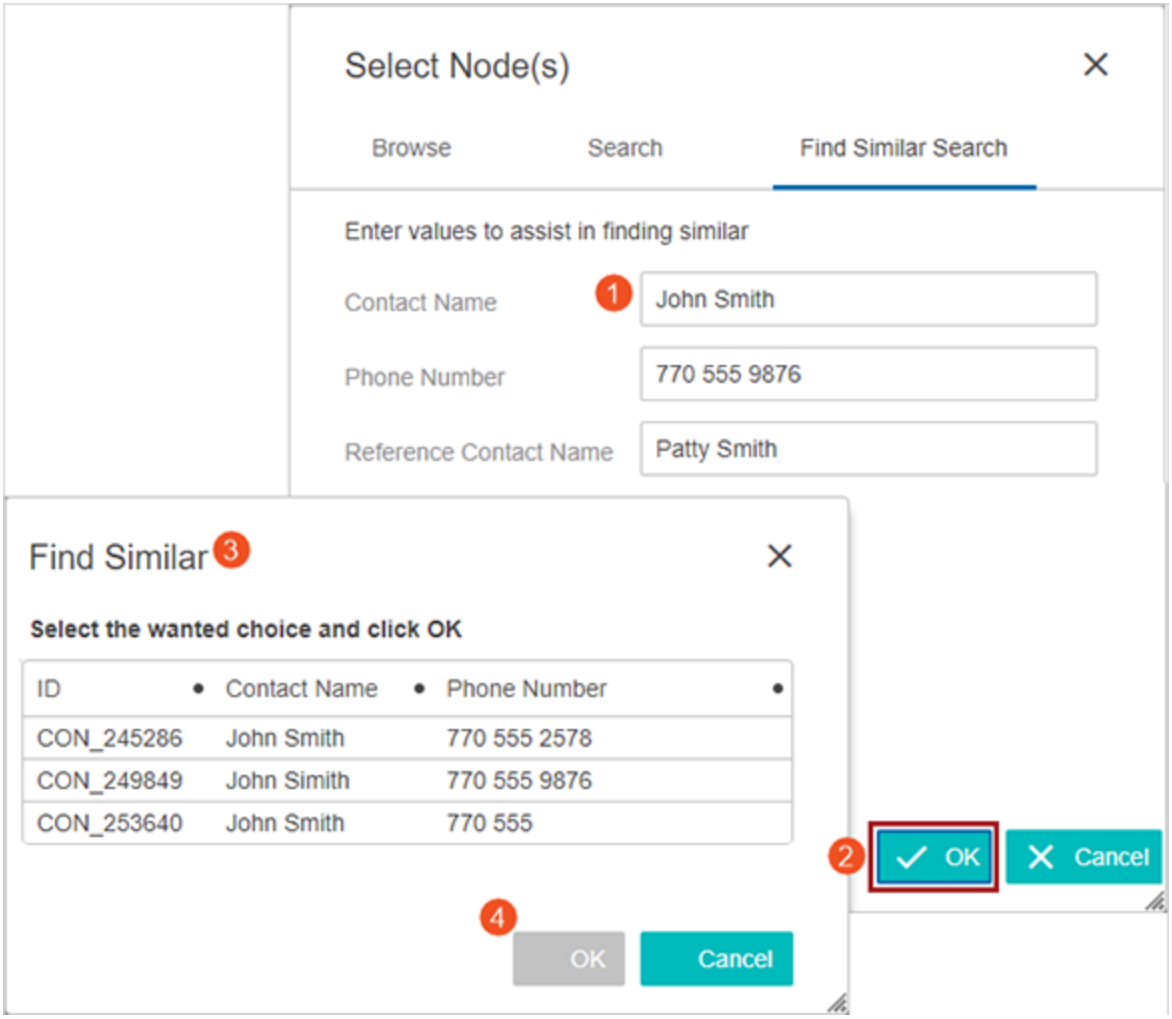


13. Before exiting design mode, select the Dialog List Screen ID of the screen you just created from the dropdown menu. In the example above, the screen ID is Dialog List Screen for Contacts.
14. Configure the **Child Components** > **Headers** section of the **Dialog List Screen Properties**. Click **Add** under the value field to set up the attributes that will display in the Find Similar Search tab for the results list. The **Help Text** is editable and will display at the top of the results list.
15. Click **Save** and **Close** design mode to return to normal Web UI mode.

Using Find Similar on an Add Reference Action

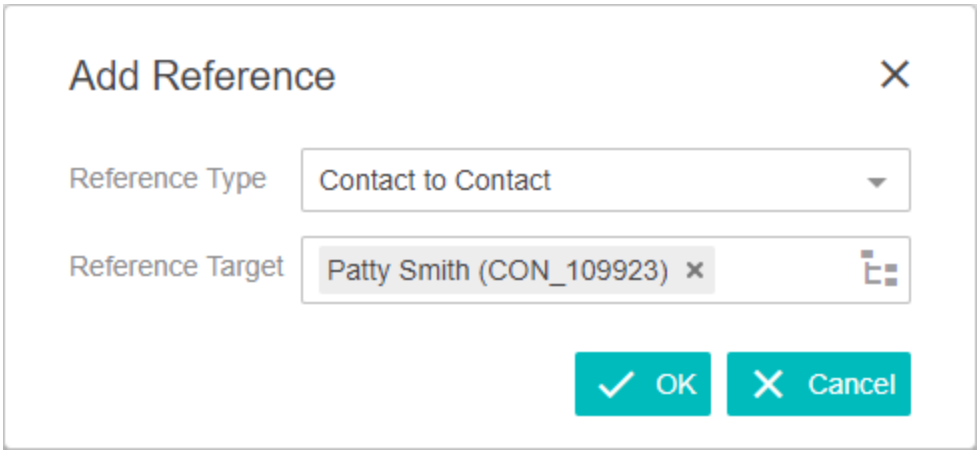
This is an example of a configured **Find Similar Search** tab. While using a **Multi-Reference Editor** component, the end user clicked 'Add reference' and then clicked the node picker icon on the 'Add reference' dialog that appeared. The **Find Similar Search** tab is displayed in the 'Select Node(s)' dialog. The end user enters data into the configured attribute fields and clicks OK. The algorithm runs in the background and the configured Dialog List Screen displays. Remember that this is not a standard search and results are based on the matching algorithm running in the background.

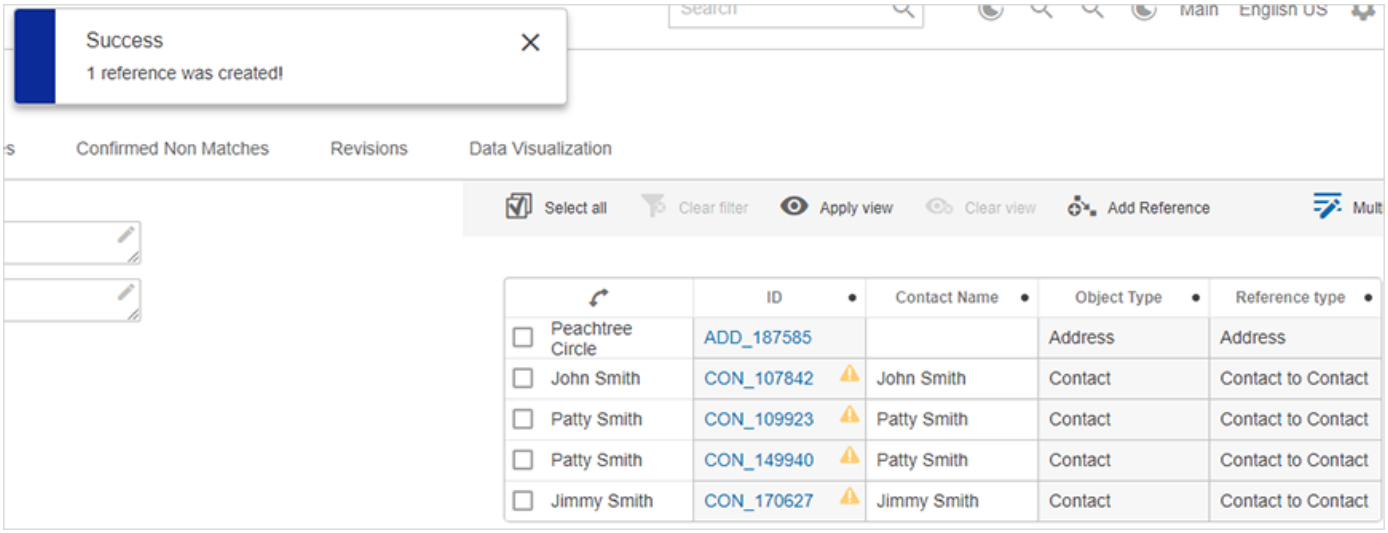




Important: As stated previously in this topic, the key to Find Similar functionality is the matching setup that the customer creates and uses for duplicate handling. This is important because the attributes being searched *must* be part of the list of attributes that Match Codes are generated for. If not, the search will not work as expected.

A maximum of fifty (50) objects are shown at one time on the results list. If the end user finds a reference on the results list that they want to use, they click in the row they want. When that selection is made, the OK button will be available. The end users clicks OK and now that reference is saved. If the user does not find a result to use, they can click cancel and create a new reference using the Create or Create from Template functions (both described previously in this topic).





Note: Find Similar functionality is also available when working with company data hierarchies via the Hierarchy Representations component (found in Main (Screen) Properties). For more information on the setup, which is similar to Add Reference, see the **Optional Configurations for the Hierarchy Representation Component** topic.

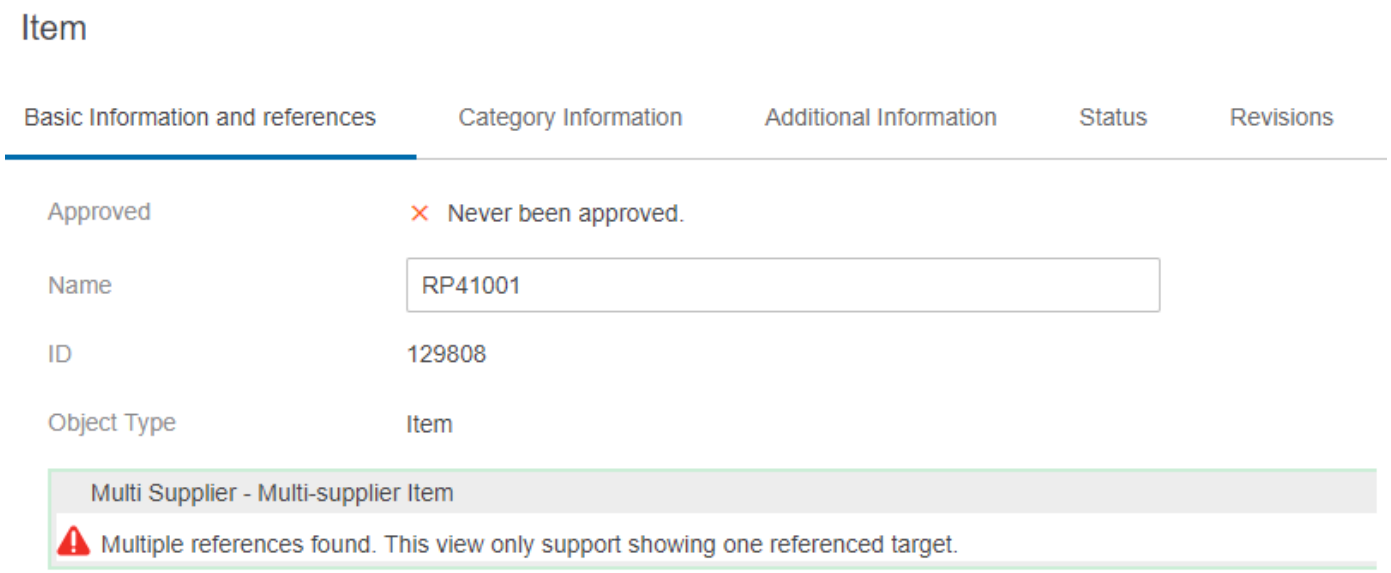
Follow Single Reference

This component in Web UI allows for editing of an object and a referenced object in a simplified interface. It enables users to view and edit data on referenced objects without navigating away from the source object. This is especially useful when a simple interface is desired for the end user who does not need awareness that the underlying data model utilizes independent objects.

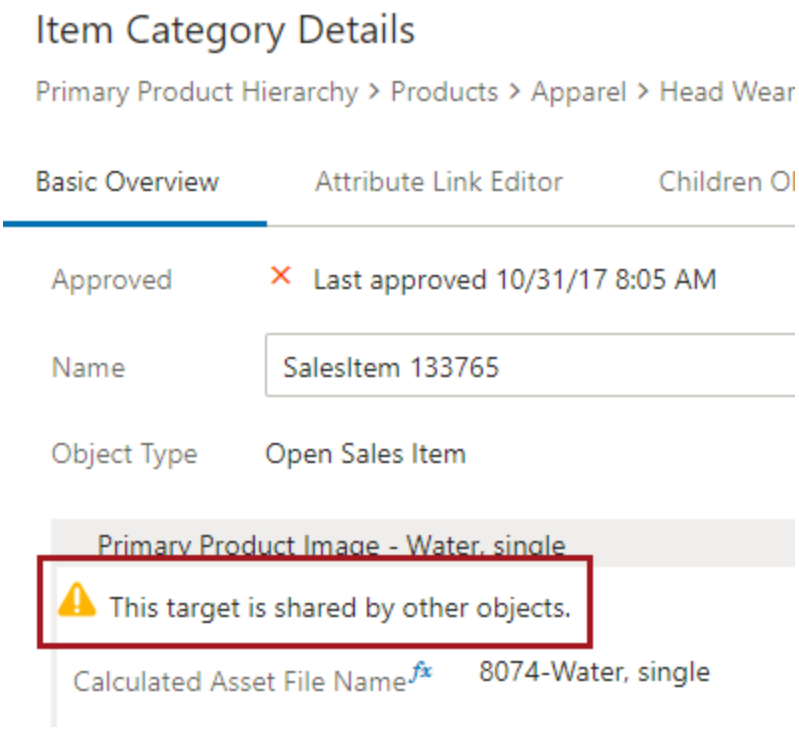
Preconditions and Considerations

The Follow Single Reference component is intended to display data where the source of the reference has only one reference of that type.

If the *source* object has more than one reference of a given reference type, an error is displayed within that section and users cannot view or edit data on any of the referenced objects using that reference type.



However, the *target* object may be referenced by more than one source, in which case a warning is displayed to the user to help prevent unintended data changes.



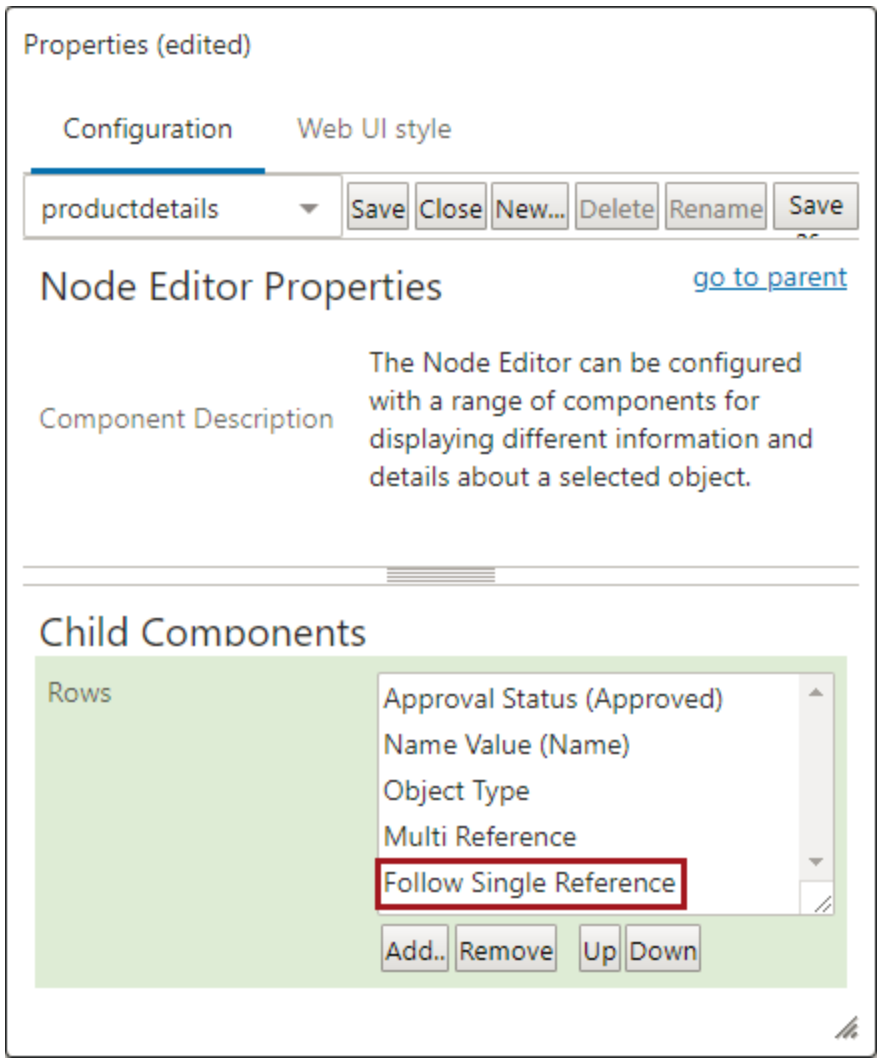
Before configuring the Follow Single Reference component, it is recommended that the data model be verified to ensure that the component is being used to display references for which the source object has only one reference of that type.

Note: When using the Follow Single Reference component in conjunction with Approve actions, it is necessary to approve the target object(s) prior to approving the source object. It is therefore recommended that the Run Business Action component be used in place of the Approve Action so that a business rule handles approval of the target object(s) (in addition to approval of the source object).

Follow Single Reference Configuration

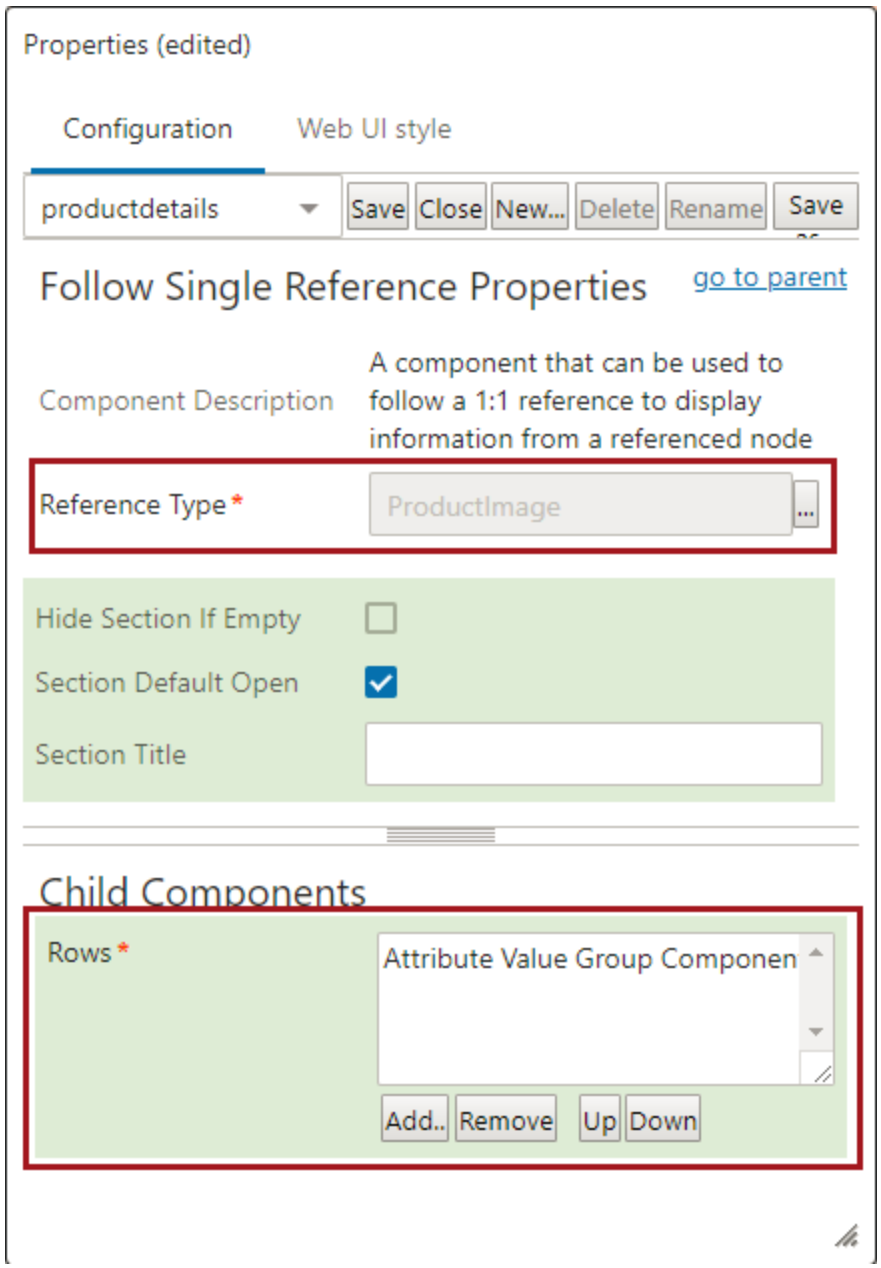
The Follow Single Reference component can be added any number of times to any Node Editor based screen. This allows users to interact with a source object and any number of referenced objects in a single screen. Users can easily adjust or isolate focus by collapsing or expanding reference types as needed.

From any screen with a **Node Editor**, add the **Follow Single Reference** component.



Double-click on the Follow Single Reference row to configure it.

- **Reference Type:** must be configured, select a reference type to display.
- **Hide Section If Empty:** When selected, the section will only display when there are references.
- **Section Default Open:** When selected, the section will initially display as open.
- **Section Title:** Enter text if a different name is needed for the panel.
- **Rows:** and at least component must be selected.


Properties (edited)
Configuration
Web UI style
productdetails
Save
Close
New...
Delete
Rename
Save
Follow Single Reference Properties
go to parent
Component Description
A component that can be used to follow a 1:1 reference to display information from a referenced node
Reference Type *
ProductImage
Hide Section If Empty
Section Default Open
Section Title
Child Components
Rows *
Attribute Value Group Componen
Add..
Remove
Up
Down

GDSN in Web UI

Handling GDSN in Web UI starts with creating a Web UI that shows information about GDSN registrations, publications, and the package hierarchy. For details, see **Create a GDSN Web UI**.

In addition to typical Web UI elements, additional tabs and buttons are available to perform GDSN functions.

Details about configuring the tabs that are available for Product Details are included in these sections:

- GDSN Registration Tab
- GDSN Hierarchy Tab

An overview of the buttons that are available to handle required GDSN actions can be found in the GDSN Web UI Buttons section.

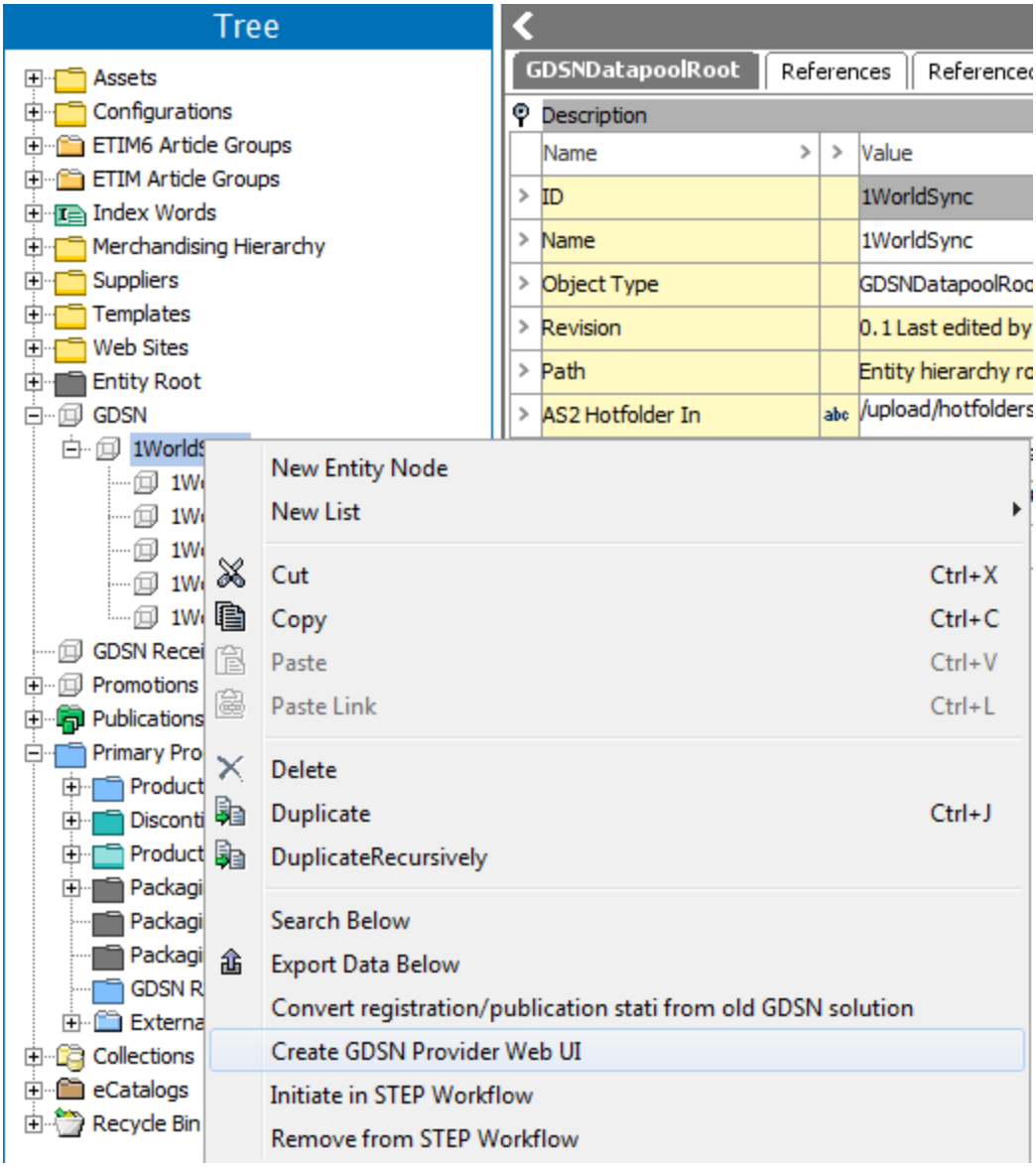
Details about configuring the GDSN buttons are included in these sections:

- GDSN Register Action Button
- GDSN Publish Action Button
- GDSN Hierarchy Withdrawal Action Button

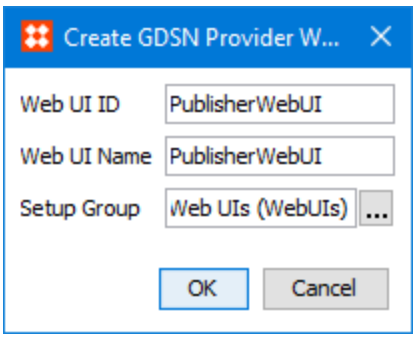
Create a GDSN Web UI

Use STEP Workbench to create a Web UI that is based on the 'User Web UI.' The Web UI illustrates how you can create a GDSN Web UI, but it is not production-ready. Additional customization is required to address your company's needs.

1. In the Tree expand GDSN and right-click the relevant data pool entity.
2. Click **Create GDSN Provider Web UI**.



3. In the **Create GDSN Provider in Web UI** dialog, specify the following:



- **Web UI ID:** The ID of the Web UI. Is also used as part of the URL for the Web UI. The Web UI ID must not contain spaces. ID is mandatory while creating a GDSN Provider Web UI.
- **Web UI Name:** The name of the Web UI. While the name is not mandatory, having it empty could cause confusions when there are multiple Web UIs created.
- **Setup Group:** Select the setup group where the Web UI configuration is stored. The setup group field is populated with any setup group that allows Web UIs. If there are no setup groups that allow the creation of a Web UI, a warning is displayed before the dialog is displayed.

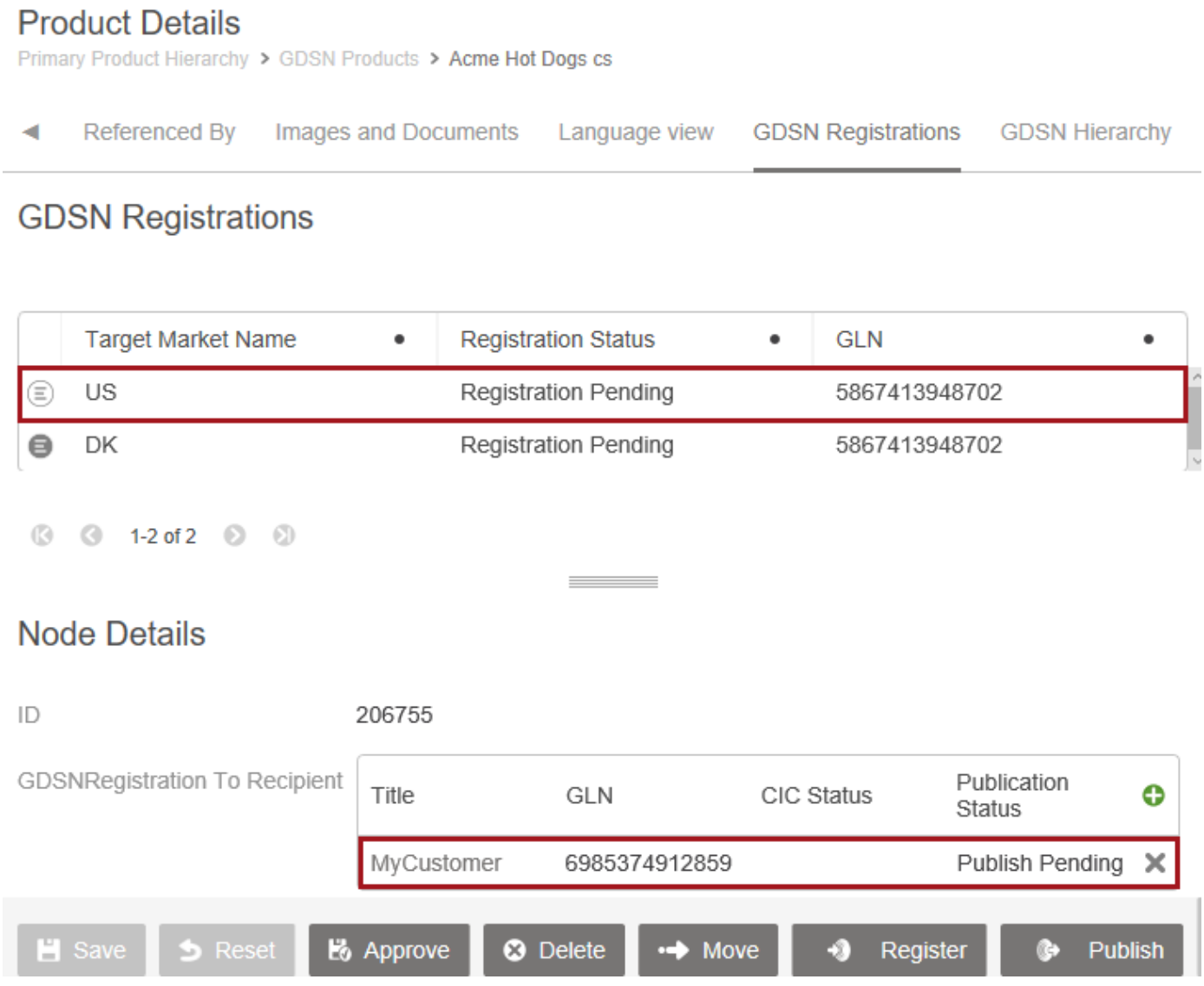
GDSN Registration Tab

The GDSN registration tab contains a master table at the top that shows information about registrations. The table lists all the GDSN registrations made for the selected product.

For each registration the following information is displayed:

- **Target Market:** Lists the target market the registration is made for.
- **Registration Status:** Lists the status of the registration. For example, Registration Completed.
- **GLN:** Lists the Global Location Number of your company or the company you are publishing for.

Once a product is registered with the GDSN it can be published to multiple GDSN data pool recipients.



Select a registration in the master table, and the details area shows a list of publications registered in the target market of the selected registration.

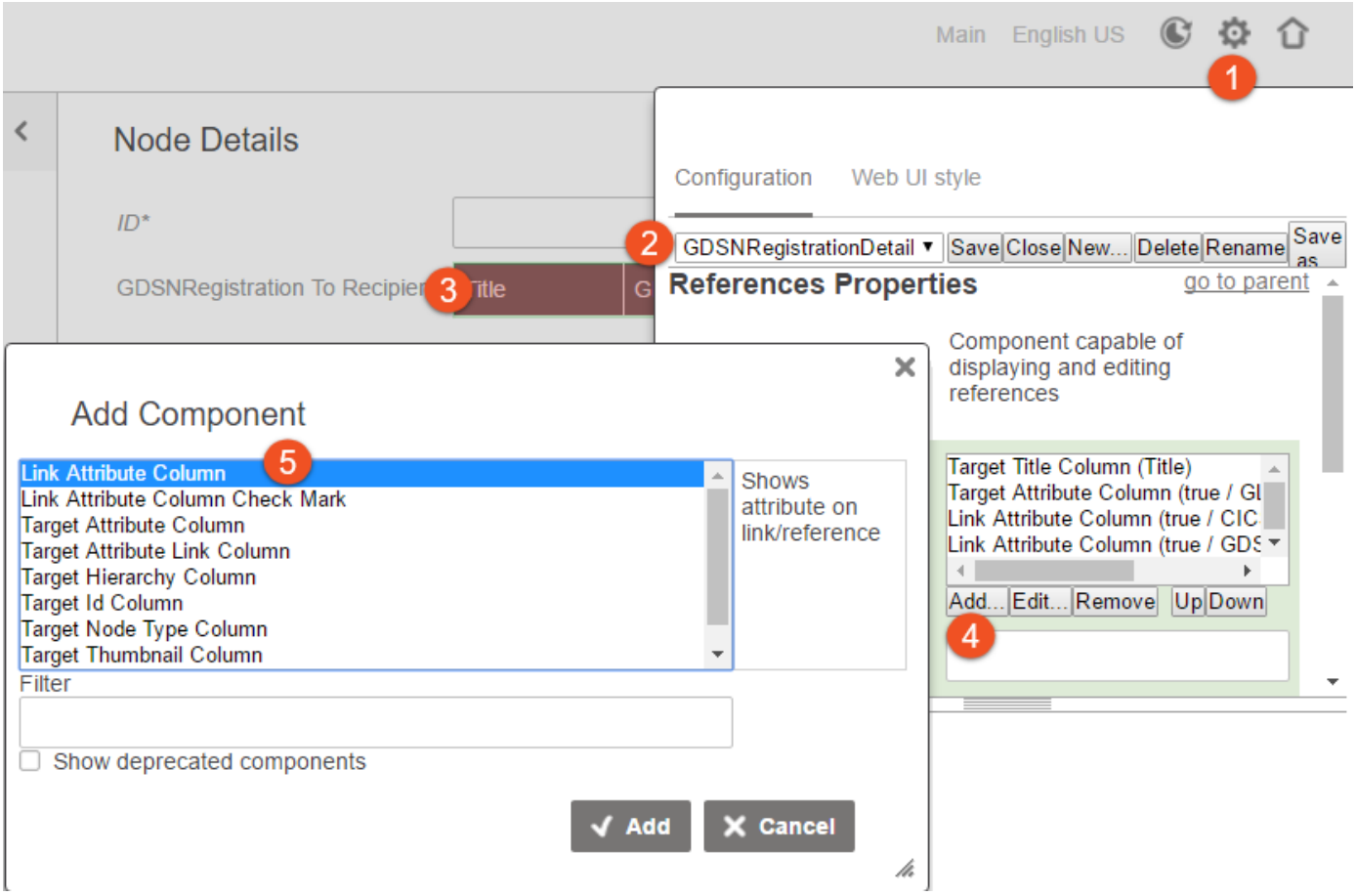
For each publication the following information is displayed:

- **Title:** Lists the name of the recipient.
- **GLN:** Lists the Global Location Number of the recipient.
- **GDSN CIC Status:** Lists information about whether the recipient has accepted the published data.
- **GDSN publication status:** Lists whether the recipient has received the product.

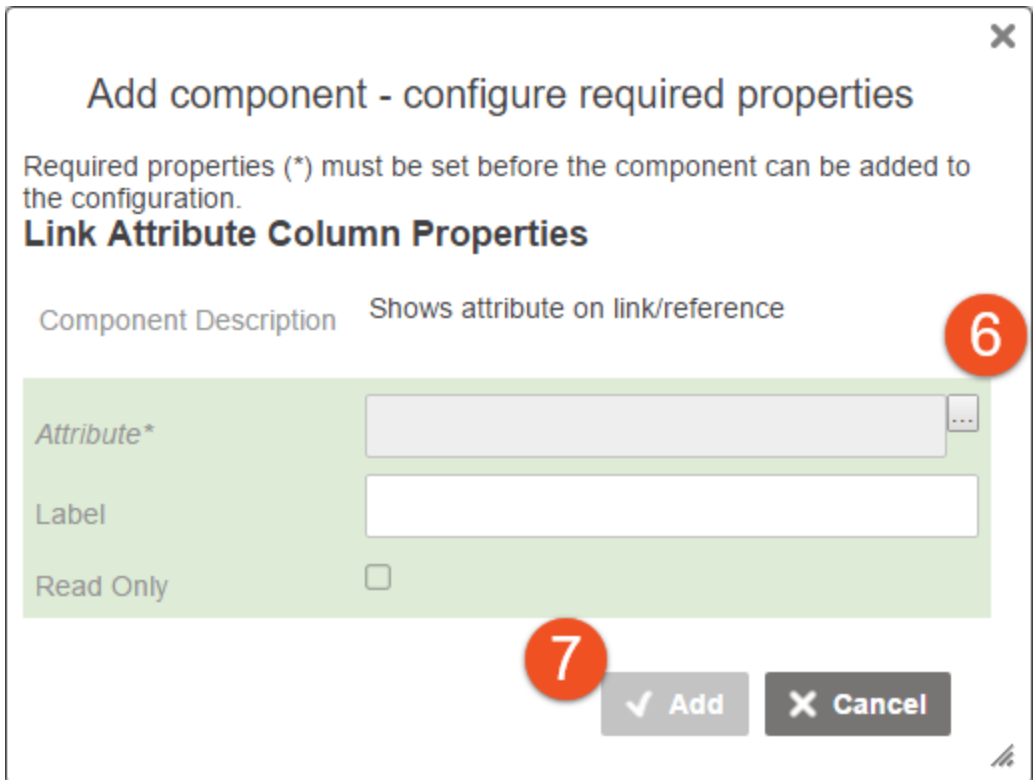
Display an attribute value in the publication table

Additional columns can be configured to both the master table (registrations) and the details table (publications). This could be a column for the publication table that displays additional comments for the CIC999 code.

1. In the Web UI, enter Design mode.
2. Select the screen **GDSNRegistrationDetails**.
3. In the Designer, navigate to the **References** component placed within the Node Editor.
4. Click the Add button for the Columns property and the **Add component** dialog displays.



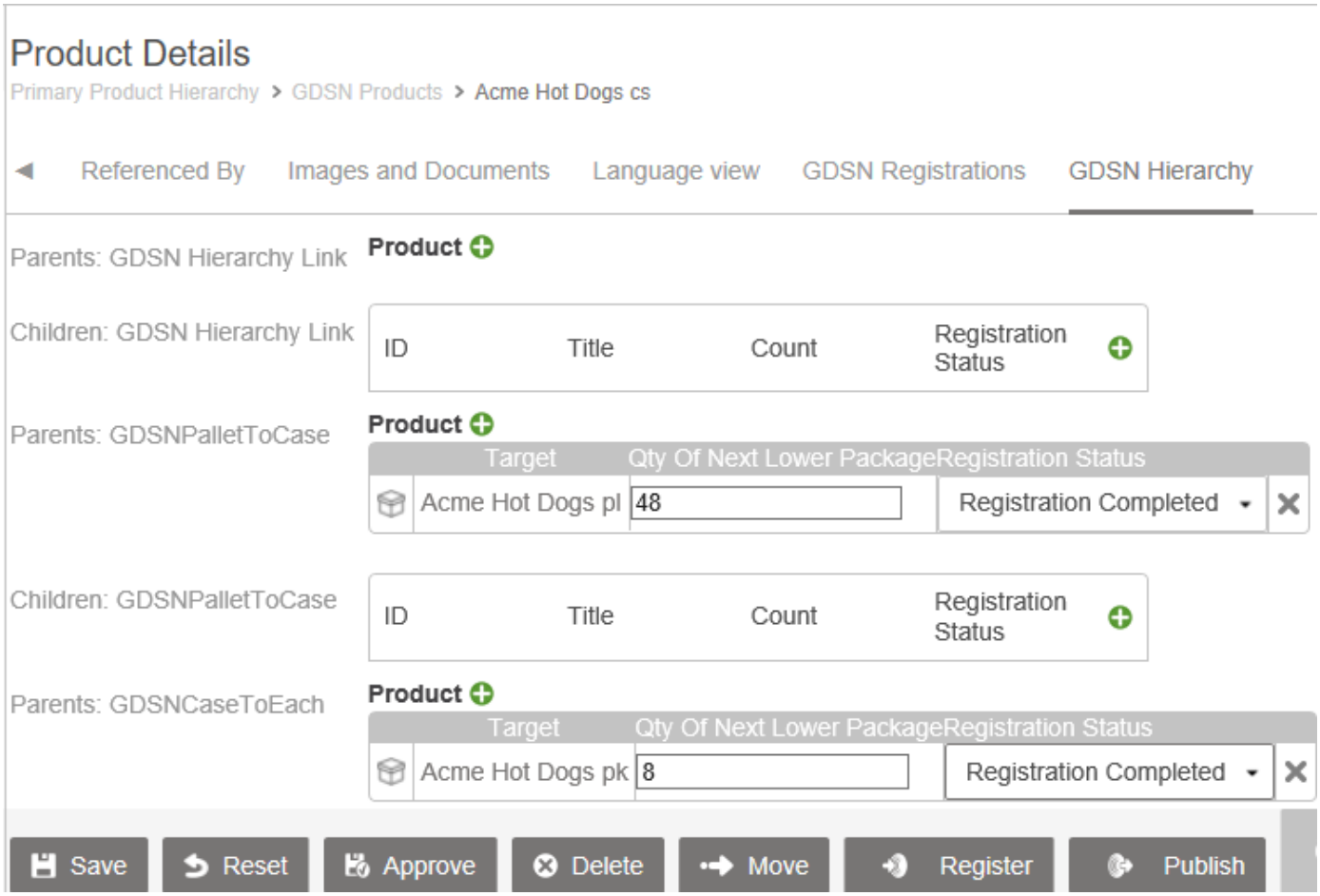
5. Select the **Link Attribute Column** component in the list, click the **Add** button, and a configuration dialog appears.



6. Specify the attribute for the new column and click the **Add** button. A label is optional. If not specified, the column title will be the same as the attribute's name.
7. In the **Add component** dialog, click the **Add** button.
8. Click **Save** for the configuration.
9. Click **Close** for the Designer.

GDSN Hierarchy Tab

The GDSN Hierarchy tab displays information about the package hierarchy. It shows two tables for each GDSN package hierarchy link type defined for the GDSN model. The first table shows the relation to the parent product in the GDSN package hierarchy. The second table shows information about the children in the GDSN package hierarchy.



For each link to a child GDSN product, the following information is displayed:

- **ID:** Lists the ID of the child GDSN product.
- **Title:** Lists the title of the child GDSN products
- **Count:** Lists the amount of child products that this product contains.
- **Registration Status:** lists whether the package hierarchy link has been registered with the data pool or not.

Sequence of Events for Business Rules in the Provider Web UI

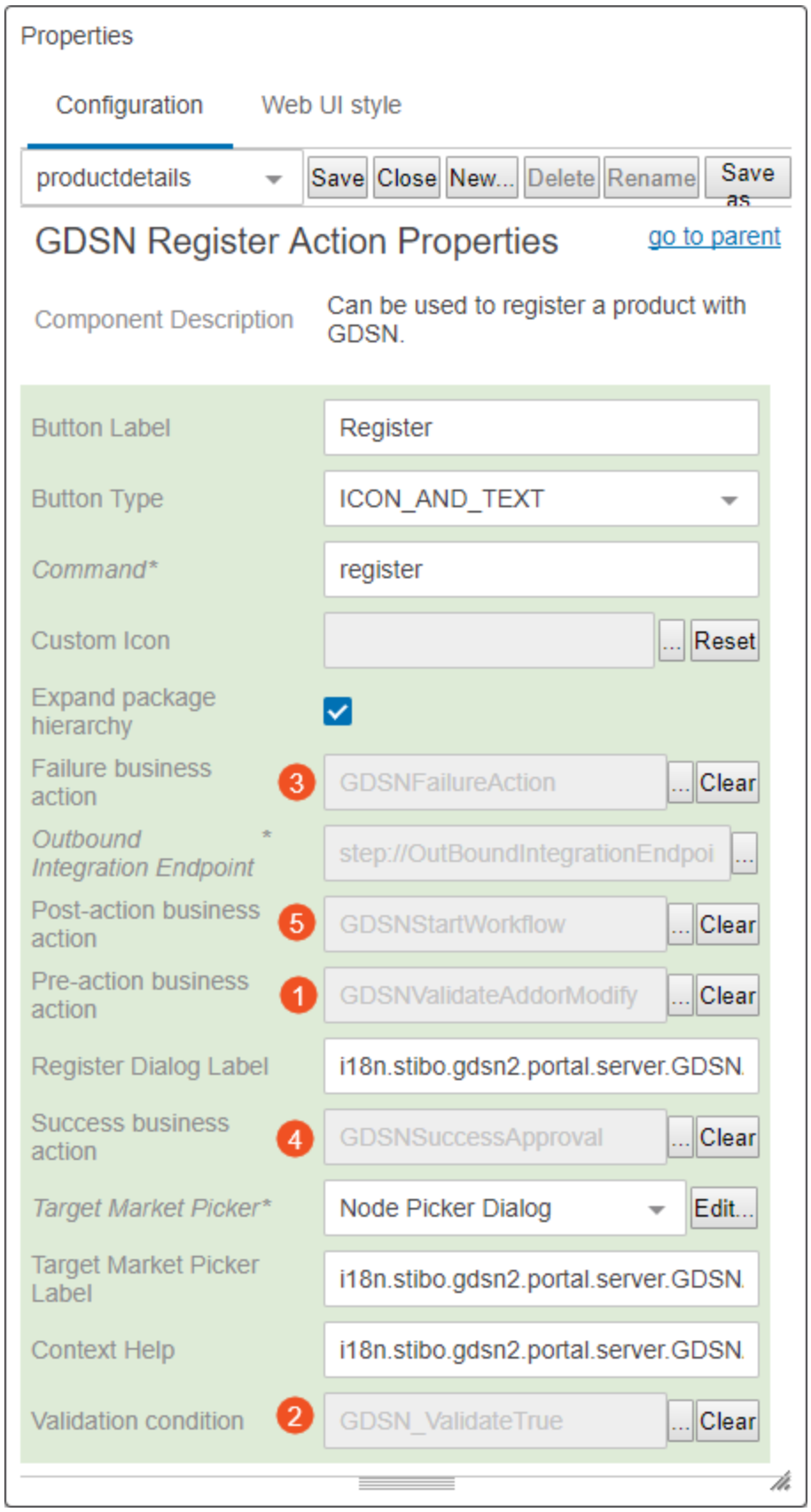
There are a number of optional business rules that can be configured for the GDSN Register Action, Publish Action, Add Links Action, and Delete Links Action buttons. This section will describe the sequence of events for how the business rules are designed to work and in this section we will base the example on the 'GDSN Register Action Properties' configuration. The following business rules are applicable for these actions.

When using any of the previously mentioned action buttons in the Web UI, the following actions occur whether or not the business rules are configured:

1. A GDSN message is generated based on the command that is configured on the button.
2. The OIEP validates the message against the GDSN XSD.
3. If the XSD validation succeeds:
   - If registering a new product, a registration object is created, a reference to the product is made, and the registration status is set. If registering as a modify, the status on the existing registration(s) are updated.
   - If publishing for the first time, a reference is made from the registration to the recipient and the publication status is captured on the link. If publishing an update, delete or hierarchy withdrawal, the publish status is just updated.
   - If adding or deleting a link, the status on the link is updated.

If the following business rules are configured, the sequence mentioned above would occur after the **Success business action** and prior to the **Post-action business action**.

1. **Pre-action business action** - If configured, this business action would be the first to run. This might be used to determine whether the product being registered is an 'add' or a 'modify.'
2. **Validation condition** - Next to run is a validation condition. If configured, this can be used to ensure data quality requirements have been met and return error messages to the user when they don't. Depending on the outcome, either a 'Failure business action' or a 'Success business action' will run next.
3. **Failure business action** - If configured, this action will run if the validation conditions fail. This may be used to route a product to a correction state in a workflow.
4. **Success business action** - If configured, this action will run if the validation conditions succeed. This may be used to approve the product information before the GDSN message is generated, or for some other purpose. After the 'Success business action' runs the GDSN Provider:
5. **Post-action business action** - If configured, this action will run last. This may be used to route the product in workflow, or capture additional information to a registration object or link.

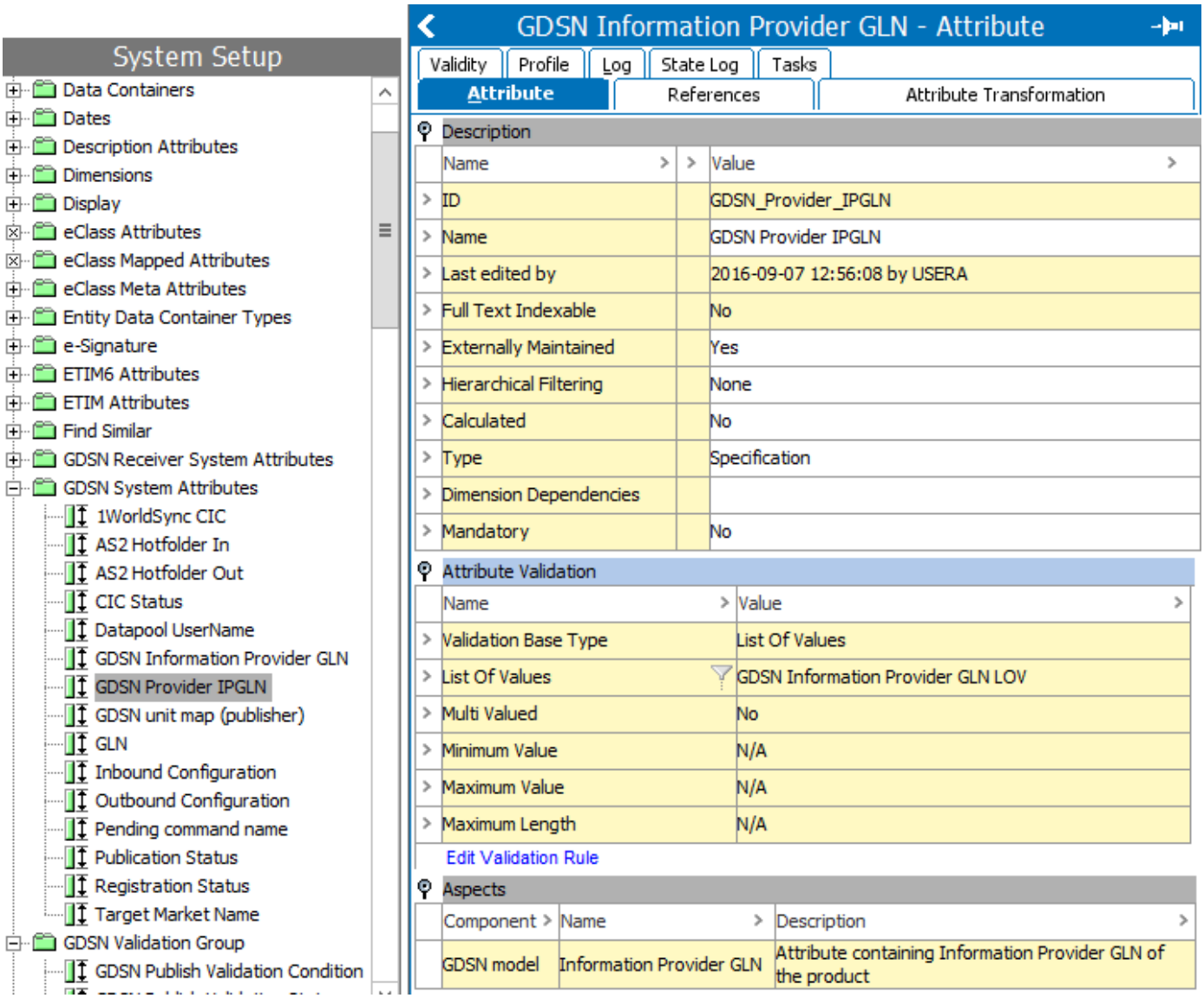

Properties
Configuration
Web UI style
productdetails
Save
Close
New...
Delete
Rename
Save as
GDSN Register Action Properties
go to parent
Component Description
Can be used to register a product with GDSN.
Button Label
Register
Button Type
ICON_AND_TEXT
Command*
register
Custom Icon
Reset
Expand package hierarchy
Failure business action
3
GDSNFailureAction
Clear
Outbound Integration Endpoint *
step://OutBoundIntegrationEndpoi
Post-action business action
5
GDSNStartWorkflow
Clear
Pre-action business action
1
GDSNValidateAddorModify
Clear
Register Dialog Label
i18n.stibo.gdsn2.portal.server.GDSN.
Success business action
4
GDSNSuccessApproval
Clear
Target Market Picker*
Node Picker Dialog
Edit...
Target Market Picker Label
i18n.stibo.gdsn2.portal.server.GDSN.
Context Help
i18n.stibo.gdsn2.portal.server.GDSN.
Validation condition
2
GDSN_ValidateTrue
Clear

For more details regarding the remaining options that are available in the GDSN Register Action Properties, see the GDSN Register Action Button topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

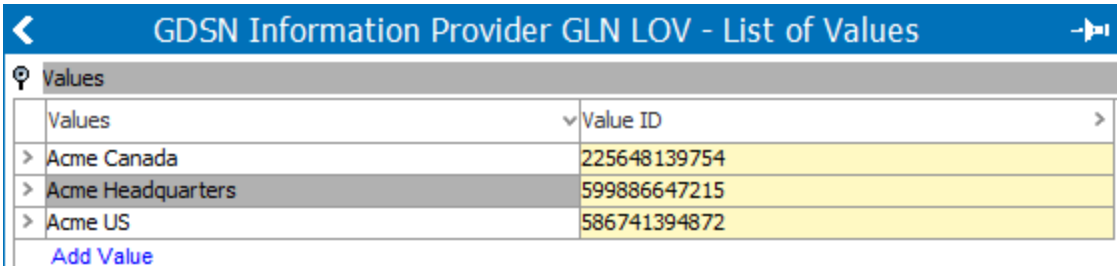
Configuring Multiple IPGLNs in Web UI

Users with multiple IPGLNs can configure their IPGLNs in the workbench for use in the GDSN Provider Web UI. The attribute and LOV can be configured automatically via the 'Easy setup of GDSN Component Model' or it can be created manually. The GDSN Provider IPGLN attribute must be configured in the workbench with the following characteristics:

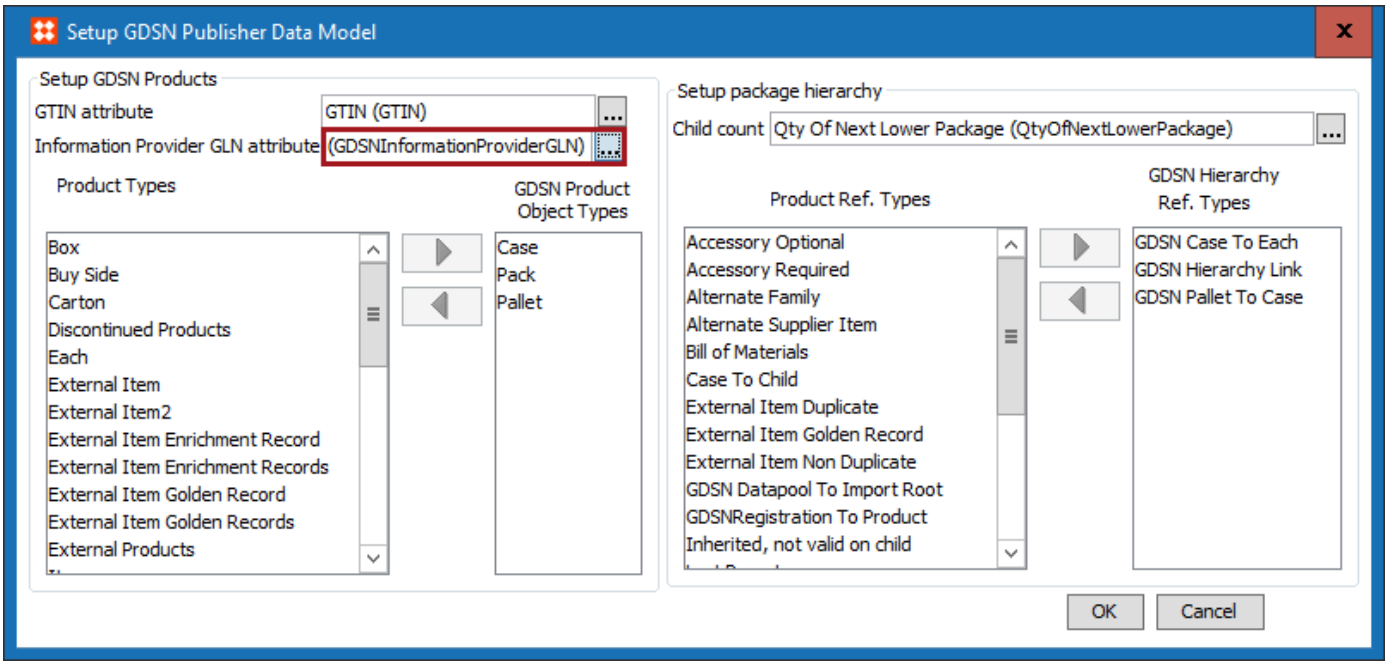
- Type: Specification or Description
- Validation Base Type: List Of Values
- Aspects: Attribute must be added to the GDSN model component model



The List of Values must contain the Value ID in association with the values. The Value ID of the LOV should be used to hold the IPGLN and the Value should be used to apply a meaningful name to the IPGLN, as shown in the example below.



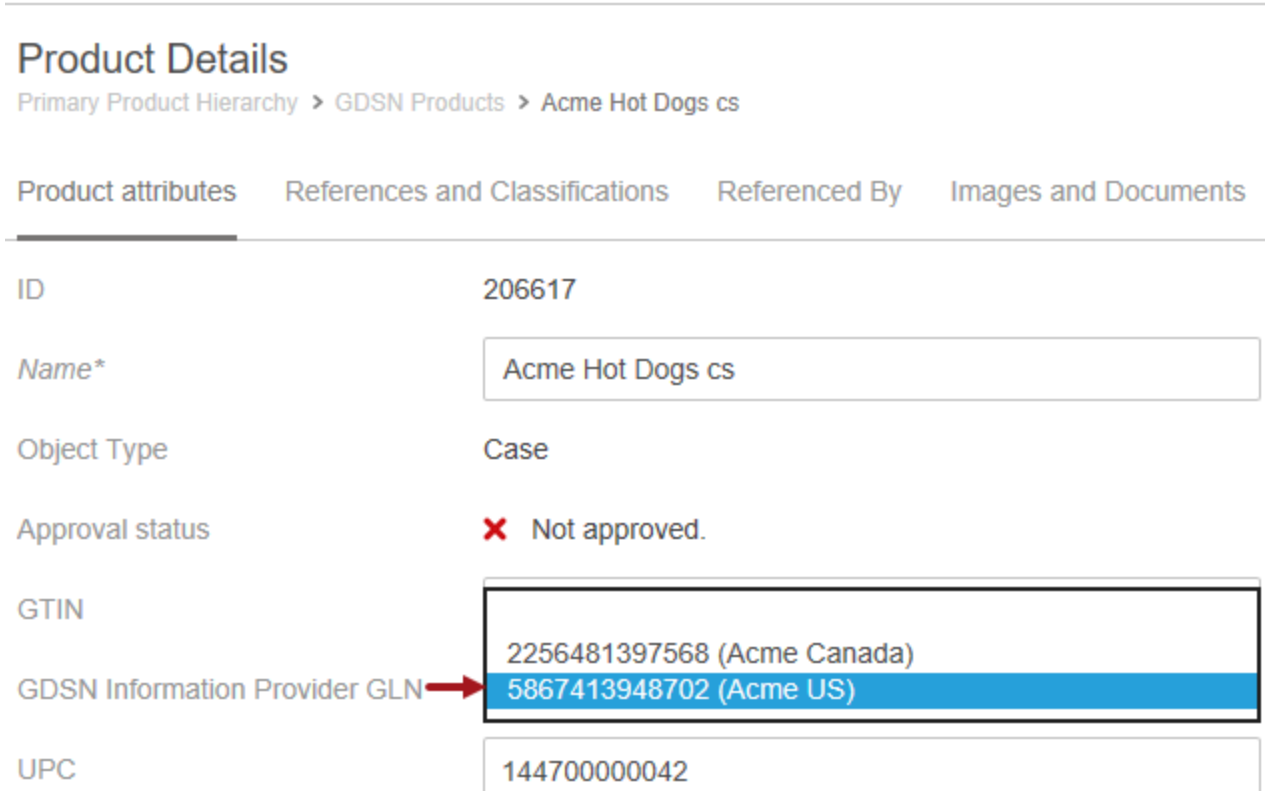
From the 'GDSN model' component model, right click and select 'Easy setup of GDSN Component Model.' Click the ellipsis button (...) for the 'Information Provider GLN attribute', select the attribute that was created for the IPGLN.



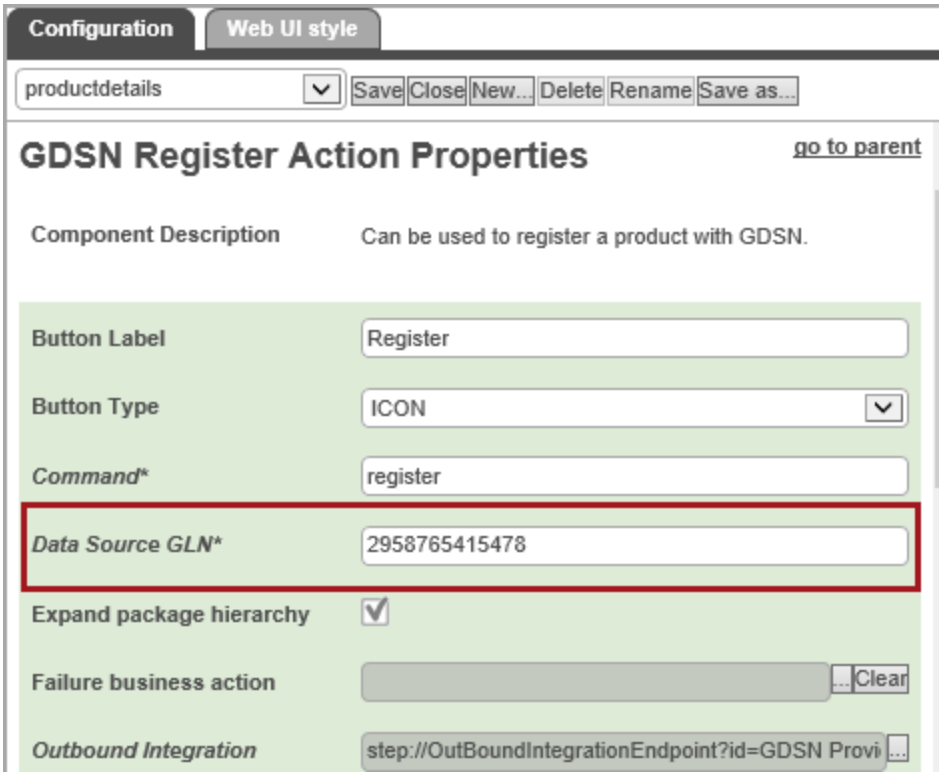
For more details regarding the Setup GDSN Publisher Data Model wizard, see the Setting Up the **GDSN Component Model** topic in the GDSN Provider documentation.

Once configured in the workbench, the GDSN Provider IPGLN attribute must be configured as an Attribute Value Component in the GDSN Publisher Web UI. If configured properly, users will have the option of selecting the IPGLN as shown in the example below. There is a validation check on the Register and Publish actions to ensure the same IPGLN values are consistent throughout the packaging hierarchy.

For more on how to configure the Attribute Value Component, see the **Attribute Value Component** topic in the **Web UI Getting Started** documentation.

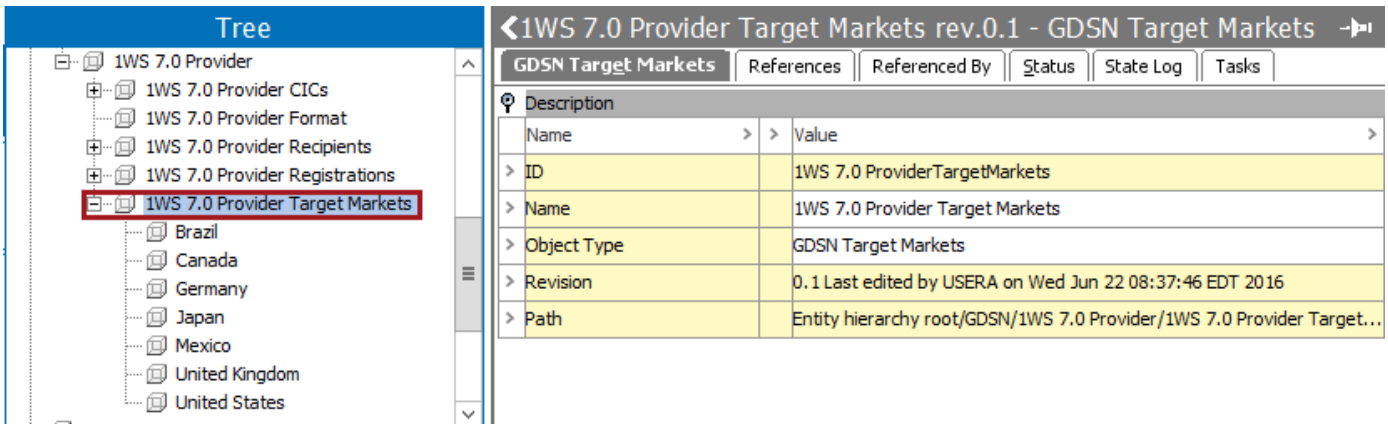


Note: For users of the GDSN Provider solution prior to 8.1, the IPGLN was maintained in the configuration of the GDSN Register and GDSN Publish action buttons in the label, 'Data Source GLN.' In order to use the IPGLN attribute value component, this value will need to be removed. Once removed, the 'Data Source GLN' will disappear.

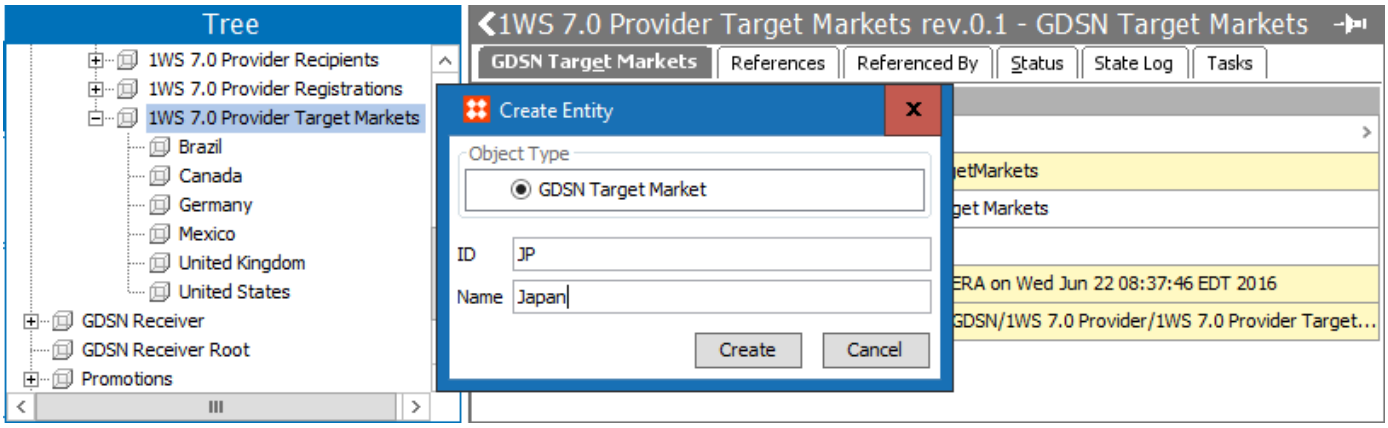

Configuration
Web UI style
productdetails
Save
Close
New...
Delete
Rename
Save as...
GDSN Register Action Properties
go to parent
Component Description
Can be used to register a product with GDSN.
Button Label
Register
Button Type
ICON
Command*
register
Data Source GLN*
2958765415478
Expand package hierarchy
Failure business action
Clear
Outbound Integration
step://OutBoundIntegrationEndpoint?id=GDSN Provi

Selecting Multiple Target Markets in Web UI

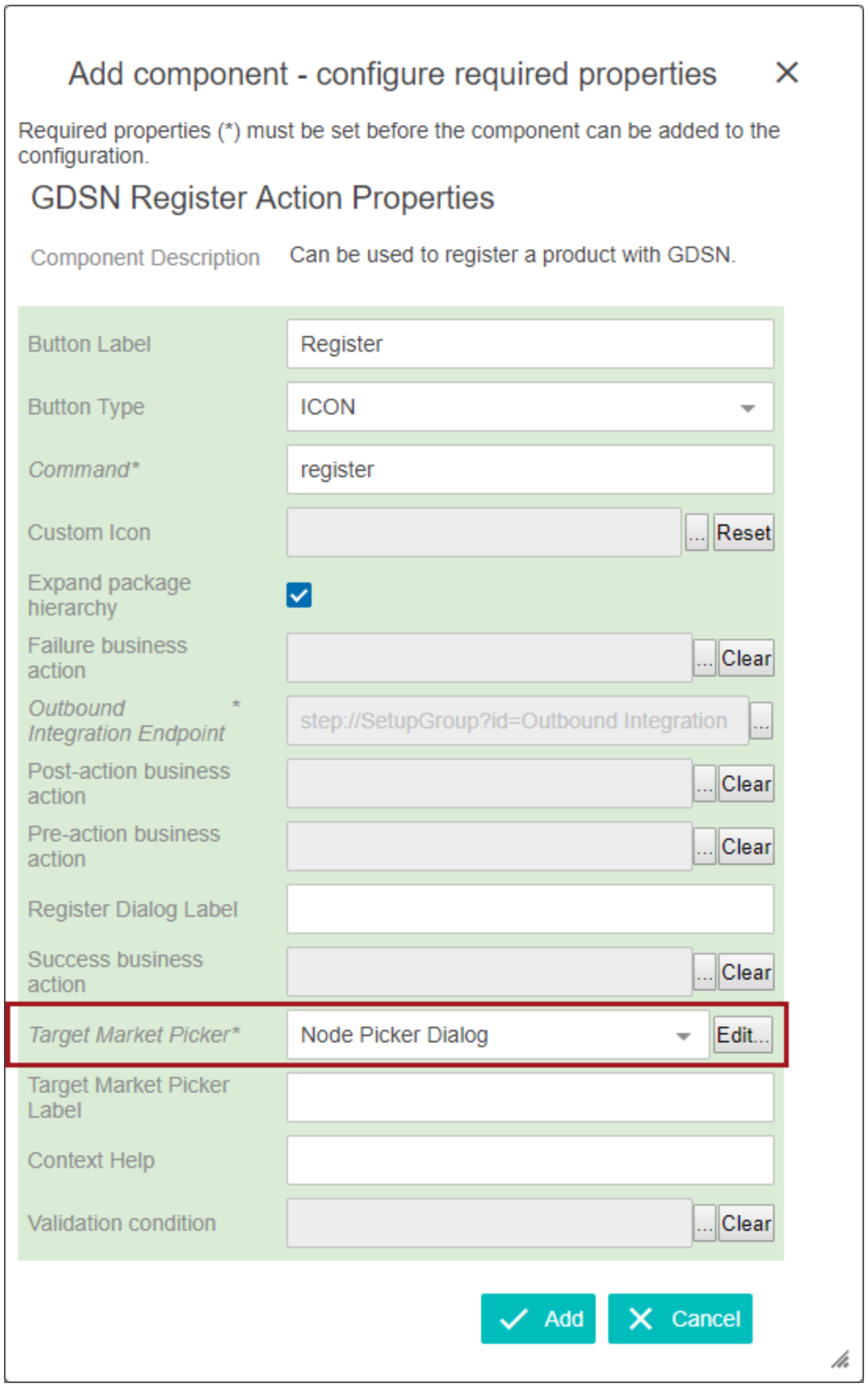
Adding multiple Target Markets to the GDSN data pool assumes that the 'GDSN model' component model has been configured and the Target Market object type already exists in the workbench as shown in the image below. For more information about the GDSN Component Model, see the **GDSN Component Model for Provider** topic in the **GDSN Provider** documentation.



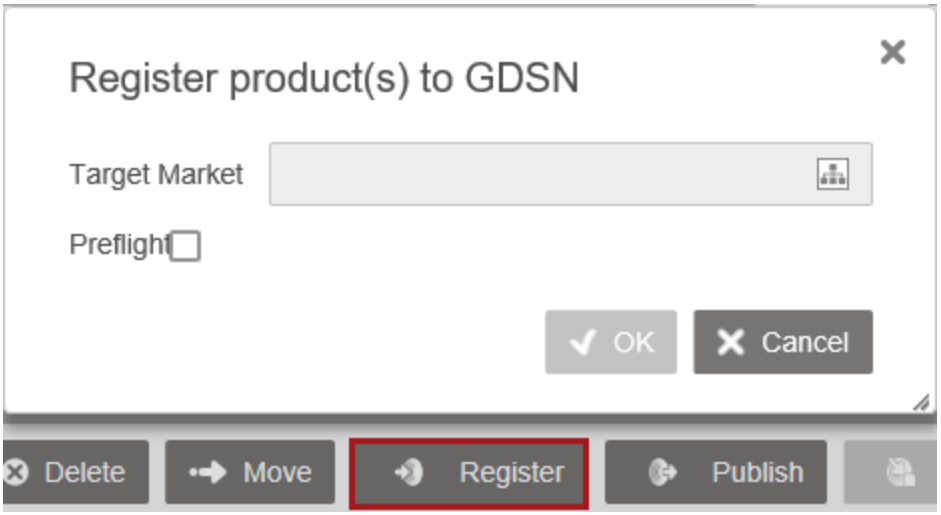
Continue adding the desired Target Markets by right clicking the Target Market root object type and creating a new GDSN Target Market entity. In these examples, the ISO Alpha-2 country codes are used as the IDs for the Target Market and the name of the market in the name field. Creating the Target Markets concludes the configuration that needs to be completed in the workbench.



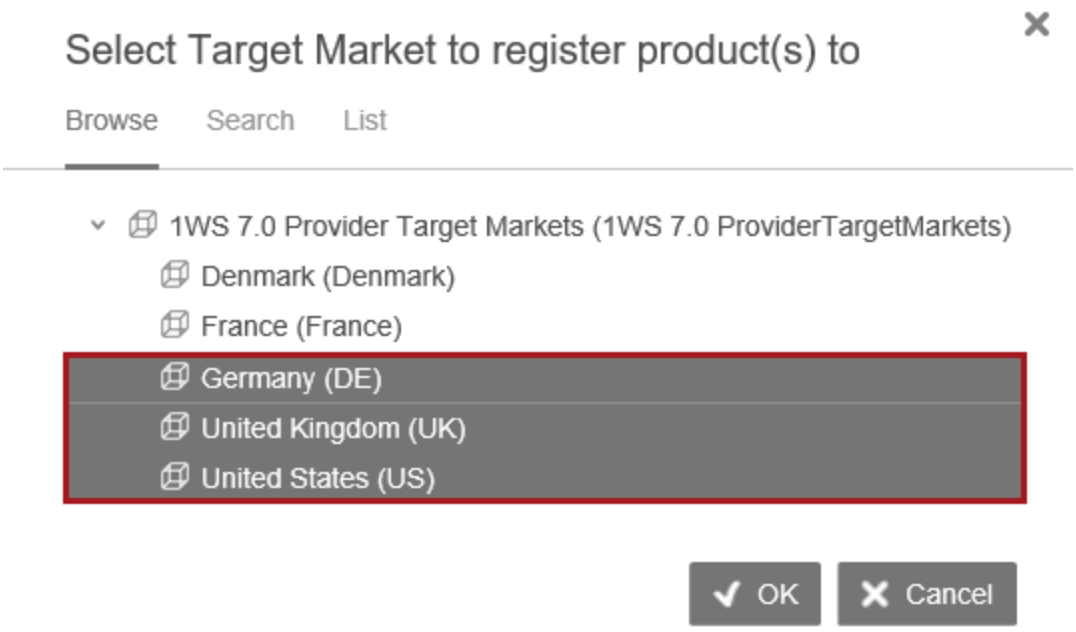
In the GDSN Provider Web UI, ensure that the GDSN Register Action Properties and the GDSN Publish Action Properties have the 'Node Picker Dialog' selected. This is pre-configured during the setup of the component model, however it is customizable. If the GDSN Register and Publish action buttons have not been configured for the GDSN Provider Web UI, then see the GDSN Publish Action Button and the GDSN Register Action Button sections of the GDSN Web UI Buttons topic in this documentation.


Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
GDSN Register Action Properties
Component Description
Can be used to register a product with GDSN.
Button Label
Register
Button Type
ICON
Command*
register
Custom Icon
Reset
Expand package hierarchy
Failure business action
Clear
Outbound Integration Endpoint *
step://SetupGroup?id=Outbound Integration
Post-action business action
Clear
Pre-action business action
Clear
Register Dialog Label
Success business action
Clear
Target Market Picker*
Node Picker Dialog
Edit...
Target Market Picker Label
Context Help
Validation condition
Clear
Add
Cancel

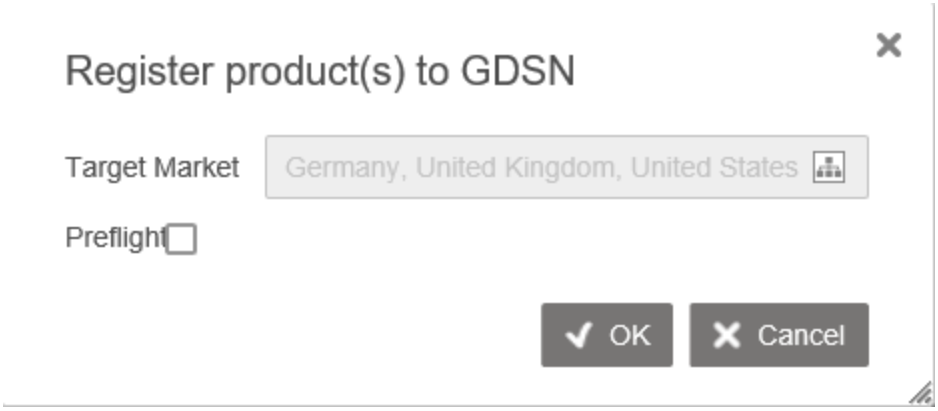
Selecting the Register or Publish action buttons in the Web UI will bring up the Target Market selector. Selecting the node picker within the Target Market selector will bring up the Register or Publish dialog depending upon which action button was selected.



Once in the Register or Publish dialog, multiple target markets can be selected by holding down the Ctrl key and selecting the desired target markets. The selected target markets will be highlighted as shown in the image below. Once all of the desired target markets have been selected, click 'OK.'

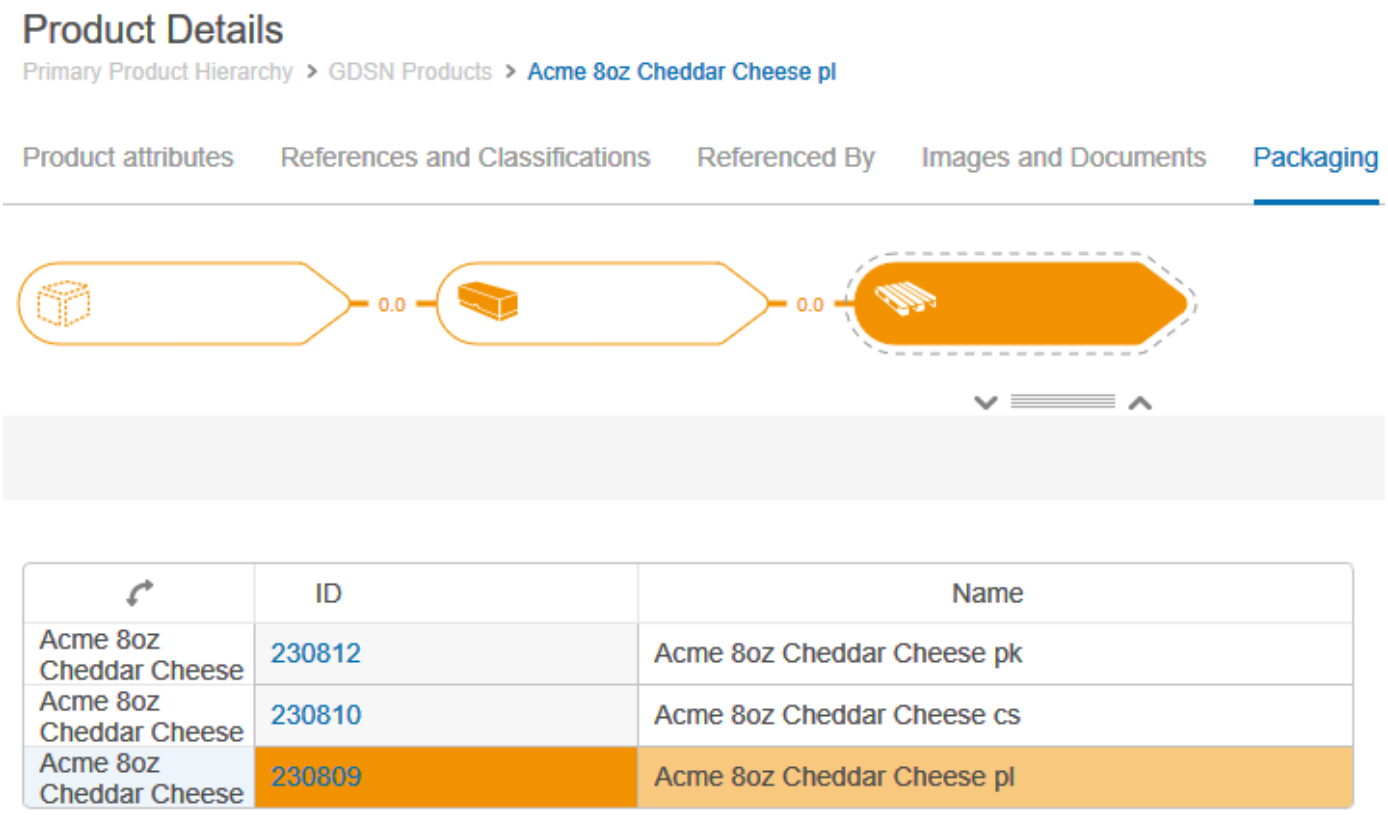


The target markets will be listed, separated by commas in the Register or Publish product(s) to GDSN dialog. Selecting the 'OK' button at this point will send the GTIN(s) to the GDSN in multiple target markets in separate target market-specific messages.


Register product(s) to GDSN
Target Market
Germany, United Kingdom, United States
Preflight
OK
Cancel

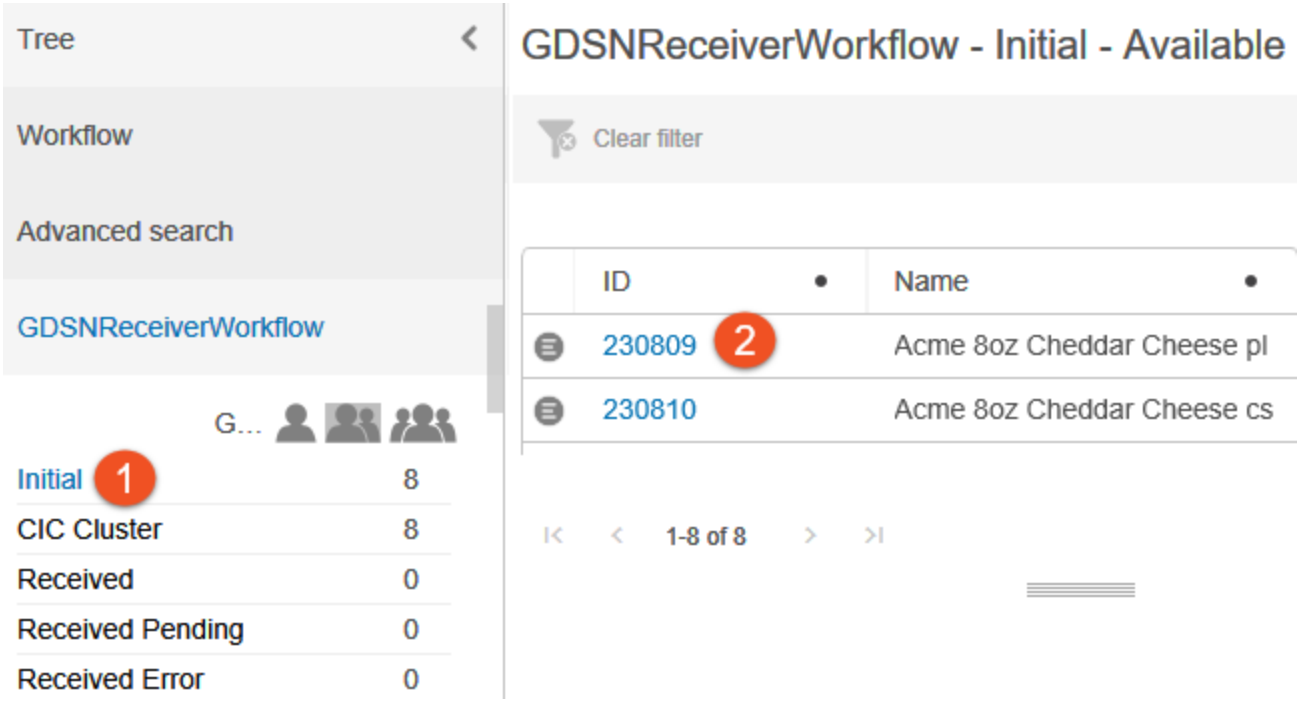
Managing Products in the GDSN Workflow in the Web UI

The product that is started in the Initial state in the CIC workflow is the package hierarchy root. Before you move the entire hierarchy to a new state, we recommend that you verify that all the items in the hierarchy are appropriate for the CIC status message that you want to send.

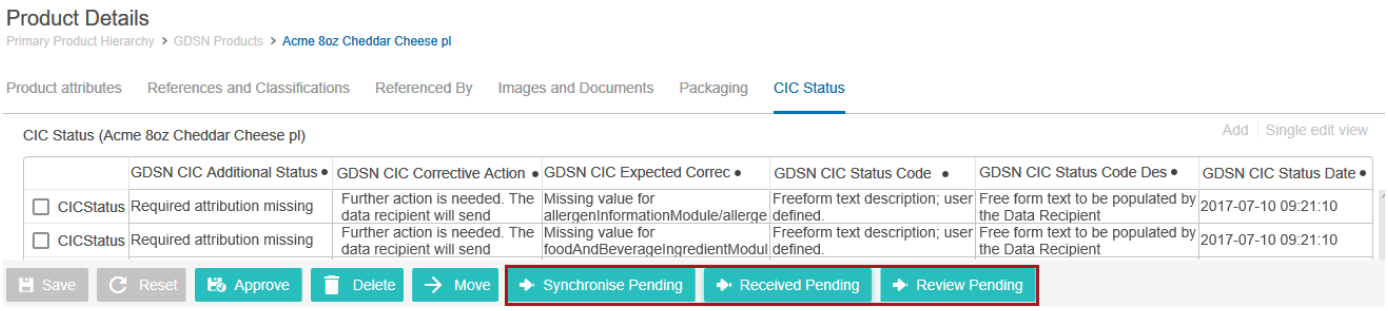


View CIC Status in the Web UI

1. On the **GDSN Web UI homepage**, in the **GDSN Workflow** , click the **Initial** link to go to the hierarchy root.
2. Click the hierarchy link of the product to inspect. Repeat this step for all the items to inspect.

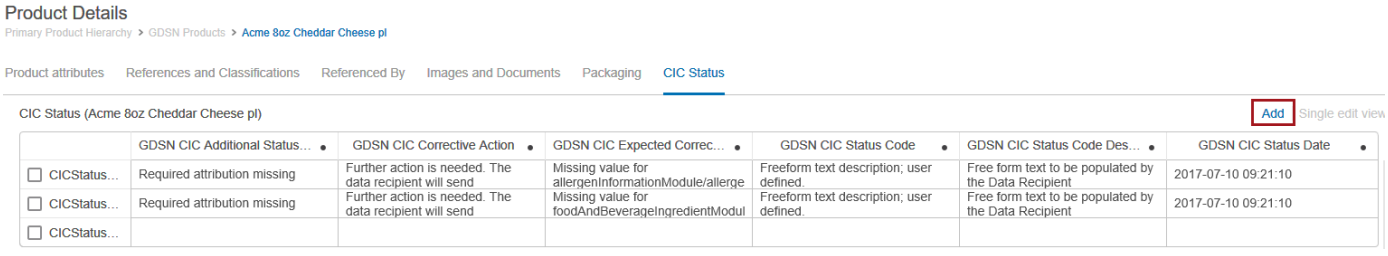


3. When you are satisfied that all items in the hierarchy are appropriate for a specific CIC status, click the status button at the bottom of the screen to move the hierarchy root to the next state of the workflow.

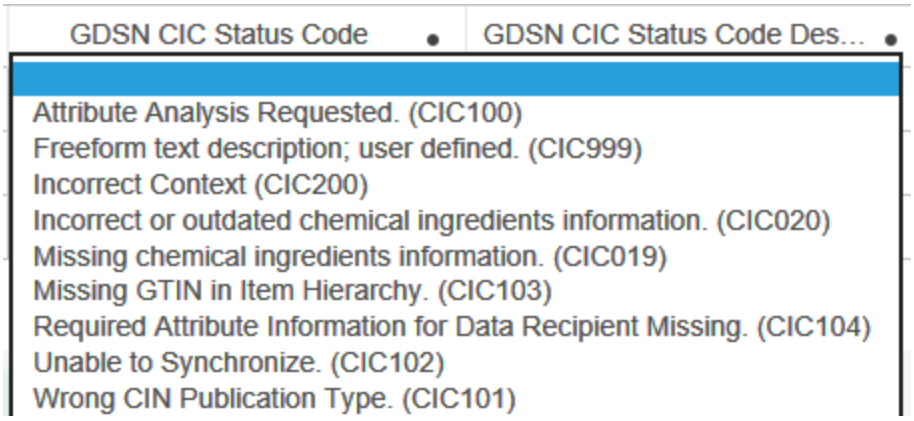


Review or Rejected Status

When a CIC message has the status Review or Rejected, you can select a CIC status message from the CIC Status Code list. This is facilitated first by selecting the **Add** link in the upper right hand corner.



And selecting the appropriate CIC status code in the dropdown. These status messages are standard GDSN messages. Additional information about the different messages can be found on the web.



Receiving CIC_Response Messages

Once the CIC message has been sent and the hierarchy node is in the Accepted Pending state, GDSN responds with either an acknowledgment or an exception.

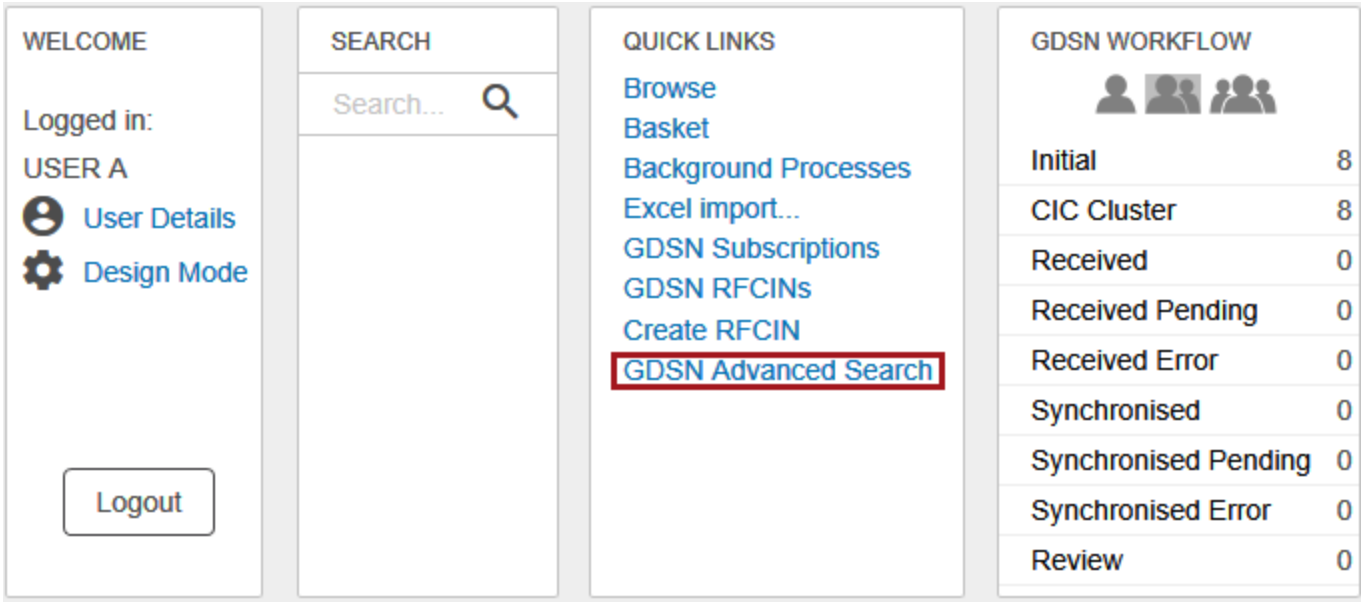
If GDSN responds with an acknowledgment, the hierarchy node is moved to the Accepted state. If the response is an exception, the node is moved to the Error state, and the two workflow variables CIC Error Code and CIC Error Description display the messages from the CIC Response message. Moving the item back to the pending state, resets the workflow variables and sends the CIC message again.

Note: Based on the states that are configured for a particular workflow in STEP Workbench, the same can be configured and using the buttons in the Web UI and the CIC's can be sent to those states as and when required by the user.

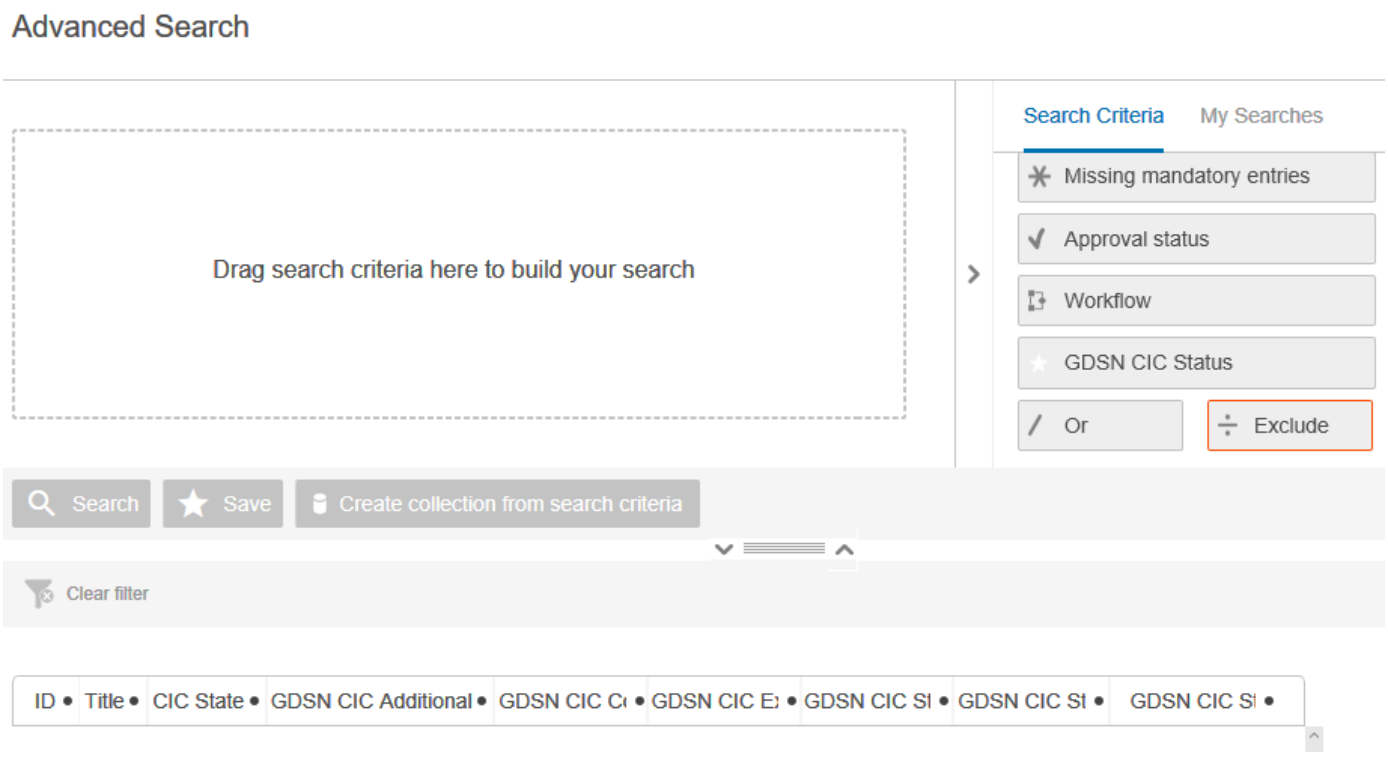
Advanced Search Options in the GDSN Receiver

The Web UI for the GDSN Receiver comes with advanced search features to support the tracking of various statuses of GDSN subscriptions and CIC states.

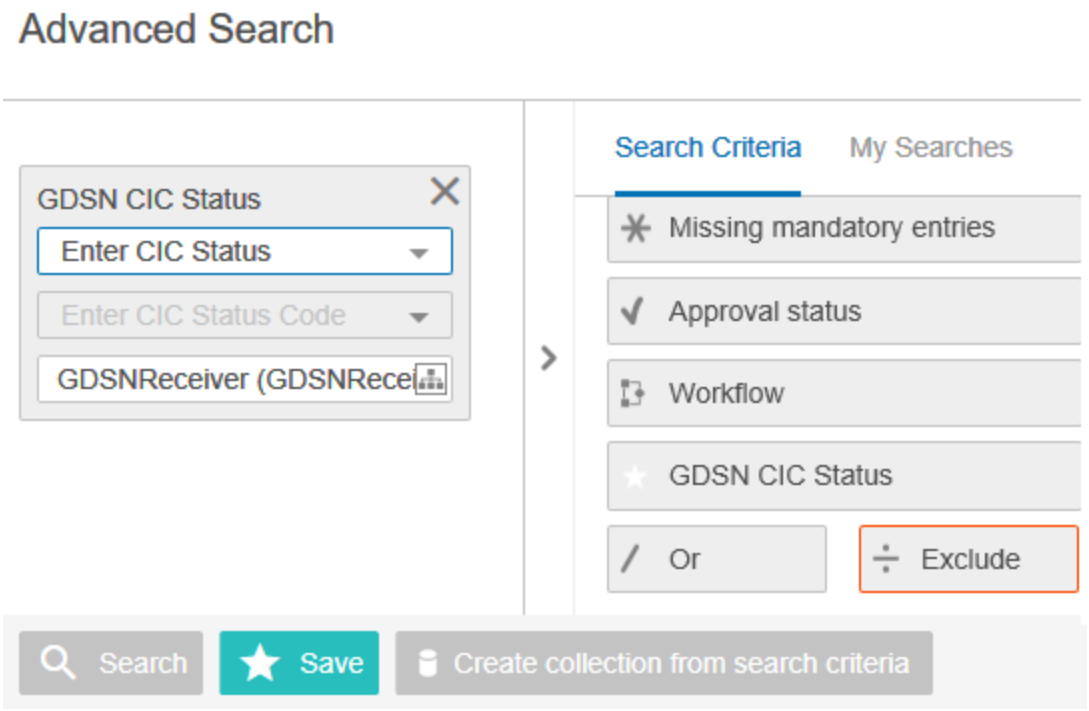
To configure the Advanced Search option in Web UI, see the **Advanced Search Initial Configuration** topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.



Clicking on the link outlined in the image above, will take the user to the **Advanced Search** screen as shown in the image below.

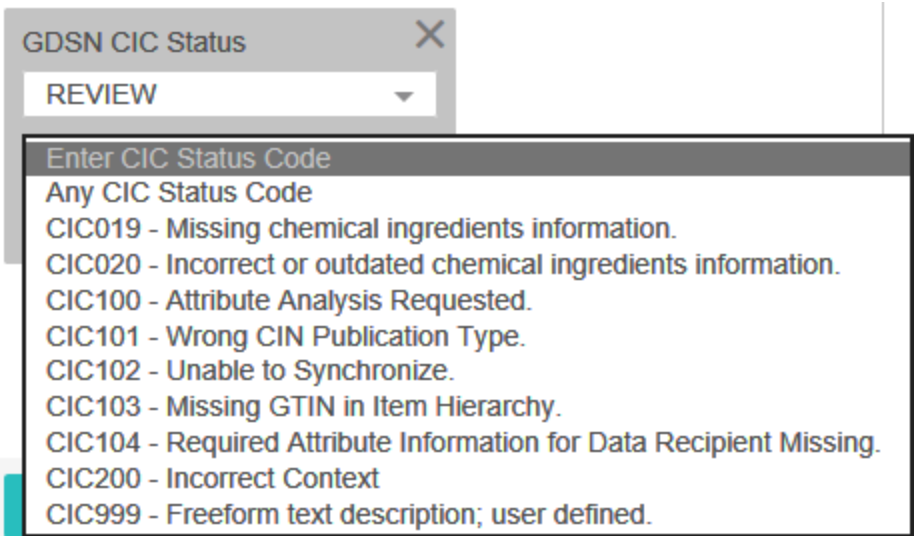


For an example how the GDSN search features can be used, this topic will take a look at all CICs sitting in a review state. First, the **GDSN CIC Status** search criteria object will be dragged over to the search build area.



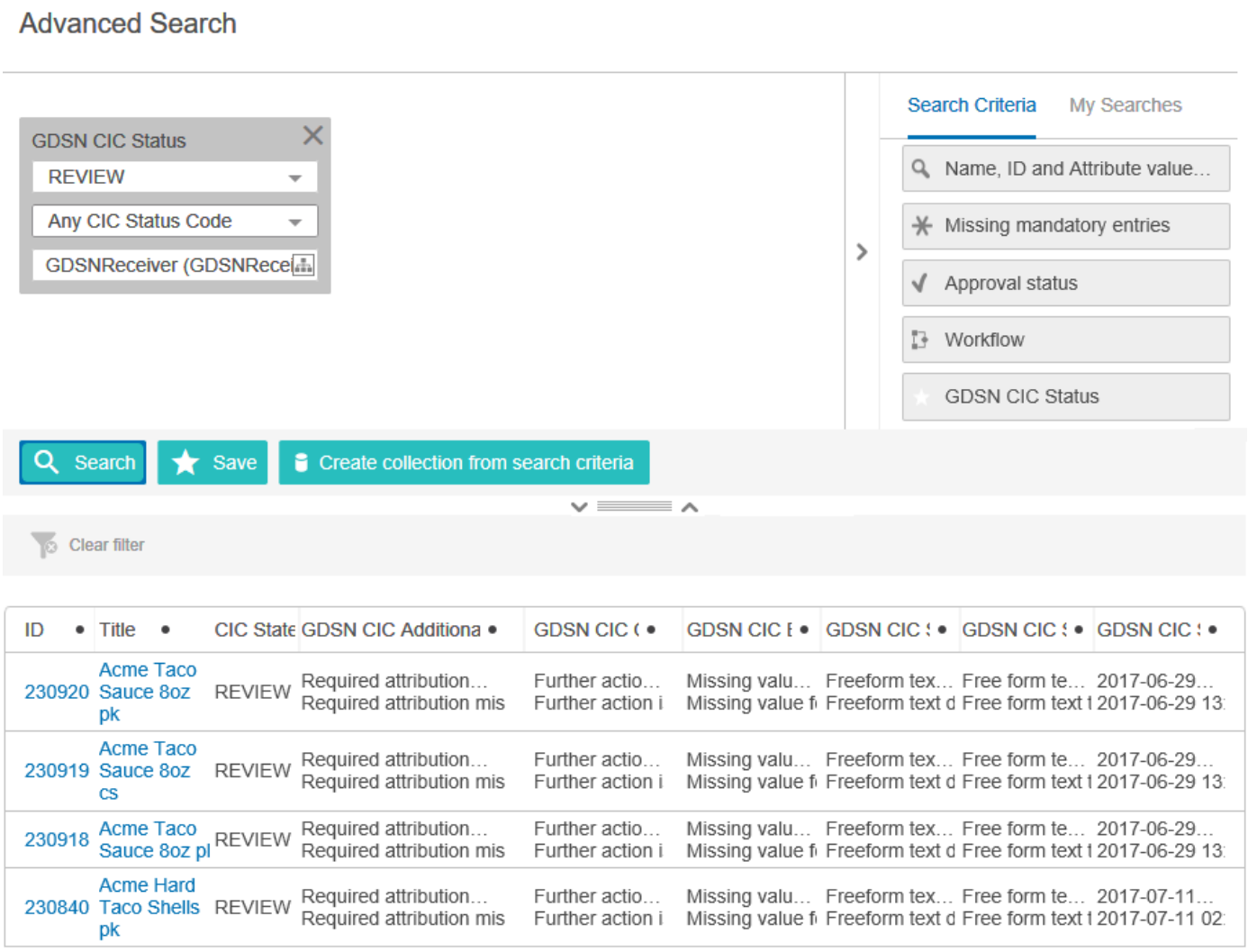
Next the status you want to search on will need to be selected. This is done by selecting the dropdown arrow where 'Enter CIC Status' is. Doing so will give you the options RECEIVED, REVIEW, REJECTED and

SYNCHRONIZED. The 'Review' state is selected and the option to 'Enter CIC Status Code' becomes available. For this example, the 'Any CIC Status Code' option is selected.

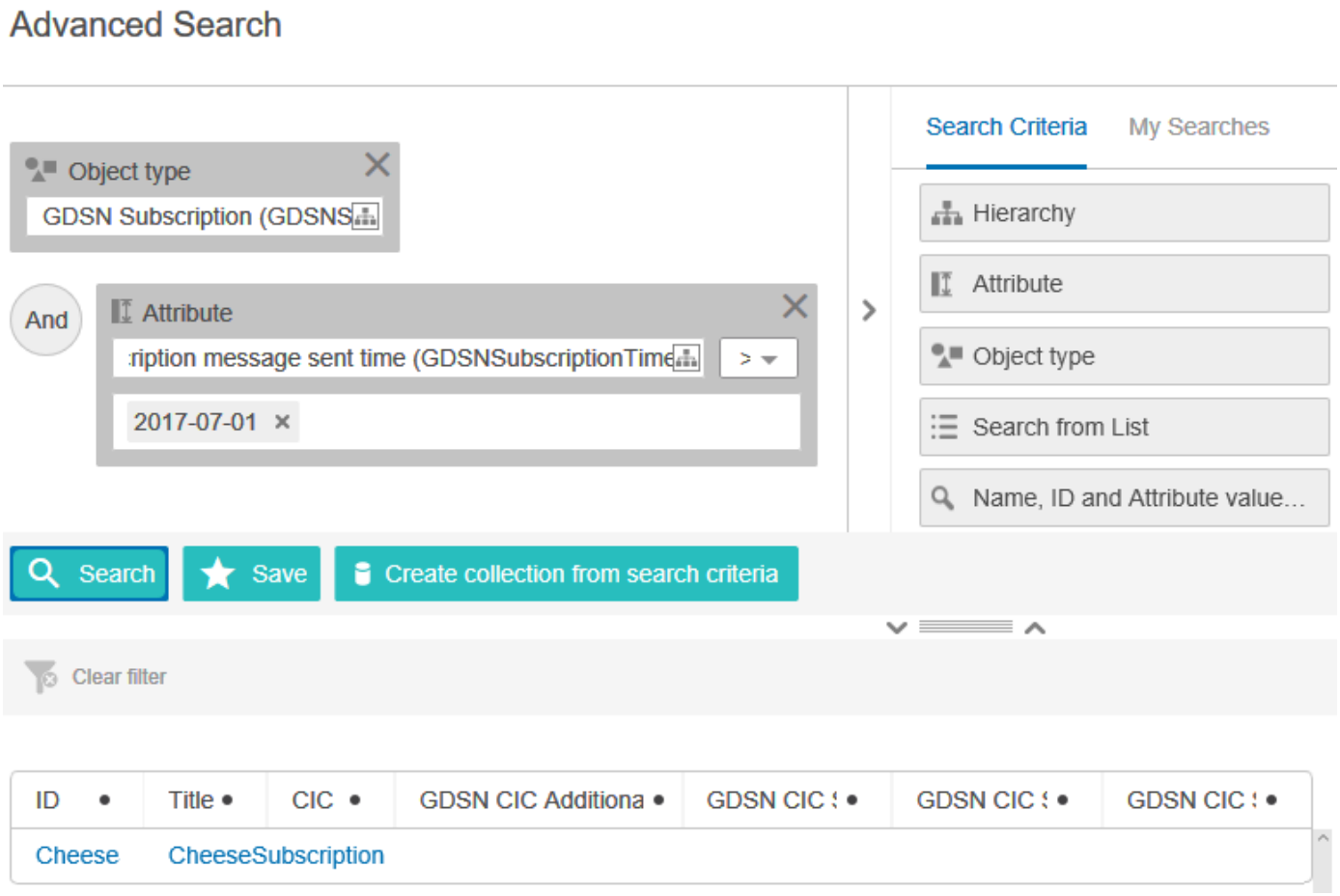


Third option is to select the Data pool and in this case, we have selected the GDSN Receiver Data pool.

Press the 'Search' button and the results will appear at the bottom of the screen.



For an additional example of how the advanced search features can work, we will look for all GDSN subscriptions sent beyond a certain date. In the example below, the search criteria object 'Object type' was dragged over to the search build area and the object type 'GDSN Subscription' was selected. Then the 'Attribute' search criteria and the attribute 'Subscription message sent time' was selected. The greater than '>' option was selected from the dropdown box and the value '2017-07-01' was entered in the search criteria field. After pressing the search button, the results will appear at the bottom of the screen.

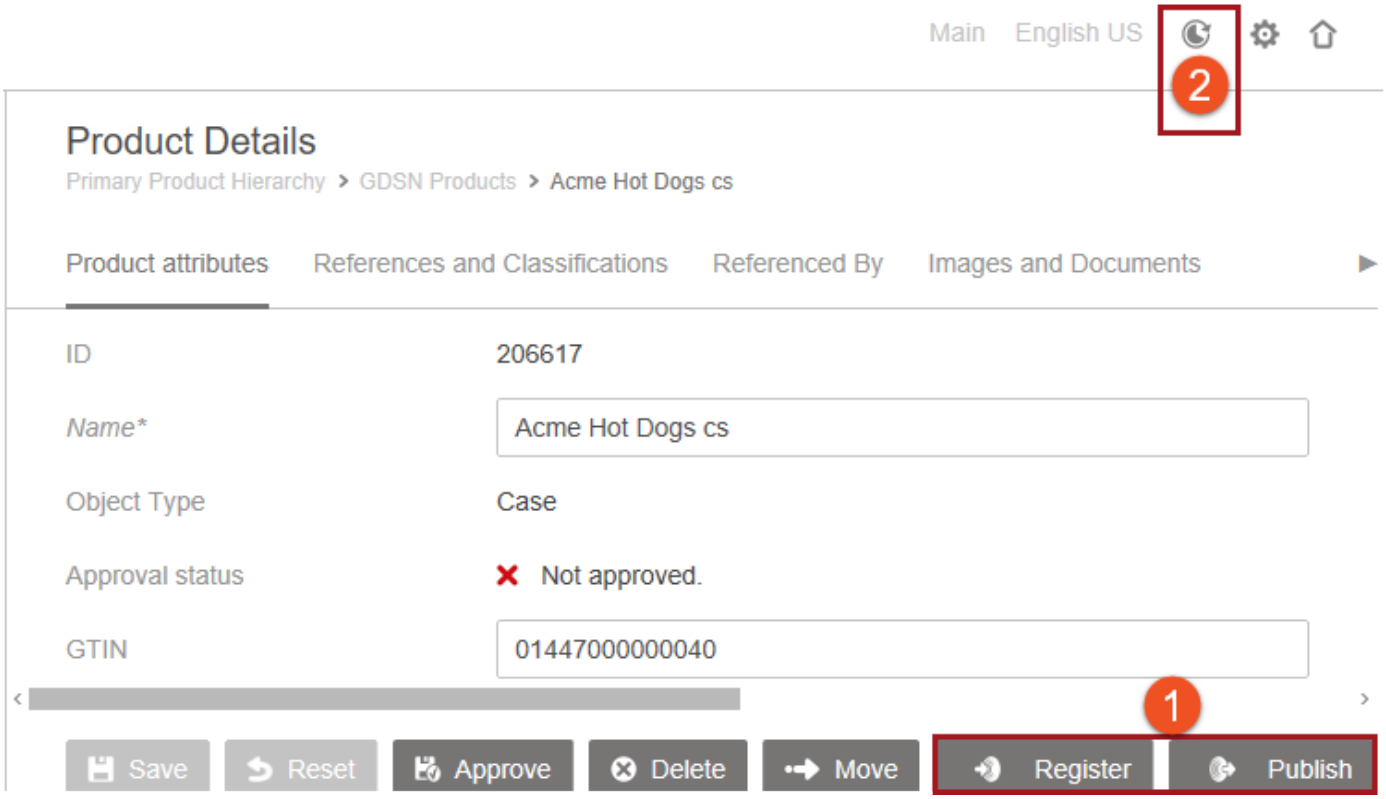


For more information regarding using advanced search, see the **Using Advanced Search** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

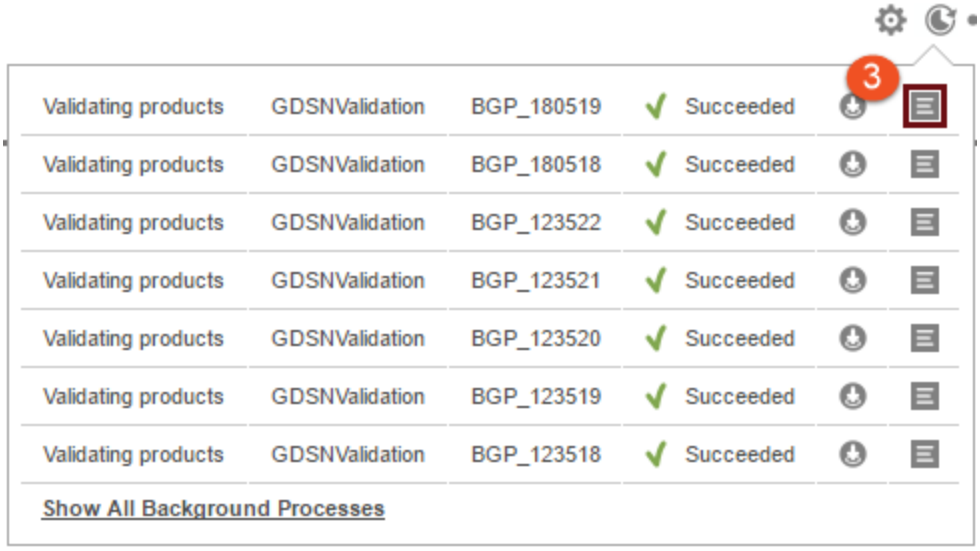
GDSN Error Messaging

When registering or publishing hierarchies for GDSN, many validation checks can occur and there may be many errors on various levels of the packaging hierarchy. While it is possible to see the validation results in a background process screen, navigating back and forth from the validation result to each product to address all of the errors could be cumbersome. It is also possible to view the validation results directly from the product details screen.

1. From the 'Product Details' screen, select the product or products to be registered or published and click the corresponding button.
2. Select the 'Background Processes' icon.



3. A 'Background Process' dialog box will pop up, and the GDSN Validation background processes will be clearly defined. Click on the validation report icon to the right of the background process list to bring up the validation report.

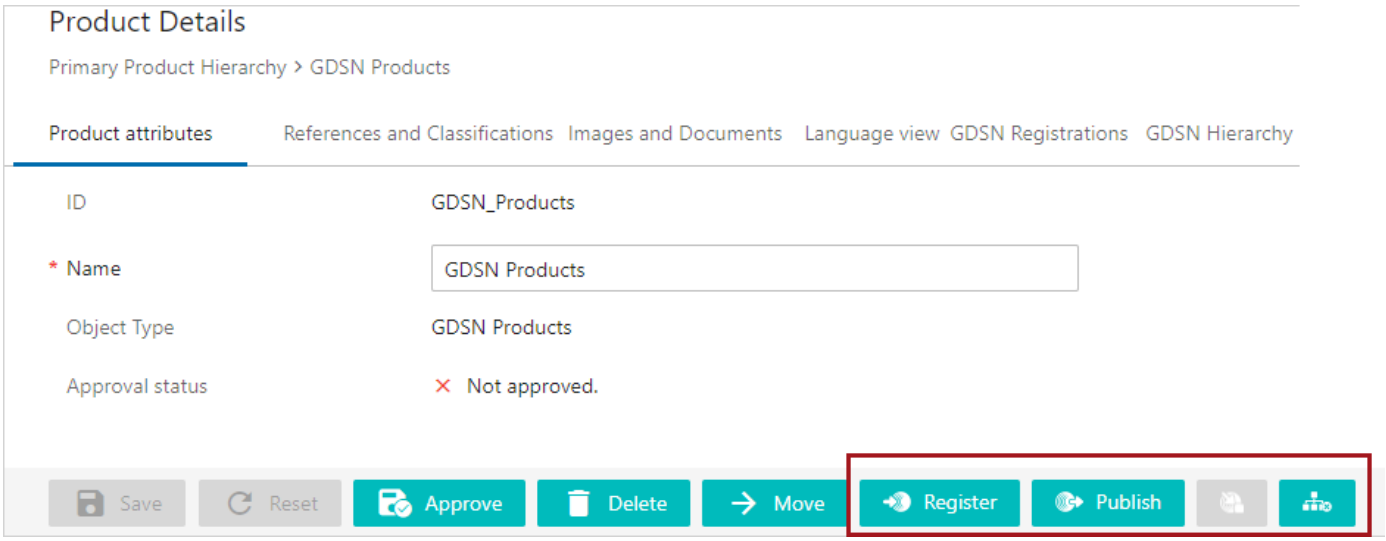


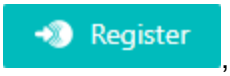
4. From the validation report, the user can see the error message associated with the product validation and a link directly to the product is provided.

Note: The validation report dialog will stay on top of the Web UI screens. This means that it is possible to navigate to different screens and still see the validation report dialog.

GDSN Web UI Buttons

The following button components are available for use in a GDSN Web UI:



- The Register button, 

, button registers the selected products with a GDSN datapool. For configuration details, see the **GDSN Register Action Button** section of the **GDSN Provider** documentation.
- The Publish button ,

, publishes the selected products to a GDSN recipient. For configuration details, see the **GDSN Publish Action Button** section of the **GDSN Provider** documentation.
- The Hierarchy Withdrawal button,
, sends a hierarchy withdrawal command for the selected packaging hierarchy. For configuration details, see the **GDSN Hierarchy Withdrawal Action Button** section of the **GDSN Provider** documentation.

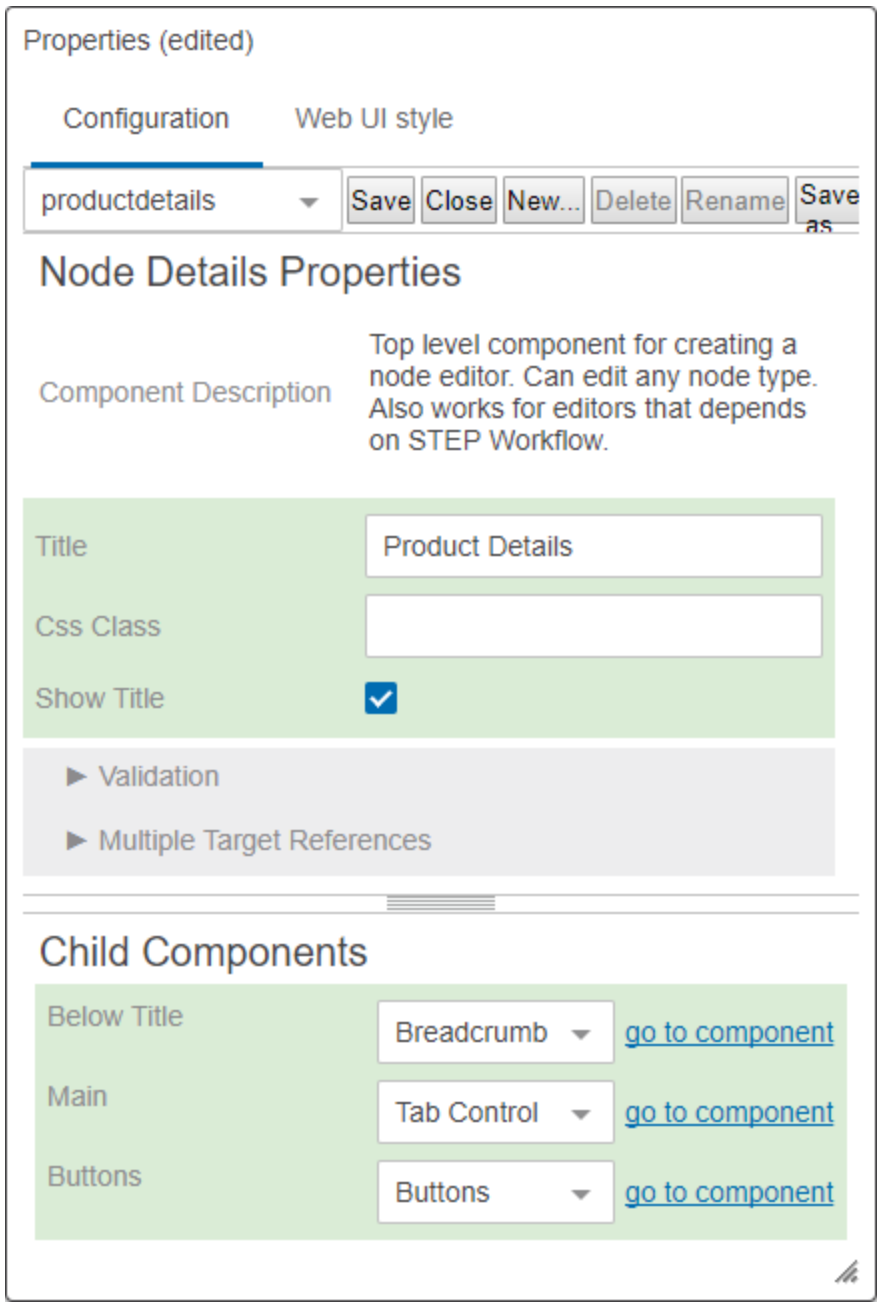
The GDSN Action buttons can be used on both NodeDetail and NodeList screens in either the Toolbar or ButtonPanel. The same set of configuration properties exist regardless of the location of the buttons.

The buttons are pre-configured in the following locations:

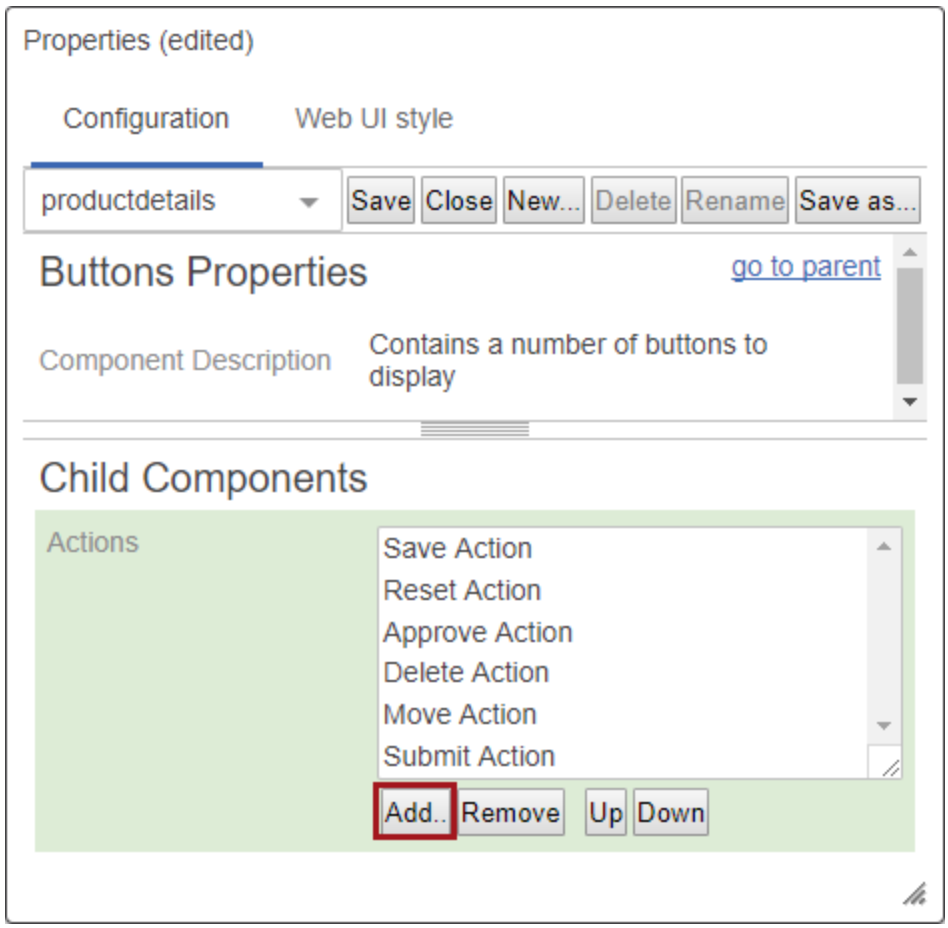
- Generic Search result screen
- Power Search result screen
- Product Details screen

Adding a GDSN button to a Node Details page

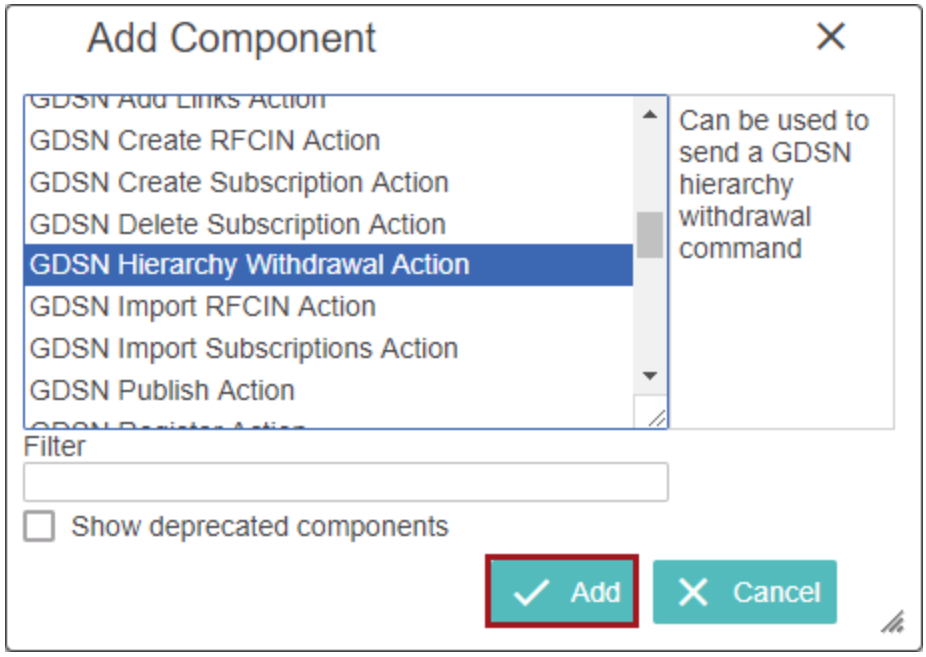
1. Open Designer for a Node Details page. The Node Details Properties configuration dialog is displayed.



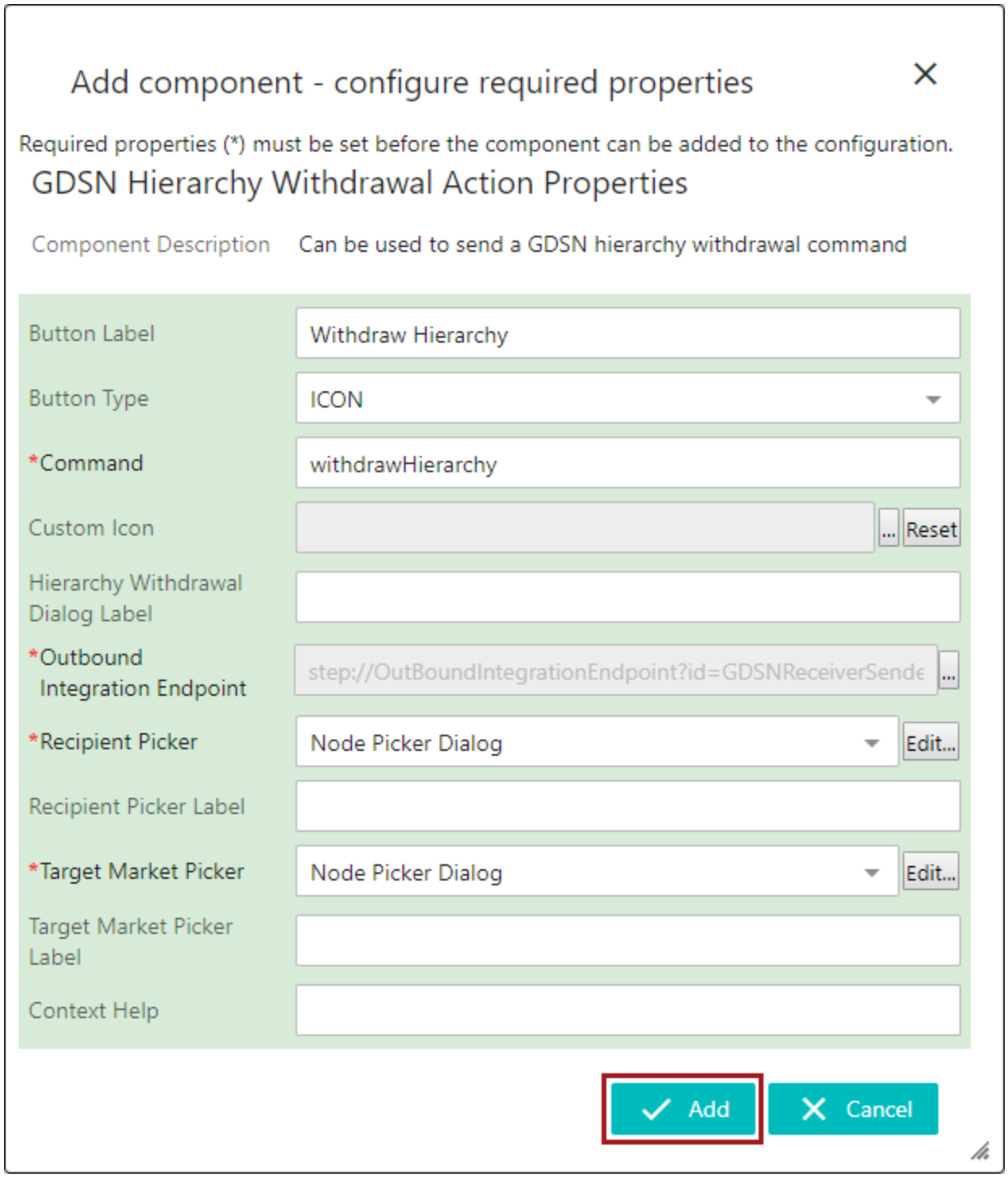
2. In the Child Components section, click the **go to component** link for the Buttons field.
3. On the Buttons Properties configuration dialog, in the Child Components section, click the **Add** button for the Actions field.



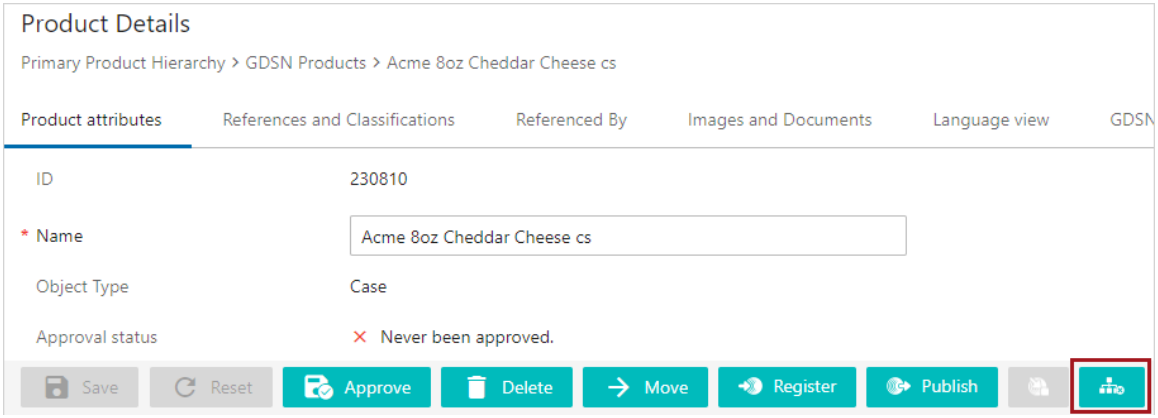
4. On the Add component dialog, select a GDSN component and click the **Add** button.



5. On the Add component - configure required properties dialog, add all necessary data and click the **Add** button.

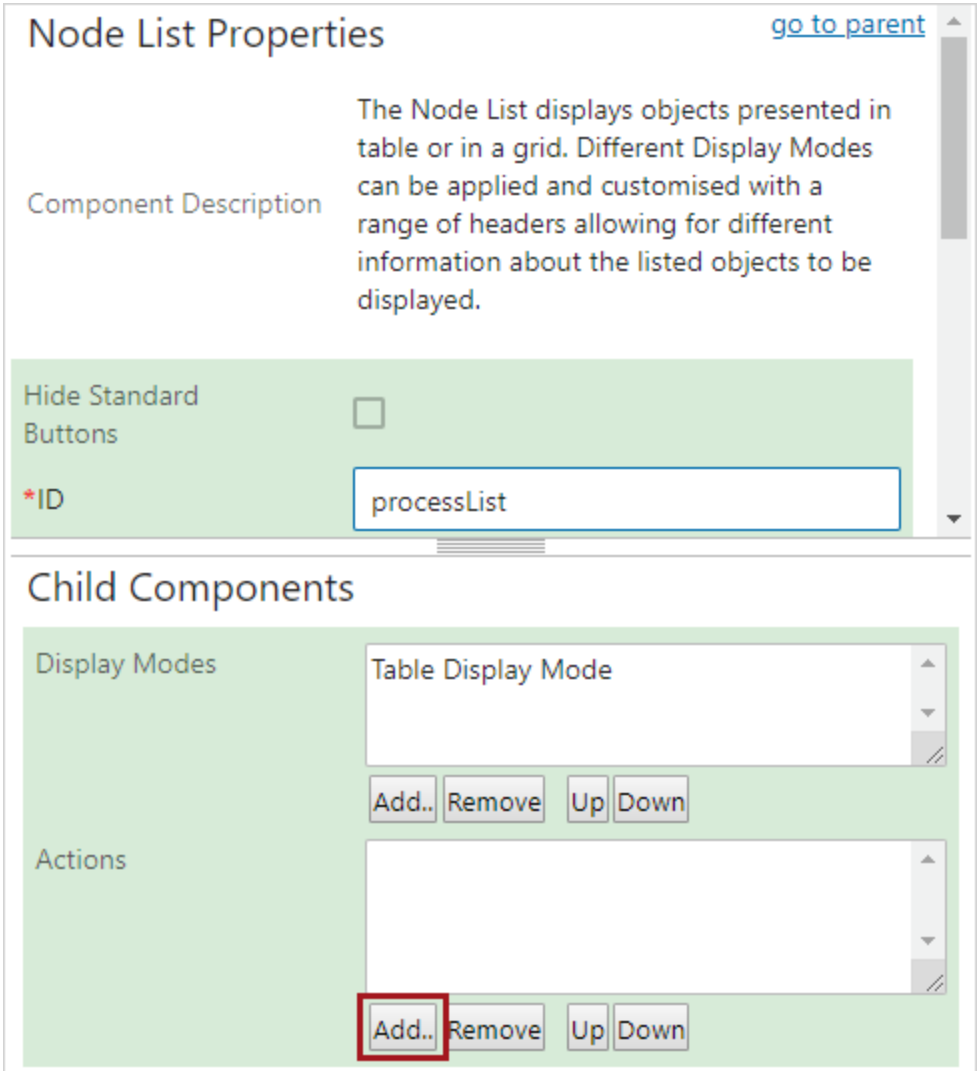


6. The button displays on the Node Details page Button Panel.

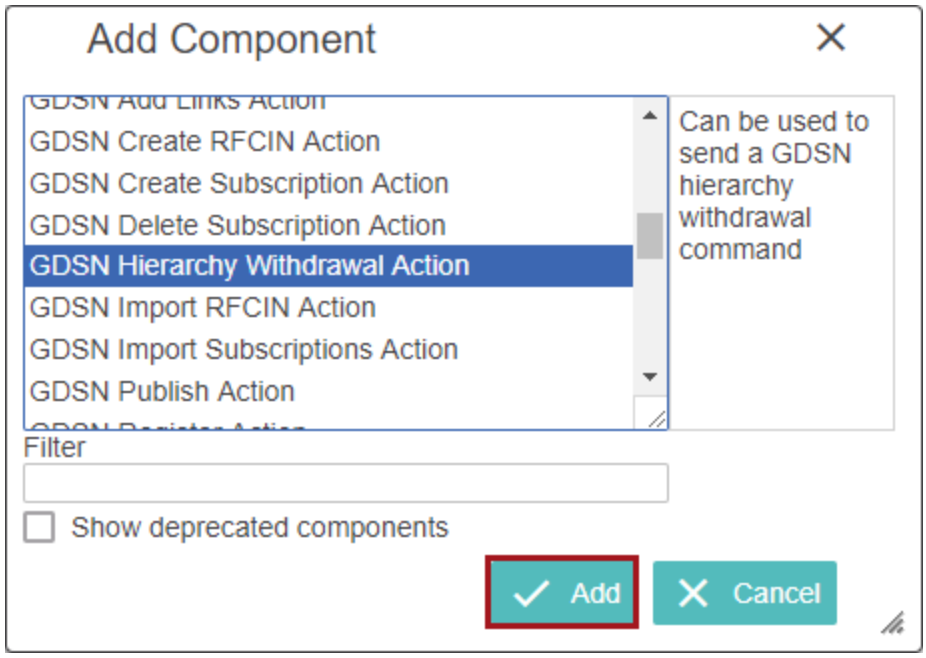


Adding a GDSN button to a Node List page

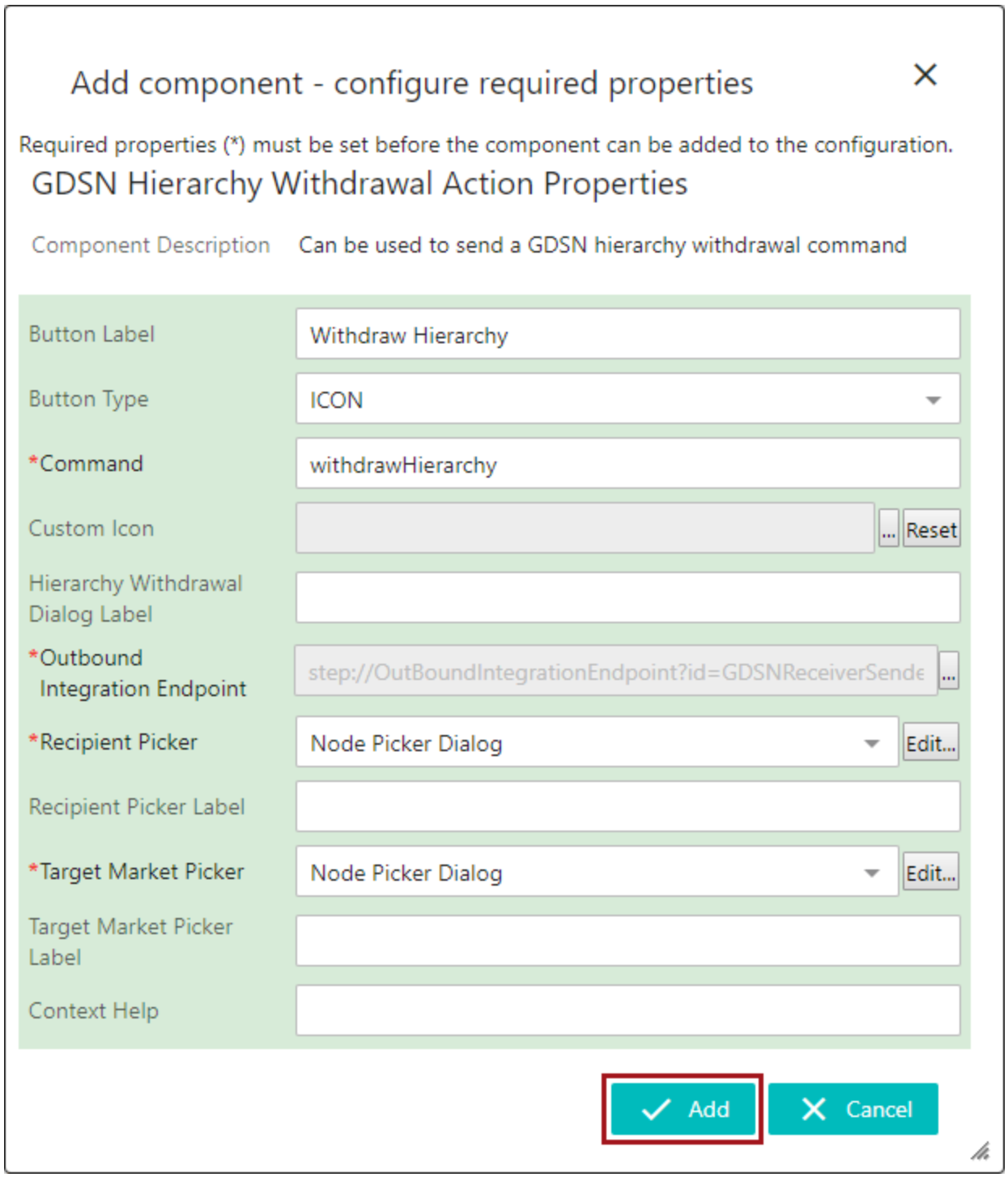
1. Open Designer for a Node List page. The Node List Properties configuration dialog is displayed.
2. In the Child Components section, click the **Add** button for the Actions field.



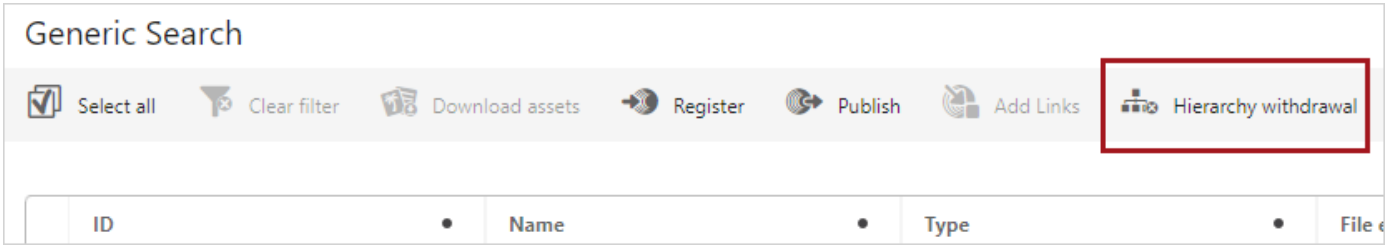
3. In the Add component dialog, select a GDSN component and click the **Add** button.



4. In the Add component - configure required properties dialog, add all necessary data and click the **Add** button.



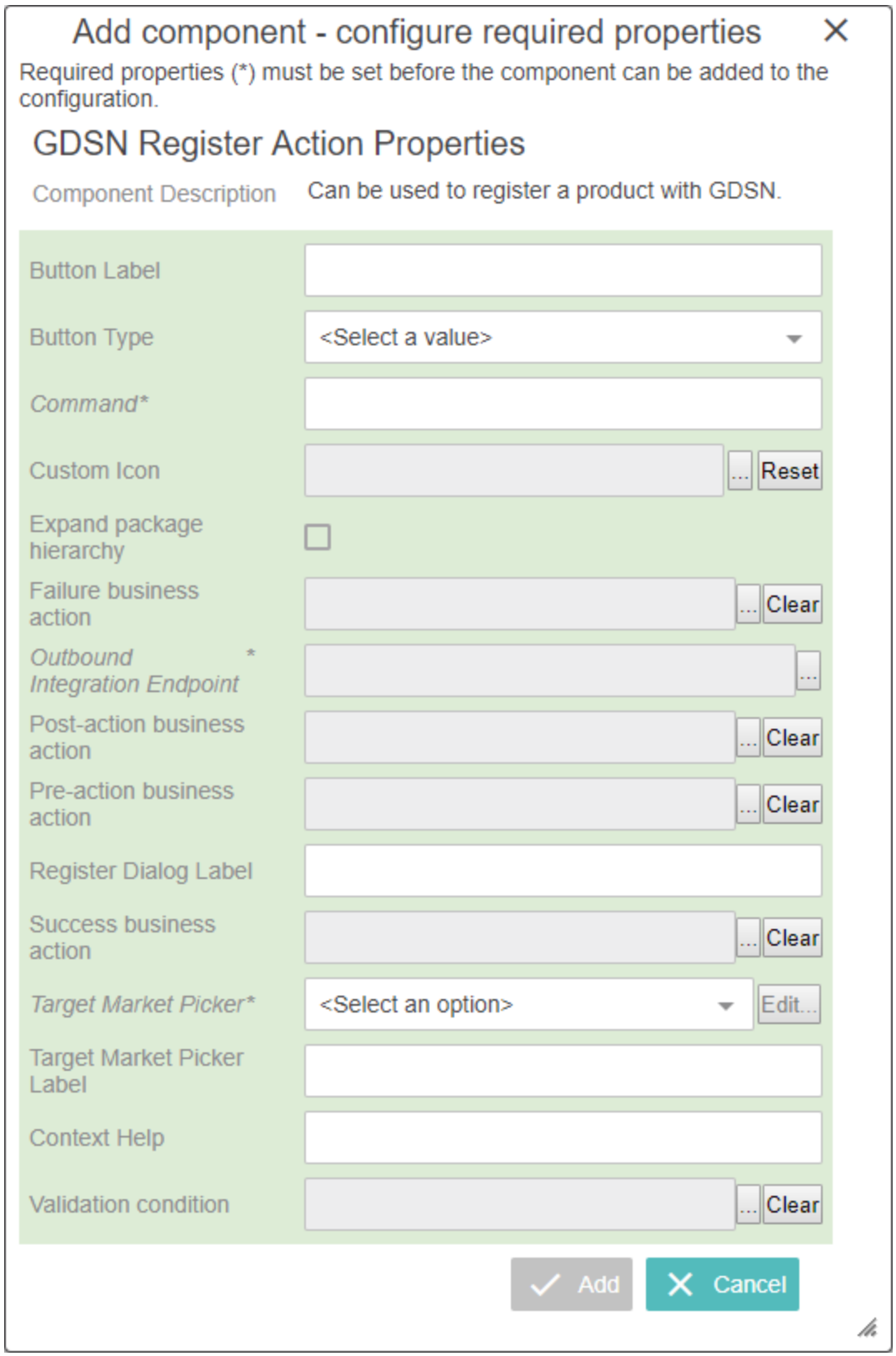
5. The button displays on the Node List page Toolbar.



Note: Above steps can be used to add the required buttons.

GDSN Register Action Button

In the Designer, the Web UI component for the Register button is called 'GDSN Register Action.' Each parameter is described in the following table.

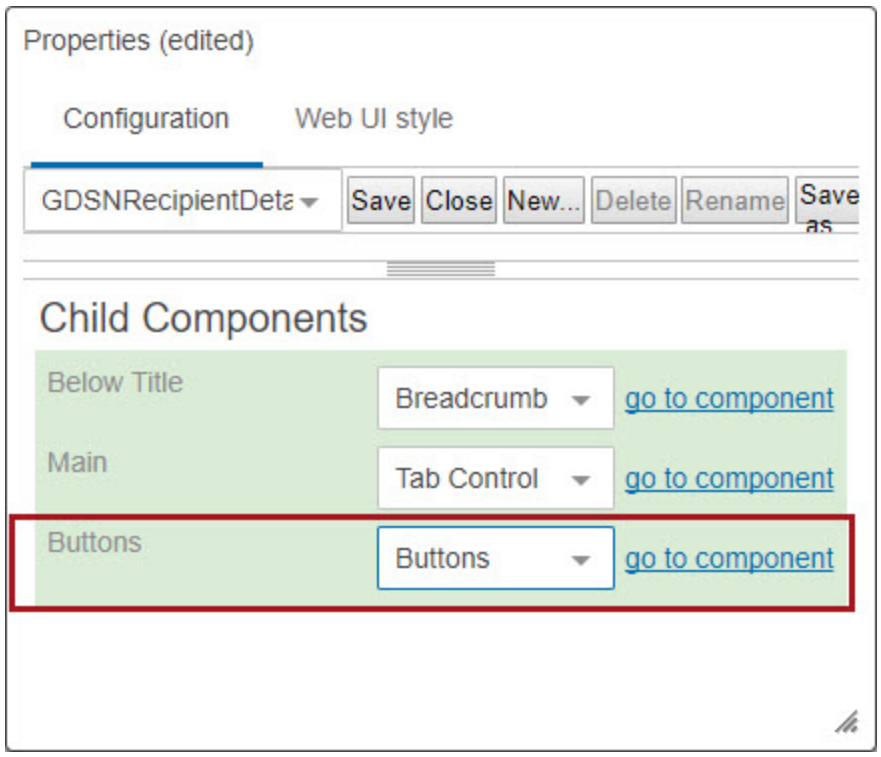

Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
GDSN Register Action Properties
Component Description
Can be used to register a product with GDSN.
Button Label
Button Type
<Select a value>
Command*
Custom Icon
Reset
Expand package hierarchy
Failure business action
Clear
Outbound Integration Endpoint *
Post-action business action
Clear
Pre-action business action
Clear
Register Dialog Label
Success business action
Clear
Target Market Picker*
<Select an option>
Edit...
Target Market Picker Label
Context Help
Validation condition
Clear
Add
Cancel

Parameter	Description
Button Label	Optional Add a label for the Register button, displayed when the Button Type is Text or Both
Button Type	Optional Specify if the button should appear with an icon, text (the button label) or both.
Command	Mandatory Specify which GDSN command should be executed when a user clicks the Register button. In the default GDSN configuration, the command is 'register.'
Custom Icon	Optional Adding a custom icon will overwrite the default icon displayed in the graphical interface. The recommended size of the icons is 20 (height) x 35 (width) pixels. The recommended color of the icon in 'Jewel-toned' deep colors that fade well for the disabled state. *It should be noted that custom icons can only be used for actions configured as child components to a Node List screen
Expand package hierarchy	When checked, the registration also includes lower level objects in the packaging hierarchy. When unchecked, the registration will only include the selected product.
Failure business action	Optional Specify which business action to run if the Validation condition fails.
Outbound Integration Endpoint	Mandatory Specify the Outbound Integration Endpoint that should be used to send the command to the data pool.
Post-action business action	Optional Specify the Business Action that should run after clicking the Publish button.
Pre-action business action	Optional Specify the Business Action that runs first (before any other Business Rules) when clicking the

Parameter	Description
	Register button. This could be used to determine which GDSN command should be sent (Change_By_Refresh or Modify).
Register Dialog Label	Optional Apply the label of the Register dialog that appears when clicking the Register button.
Success business action	Optional Specify which business action to run if the Validation condition is successful.
Target Market Picker	Mandatory Configure the pop-up dialog that enables the end user to pick the target markets for the registration.
Target Market Picker Label	Mandatory Apply the label of the pop-up dialog used by end users to pick the target markets for the registration.
Context Help	Optional The name of the action will be displayed on mouse hover on the button when presented in the GUI.
Validation condition	Optional Specify which business condition should be validated before the product is processed further. Depending on the outcome of the validation, the 'Success business action' or the 'Failure business action' is called. If no condition is configured, no validation is executed and the Success / Failure business actions are not used. If a condition is configured, a Preflight option is presented in the Register dialog, enabling the user to run the Validation conditions and the Success / Failure business actions without actually registering to the GDSN.

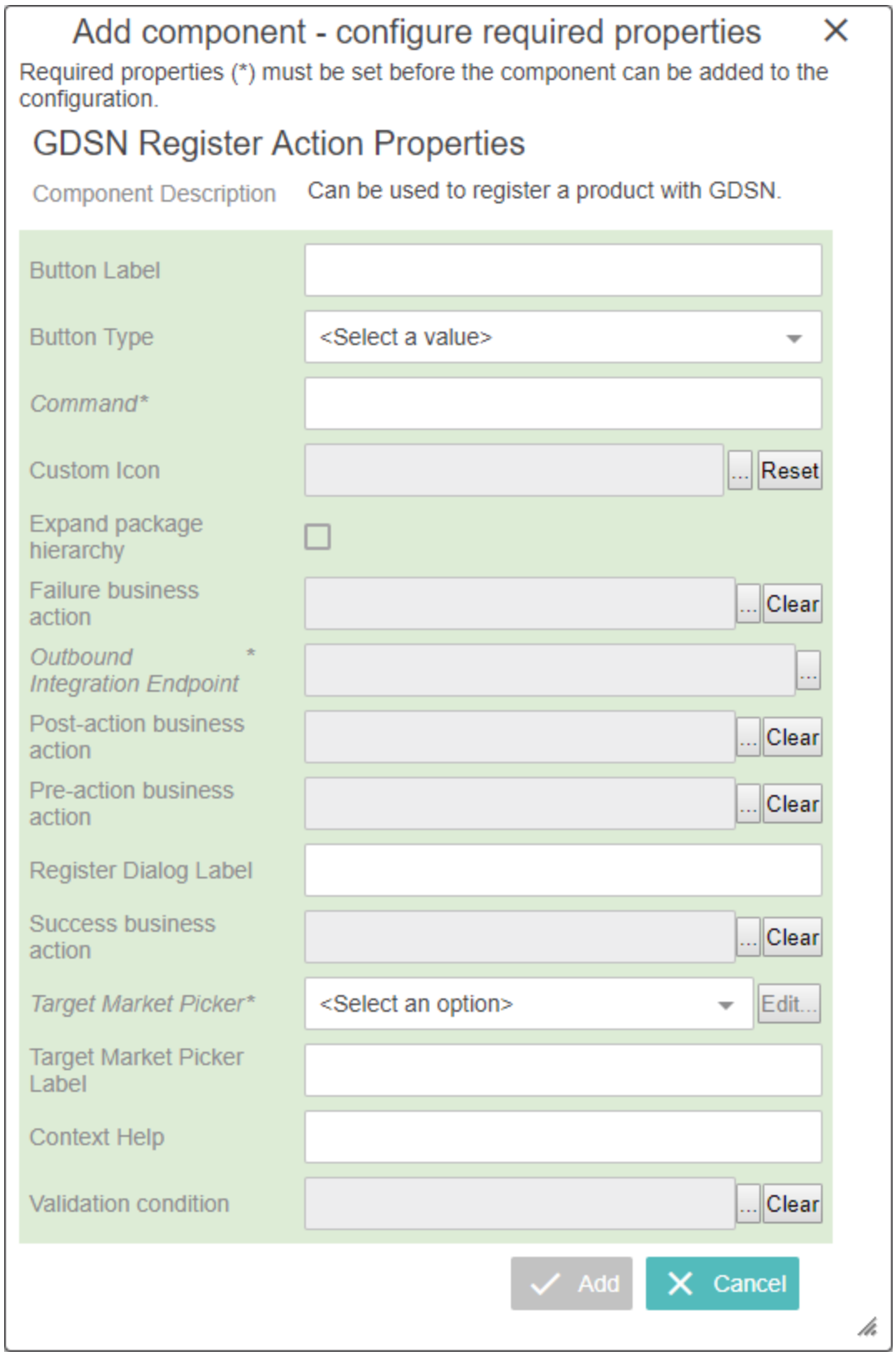
Configuring the GDSN Register Action Properties

1. Open Designer for a Node Details Properties screen.
2. In the Child Components section, click the go to component link for the Buttons field.



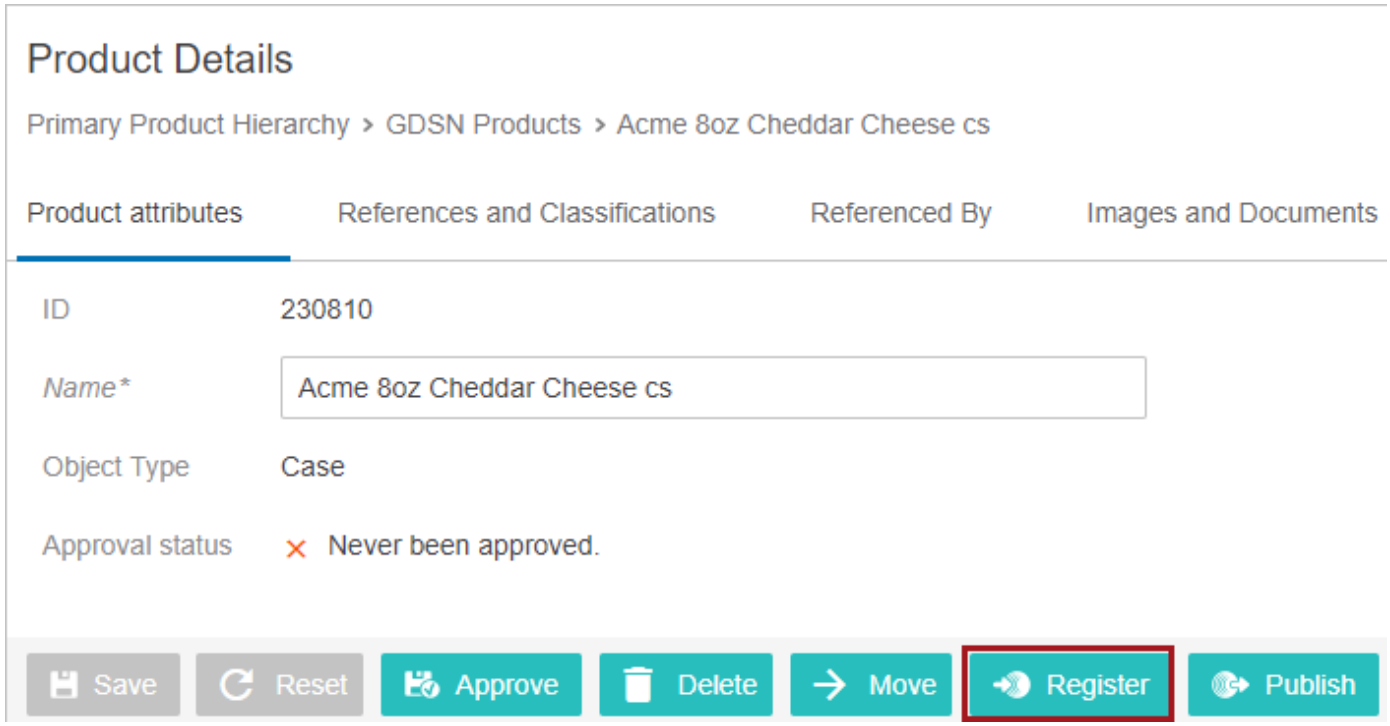
3. Double click on the 'GDSN Register Action' if already added. If not, add the action button 'GDSN Register Action.'
4. GDSN Register Action Properties screen will be displayed.

Note: The 'GDSN Register Action' button can be accessed through Node List screen as well.


Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
GDSN Register Action Properties
Component Description
Can be used to register a product with GDSN.
Button Label
Button Type
<Select a value>
Command*
Custom Icon
Reset
Expand package hierarchy
Failure business action
Clear
Outbound Integration Endpoint *
Post-action business action
Clear
Pre-action business action
Clear
Register Dialog Label
Success business action
Clear
Target Market Picker*
<Select an option>
Edit...
Target Market Picker Label
Context Help
Validation condition
Clear
Add
Cancel

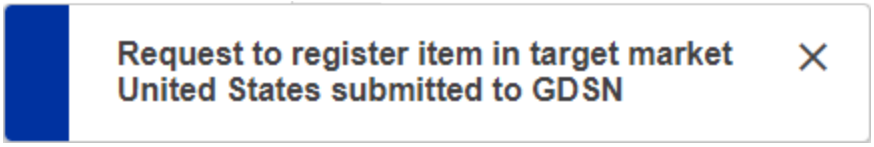
Note: The following business rules (business action and business condition) must be available in STEP system to add in GDSN Register Action properties screen, if required: Failure business action, Post-action business action, Pre-action business action, Success business action, and Validation condition.

5. After configuring the required fields, click on 'Save' and close the designer.
6. Navigate to the GDSN product to view the configured 'Register Action' button.



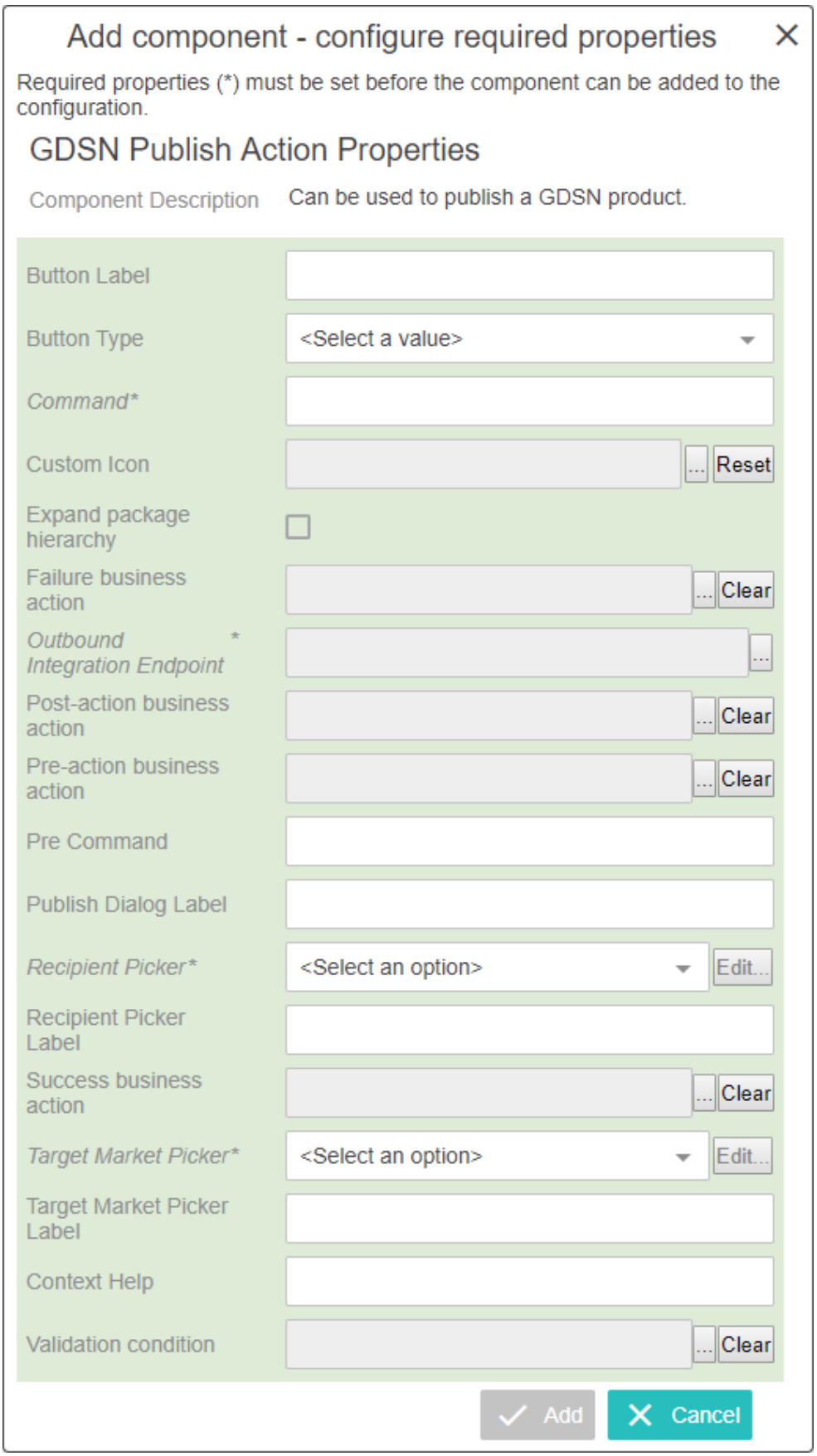
7. Clicking on the 'Register' button will display a pop up where the 'Target Market' needs to be selected.

8. Select the required target market and click on the OK button. A confirmation message will display.


Request to register item in target market
United States submitted to GDSN

GDSN Publish Action Button

In the Designer, the Web UI component for the Register button is called 'GDSN Register Action.' Each parameter is described in the following table.


Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
GDSN Publish Action Properties
Component Description
Can be used to publish a GDSN product.
Button Label
Button Type
<Select a value>
Command*
Custom Icon
Reset
Expand package hierarchy
Failure business action
Clear
Outbound Integration Endpoint *
Post-action business action
Clear
Pre-action business action
Clear
Pre Command
Publish Dialog Label
Recipient Picker*
<Select an option>
Edit...
Recipient Picker Label
Success business action
Clear
Target Market Picker*
<Select an option>
Edit...
Target Market Picker Label
Context Help
Validation condition
Clear
Add
Cancel

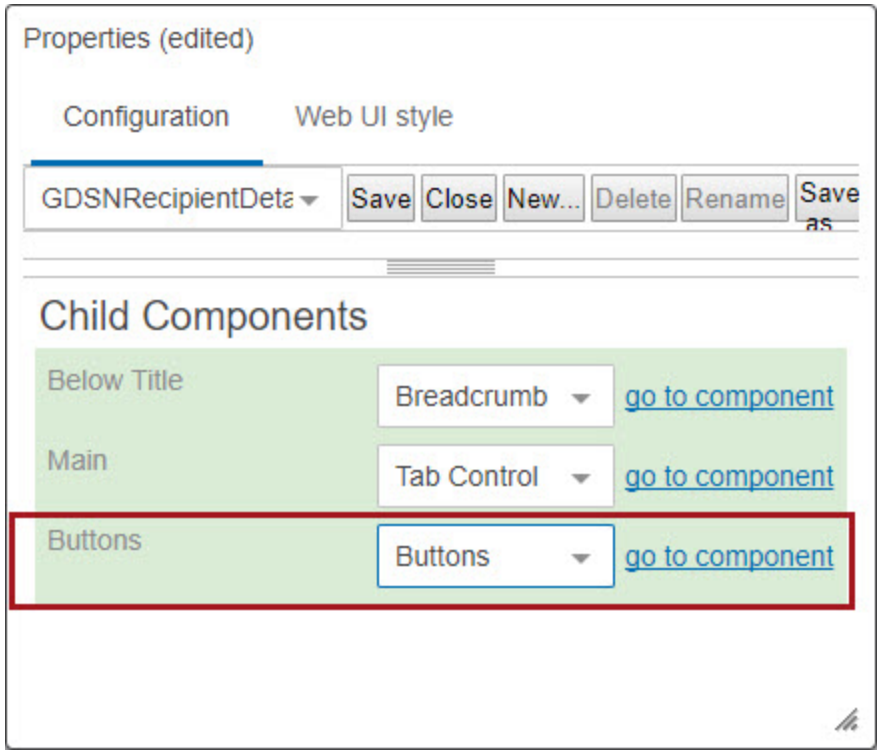
Parameter	Description
Button Label	Optional Add a label for the Publish button, displayed when the Button Type is Text or Both
Button Type	Optional Specify if the button should appear with an icon, text (the button label) or both.
Command	Mandatory Specify which GDSN command that should be executed when a user clicks the Publish button. In the default GDSN configuration, the command is 'publish.'
Custom Icon	Optional Adding a custom icon will overwrite the default icon displayed in the graphical interface. The recommended size of the icons is 20 (height) x 35 (width) pixels. The recommended colour of the icon in 'Jewel-toned' deep colours that fade well for the disabled state. *It should be noted that custom icons can only be used for actions configured as child components to a Node List screen.
Expand package hierarchy	When checked, the publication also includes lower level objects in the packaging hierarchy. When unchecked, the publication will only include the selected product.
Failure business action	Optional Specify which business action to run if the Validation condition fails.
Outbound Integration Endpoint	Mandatory Specify the Outbound Integration Endpoint that should be used to send the command to the data pool.
Post-action business action	Optional Specify the Business Action that should run after clicking the Publish button.
Pre-action business action	Optional Specify the Business Action that runs first (before any other Business Rules) when clicking the Publish button. This could be used to determine which GDSN command should be sent

Parameter	Description
	(Change_By_Refresh or Modify).
Pre Command	Optional Specify the GDSN command that runs prior to the publishing of the product. This could be a register command that is configured to send an update document type to GDSN in order to ensure that the current attribute values in STEP are synched with the values that are stored in GDSN.
Publish Dialog Label	Optional Apply the label of the publish dialog that appears when clicking the Publish button.
Recipient Picker	Mandatory Configure the pop-up dialog that enables the end user to pick recipients for the publication.
Recipient Picker Label	Mandatory Apply the label of the pop-up dialog used by end users to pick recipients for the publication.
Success business action	Optional Specify which business action to run if the Validation condition is successful.
Target Market Picker	Mandatory Configure the pop-up dialog that enables the end user to pick the target markets for the publication.
Target Market Picker Label	Mandatory Apply the label of the pop-up dialog used by end users to pick the target markets for the publication.
Context Help	Optional The name of the action will be displayed on mouse hover on the button when presented in the GUI.

Parameter	Description
Validation condition	Optional Specify which business condition is validated before the product is processed further. Depending on the outcome of the validation, the 'Success business action' or the 'Failure business action' is called. If no condition is configured, no validation is executed and the Success / Failure business actions are not used. If a condition is configured, a Preflight option is presented in the Publish dialog, enabling the user to run the Validation conditions and the Success / Failure business actions without actually publishing to the GDSN.

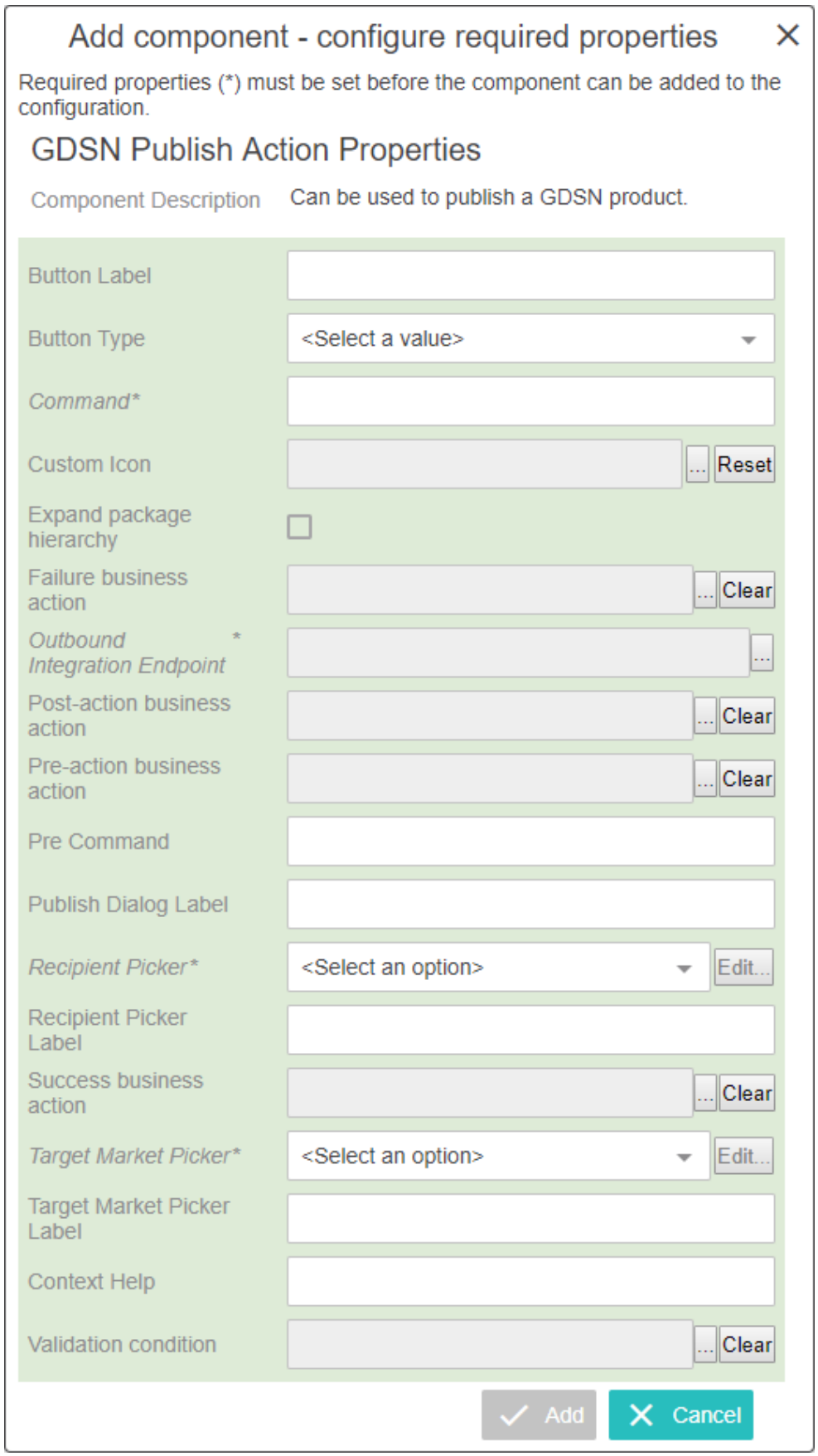
Configuring the GDSN Publish Action Properties

1. Open Designer for a Node Details Properties screen.
2. In the Child Components section, click the go to component link for the Buttons field.



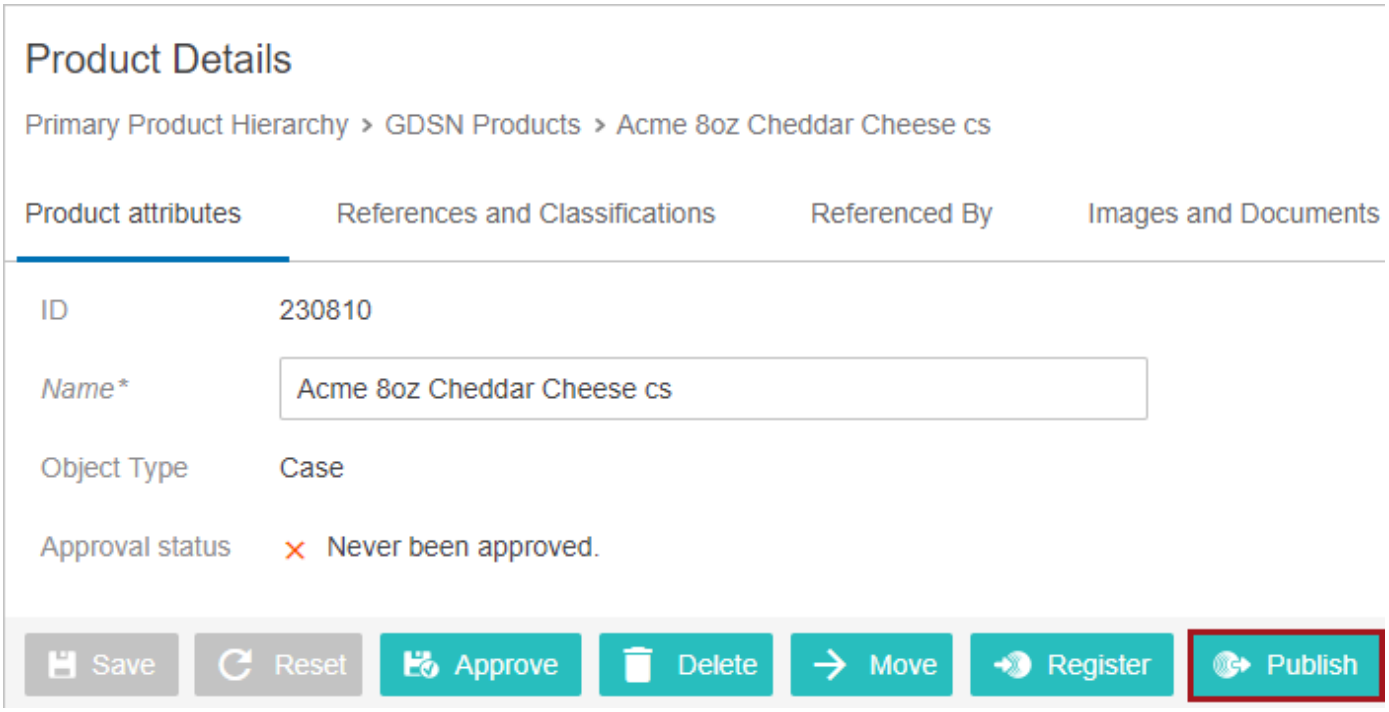
3. Double click on the ‘GDSN Publish Action’ if already added. If not, add the action button ‘GDSN Action.’
4. GDSN Publisher Action Properties screen will be displayed.

Note: The 'GDSN Publisher Action' button can be accessed through Node List screen as well.


Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
GDSN Publish Action Properties
Component Description
Can be used to publish a GDSN product.
Button Label
Button Type
<Select a value>
Command*
Custom Icon
Reset
Expand package hierarchy
Failure business action
Clear
Outbound Integration Endpoint *
Post-action business action
Clear
Pre-action business action
Clear
Pre Command
Publish Dialog Label
Recipient Picker*
<Select an option>
Edit...
Recipient Picker Label
Success business action
Clear
Target Market Picker*
<Select an option>
Edit...
Target Market Picker Label
Context Help
Validation condition
Clear
Add
Cancel

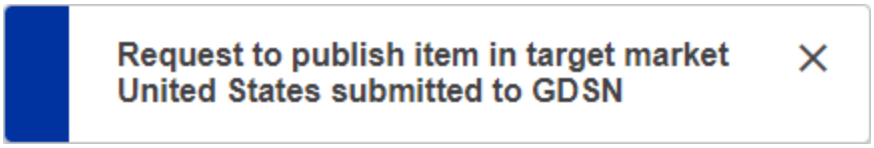
Note: The following business rules (business action and business condition) must be available in STEP system to add in GDSN Publisher Action properties screen, if required: Failure business action, Post-action business action, Pre-action business action, Success business action, and Validation condition.

5. After configuring the required fields, click on 'Save' and close the designer.
6. Navigate to the GDSN product to view the configured 'Register Action' button.



7. Clicking on the 'Register' button will display a pop up where the 'Target Market' needs to be selected.

8. Select the required target market and click on the OK button. A confirmation message will display.

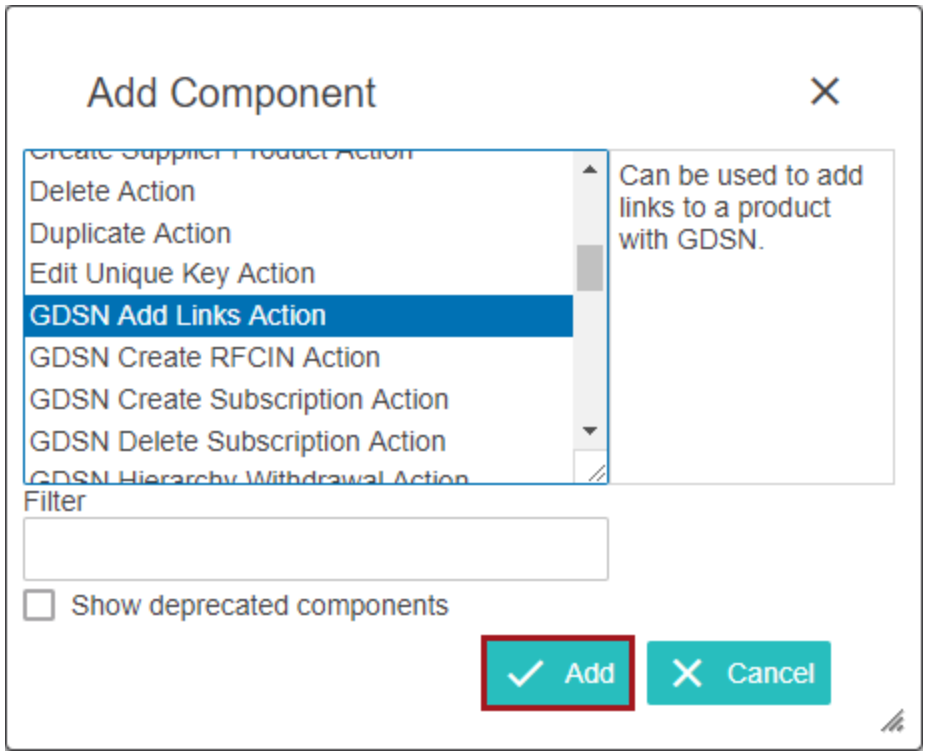

Request to publish item in target market
United States submitted to GDSN

GDSN Hierarchy Link Action Buttons

To add or delete hierarchy links to registered product objects in the GDSN, separate components need to be configured within the GDSN Data Provider Web UI. The addLink and deleteLink action commands can be configured in the following way within the Web UI. This section assumes a basic knowledge of configuring Web User Interfaces. For more information regarding Web User Interfaces, see the **Design Mode Basics** topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

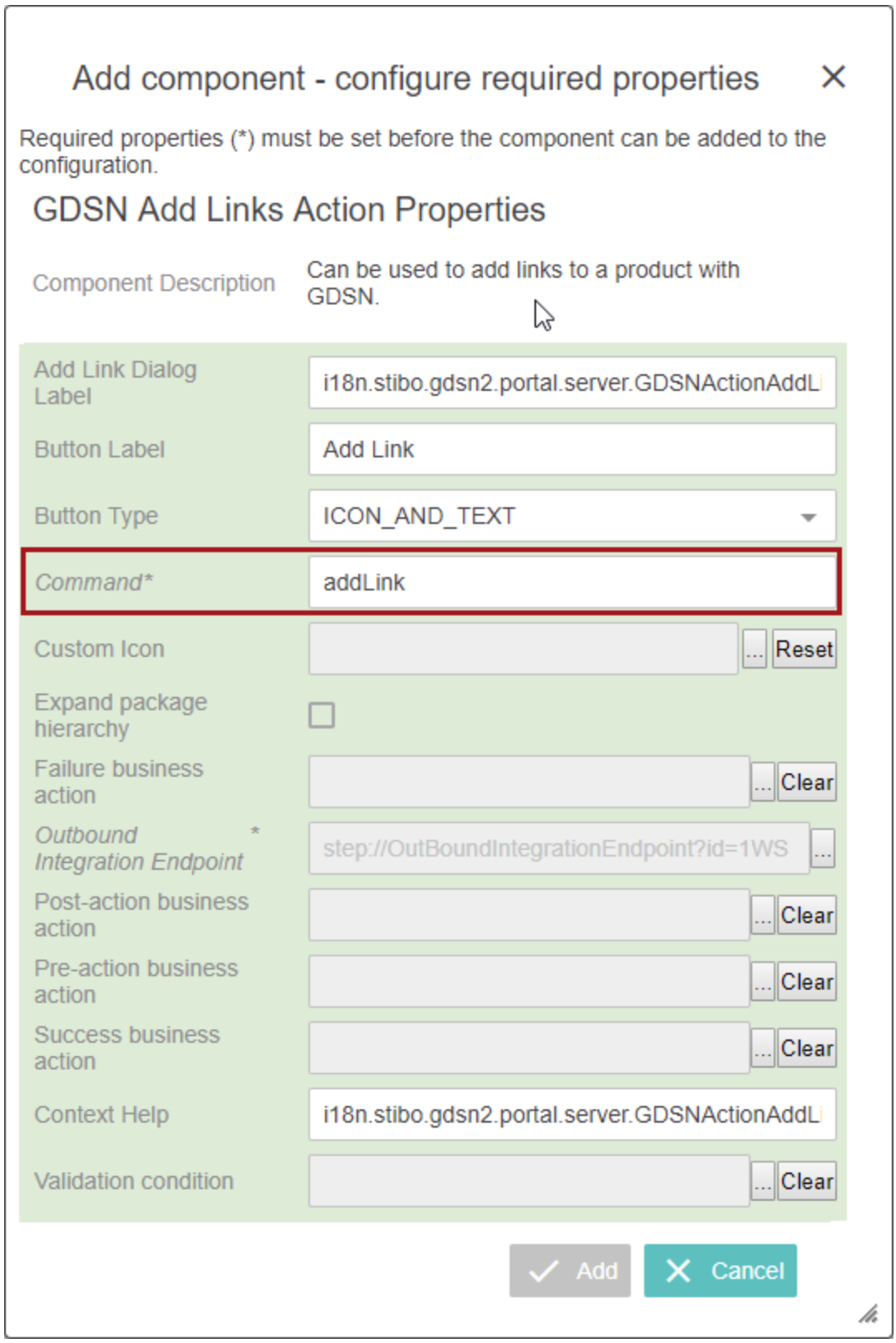
In Design Mode, select the **GDSN Add Links Action** and Add.

Note: The 'GDSN Add Links Action' component is used for adding links **and** deleting links. The commands that determine what the component will be used for is described below.



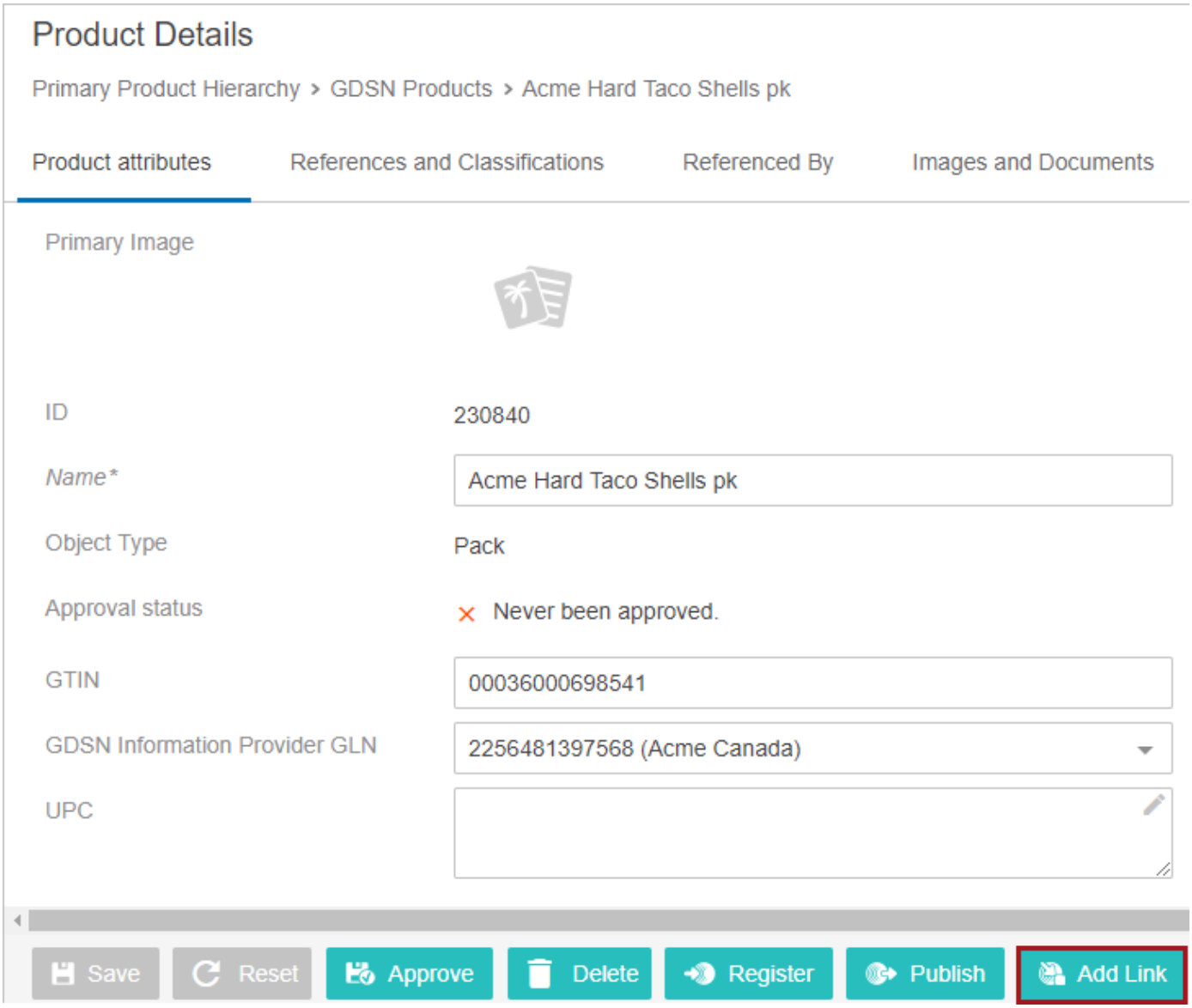
This can be added on a Node Details and Node List screen.

The configuration dialog will appear as shown in the example below. Note that there are two properties that are required to configure the Add Links action to send the messages to the GDSN as determined by the asterisks; the Command action and the Outbound Integration Endpoint. In this example, the configuration is for adding links so the action command must be **addLink**. If this component was being configured to delete links from the product hierarchy, the command that should be entered would be **deleteLink**. In the event that both the Add Links and Delete Links action buttons are going to be configured, it is highly recommended that the 'Button Label' field is populated, and that the 'Button Type' is set to ICON_AND_TEXT so that the buttons can be differentiated.


Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
GDSN Add Links Action Properties
Component Description
Can be used to add links to a product with GDSN.
Add Link Dialog Label
i18n.stibo.gdsn2.portal.server.GDSNActionAddL
Button Label
Add Link
Button Type
ICON_AND_TEXT
Command*
addLink
Custom Icon
Reset
Expand package hierarchy
Failure business action
Clear
Outbound Integration Endpoint *
step://OutBoundIntegrationEndpoint?id=1WS
Post-action business action
Clear
Pre-action business action
Clear
Success business action
Clear
Context Help
i18n.stibo.gdsn2.portal.server.GDSNActionAddL
Validation condition
Clear
Add
Cancel

More information regarding the other options in this dialog can be found in the 'GDSN Provider' topic in this documentation.

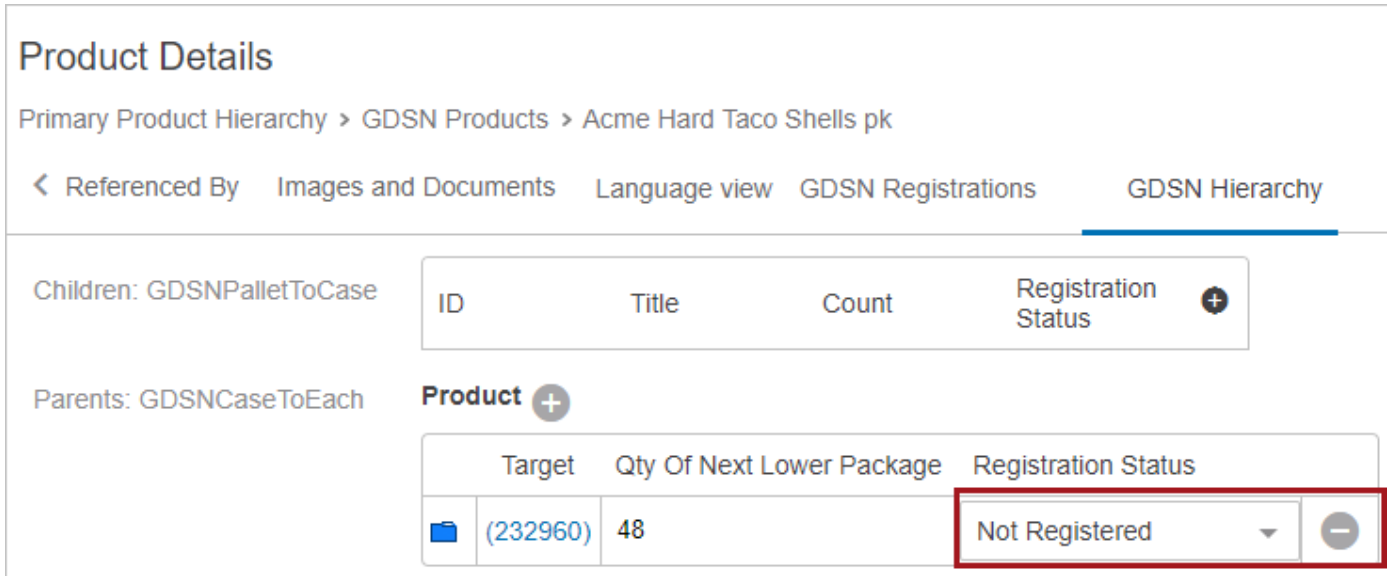
The following image shows an example of the 'Add Links' component that was configured in this example.



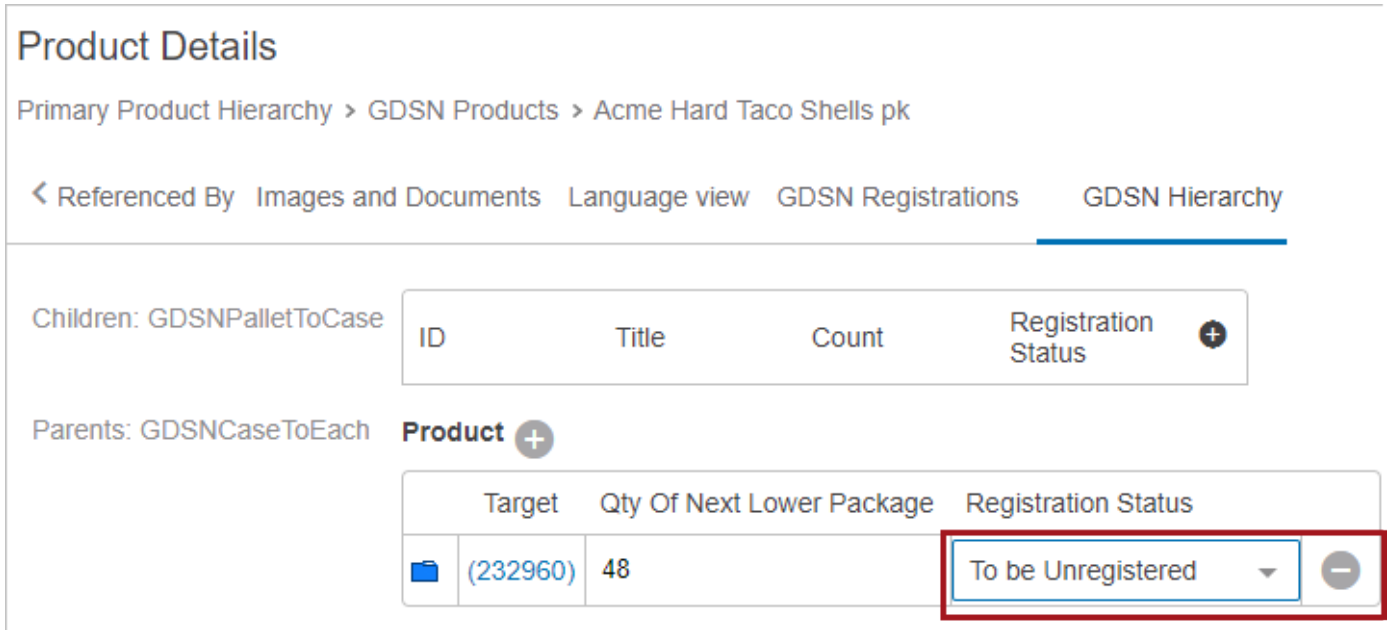
This button is inactive in any of the following situations:

- If there is no reference to a lower level GDSN item.
- If the selected item is not registered yet.
- If the referenced lower level item is not registered yet.

If using the Add Links button, set the Registration Status on the items for which you want to add links for to 'Not Registered' as shown in the image below.



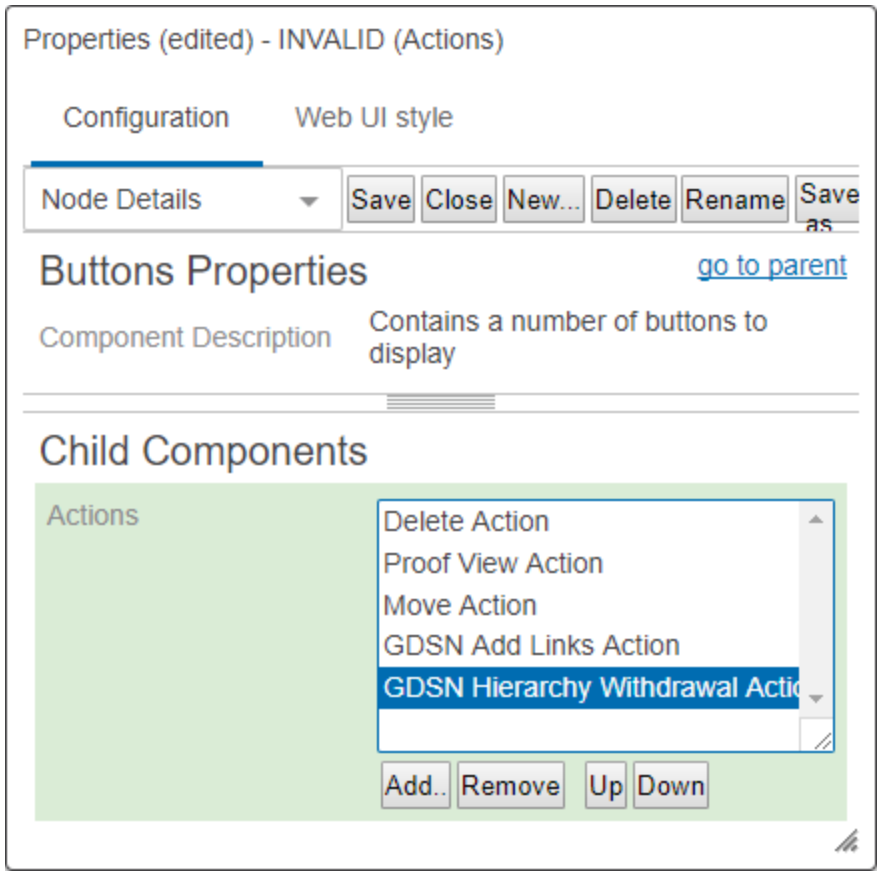
If using the Delete Links button, the Registration Status should be set to 'To be Unregistered.'



GDSN Hierarchy Withdrawal Action Button

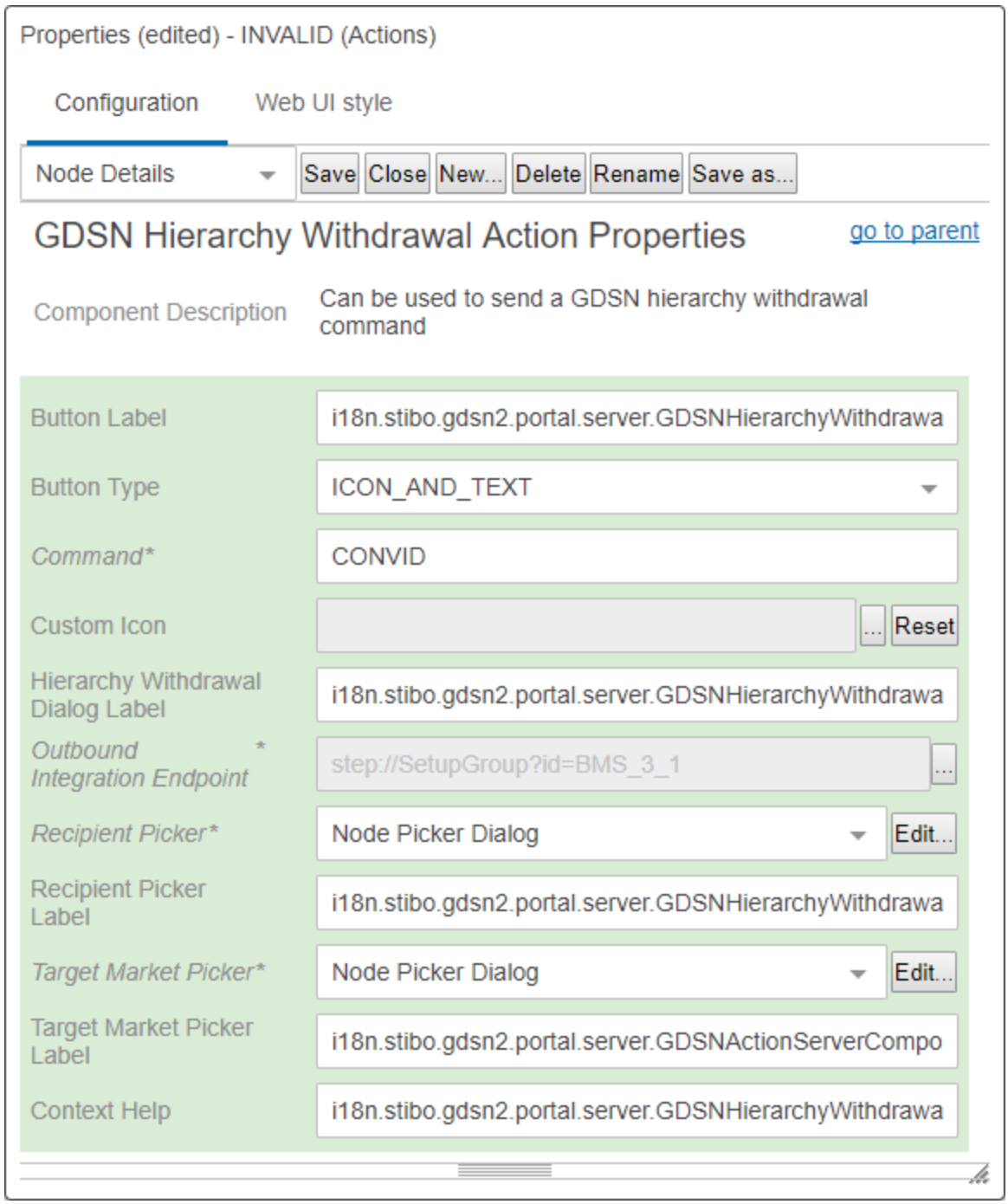
In the Designer, the Web UI component for the Hierarchy Withdrawal button is called GDSN Hierarchy Withdrawal Action. Each parameter is described in the following table.

1. Open Designer for a Node Details Properties screen.
2. In the Child Components section, click the 'go to component' link for the Buttons field.
3. Double click on the 'GDSN Hierarchy Withdrawal Action' if already added. If not, add the action button 'GDSN Hierarchy Withdrawal Action.'



4. GDSN Hierarchy Withdrawal Action Properties screen will be displayed.

Note: We can access the 'GDSN Hierarchy Withdrawal Action' button through Node List screen as well.



Parameter	Description
Button Label	Optional Add a label for the Hierarchy Withdrawal button, displayed when the Button Type is Text or Both

Parameter	Description
Button Type	Optional Specify if the button should appear with an icon, text (the button label) or both.
Command	Mandatory Specify which GDSN command that should be executed when a user clicks the Hierarchy Withdrawal button. In the default GDSN configuration, the command is 'hierarchyWithdrawal.'
Custom Icon	Optional Adding a custom icon will overwrite the default icon displayed in the graphical interface. The recommended size of the icons is 20 (height) x 35 (width) pixels. The recommended colour of the icon in 'Jewel-toned' deep colours that fade well for the disabled state. *It should be noted that custom icons can only be used for actions configured as child components to a Node List screen.
Outbound Integration Endpoint	Mandatory Specify the Outbound Integration Endpoint that should be used to send the command to the data pool.
Hierarchy Withdrawal Dialog Label	Optional Add the Hierarchy Withdrawal Dialog Label to the dialog that appears when clicking the Hierarchy Withdrawal button.
Recipient Picker	Mandatory Configure the pop-up dialog that enables the end user to pick recipients for the hierarchy withdrawal.
Recipient Picker Label	Mandatory Apply the label of the pop-up dialog used by end users to pick recipients for the hierarchy withdrawal.
Target Market Picker	Mandatory Configure the pop-up dialog that enables the end user to pick target markets for the hierarchy withdrawal.

Parameter	Description
Target Market Picker Label	Mandatory Apply the label of the pop-up dialog used by end users to pick target markets for the hierarchy withdrawal.
Context Help	Optional The name of the action will be displayed on mouse hover on the button when presented in the GUI.

Business Rules with GDSN

Business rules can be used in a variety of ways in combination with the GDSN component. They can, for example, be used to send out messages, update status, and start workflows. The following describes how to use GDSN specific business actions and how to run business actions when receiving messages from GDSN.

Business Action on Inbound Messages

In the inbound format configuration you can configure which business actions should be run when different message types are received. You can use this to update status, transition workflows or send out notification emails.

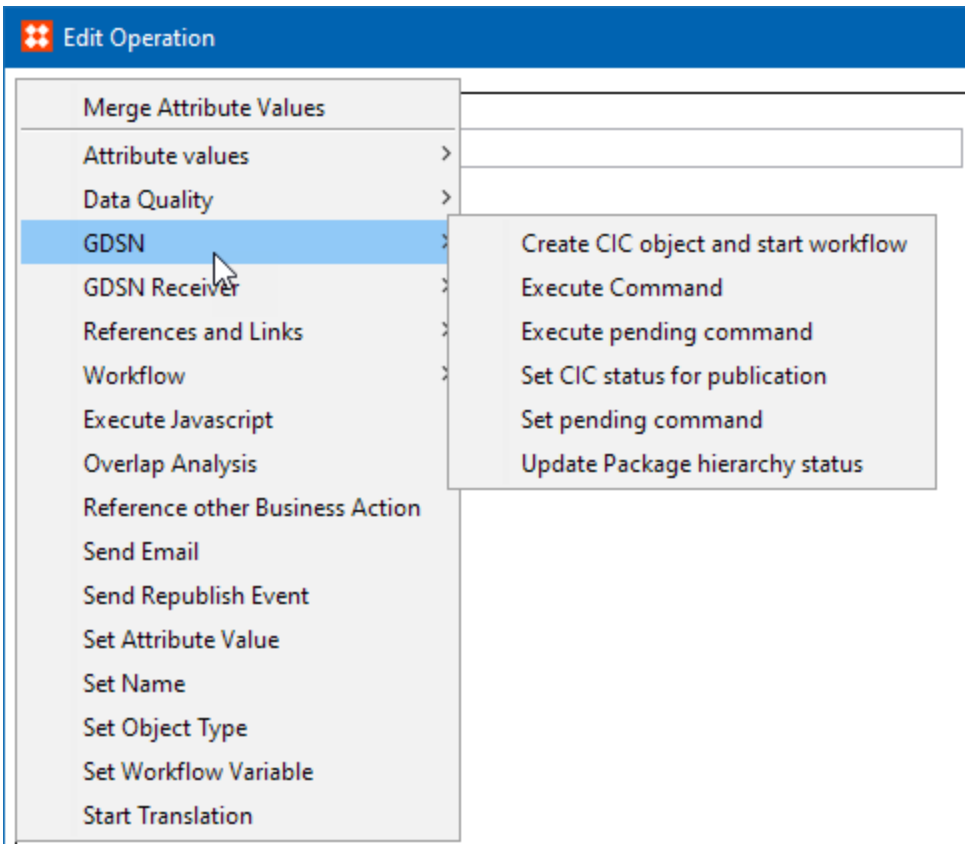
In the inbound format configuration, you can configure a map from strings to XPaths. When a message is received, the XPaths are evaluated and a map is created from the string keys to the evaluated values. This map can be bound into a JavaScript business action so that the business action can access parts of the incoming message.

For general information about how to set up business actions, see **Business Actions** in the **Business Rules** documentation.

Business Actions for GDSN

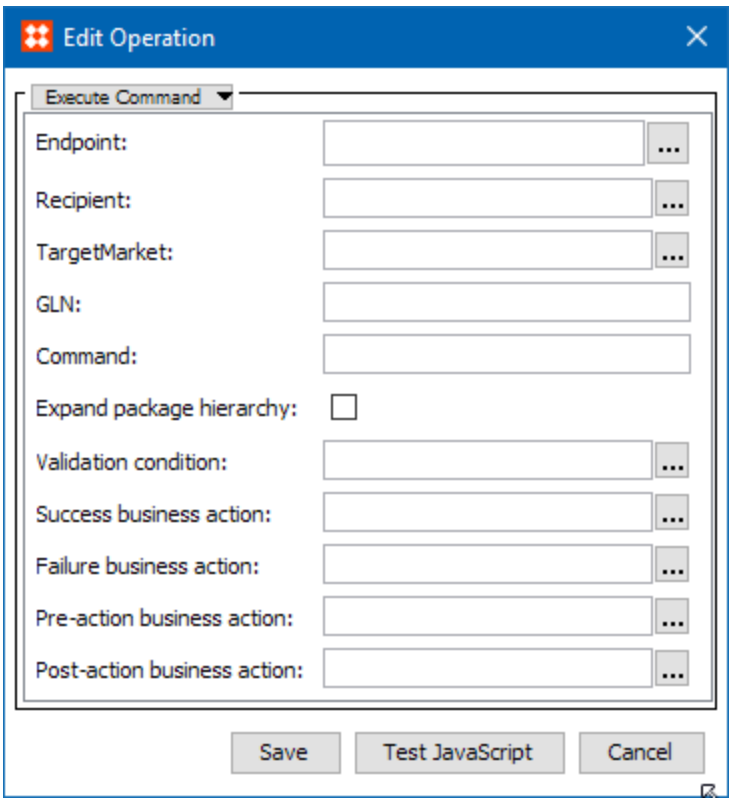
1. In **System Setup**, expand **Business Rules**, and then select the relevant action.
2. On the **Business Rule** tab, in the lower left corner, click **New Business Action**.
3. Enter ID and Name in Create Business Action window
4. Click on Create button.
5. Once it is created, right click on it and select Edit Business Rule.
6. In the field that opens, click **Add new Business Action** link and the **Merge into** icon (**Edit operation** icon) will appear in the empty box above.
7. Click the **Edit Operation** icon.
8. In the **Edit Operation** dialog, select GDSN from the dropdown.

The following actions are available:



Execute command

This action sends out a message to a data pool.

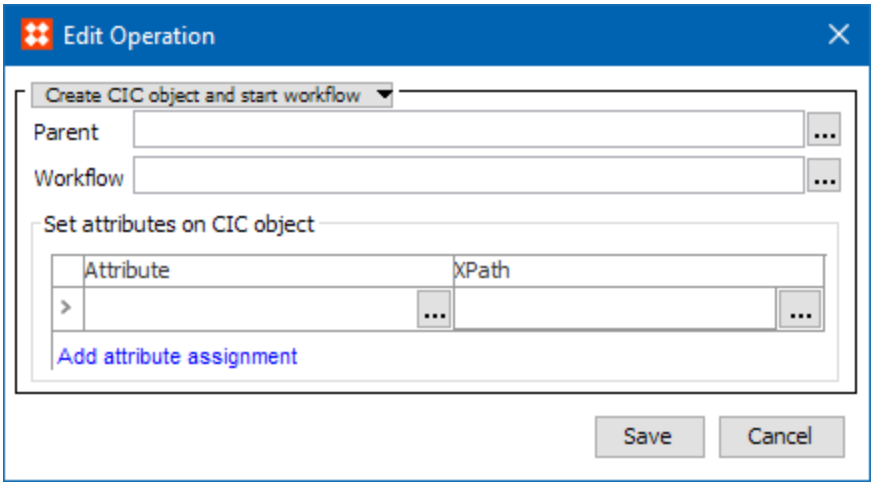


Field	Description
Command	Enter the command parameter that matches the command from the outbound configuration of the message type to be sent out.
Endpoint	Specify the outbound endpoint to be used to send out the message. A list of available endpoints displays when you click the ellipsis button (...).
Expand package hierarchy	When checked, selecting a hierarchy top node exports the entire hierarchy below the node.
GLN	Specify the GLN the products must be sent from. This is the GLN the MyGLN parameter tag resolves to.
Recipient	Optional For a publish template, specify the recipient you want to publish the products to. The Recipient parameter tag will contain the GLN of the recipient.

Field	Description
Target Market	Specify the target market the message should be sent in. The target market parameter tag will contain the target market attribute value of the selected target market.
Validation Condition	Business condition that should be validated successfully before sending message.
Success business action	Specify which business action to run if the Validation condition is successful.
Failure business action	Specify which business action to run if the Validation condition fails.
Pre-action business action	Specify the Business Action that runs first (before any other Business Rules) when sending message.
Post-action business action	Specify the Business Action that should run after sending message.

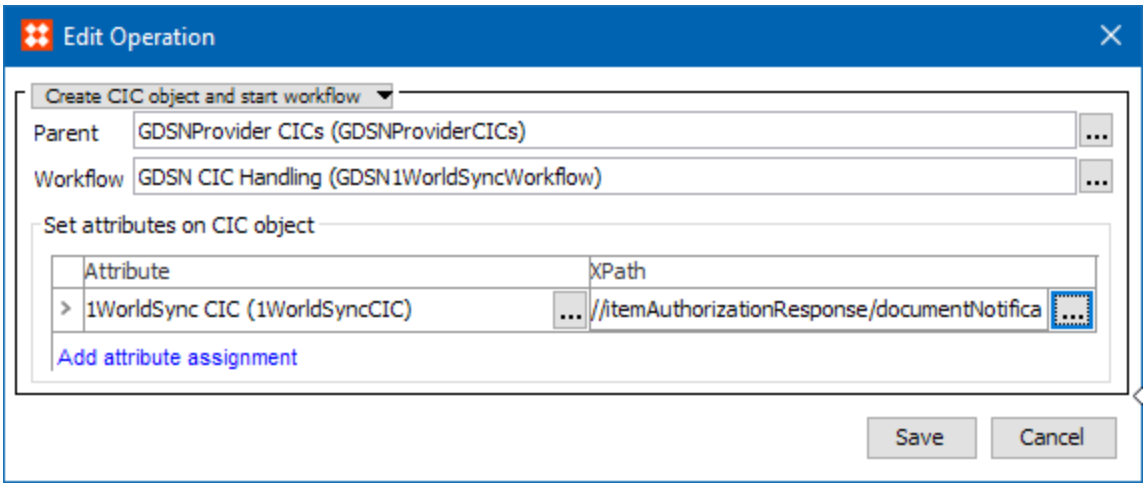
Create CIC Object and Start Workflow

This option creates a CIC entity and starts it in a workflow. It is connected with the product the CIC applies to and with the recipient that sends the CIC. Furthermore, using XPaths, it is possible to place parts of the CIC message in an attribute on the CIC object.



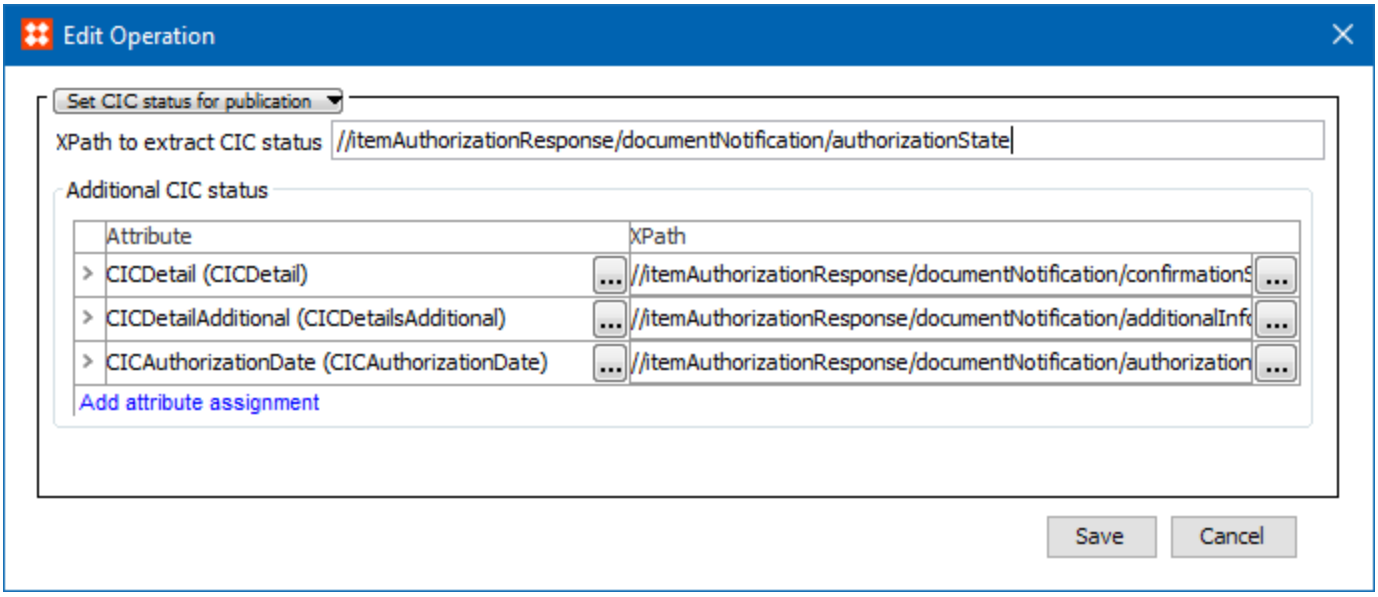
Field	Description
Parent	The CIC entity is created below the entity specified.
Workflow	The CIC entity is started in the workflow specified.
Set attributes on CIC object	Click the **Add attribute assignment** link. Select the attributes to be set on the CIC object and the XPaths to be evaluated to find the values from the inbound message.

The image below shows, example of the 'Create CIC object and start workflow' business action.



Set CIC Status for Publication

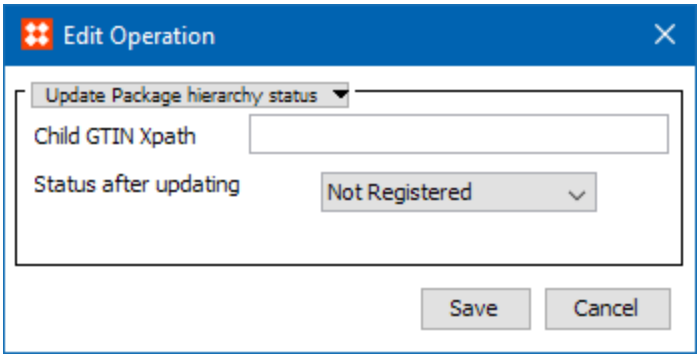
Sets the CIC status for a publication to a recipient.



Field	Description
XPath to extract CIC status	Mandatory Specify an XPath that points out the CIC status in the inbound message.
Additional CIC status	Optional Specify an XPath to additional CIC information and point the attribute that should be used to store this information. For example, the additional CIC information could be text values that go along with the CIC999 status or it could be the date CIC status date.

Update Package Hierarchy Status

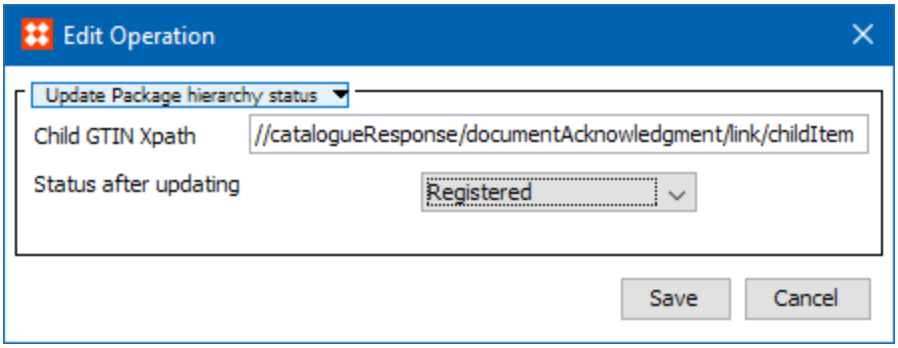
The option sets the registration status of a package hierarchy link.



In the **Child GTIN XPath** field, specify an XPath that points out the GTIN of the child product in the inbound message.

From the **Status after Updating** list, select the status that you want the link to have after the action has been run.

The image below shows, example of the 'Update Package hierarchy status' business action.



'Evaluate JavaScript' with Binding to 'GDSN Publisher Product Validation'

The 'Evaluate JavaScript' plugin in connection with the 'GDSN Publisher Product Validation' binding provides the option to write JavaScript business rules that can access information about a product instance that is registered for a given data pool.

For example, this could be used to write a script that can validate if all required attributes for a given data receiver have been populated on a given product. For more information about the Validation Condition option, see **GDSN Publish Action Button** or **GDSN Register Action Button**.

Set Pending File

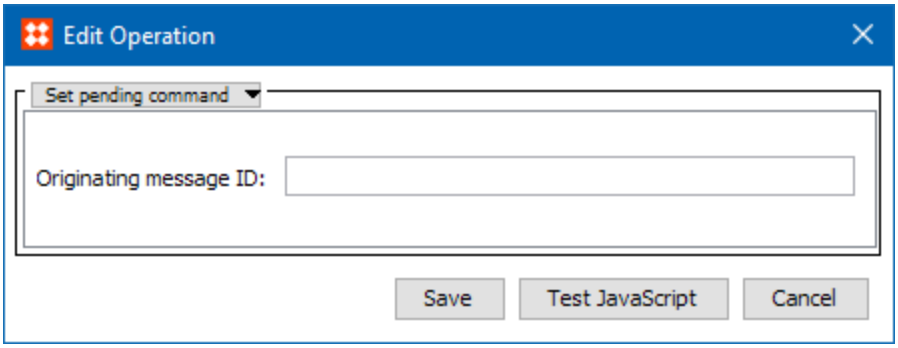
This Business Action is used for the 1WorldSync data pool in conjunction with using the 'Pre command' option in the Web UI (**GDSN Web UI Buttons**). When a pre-command is executed, the system will await a response from the data pool and GDSN before the real command is executed.

For the 1WorldSync data pool, these responses are not combined in one file and will thus not be received at the same time. Instead the responses are received asynchronously, one response message will be received from the 1WorldSync data pool and another response message will be received from the GDSN. Only when both responses have been received, is the real command (the pending command) executed.

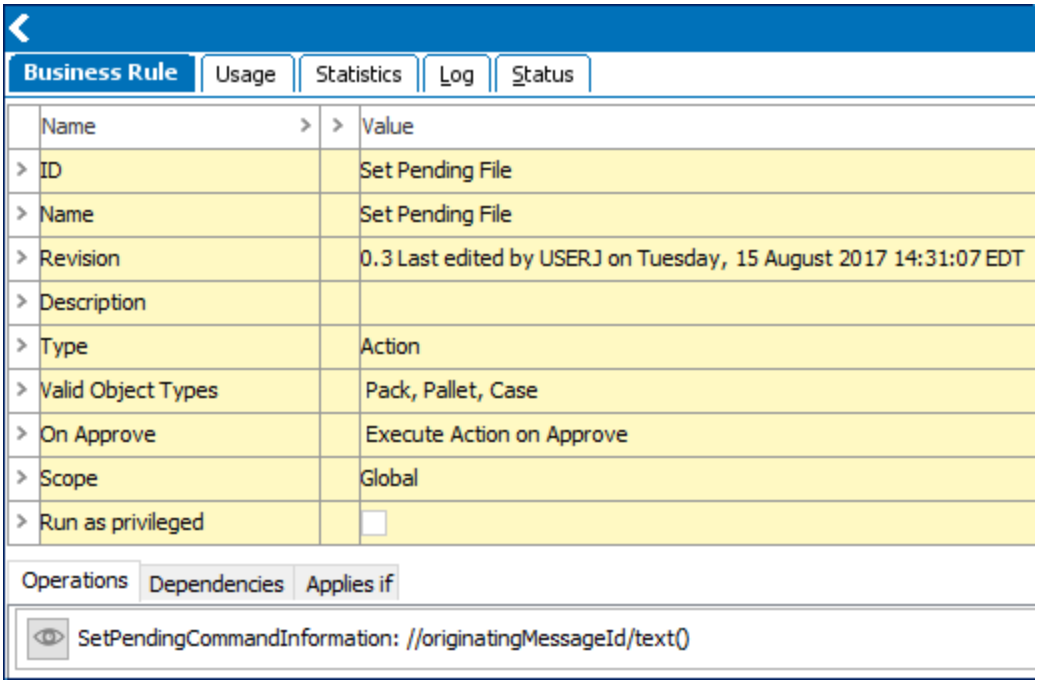
The 'Set pending command' operation for this business action tracks which command should be executed when the response messages have been received for the pre-command, the pending command will be stored in a description attribute that is valid for the registration object (see **GDSN Provider Component Model Elements**).

The Set Pending File business action is triggered via the Inbound format configuration with the Type Key 'catalogueResponsedocumentAcknowledgementitemADD.'

Originating Message ID: Specify the XPath for the Originating Message ID. The default value is //originatingMessageId/text().



The image below shows, example of the 'Set Pending File' business action.



Execute Pending File

This Business Action will execute the pending command that is stored in a description attribute on the registration object. For further information, see Set Pending File above.

The Execute Pending File business action is triggered via the Inbound format configuration with the Type Key 'gdsnItemRegistryResponsedocumentAcknowledgement.'

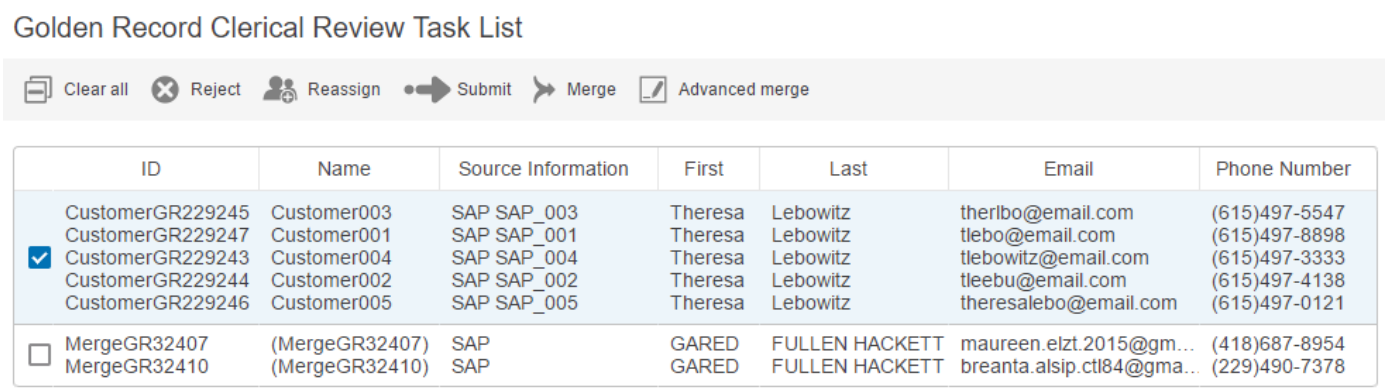
Golden Record Clerical Review Task List

The Golden Record Clerical Review Task List screen displays all potential duplicates found in a specific golden record clerical review workflow or workflow state. From this screen, golden records are grouped into tasks and can be rejected as duplicates via the **Reject** action button, or acknowledged as duplicates and merged together via the **Merge** or **Advanced merge** action buttons. These tasks can also be reassigned to other users via the **Reassign** action button or submitted to another state in the workflow via the **Submit** action button.

To arrive at this screen, a golden record has to have been flagged as a potential duplicate by the relevant matching algorithm during import. This means that it has fallen within the clerical review threshold of the matching algorithm, and thus, initiated into a clerical review workflow where it can either be rejected as a duplicate or merged with other records. Potential duplicates that are matched together are organized into distinct tasks in the workflow, as pictured below.

For more information, see the **Clerical Review** section of the **Matching, Linking, and Merging** documentation.

Note: This screen is only to be used with the matching and merging solution. The Data Stewards are the primary users of this screen who can decide if products are duplicates or non-duplicates. A separate user group is recommended to be used for this task.



Prerequisites

It is expected that anyone configuring the Golden Record Clerical Review Task List component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring the Golden Record Clerical Review Task List

The Golden Record Clerical Review Task List can be configured to present the most relevant headers to the reviewer. Additionally, attribute group display options and configurable action buttons are available.

1. To create a new Golden Record Clerical Review Task List screen, enter the designer and click **New...**.
2. Select 'Golden Record Clerical Review Task List' and enter a Screen ID, then click **Add**.

3. Once the screen has been added, it can be configured on a relevant Status Selector Homepage widget.
4. **Headers:** In this parameter, click **Add...** and select one of the listed header components. Once a selection is made and any additional, required configurations are complete, click **Add**.

Note: If additional configuration is required for the chosen header component, then the properties dialog will open automatically upon adding the component. The Golden Record Clerical Review Task List must be configured as a result screen for a Status Selector Homepage widget and configured with a Node List and a Display Mode. This display mode should be configured with a specific set of table headers relevant to Golden Records.

- Golden Record Attribute Value Group Header - Displays the values of the specified group's attributes on the golden records. Attributes added to a selected Attribute Group will automatically be included and displayed. Once selected, additional configuration is required:
  - Attribute Group - Specify the attribute group to display values for.
  - Blacklist Attribute Group - Specify which attribute groups **Not** to display attributes for, even if they also appear in the attribute group specified above.
  - Dimensions - Specify height / width of the of the header cell.
  - Included Nested Groups - Check the box if attributes from nested parameter groups should be included.
  - Label - Specify a label for the header.
  - Read Only - Check the box if these values listed under this header should not be edited.
  - Show LOV IDs - Check this box if relevant LOVs should display their IDs next to the corresponding values.
  - Table Sorting - Select a method of sorting the values in the header.
  - Enable Locale Formatting - Check the box if 'ISO Date' and 'ISO Date and Time' values should be formatted according to locale.
  - Context Help - Enter help text for the component to display.
  - Display Context help - Check the box to display context help text for attributes.
- Golden Record Attribute Value Header - Displays the values of the specified attribute on the golden records. Once selected, specify an Attribute, Label, and Preferred Column Width in the configuration dialog.
- Golden Record Data Container Attribute Value Header - Displays the values for the specified data container attribute on the golden records. Once selected, specify a Data Container, Attribute, Label, and Preferred Column Width in Pixels in the configuration dialog.
- Golden Record ID Header - Displays the IDs of the golden records in the table. Once selected, double click on the component and specify a Label and Preferred Column Width in the configuration dialog.
- Golden Record Name Header - Displays the names of the golden records in the table. Once selected, double click on the component and specify a Label and Preferred Column Width in the configuration dialog.
- Golden Record Reference Type Header - Displays the object the golden record references via the specified reference type. Once selected, specify a Reference Type, Label, and Preferred Column Width in the configuration dialog.

- Golden Record Source Information Header - Displays source system and record information for the golden records. Once selected, double click on the component and specify a Label and Preferred Column Width in the configuration dialog.

Important: For maximum efficiency in reviewing content, configuring the Dynamic Table Layout component is required. When configuring this component, ensure that the 'Allow Wrap Of Header Title' and 'Allow Wrap of Cell Content' parameters are unchecked in order to optimize the view for object comparisons. This applies to both the Golden Record Clerical Review Task List and Advanced Merge Dialog. For more information, see the **Dynamic Table Layout** section of the **Web User Interfaces** documentation.

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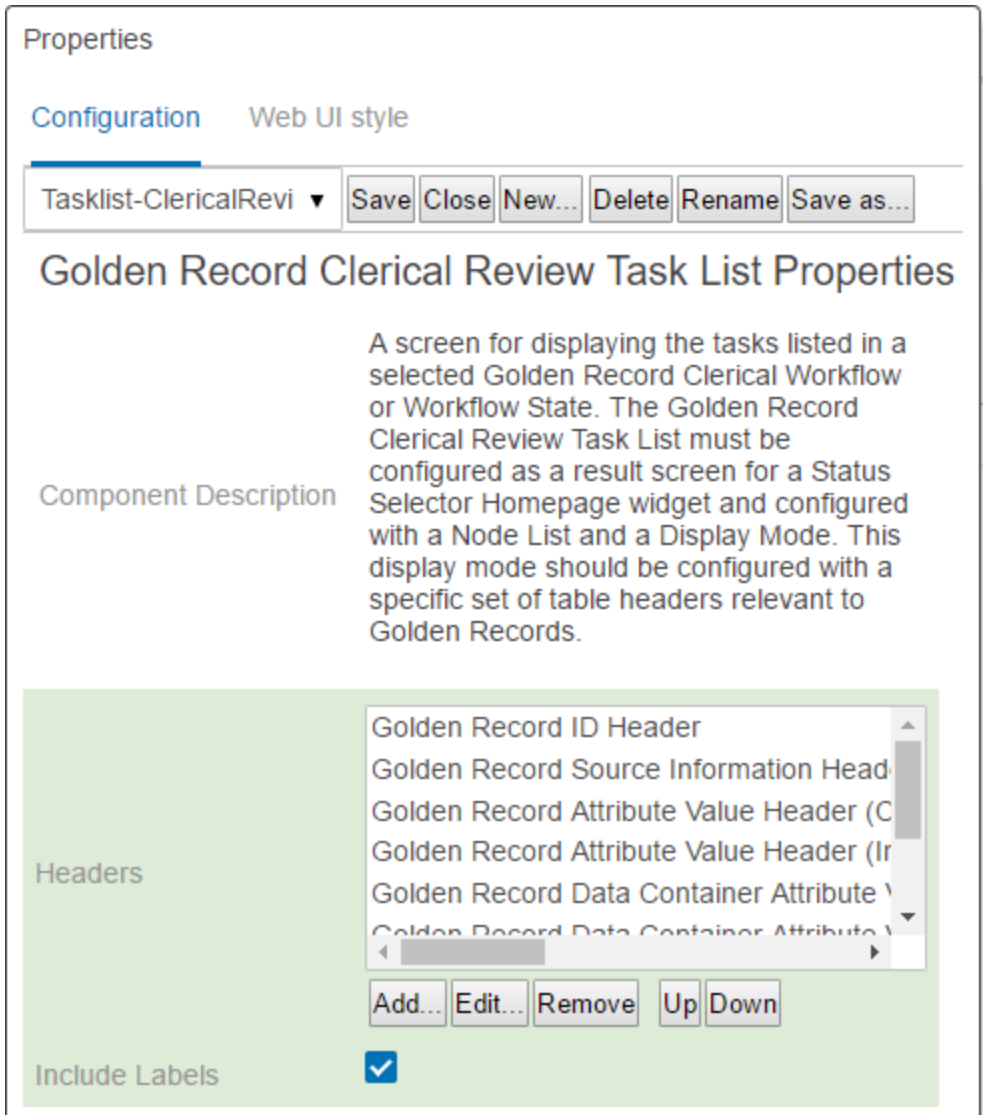
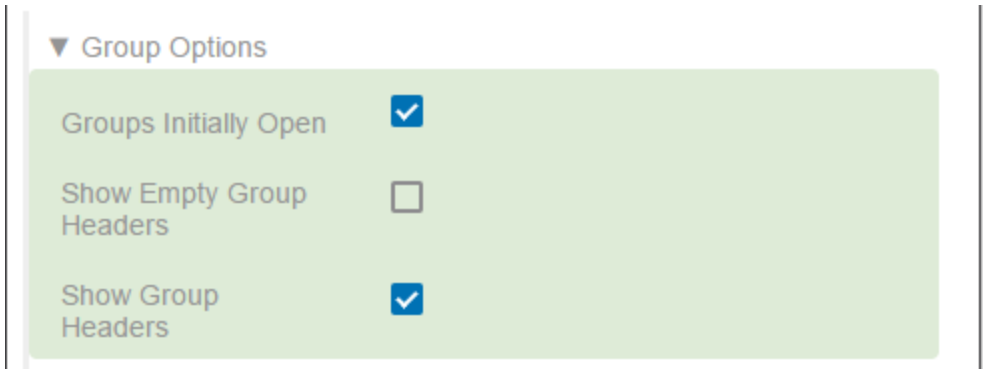
5. **Include Labels:** In this parameter, check the box to make all toolbar actions on the screen display a label beneath the icon.



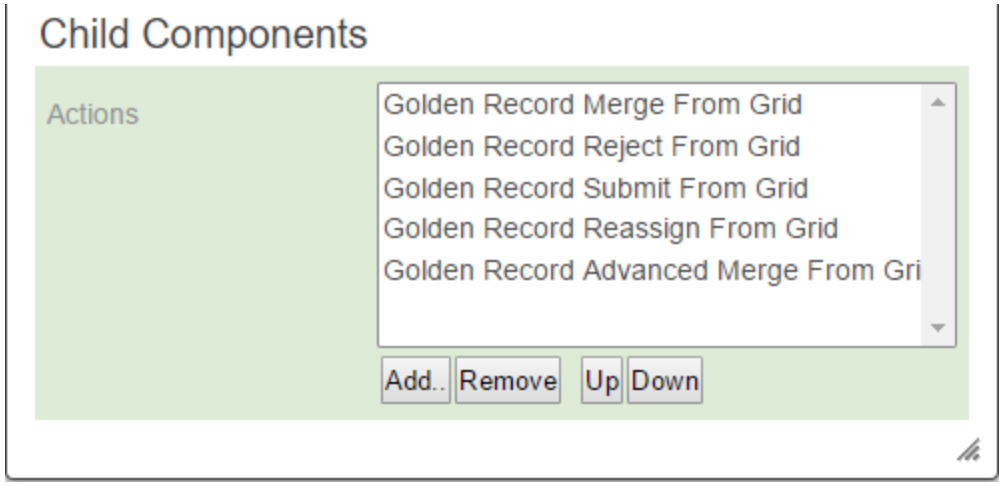
Note: Once the actions are selected, they should be configured as per the requirement by double clicking on it and providing the various parameters in the screen.

6. **Group Options:** There are three configuration options under this flipper.

   - Groups Initially Open - Check the box to make attribute groups be opened by default.
   - Show Empty Group Headers - Check the box to make the header visible if the group is empty.
   - Show Group Headers - Check the box to show a header for attribute groups.



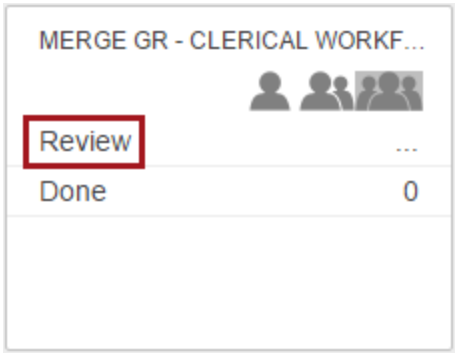
7. **Child Components:** Click **Add...** and select one of the actions to add to the toolbar. These actions are detailed in the Using a Golden Record Clerical Review Task List section below.



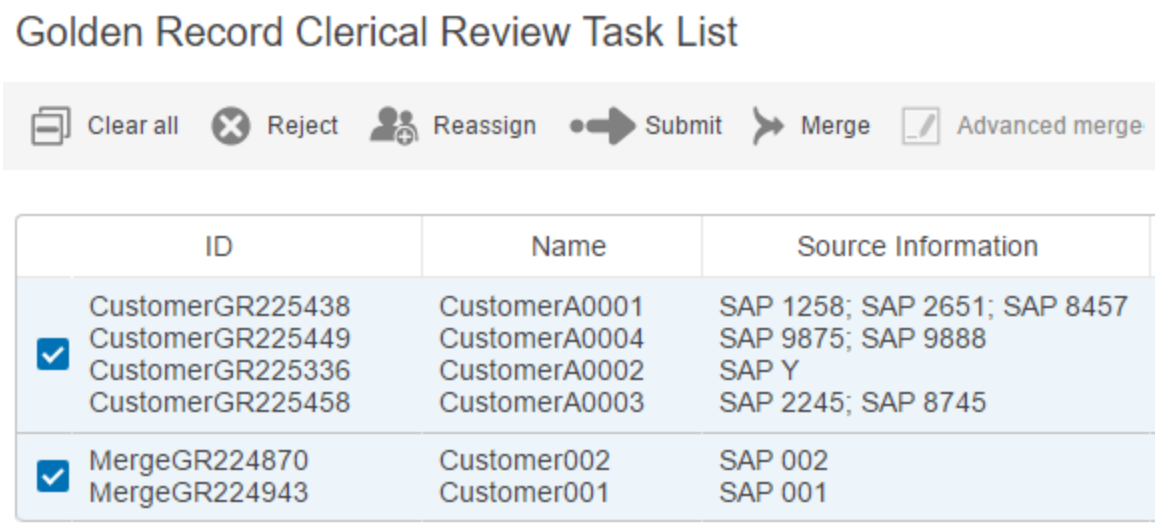
Using the Golden Record Clerical Review Task List

Once configured, a user can evaluate potential duplicates from the Golden Record Clerical Review Task List and perform a number of actions on them, including rejecting or merging the records. The following toolbar actions are available based on what has been configured for the screen: Clear all, Reject, Reassign, Submit, Merge, and Advanced Merge.

1. Before the user can evaluate clerical review tasks assigned to them, they must navigate to Golden Record Clerical Review Task List via a relevant Status Selector Homepage widget, or should got to the workflow Status Selector on the Stack Panel Item. For more information on configuring and using this widget, see the **Status Selector Homepage Widget** section of the **Web User Interfaces** documentation.



2. Once on the Golden Record Clerical Review Task List screen, tasks can be selected via the checkbox. If multiple tasks are selected, all but the **Advanced merge** action are available.



Clear all can be clicked to remove all selections on the screen.

If desired, these tasks can be filtered by priority via a filter at the top of the screen.

By clicking the filter icon, only tasks marked as High Priority will appear in the task list. This filtering is driven by a High Priority Status Flag configured in the match criteria of the relevant matching algorithm.

Note: This filter icon only appears if High Priority tasks exist in the currently selected workflow state, and only appears for the assignees in which it is applicable (based on assignee filtering).

For more information on configuring a status flag for a matching algorithm, see the **Configuring Golden Record for Matching and Merging** section of the **Matching, Linking, and Merging** documentation.

For more information on displaying this filter, see the **Main Properties** topic of the **Web User Interface / Web UI Setup and User Guide** documentation.

3. Perform the desired action by clicking the relevant action button:

- Reject - By clicking **Reject**, the golden records in the selected task(s) will be marked as 'Confirmed Non Duplicates' and removed from the workflow.

  For more information on the 'Confirmed Non Duplicates' reference type, see the **Matching, Linking, and Merging Component Model Configuration** section of the **Matching, Linking, and Merging** documentation.

- Reassign - By clicking **Reassign**, the selected task(s) can be assigned to another user. The new assignee can be selected from the 'Select assignee' dialog that appears.
- Submit - By clicking **Submit**, the selected task(s) can be moved to another state in the workflow. To use this button, the 'Event ID' parameter must be configured.

Note: This Event ID must correspond with the ID of the relevant event in the workflow. This parameter is case sensitive.

- Merge - By clicking **Merge**, the golden records in the selected task(s) will be merged into a single surviving golden record (for each task selected). Which values get promoted to the surviving golden record are determined automatically by the survivorship rules specified on the corresponding matching algorithm. The other golden records in the task are set to being deactivated and will not be matched again.

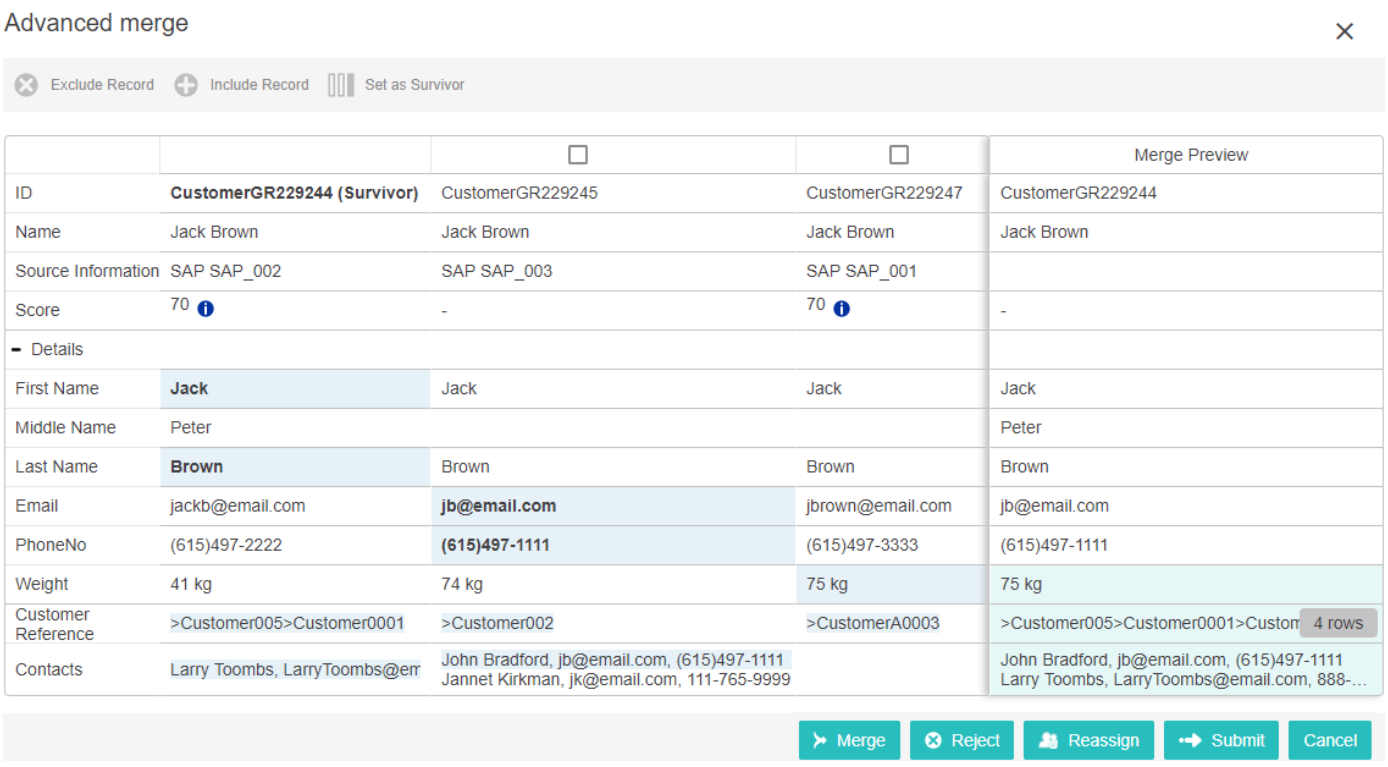
For more information on survivorship rules, see the **Golden Records Survivorship Rules** section of the **Matching, Linking, and Merging** documentation.

For more information on deactivation, see the **Matching, Linking, and Merging Component Model Configuration** section of the **Matching, Linking, and Merging** documentation.

- Advanced Merge - By clicking **Advanced merge**, golden records on the selected task can be inspected, and merged into a single surviving record. From the 'Advanced merge' dialog, users can view the relevant details of each golden record and perform a number of actions such as: rejecting specific golden records as duplicates, reassigning the task to another user, submitting the task to another state in the workflow, or merge the selected records together.

  When merging in this way, individual records on the task can be excluded / included from the merge, and one can be selected as the surviving record (automatically assigned but can be changed by the user). Specific values from each record can be selected for promotion to the surviving record, and the end result is displayed by the Merge Preview on the right side of the dialog.

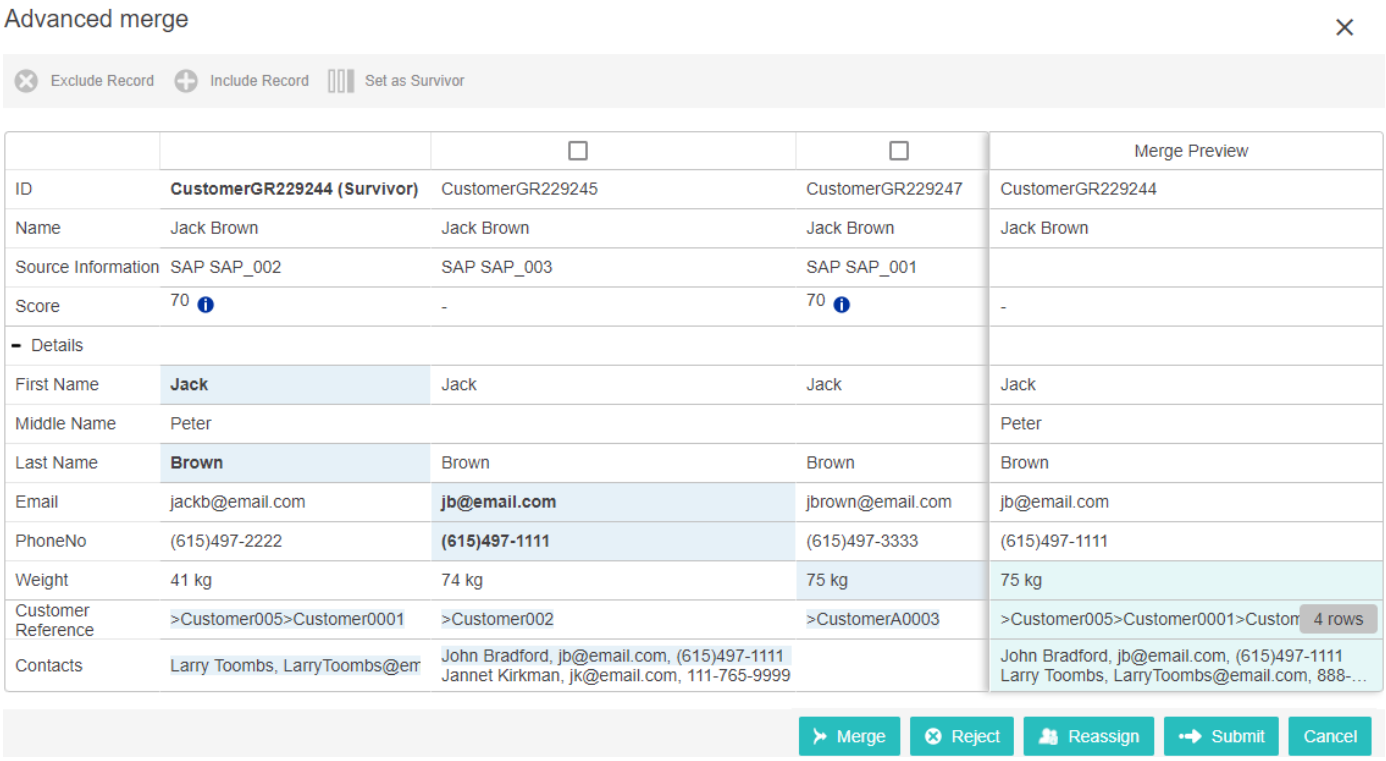
Note: Attribute values can also be entered in the Merge Preview column.



For more information on configuring and using the advanced merge dialog, see the **Golden Record Advanced Merge Dialog** section of the **Web User Interfaces** documentation.

Golden Record Advanced Merge Dialog

When clicking **Advanced merge** on a Golden Record Clerical Review Task List screen, the Golden Record Advanced Merge dialog appears, allowing users to view the relevant details of each golden record in the selected task and perform a number of actions such as: rejecting specific golden records as duplicates, reassigning the task to another user, submitting the task to the next state in the workflow, or merge the selected records together. For more information on the Golden Record Clerical Review Task List screen, see the **Golden Record Clerical Review Task List** section of the **Web User Interfaces** documentation.



Prerequisites

It is expected that anyone configuring the Golden Record Advanced Merge Dialog is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring the Golden Record Advanced Merge Dialog

The general functionality of the dialog is consistent across different configurations, however, which values are available for selection is determined by which value headers are configured. To configure this dialog, add a Golden Record Advanced Merge From Grid child component to a relevant Golden Record Clerical Review Task List screen, then enter the configuration of the child component.

Note: The Submit, Reject, and Reassign action buttons in the advanced merge dialog are inherited from the parent screen configuration, Golden Record Clerical Review Task List.

1. **Groups Initially Open:** In this parameter, check the box if attribute groups should already be opened whenever the dialog appears.
2. **Headers:** In this parameter, click **Add...** and select a header to add to the dialog. Once a selection is made, click **Add**. Note that some headers may require additional configuration.

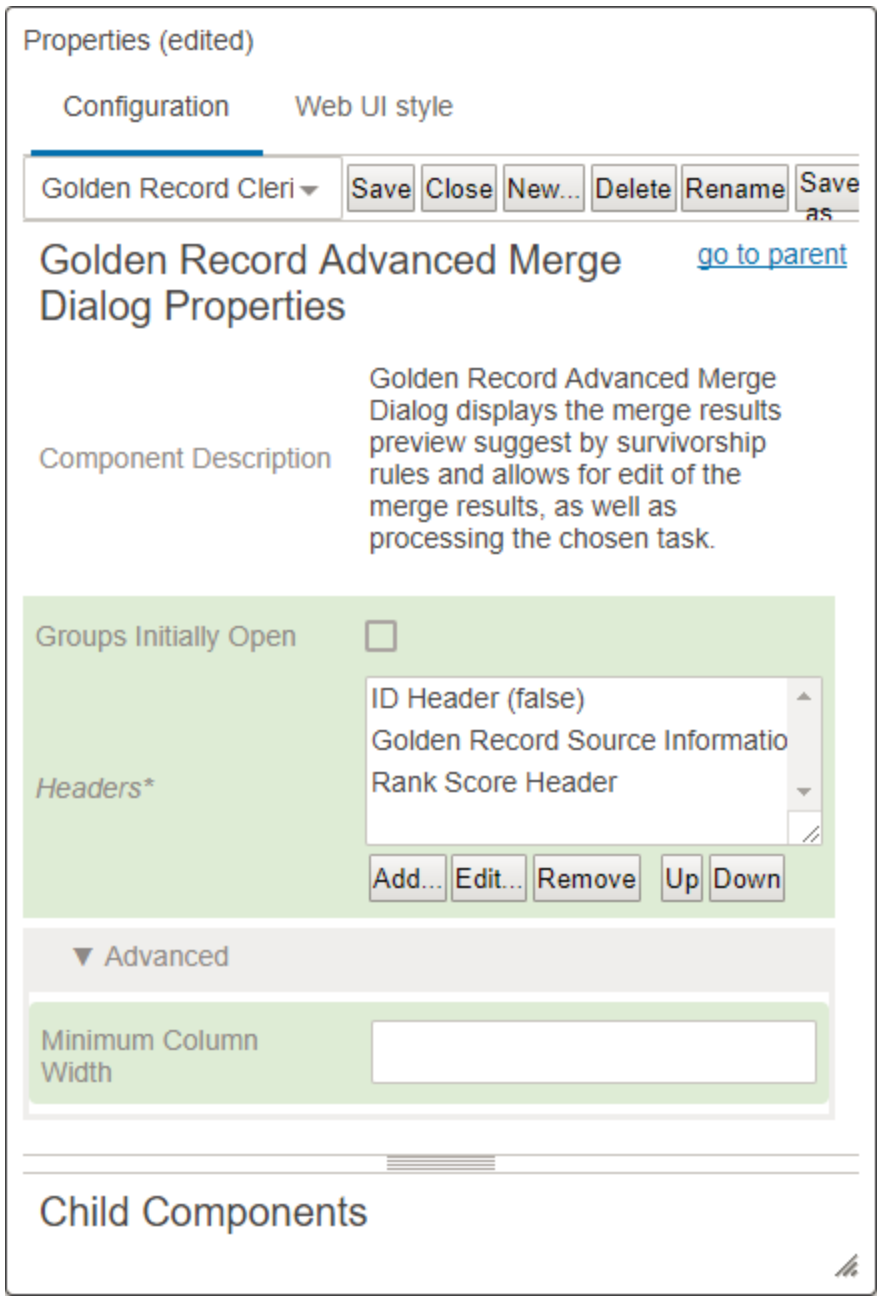
   Recommended headers to use for this dialog are: ID, Name, Golden Record Source Information, Rank Score Header, Attribute Value, Attribute Value Group, Advanced Merge Data Container Header, and Advanced Merge Reference Header. For more information on configuring these headers, see the 'Headers' section below.

Note: It is recommended to set the 'Enable Links' parameter in any headers that offer that option to 'false.' If set to 'true' this parameter will be ignored. Read-only parameters are likewise ignored.

   By default, newly created Advanced Merge Dialog components will have the ID, Golden Record Source Information, and Rank Score headers pre-configured.

Note: Using either the Data Container Attribute Value Group Header or Data Container Attribute Value Header is not advised.

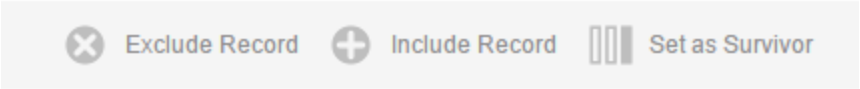
3. **Minimum Column Width**: In this parameter, enter the preferred width of the columns in pixels.



Using the Golden Record Advanced Merge Dialog

The dialog is separated into four sections: toolbar at the top, golden records, merge preview, and a toolbar at the bottom.

1. The toolbar at the top gives users the ability to exclude or include specified records from the merge, and designate a surviving record.



- Exclude Record - Excludes the selected records from the merge. The values of the record are disabled to signify the record's exclusion.
- Include Record - Includes the selected records in the merge. This option is only available for records that have been excluded.
- Set as Survivor - Designates the selected record as the surviving record. The ID of the surviving record is marked to signify its status.

	☐	☐
ID	**CustomerGR225336 (Survivor)**	CustomerGR225438

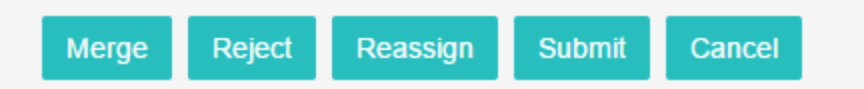
2. The golden record view in the center of the dialog lists all mapped headers. Individual values can be selected for promotion to the Merge Preview. Values chosen based off of survivorship rules appear in bold, and values selected for promotion to the golden record are highlighted in blue.

jb@email.com	jbrown@email.com
(615)497-1111	(615)497-3333

3. The 'Merge Preview' column displays all of the values that will survive after the merge. Any values that have been manually selected for promotion to the surviving record are highlighted in blue. Values can also be added manually and are highlighted in green. This applies to attribute values, data containers, and references to target objects.

Merge Preview
CustomerGR229244
Jack Brown
Jack
Brown
75 kg
jb@email.com
(615)497-3333

4. The toolbar at the bottom gives users the ability to merge the records, reject the records as duplicates, reassign the task to another user, submit the task to the next state in the workflow, or cancel the dialog. The Submit, Reject, and Reassign buttons in the advanced merge dialog are inherited directly from the corresponding Golden Record Clerical Review Task List configuration.
   - Merge - Merges the records into one surviving record. All records are automatically included in the merge unless they have been manually excluded via the **Exclude Record** action button.
   - Reject - Rejects the records as the duplicates and closes the task. The Exclude / Include buttons can be used to reject matches on a per-record basis.
   - Reassign - Reassigns the task to another user.
   - Submit - Submits the task to the next state in the workflow.
   - Cancel - Cancels the dialog.



Headers

Parameters that appear in italics and have an asterisk (*) next to them in the configuration are mandatory.

ID Header

The 'ID Header' displays the IDs of objects in the table. Configuration options include:

- Dimensions - Specify height / width of the of the header cell.
- Enable Link - Check the box if the values under this header should act as links.
- Label - Enter a label for the header.
- Table Sorting - Select a method of sorting the values in the header.
- Context Help - Enter help text for the component to display. Only works if the 'Enable Link' box is checked.

ID values cannot be edited in the corresponding Merge Preview field.

Name Header

The 'Name Header' displays the names of objects in the table. Configuration options include:

- Dimensions - Specify height / width of the of the header cell.
- Label - Enter a label for the header.
- Table Sorting - Select a method of sorting the values in the header.

Name values can be edited in the corresponding Merge Preview field.

Golden Record Source Information Header

The 'Golden Record Source Information Header' displays source system and record information for objects in the table. Configuration options include:

- Label - Enter a label for the header.
- Preferred Column Width - Enter the width of the column in pixels.

Golden Record Source Information values cannot be edited in the corresponding Merge Preview field.

Rank Score Header

The 'Rank Score Header' displays the rank score of golden records as they compare to the surviving golden record. Configuration options include:

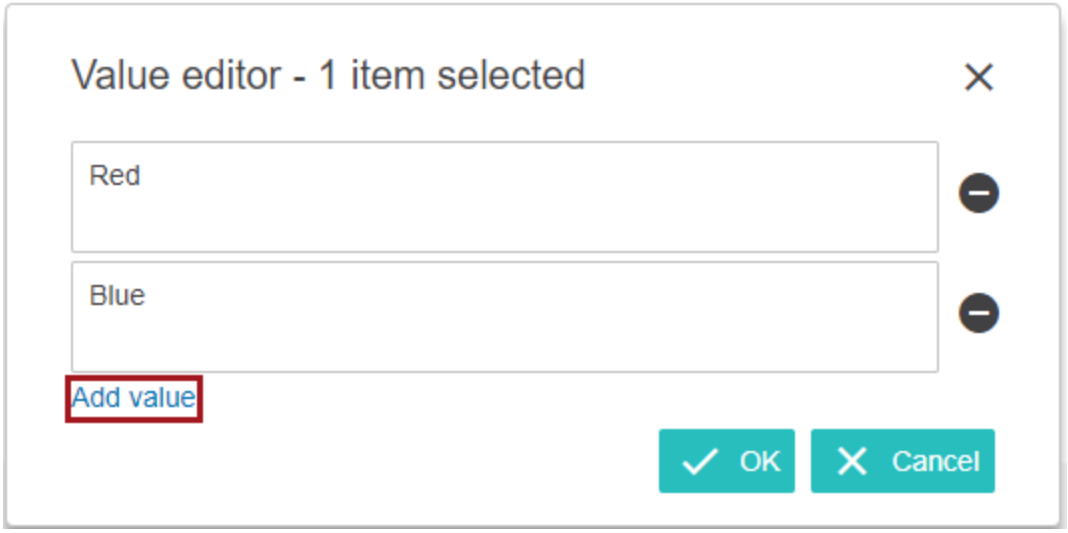
- Dimensions - Specify height / width of the of the header cell.
- Label - Enter a label for the header.
- Table Sorting - Select a method of sorting the values in the header.

Attribute Value Header

The 'Attribute Value Header' displays the attribute values of objects in the table. Configuration options include:

- Attribute - Click the ellipsis button (...) and browse or search for the relevant attribute to display values for.
- Dimensions - Specify height / width of the of the header cell.
- Label - Enter a label for the header.
- Mandatory - Specify whether or not an attribute value should be considered mandatory. If so, the header will appear italicized and with an asterisk (*) in the table.
- Read Only - Check the box if values under this header should not be editable.
- Table Sorting - Select a method of sorting the values in the header.
- Enable Locale Formatting - Check the box if 'ISO Date' and 'ISO Date and Time' values should be formatted according to locale.
- Show Invalid Inherited Values - Check the box if the table should display inherited values even if the attribute is not valid for the object.
- Show LOV IDs - Check this box if relevant LOVs should display their IDs next to the corresponding values.
- No Wrap - Check the box if values should not wrap within the cells. This setting is overridden by the Dynamic Table Layout Settings. For more information, see the **Main Properties** topic of the **Web User Interfaces** documentation.
- Context Help - Enter help text for the component to display.
- Display Context help - Check the box to display context help text for attributes.

Attribute values can be edited in the corresponding Merge Preview field. If the attribute is multi-valued, multiple values can be added to via the Merge Preview. To add values for a multi-valued attribute, double-click on the corresponding Merge Preview cell and click the **Add value** link in the 'Value editor' dialog.



Attribute Value Group Header

The 'Attribute Value Group Header' displays a group of attributes' values for objects in the table. Configuration options include:

- Attribute Group - Click the ellipsis button (...) and browse or search for the relevant attribute group to display values for.
- Blacklist Attribute Group - Specify which attribute groups not to display attributes for, even if they also appear in the attribute group specified above.
- Dimensions - Specify height / width of the header cell.
- Included Nested Groups - Check the box if attributes from nested parameter groups should be included.
- Label - Specify a label for the header.
- Mandatory - Specify whether or not an attribute value should be considered mandatory. If so, the header will appear italicized and with an asterisk (*) in the table.
- Read Only - Check the box if values under this header should not be editable.
- Show LOV IDs - Check this box if relevant LOVs should display their IDs next to the corresponding values.
- Table Sorting - Select a method of sorting the values in the header.
- Enable Locale Formatting - Check the box if 'ISO Date' and 'ISO Date and Time' values should be formatted according to locale.
- No Wrap - Check the box if values should not wrap within the cells. This setting is overridden by the Dynamic Table Layout Settings. For more information, see the **Main Properties** topic of the **Web User Interfaces** documentation.

Note: This parameter is automatically set upon saving the component as the Golden Record Advanced Merge is designed to compare data, and thus should not wrap text.

- Context Help - Enter help text for the component to display.
- Display Context help - Check the box to display context help text for attributes.

Attribute values can be edited in the corresponding Merge Preview field. If the attribute is multi-valued, multiple values can be added to via the Merge Preview. For more information on adding values to multi-valued attributes, see the 'Attribute Value Header' description above.

Advanced Merge Data Container Header

The 'Advanced Merge Data Container Header' displays data container values. Configuration options include:

- Data Container Type - Click the ellipsis button (...) and browse or search for the relevant data container type to display attributes from.
- Display Attribute - Click the ellipsis button (...) and browse or search for the relevant calculated attribute to display data containers listed in the editor. This calculated attribute should convey the most important details for differentiating the individual data containers.

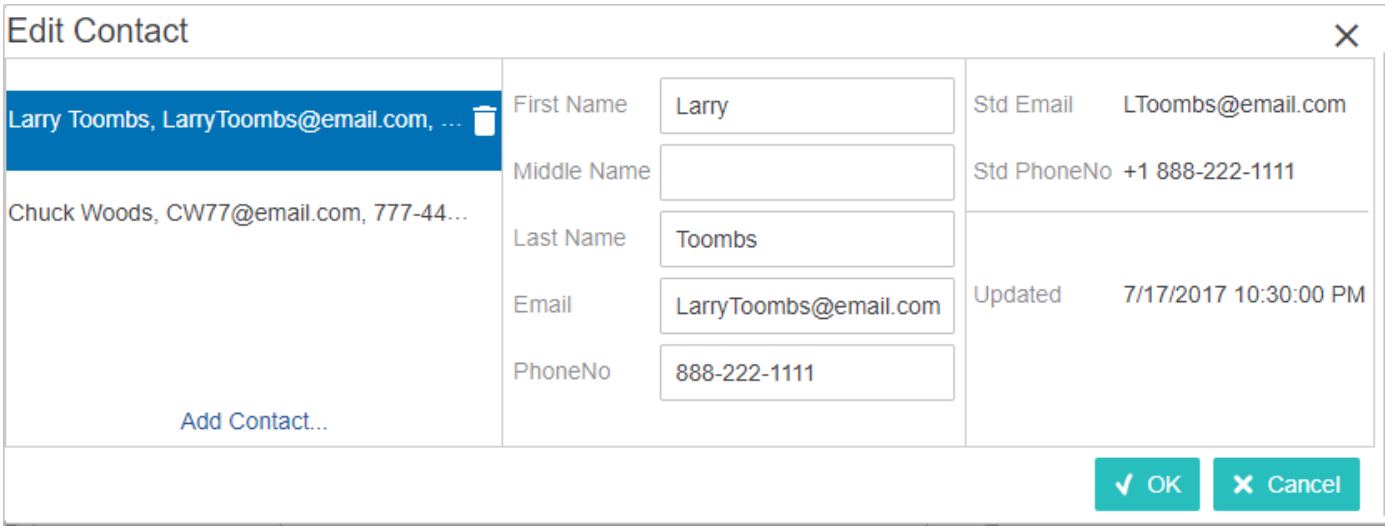
  For more information on calculated attributes, see the **Calculated Attributes** section of the **System Setup / Super User Guide** documentation.

- Editable Attributes - Click the ellipsis button (...) and browse or search for the attribute group that contains attributes whose values should be editable.
- Standardized Attributes - Click the ellipsis button (...) and browse or search for a relevant attribute group that displays standardized values for data containers listed in the editor.
- Metadata Attributes - Click the ellipsis button (...) and browse or search for a relevant attribute group that displays meta values for data containers listed in the editor.
- Label - Specify a label for the header.
- Context Help - Enter help text for the component to display.
- Display Context help - Check the box to display context help text for attributes.

Data containers can be manually selected from various golden records to build a complete set of Data Containers in the Merge Preview.

To add / maintain data containers from the Advanced Merge dialog, double-click the corresponding cell under Merge Preview.

The editor dialog that appears is identical in functionality to the Data Container Attribute View Editor. For more information on creating / maintaining data containers using the Data Container Attribute View Editor, see the **Data Containers in Web UI** section of the **Web User Interfaces** documentation.



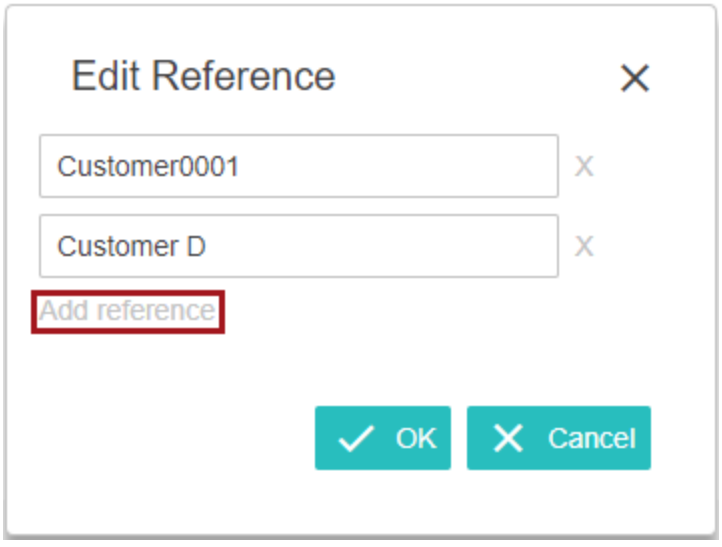
Advanced Merge Reference Header

The 'Advanced Merge Reference Header' displays the references to target objects in the table. Configuration options include:

- Label - Specify a label for the header.
- Reference Type - Click the ellipsis button (...) and browse or search for the relevant reference type to display references for.

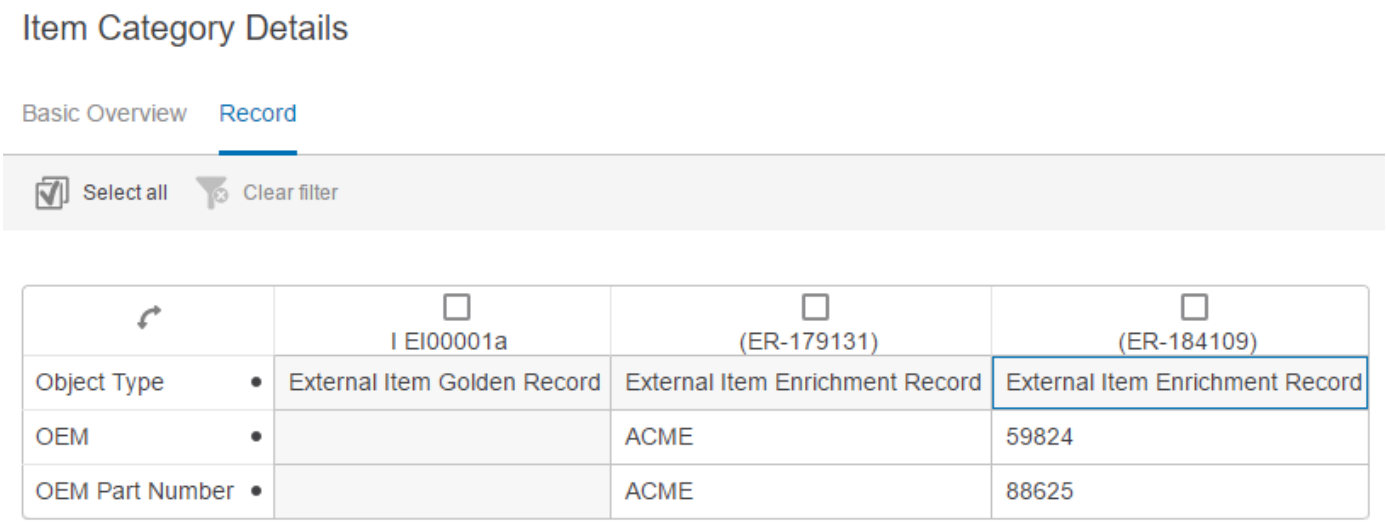
References to target objects can be edited in the corresponding Merge Preview field. These references can be manually selected from various golden records to build a complete set of references to target objects in the Merge Preview. If the reference type is multi-valued, multiple references can be added via the Merge Preview.

To add values for a reference type, double-click on the corresponding Merge Preview cell and click the **Add reference** link in the 'Edit Reference' dialog. In the node selection dialog, search for entities you want to reference via entity ID or Source Record ID.



Golden Record Linked Members Component

With the Golden Record Linked Members component screen, users can view a golden record node alongside all of its source records. Attribute headers can be configured for comparing the records, and to see where each inherited value originated.



Both the **Unlink Duplicates** and **Unlink Single Record from Golden** actions can be configured on this component.

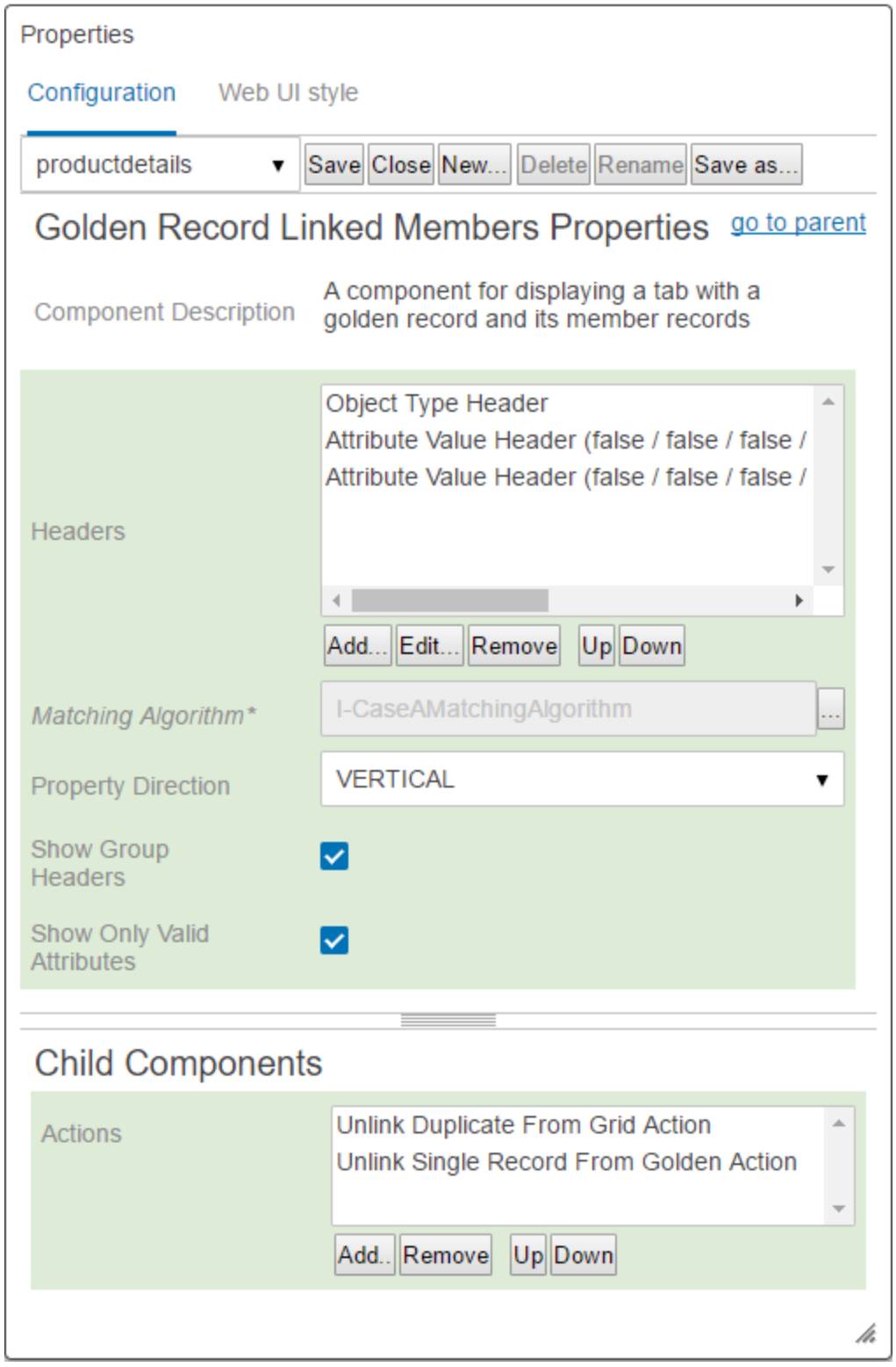
Prerequisites

It is expected that anyone configuring the Golden Record Linked Members component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring the Golden Record Linked Members Component

A number of configuration options are available for this component that allow users to customize how the table is formatted. Additionally, a matching algorithm and corresponding action button(s) must be configured.

This component can be configured on a node details screen.



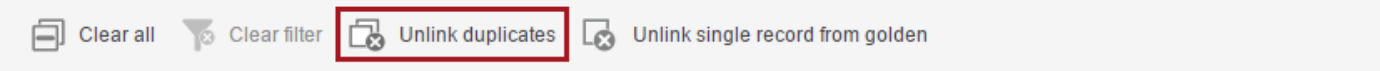
1. **Headers**: In this parameter, specify which headers will appear on the table by clicking **Add...** and selecting the desired header. Depending on the header selected, additional configuration steps may be required. Ideally,

attributes most relevant to comparing records should be specified.

2. **Matching Algorithm**: In this parameter, click the ellipsis button (...) and select the relevant matching algorithm.
3. **Property Direction**: For this parameter, determine whether to display the data in a horizontally or vertically aligned list via the dropdown.
4. **Show Group Headers**: Check the box for this parameter if attribute group headers should be displayed.
5. **Show Only Valid Attributes**: Check the box for this parameter to display valid attributes only.

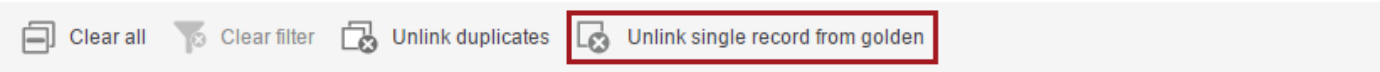
Action Buttons

1. **Unlink Duplicates**: In this **Actions** parameter, click the **Add...** button and select 'Unlink Duplicates From Grid Action'. This will add an **Unlink Duplicates** action button to the screen. To use this action, select two source records and click the **Unlink Duplicates** button. This will unlink the two records and mark them as confirmed non-duplicates. Only one will survive and remain linked to the golden record.



	I EI00001a	(ER-179131)	(ER-184109)
Object Type •	External Item Golden Record	External Item Enrichment Record	External Item Enrichment Record
OEM •		ACME	59824
OEM Part Number •		ACME	88625

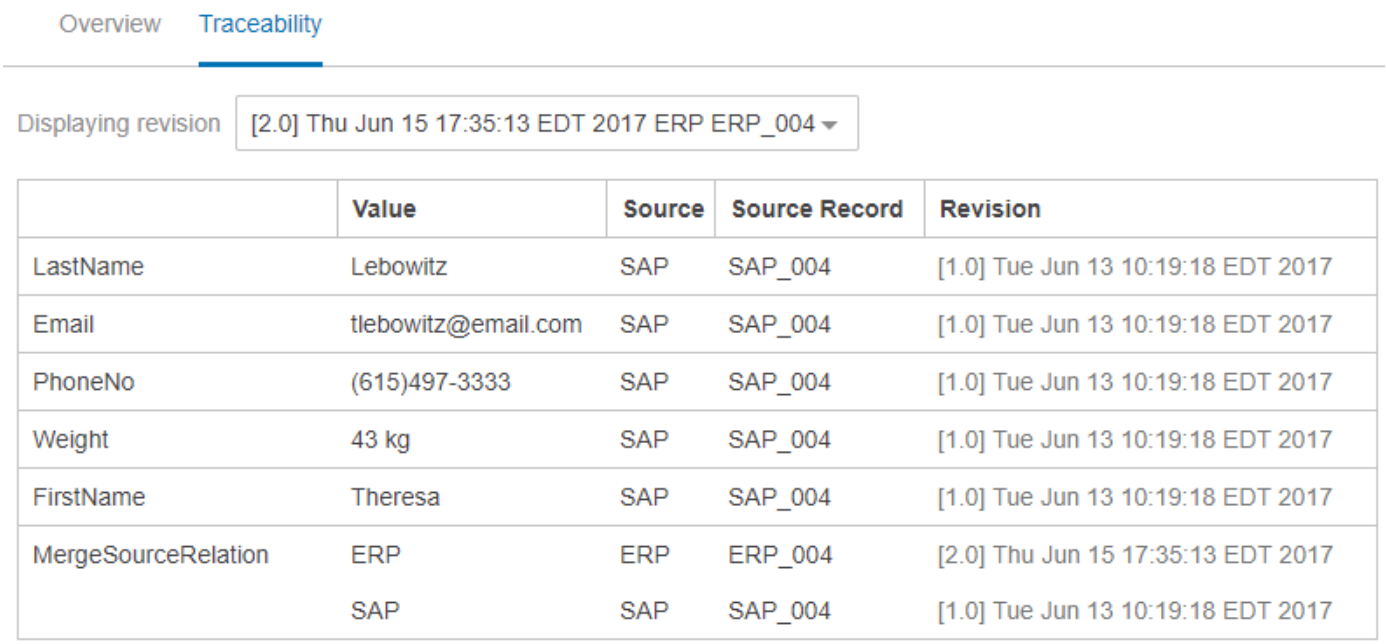
2. **Unlink Single Record from Golden**: In this **Actions** parameter, click the **Add...** button and select 'Unlink Single Record From Golden Action'. This will add an **Unlink single record from golden** action button to the screen. To use this action, select one source record and click the **Unlink Single Record From Golden** button. This will remove the source record reference from the golden record.



	I EI00001a	(ER-179131)	(ER-184109)
Object Type •	External Item Golden Record	External Item Enrichment Record	External Item Enrichment Record
OEM •		ACME	59824
OEM Part Number •		ACME	88625

Golden Record Source Traceability Screen

The Golden Record Source Traceability Screen displays the revision history of a golden record, and can be configured with header rows that display the values of attributes, attribute groups, data container attributes, and reference types. This allows the user to track changes to individual aspects of a golden record, and display from which system the new values originated and when the changes were made.



	Value	Source	Source Record	Revision
LastName	Lebowitz	SAP	SAP_004	[1.0] Tue Jun 13 10:19:18 EDT 2017
Email	tlebowitz@email.com	SAP	SAP_004	[1.0] Tue Jun 13 10:19:18 EDT 2017
PhoneNo	(615)497-3333	SAP	SAP_004	[1.0] Tue Jun 13 10:19:18 EDT 2017
Weight	43 kg	SAP	SAP_004	[1.0] Tue Jun 13 10:19:18 EDT 2017
FirstName	Theresa	SAP	SAP_004	[1.0] Tue Jun 13 10:19:18 EDT 2017
MergeSourceRelation	ERP	ERP	ERP_004	[2.0] Thu Jun 15 17:35:13 EDT 2017
	SAP	SAP	SAP_004	[1.0] Tue Jun 13 10:19:18 EDT 2017

The columns that appear on the table are **Not** configurable, and include:

- Value - Displays the value of the attribute / reference.
- Source - Shows from which source system the revision originated.
- Source Record - Shows the ID of the source system from which the revision originated.
- Revision - Provides a link to the golden record version from which the revision originated.

Previous versions of the golden record can be viewed via the 'Displaying version' dropdown.

Note: This screen can only display the revision history of golden records generated via Match and Merge.

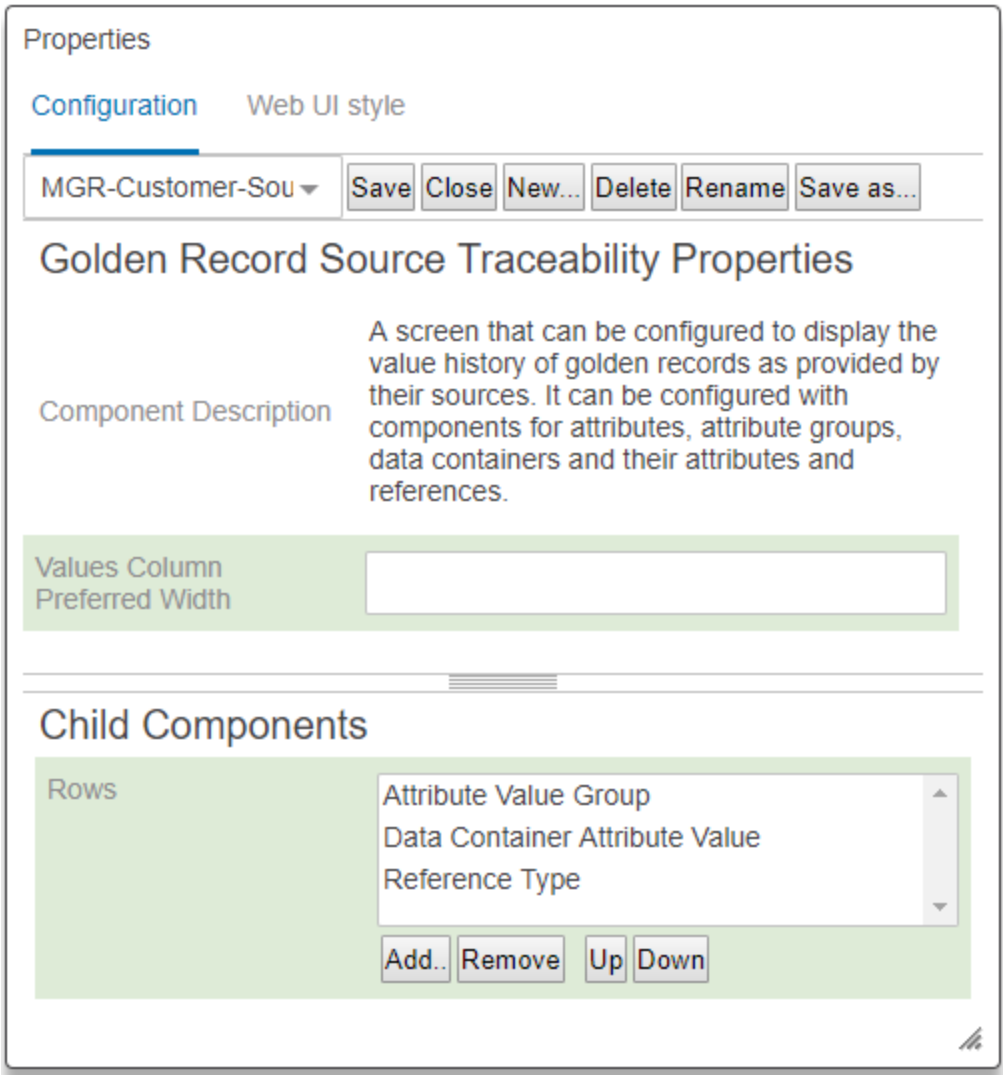
Prerequisites

It is expected that anyone configuring the Golden Record Source Traceability Screen component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring the Golden Record Source Traceability Screen

The Golden Record Source Traceability Screen is a fairly static screen type, but allows users to customize which value headers appear on the source traceability table.

1. To create a new Source Traceability screen, enter the designer and click **New...**.
2. Select 'Golden Record Source Traceability' and enter a Screen ID, then click **Add**.
3. Once the screen has been added, it can be configured as a Sub Tab Page of a Node Details Screen.



4. In the **Value Column Preferred Width** parameter, enter the preferred width of the value columns in pixels.
5. In the **Rows** child component parameter, click **Add...** and select a value header component from the list that appears. Available value headers include:
   - Attribute Value - Displays the value of the specified attribute on the golden record. Requires additional configuration after selection.
   - Attribute Value Group - Displays the values of the specified group's attributes on the golden record. Attributes added to a selected Attribute Group will automatically be included and displayed. Requires additional configuration after selection.
   - Data Container Attribute Value - Displays the value for the specified data container attribute on the golden record. Requires additional configuration after selection.

Note: A calculated attribute must be configured to render the display of data container attributes.

   - Reference Type - Displays the value of the specified reference type. Requires additional configuration after selection.
6. Once a value header is selected and configured, click **Add**.

Guided Data Entry

Guided Data Entry is a feature that allows admin users to configure a simple data enrichment workflow in Web UI for end users. This feature can be used for end users who may not have (or need) a lot of experience or training in the STEP Web UI, as each screen displays only:

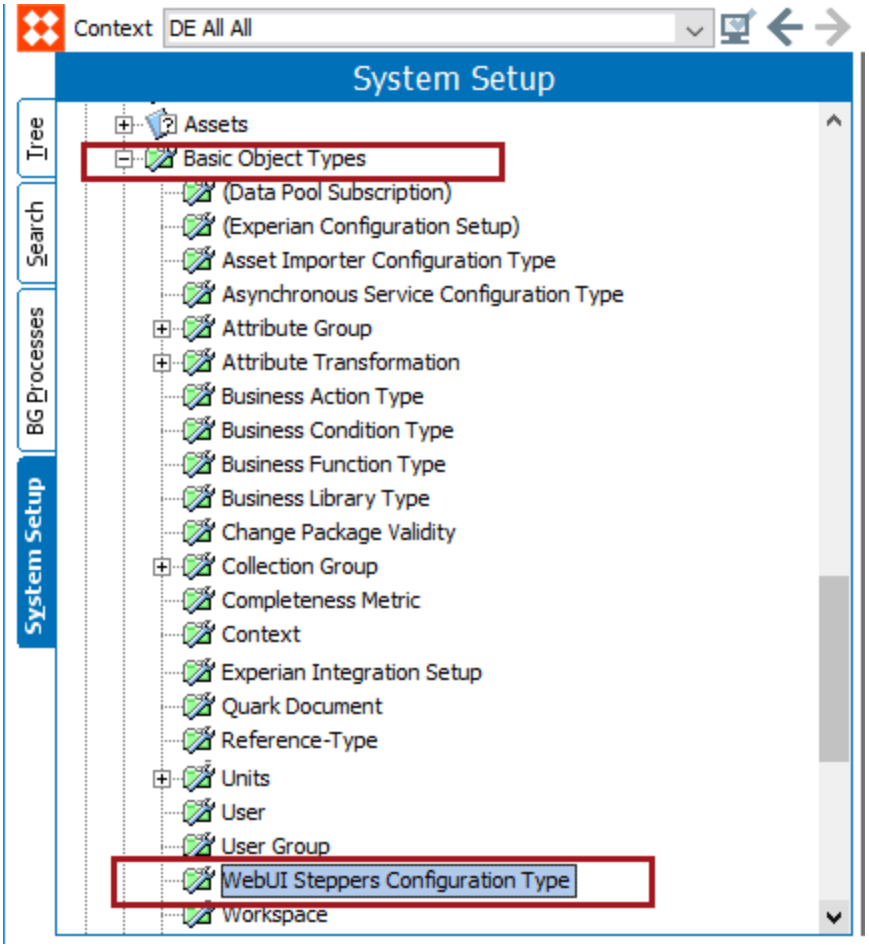
- attributes and attribute groups that require values to be added
- reference types for which a specific reference must be added

Guided Data Entry's screen-by-screen progression, or 'steppers,' can be configured to show any number of attributes and references, as well as which attribute or reference is mandatory for completion of the stepper. Non-mandatory fields can be filtered out on each screen by the end user.

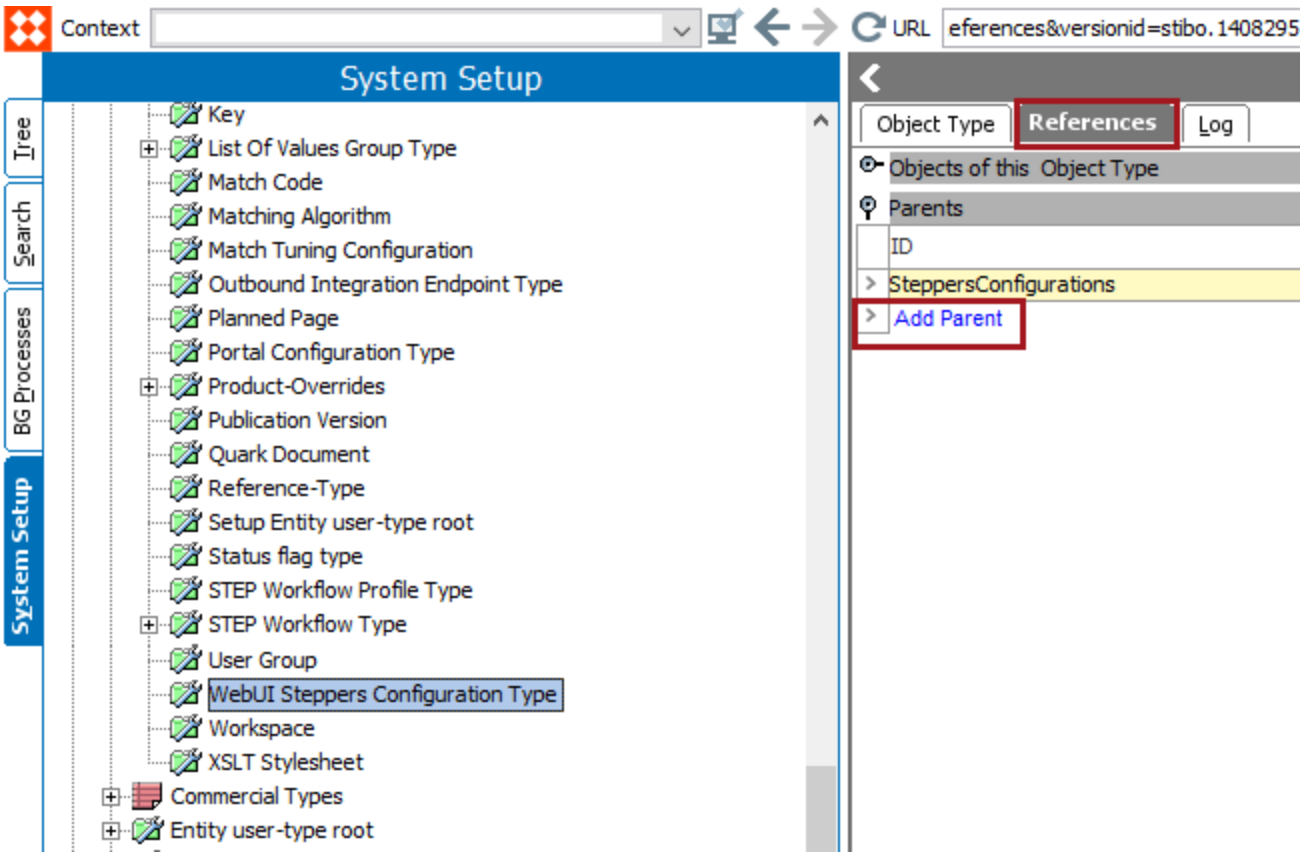
Configuring Guided Data Entry

Though Guided Data Entry is used exclusively in the Web UI, configuration of the screen-by-screen progression, or 'stepper,' is configured primarily in the workbench (with a small amount of setup required to enable this feature in the Web UI). The benefit of configuring in the workbench is that the stepper can easily be added into multiple Web UIs, rather than having to configure the same stepper for each Web UI in which it is required. Following the steps described below, an admin user can design a stepper that will take a Web UI end user, step-by-step, through a required set of screens for the purpose of structured data enrichment.

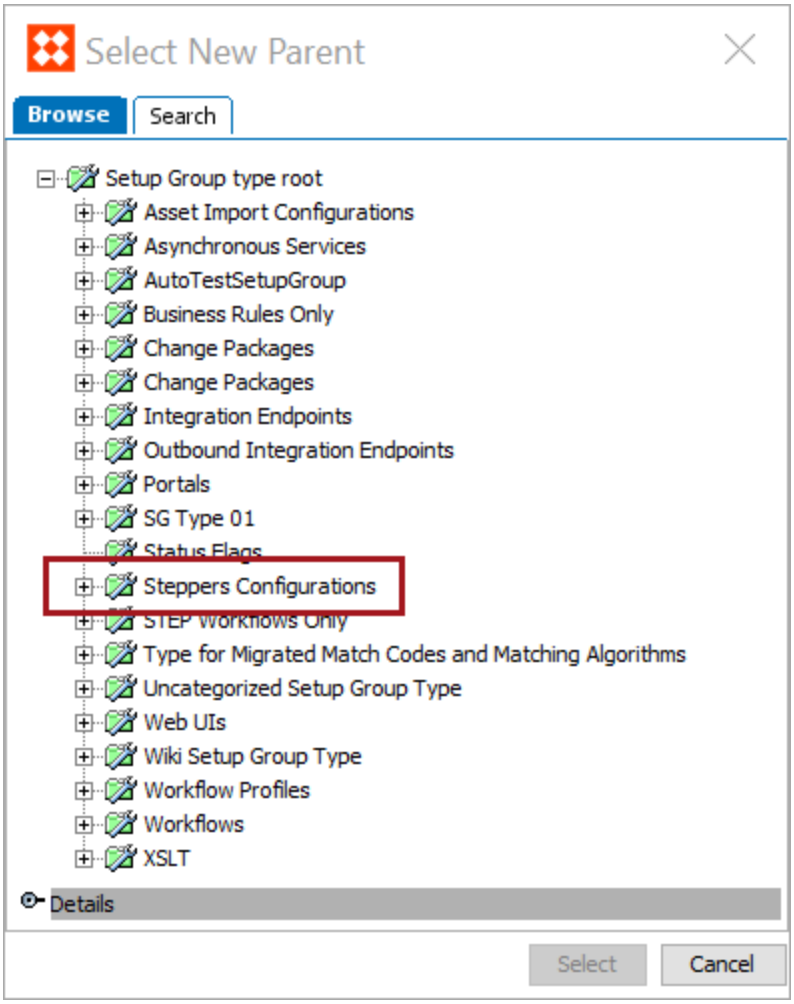
1. In the workbench, in the System Setup tab, under Basic Object Types, find 'Web UI Steppers Configuration Type' object type.



2. Once this object type has been highlighted, click on the 'References' tab in the Main Window, and then click 'Add parent.'

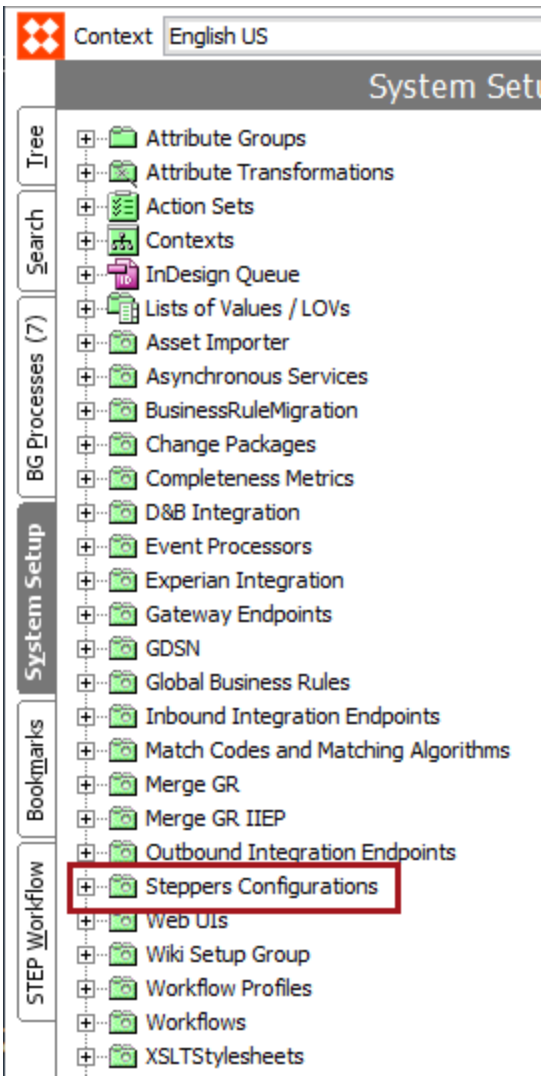


3. In the 'Select New Parent' dialog that displays, select where in STEP this and any other stepper configuration should reside. Users can select either an existing Setup Group Type root or create a new one. In the screenshot below, a new Setup Group Type root called 'Steppers Configurations' has been created and added as the parent. This is where the 'Web UI Steppers Configuration Type' object type will reside.

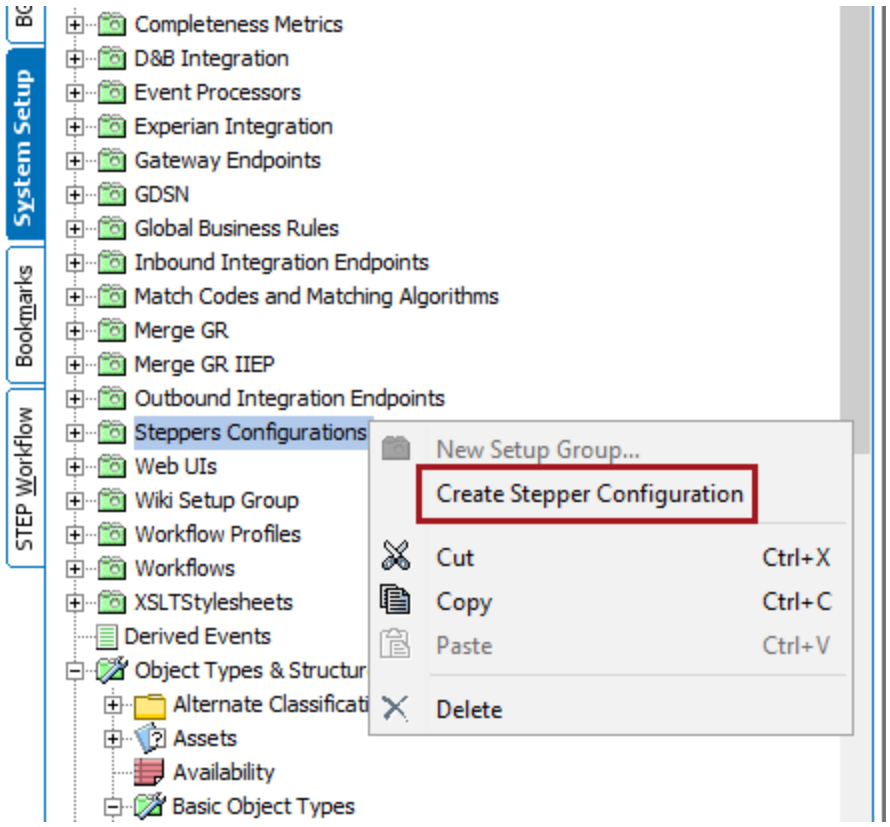


For more information on creating object types, see the **Creating an Object Type** section of the System Setup / Super User Guide documentation.

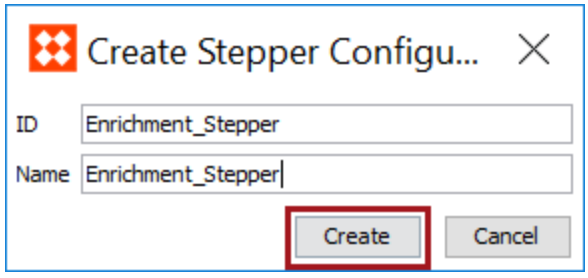
4. Now the 'Steppers Configurations' will appear as an object type root node in the 'System Setup' tab, allowing users to create stepper objects.



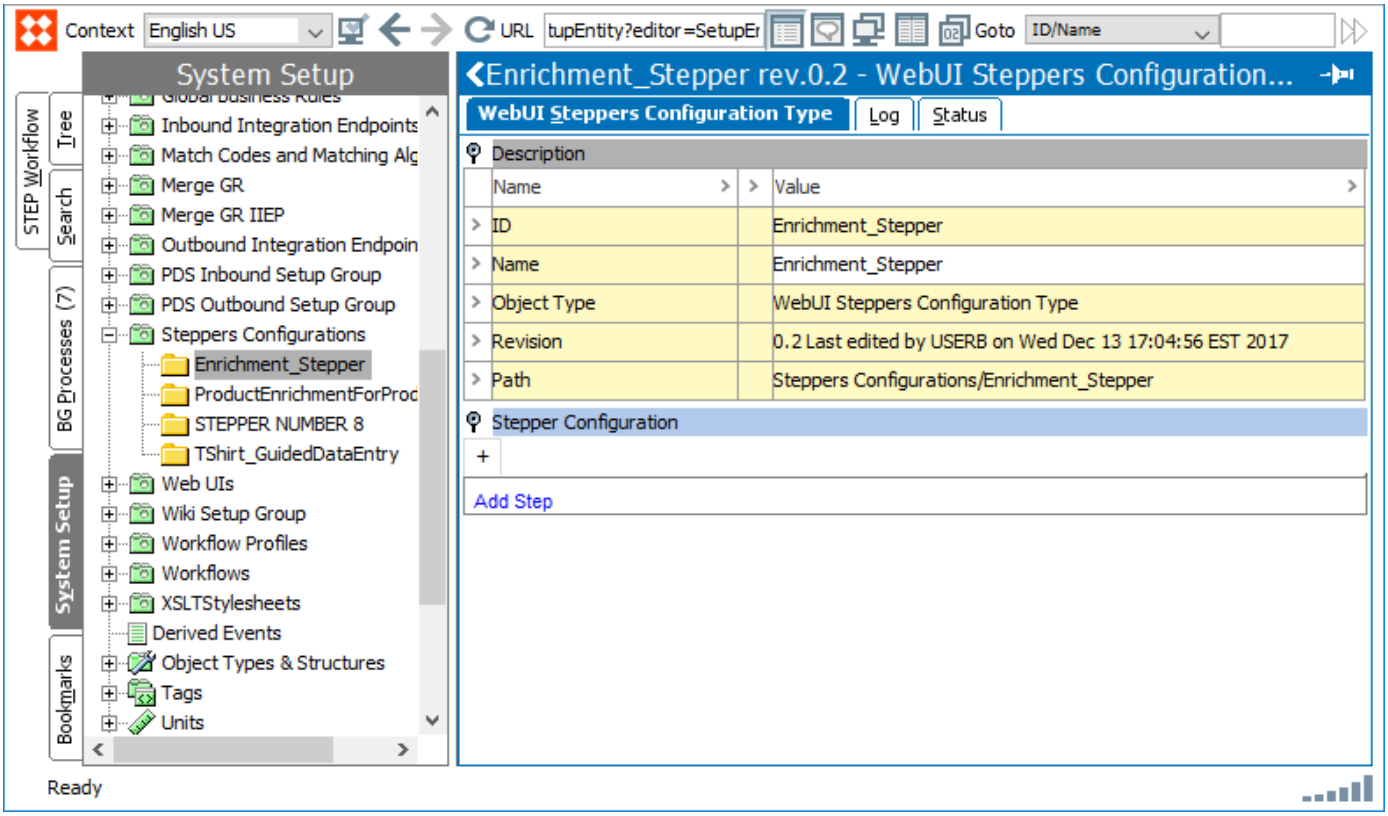
5. Right-click on your stepper object type and select 'Create Stepper Configuration.'



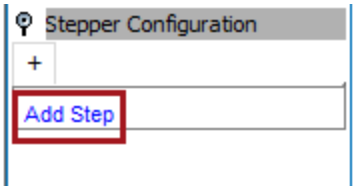
6. In the 'Create Stepper Configuration' dialog that displays, add an ID and a name and click 'Create.'



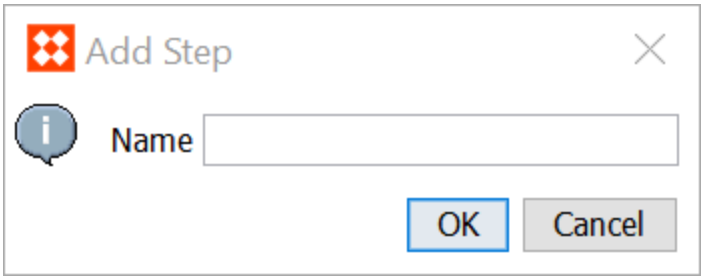
The newly created stepper configuration will display in the Main Window. An unconfigured or blank stepper will look like the screenshot below:



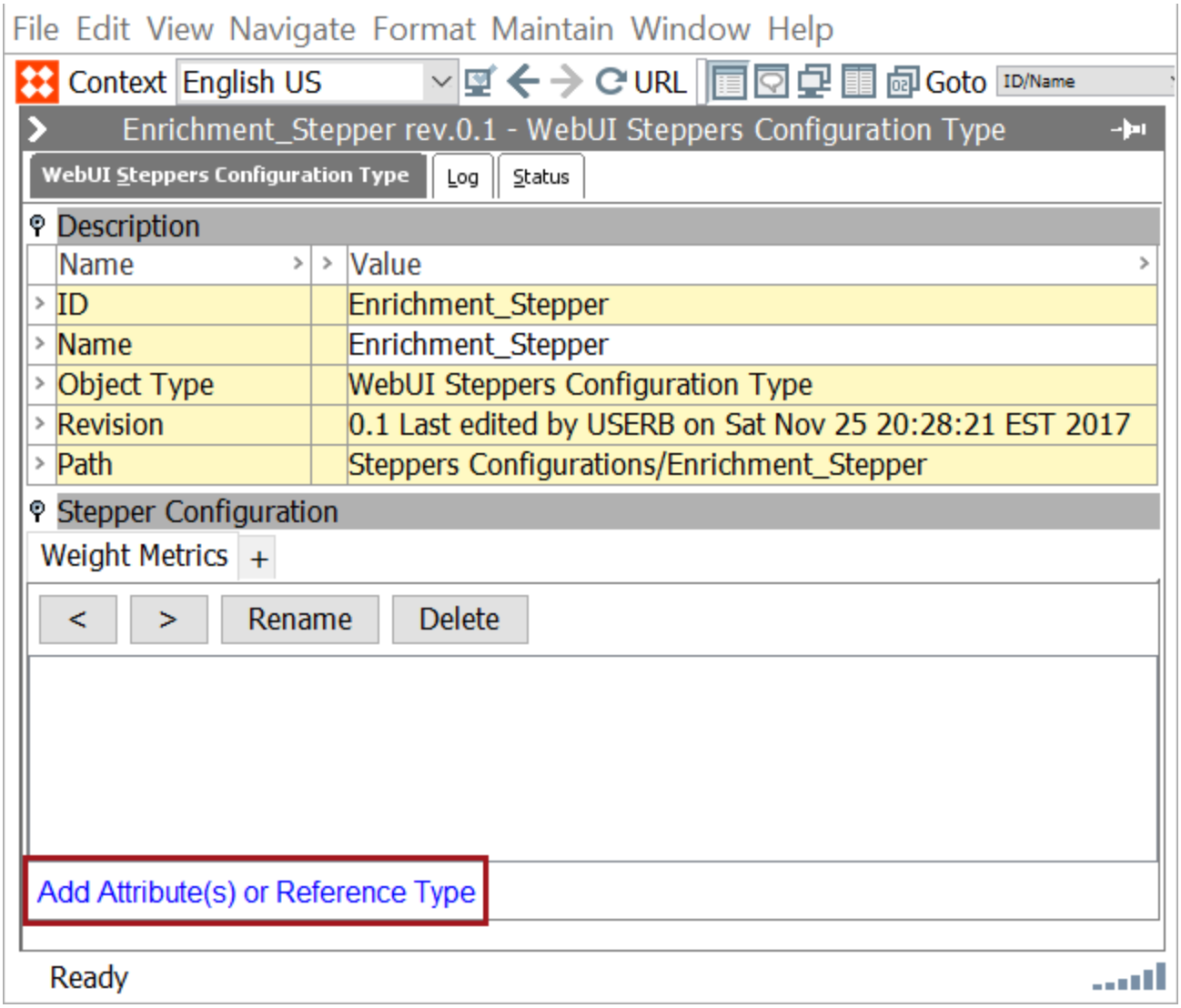
7. To configure a stepper, click 'Add Step.'



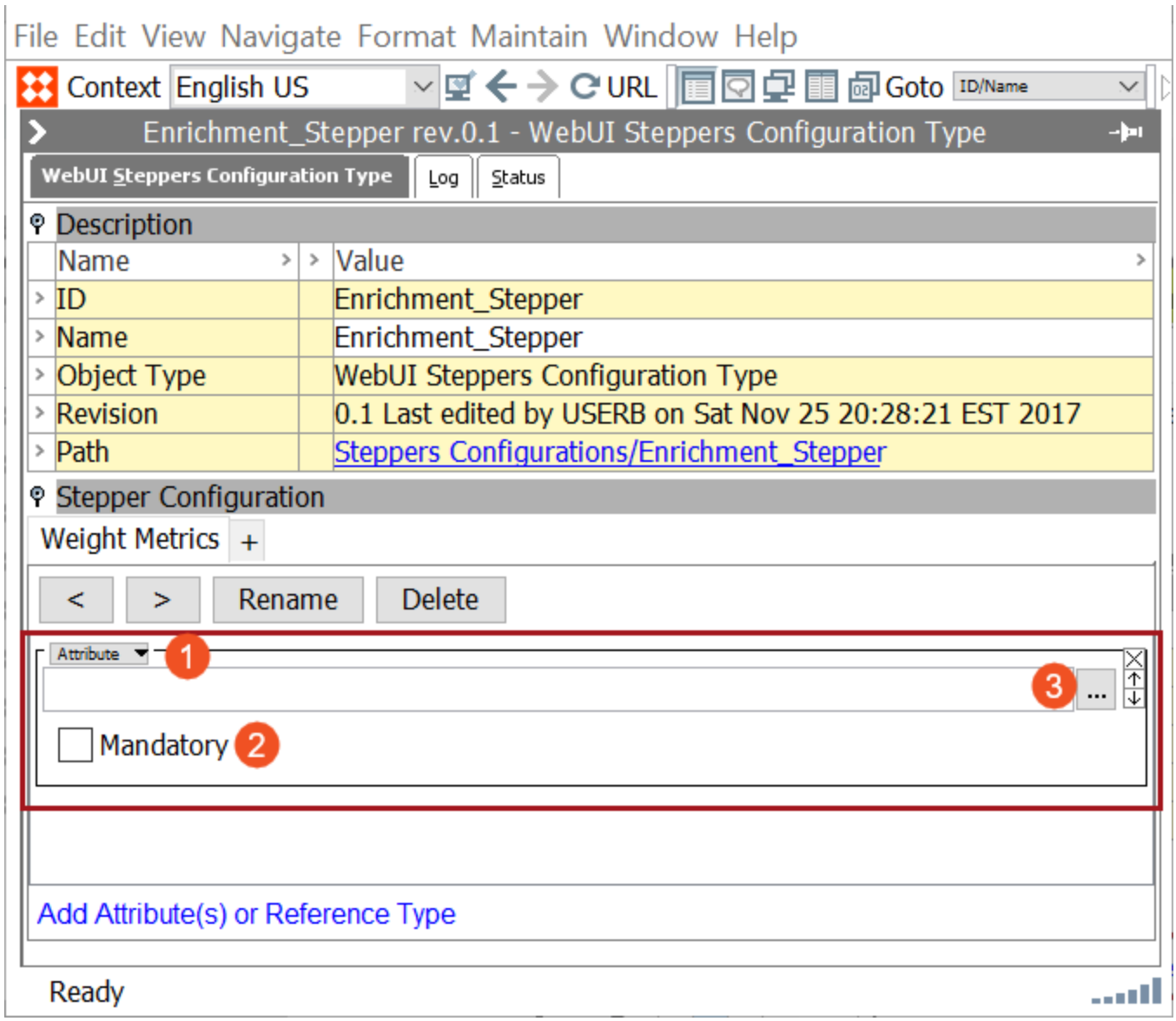
8. Name the step based on what kinds of attributes or references users will be expected to enrich.



9. To add attributes, attribute groups, or reference types to be enriched in the first step, click 'Add Attribute(s) or Reference Type.'



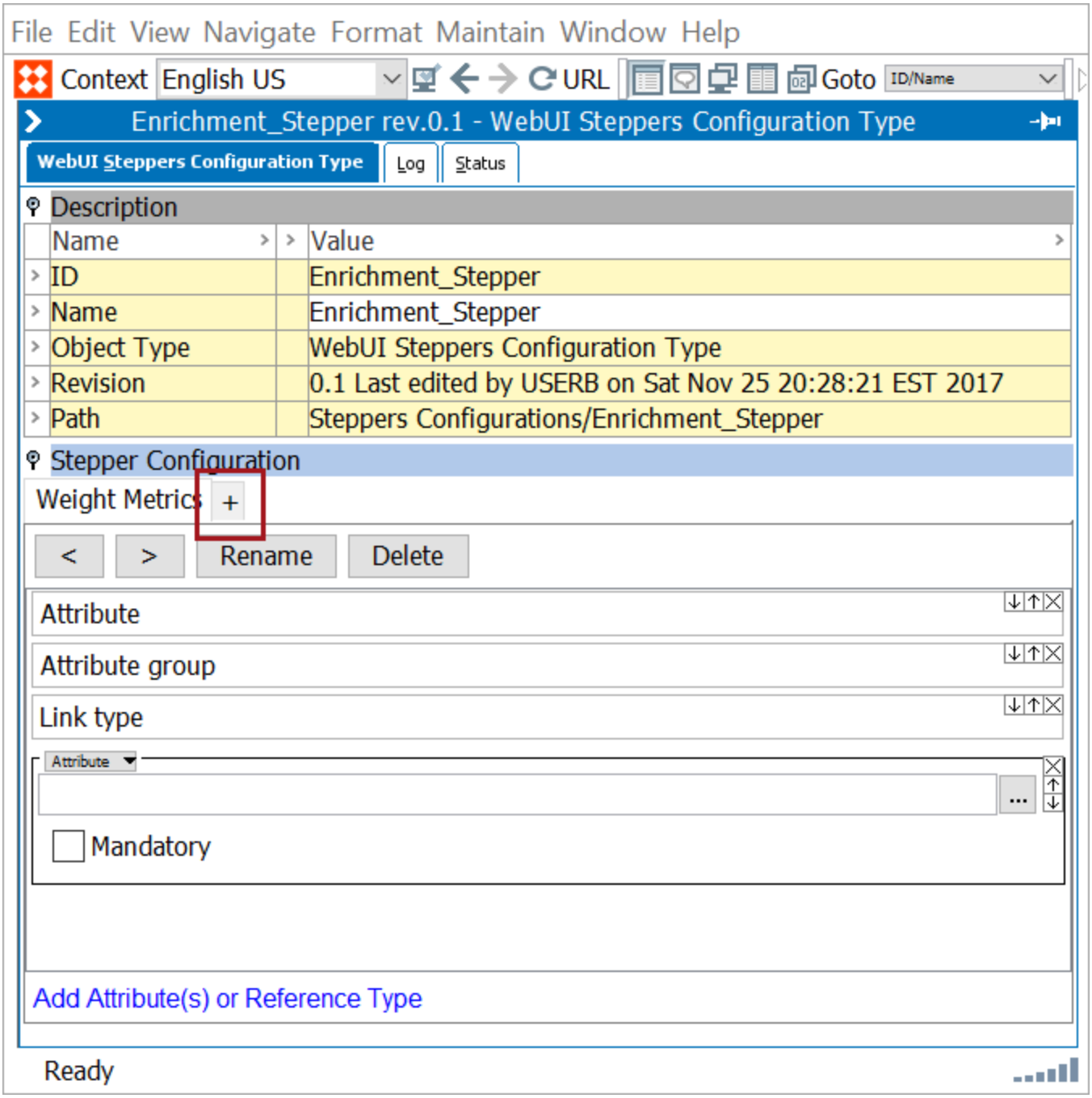
10. A new field parameter displays. There are three important aspects to this new field, all of which are numbered in the screenshot below and then described in a numbered list below the screenshot.



1. **The object type selector:** By clicking this dropdown, users may select whether the field to be added is an attribute, attribute group, or a reference type.
2. **Mandatory**: Users determine whether the added data type is mandatory for completion of the stepper, or optional.
3. **Node Picker**: Click the ellipsis button (...) to display an object selector window that allows users to select, using either the 'Browse' or 'Search' tabs, the attribute, attribute group, or reference type to add to the step.

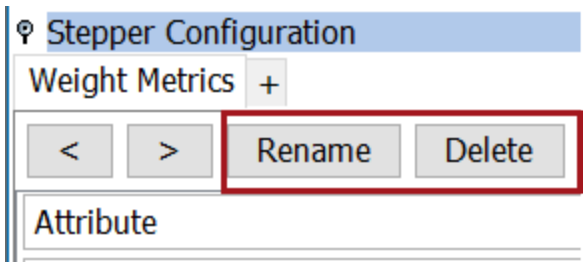
When you have finished selecting which attribute, attribute group, or reference (or link) type will be included in the step, click 'Add Attribute(s) or Reference Type' again to add another data field to be enriched.

11. When all required data fields have been added for the first step, click the '+' button to create a second step.

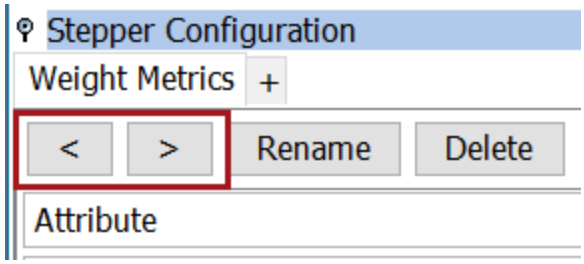


Repeat steps 8-10 for each desired stepper step.

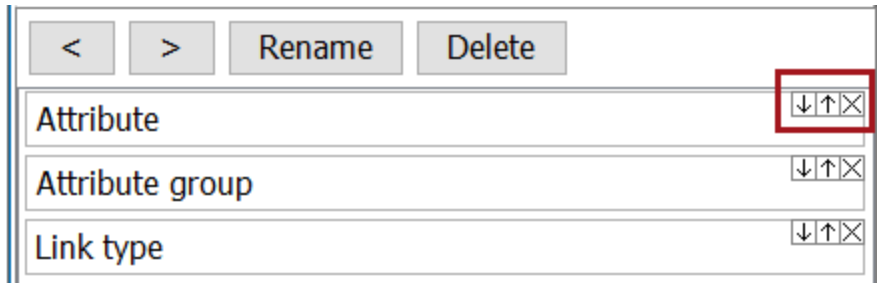
If a step must be renamed or deleted, use the 'Rename' and 'Delete' buttons just beneath the title of the stepper.



If the steps must be re-ordered, use the '<' and '>' buttons to shift the selected step left or right in the established sequence.



If the various data fields within the step need to be reordered or deleted, users may click the buttons located at the far left of each data field parameter. The up arrow button moves the selected data field up in the established sequence, the down arrow moves the data field down, and the 'X' button deletes the data field from the step.

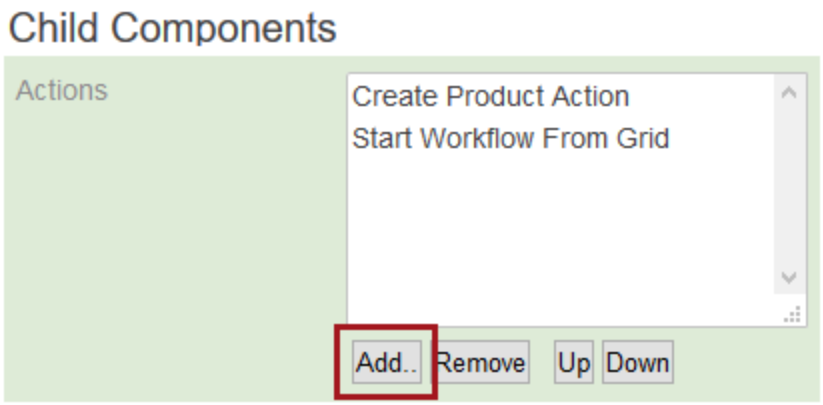


Adding Guided Data Entry to Web UI

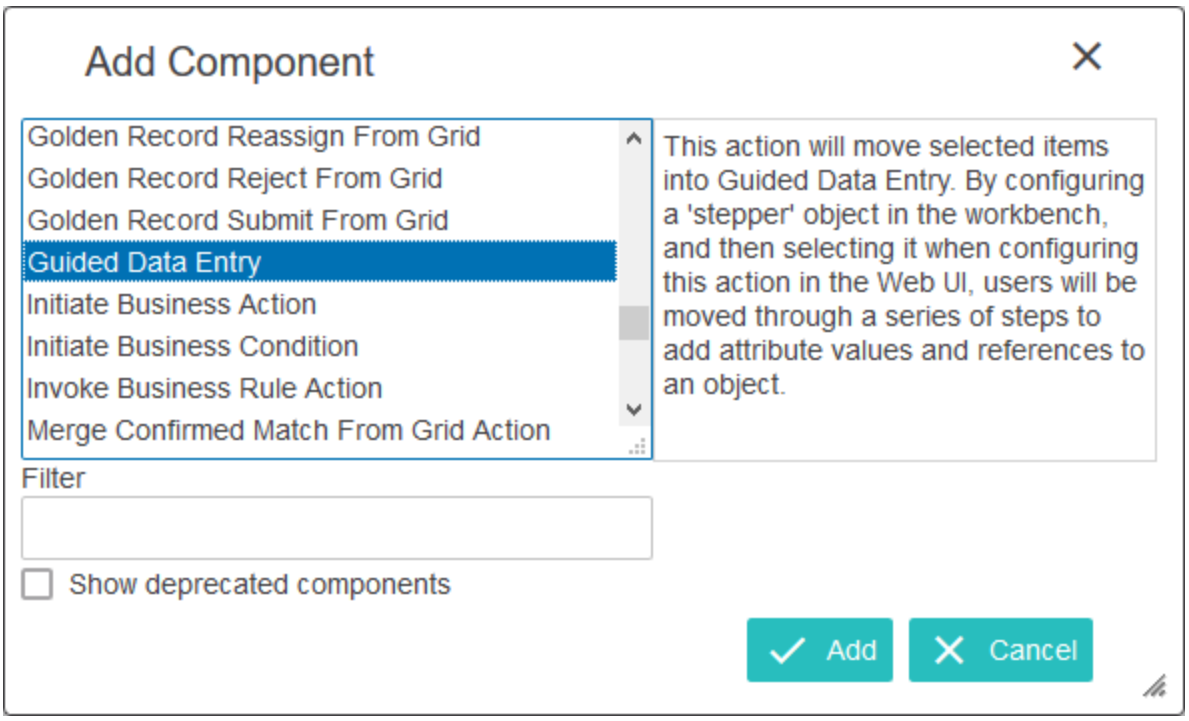
Guided Data Entry is enabled in the Web UI by adding a toolbar action button called 'Guided Data Entry' to a node list screen. When one or more items in a node list are selected, the 'Guided Data Entry' toolbar action button, if added, will display. By clicking it, users will open a Guided Data Entry window in which the configured attributes, attribute groups, and reference types for the selected objects will display. Users may then add attribute values or references to complete the Guided Data Entry 'stepper.'

To add the 'Guided Data Entry' toolbar action button, users must follow these steps:

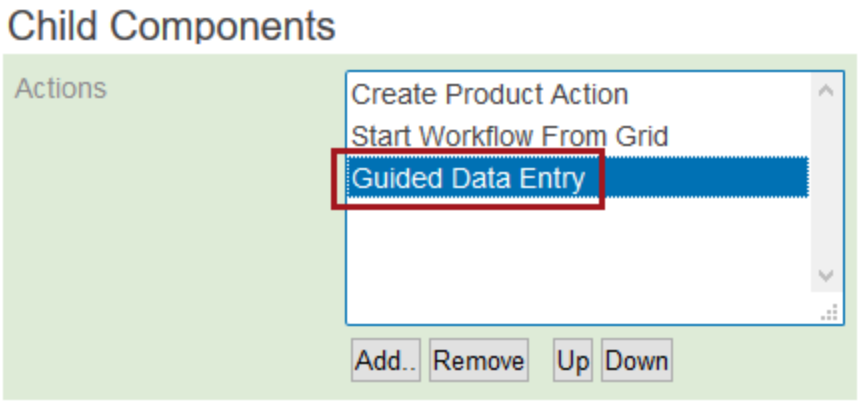
1. Navigate to the Node List onto which the Guided Data Entry toolbar action button should be added. Then enter the designer.
2. On the Node List's Child Components, under 'Actions,' click 'Add..'



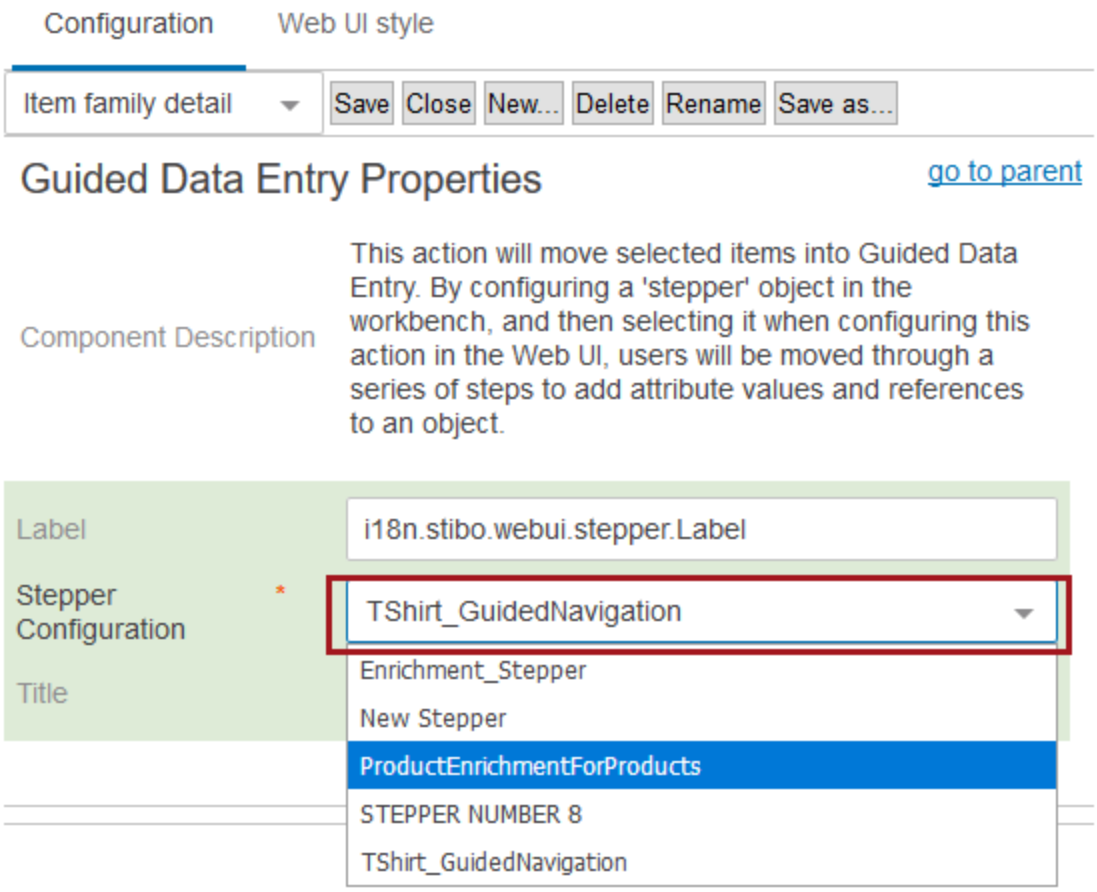
3. In the 'Add Component' dialog, select 'Guided Data Entry' and then click 'Add.'



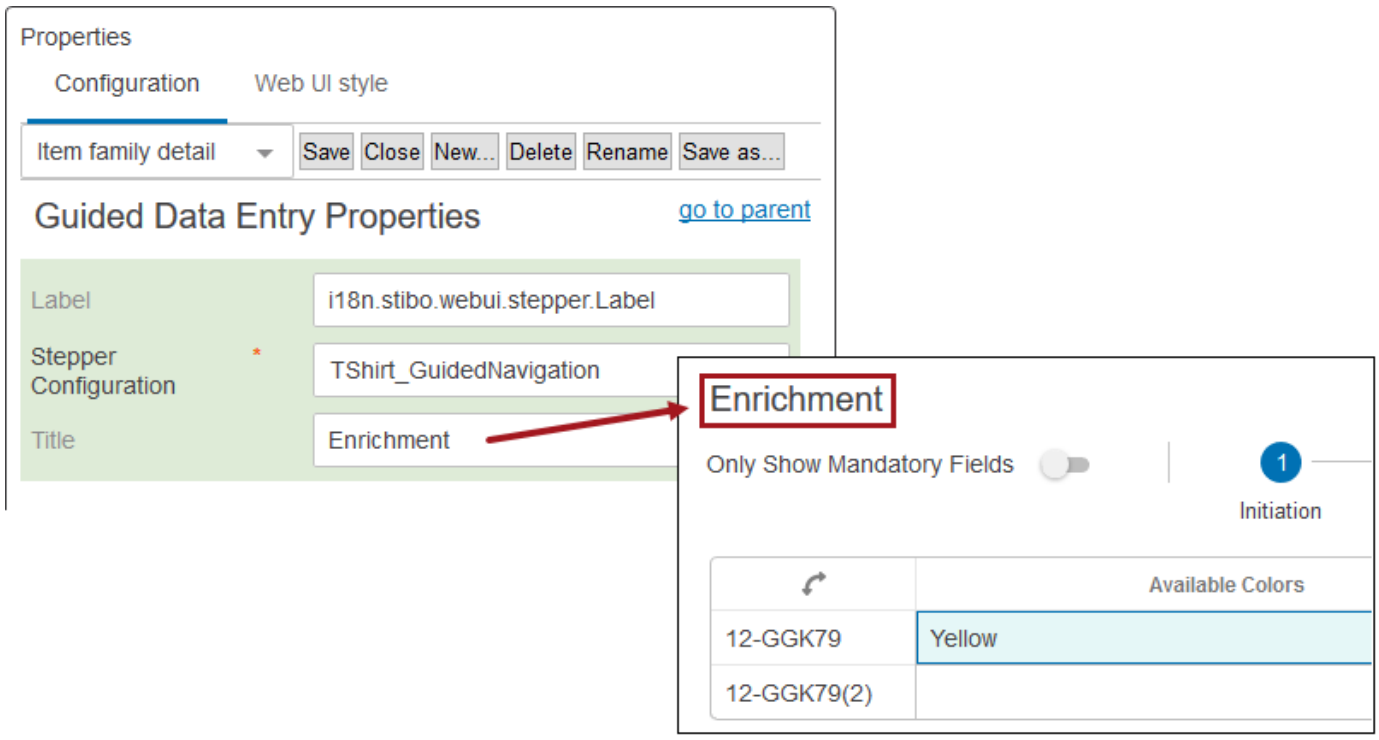
4. Back in Child Components, double click the newly added 'Guided Data Entry' toolbar action to edit the component.



5. In the 'Guided Data Entry Properties' window, users will find three parameters. The first parameter, 'Label,' determines the text that appears beside the Guided Data Entry toolbar action icon. If left unedited, the default text is 'Start Guided Data Entry.'
6. 'Stepper Configuration,' is where the user will select which stepper should be activated when the user clicks the 'Start Guided Data Entry' toolbar action. To select the stepper, click the field and select the appropriate stepper from the dropdown.



7. Text entered into the third field, 'Title,' populates the header label that displays at the top of the Guided Data Entry window. The title is static as users progress through the steps.

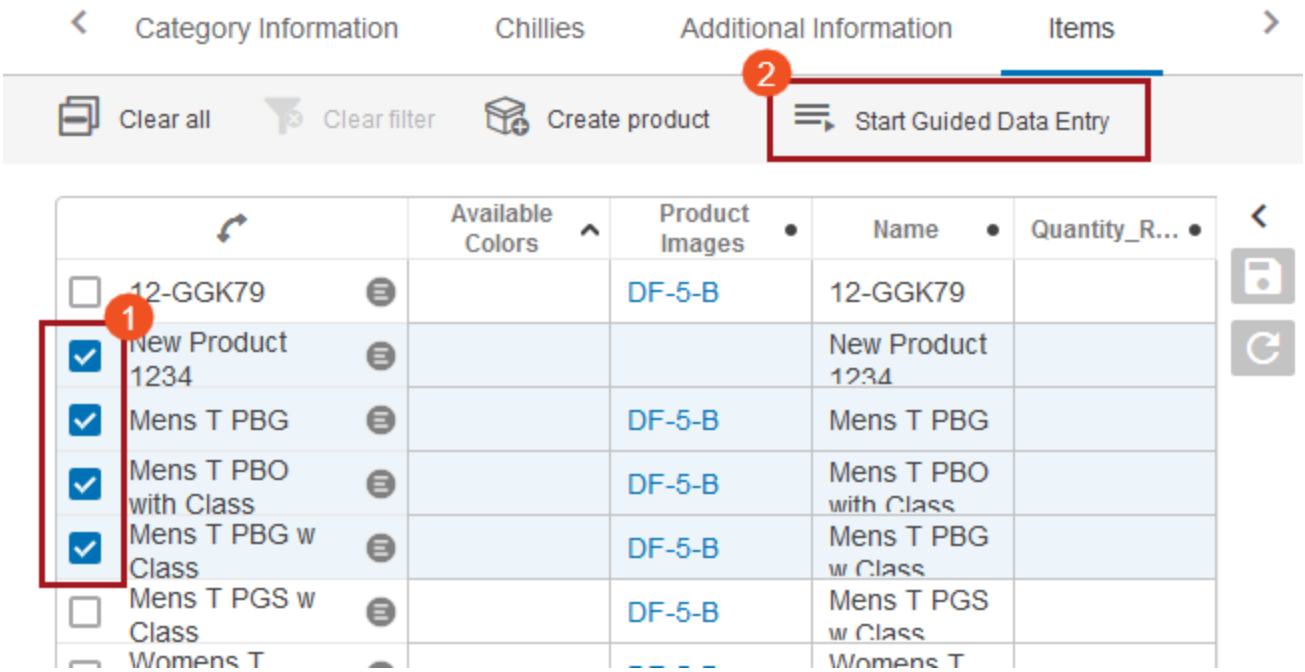


8. Save the configuration and the 'Guided Data Entry' toolbar action will be enabled on the selected node list.

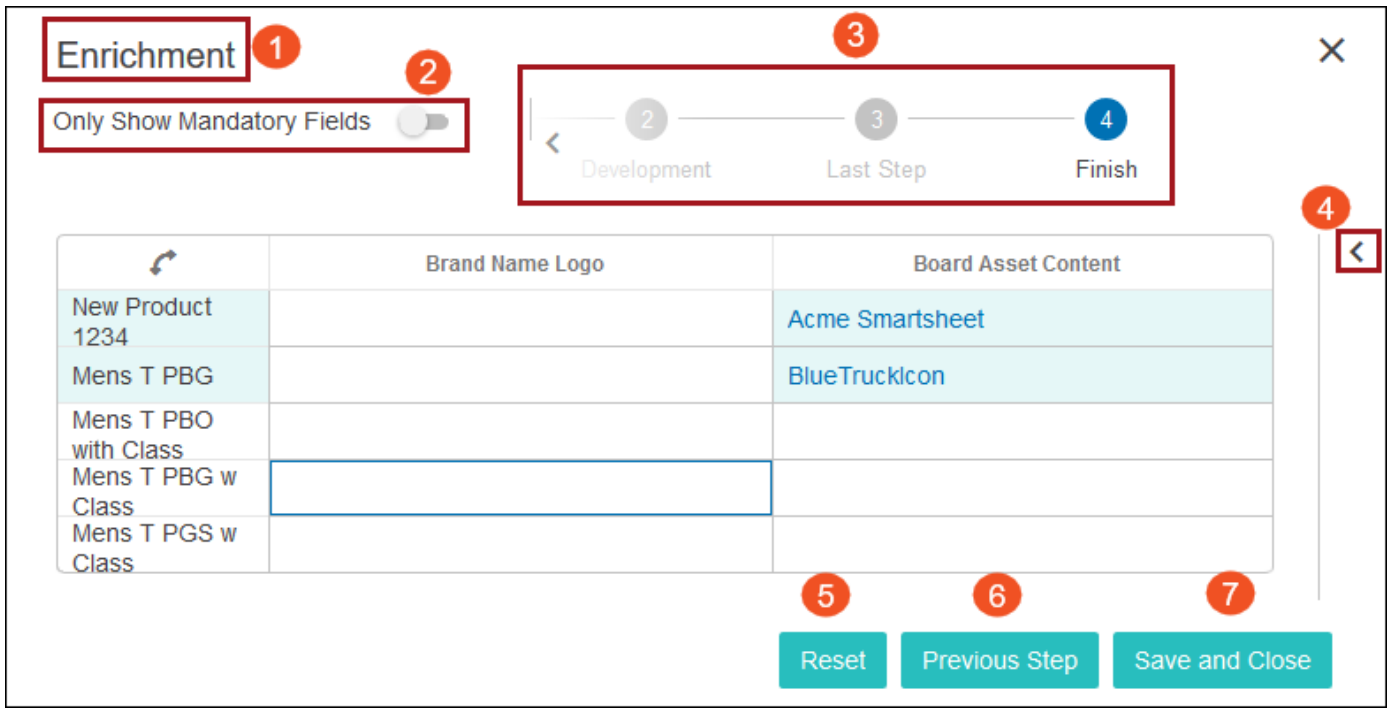
Using Guided Data Entry

To use Guided Data Entry in the Web UI, users must first have configured a screen-by-screen progression, or 'stepper' object,' in the workbench, and then added the 'Start Guided Data Entry' toolbar action in the Web UI on a Node List. Information on this can be found in the **Guided Data Entry** sections of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

1. On a Node List in the Web UI, select which products should be entered into Guided Data Entry. Once the desired products are selected, click the 'Start Guided Data Entry' toolbar action button. Placing the cursor over the toolbar action icon or text will bring up a tooltip that displays the name of the selected stepper object that was configured and named in the workbench. That configuration process is outlined in the **Configuring Guided Data Entry** section of the Guided Data Entry documentation.



2. The Guided Data Entry screen displays. A list of the selected products will display, as well as the attributes or reference types configured to display on the first step of Guided Data Entry. The various elements that make up the Guided Data Entry screen are numbered in the screenshot below. A list corresponding to those numbered items can be found below the screenshot.



1. **Title**: The name entered in the 'Title' field, found in the 'Start Guided Data Entry Properties' screen in the designer, will display.
2. **Only Show Mandatory Fields**: A switch that, when activated, will show only those attributes or reference types that have been designated as mandatory. It is set to inactive as default.
3. **Progress tracker**: The titles of all the steps that make up the 'stepper' display beneath the number of the step which displays in a circle. The number of the step will be highlighted blue when selected. Users may navigate between the steps by clicking on either the step number or step labels that display. For steppers with more steps than can be seen all at once in a Guided Data Entry window, a left arrow and right arrow display at either end of the progress tracker which can be clicked to navigate a user to any step in the Guided Data Entry stepper.
4. **Expand Edited items arrow**: When users click this arrow, a panel expands rightward into the Guided Data Entry window and lists all objects that have been edited in the current Guided Data Entry step.
5. **Reset**: This button will revert any entered value in the current step to the last saved value. This button is only applicable to data that has been entered on a given step. Clicking this button will not reset all entered data on all steps of the Guided Data Entry stepper.
6. **Previous Step**: This button will navigate the user to the previous step in the Guided Data Entry window. It is inactive on the first step of Guided Data Entry. Clicking the 'Previous Step' button will move the user backward one step in the Guided Data Entry stepper, and will not cause any newly entered data to be removed.
7. **Next Step / Save and Close**: On any step that is not the final step, a button labeled 'Next Step' will display. Clicking the 'Next Step' button will move the user forward one step in the Guided Data

Entry stepper, and will not cause any newly entered data to be removed. If users have added any data to any step in Guided Data Entry, on the final step the button in the lower right-hand corner of the Guided Data Entry window will be labeled 'Save and Close.' Clicking this button is the only way to ensure that data added into the Guided Data Entry window is saved. If no data has been added to the Guided Data Entry stepper, this button will be labeled only 'Close.' As stated previously, users may safely navigate between the steps in Guided Data Entry without losing unsaved entries, but users should not exit Guided Data Entry without first navigating to the final screen and clicking the 'Save and Close' button.

Handling Duplicated Attributes in Web UI

It is common for attributes to be linked to multiple attribute groups within STEP. This can lead to redundancy and confusion as attributes may appear multiple times on a Web UI screen when configured to display attribute groups that contain overlapping attributes. To manage this, it is possible to indicate groups of attributes that should not be displayed within the Web UI.

Even if duplication is not an issue, a single attribute group or multiple groups may contain sensitive information that should be hidden from view on the Web UI screen. A blacklisted attribute group can be used to hide this sensitive information.

To illustrate this functionality, consider attribute groups X, Y, and Blacklist. The 3 groups contain a variety of attributes, but each includes Attribute A.

If adding the Group Blacklist to the BlacklistedAttributeGroup for Group Y but not for Group X, then Attribute A will display with Group X attributes on the screen, while being omitted from Group Y attributes. This will eliminate duplicates being shown when displaying both groups on the screen.

When Group Blacklist is added as the BlacklistedAttributeGroup for both Group X and Group Y, then neither group will show Attribute A. Alternatively, if nothing is chosen as a BlacklistedAttributeGroup for either Group X or Group Y, then both groups will show Attribute A.

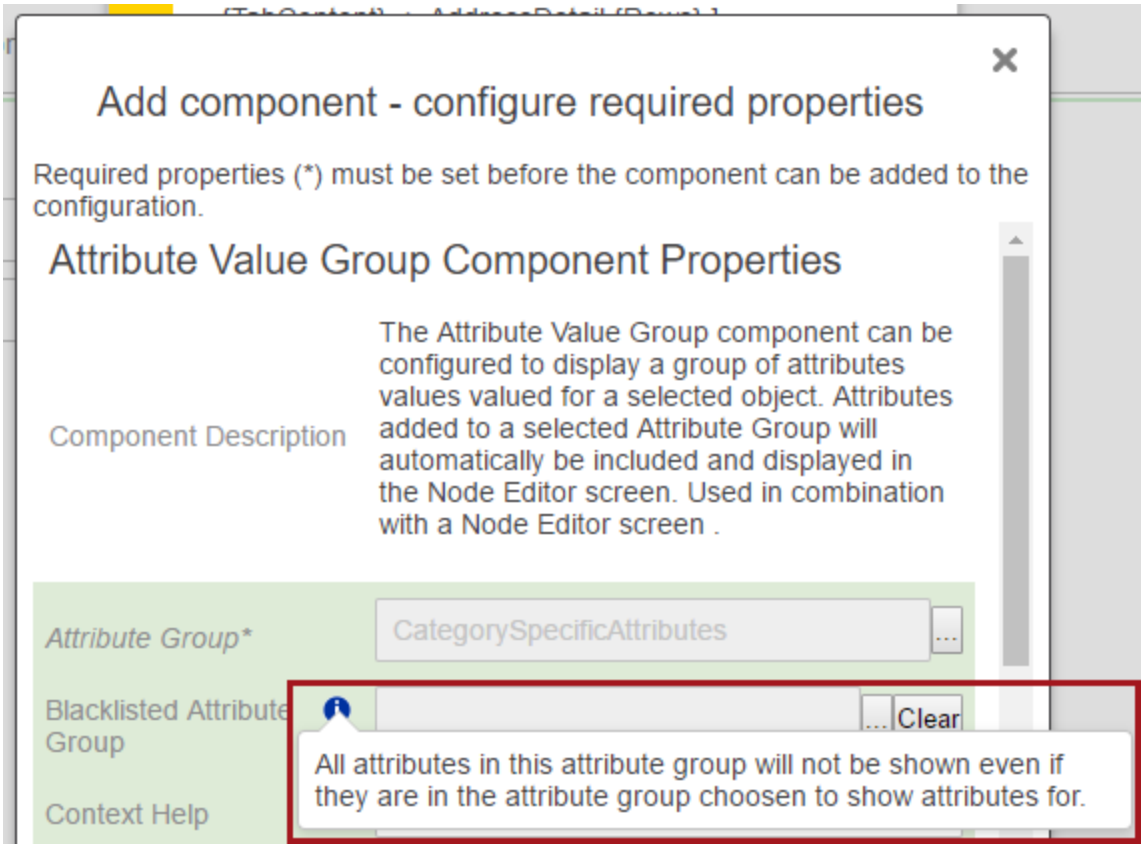
Create Attribute Group(s) to Hold Attributes Known to Exist in Multiples Groups

In the STEP Workbench, one or more attribute group(s) should be created to specifically hold attributes that should not be displayed within the Web UI.

More information about attributes and creating attribute groups is found under System Setup in STEP Help.

Setting up Blacklisted Attribute Groups in Web UI

Within the Web UI designer, the ValueGroup and ValueGroupHeader components have a BlacklistedAttributeGroup field which can be populated with an attribute group. This attribute group holds attributes that should not be displayed within the Web UI. Any attributes in the blacklisted attribute group will not appear on the screen. This feature can be used when displaying multiple attribute groups on the screen or even when using a single group.



Selecting a blacklisted attribute group in ValueGroup or ValueGroupHeader has no impact on other attribute groups shown on a screen and within Web UI. Each component operates independently of each other.

Important: To avoid confusion, it is recommended that any attribute groups created specifically to group blacklisted attributes are named accordingly.

Homepage Widgets

It is possible to configure a grid of widgets that display useful information on the Web UI Homepage, where users are directed after logging in. The purpose of the Widget Grid is to display a customizable overview of common tasks or information a user needs to more easily work in STEP. Widgets are meant as a quick way of getting an overview of a user's tasks and an easy way to reach actions that are often used.

Below is a list of some of the most commonly used widgets.

Prerequisites

It is expected that anyone configuring a Homepage widget is familiar with Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer.

Details on how to add a widget to the homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

Analytics Widget

STEP supports integration with data analytics tools like Tableau Server and Qlik Server in the STEP Web UI. Data analytics dashboards can be displayed in the Web UI in either a homepage widget or in a screen.

For more information on the Analytics Widget, see the **Analytics** section of the **Web User Interfaces / Using a Web UI** documentation.

Asset Importer Widget

The Asset Importer Widget allows users to import assets via an asset import configuration. Multiple asset importer configurations can be mapped to the same widget. The widget can also be set up to not specify a configuration at all, allowing users to choose from a full list of all configurations available in the system upon initiating an import.

For more information on the Asset Importer Widget, see the **Asset Importer Widget** section of the **Web User Interfaces / Using a Web UI** documentation.

File Loading Widget

The File Loading Widget allows users to select, or drag and drop, one or more files from their local machine for asynchronous transfer into a STEP hotfolder. More than one file loading widget can be added to a Web UI homepage, and more than one IIEP can be configured within each File Loading Widget. Depending on how the IIEP is configured, users can transfer either zipped files less than 50GB or standard files less than 600MB.

For more information on the File Loading Widget, see the **File Loading Widget** section of this guide.

HTML Asset Widget

The HTML Asset Widget is a versatile component that will load an asset from STEP assuming that it contains an HTML document and insert it within the widget. This can be used to display a rich message that can be updated by replacing the asset content from the STEP Workbench.

Impersonate User Widget

In support situations it is often relevant to be able to see exactly what the user experiencing the issue is seeing, including data and error messages. Web UI user impersonation enables a privileged user to act as another user, but using their own password so that the impersonated user's password is not revealed. When impersonating someone, all privileges, views, and access are exactly matched to the user being impersonated.

For more information, see the **Web UI User Impersonation** topic in the **System Setup / Super User Guide** documentation.

KPI Widget

The KPI Widget can be configured with a range different data profiling content. The dashboard widgets available in the Web UI can all be configured as content in the KPI Widget.

For more information on what data profile widgets are available, see the **Data Profile Widgets in Web UI** section of this guide.

Links Widget

The Links Widget can be configured with a list of links to Web UI screens (e.g., upload screen or processes screen), a node in STEP (product, asset, classification, entity, or publication) or to an external URL outside the Web UI. In addition small sections of text can be placed in the list by adding a StaticText or StaticHtml component. The text components can be used to write descriptive text for the links.

Mass Creation Widget

Once configured, the Mass Creation Widget enables users to start the process of creating new objects in Web UI. This widget is used in conjunction with the Mass Creation screen type, which allows users to on board multiple objects into STEP using Web UI screens instead of more complex import methods such as Smartsheets.

For more information, see the **Mass Creation Widget** section of this guide.

Policy Widget

The Policy Widget, when used in conjunction with a CMDM system and configured Data Policies, shows all the currently breached policies.

For more information, see the **Policy Widget** section of this guide.

Search Widget

The Search Widget allows for a quick (and configurable) search of objects in the STEP system. The Search Widget can be configured to search widely through STEP, or it can be configured to search only a narrow segment of STEP (i.e., Data Containers, Golden Record IDs, and Source Record IDs), depending on the needs of the user.

For more information, see the **Search Widget** topic within this guide.

Simple Importer Widget

A Simple Importer Widget allows Web UI users of all skill levels to reliably initiate an import on demand from the Web UI Homepage. Administrators have many options to allow their users to easily and accurately create and/or update products, entities, classifications; and their attribute values, reference types, and object type by dragging and dropping a CSV or Excel valid import file onto the respective Web UI Homepage widget. If desired, a Simple Importer Widget can also provide more advanced on demand import functionality when configured to utilize saved import configurations.

For more information , see the **Simple Importer Widget** topic within this guide.

Smartsheet Export Widget

The Smartsheet Export Widget allows users to easily download Smartsheets. Depending on how the chosen template is configured, this can be used for both data and template exports.

For more information, see the **Smartsheet Export Widget** section of the **Web User Interfaces** documentation.

Status Selector Homepage Widget

The Status Selector Homepage Widget allows a user to view tasks associated with the states of a particular workflow. If desired, the widget can also be configured to allow users to initiate objects into a workflow. Similar functionality is available on the Status Selector Sidebar Widget in Main.

For more information, see the **Status Selector Homepage Widget** section of the **Workflows in Web UI** documentation.

Text Widget

The Text Widget allows for the display of text on the Web UI Homepage. Since all users are directed to the Homepage after login, the Text Widget is a great way to display a custom welcome message and/or instructions to users regarding next steps after logging in.

For more information, see the **Text Widget** section of this guide.

Translation Status Widget

The Translation Status Widget is used for showing translation jobs. This widget displays the number of jobs that are in certain states for a selected Asynchronous Configuration. It is possible to navigate to a screen showing detailed information about each displayed state's job nodes.

For more information, see the **Translation Status Widget** documentation.

User Widget

The User Widget shows the username of the currently logged in user, and has a logout button to let the user safely log out of the Web UI.

Video Asset Widget

This widget is used to display the video content of an Asset in STEP. The assets configured in the widget has to be a video file. If it is a document or an image it will not appear in the widget.

Workflow Historical Line Dashboard

The Workflow Historical Line Dashboard widget displays historical data of the specified Workflow Profile as a line chart. This data must be generated on-demand via the Workflow Profile itself (in either STEP Workbench or Web UI).

For more information on the Workflow Historical Line Dashboard widget, see the **Workflow Historical Line Dashboard** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Workflow Profile Chart Dashboard

The Workflow Profile Chart Dashboard widget displays live data of the specified Workflow Profile as a pie or bar chart.

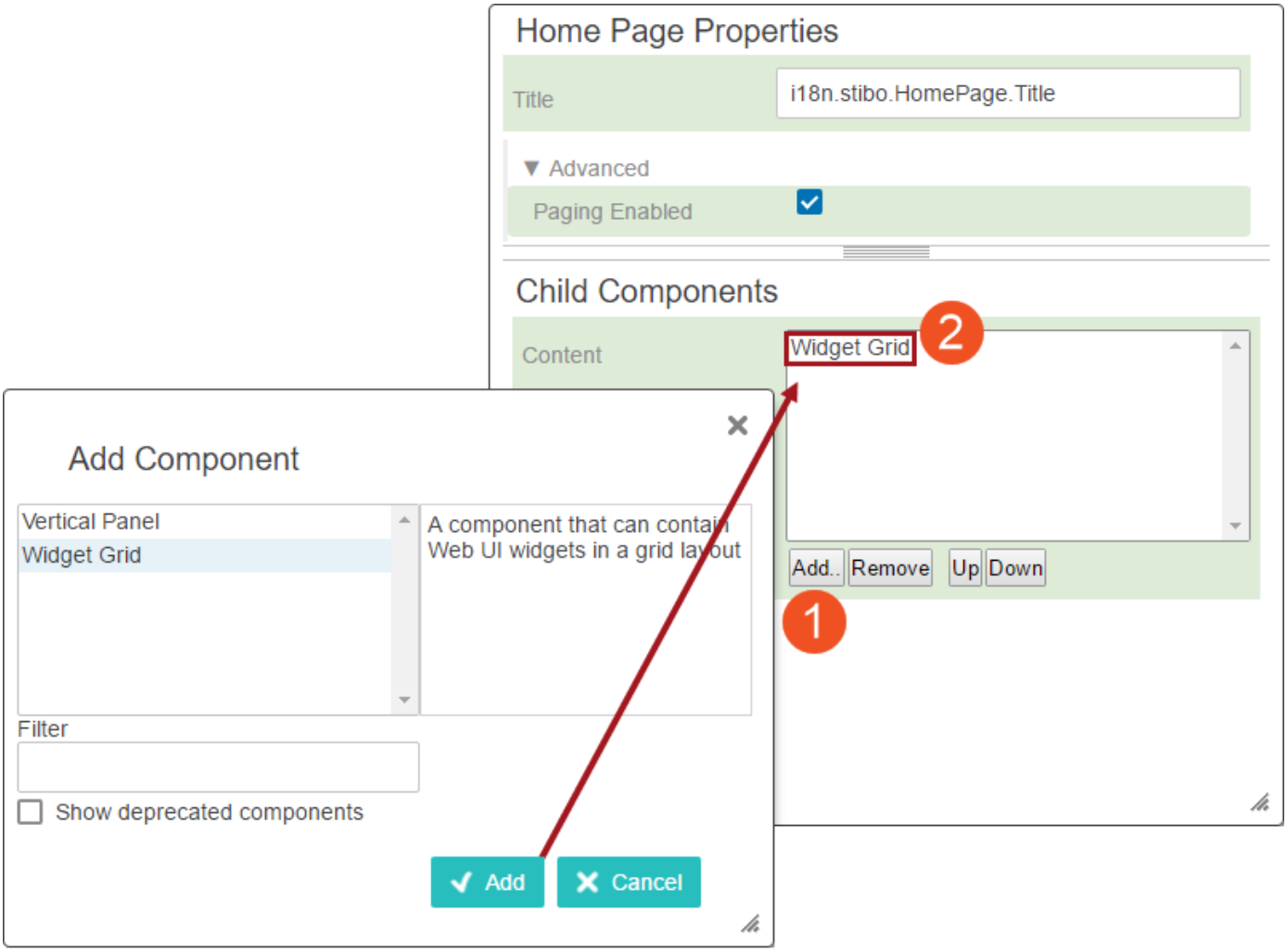
For more information on the Workflow Profile Chart Dashboard widget, see the **Workflow Profile Chart Dashboard** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Adding Widgets to a Homepage

Any number of widgets can be added to a Widget Grid. Web UI designers can choose to add all widgets to a single Widget Grid component, but they can also add multiple Widget Grids to a Homepage.

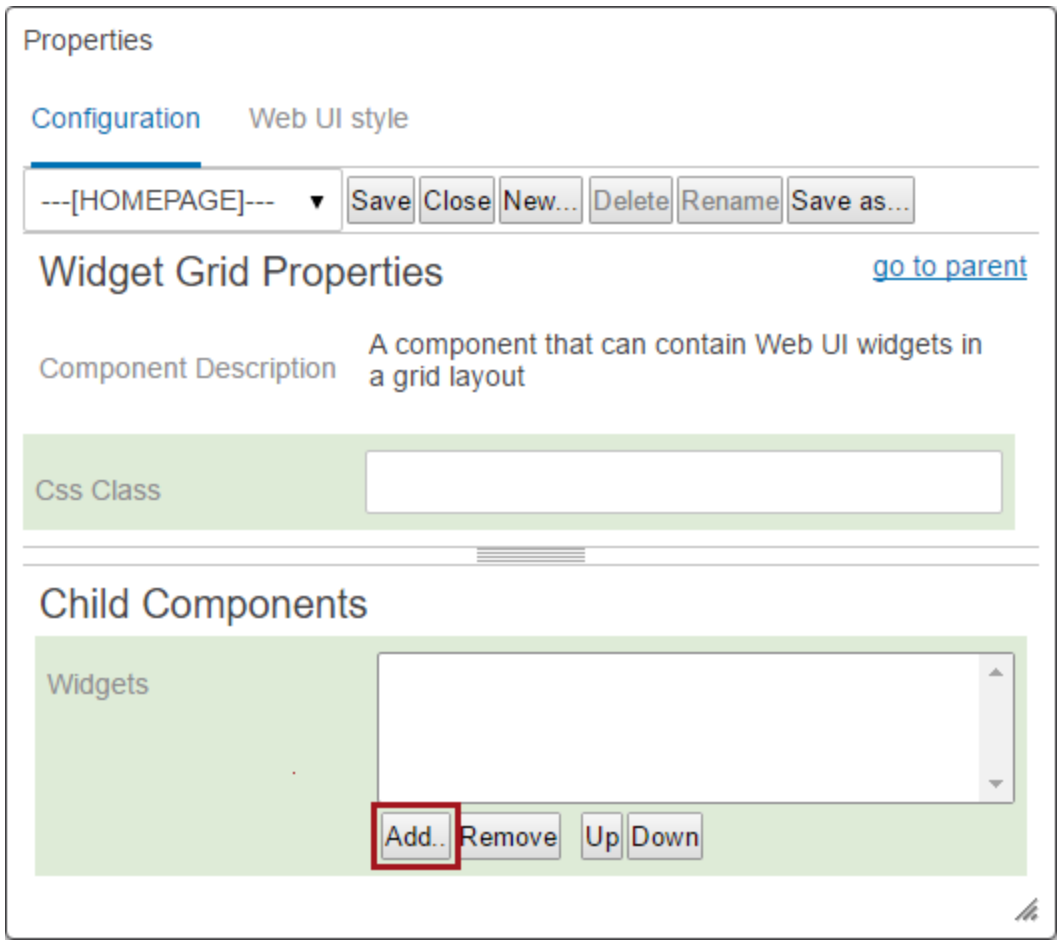
To add a widget to the Homepage:

1. Enter Web UI design mode.
2. On the Home Page Properties, add a **Widget Grid** as a **Child Component** to **Content**.

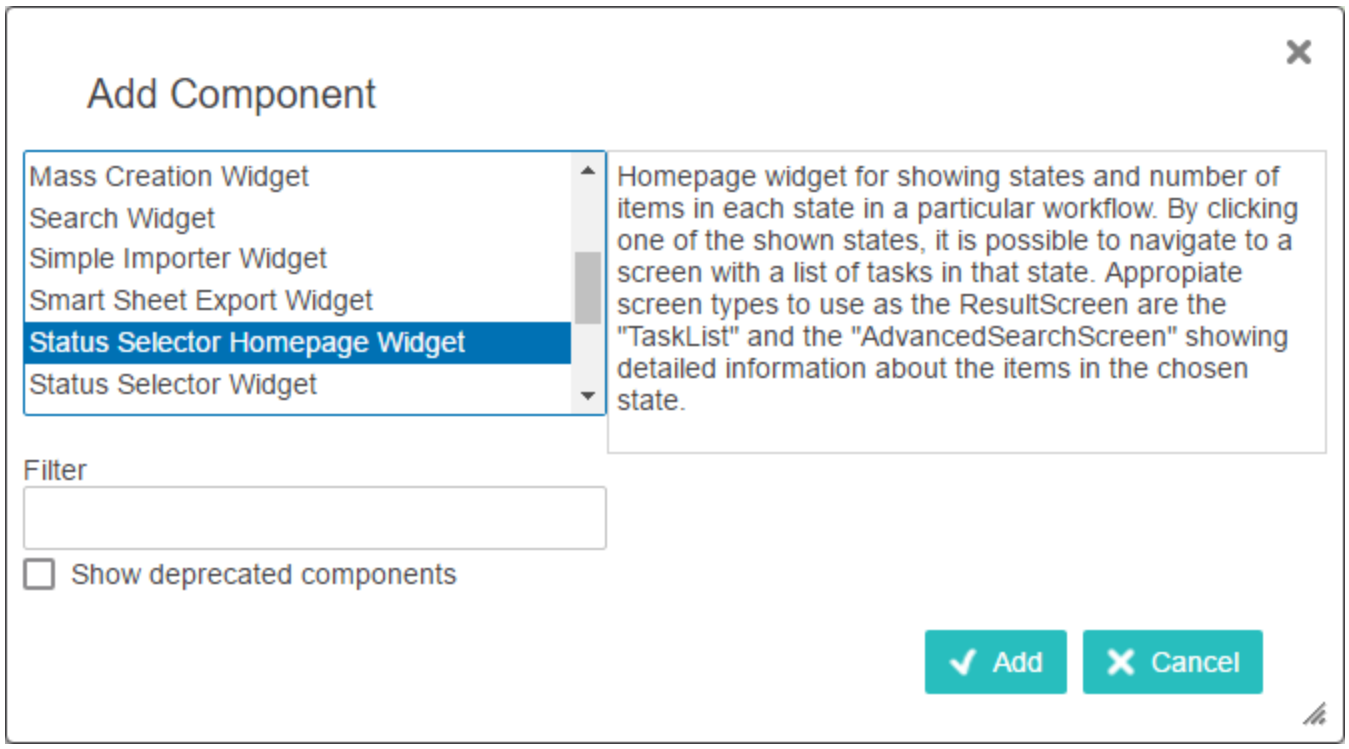


If more than one Widget Grid or Vertical Panel is listed, and a new Widget Grid is added, the new Widget Grid will appear at the bottom of the list.

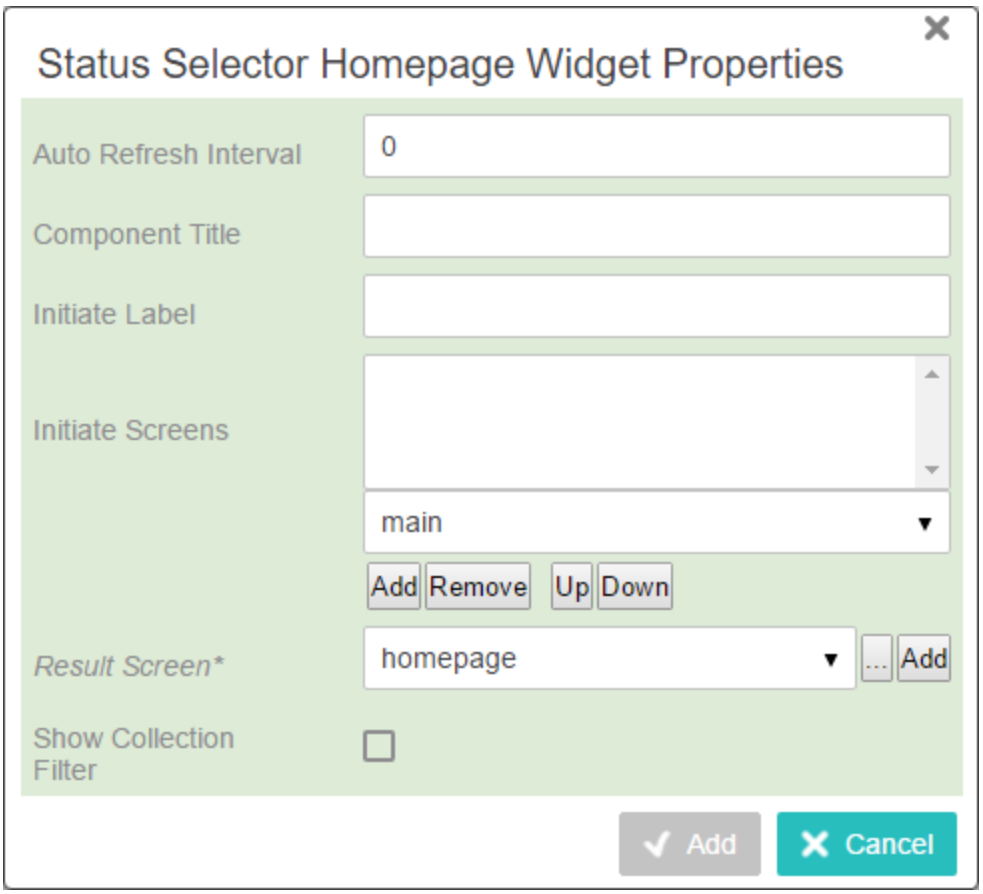
3. Double click on the newly added **Widget Grid** to display its properties.
4. Select **Add** in the Widgets Child Component section to display the Add Component dialog.



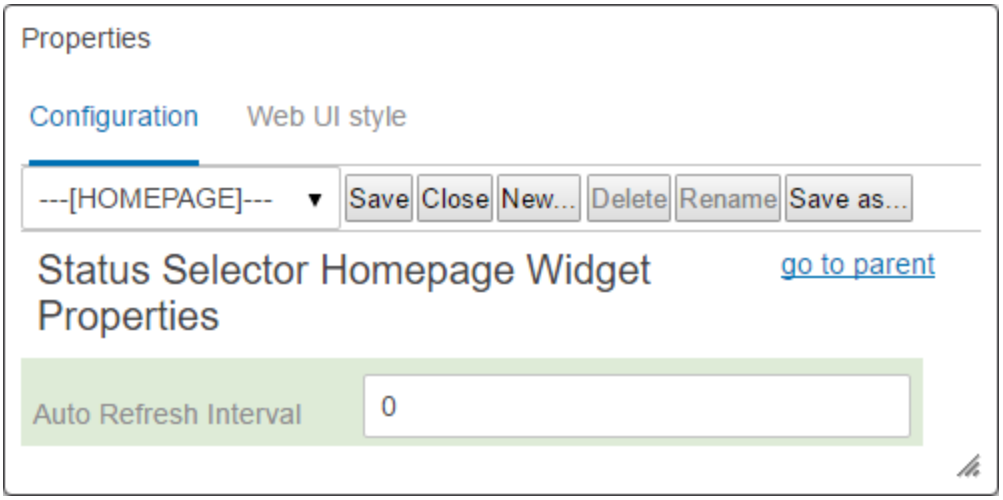
5. Choose the widget. In the example, **Status Selector Homepage Widget** is selected. Click **Add** to close the dialog and return to the Widget Grid Properties.



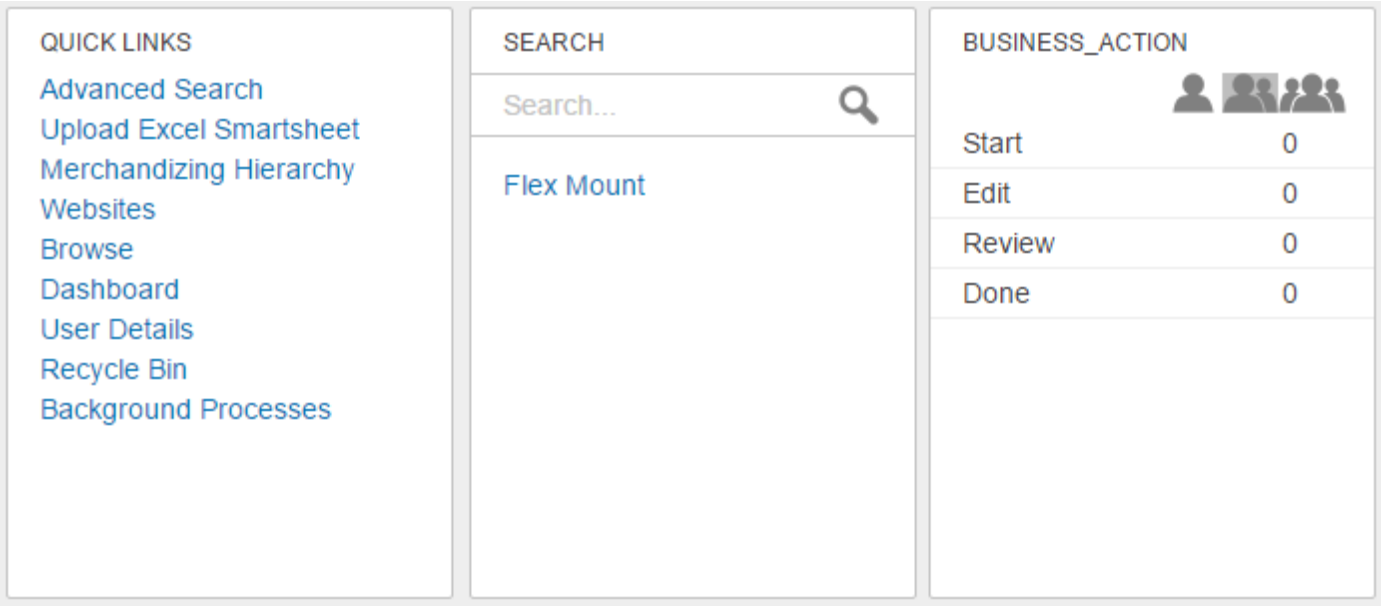
6. Configure the Widget Properties based on the parameters shown. Each widget has a different set of properties. See the documentation specific to each widget for additional information.



7. When the configuration is complete, select **Save** and **Close** the designer.



8. The widget should now appear on the Homepage.


QUICK LINKS
Advanced Search
Upload Excel Smartsheet
Merchandizing Hierarchy
Websites
Browse
Dashboard
User Details
Recycle Bin
Background Processes
SEARCH
Search...
Flex Mount
BUSINESS_ACTION
Start 0
Edit 0
Review 0
Done 0

Asset Importer Widget

The Asset Importer Widget offers users a simple method of importing assets from the Web UI Homepage. Multiple asset importer configurations can be mapped to the same widget, which are accessed individually by dragging and dropping files into the appropriate area on the widget or by clicking on the **Select File** button for the corresponding configuration.

Before this widget can be used, ensure that the Asset Importer functionality has been enabled and that there are configurations available on the system.

For more information on enabling Asset Importer, see the **Asset Importer Initial Setup** section of the **Asset Importer** documentation.

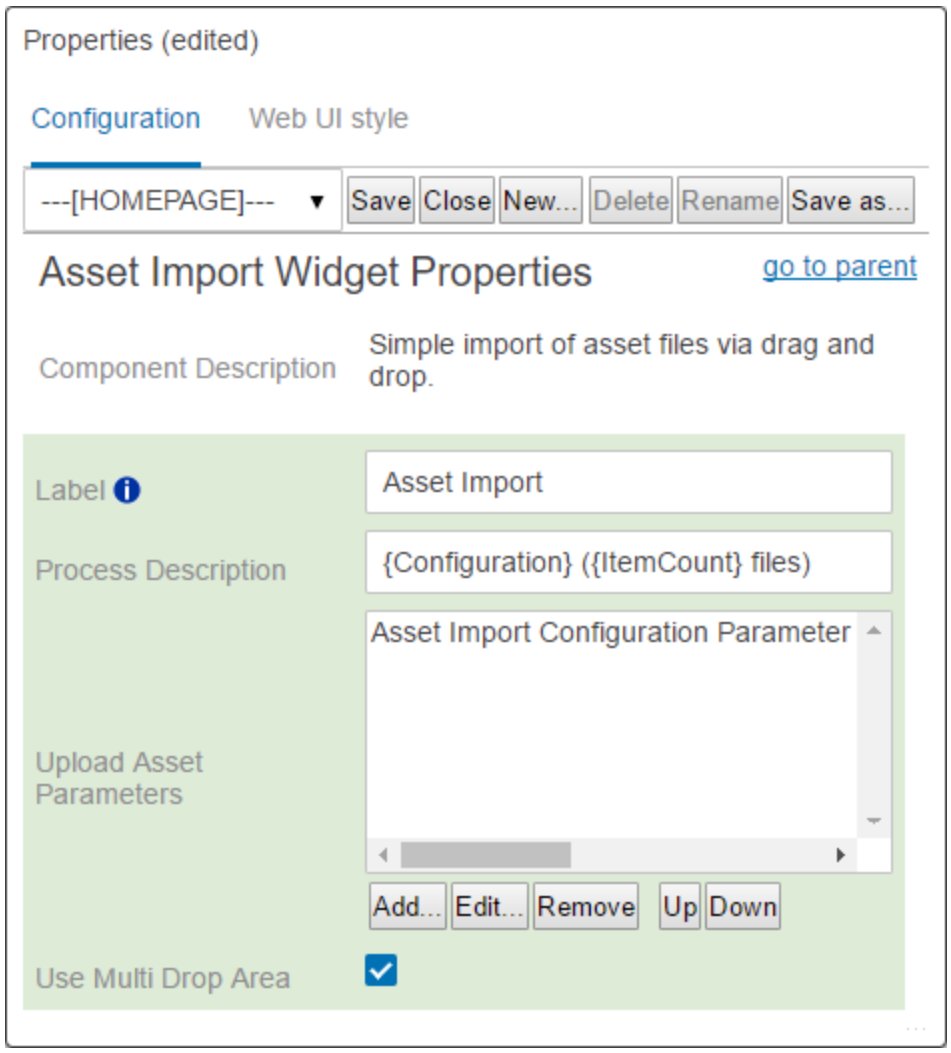
For more information on creating asset importer configurations, see the **Asset Importer Configuration Overview** section of the **Asset Importer** documentation.

Configuration

It is expected that anyone configuring the Asset Importer Widget is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer.

For information on adding a widget to the homepage, see **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

1. When configuring the Asset Importer Widget for the Homepage, there are four optional parameters to consider; Label, Process Description, Upload Asset Parameters, and Use Multi Drop Area.

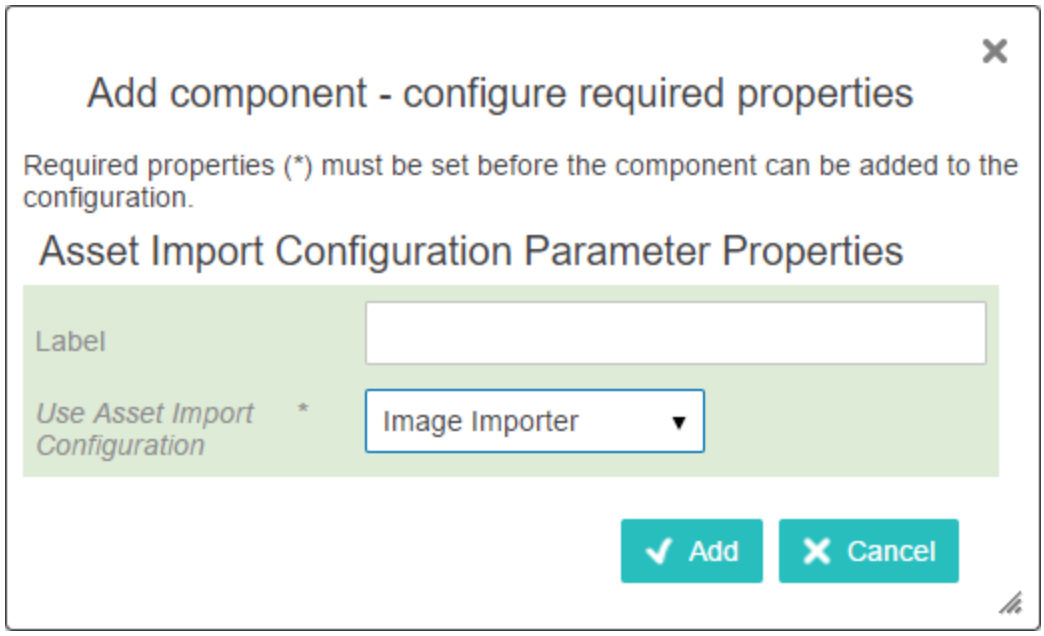


2. In the 'Label' parameter, enter a label for the widget.
3. In the 'Process Description' parameter, create a template for the background process description. The template may contain a number of place holders that are expanded when the background process is started.

   Available placeholders include:

   - **[Action]**: The name of the action.
   - **[Configuration]**: The asset importer configuration.
   - **[ItemCount]**: The number of files to import.
   - **[ImportFile]**: The name of the file(s) in a comma separated list.
4. In the 'Upload Asset Parameters' field, click **Add** (and follow the below steps) to map an asset import configuration to the widget. If no selections are made, the user will be prompted to specify which configuration to use among all those present on the system upon import.

- In the dialog that appears, enter a label for the area in which the configuration will reside.
- Select the desired Asset Configuration.
- Click **Add** when finished.



5. In the 'Use Multi Drop Area' parameter, check the box to enable multiple drop areas on the widget. Each of these drop areas represent an individual asset importer configuration that was specified in the above step. If unchecked, the widget will have one large drop area, that when used, will prompt you to select a configuration from those specified in the previous step.

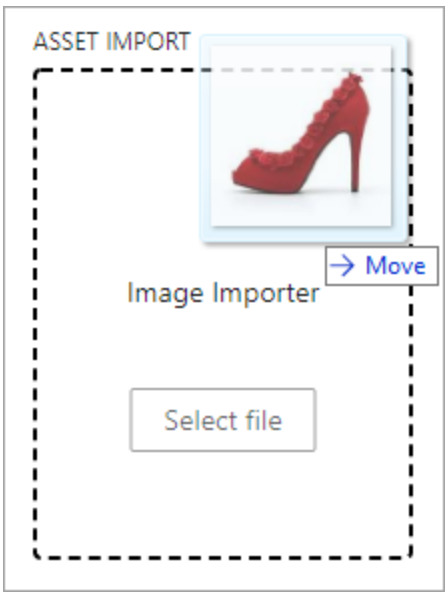
Note: It is recommended to leave the box unchecked if you want to map many different configurations to the same widget.

Importing Assets

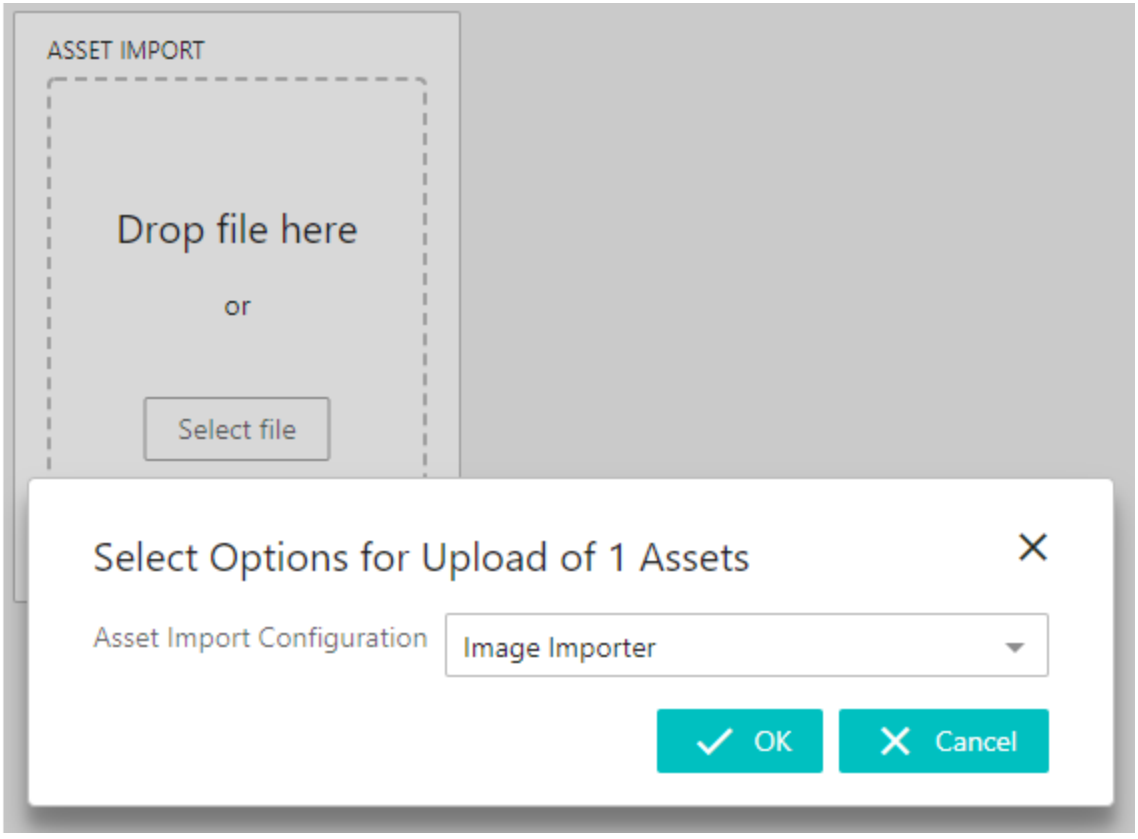
Once the widget is configured, assets can be easily uploaded by either dragging and dropping the relevant file into the widget drop area or by clicking on the **Select File** button for the corresponding configuration.

Drag and drop

Files can be dragged and dropped directly into the widget. Once dropped, the user will be provided with a link to the background process.

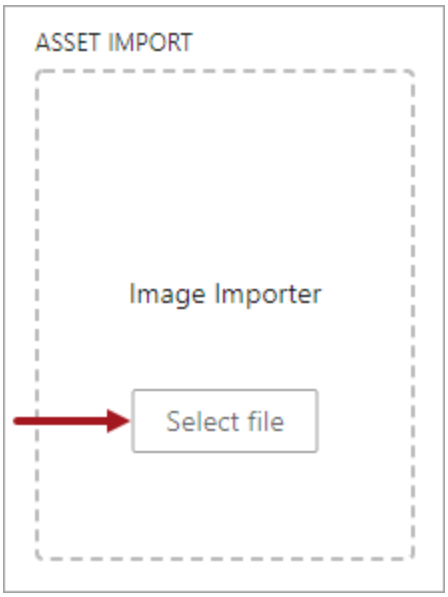


If 'Use Multi Drop Area' is not configured, the user will be prompted to select a configuration. Once a selection is made, click **OK** and the import will initiate.



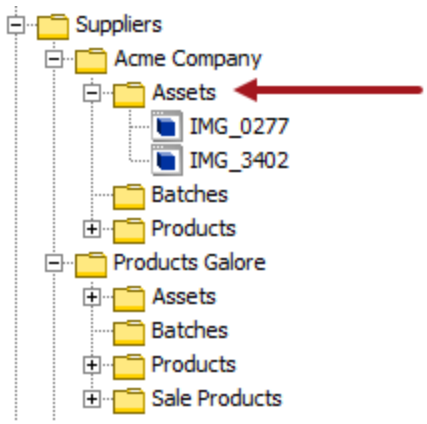
'Select file' option

In addition to drag and drop, users can click **Select file** for the corresponding importer configuration.

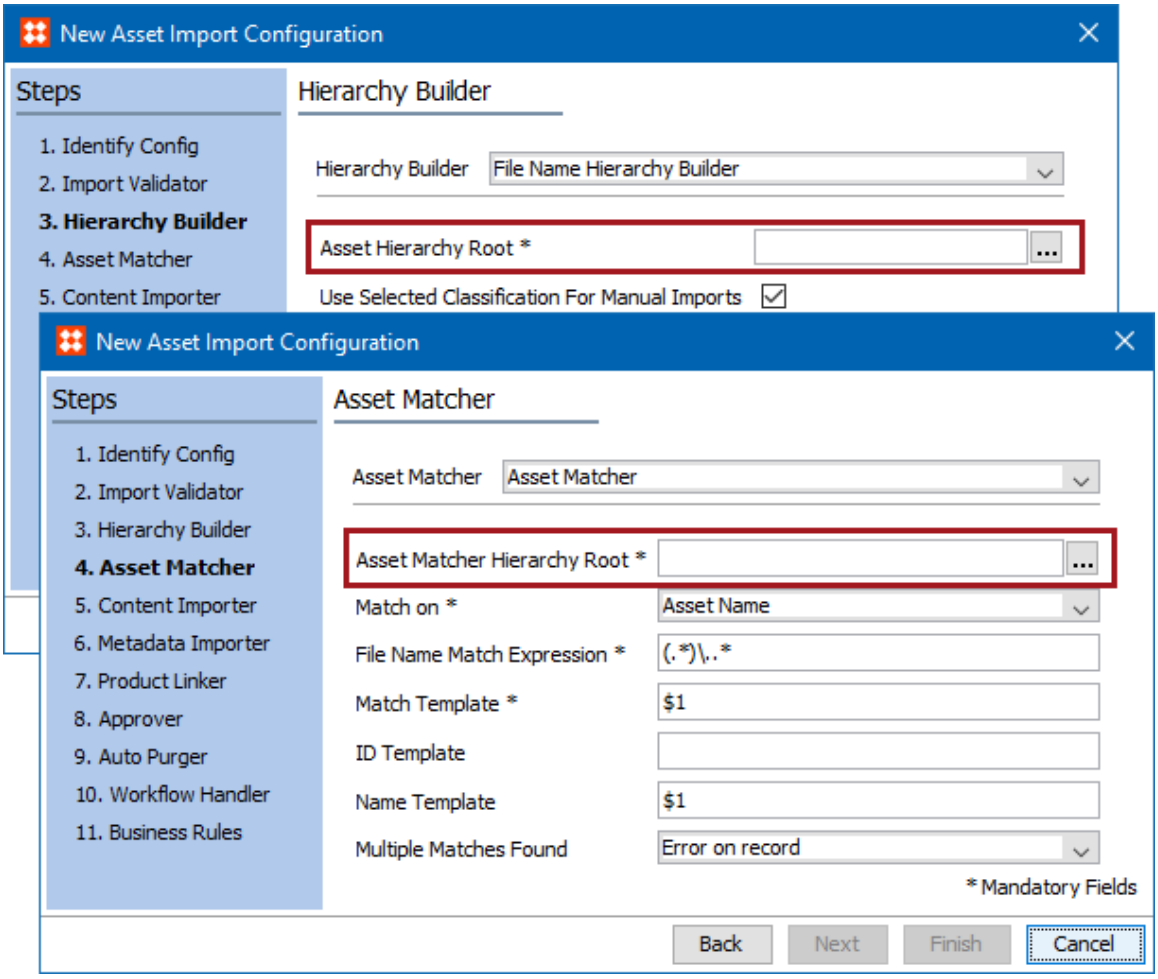


Supplier / vendor users

Supplier selection is important in Web UI. If a user is a member of multiple vendor groups, they are able to upload assets to a specific supplier that they are acting on behalf of and the supplier selection is passed along in the process. The Supplier ID chosen from the Corner Bar Supplier Selector will be passed to the import background process so that the correct supplier / vendor classification assets folder is selected to import the asset into.



Successful importing relies on the proper configuration of the root selected for Hierarchy Builder and the root selected for Asset Matcher within the asset import configuration.



Users also need to be aware of any matching products, which are currently below a product node, and should only link to products owned by the selected vendor.

See the **Corner Bar Supplier Selector Component** topic for more information.

Data Profile Widgets in Web UI

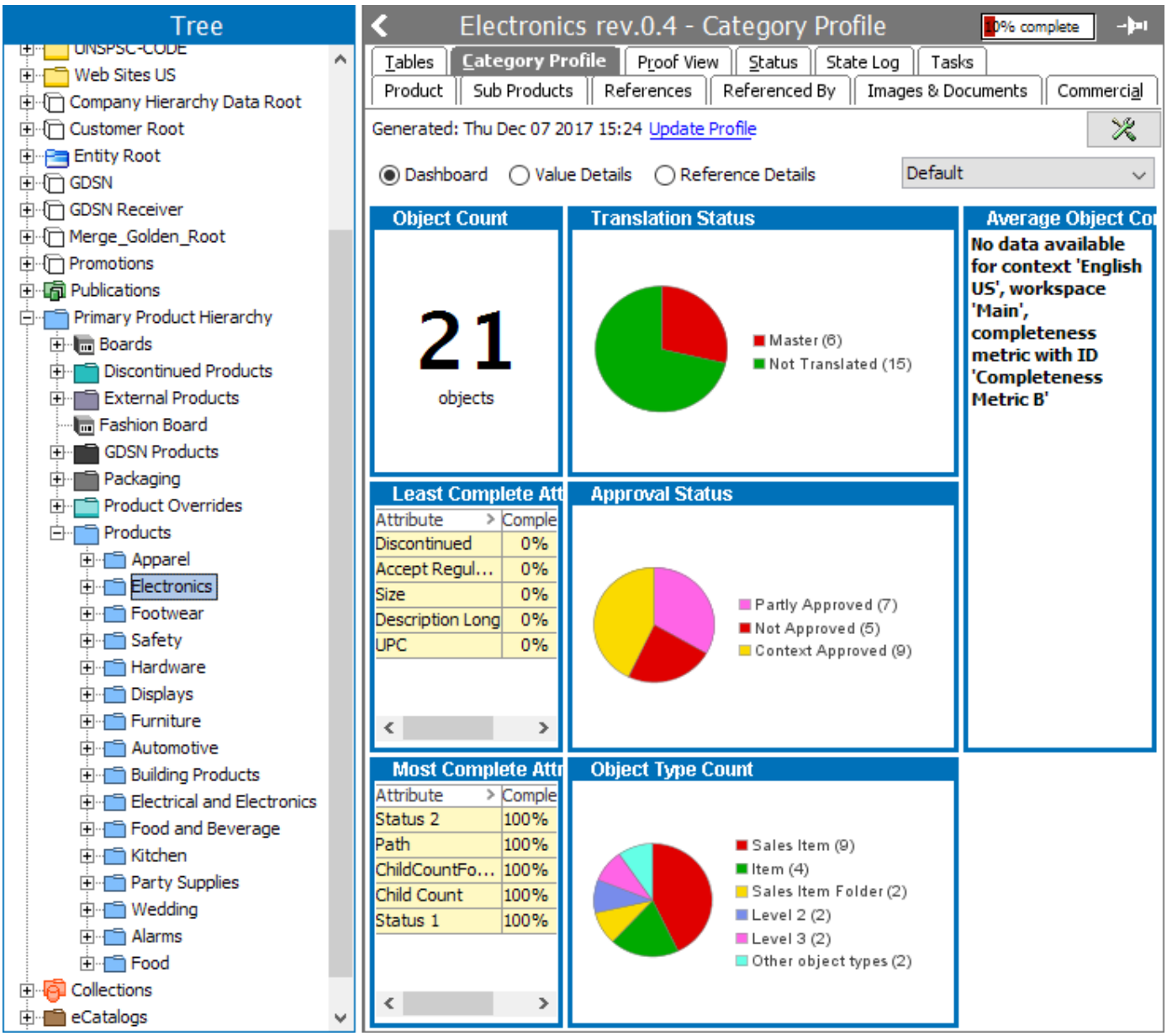
Like data profile dashboards in STEP Workbench, profiled data can also be displayed using the KPI widgets in Web UI.

To add widgets to the homepage, add the widget 'KPI Widget' to an applicable page, specify a selection (what node to display profiled data from), and choose the desired child component. To add one to a node in the hierarchy add the desired widget as a child component.

Note: Widgets added to a node in the hierarchy will pull profiled data from its child nodes automatically. When adding a widget to the homepage, however, the user must specify where to pull profiled data from via the Selection field. In either case data will only display so long as a profile has been generated for the applicable dataset.

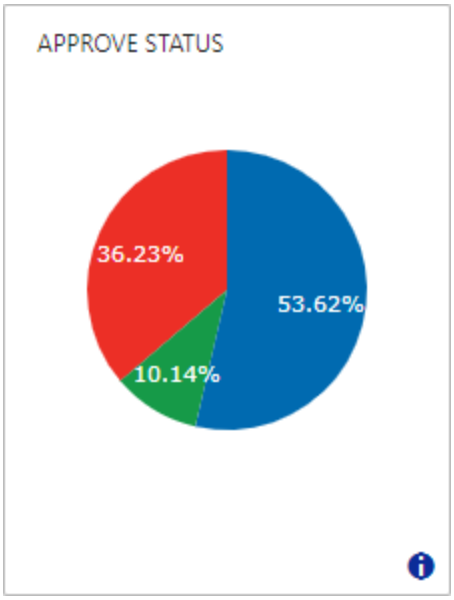
All available data profile widgets found in Web UI are detailed below.

Important: The profile has to be Generated / Updated for the selected STEP object hierarchy configured in the Data Profile widgets for the graphical representation to be visible on the Data Profile widgets. At times all the configuration will be correct, if the ability to see anything in the widget is lacking, then the user has to Generate the Profile (if it's for the first time), or update the profile if already generated. See image below for reference.

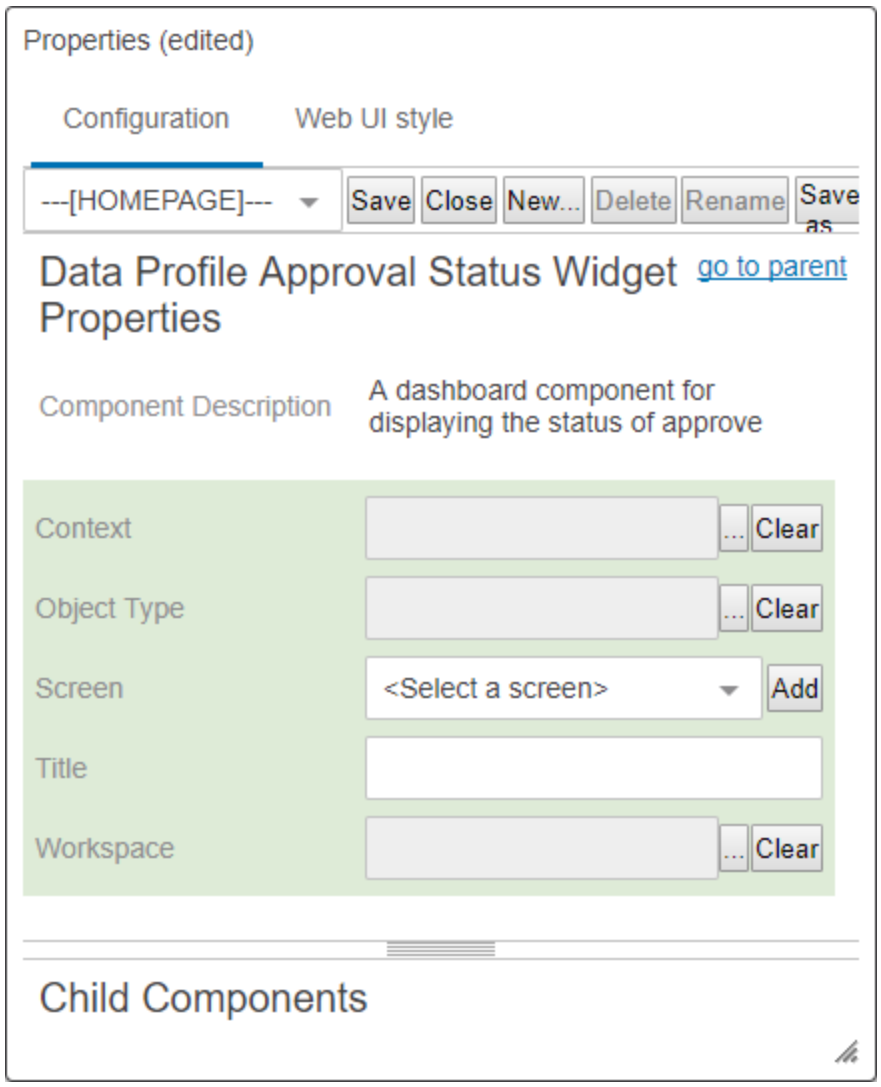


Approve Status

This widget displays the approval status of objects in the data profile.



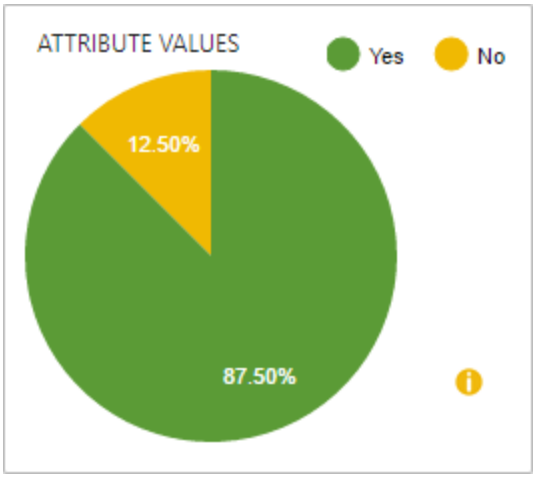
Configuration options include:



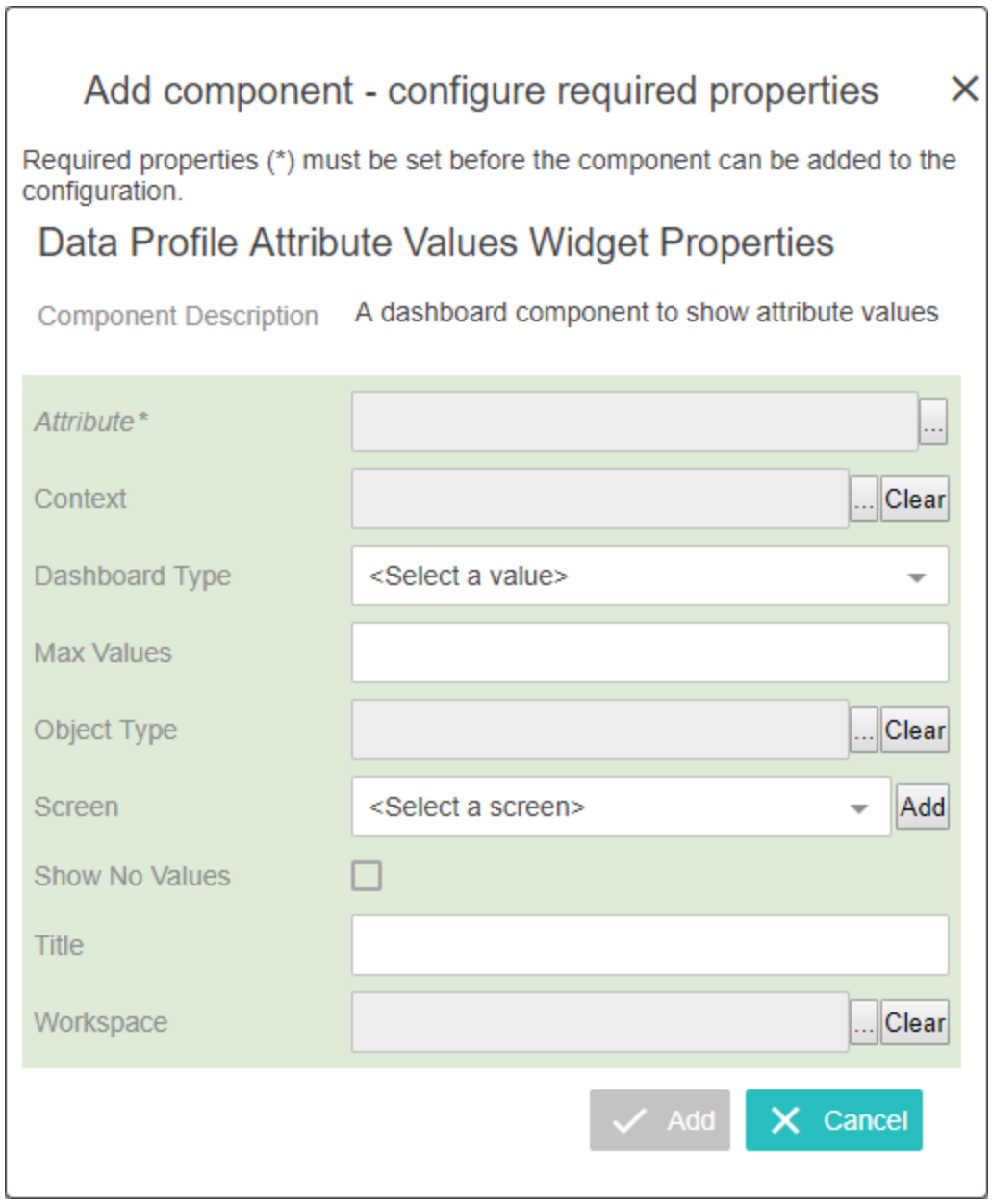
- **Context** - Pulls data from the specified context.
- **Object Type** - Filters data via object type.
- **Screen** - Links the graph to another screen in the Web UI. The selected screen must be a Generic Search screen.
- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

Attribute Values

This widget shows the distribution of values for the specified attribute across objects in the data profile.



Configuration options include:



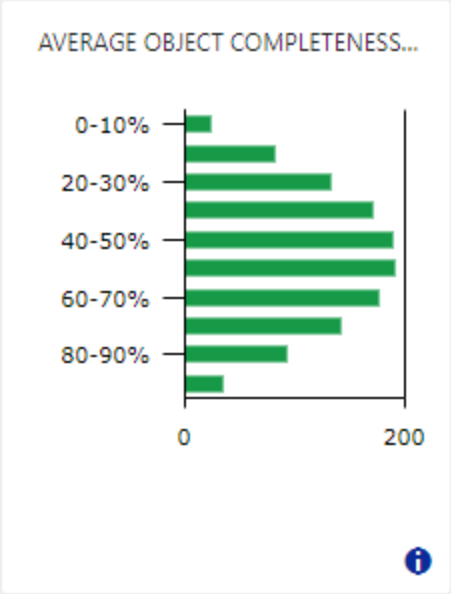
- **Attribute** - Specifies which attribute to pull values from. Defining this configuration is mandatory.
- **Context** - Pulls data from the specified context.
- **Dashboard Type** - Determines whether to display the data as a pie chart or bar chart.
- **Max Values** - Specifies the maximum number of distinct values to display. By default this field is set to -1, which means 'all values'. If the specified maximum is exceeded, the remaining (smaller) values will be placed in the "Other values" group.
- **Object Type** - Filters data via object type.
- **Screen** - Links the graph to another screen in the Web UI. The selected screen must be a Generic Search screen.

- **Show No Values** -Displays the number of objects that have no value for the specified attribute when the box is checked.
- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

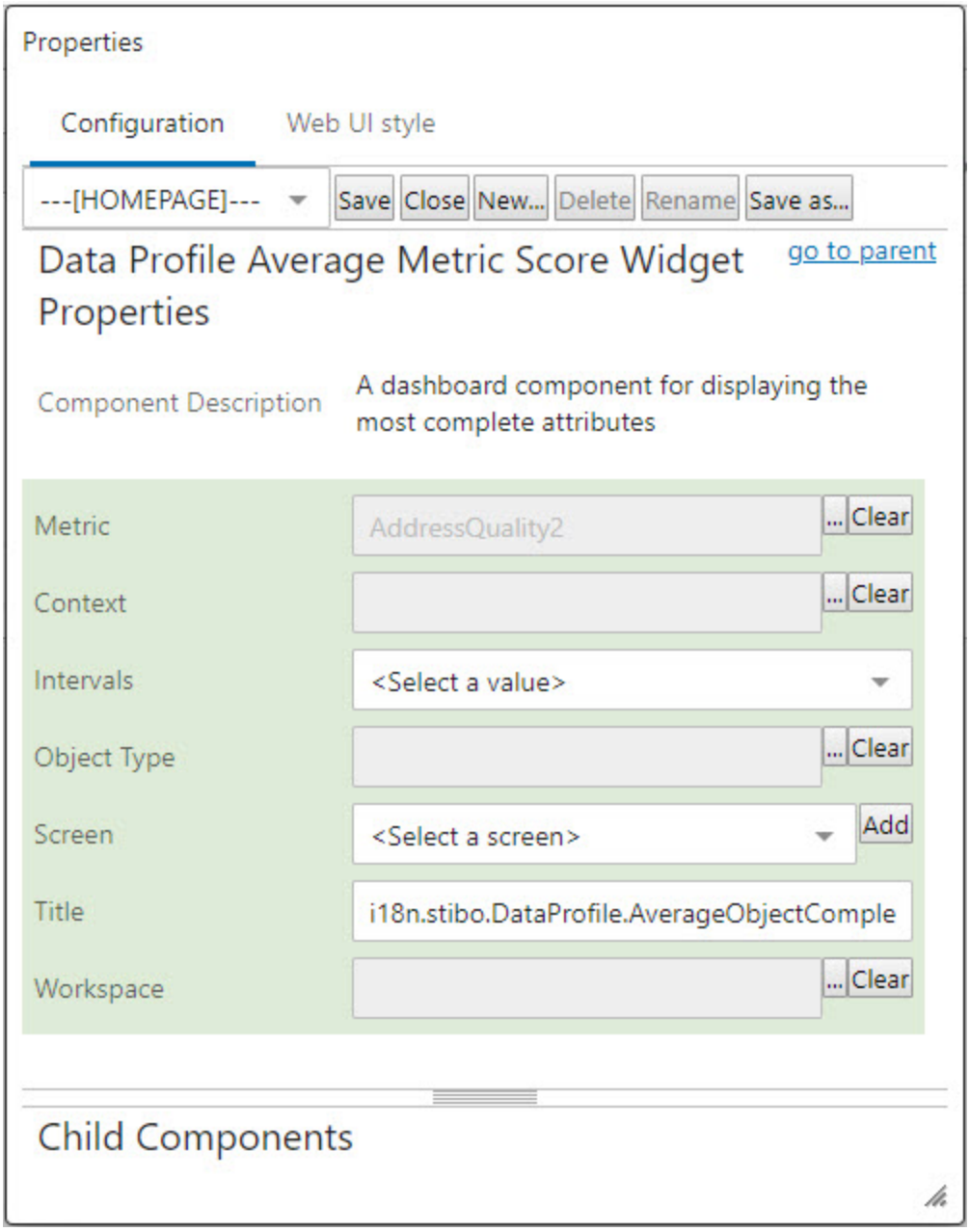
Important: Any attribute that is full text indexed, multi-valued, calculated, or has values with inline references is not compatible with this widget.

Average Metric Score

This widget displays the results of a specific metric applied to the data profile.



Configuration options include:



- **Metric** - Determines which metric to evaluate the data with. Note that the metric must be specified in the Profile Configuration and data must have been profiled using that configuration before the widget can show any data. For more information, see the **Profile Configuration** section of the **Data Profiling** documentation.
- **Context** - Pulls data from the specified context.
- **Intervals** - Displays the bars of the graph in intervals of 2, 4, 5, 10, or 20.
- **Object Type** - Filters data via object type.
- **Screen** - Links the graph to another screen in the Web UI. The selected screen must be a Generic Search

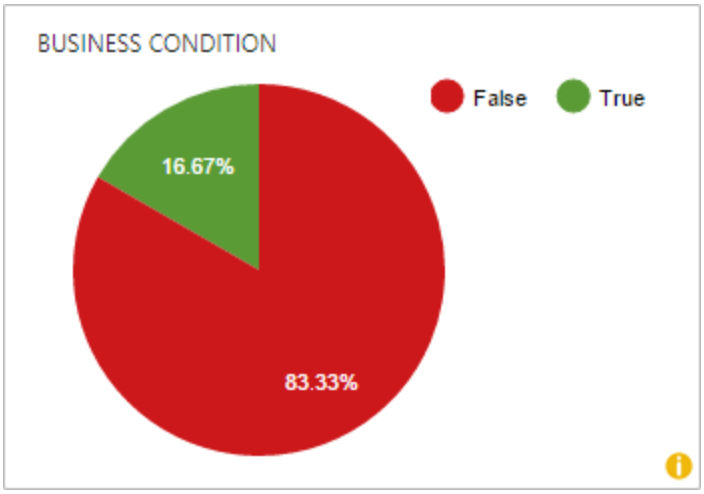
screen.

- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

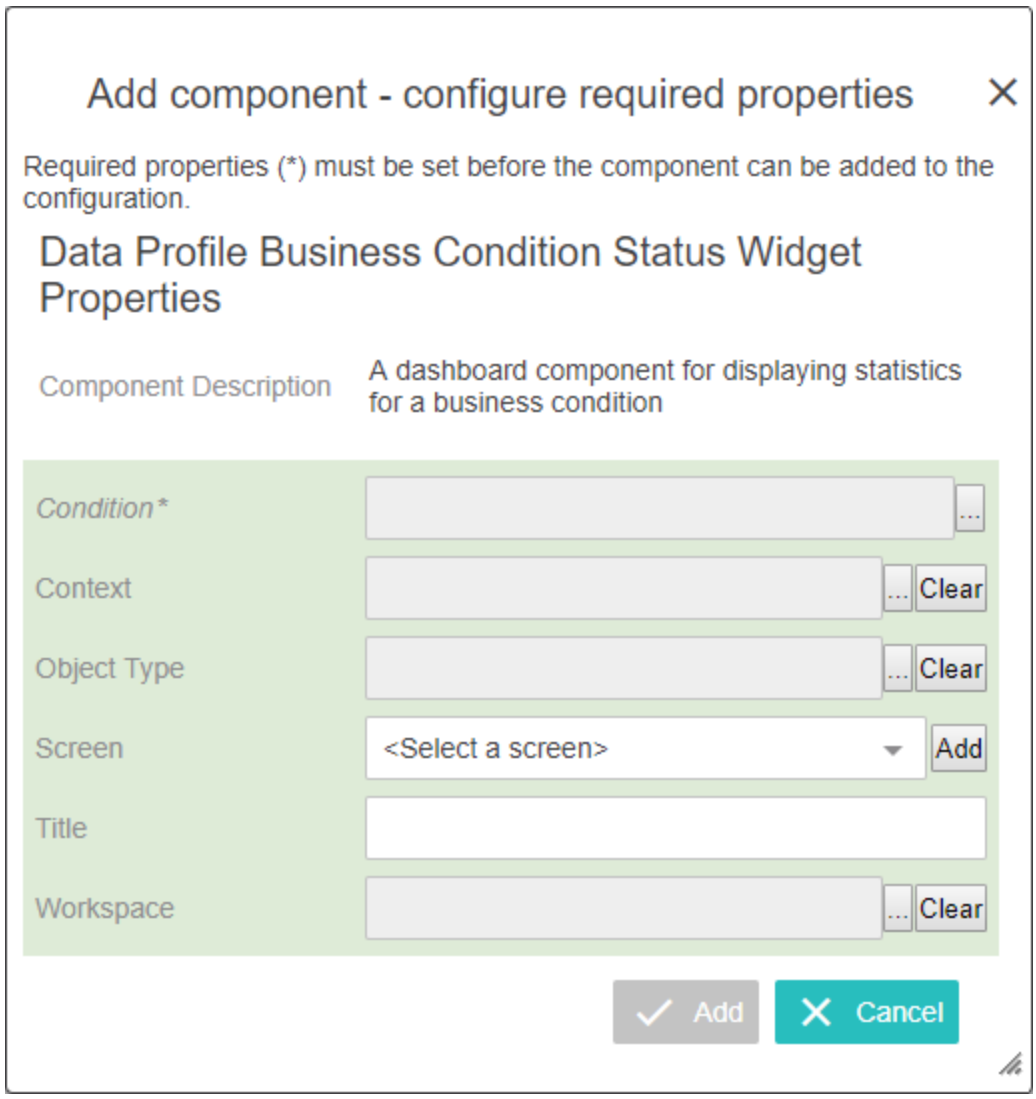
Condition Status

This widget displays the result of testing a business condition during profiling.

Note: If the test of the business condition results in an error, the test is reported as failed.



Configuration options include:



- **Condition** - Determines which business condition to test when profiling. Note that the condition must be specified in the Profile Configuration and data must have been profiled using that configuration before the widget can show any data. For more information, see the **Profile Configuration** section of the **Data Profiling** documentation.
- **Context** - Pulls data from the specified context.
- **Object Type** - Filters data via object type.
- **Screen** - Links the graph to another screen in the Web UI. The selected screen must be a Generic Search screen.
- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

Least Complete Attributes

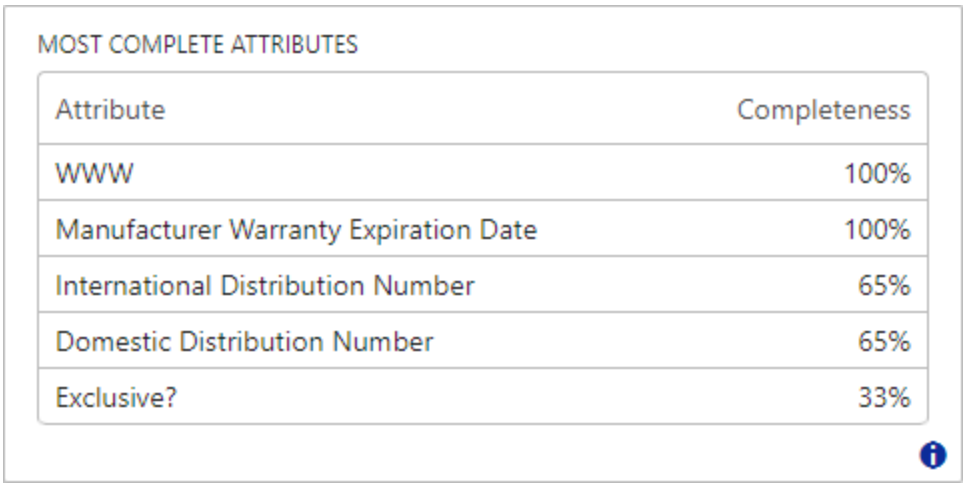
This widget displays the five least complete attributes in the data profile. Completeness is rounded to the nearest whole percentage and attributes with the same completeness are presented in the order in which they are retrieved from the database. Inherited values are included in the calculation.

Configuration options include:

- **Context** - Pulls data from the specified context.
- **Object Type** - Filters data via object type.
- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

Most Complete Attributes

This widget lists the five most complete attributes in the data profile. Completeness is rounded to the nearest whole percentage and attributes with the same completeness are presented in the order in which they are retrieved from the database. Inherited values are included in the calculation.



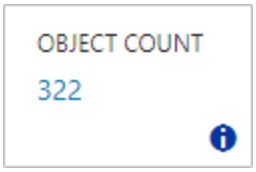
Configuration options include:

- **Context** - Pulls data from the specified context.
- **Object Type** - Filters data via object type.
- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

Object Count

This widget displays the number of objects in the data profile.

Note: If any objects being profiled are linked multiple times in the sub-tree, they are also counted multiple times. This only applies to sub-trees under classifications and entities, as products can only link to other products once in a parent / child relationship.



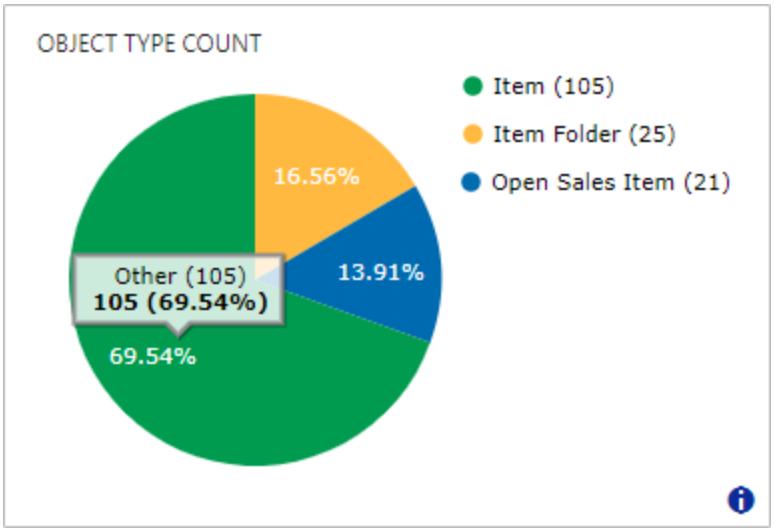
Configuration options include:

- **Context** - Pulls data from the specified context.
- **Screen** - Links the graph to another screen in the Web UI. The selected screen must be a Generic Search screen.
- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

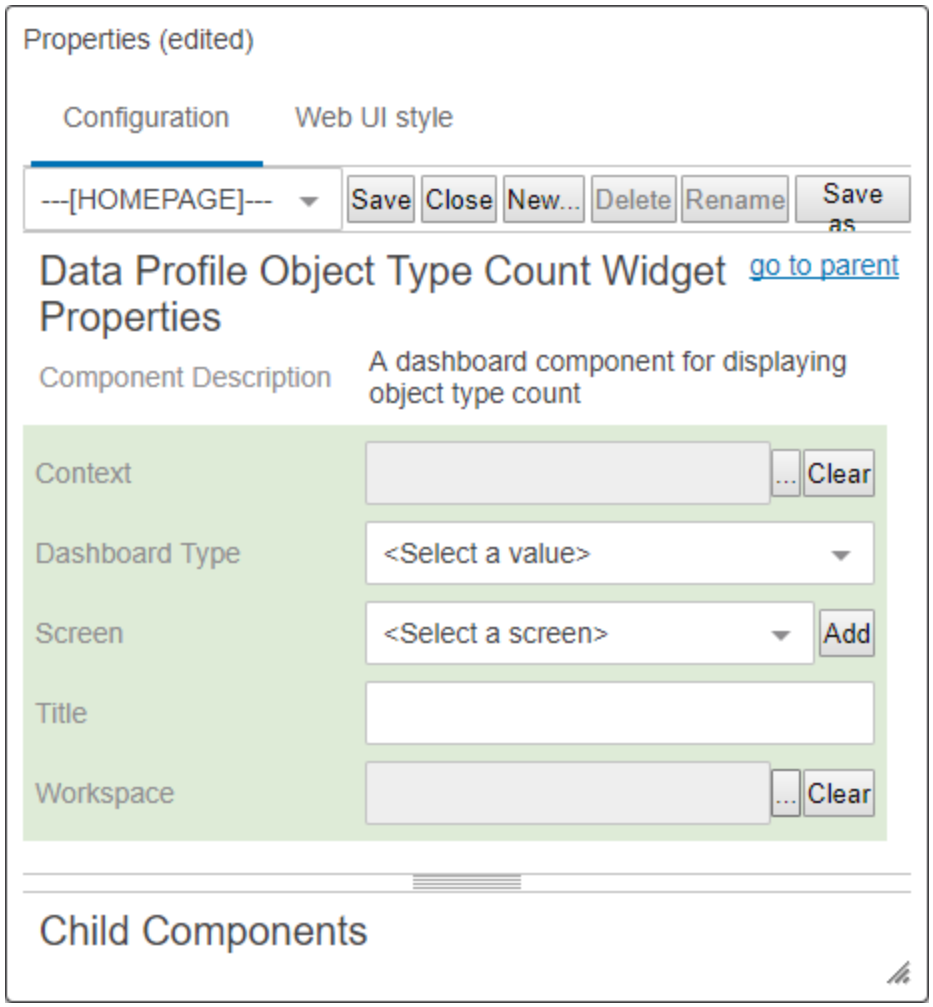
Object Type Count

This widget displays the distribution of object types in the data profile.

Note: Only the five most common types are displayed as separate entries. The remaining types are grouped in "Other object types".



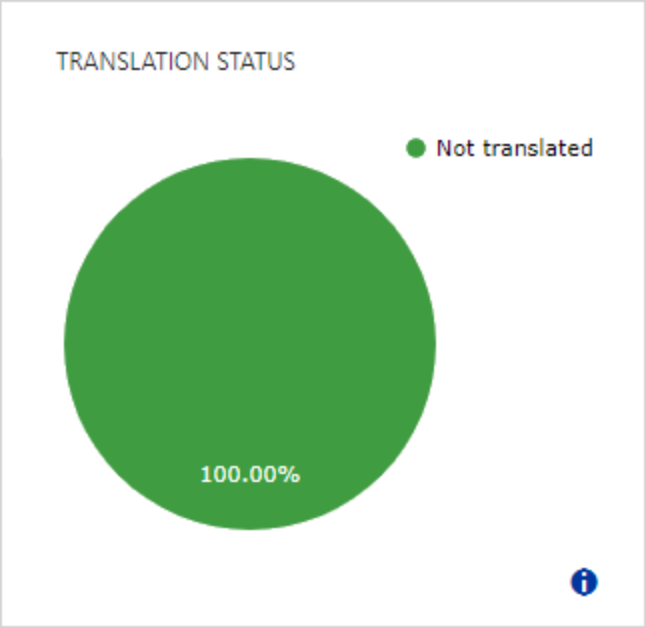
Configuration options include:



- **Context** - Pulls data from the specified context.
- **Dashboard Type** - Determines whether to display the data as a pie chart or bar chart.
- **Screen** - Links the graph to another screen in the Web UI. The selected screen must be a Generic Search screen.
- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

Translation Status

This widget displays the translation status of the objects in the data profile.



Configuration options include:

- **Context** - Pulls data from the specified context.
- **Object Type** - Filters data via object type.
- **Screen** - Links the graph to another screen in the Web UI. The selected screen must be a Generic Search screen.
- **Title** - Changes the name that appears on the widget's title bar.
- **Workspace** - Pulls data from the specified workspace.

Note: The KPI Table Widget has been deprecated.

File Loading Widget

The File Loading Widget allows Web UI users to easily transfer files into application server hotfolders used by an IIEP, or to an IIEP that does not use a hotfolder.

Considerations and Limitations

This widget is compatible with both hotfolder-based and non-hotfolder-based IIEPs. However, to use the File Loading Widget for a non-hotfolder-based IIEP, you must also configure the IIEP receiver defined in the **Web UI File Loading Receiver** topic in the **Data Exchange** documentation.

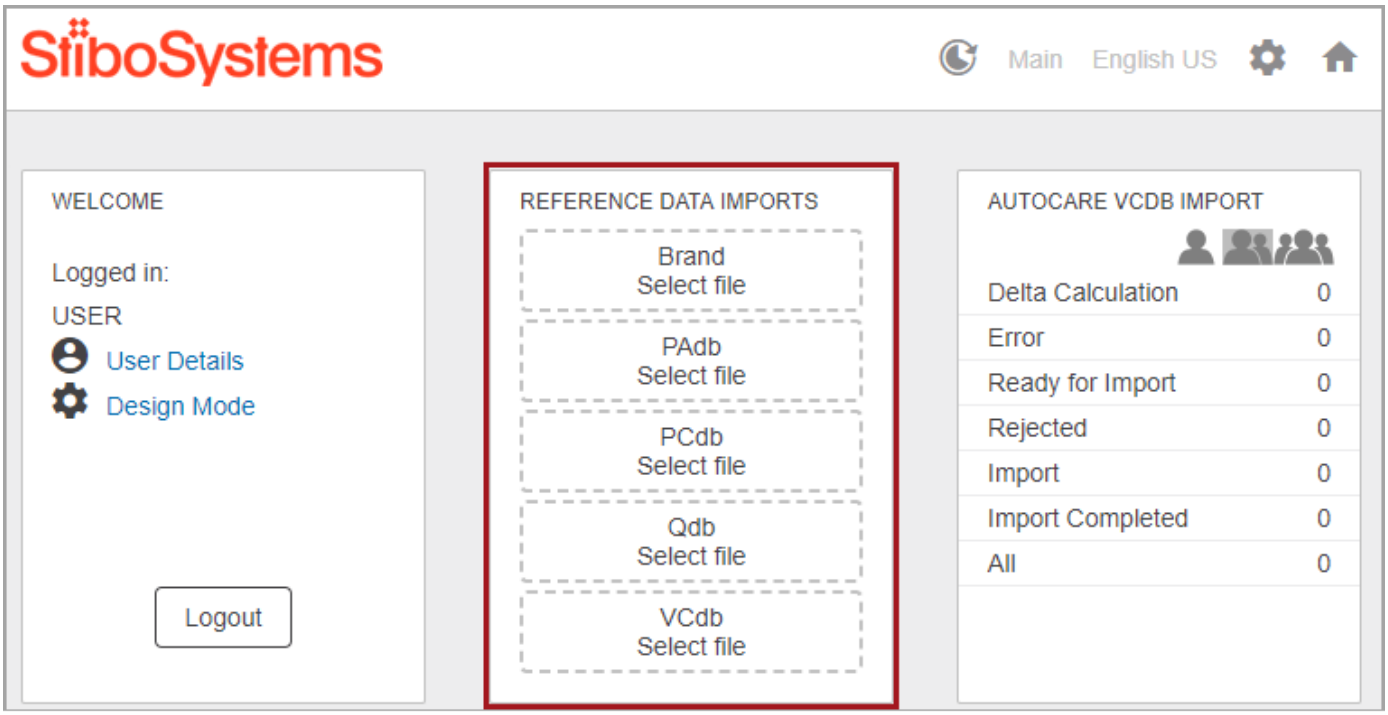
Important: The 'File Loading Widget' is an excellent tool for starting IIEPs but users should seriously consider if this is the right tool to use in all circumstances. For example, since this widget does not support the monitoring of background processes in the Web UI by individual user ID, it might not be the right widget for a vendor portal.

Users should be aware that Microsoft Internet Explorer and Edge browsers do not support drag and drop. Therefore when those browsers are used, and a file is drag and dropped onto the widget, STEP displays a message indicating that drag and drop is not supported. Instead, a file browser window is automatically displayed for the user to select a file for import.

Using the File Loading Widget

The File Loading Widget is accessible from a Web UI homepage and allows users to select, or drag and drop, one or more files from their local machine for transfer into a STEP hotfolder.

In the example below, a File Loading Widget has been configured with the title 'REFERENCE DATA IMPORTS' and allows for five different IIEP drop zones: Brand, PAdb, PCdb, Qdb, and VCdb.



Once one or more files are dragged onto a drop zone, then a dialog will display at the top of the screen confirming the file has been submitted. In the example below, one file was dragged onto the PCdb drop zone, and the dialog displays that the 'AAIA PCdb.zip' file has been submitted to the 'PCdb' hotfolder.

Important: If the dialog confirming the file is submitted does not display, then it is possible that the browser being used does not support drag and drop, or the file being used is not properly extracted.

Depending on how the IIEP is configured, users can transfer either zipped files less than 50GB or standard files less than 600MB. Subsequent handling of files will occur only if supported by the corresponding IIEP. For example, if the IIEP is configured to process a ZIP file, and a standard file is selected for import, then the IIEP will report an error.

When using the drag-and-drop feature to transfer ZIP files, the ZIP file cannot be part of a larger compressed file. In other words, before uploading a ZIP file, ensure that the ZIP file is available on its own. Dragging a ZIP file that is part of a larger compressed file onto a drop zone will not work, a dialog confirming the file has been submitted will not display, and the file conversion process will not begin.

Monitoring Progress with the Background Process Notification Component

Because the File Loading Widget and the Background Process Notification Component have been developed to work together, when the Background Process Notification Component is enabled, users can easily track their file transfer progress. For more information, see the **Background Process Notification Component** topic within the **Main Properties Overview** section.

When a File Loading Widget is used to transfer files, the Background Process Notification side panel will display with a separate section titled 'File Uploads,' allowing users to follow the progress of their file transfers while continuing to use the Web UI. Once the status of the import changes, then the user can be notified via the BGP Notification features. Additionally, if an import needs to be canceled, a user can click the Cancel button within the Background Process Notification panel, the import will be stopped, and the files will be removed from the server.

Configuring the File Loading Widget

More than one File Loading Widget can be added to a Web UI homepage Widget Grid component, and more than one IIEP can be configured within each File Loading Widget. The ability to add more than one File Loading Widget to a homepage allows system administrators the ability to configure different widgets for different import types or processes. Additionally, each File Import Widget can be configured with more than one drop zone, allowing for different import types within one widget.

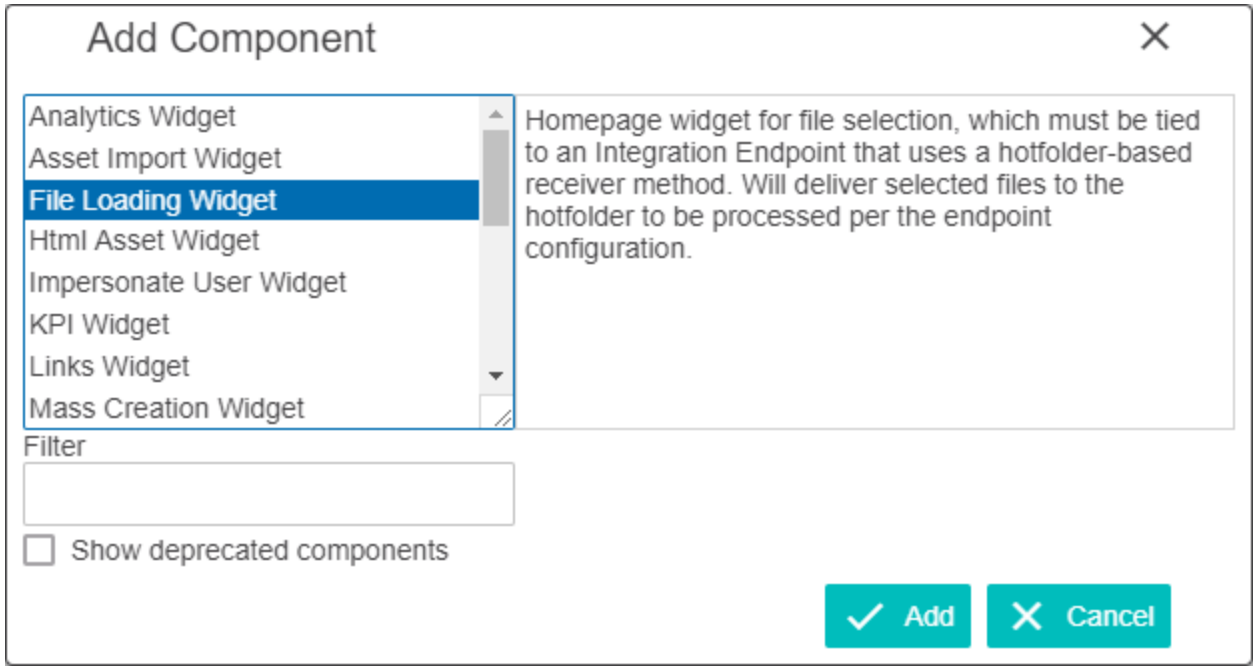
During configuration, the admin user selects an IIEP that will process the files for each of the file loading or import types. When the File Loading Widget is used to import a file, the system reads the configuration of the IIEP and determines the appropriate hotfolder to which the file will be transferred.

Details on how to add a widget to a homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started / User Guide** documentation.

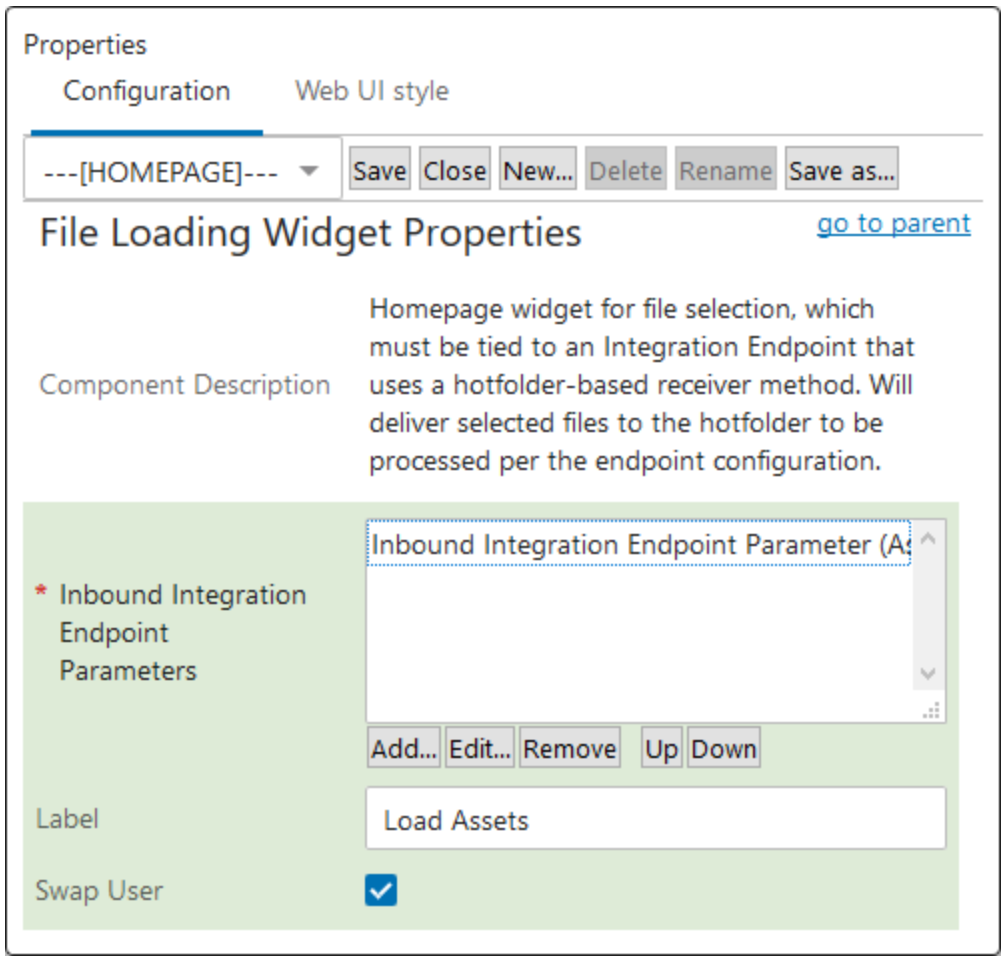
Prior to configuring the File Loading Widget, one or more IIEPs needs to be configured. For more information on configuring IIEPs see the **Inbound Integration Endpoints** section within the **Data Exchange** guide.

Use the following steps to configure the File Loading Widget:

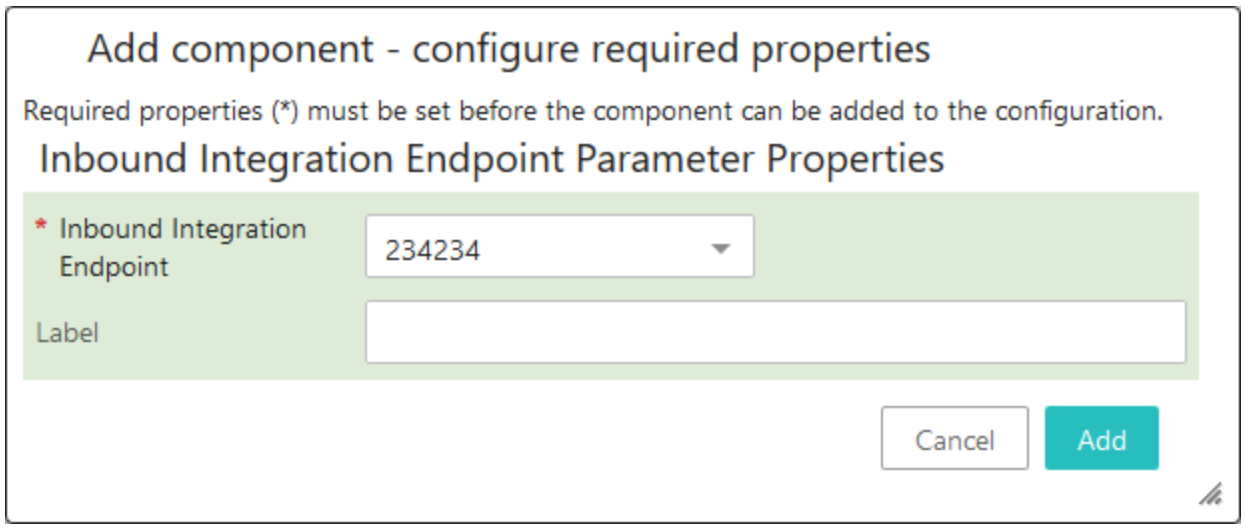
1. From the Designer, select Widget Grid Properties > Child Components > Widgets > click the **Add** button, and the Add Component dialog will display as shown below.



2. Select File Loading Widget, click the **Add** button, and the File Loading Widget Properties will display.



3. Go to the Inbound Integration Endpoint Parameters, click the **Add** button, and the Inbound Integration Endpoint Parameter Properties dialog will display.



4. For the Inbound Integration Endpoint parameter, select the previously created IIEP from the dropdown.
5. Optionally, within the Label parameter field, enter text to be displayed within the drag and drop area of the widget. When left blank, the name of the selected IIEP will display.
6. Click the **Add** button, and the File Loading Widget Properties will display with the Inbound Integration Endpoint Parameters populated.
7. Optionally, within the Label parameter field, enter text to be displayed at the top of the widget. When left blank, the default label ('FILE IMPORT') will display.

   In the example below, the IIEP selected for this configuration is named 'IMPORT,' and both Label fields within the designer have been left blank.

8. Check the box for **Swap User** to run the IIEP as the logged-in Web UI user rather than the configured IIEP user. This allows the Web UI user to view the background process (via the Background Notification Panel) initiated when the Web UI user adds a file to the widget. By swapping the user in this way, the Web UI user can monitor the progress of the background process created by the file loading action, and enable them to detect and correct any potential errors.
9. Click the **Add** button and the Widget Grid Properties will display with the newly added File Loading Widget.
10. Click **Save** and **Close** buttons to close the designer, and view the newly configured File Loading Widget.

Mass Creation Widget

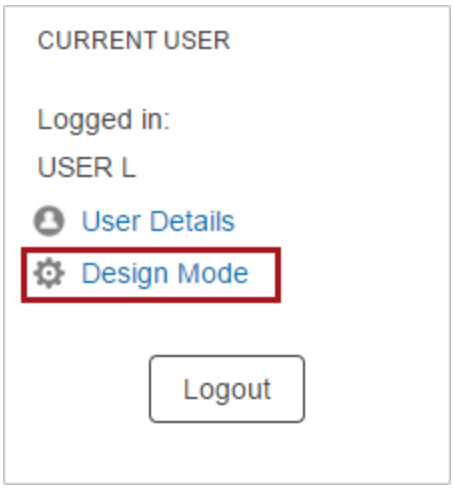
The Mass Creation Widget is a Homepage widget that, once configured, enables users to start the process of creating new objects in Web UI. This widget is used in conjunction with the Mass Creation screen type, which allows users to onboard multiple objects into STEP using Web UI screens instead of using more complex import methods such as Smartsheets.

Adding a Mass Creation Widget

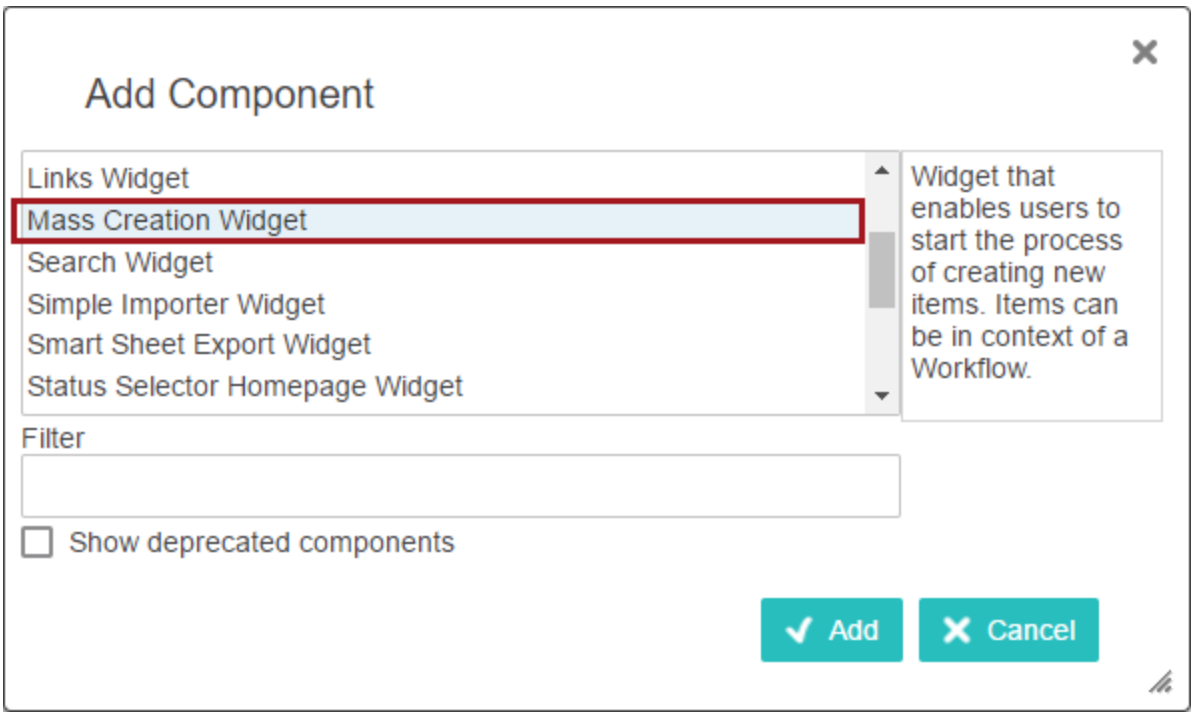
Admin users first need to add the Mass Creation Widget. Once the widget is created, configuration can begin.

To add a Mass Creation Widget to the Web UI Homepage:

1. Log in to the Web UI. User must have privileges to edit Web UI configurations.
2. Click the design mode launch button found on the Homepage (in the user widget).



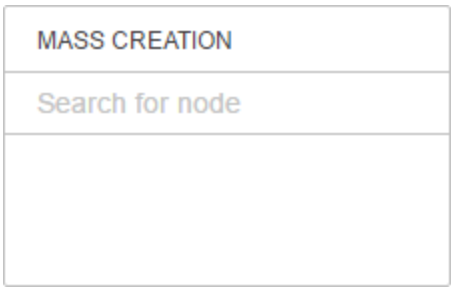
3. If not automatically shown the Home Page Properties, choose **---[HOMEPAGE]---** from the screen dropdown list.
4. Add the Mass Creation Widget to a Widget Grid:
    - If adding it to an existing Widget Grid, double-click the desired Widget Grid listed in the Child Components > Content parameter field. Click Add, choose **Mass Creation Widget** from the 'Add component' dialog, and then click Add again.
    - If adding a new Widget Grid, click the Add button under the Child Components > Content parameter field. Select **Widget Grid** in the 'Add component' dialog and then click Add. Next, double-click the new Widget Grid that is now showing at the bottom of the list in the Child Components > Content field. Click Add, choose **Mass Creation Widget** from the 'Add component' dialog, and then click Add again.



Widgets can be reordered as needed. Either reorder the individual widgets inside a Widget Grid by clicking on a widget name and then clicking the Up and Down buttons in the **Widgets Child Component** of the **Widget Grid Properties** screen. Or, as an alternative, select a **Widget Grid** in the Child Components > Content field of the Home Page Properties and click Up and Down to reorder the entire Widget Grid. Details on how to add a widget to a homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

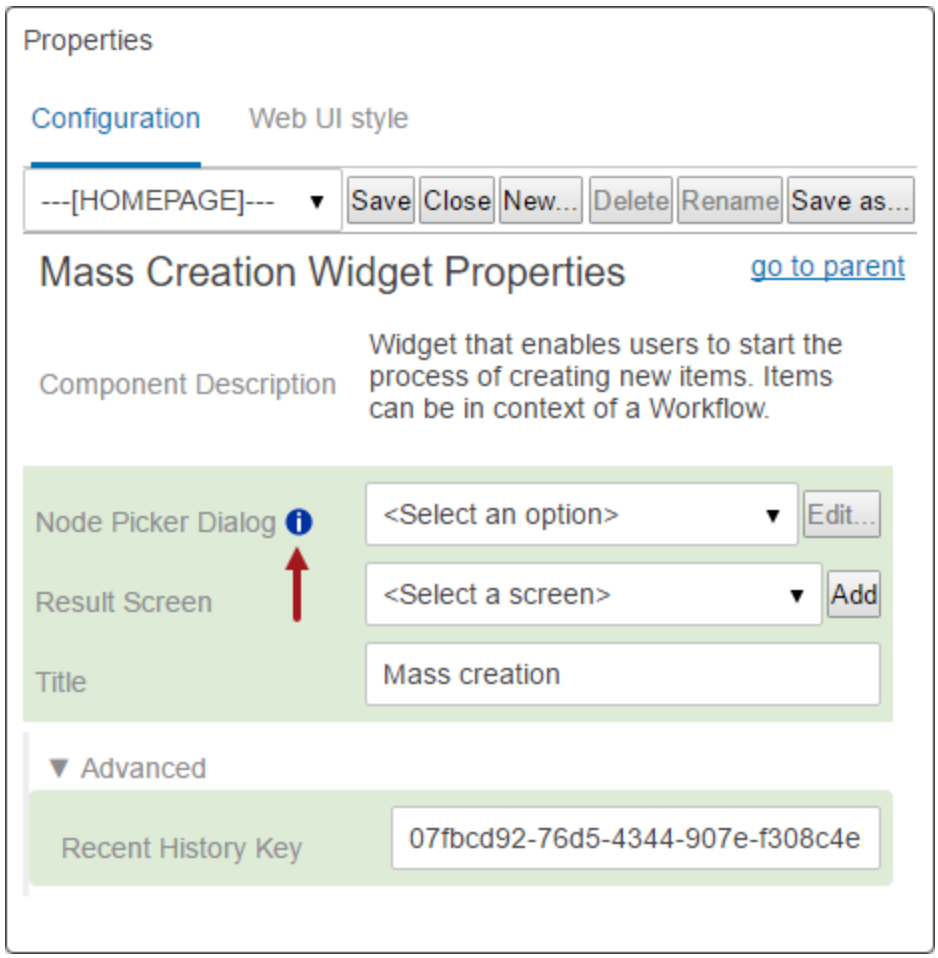
5. Click **Save** in the Designer window. At this point, either close Designer and configure the widget at a later time, or continue on with the **Mass Creation Widget Properties** configuration.

Until the widget is configured, it will sit on the Web UI Homepage and remain non-functional for onboarding purposes.



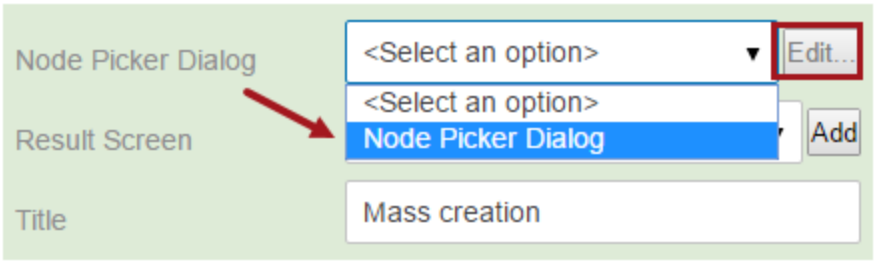
Configuring a Mass Creation Widget

An image of the default properties screen follows. Each parameter should be configured as needed and features help text, accessible by clicking the info icon to the right of each parameter name. The sections directly after the image explain what each parameter does and the steps / options for configuring them.

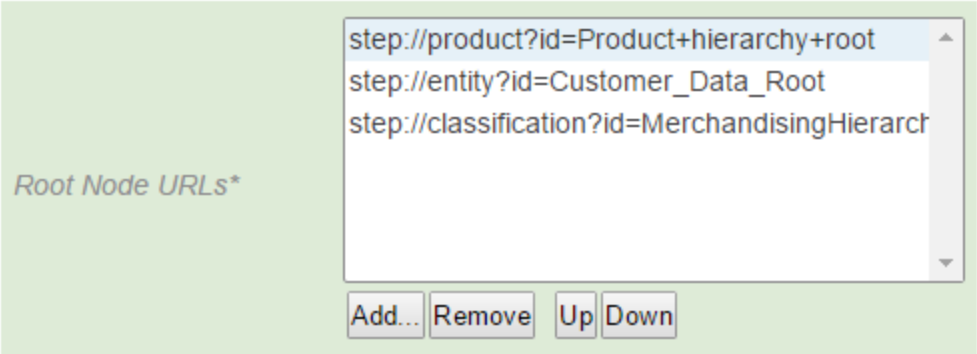


Node Picker Dialog

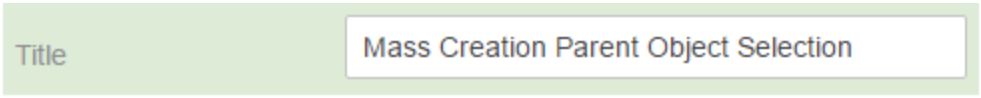
1. Select 'Node Picker Dialog' from the dropdown. The **Node Picker Dialog Properties** dialog automatically displays.

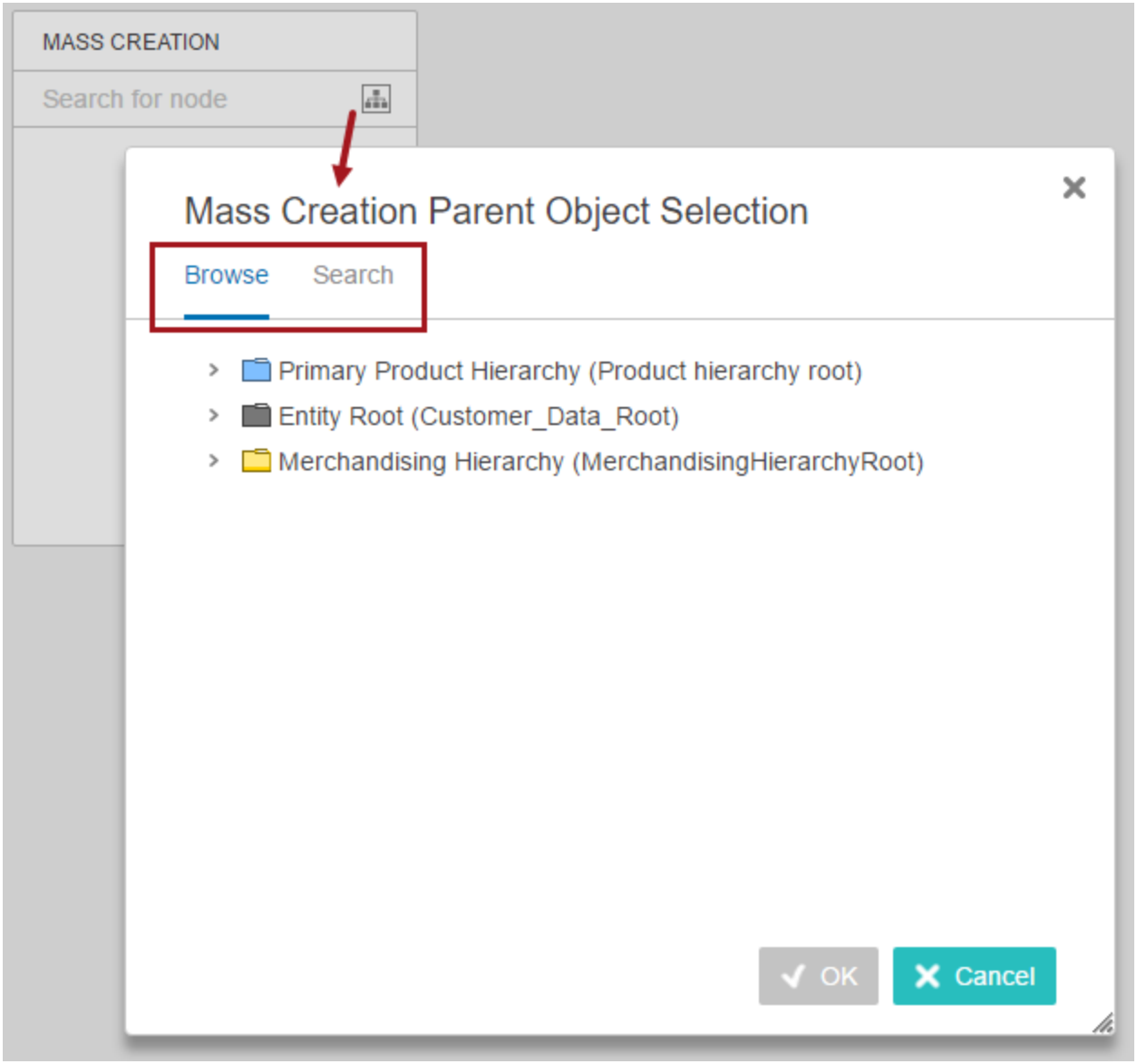


2. On the properties screen, select **Static Root Nodes** within the **Root Node Plugin** dropdown.
3. The **Static Root Nodes Properties** dialog appears. Click **Add**, under the **Root Node URLs** field, to make selections. This selection will determine what nodes are presented to the end user when using the widget and should be limited to **Product**, **Entity**, or **Classification** nodes. Re-order and remove existing root node selections as needed.



4. A selection must be made for the **Tab Pages** parameter. Two valid options work with the Mass Creation functionality: Browse and Search. After adding a Browse tab, double-click the Browse title in the parameter field to set, if needed, any Tree navigation limitations for end users. If adding a Search Table tab, there is additional configuration to be done to the Search Table Tab Properties to maximize the search feature.
5. Leave **Title** as-is or type in a meaningful title for end users. This title will display above the tabs (created in the previous step) when users click the node picker icon on the widget.





Note: All the steps above cover setting up the parameters for the first time. Where applicable, click the Edit button to the right of the parameter value field (or beneath it) to edit existing settings.

6. Click **Save** and you will be returned to the **Mass Creation Widget Properties**.

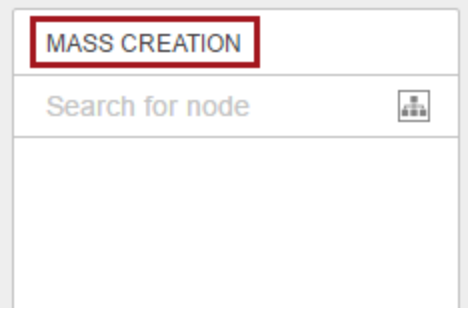
Results Screen

1. Using the '<Select a screen>' dropdown for the **Result Screen** parameter, choose the screen ID for the Mass Creation screen that will be tied to this widget. End users will click on the widget, select a parent object, and be directed to the Mass Creation screen designated by this parameter.
2. If the desired Mass Creation screen does not already exist, click **Add** and create a new screen using the screen type Mass Creation Screen. The screen ID that you give the new screen will automatically populate

in the parameter value field. Once all widget settings are made and saved, the Mass Creation screen can be configured following the directions outlined in the **Configuring a Mass Creation Screen** documentation.

Title

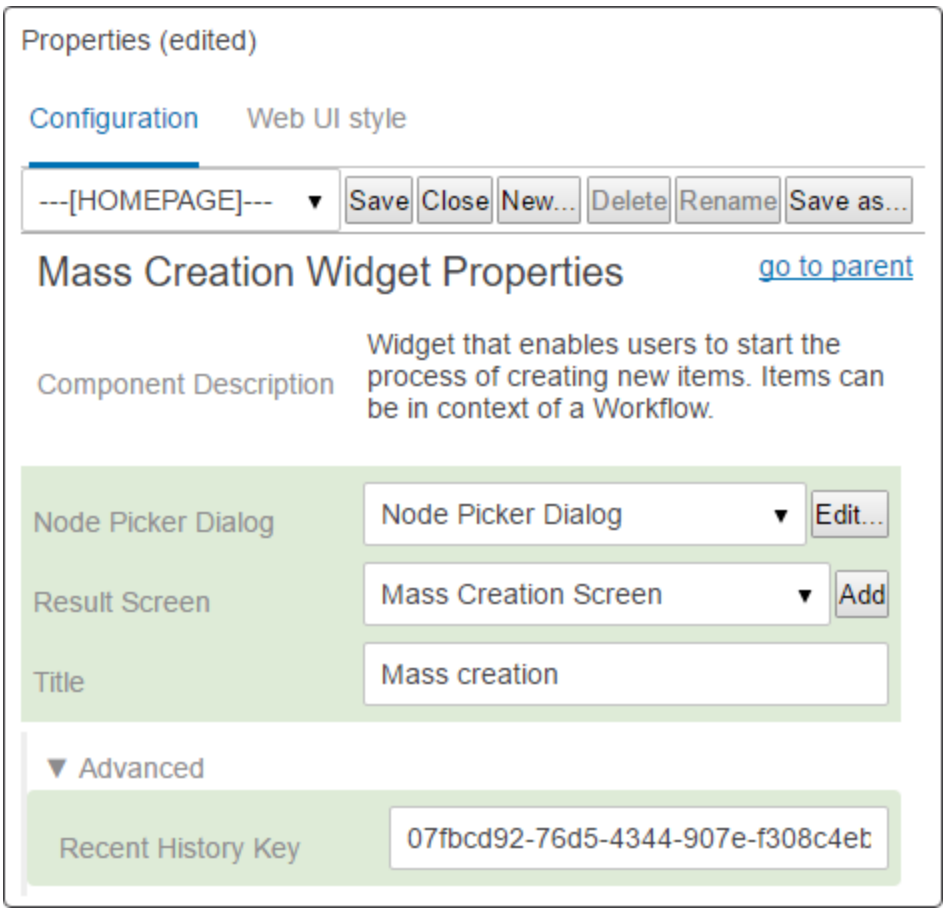
The default title displayed at the top of a Mass Creation Widget is 'Mass creation.' Since multiple widgets can be created for different onboarding needs, the title can be renamed to something more descriptive for end users.



Recent History Key

Under **Advanced** there is a **Recent History Key** parameter. The key in the value field may be copied and pasted / used within another widget. The widgets would then share the same **Latest searches** history information.

Below is an example of the **Mass Creation Widget Properties**, fully configured:



After parameter selections have been made, click **Save** at the top of the Designer window. Close the Designer window to exit design mode and return to normal Web UI operation. If a Mass Creation Screen has not been configured yet, instead of exiting design mode, select an existing (or create a new) Mass Creation Screen to continue on with the setup process.

For more information, see the **Configuring a Mass Creation Screen** section of the **Web User Interfaces / Using a Web UI** documentation.

For more information about using the Mass Creation components, see the **Using a Mass Creation Screen and Widget** section of the **Web User Interfaces / Using a Web UI** documentation.

Policy Widget

The Policy Widget is a Homepage widget that shows the breaches policies which are active in the system. The most recent breaches will be shown and clicking on these policies will link to the configured Policy Details screen.

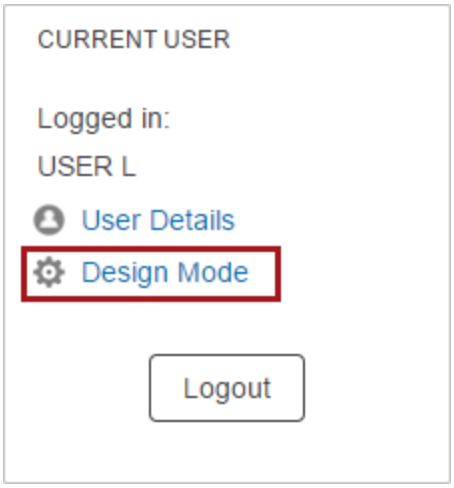
Before using the Policy Widget, the Data Policy Web UI must be configured. For information how to set up the web UI, see the **Web UI Configurations for Policies** topic of the **Data Governance** documentation.

Adding a Policy Widget

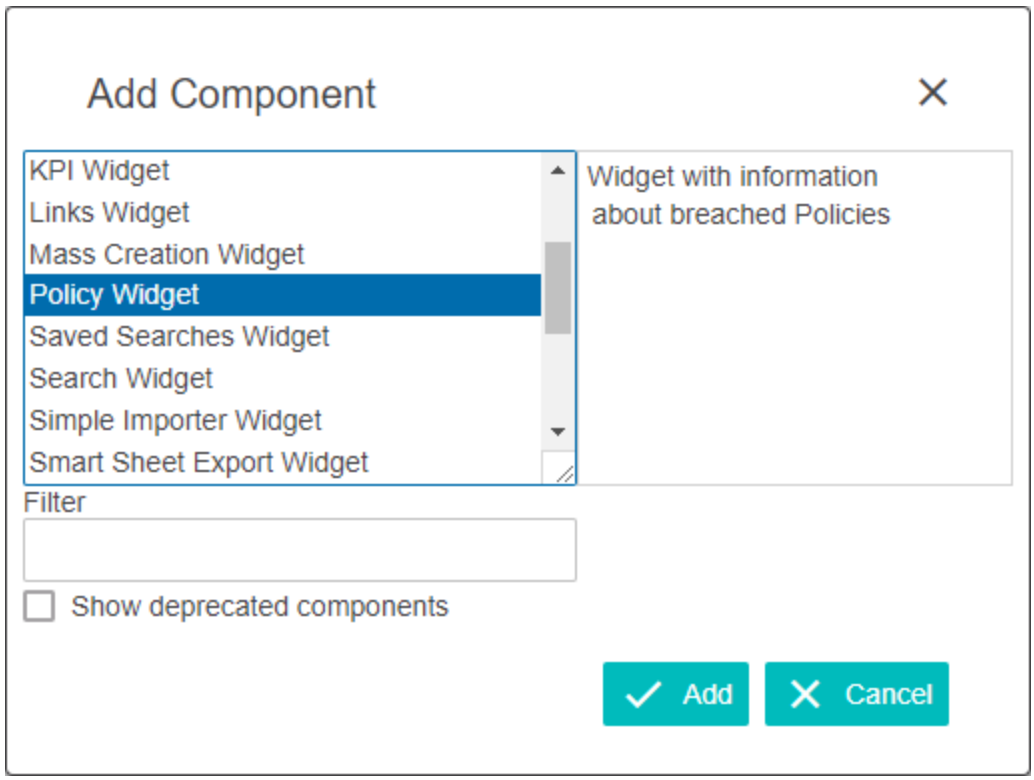
The Policy Widget is pre-configured to show the breached policies.

To add a Policy Widget to the Web UI Homepage:

1. Log in to the Web UI. User must have privileges to edit Web UI configurations.
2. Click the design mode launch button found on the Homepage (in the user widget).

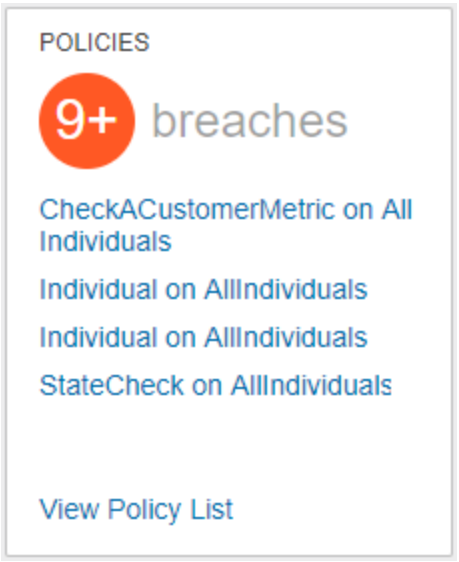


1. If not automatically shown the Home Page Properties, choose **---[HOMEPAGE]---** from the screen dropdown list.
2. Add the Policy Widget to a Widget Grid:
   - If adding it to an existing Widget Grid, double-click the desired Widget Grid listed in the Child Components > Content parameter field. Click Add, choose **Policy Widget** from the 'Add component' dialog, and then click Add again.
   - If adding a new Widget Grid, click the Add button under the Child Components > Content parameter field. Select **Widget Grid** in the 'Add component' dialog and then click Add. Next, double-click the new Widget Grid that is now showing at the bottom of the list in the Child Components > Content field. Click Add, choose **Policy Widget** from the 'Add component' dialog, and then click Add again.



Widgets can be reordered as needed. Either reorder the individual widgets inside a Widget Grid by clicking on a widget name and then clicking the Up and Down buttons in the **Widgets Child Component** of the **Widget Grid Properties** screen. Or, as an alternative, select a **Widget Grid** in the Child Components > Content field of the Home Page Properties and click Up and Down to reorder the entire Widget Grid. Details on how to add a widget to a homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

5. Click **Save** in the Designer window. At this point, the Policy Widget will display any breached policies.



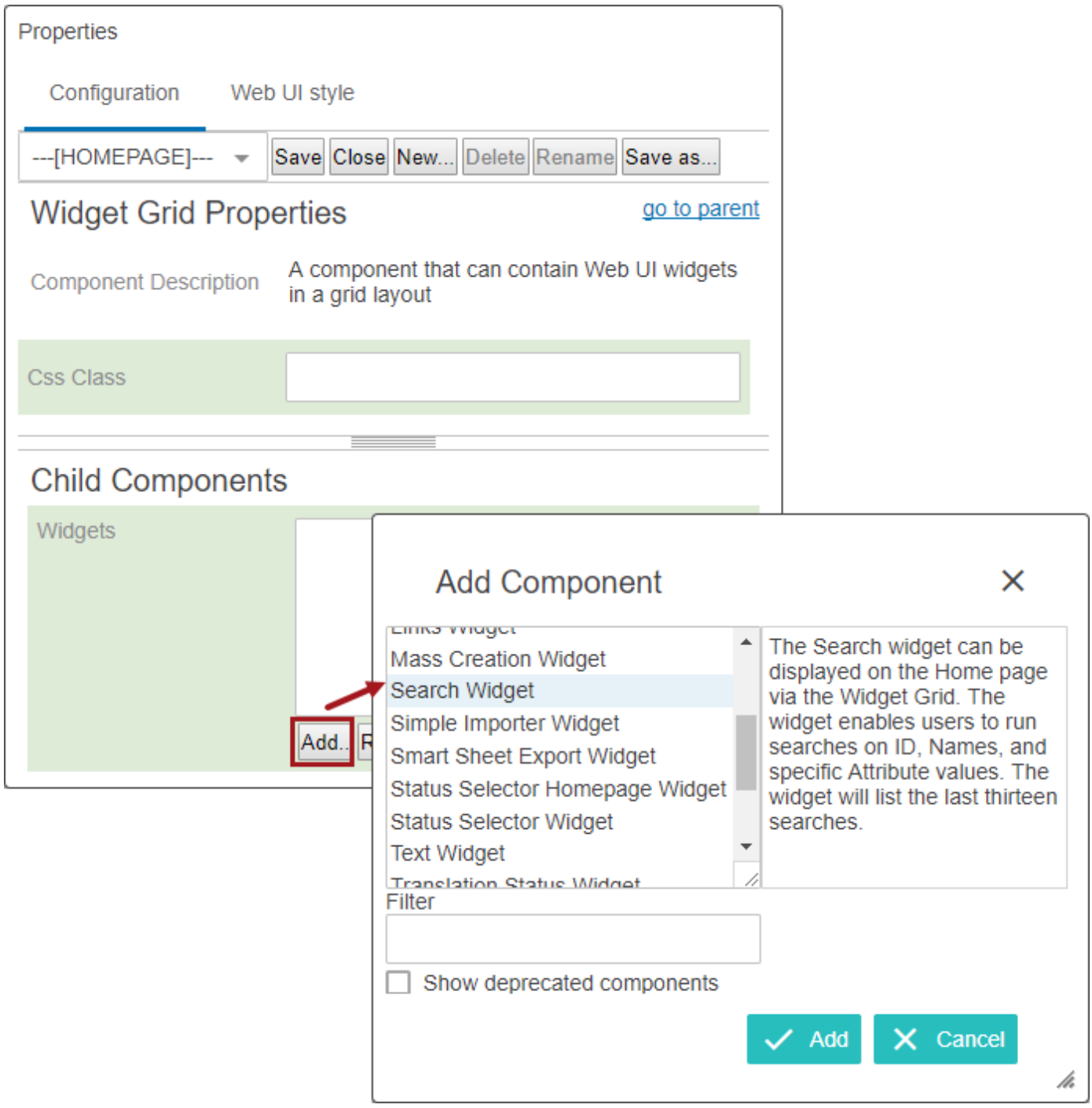
Search Widget

The Search Widget allows for a quick (and configurable) search of objects in the STEP system. The Search Widget can be configured to search widely through STEP, or it can be configured to search only a narrow segment of STEP, depending on the needs of the user.

Adding Search Widget

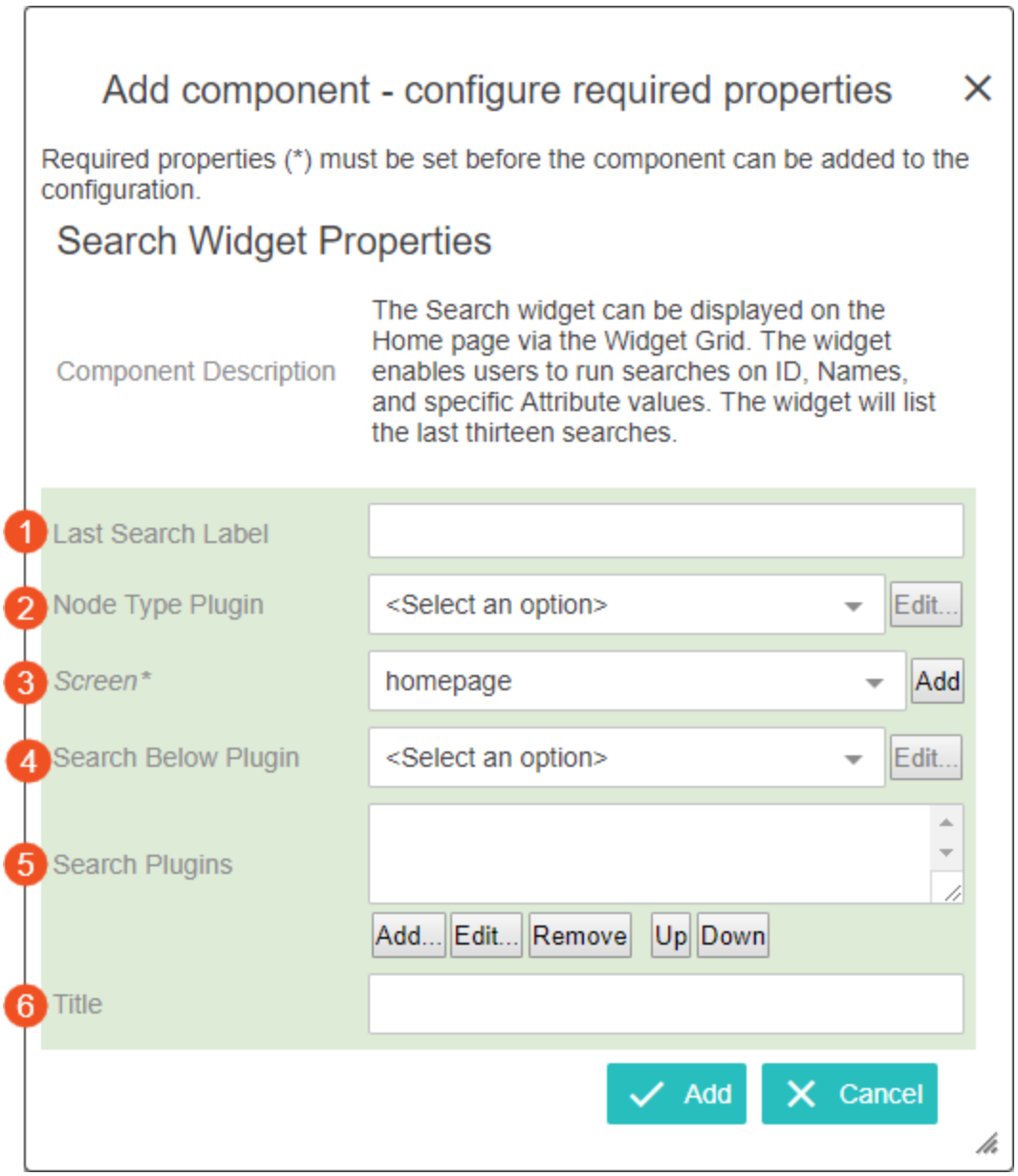
Note: Adding the Widget Grid is explained in the **Homepage Widgets** section of the **Using a Web UI** topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

1. In design mode, double click on the desired 'widget grid' from the **Homepage Properties** screen.
2. Click on the **Add** button from the child components of the widgets field.
3. Select the **Search Widget** from the **Add Component** screen and click **Add**.

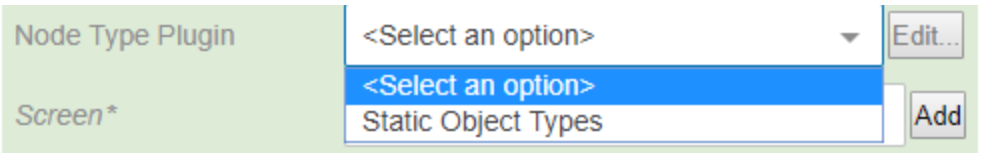


Configuring a Search Widget

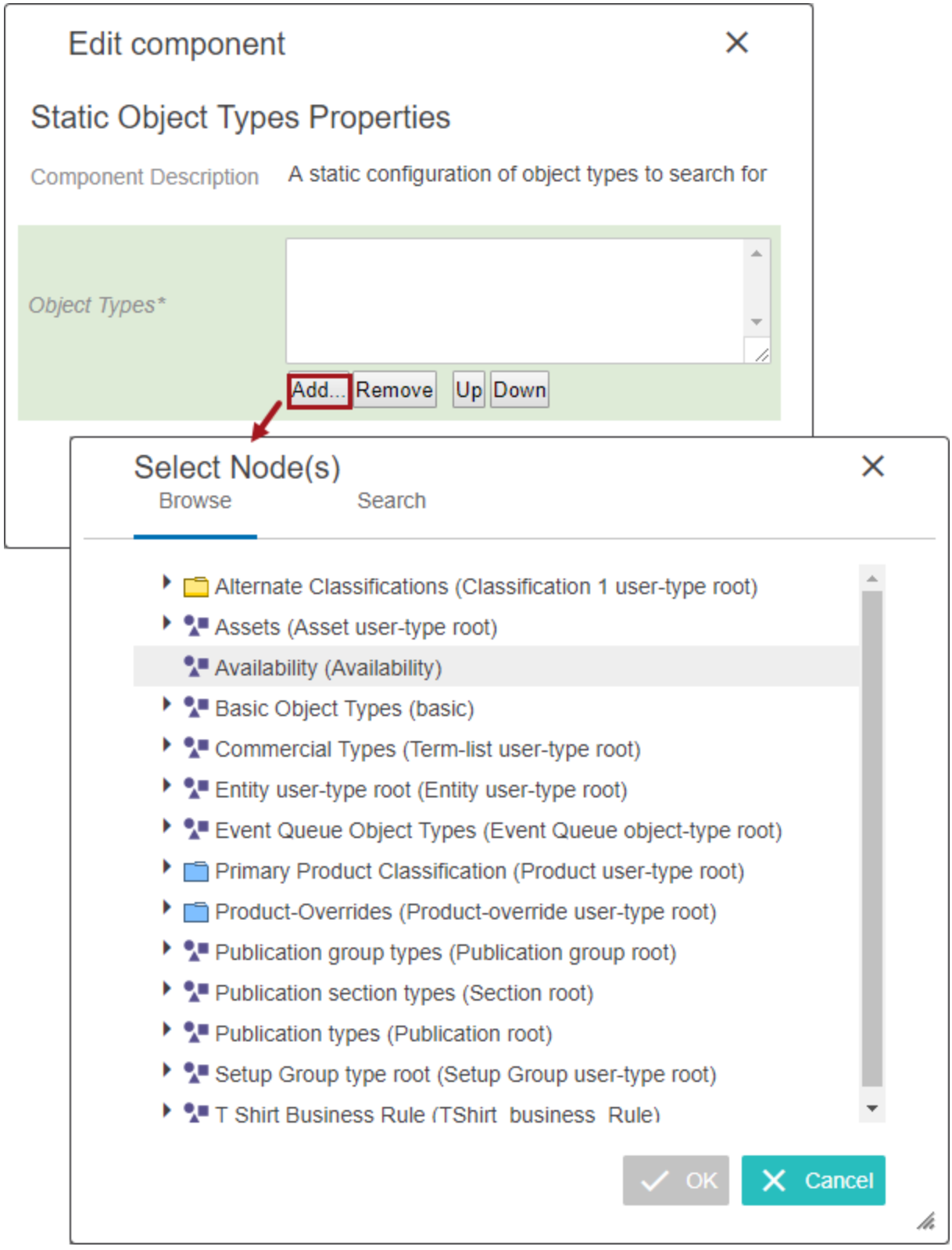
Each parameter should be configured as needed. The following section explain what each parameter does and the steps / options for configuring them.



1. **Last Search Label**: Used for he title of the last searched phrases.
2. **Node Type Plugin**: This is used to determine the type of nodes to search for. If not set, the widget will search for all Assets, Classifications, Entities, and Products.



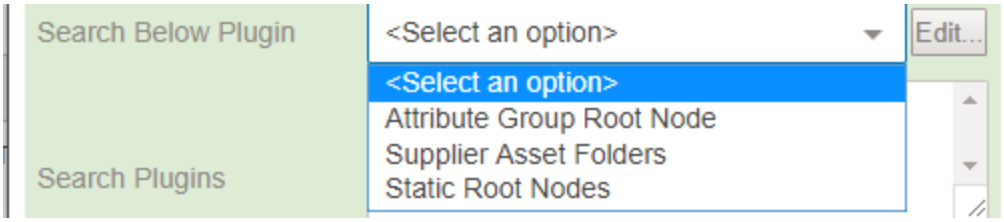
- **Static Object Types**: Selecting this option and clicking on edit will display the 'Static Object Type Properties' screen. Clicking on the 'Add' button will display all the object types in STEP. The user has to select the relevant object type and click the Save button.



2. **Screen**: The screen that should be used to display hyperlinked objects from the widget. The screen must be either a 'Generic Search' or 'Node List Browser' type. The Node List Browser will show one product at a time with the option to go forward and back in the search results, whereas the Generic Search will show the result in a Node list table or multieditor format.

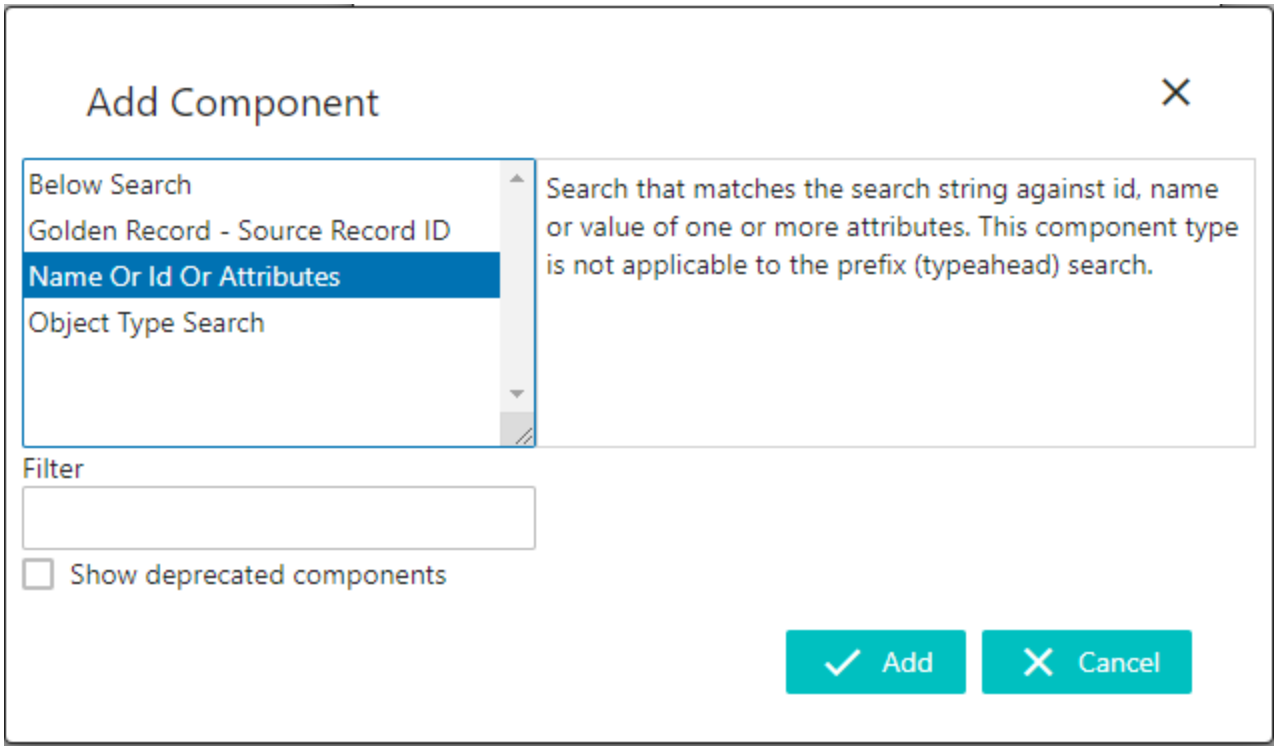
   The user can select a pre-configured screen or the user can click on the 'Add' button where the user enters a valid Screen ID and select the 'Generic Search' screen.

3. **Search Below Plugin**: This parameter defines the node below which the search is to be carried out. Three options will be displayed when the dropdown of the 'Search Below Plugin' is clicked.



- **Attribute Group Root Node**: When the Attribute Group Root Node option is selected, the Attribute Group Root Node Properties screen will be displayed where the valid Attribute Group node will be selected. Selected attribute group node will act as the top root node for the Node Picker dialog.
- **Supplier Asset Folders**: When this option is selected the search result will list the asset folders for the suppliers that the user is a member of.
- **Static Root Nodes**: This parameter allows the required Root Node URLs. Multiple root nodes of Product Classification, Entity, Assets, Publication, and Collections can be added. Selecting this option will display the 'Static Root Nodes Properties' screen where the Root Node URLs are added.

5. **Search Plugins**: In this parameter, two options are available when the 'Add' button is clicked.



- **Below Search**: This plugin determines under which nodes to run the search. Every node will be searched if this parameter is not configured.
- **Golden Record- Source Record ID**: Performs a search that matches the Golden Record IDs, or the IDs of the Source Records, that contribute to a Golden Record and returns the active Golden Record. Unless it is explicitly required, this search should not be configured together with any other parameters as doing so might cause poor performance / empty results.
- **Name Or Id Or Attributes**: This plugin is used to add attributes to search against. Once this search plugin is added, the user has to select the plugin and click on the 'Edit' button to add the attributes. This action will display the Name or Id Or Attributes Properties screen. There are two parameters that can be chosen:
  - **Attributes**: Attributes are added and removed based on the search criteria. Clicking on Add will display the screen for the attribute selection.
  - **Search in Data Containers**: This is explained further in the section below.
- **Object Type Search**: This determines which object types to search for.

6. **Title**: This is the Search Widget Title. It is recommended to use a descriptive title.

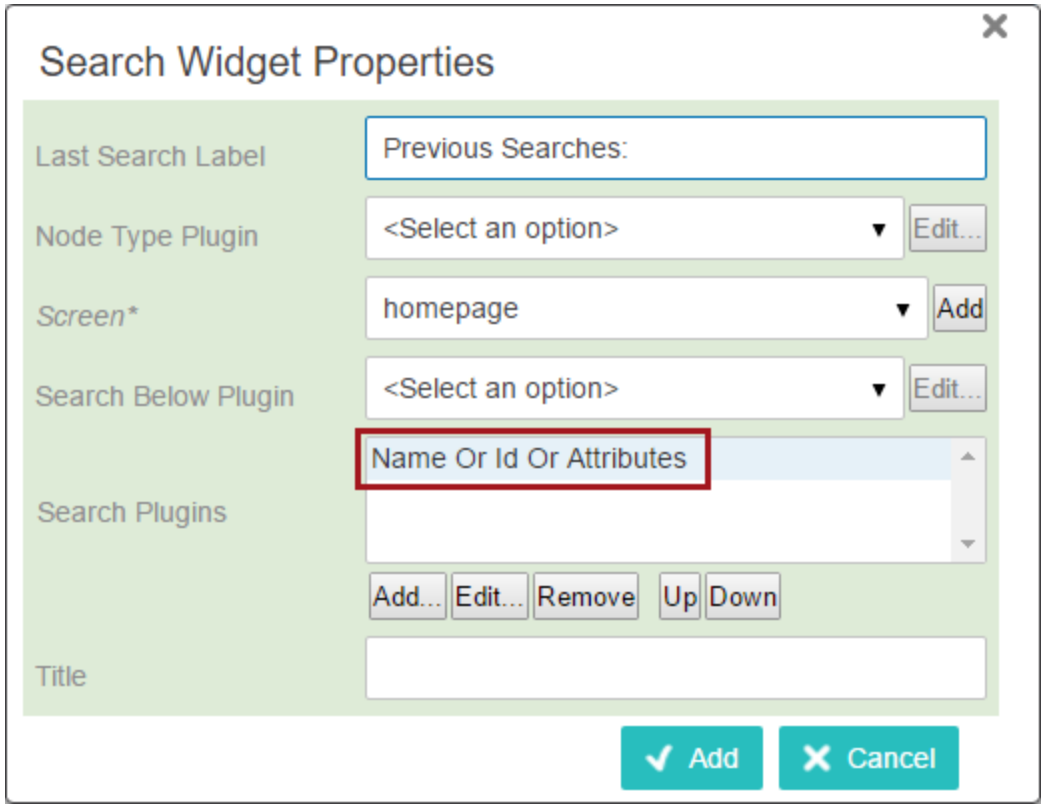
Search Results

The results of a search can be displayed on either a screen of type generic Search or of type Node List Browser. The generic search screen can be configured with one or more display modes to show the results, and the Node List Browser screen will show a detail screen with the first result and the option of paging through the result list.

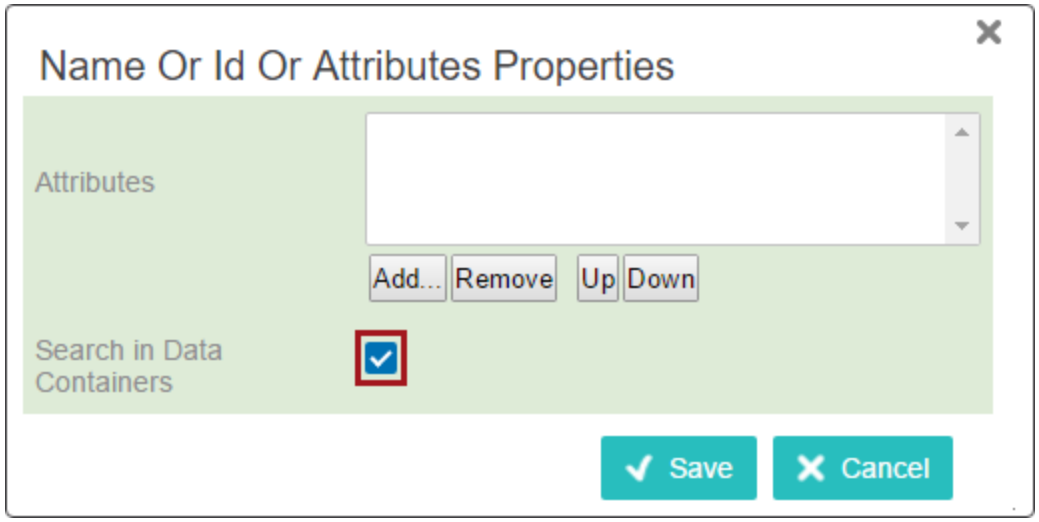
Search in Data Containers

The Search Widget can be configured to search within data containers, if required.

Editing the Search Widget Properties in the designer, the user must first add the 'Name Or Id Or Attributes' value in the **Search Plugins** field, and then click on the value to open the **Edit component** window.



In the **Edit component** window, add attributes and check the box beside **Search in Data Containers**. Once this configuration is saved, any search initiated in the Search Widget will also search through data containers and return applicable entities within the search results.



Search Golden Record or Source Record IDs

The 'Golden Record - Source Record ID' plugin can also be configured. This plugin alters the search logic so that it matches the search string against golden record IDs or the IDs of the source records that contribute to a golden record, and returns the active golden record.

To use this plugin, one or more matching algorithms must be set on the widget by selecting the plugin once it has been added and clicking **Edit...**. In the Golden Record - Source Record ID Properties window, click **Add...** and browse or search for the desired matching algorithm, then click **OK**. Once the selections have been made, click **Save**.

Note: Unless it is explicitly required, the 'Golden Record - Source Record ID' plugin should not be configured together with any other parameters. Doing so might cause poor performance / empty results.

Simple Importer Widget

A Simple Importer Widget allows Web UI users of all skill levels to reliably initiate an import on demand from the Homepage screen. Administrators have many options to allow their users to easily and accurately create and/or update products, entities, and classifications; and their attribute values, reference types, and object type by dragging and dropping a CSV or Excel valid import file onto the respective Web UI Homepage widget.

More than one Simple Importer Widget can be added to the Homepage, allowing users easy access to many on-demand imports.

Who can create / update what

The user's ability to create or update objects is limited to only the attribute values, and reference types valid for the object type(s) they have permission to access. Unique keys can also be implemented to ensure a user has uniquely identified an object before being allowed to start an import. Additionally, the Simple Importer Widget does not allow a user to map to an attribute that is not valid for the specified object type. In other words, attributes may appear as mapping selections, but when selected, if they are not valid for the object type being handled by the import, then the user will not be able to start the import. This restriction makes this widget ideal when a user with limited STEP access needs to create or update data for only those objects they have permission to access.

Auto Map or Pre-configure

Administrators can configure the Simple Importer Widget to allow users to map data on the fly or to use preexisting import configurations as a starter template. If both options are desired, then a separate widget must be configured for each.

When an administrator chooses to allow users to map data on the fly, the user is assisted with the STEP Auto Map feature that compares data in the input file's header row with the IDs / names of the attributes in STEP. When a match is found, the column is automatically mapped to the corresponding object attributes. For more information about Auto Map, see the **Inbound Map Data - Auto Map** topic within the **Data Mapping** documentation.

When an administrator chooses to use pre-configured import configurations, they allow for more advanced on demand import functionality (i.e., business rules). This is useful for frequently-used imports where the parameters and options are always (or nearly always) the same. However, when a Simple Importer Widget is configured to use a saved import configuration, the Auto Map feature is disabled.

Topics in this guide

- Valid File Types
- Import File Considerations
- Using Simple Importer Widget
- Create Objects Using Simple Importer Widget
- Update Objects Using Simple Importer Widget
- Import Preview and Mapping
- Configuring Simple Importer
- Unique Keys and the Simple Importer Widget

Valid File Types

The valid file types are Excel Workbook (.xlsx), Excel 2003 to 2010, and CSV. It is recommended that users use the newest, supportable version of Excel.

For more information, see the **CSV Format** topic and/or the **Excel Format** topic within the **Data Exchange** documentation. Also, for more information on supported versions of Excel, see the current **Platform and Software Support** documentation in the **System Release and Patch Notes**.

Import File Considerations

If the import file contains:

- data that does not need to be imported into STEP, then the mapping field column needs to be blank, or unmapped, so that STEP will ignore the data.
- column header labels '<ID>' or '<Name>', then the preview will display with the ID and/or object Name as auto mapped. For more information, see the **Predefined Header Text** section of the **Inbound Map Data - Auto Map** topic within the **Inbound Map Data Options** documentation.
- column header labels that should be used as the new object ID, either because the import file does not contain an '<ID>' column or because the column labeled as '<ID>' is not ideal to be used as the STEP ID, then the user can manually map new object IDs to a preferred import file column. For more information, see the **Mapping ID** topic of the **Import Preview and Mapping** section of this guide.
- column header labels that match STEP attribute IDs / names, then the import preview will display with those columns auto mapped. For more information, see the **Mapping Attribute** topic of the **Import Preview and Mapping** section of this guide.
- column header labels that do not match the STEP attribute ID / name, but the data needs to be imported, then the user can manually map those columns. For more information, see the **Mapping Attribute** topic of the **Import Preview and Mapping** section of this guide.
- reference types, then the user will need to manually map the reference types to the import file column, because auto mapping of reference types is not supported. However, once manually mapped, the standard parent/child inheritance will automatically occur. For more information see the **Mapping Reference Type** topic of the **Import Preview and Mapping** section of this guide.
- data not valid for the attribute type (for example, a text value in a numeric attribute, or an invalid LOV value), then the user will be visually warned and can choose to edit the data prior to importing, or ignore. For more information, see the **Check Attribute Data Validity** topic of the **Import Preview and Mapping** section of this guide.
- column(s) with attribute values required for a unique key, then the 'Unique key - mapped by Attribute' feature can be used to properly create and/or update objects. For more information, see the **Using Unique Key Mapped by Attribute** topic within the **Unique Keys and the Simple Importer Widget** section of this guide.
- a column with each object's unique key, then the objects can be updated using the mapping to 'Unique key' feature. For more information, see the **Using Unique Key to Update Objects in Web UI** topic within the **Unique Keys and the Simple Importer Widget** section of this guide.

Using Simple Importer Widget

Once configured, the Simple Importer Widget can be used to quickly and easily create or update products, entities, or classifications; and their attribute values, reference types, and object type.

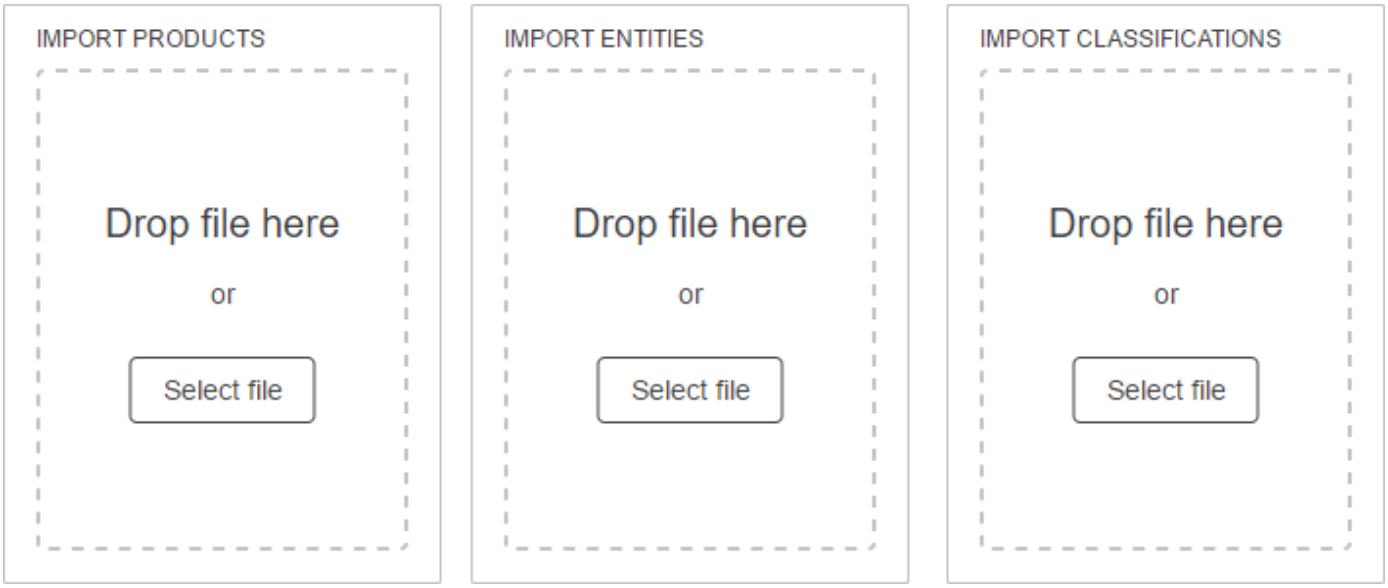
This topic is an overview of the steps involved when using a Simple Importer Widget.

1. Initiate an Import
2. Choose to Update or Create Objects
3. Preview an Import File and Map Data to STEP
4. Start an Import

Initiate an Import

To initiate an import from the Web UI Homepage, drag and drop a valid CSV or Excel file onto the Simple Importer Widget or use the 'Select file' button to find and select the valid file.

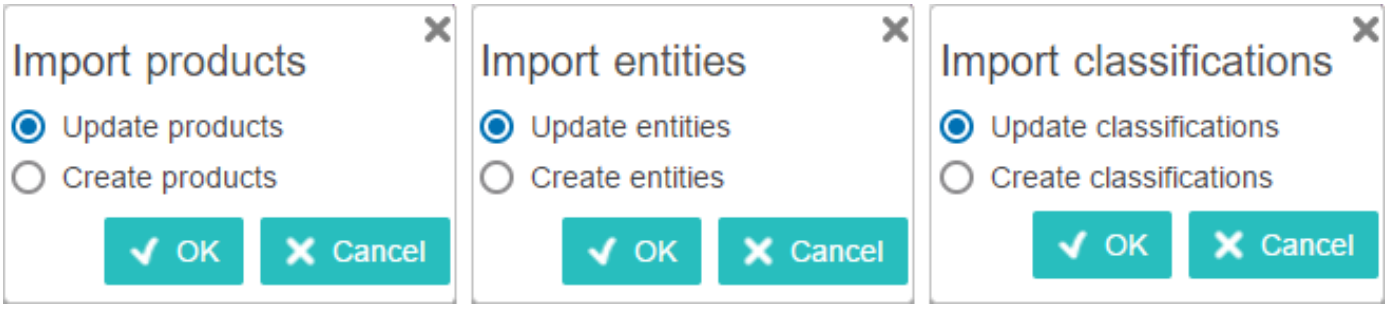
For this example, a Simple Importer Widget with basic configurations for each of the three import node types (Products, Entities, and Classifications) has been configured to display on the Homepage.



Choose to Update or Create Objects

Once an import file has been selected (or drag and dropped onto a Simple Importer Widget), a dialog specific to the widget configuration will display, prompting the user to choose to update existing objects or create new ones.

Below are examples of the respective dialog that displays when each of the three import node types is initiated and a default title is used.



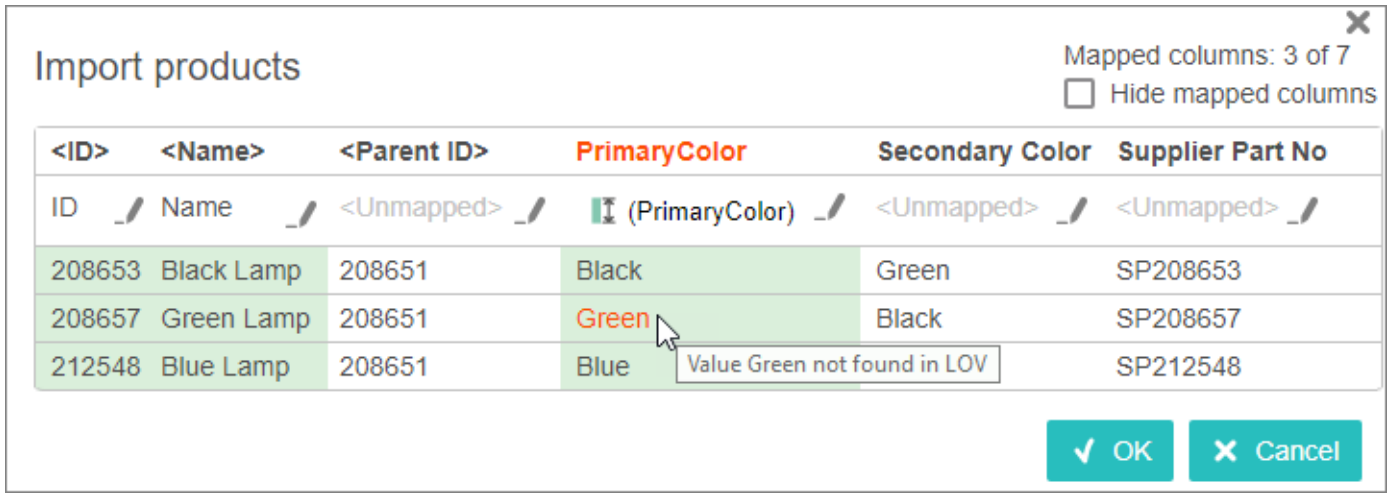
If an import file includes objects to be updated and objects to be created, the same import file can be used for both the update and create functions. However, each function will need to be completed separately (e.g., the file will need to be imported twice, once using the update option, and once using the create option).

For more information on the update functionality, see the **Update Objects Using Simple Importer** section of this guide.

For more information on the create functionality, see the **Create Objects Using Simple Importer** section of this guide.

Preview an Import File and Map Data to STEP

After an import has been initiated using the Simple Importer Widget, the import preview will display. The purpose of the import preview is to display a representation of less than 100 rows of information from the import file and the STEP system in one view. This allows users to approve automatically mapped data, edit mappings, manually map data, and confirm attribute value validity before actually starting the import, or cancel the import.



Important: The import preview displays differently depending upon the system settings configuration of a STEP Unique Key. For more information, see the **Unique Keys and the Simple Importer Widget** topic within this guide.

For the example shown above:

- 3 of 7 columns are mapped, and all columns are displayed.
- The import file column '<ID>' is automatically mapped to the STEP ID, and the OK button is enabled. Mapping the ID (or Unique Key) is the only requirement to enabling the OK button.
- The ID, Name, and PrimaryColor columns are automatically mapped because the import file column headers match the Auto Map requirements for case-sensitive header text, and STEP attribute ID and/or name. (Optionally, an import configuration could be used to map headers according to the import configuration. For more information, see the **Configuring Simple Importer Widget** topic within this guide.)
- The import file column '<Parent ID>', 'Secondary Color', and 'Supplier Part No' are unmapped, and display with the '<Unmapped>' light gray text.
- The import file column 'PrimaryColor' displays using orange text because the STEP Primary Color attribute uses an LOV that does not include Green as an option.

For more information, see the **Import Preview and Mapping** topic within this guide.

Important: If any unique keys are active in STEP, the import will fail for objects with ID values that already exist within unique key values. Even when the 'Unique key - mapped by Attribute' option is not selected, an error will occur when the ID value from an import conflicts with the unique key configuration. For more information, see the **Unique Keys and the Simple Importer Widget** topic within this guide.

Start an Import

Once mapping is complete, from the import preview click the **OK** button to start the import. The import preview will close, and a process message indicating an import background process has initiated will display with a link to the Background Process Node Details.

In the example below, the default process description is used.

If configured, the user can track the progress of the import with the Background Process Notification component and/or the Background Process List Screens. For more information, see the **Background Process Notification Component** section of the **Corner Bar Component** documentation within the **Main Properties Overview**, and the **Background Process List Screen** section of the **Using a Web UI** documentation.

Important: If an object is being created with an object type that is not valid for the existing parent, then the background process will report 'The object type with ID (ID of import file object type) isn't valid under object type with ID (ID of parent / category).' The object will be skipped.

Configuring Simple Importer Widget

A Simple Importer can only be accessed from a Simple Importer Widget on a Web UI Homepage. This topic addresses prerequisites, and the parameters available for configuring a Simple Importer Widget.

Prerequisites

It is expected that anyone configuring a Simple Importer Widget is familiar with Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer.

A Simple Importer is accessed via a Simple Importer Widget on the Homepage. Details on how to add a widget to a homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

To create objects using the Simple Importer Widget, users must have privileges allowing them to create, modify, and update the products, entities, classifications, and their attribute values, reference types, and object type in STEP (as appropriate for the data being imported). Also, the attributes mapped during import must be valid for the object type being created or updated.

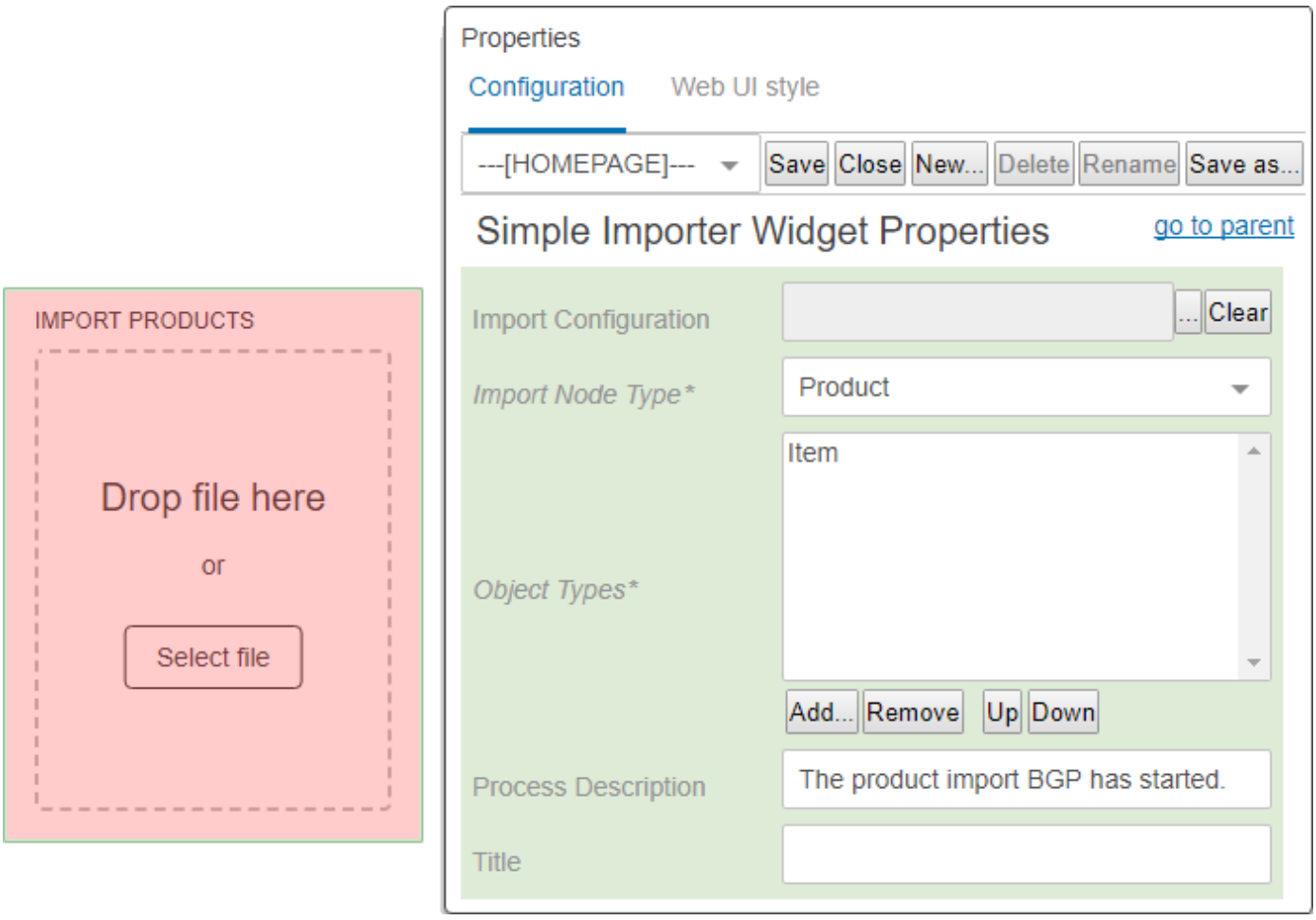
The Simple Importer has the same default settings as the Import Manager in workbench, with an exception: Attribute Transformations are not supported. For more information, see the **Import Manager** section of the **Data Exchange** documentation.

If expected results are not achieved, then a firm understanding of Action Sets, Privilege Rules, and Keys is very important. More information can be found in the **Action Sets** section within **System Setup**, the **Privilege Rules** section within **Users and Groups**, and the **Unique Keys** section within **System Setup**.

Configure a Simple Importer Widget

Any number of Simple Importer Widgets can be added to a Homepage, but each one can be configured with only one of the three import node types: products, entities, or classifications. However, more than one Simple Importer Widget can be configured for the same importer node type.

Note: An easy way to access the properties for an existing widget is to open Web UI designer from the Homepage, and select the widget you wish to configure. The designer will display the properties of the selected widget.



When adding a Simple Importer Widget to the Homepage Widget Grid, two parameters (Import Node Type and Object Types) are required, as indicated by the asterisk (*). This section describes all parameters in detail.

- **Import Configuration:** Provides a template mapping, which users can then edit as needed. This is useful if advanced Import Manager features are needed (beyond basic create or update of objects, attribute values, and references). For example, if business rules are to be run as part of the import, an import configuration must be used as the simple importer does not allow selection of business rules. For more information, see the **Business Rules in an Import Configuration** topic within the **Business Rules** documentation.
  - Optionally, click the ellipsis button (...) and select a saved Import Configuration to provide users with pre-configured mapping.
    - Before an importer configuration is available for selection in the widget configuration, it must be created in the workbench by a user with required privilege rules.
    - Choose the import configuration carefully. An error displays if the object selected is not a configuration for import, however no validation is performed to ensure the selected import configuration matches the next parameter of this widget (Import Node Type).

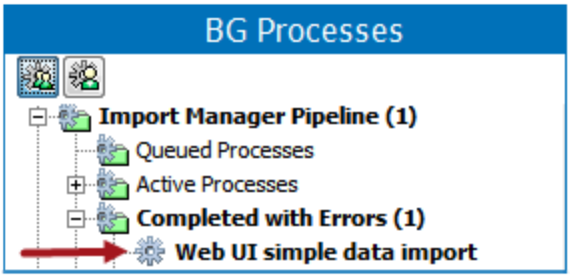
Important: Configuring the widget to use a saved import configuration will disable the Auto Map feature. If users need to import files different from the configured import configuration, then an additional widget should be created for users to benefit from the Auto Map feature when importing a file. Auto Map can be a great time saver, however the auto mapping of reference and object types is not supported. Reference and object types must be mapped manually. For more information, see the **Inbound Map Data - Auto Map** topic and the **Import Manager** section of the **Data Exchange** documentation.

- Leaving the Import Configuration parameter blank will result in the following default settings when an import is initiated using the Simple Importer Widget:
  - Auto-Initiate STEP Workflows on Item Creation is enabled
  - Auto Select Import Mode is enabled
  - Match units by name is enabled
  - Approver will be the current user initiating the import
  - Import Workspace will be the workspace used when initiating the import
  - Context will be the context chosen by the user when logging in to the Web UI.

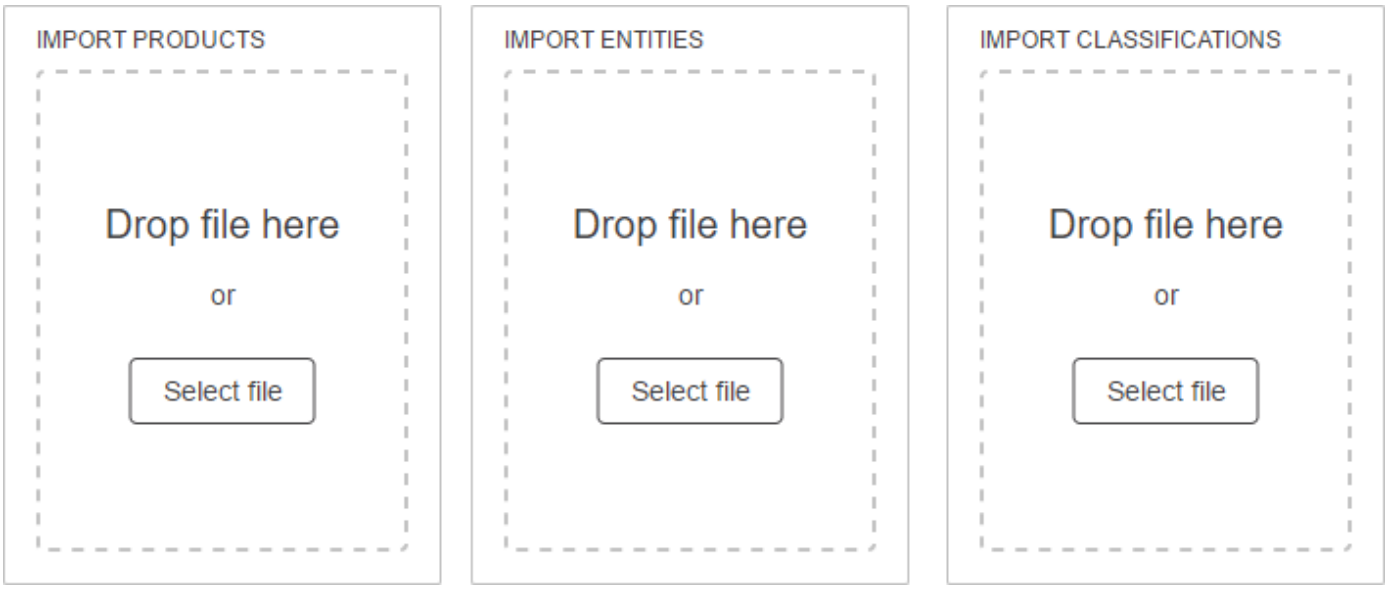
  For more information, see the **Import Manager - Advanced Settings** topic of the **Creating a Data Import** section within the **Import Manager** documentation.

- **Import Node Type*:** One of the following Import Node Types must be selected: Product, Entity, or Classification. Additional widgets can be made for each node type, if necessary.
- **Object Types*:** Provides the ability for the simple importer to create or update products, entities, or classifications for the added object types. At least one object type must be added to create and save the widget. Only the defined object types will display for the user to select from when initiating the import. Multiple valid object types of the same super type can be selected.
  - All object types selected should be within the same super type (e.g., all products, all entities, or all classifications). Mixing of super types (e.g., one product and one entity) is not supported.
  - When using the simple importer, the user will be able to select from only the object types listed during mapping.
  - Click the **Add** button to add one or more object types and the **Remove** button to eliminate a displayed object type.
  - Click the **Up** and **Down** buttons to display a list of Object Types in a specific order to the user.
- **Process Description:** The default process description is 'Web UI simple data import.' Optionally enter in a process description for monitoring background processes. The background process description in workbench will be updated with the populated text.
  - Within Web UI, when the user starts an import they will see the following:

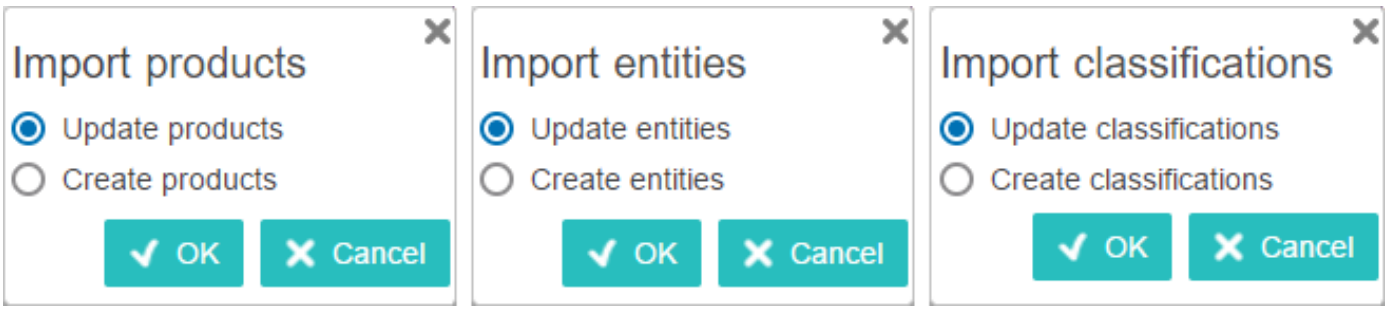
- Within workbench, once the Simple Importer has started, the BG Processes tab will display the background process within the Import Manager Pipeline using the process description as configured within the Web UI Simple Importer Properties. In the example below, the process has completed and the default process description 'Web UI simple data import' is used.



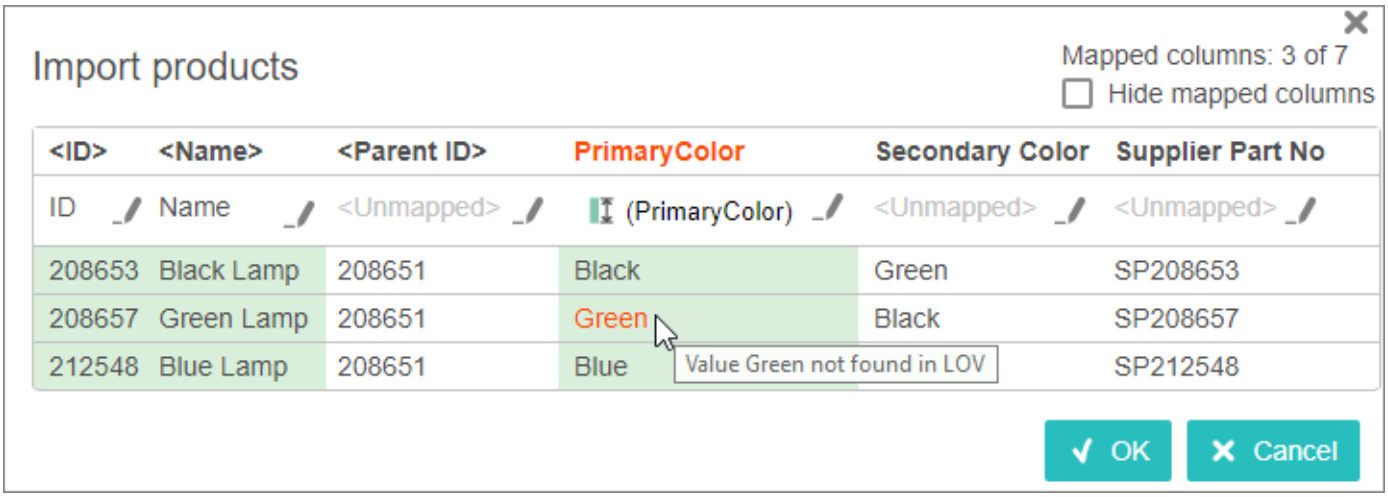
- **Title:** Optionally enter a title. If the parameter is left blank, then the default title will display within the designer as 'Import <nodetype>,'and will display for the user as Import products, Import entities, or Import classifications.
  - The Title parameter will display on the widget, the Update / Create dialog, and the Import Preview dialog.
  - The screenshot below is an example of how the default Title parameter for the product, entity, and classification node types display when the Simple Importer Widget is added to the Homepage.



  - The screenshot below is an example of how the default Title parameter for the product, entity, and classification node types display once an import is initiated and the Update / Create dialog displays.



- The screenshot below is an example of how the default Title parameter for the product node type will display when an import preview dialog displays.



Create Objects Using Simple Importer Widget

The create function within Simple Importer provides a user friendly tool for creating new products, entities, or classifications; and their attribute values, reference types, and object type. During the creation process, STEP will not allow any existing objects to be updated. Any existing objects in the import file will be ignored. However, if an import file includes both objects to be updated and created, follow the process as described below, and then using the same import file, follow the process described in the **Update Objects Using Simple Importer Widget** section within this guide.

Prerequisites

To create objects using the Simple Importer Widget, users must have privileges allowing them to create, modify, and update the data being imported. This may include products, classifications, entities, and their attribute values, object types, and reference types.

Creating objects requires the import file to include either a STEP ID or unique key. For information on using unique keys with the simple importer, see the **Unique Keys and the Simple Importer Widget** section within this guide.

Steps to Create Objects

Below are steps to create objects after an import is initiated using the Simple Importer Widget, as described in the **Using Simple Importer Widget** section of this guide.

Note: For this example, products are being created, however the steps are comparable for entity and classification creation.

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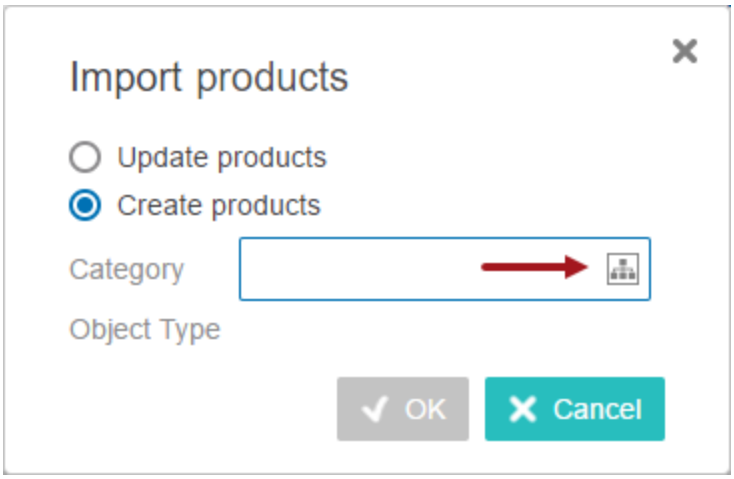
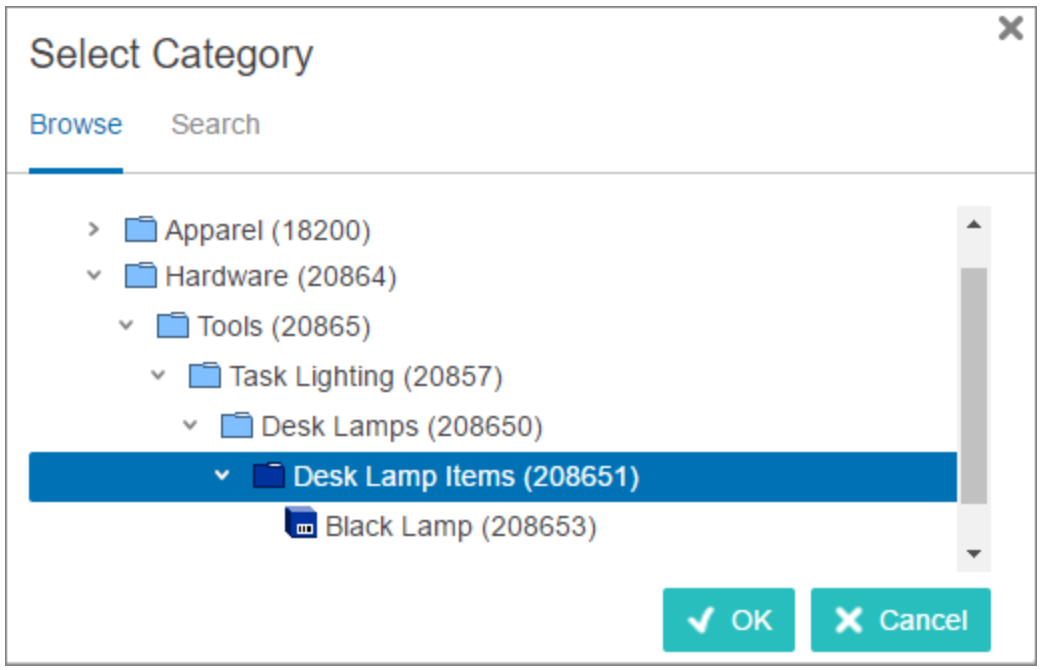
1. Select **Create products**, and the Category and Object Type parameters will display.

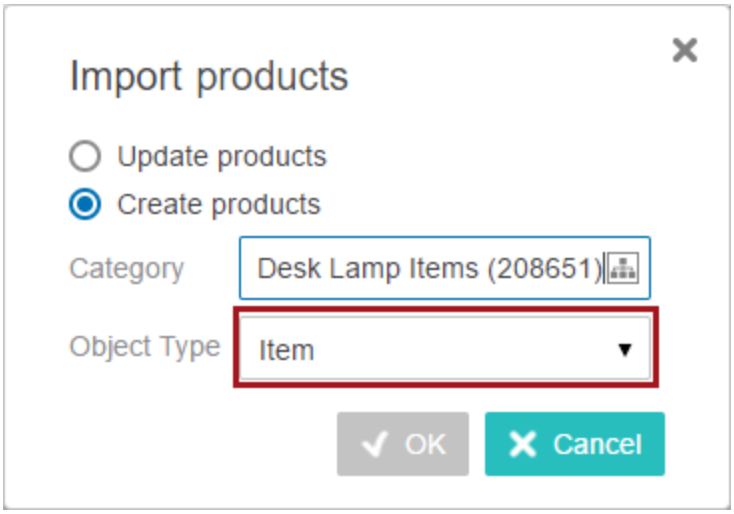


2. Enter the name or ID of the category, or click on the **Category node picker**, and the Select Category dialog will display. Select **the parent under which all objects should be created**.

   In this example, 'Desk Lamp Items' is used.



3. Click the **OK** button, and the dialog displays the parent selection and resulting object type options. Once the import is complete, the selected option applies to all newly created objects unless the user manually maps a data import column to object type.
   - If a single object type is valid for the selected parent, it will be displayed with no additional options.
   - If multiple object types are valid for the selected parent, the available options will display in a dropdown, and one must be selected.



Important: When new objects need different object types, then the import data file column can be manually mapped to an object type. Any blank rows within the import data file mapped to an object type will be created with

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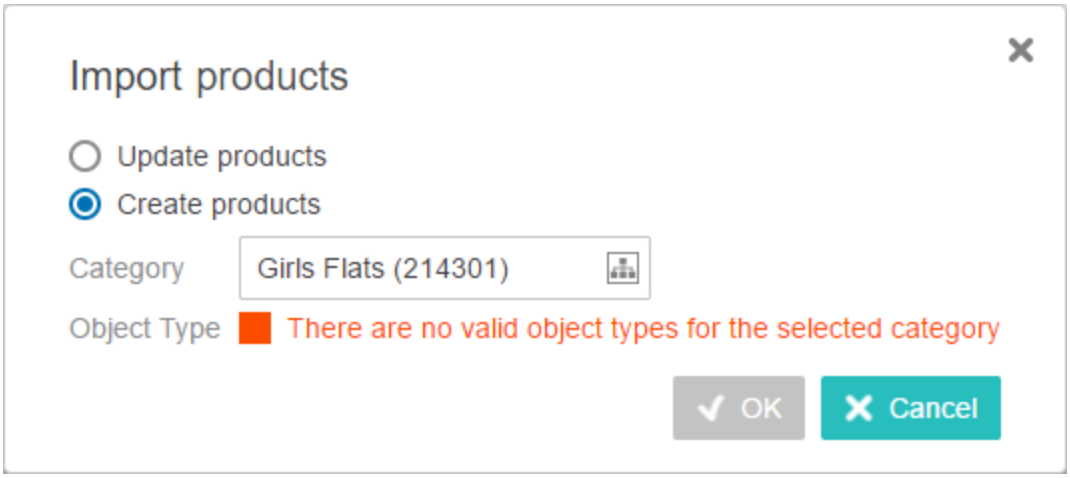
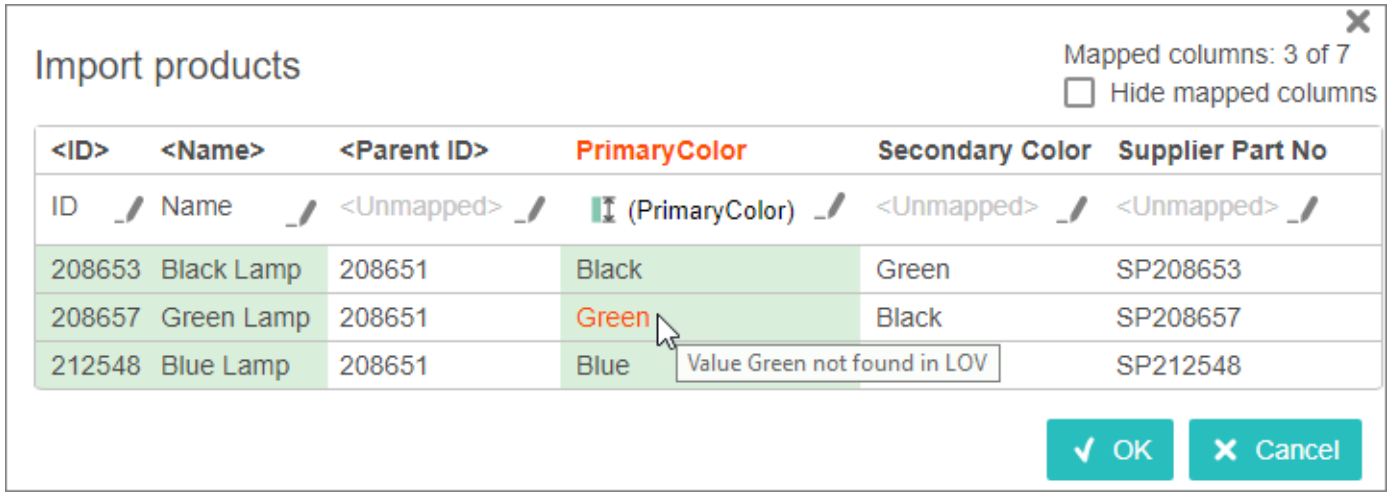
the Category and Object Type selections made during the import initiation. For more information, see the **Mapping Object Type** topic within the **Import Preview and Mapping** section of this guide.

- If there are no valid object types for the selected parent, STEP will notify the user and the OK button will remain disabled.



4. Once a valid object type is selected, click the **OK** button, and the import preview will display. Auto mapping is performed for all columns with attribute IDs or names that match between the import file and STEP.



Note: In the example above, 'Import products' displays as the title of the import preview because the import was initiated using a Simple Importer Widget configured with the import node type of Product, and the default title. When other Simple Importer Widgets are used to initiate a Simple Importer, the respective title will display.

5. Mapping an ID column or unique key is required to properly identify the objects (in this example products) intended to be created. The OK button will not become active until an ID is mapped. Only the valid data in

mapped fields (identified by the green background and black text) is imported. For more information about the import preview and how to use the mapping functionality, see the **Import Preview and Mapping** section within this guide.

6. Once the necessary fields are mapped, the user is now ready to start the import, as defined in the **Start an Import** section within the **Using Simple Importer Widget** topic within this guide.

Update Objects Using Simple Importer Widget

The update function within Simple Importer provides a user friendly tool for updating existing products, entities, or classifications; and their attribute values, reference types, and object type. During the update process, STEP will not allow any new objects to be created. Any new objects in the import file will be ignored. Only objects with a matching ID or unique key within the selected object type will be updated. However, if an import file includes both objects to be updated and created, follow the process as described below, and then using the same import file, follow the process described in the **Create Objects Using Simple Importer** section within this guide.

Prerequisites

To update objects using the Simple Importer Widget, users must have privileges allowing them to modify and update the data being imported. This may include products, classifications, entities, and their attribute values, object types and reference types.

Updating objects requires the import file to include either a STEP ID or unique key. For information on using unique keys with the Simple Importer, see the **Unique Keys and the Simple Importer Widget** section within this guide.

Steps to Update Objects

Below are steps to update objects after an import is initiated using the Simple Importer Widget, as described in the **Using Simple Importer Widget** section of this guide.

Note: For this example, products are being updated, however the steps are comparable for entity and classification updates.

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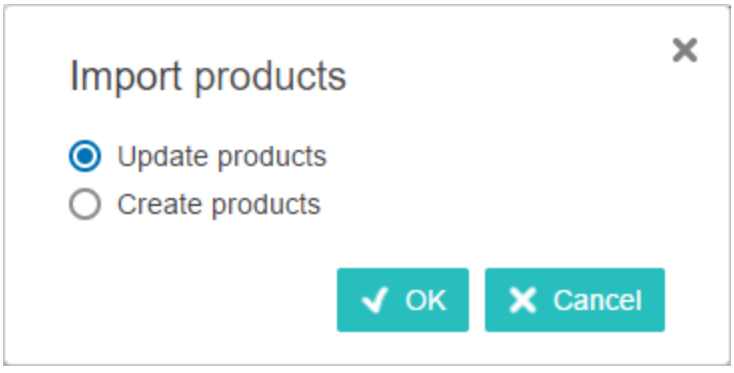
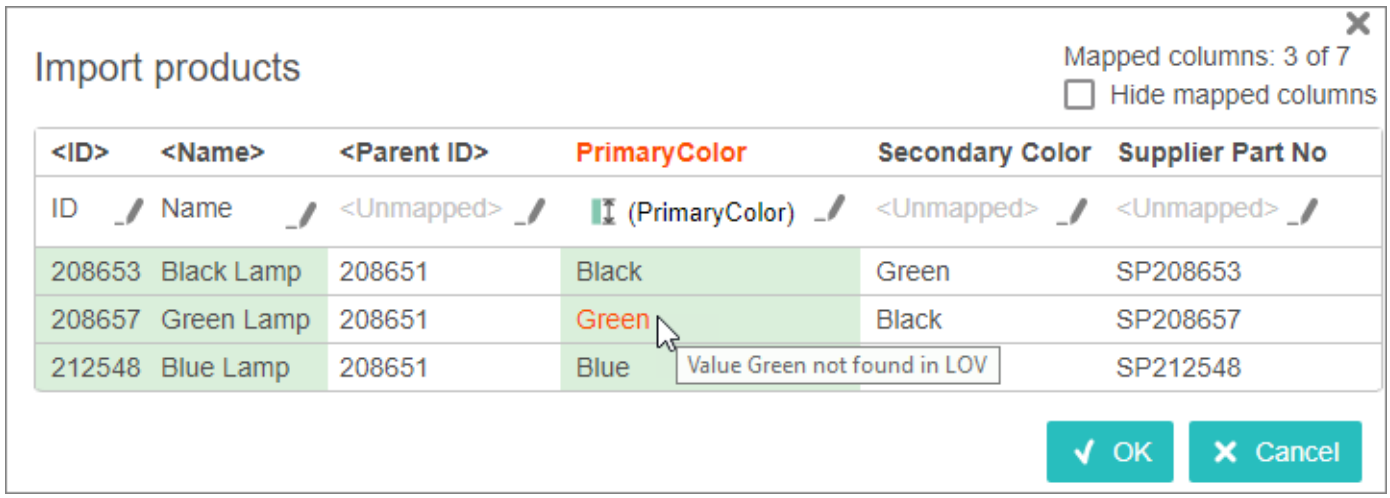
1. Select **Update products**.



2. Click the **OK** button, and the import preview will display. Auto mapping is performed for all columns with attribute IDs or names that match between the import file and STEP.



Note: In the example above, 'Import products' displays as the title of the import preview because the import was initiated using a Simple Importer Widget configured with the import node type of Product, and the default title. When other Simple Importer Widgets are used to initiate a Simple Importer, the respective title will display.

3. Mapping an ID column or unique key is required to properly identify the existing products intended to be updated. Only the valid data in mapped fields (identified by the green background and black text) is imported. For more information about the import preview and how to use the mapping functionality, see the **Import Preview and Mapping** section within this guide.
4. Once the necessary fields are mapped, the user is now ready to start the import, as defined in the **Start an Import** section within the **Using Simple Importer Widget** topic within this guide.

Import Preview and Mapping

The import preview will display after an import has been initiated using the Simple Importer. The purpose of the import preview is to display a representation of less than 100 rows of information from the import file and the STEP system in one view. This allows users to approve auto mapped data, edit mappings, manually map data before actually starting the import, or cancel the import.

This section addresses:

- Prerequisites
- Import Preview Features
- Check Data Validity for Attribute Types
- Mapping Attribute
- Mapping ID
- Mapping Name
- Mapping Object Type
- Mapping Reference Type
- Remove Mapping

Prerequisites

The import preview uses the STEP Auto Map functionality. For more information, see the **Inbound Map Data - Auto Map** topic within the **Inbound Map Data Options** documentation.

Import Preview Features

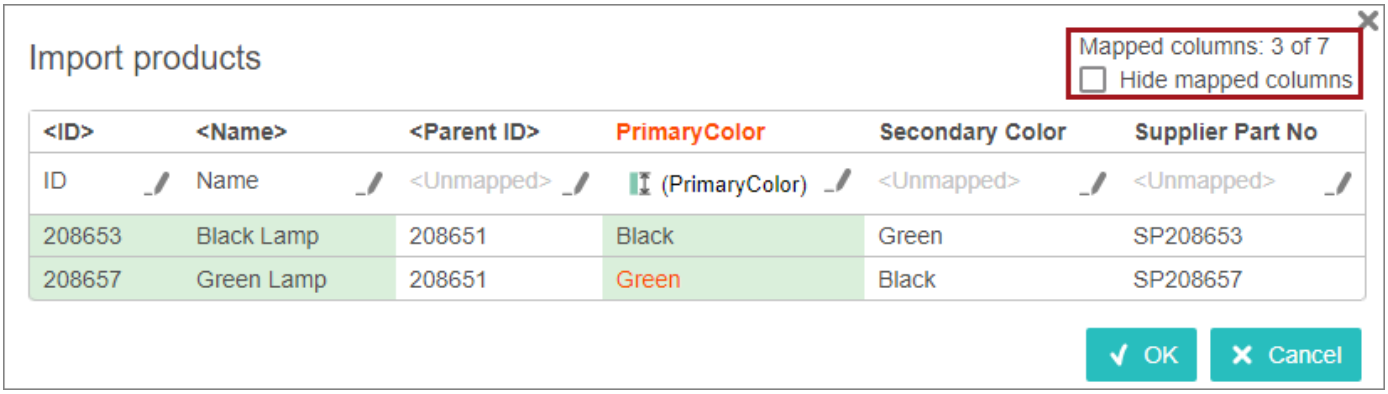
This section describes the different features available within the import preview.

Title

In the example below, 'Import products' displays as the title of the import preview because the Simple Importer was initiated using a Simple Importer configured with the import node type of Product, and the default title 'Import <nodetype>.' When other Simple Importer Widgets are used to initiate a Simple Importer, the respective title will display.

Mapped columns count and Hide mapped columns

In the top right of the import preview, 'Mapped columns:' indicates the number of columns from an import file that are mapped, and the 'Hide mapped columns' checkbox (when enabled) allows users to easily focus on the columns that are not mapped. These features are most useful when an import file contains more columns than can be displayed without scrolling.

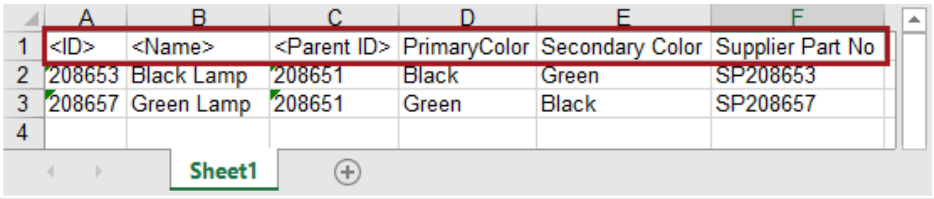


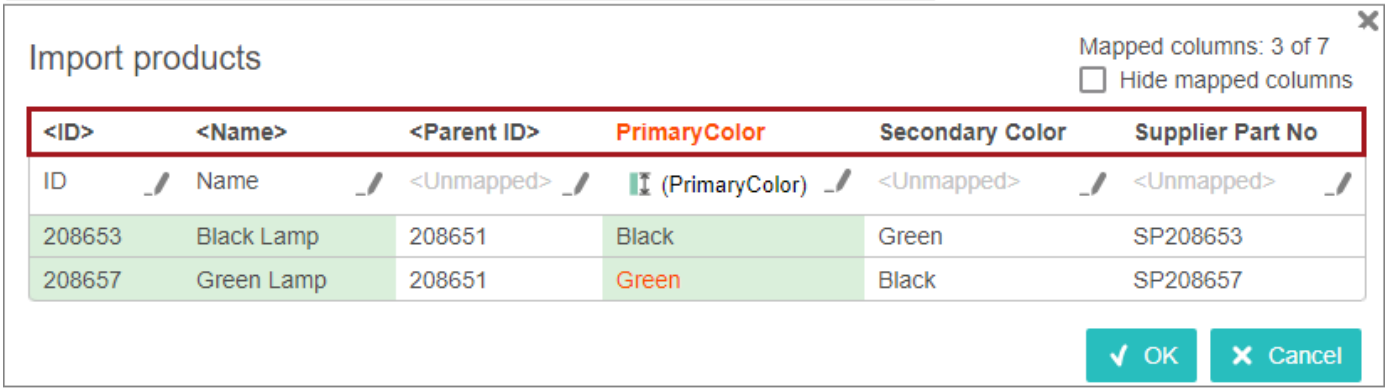
Important: The import preview displays differently depending upon the system settings configuration of a STEP unique key. For more information, see the **Unique Keys and the Simple Importer Widget** topic within this guide.

Header row

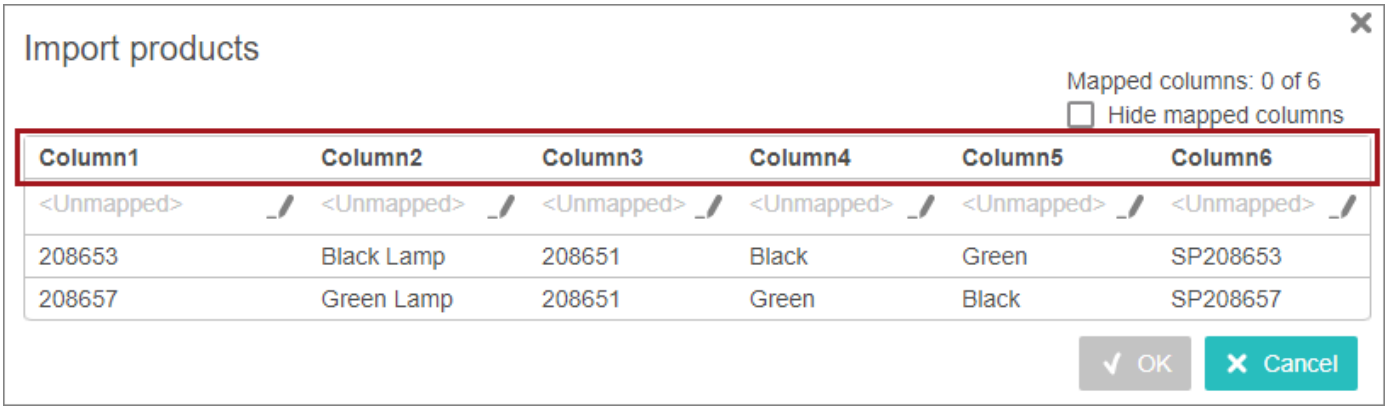
The import preview displays the import file information as a table. The first row of the table is used to display column headers with bold text. Import files can be used with or without a header row.

If the import file includes a header row, then the import preview header row will display with the import file column header labels.





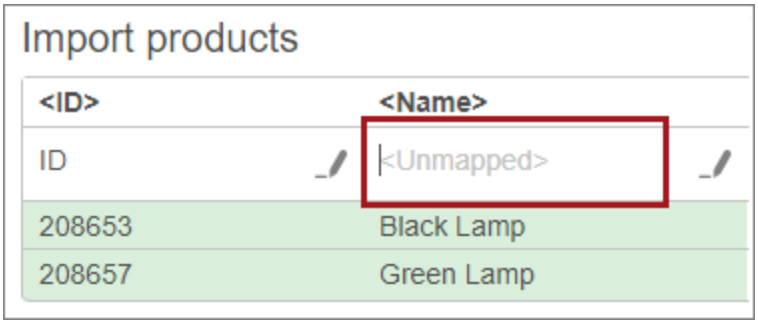
If the import file does not include a header row, then the import preview header row will display with each column numbered using bold text (as shown below).



Mapping row and Edit button

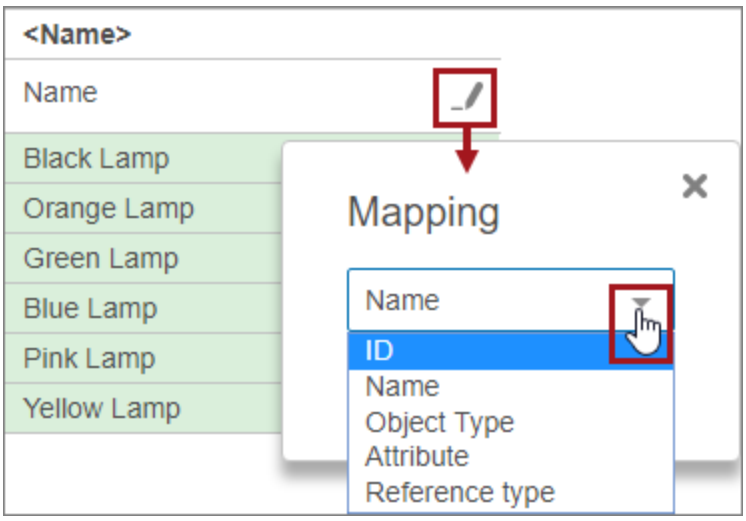
The second row (under the header row) is used to map the import file data to STEP objects. Import file columns can be unmapped, auto mapped, and manually mapped.

The mapping row displays unmapped data as '<Unmapped>' using light gray text, and mapped values display with the STEP object ID.



For information on how to remove a mapped value, see the **Remove Mapping** topic within this section.

The mapping row also displays an Edit button ( ) for each column. The Edit button opens a Mapping dialog with a dropdown that can be used to manually map the STEP ID, Name, Object Type, Attribute, and Reference type to import file columns.

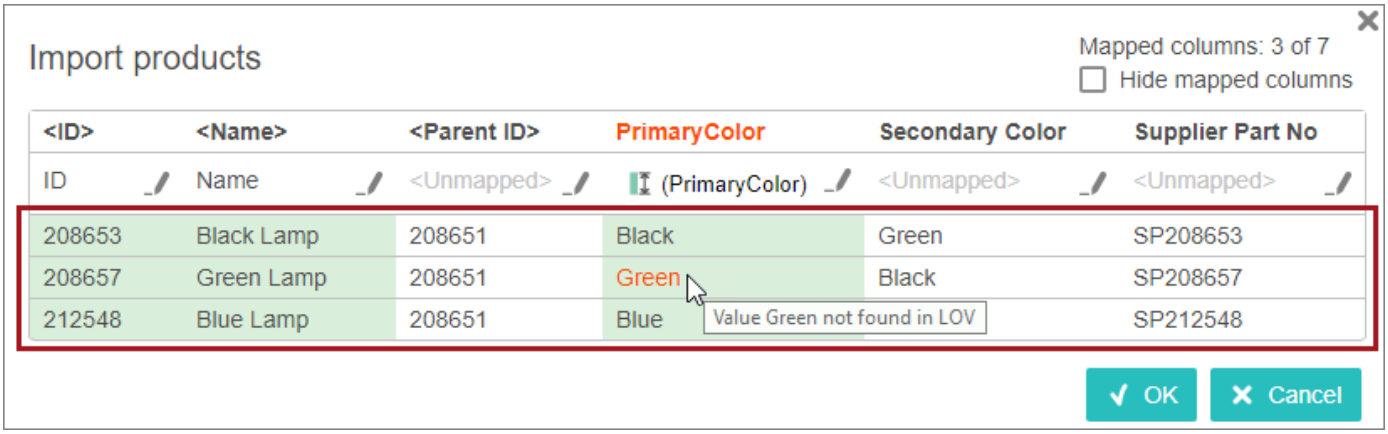


Important: The Mapping dropdown displays differently depending upon the system settings configuration of a STEP unique key. For more information, see the **Unique Keys and the Simple Importer Widget** topic within this guide.

Data preview

Below the mapping row, a representation of up to 100 rows of information from the import file displays. Data within the mapped columns display with green shading, and unmapped columns display white (no shading). If any values within the import file are mapped to STEP attributes, but do not match the STEP attribute validation base type, a tool-tip will display information as to why the import data does not meet the attribute validation base type. For more information, see the **Check Attribute Data Validity** topic of this guide.

Important: Only the valid data in mapped fields is imported.



OK and Cancel Buttons

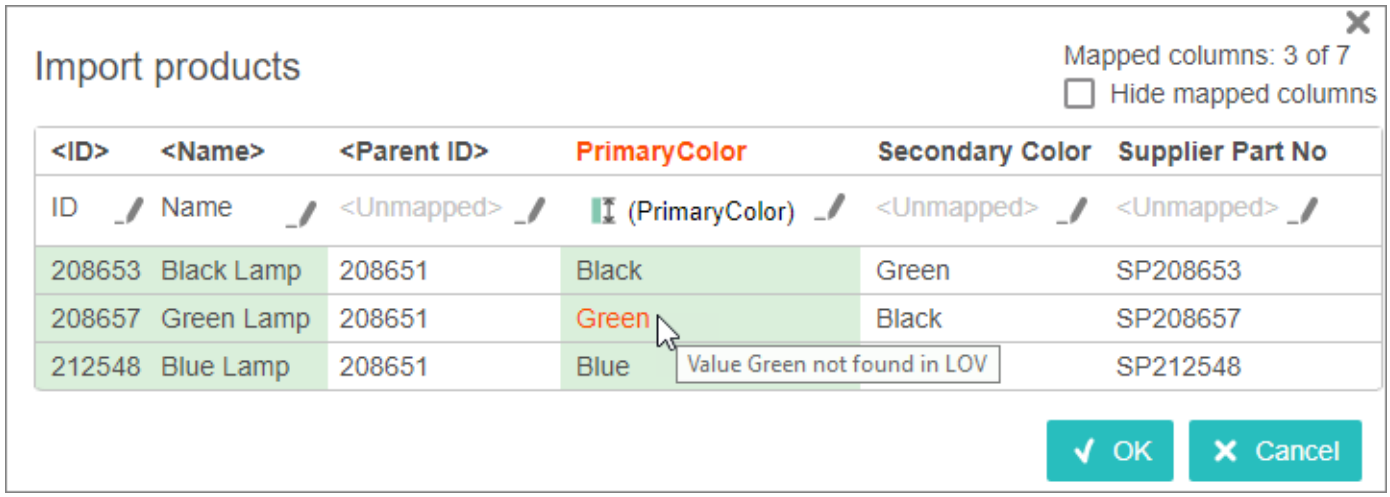
The import preview displays with OK and Cancel buttons. STEP data remains unchanged until the OK button is clicked. Only an ID field or unique key field is required to complete the mapping, and enable the OK button that will start the import background process. However, if only an ID or unique key is mapped, no changes will be made in STEP.

The Cancel button is always enabled, allowing the user to cancel the import preview at anytime, making no changes to the STEP data.

Check Attribute Data Validity

On the import preview, as mappings are created, STEP confirms the data type or validation base type mapped to the attribute is valid (for example, a text value in a numeric attribute, or an invalid LOV value). The preview uses orange text to indicate when the data supplied in an import file is not valid for the validation base type of the attribute it has been mapped to. When a user hovers over the orange text (as shown in the screenshot below), a tool-tip will display information as to why the import data does not meet the attribute validation base type.

For example, the import file column 'PrimaryColor' header displays using orange text because the attribute value 'Green' within the import file is not valid. In this example, the STEP Primary Color attribute uses an LOV that does not include Green as an option. If this import file is processed without adding Green to the STEP LOV, then the attribute value for the relative object will not be updated, because the data is not valid for the attribute.



Mapping Attribute

When using the Simple Importer Widget, if an import file column label matches a STEP attribute ID and/or name, then it can auto map to the STEP attribute. The auto mapping can be confirmed when the preview displays with the auto mapped column(s). For more information, see the **Predefined Header Text** section of the **Inbound Map Data - Auto Map** topic within the **Inbound Map Data Options** documentation.

A user can manually map a column within the import file to a STEP attribute. However, only one attribute can be mapped per column.

For example, a user may want to map to a STEP attribute when an import file column:

- label does not match a STEP attribute ID and/or name.
- labeled as '<Name>' was auto mapped, but is not preferred for creating new STEP objects.

Below are steps to map a column within the import file to the STEP attribute.

Note: It is recommended to map the object ID / unique key before any other mappings to enable the Suggestions functionality described below.

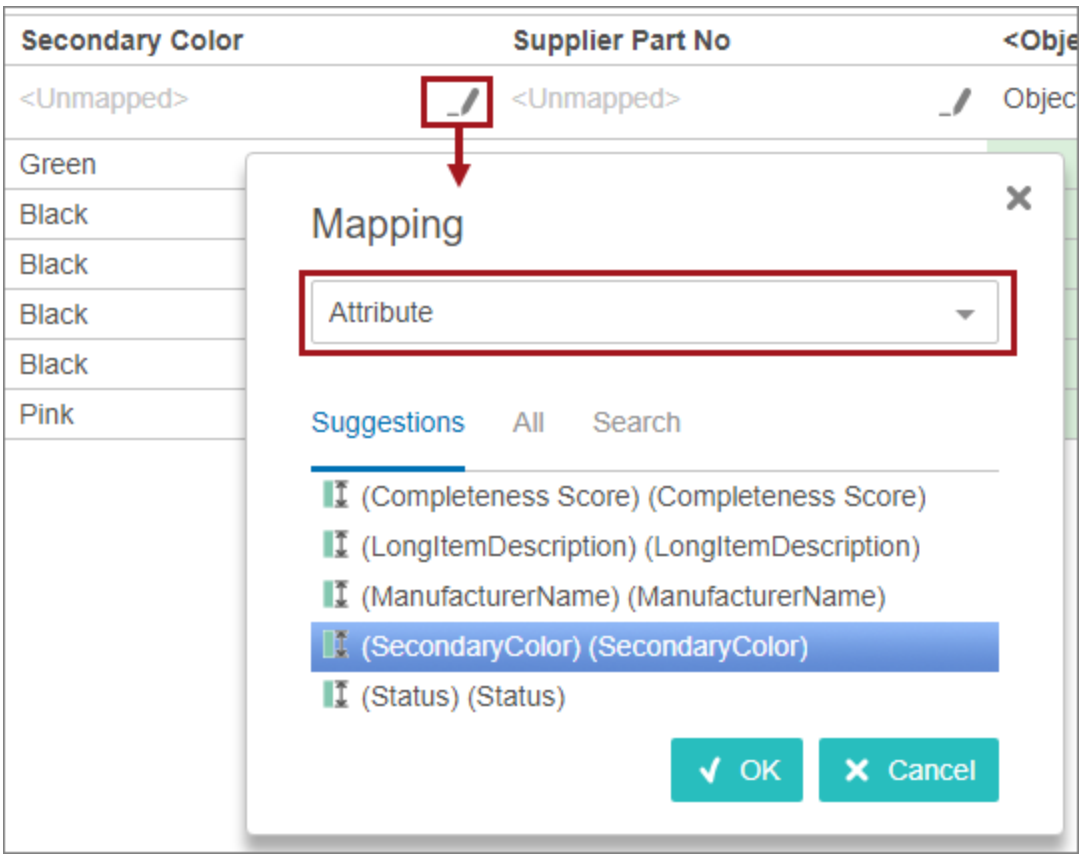
For this example, the import file included a 'Secondary Color' column label that was not auto mapped to the STEP attribute because the column label does not match the STEP attribute ID and/or name.

1. From the import preview dialog, select the **Edit button** in the top right of the column that needs to be mapped (Secondary Color), and the mapping dialog will display.

   Alternatively, type an attribute name or ID into the text field to the left of the Edit button, where '<Unmapped>' is displayed in the image below. Typeahead functionality lists the attributes that match the text and the required attribute can be selected from the list.

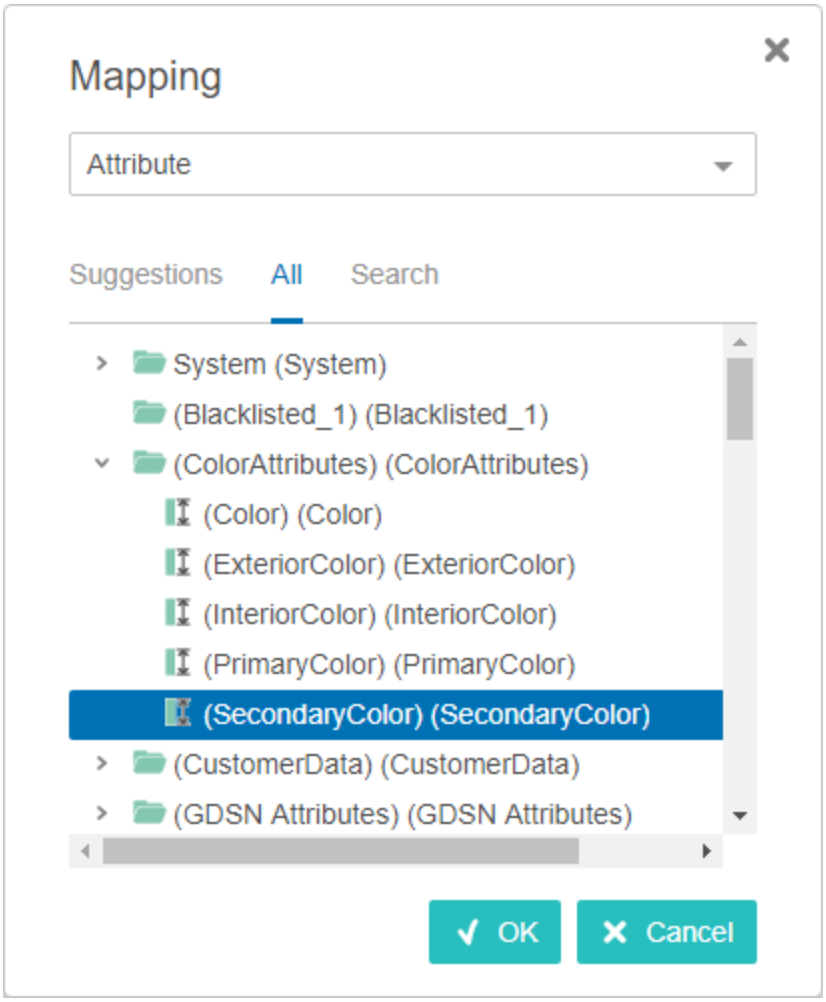
2. Select **Attribute** from the dropdown, and the Suggestions, All, and Search tabs will populate accordingly.

   - **Suggestions Tab:** When selected, a list of attributes will display based upon the object type defined for the import. For an attribute to be suggested, the attribute must be valid for both the object types of the items that are imported, and the object type of the parent under which they are imported.

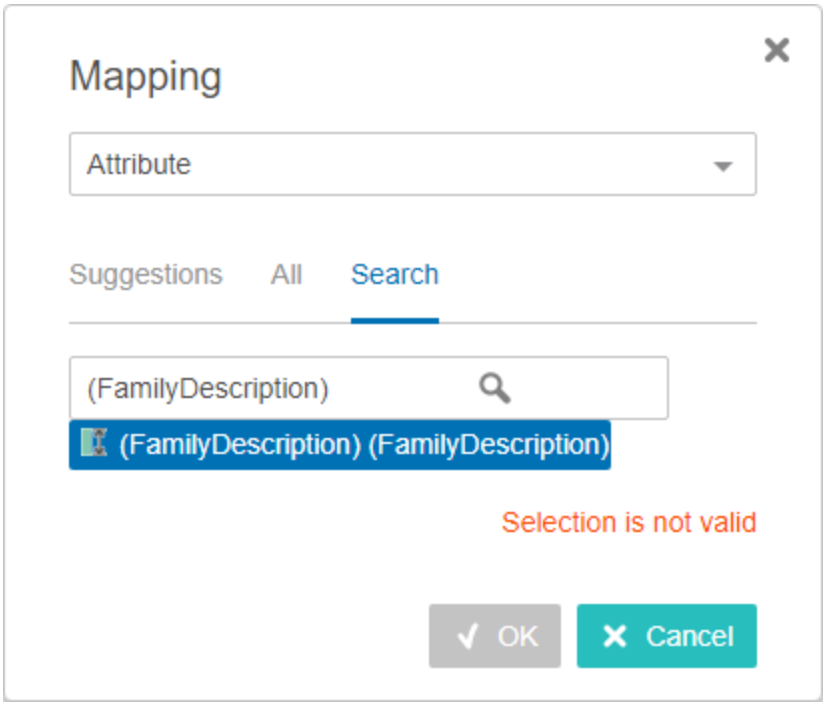


Important: The Suggestions tab is based on the object type being imported. Suggestions function properly when creating objects because an object type is specified when initiating the import. When updating objects, the Suggestions tab returns results only after the object ID is mapped, which also identifies the object type. Therefore, it is recommended to map the ID / unique key before any other mappings.

- **All Tab:** When selected, all attribute group folders accessible by the user display. Expand the attribute group folders to locate the necessary attribute. The **OK** button will enable once a valid attribute is selected. Click the **OK** button to return to the import preview.



- **Search Tab:** When selected, a blank search field displays. Enter an attribute name or ID into the search field, and the available attribute will display for selection. Select the attribute.
  - If the attribute selected is not valid, then the user will be notified with orange text, 'Selection is not valid,' and the **OK** button is not enabled (as shown below).



3. Once a valid attribute is selected, the **OK** button will enable. Click the **OK** button to return to the import preview.
4. Once mapping is complete, from the import preview, select the **OK** button to start the import. For more information, see the **Start an Import** section of the **Using Simple Importer Widget** topic within this guide.

Results for this example

Once the import is complete, the objects will have the valid attribute values per the mapping selections.

Mapping ID

When using the Simple Importer Widget, the ID column can auto map if the column header label is '<ID>'. The auto mapping can be confirmed when the preview displays with the ID auto mapped. For more information, see the **Predefined Header Text** section of the **Inbound Map Data - Auto Map** topic within the **Inbound Map Data Options** documentation.

A user can manually map the STEP object ID to a column within the import file.

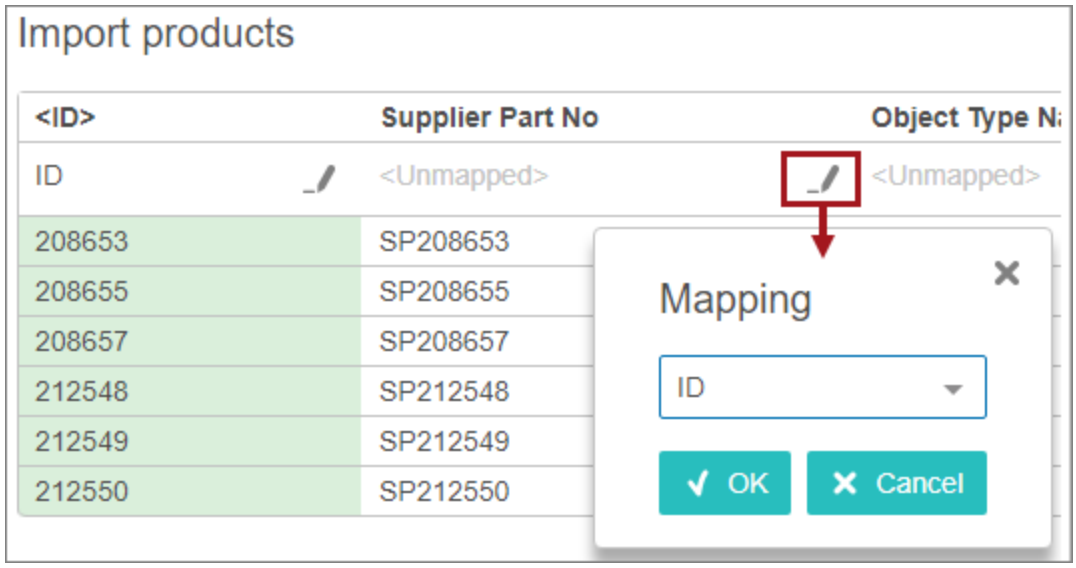
For example, a user may want to map to a STEP object ID when an import file column:

- does not include a column with the '<ID>' label.
- labeled as '<ID>' was auto mapped, but is not preferred for creating new STEP objects, and the user needs to manually map ID to the column with a preferred ID.

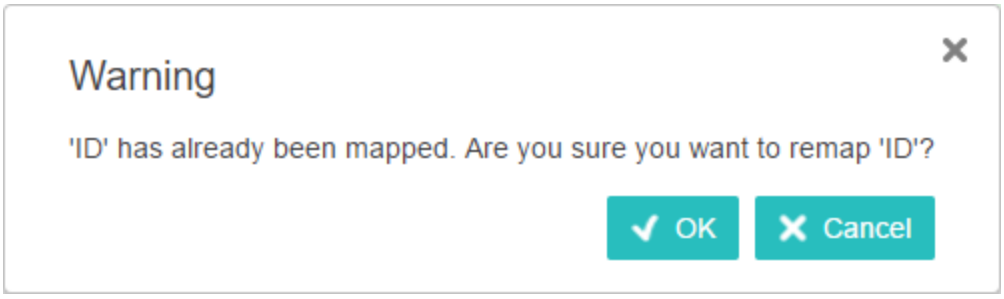
Below are steps to map a column within the import file to the STEP object ID.

For this example, the import file included an '<ID>' column that was auto mapped to the STEP new object ID. However, the 'Supplier Part No' column is better suited as the STEP new object ID, and needs to be manually mapped to ID.

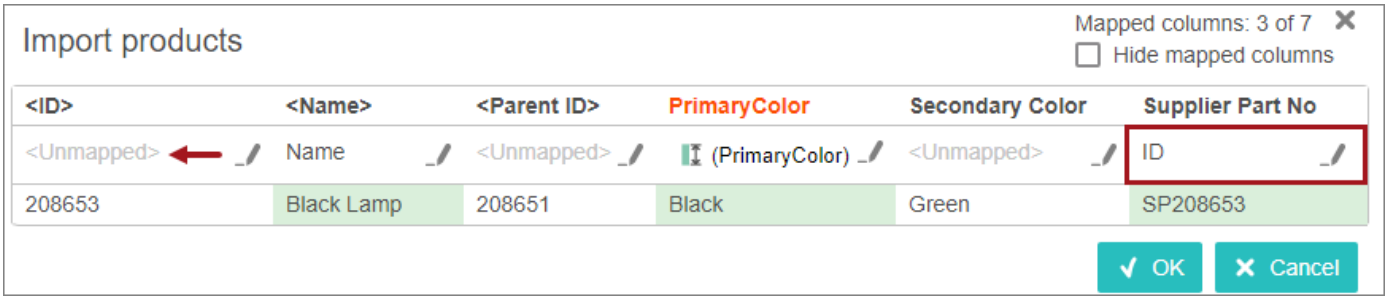
1. From the import preview dialog, select the **Edit button** in the top right of the column that needs to be mapped (Supplier Part No), and the mapping dialog will display.



2. Select **ID** from the dropdown.
3. Click the **OK** button.
   - Because the ID was already mapped, a Warning dialog will display.



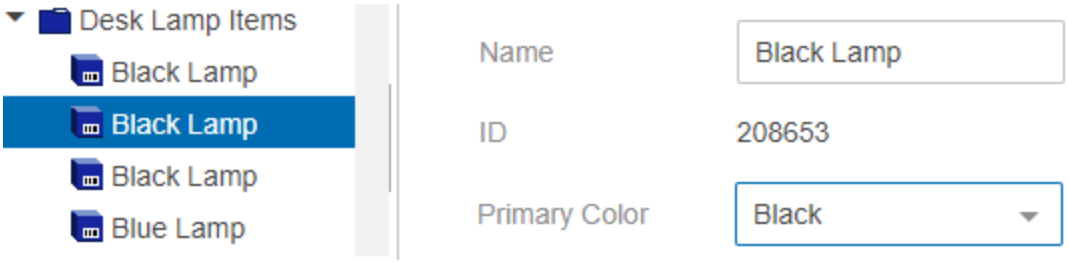
4. Click the **OK** button, and the import preview will display the <ID> column as <Unmapped>, and the Supplier Part No column as ID.



5. Once mapping is complete, from the import preview select the **OK** button to start the import. For more information, see the **Start an Import** section of the **Using Simple Importer Widget** topic within this guide.

Results for this example

Once the import is complete, the new objects will have the IDs as listed in the Supplier Part No column.



Important: If any keys are active in STEP, the import will fail for objects with ID values that already exist within key values. Even when the 'Unique key - mapped by Attribute' option is not selected, an error will occur when the ID value from an import conflicts with the unique key configuration. For more information, see the **Unique Keys and the Simple Importer Widget** topic within this guide.

Mapping Name

When using the Simple Importer Widget, if an import file column is labeled as '<Name>', then it can auto map to the STEP object name. The auto mapping can be confirmed when the preview displays with the object name auto mapped. For more information, see the **Predefined Header Text** section of the **Inbound Map Data - Auto Map** topic within the **Inbound Map Data Options** documentation.

A user can manually map a column within the import file to the STEP object name.

For example, a user may want to map to a STEP object name when an import file column:

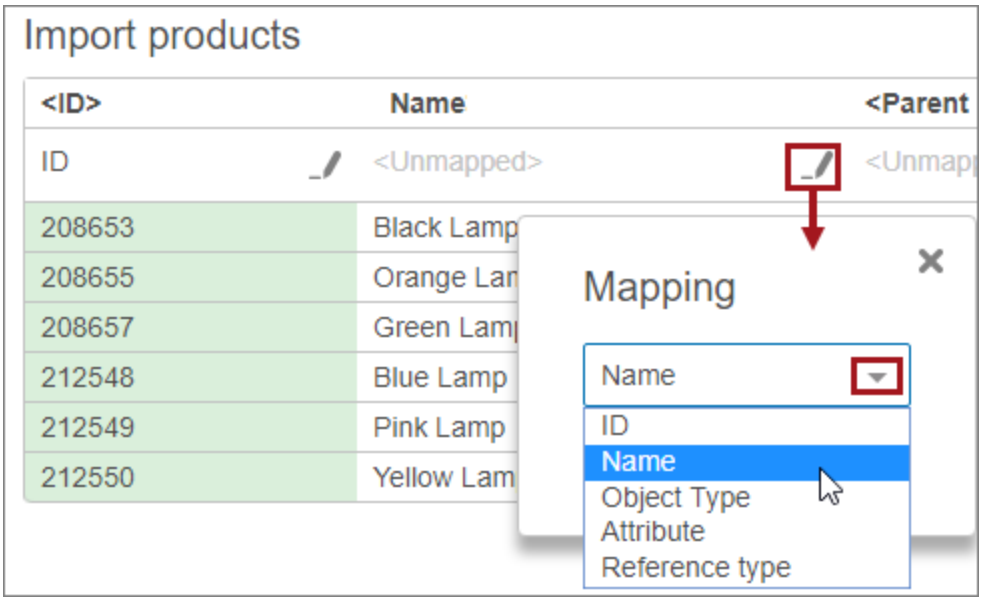
- does not include the '<Name>' label, and the user needs to manually map to an existing column.
- labeled as '<Name>' was auto mapped, but is not preferred for creating new STEP objects. The user needs to manually map name to the column with a preferred object name.

Below are steps to map a column within the import file to the STEP object name.

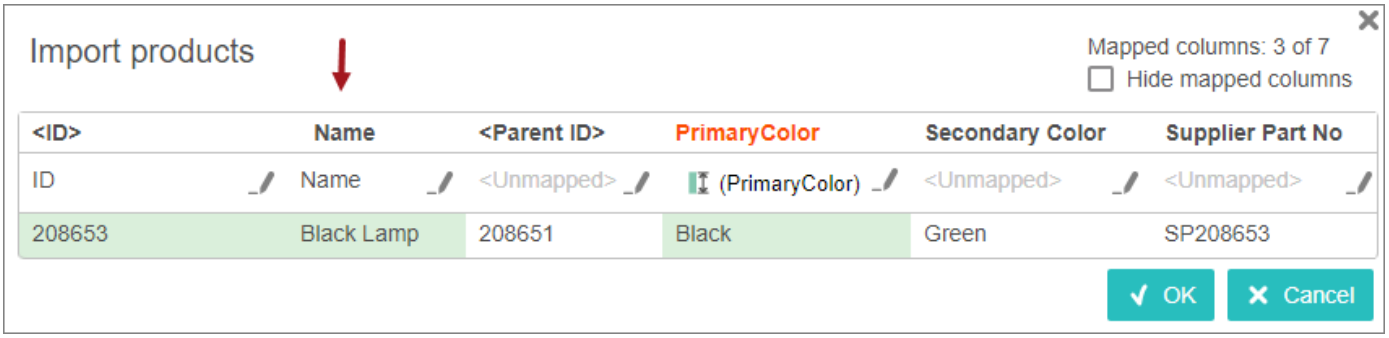
Note: It is recommended to map the object ID / unique key before any other mappings to enable the Suggestions functionality.

For this example, the import file included a 'Name' column that was not auto mapped to the STEP object name because the Auto Map functionality requires the object name column heading within the import file to be '<Name>' for the auto mapping to occur.

1. From the import preview dialog, select the **Edit button** ( ) in the top right of the column that needs to be mapped (Name), and the mapping dialog will display.
2. Select **Name** from the dropdown.



3. Click the **OK** button, and the import preview will display the Name column as mapped to the STEP object name.



4. Once mapping is complete, from the import preview select the **OK** button to start the import. For more information, see the **Start an Import** section of the **Using Simple Importer Widget** topic within this guide.

Results for this example

Once the import is complete, the object names will display per the import file Name column.

Mapping Object Type

When using the Simple Importer Widget to edit object type information, Auto Map functionality is not available, however a user can manually map a column within the import file to a STEP object type.

For example, a user may want to map to a STEP object type when:

- objects need to be created for more than one object type.
- the current object type needs to be changed to a new object type.

To create objects using different object types, after initiating the import, and selecting the category and object type, then the selected object type will apply to all newly created objects unless the user manually maps the import object to a different object type. The manual mapping overrides the object type selection made when initiating the import, therefore any objects created will be given the object type manually mapped. Any blank rows within the import data file mapped to object type will be created with the object type selection made during the import initiation. For more information, see the **Create Objects Using Simple Importer** section of this guide

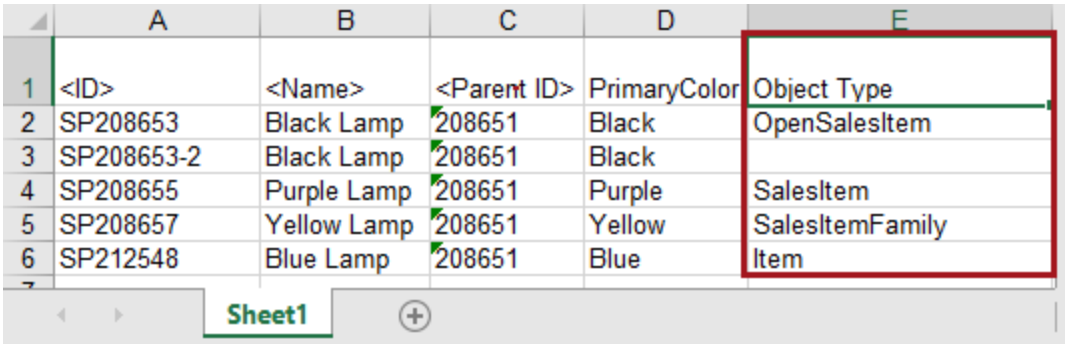
To update an existing object to a new and/or different object type, the new object type must be valid below the existing object type parent.

Note: In the following two cases, the object will be skipped during import and reported as described: 1. If an object is being created or updated with an object type that is not valid for the existing parent, then the background process detail will report 'The object type with ID (ID of import file object type) isn't valid under object type with ID (ID of parent / category).' 2. If the object type does not exist in STEP, the background process detail will report 'The object type with ID (ID of import file object type) could not be found.

Steps for Manually Mapping Object Type

Below are steps to manually map an import file column that contains object type IDs to a STEP object type. It is recommended to map the object ID / unique key before any other mappings.

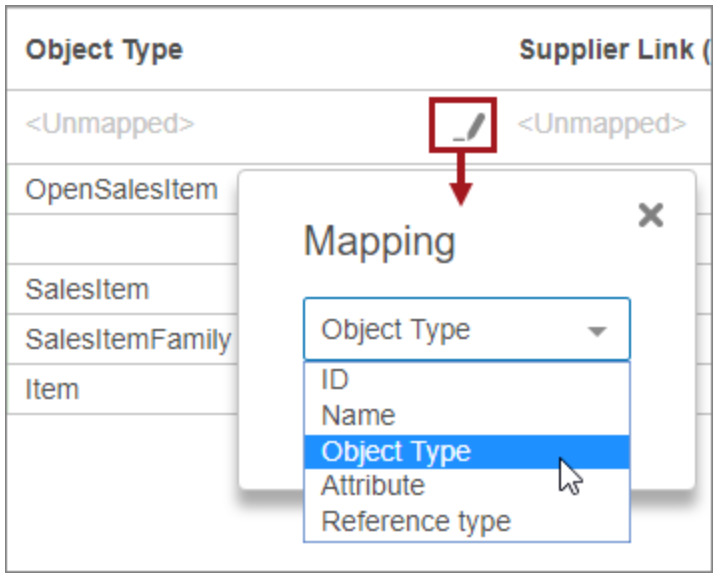
For this example, the import file includes a column heading labeled 'Object Type' that cannot be auto mapped, and must be manually mapped to the STEP object type. Of the five (5) product objects within the import, each belongs to a different object type (OpenSalesItem, SalesItem, SalesItemFamily, and Item) or an object type is not identified (field left blank in import file).



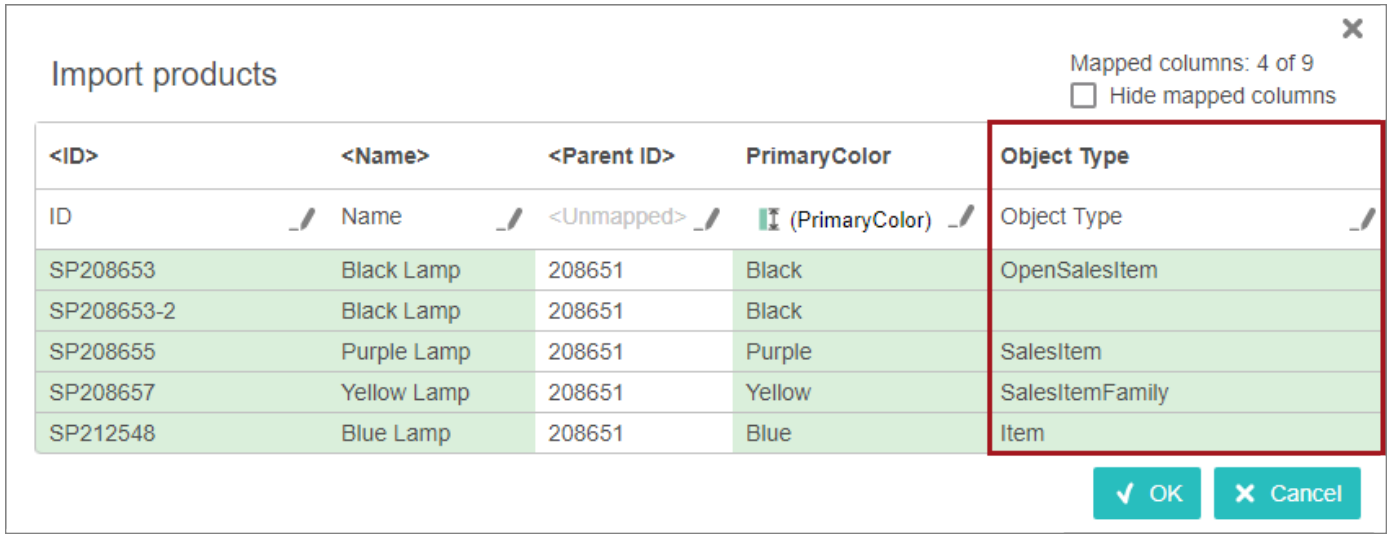
	A	B	C	D	E
1	<ID>	<Name>	<Parent ID>	PrimaryColor	Object Type
2	SP208653	Black Lamp	208651	Black	OpenSalesItem
3	SP208653-2	Black Lamp	208651	Black	
4	SP208655	Purple Lamp	208651	Purple	SalesItem
5	SP208657	Yellow Lamp	208651	Yellow	SalesItemFamily
6	SP212548	Blue Lamp	208651	Blue	Item

Sheet1

1. From the import preview dialog, select the **Edit button** ( ) in the top right of the column that needs to be mapped (Object Type), and the mapping dialog will display.
2. Select **Object Type** from the dropdown, and the OK button will enable.



3. Click the **OK** button on the Mapping dialog and the import preview will display with the object type mapped.



4. Once mapping is complete, from the import preview select the **OK** button to start the import. For more information, see the **Start an Import** section of the **Using Simple Importer Widget** topic within this guide.

Results for this example

- Row 1 contained the invalid object type ID 'OpenSalesItem,' will be skipped, and the background process detail will report 'The object type with ID (OpenSalesItem) isn't valid under object type with ID (ID of parent /

category).'

- Row 2 contained a blank cell within the manually mapped object type.
  - If the Update objects function was used to initiate the import, then the row will be updated, but no change will be made to the Object type.
  - If the Create objects function was used to initiate the import, then the new object will be created with the Object type selected during the initiate import.
- Rows 3 through 5 contained valid object type IDs, and will be properly created / updated in STEP.

Mapping Reference Type

When using the simple importer widget, Auto Map is not supported for reference types. A user can manually map a STEP reference type to a column within the import file. However, the reference type must be valid for the object.

Note: If a reference type is being referred to, which is not valid for the object type, then the background process detail will report 'The reference type with ID (ID of the reference type) isn't valid for target product with ID (ID of the Product).'

When importing data using the simple importer widget, columns can be mapped to the Image and Document References (Assets), Classification, Entity, and Product reference types.

It is important to note that multi reference functionality is not available with this widget. Only one reference type can be added to an object using this widget.

Multi objects can be referred for a single reference type adding separate rows for each object in import file as shown in the below screenshot.

	A	B	C	D
1	<ID>	<Name>	<Object Type Name>	Primary Product Image
2	SP208653	Black Lamp	Item	20585
3	SP208653	Black Lamp	Item	20586
4	SP208653	Black Lamp	Item	20584
5				

For example, a user may want to map to a STEP reference type when an import file column includes the ID of :

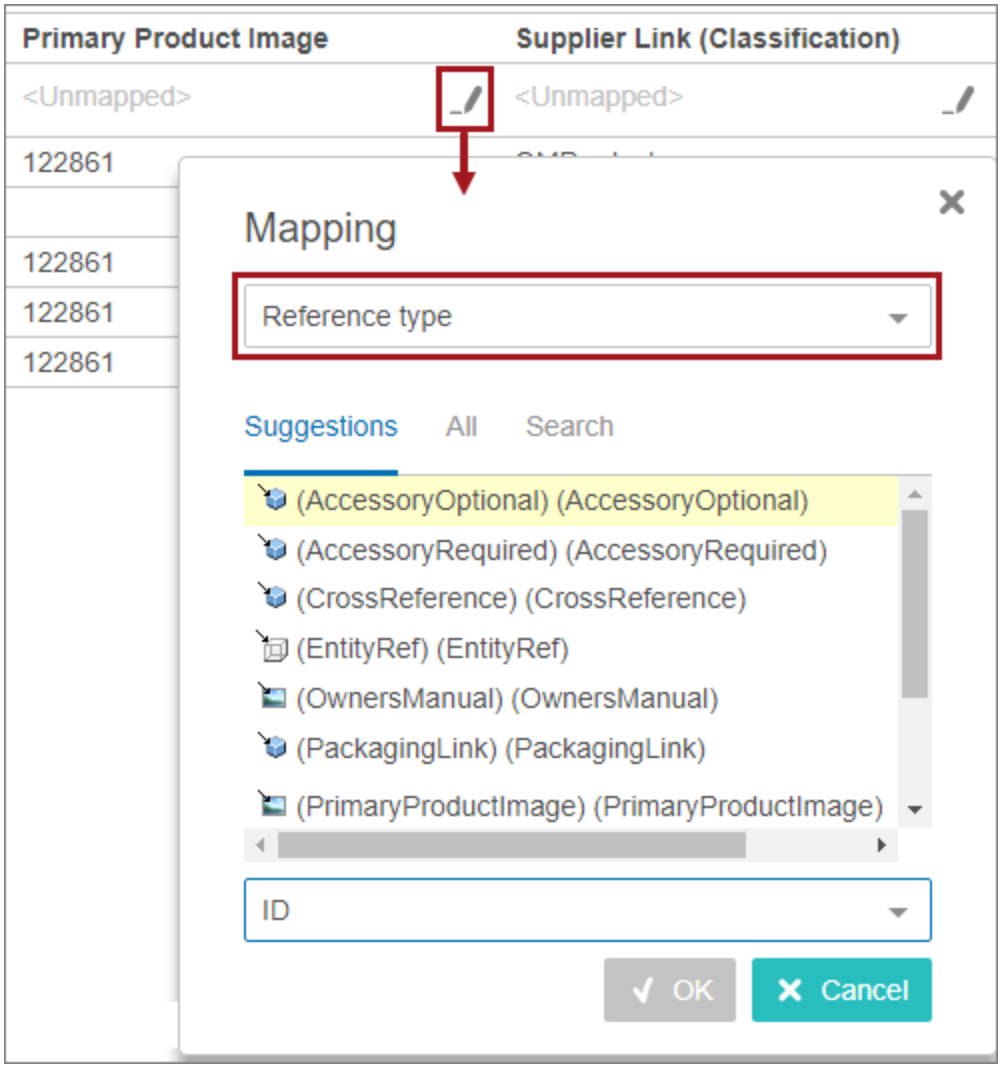
- an image that needs to display as the primary product image.
- a supplier that needs to display as a classification reference.
- a current location where the parts are stored that needs to display as an entity reference.
- a product that can be used as a substitute that needs to display as a product reference.

Below are steps to map a column within the import file to the STEP reference type.

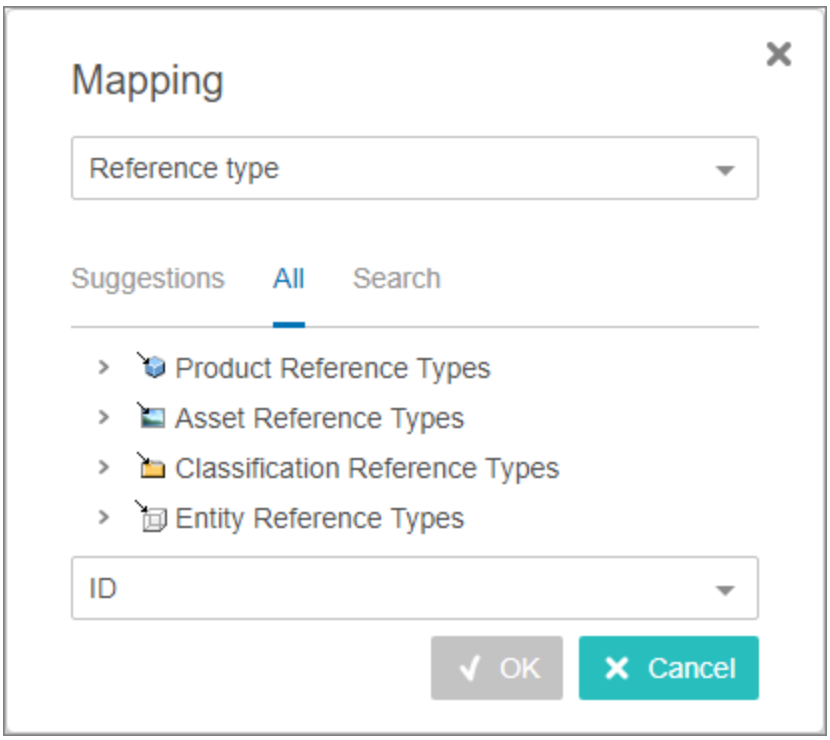
Note: It is recommended to map the object ID / Unique Key before any other mappings to enable the Suggestions functionality.

1. From the import preview dialog, select the **Edit button** in the top right of the column that needs to be mapped, and the mapping dialog will display.
2. Within the Mapping dialog, select **Reference type** from the dropdown dialog and the Suggestions, All, and Search tabs will populate accordingly.
   - **Suggestions Tab:** When selected, a list of reference types will display based upon the object type defined for the import. For a reference type to be suggested, the reference type must be valid for the object types of

the items that are imported. Once a valid selection is made, click the **OK** button to return to the import preview.

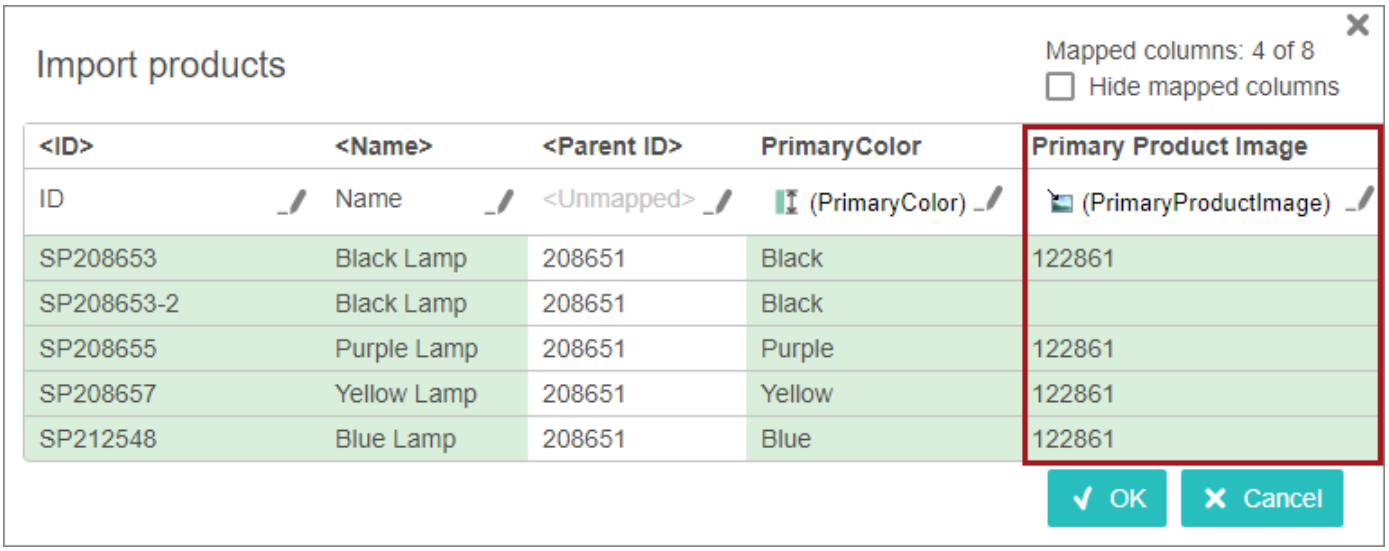


- **All Tab:** When selected, all reference type groups display. Expand the reference type group to locate the necessary reference type. The OK button will enable once a valid reference type is selected. Click the **OK** button to return to the import preview.



- **Search Tab:** When selected, a blank search field displays. Enter a reference type name or ID into the search field, and the available reference types will display for selection. Select the valid reference type, and the OK button will enable.

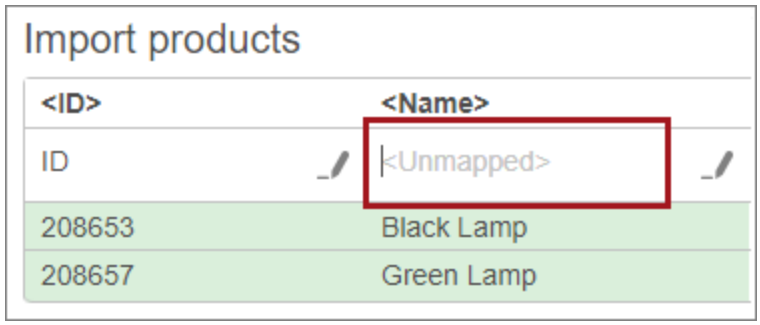
3. Select a valid reference type and click the **OK** button and the Import preview will display with the reference type mapped.



4. Once mapping is complete, from the import preview, select the **OK** button to start the import. For more information, see the **Start an Import** section of the **Using Simple Importer Widget** topic within this guide.

Remove Mapping

To remove a mapped value, use the mouse pointer to select the value within the mapping row, then use the delete key to remove the value. The cell will display as '<Unmapped>', and once the cursor is removed from the cell, the column values will no longer display with green shading.



Unique Keys and the Simple Importer Widget

When using the Simple Importer Widget, the import preview displays differently depending upon the workbench System Setup configuration of STEP Keys (unique keys). Within the import preview, two unique key options are available; 'Unique key' and 'Unique key - mapped by Attribute.'

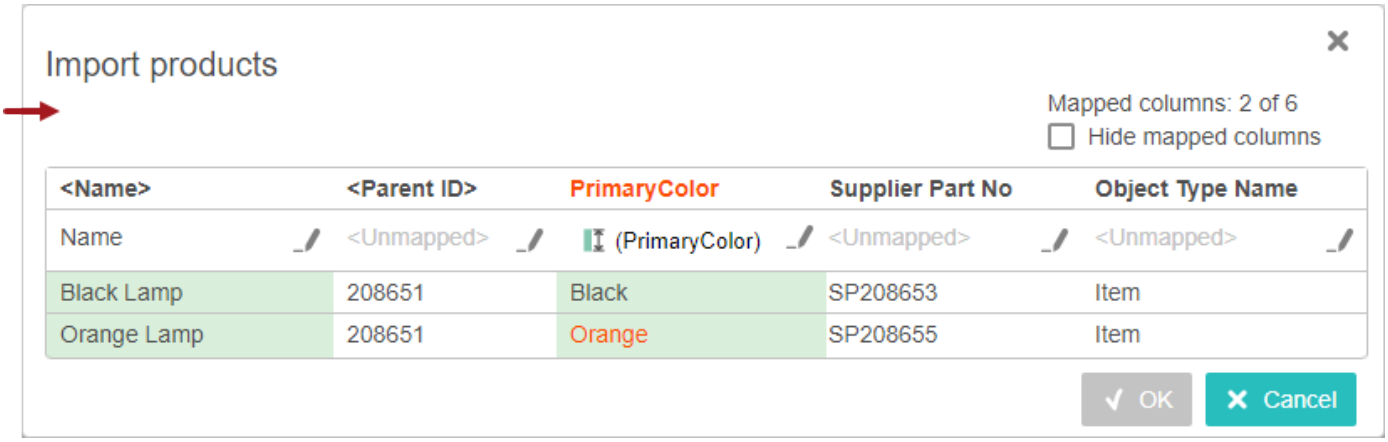
This topic addresses:

- Displaying Unique Key Options
- Unique Key Considerations
- Using Unique Key to Update Objects in Web UI
- Using Unique Key Mapped by Attribute.

Displaying Unique Key Options

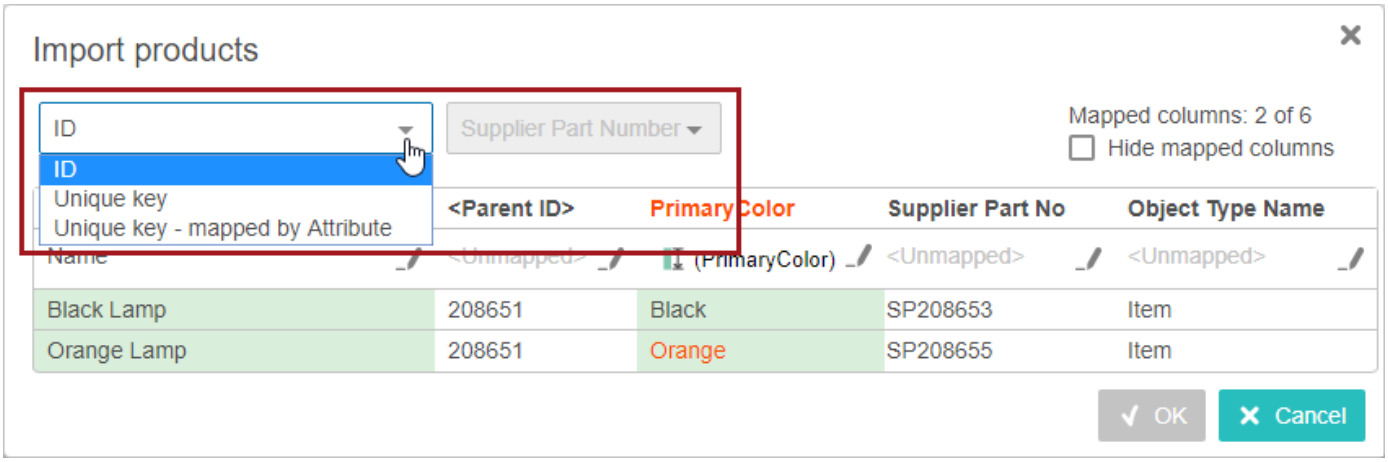
The options to map unique keys will only be available when an applicable imported object type is selected and when there is a valid key active in the system. For more information on unique keys, see the **Keys** section of the **System Setup / Super User Guide**.

If a STEP key is not valid and/or active, then a user will not see the dropdown located below the import preview title (as shown in the screenshot below).



If at least one STEP key is valid and active, then a user can choose to:

- Create objects using
  - ID
  - Unique key - mapped by Attribute
- Update objects using
  - ID
  - Unique key - mapped by Attribute
  - Unique key (As shown in the screenshot below.)



For more information, see the **Using Unique Key Mapped by Attribute** topic and/or the **Using Unique Key to Update Objects in Web UI** topic within this guide.

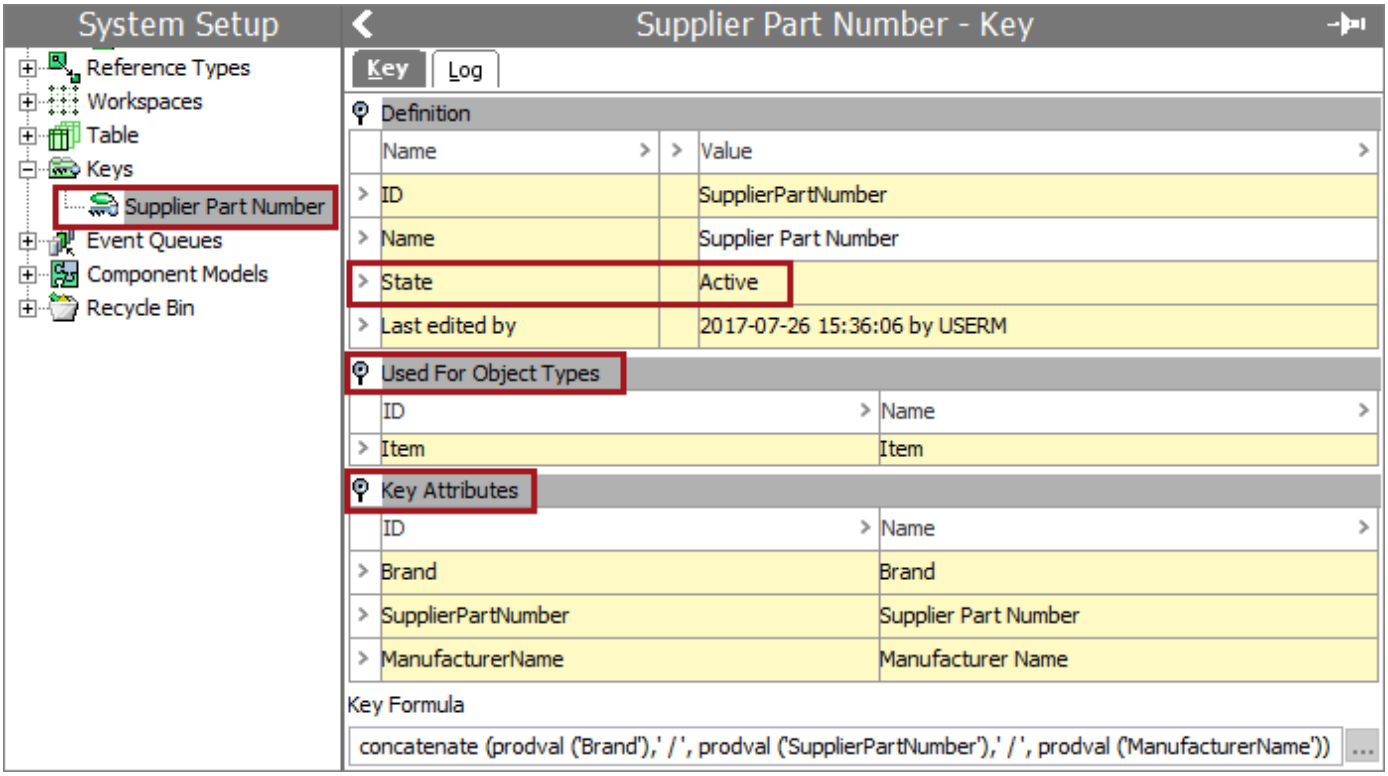
Unique Key Considerations

Before using this feature it is a good idea to confirm the status and settings of your unique key.

The screenshot below displays the Workbench > System Setup > Keys settings for the unique key used for the examples within this topic.

For the key examples within this section, it is important to notice the key is:

- Named 'Supplier Part Number'
- Active
- Used for the Object Type 'Item'
- Created using the following Key Attributes: Brand, Supplier Part Number, Manufacturer Name
- Configured with a Key Formula that concatenates the key attributes.

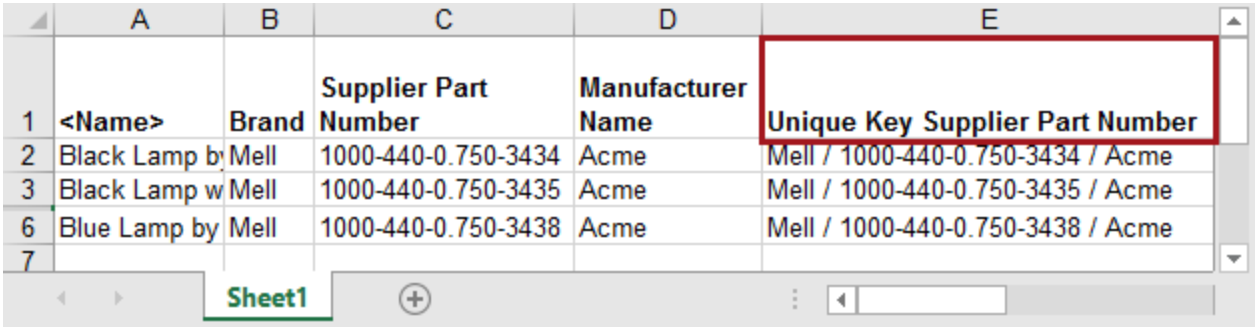

System Setup
Reference Types
Workspaces
Table
Keys
Supplier Part Number
Event Queues
Component Models
Recycle Bin
Supplier Part Number - Key
Key
Log
Definition
Name
Value
ID
SupplierPartNumber
Name
Supplier Part Number
State
Active
Last edited by
2017-07-26 15:36:06 by USERM
Used For Object Types
ID
Name
Item
Item
Key Attributes
ID
Name
Brand
Brand
SupplierPartNumber
Supplier Part Number
ManufacturerName
Manufacturer Name
Key Formula
concatenate (prodval ('Brand'),' / ', prodval ('SupplierPartNumber'),' / ', prodval ('ManufacturerName'))

Using Unique Key to Update Objects in Web UI

The 'Unique key' option allows for unique keys to be mapped directly in the Web UI, when using Simple Importer Widget to update objects. If the STEP ID is omitted from the update import file, then it is possible to match an existing object via its unique key instead. The unique key must be manually mapped in place of the STEP ID, using the 'Unique key' option.

Below are steps to update objects using the 'Unique key' feature, once an import is initiated and the update feature is selected using the Simple Importer Widget, as described in the **Using Simple Importer Widget** section of this guide.

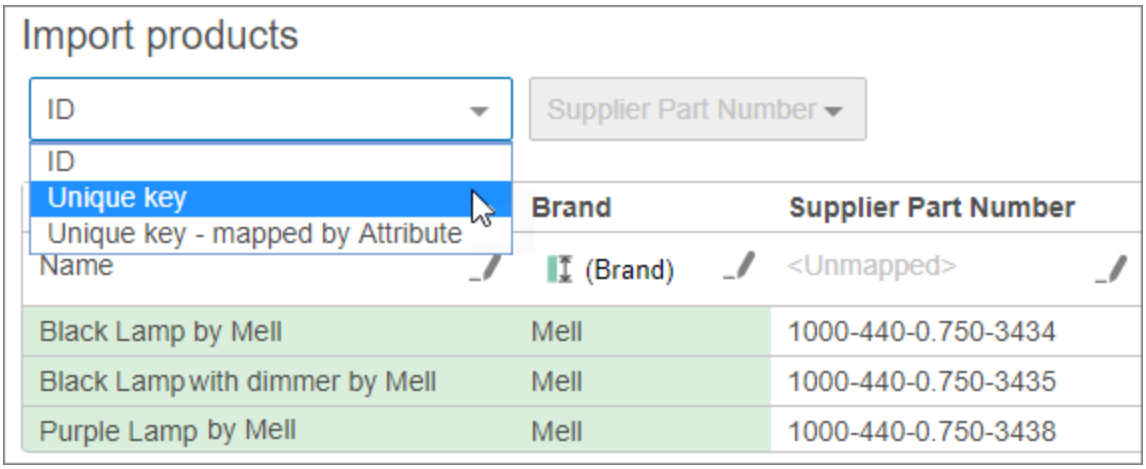
For this example, the import file contains a column with each object's unique key that can be mapped to the STEP unique key.



	A	B	C	D	E
1	<Name>	Brand	Supplier Part Number	Manufacturer Name	Unique Key Supplier Part Number
2	Black Lamp b	Mell	1000-440-0.750-3434	Acme	Mell / 1000-440-0.750-3434 / Acme
3	Black Lamp w	Mell	1000-440-0.750-3435	Acme	Mell / 1000-440-0.750-3435 / Acme
6	Blue Lamp by	Mell	1000-440-0.750-3438	Acme	Mell / 1000-440-0.750-3438 / Acme
7					

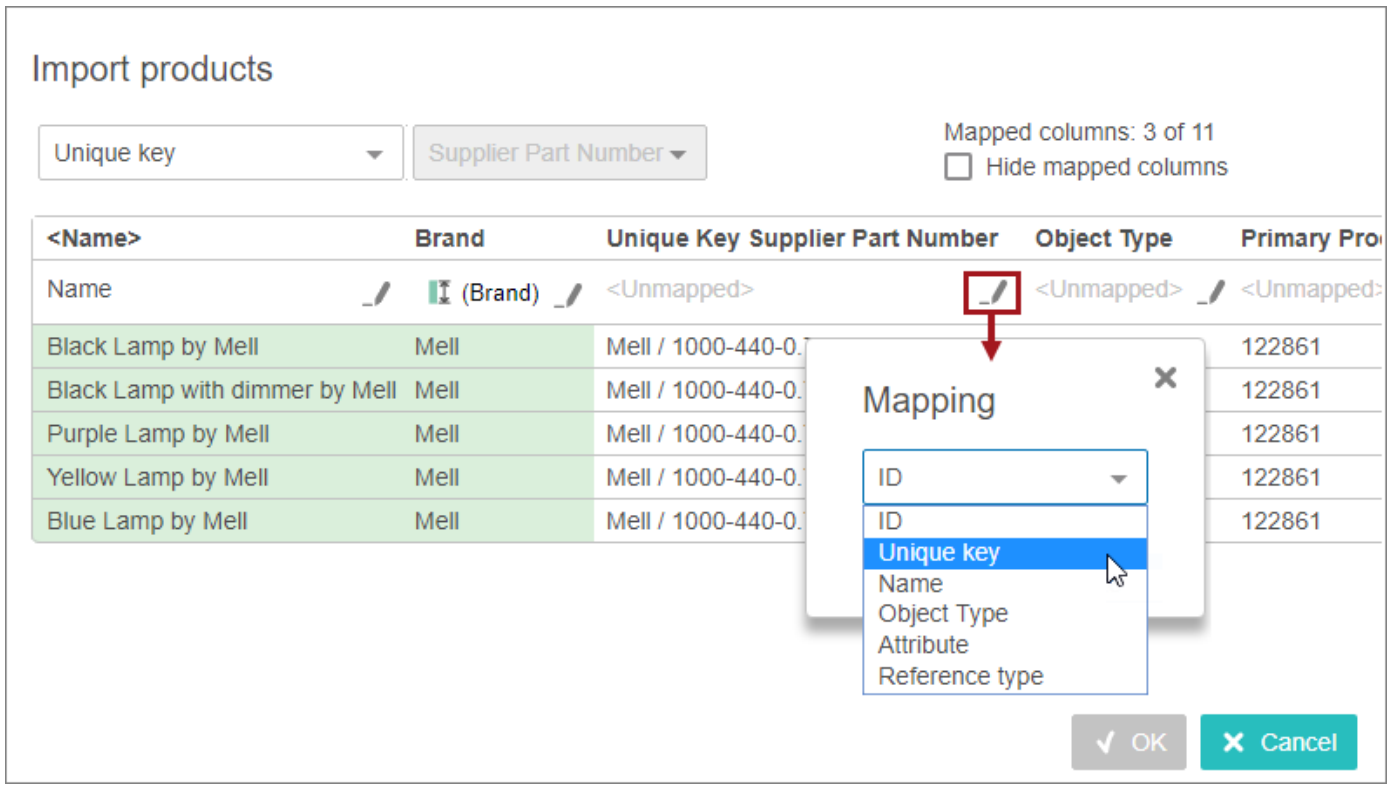
Sheet1

1. Once the Import Preview displays, select **Unique key** from the dropdown.

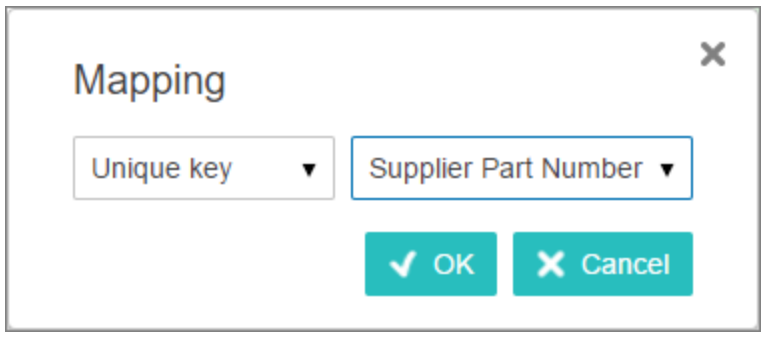


The unique key selection will remain grayed out, and the OK button will remain disabled until the unique key is mapped.

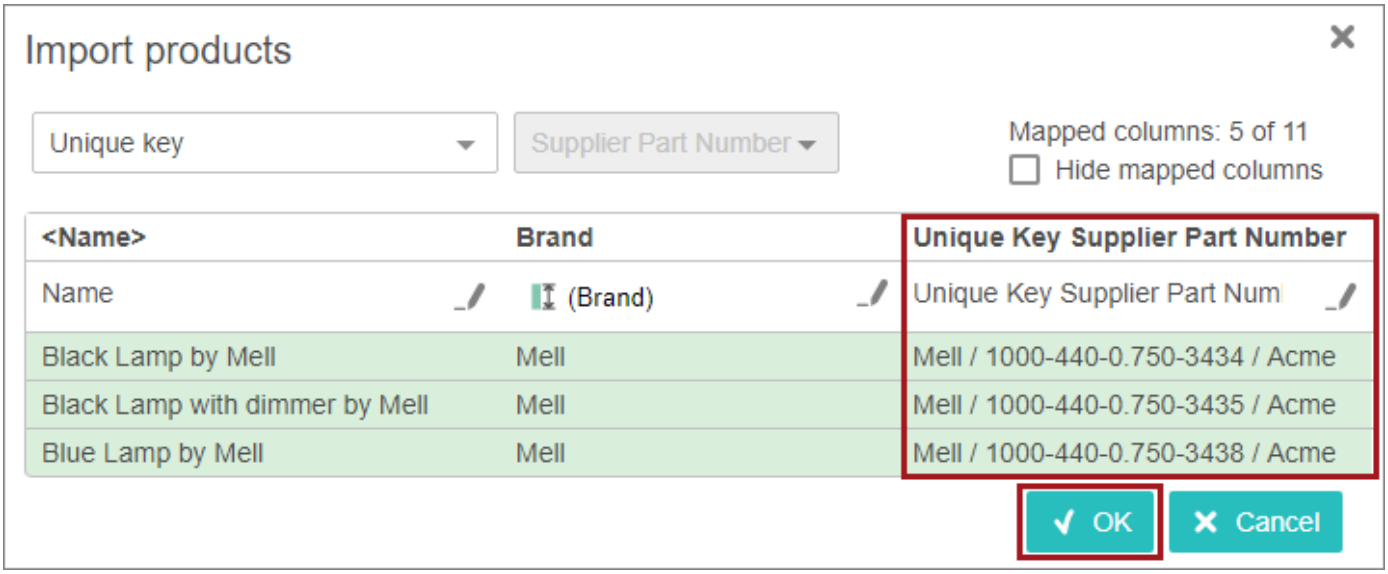
2. Click the **edit button** ( ) in the desired field, and the Mapping dialog will display.



3. Select **Unique Key** and the mapping dialog will display with the available unique key options, as shown below.



4. Select **the desired unique key** from the dropdown.
5. Click the **OK** button, and the import preview will display with the column now mapped to the unique key, and the **OK** button enabled.



6. Once all the necessary mapping is complete, from the import preview select the **OK** button to start the import. For more information, see the **Start an Import** section of the **Using Simple Importer Widget** topic within this guide.

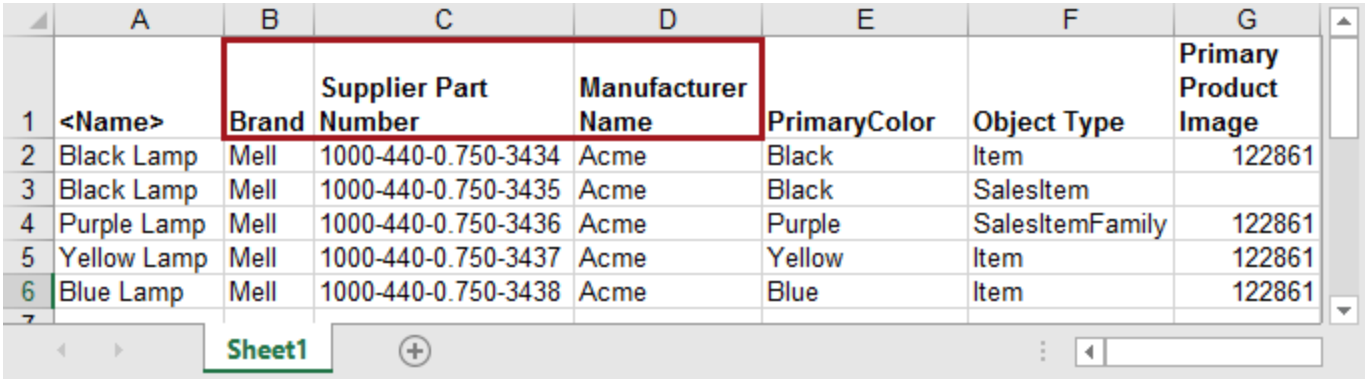
Once the import is complete, the valid objects and data will be updated in STEP.

Using Unique Key - Mapped by Attribute

Keys can be automatically generated (or matched) when the underlying attributes are mapped during import. If an import file does not include a column with the ID label (or if the import file column labeled as ID is not preferred), and the import file contains column(s) with attribute values required for a unique key, then the 'Unique key - mapped by Attribute' feature can be used to properly create and/or update objects.

Below are steps to create or update objects using the 'Unique key - mapped by Attribute' feature, once an import is initiated using the Simple Importer Widget, as described in the **Using Simple Importer Widget** section of this guide.

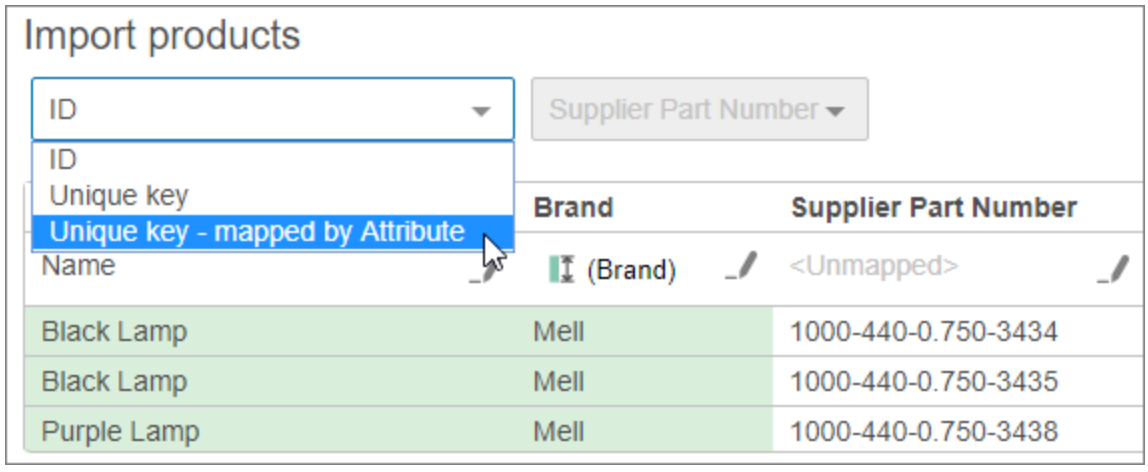
For this example, the import file does not contain a column with the ID label, but the import file does contain columns that can be mapped to the 3 'Key Attributes' (per the Key settings in the workbench screenshot shown previously): Brand, Supplier Part Number, and Manufacturer Name.



	A	B	C	D	E	F	G
1	<Name>	Brand	Supplier Part Number	Manufacturer Name	PrimaryColor	Object Type	Primary Product Image
2	Black Lamp	Mell	1000-440-0.750-3434	Acme	Black	Item	122861
3	Black Lamp	Mell	1000-440-0.750-3435	Acme	Black	SalesItem	
4	Purple Lamp	Mell	1000-440-0.750-3436	Acme	Purple	SalesItemFamily	122861
5	Yellow Lamp	Mell	1000-440-0.750-3437	Acme	Yellow	Item	122861
6	Blue Lamp	Mell	1000-440-0.750-3438	Acme	Blue	Item	122861

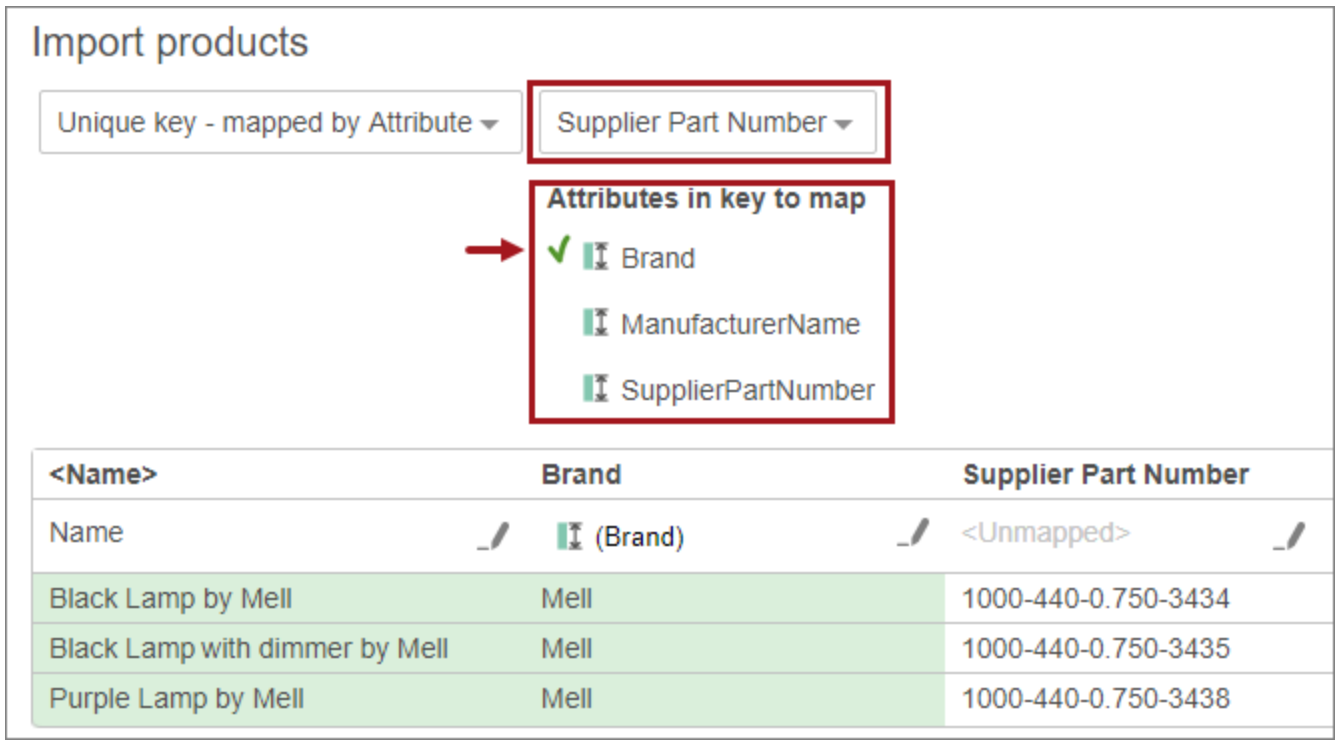
Sheet1

1. Once the Import Preview displays, select **Unique key - mapped by Attribute** from the dropdown.



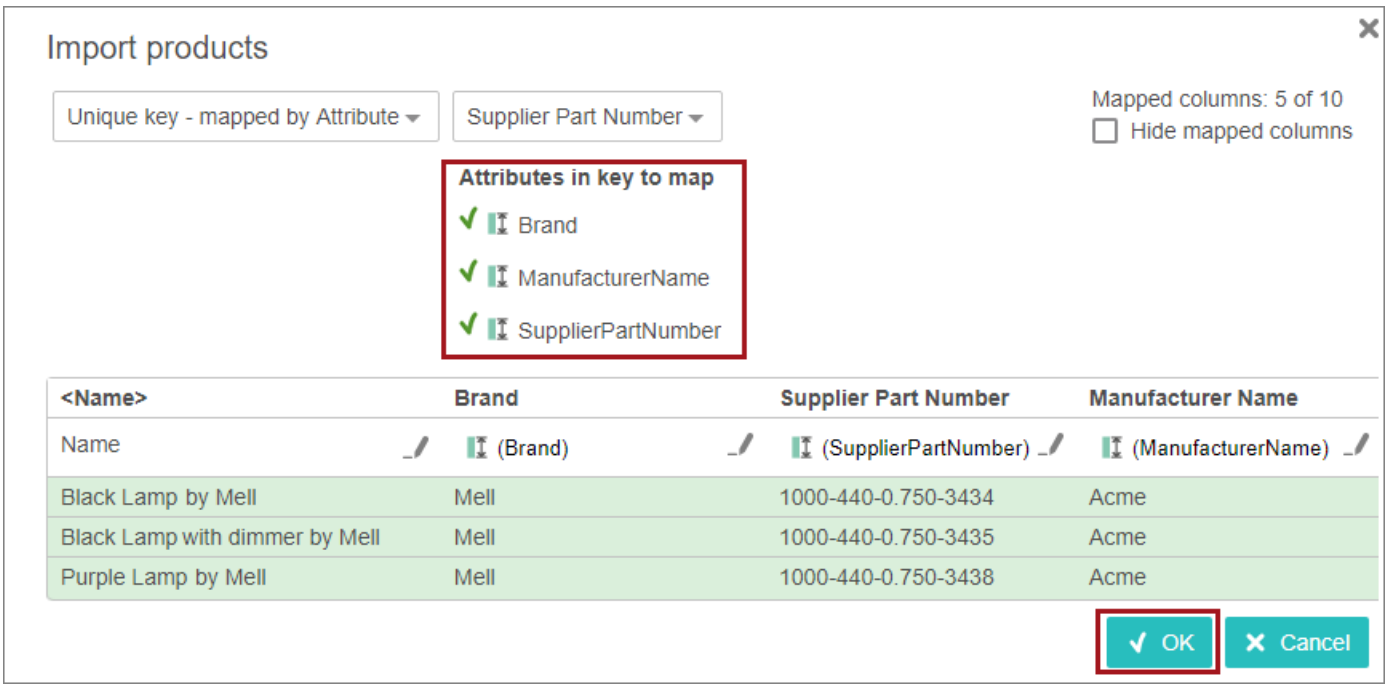
Note: The 'Unique key' option only displays when updating objects. For more information see the **Displaying Unique Key Options** section of the **Unique Keys and the Simple Importer Widget** topic within this guide.

2. Once the Unique key - mapped by Attribute option is selected, the unique key dropdown is enabled. If more than one unique key is available, select **the unique key to be used for this import** from the dropdown.
3. Once the desired unique key is selected the 'Attributes in key to map' will display with the list of attribute IDs necessary for the selected unique key.



- Once a unique key attribute is mapped to an import column, under the 'Attributes in key to map,' a green check mark will display to the left of the unique key attribute ID.
- Because the attribute ID (Brand) is one of the import column headings, the unique key attribute is auto mapped.
- The **OK** button is disabled until all the required attributes are mapped.

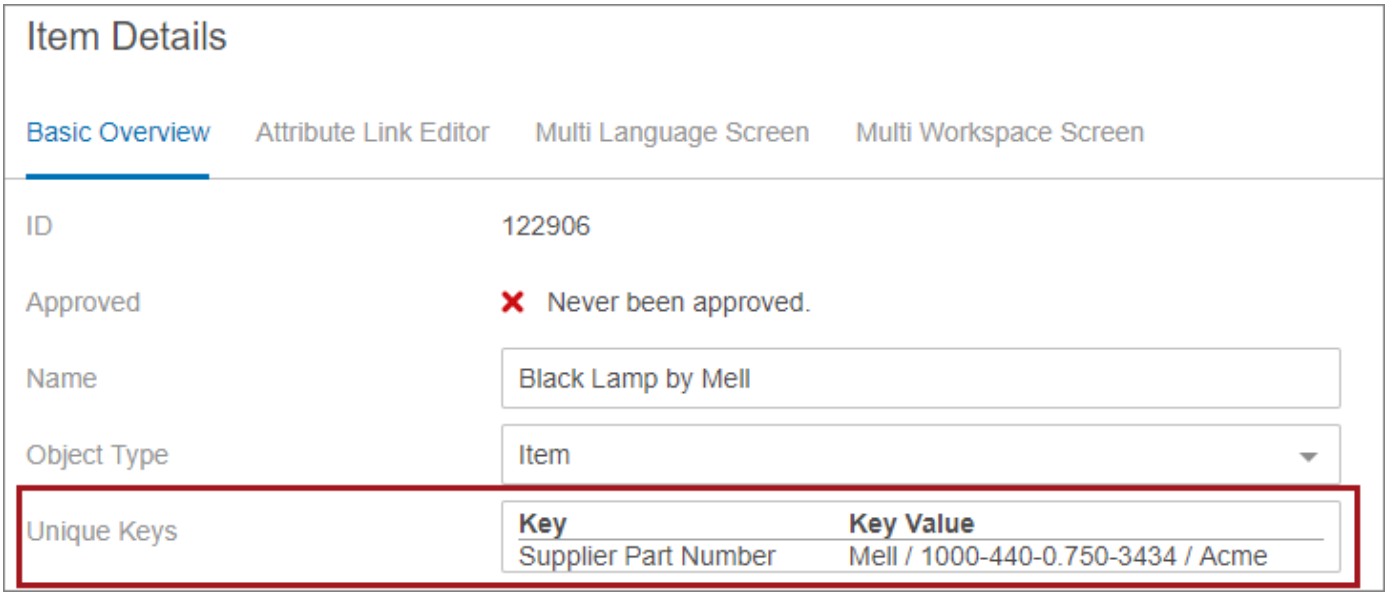
4. Map the remaining attributes in the key as described in the **Mapping Attribute** topic within the **Import Preview and Mapping** section of this guide.
5. Once all the attributes in key to map have been mapped, each of the unique key attribute IDs listed will display with a green check mark, and the **OK** button will enable.



6. Once all the necessary mapping is complete, click the **OK** button to start the import.

Once the import is complete, the new objects will have auto generated STEP IDs, and a unique key based upon the attribute values provided within the unique key formula.

In the example below, the Web UI is configured to display unique keys on a Node Details screen. The Key Value displayed below was created using the above steps.



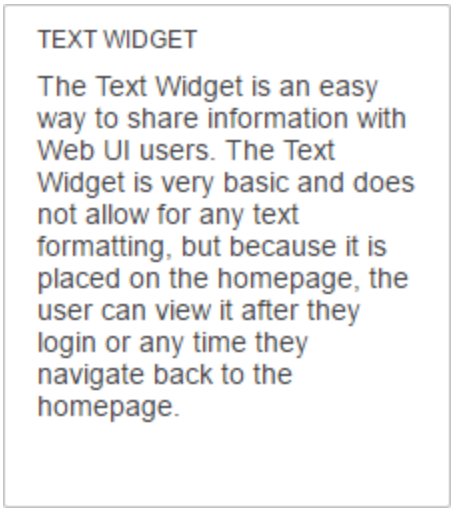
For more information, see the **Start an Import** section of the **Using Simple Importer Widget** topic.

Important: The import will fail when import data mapped to unique key attribute values already exist in STEP. New products cannot be created with unique key attribute values that already exist.

Text Widget

The purpose of the Text Widget is to provide an easy way to display custom text to all Web UI users. The Text Widget, which supports HTML formatting in the Text parameter, is a great way to display a custom message of welcome or next steps after logging in because it can be displayed on the homepage, where users are directed after login.

The purpose of this section is to describe each of the parameters within the Text Widget Properties.



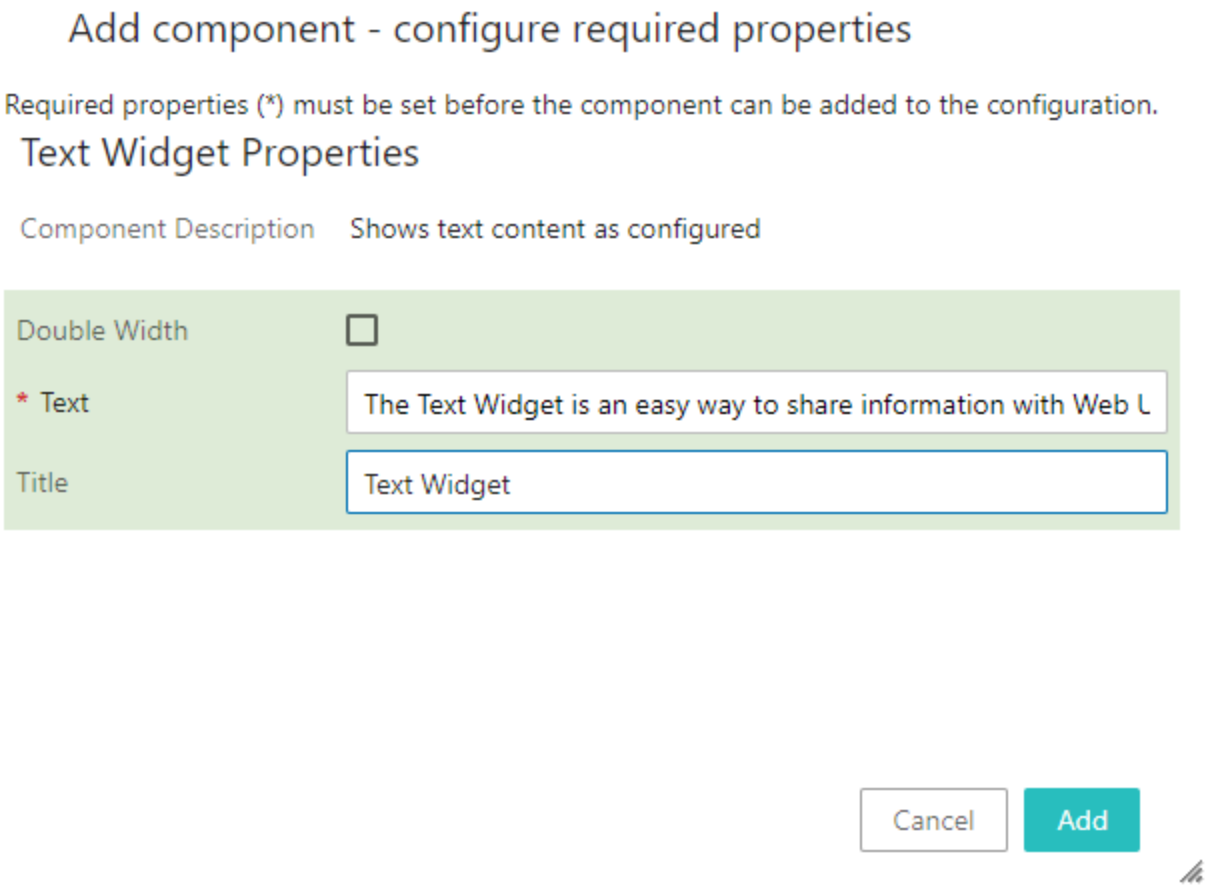
Prerequisites

It is expected that anyone configuring the Text Widget is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer.

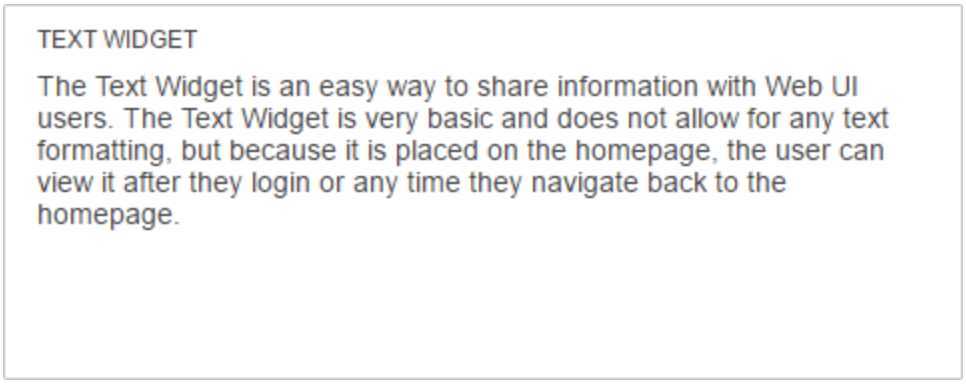
Details on how to add a widget to a homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

Configuring the Text Widget

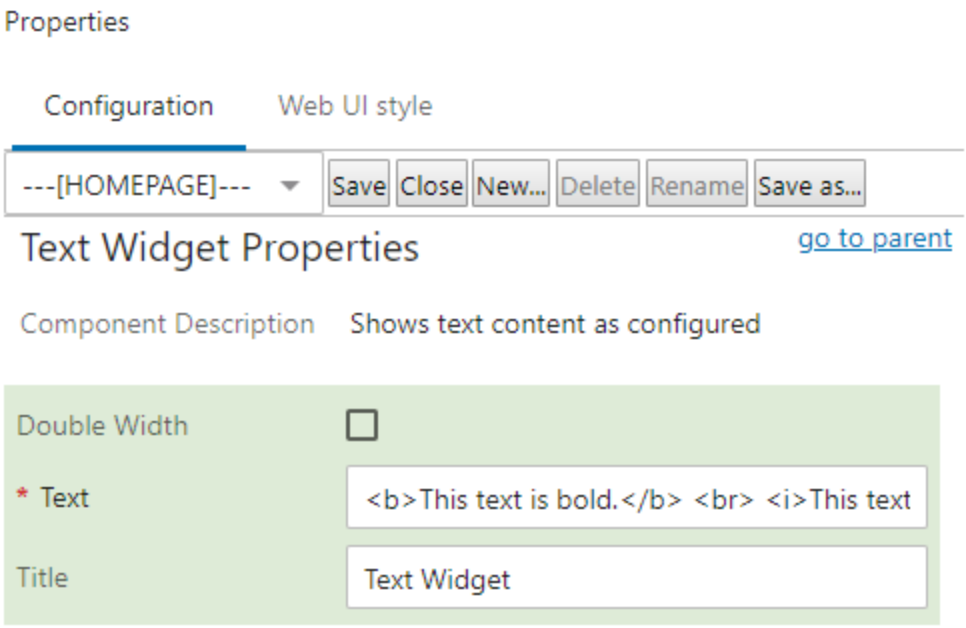
When configuring the Text Widget for the Homepage, there are three parameters to consider; Double Width, Text and Title.

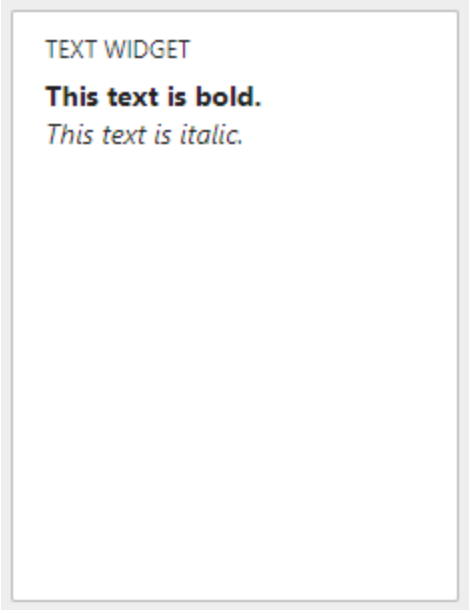


If the **Double Width** parameter is checked, the widget is doubled in size form the from the standard widget single width.



The **Text** parameter must be populated for the widget to be added to the homepage. When the Double Width parameter is checked, the widget can display approximately 1300 characters. When the Single Width parameter is checked, the widget can display approximately 600 characters. HTML tags can be used in the Text Widget Text parameter to display formatted text.

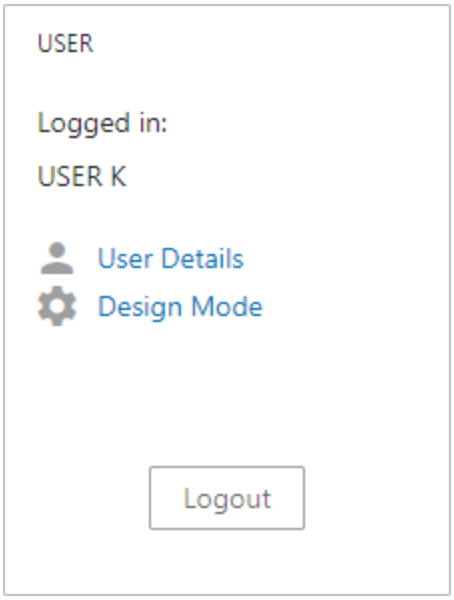




The **Title** parameter is optional. When blank, the default title, 'Text', appears. When the Double Width parameter is checked, the Title can display approximately 50 characters. When the Single Width parameter is checked, the Title can display approximately 25 characters.

User Widget

The User Widget allows users to quickly access basic administrative functions in the Web UI, such as confirming the system user currently signed into the Web UI, accessing a configured User Details screen via a link, and logging out via a 'Logout' button. It should be noted that appearance and access to elements in the User Widget may differ than the graphic below depending on the user's administrative privileges.



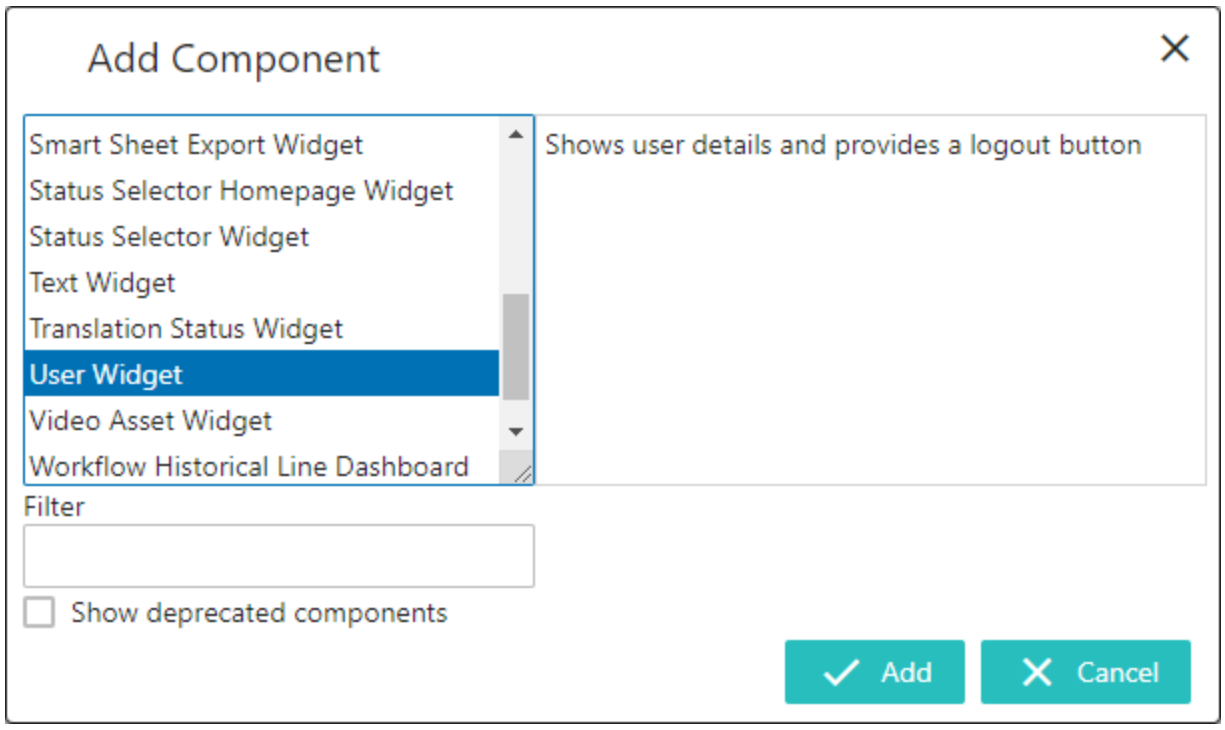
Prerequisites

Because basic concepts for working with the designer are not covered in this section, it is recommended that users configuring homepage widgets be familiar with the Web UI designer. For more information on the basics of working in the designer, see the **Design Mode Basics** topic in the **Homepage Widgets** documentation.

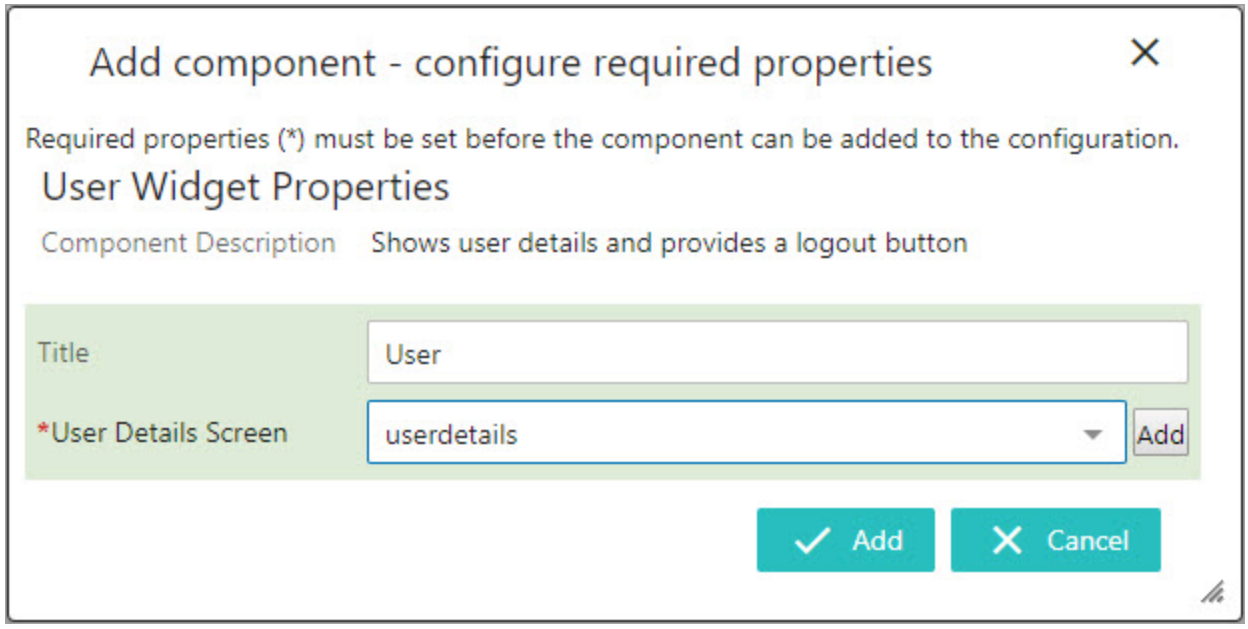
Details on how to add a widget to a homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

Configuring the User Widget

When adding the User Widget to the widget grid, choose the 'User Widget' in the 'Add Component' window, and then click 'Add'.



A 'User Widget Properties' window then displays in which the user can configure the User Widget.



The two configurable parameters are:

- **Title**: In this field, add a title that will display as a header at the top of the User Widget. If the field is left blank, the default title 'Current User' will display on the User Widget. In the above example, the Title 'User' has

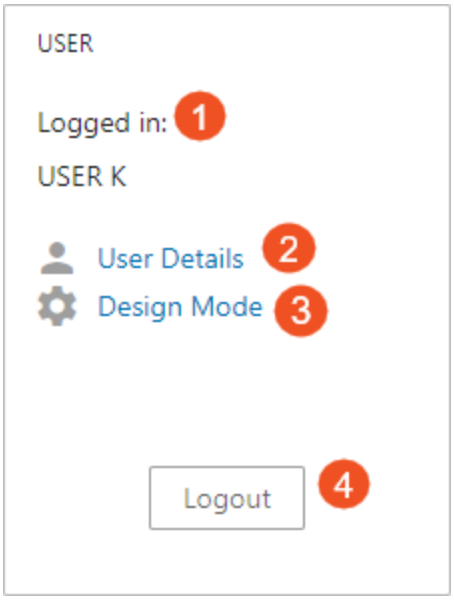
been added.

- **User Details Screen**: Select the User Details screen from the dropdown and then click the 'Add' button at the bottom of the window. For information regarding configuration of the User Details screen, see the **User Details Screen** topic in the **Web UI Getting Started** documentation.

  Note: Clicking the 'Add' button to the right of the 'User Details Screen' field allows users to select from a larger list of screens. This function is used to create and configure a new User Details screen.

Using the User Widget

Once configured, the User Widget will display on the Web UI homepage. In the screenshot below, all elements that can be displayed on a User Widget are shown with a number. In the numbered list below the screenshot, each element is described based on its corresponding number.



1. **Title**: Displays the title added by the user. If no title text was added, 'Current User' will display.
2. **User Details**: Clicking this link takes the user directly to the designated User Details screen.
3. **Design Mode**: Clicking this link opens the designer.
4. **Logout**: Clicking this button logs the user out of the Web UI.

Image Deduplication Clerical Review Screen

The Image Deduplication Clerical Review screen component enables users to review and manage sets of duplicate images after running the image deduplication process. Each potential duplicate set in clerical review is represented in the workflow as a single task, with all assets in the duplicate set being displayed in this screen.

Prerequisites

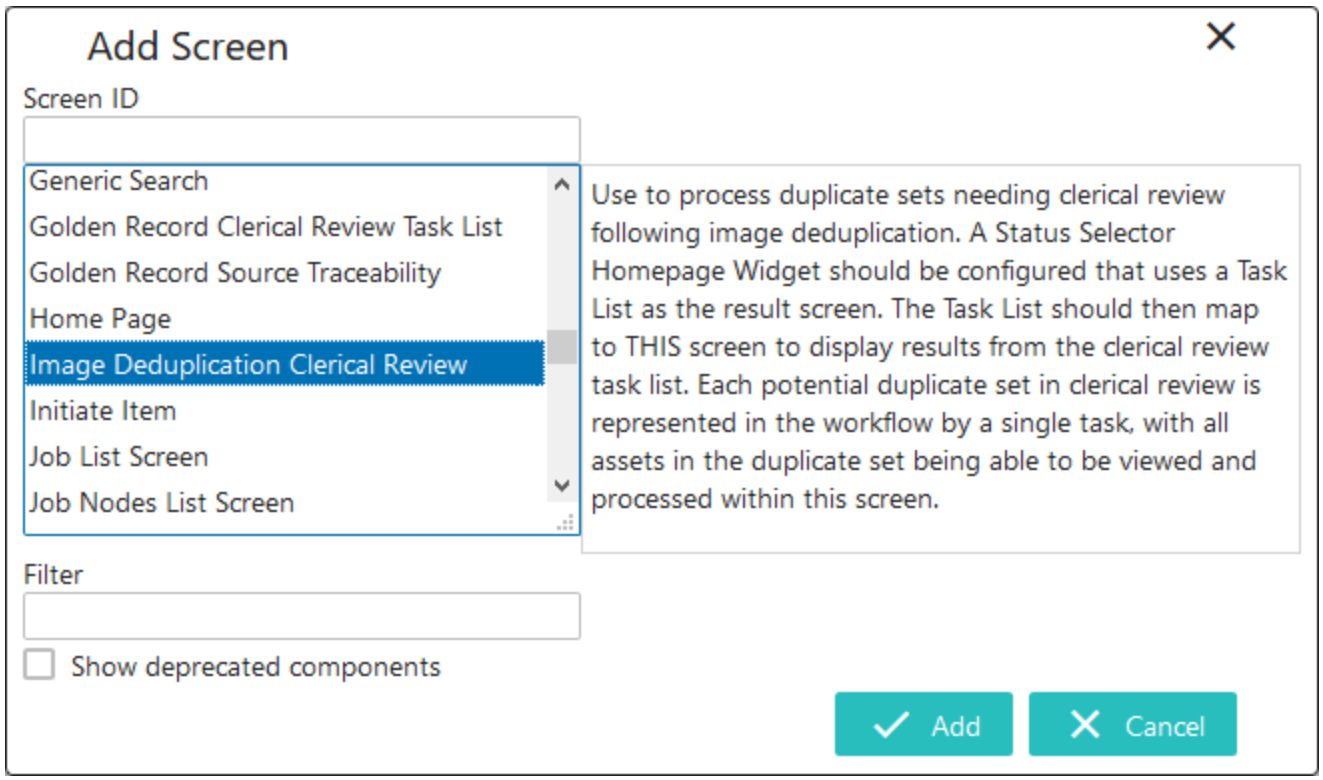
It is expected that anyone configuring the Image Deduplication Clerical Review Screen component is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Additionally, to use the image deduplication functionality, the Image Deduplication component must be activated as described in the **Deduplicating Images** topic in the **Digital Assets** documentation.

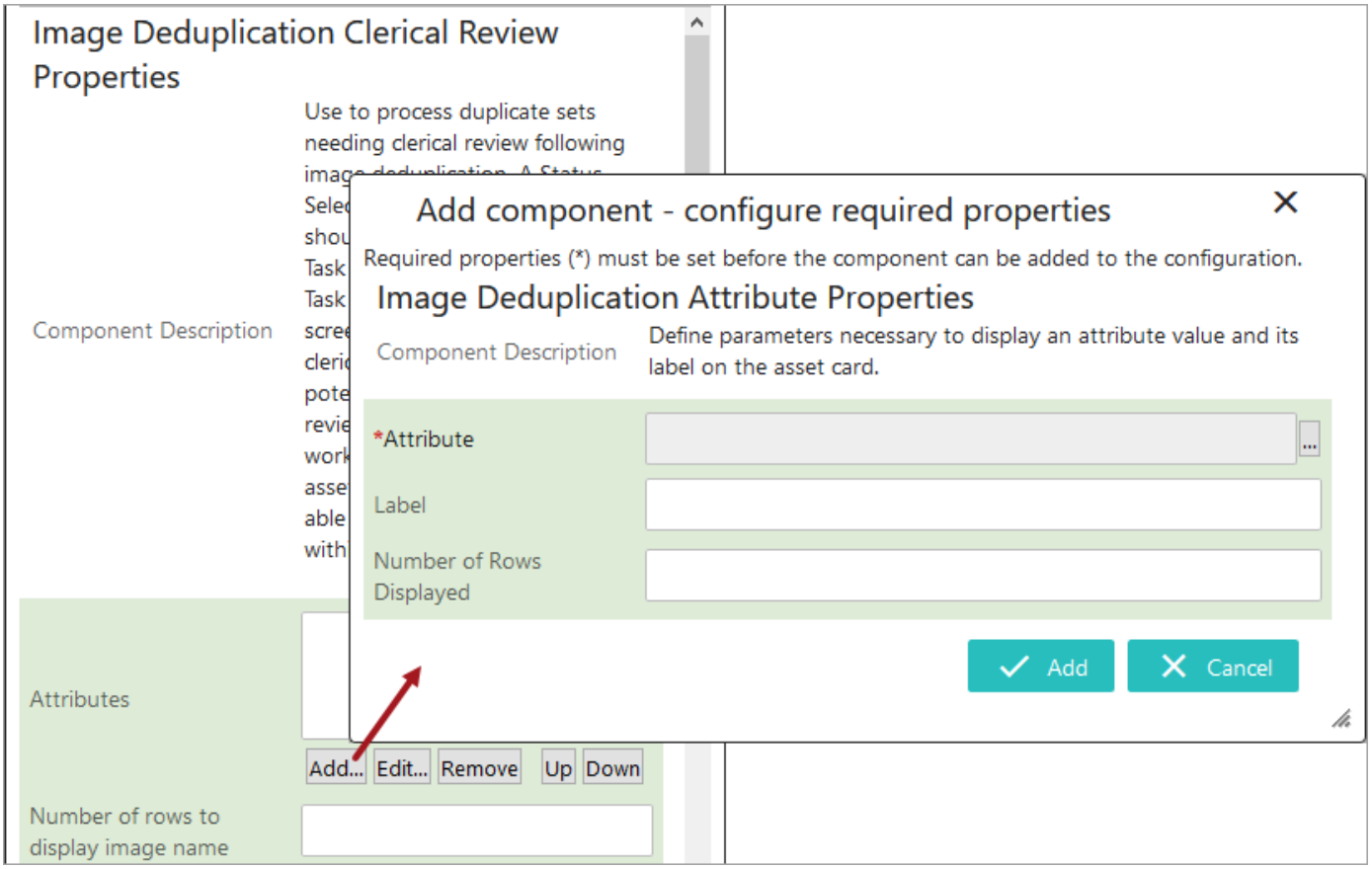
Adding and Configuring the Screen

Use the following steps to create and configure an 'Image Deduplication Clerical Review' screen.

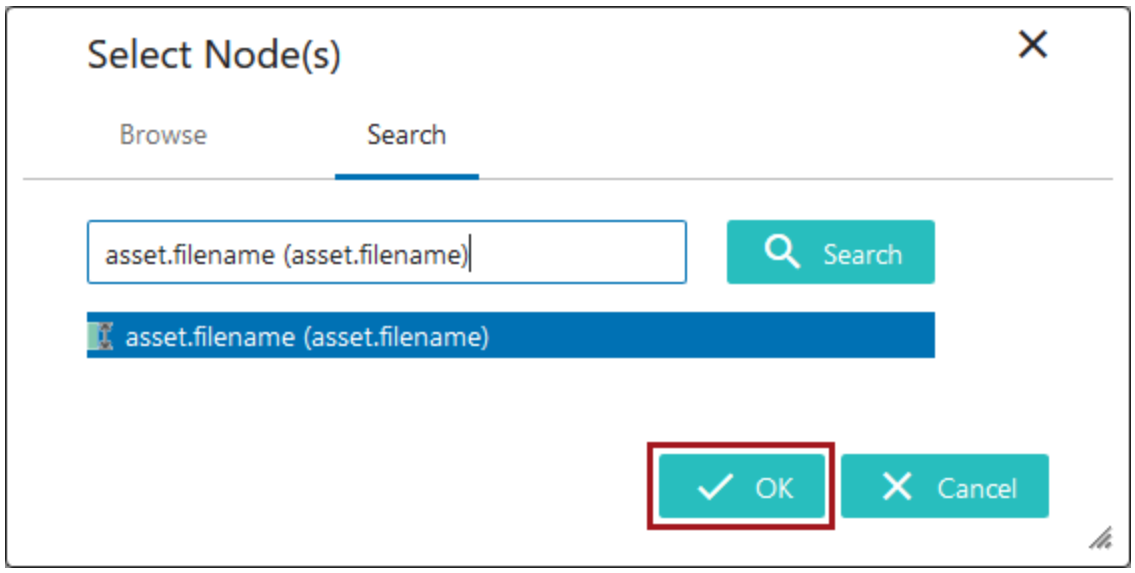
1. Create an 'Image Deduplication Clerical Review' screen. Steps for creating a new screen are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic. Select 'Image Deduplication Clerical Review' as the screen type.



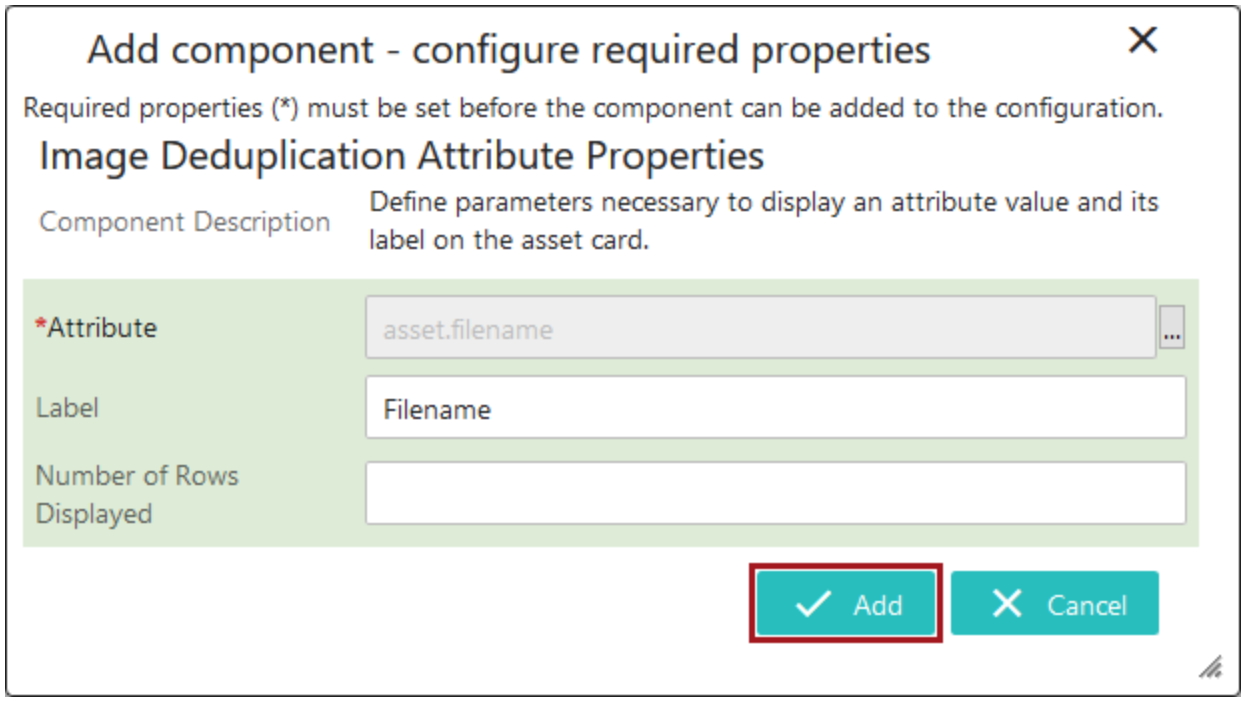
2. After creating the new 'Image Deduplication Clerical Review' screen, determine the image attributes that should display on the screen. On the Attributes parameter, click 'Add' to display the Image Deduplication Attribute Properties dialog, then click the ellipsis button (...) on the Attribute parameter to make your selections.



3. Use the 'Search' or the 'Browse' option to select the asset metadata attributes that will appear in the screen and click 'OK.'



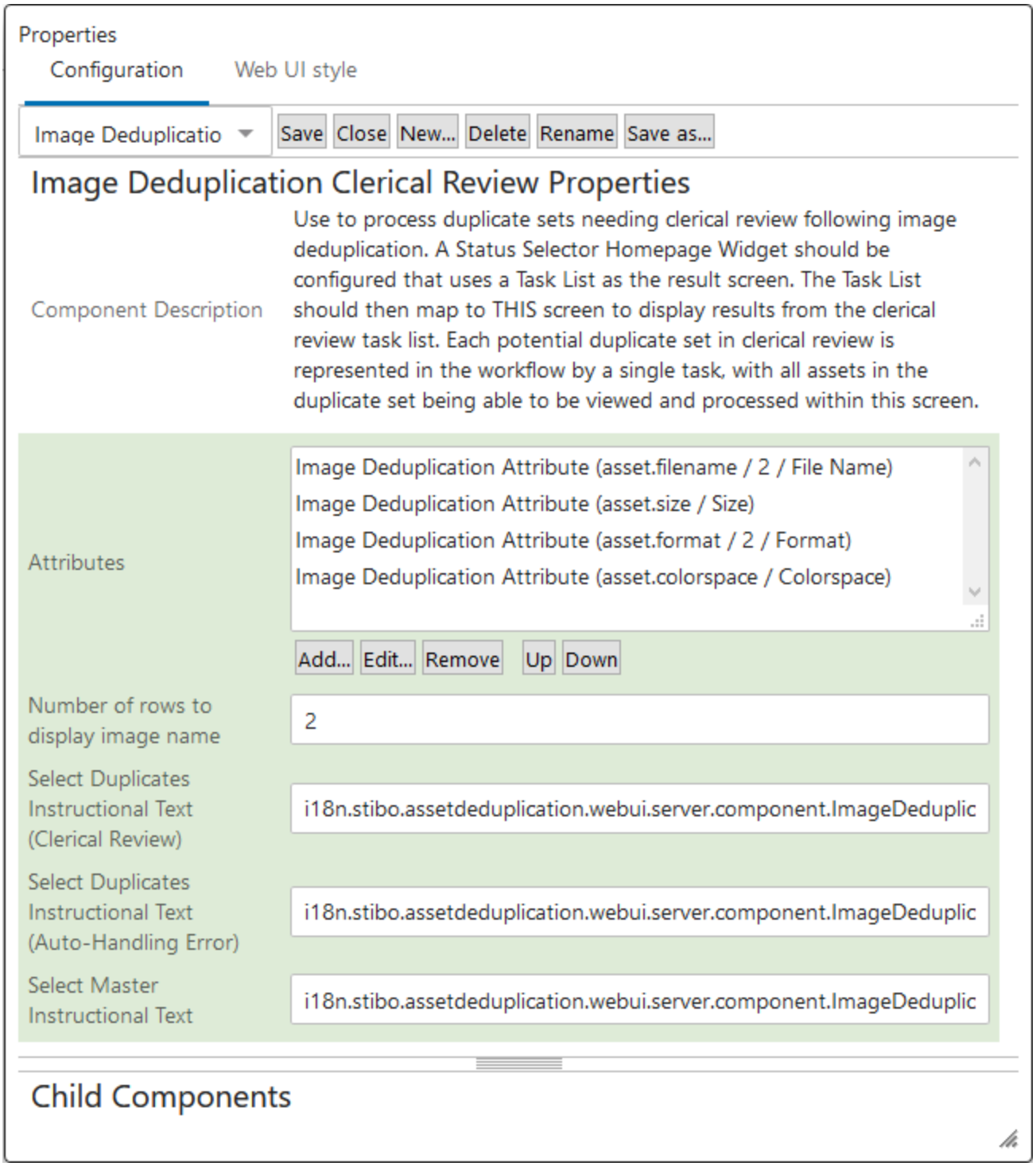
4. Optionally, add a Label and Number of Rows Displayed:
   - Label - By default, the user will see the attribute name on the screen.
   - Number of Rows Displayed - By default, only one row is used and additional text can be viewed by hovering over the value. If most values require more than one row, add an integer to define how many should be used.



5. Click 'Add' to close the Image Deduplication Attribute Properties dialog. Repeat as needed to add more metadata attributes.

Note: While any number of attributes can be displayed, the screen is optimized for a small number. Adding an excessive number of attributes will result in a poor user experience.

All added attributes and the settings are displayed in the Attributes parameter.



6. On the Image Deduplication Clerical Review dialog, for the **Number of rows to display image name** parameter, set a number. Text wraps as required, up to the number of rows set. Additional text can be viewed by hovering over the value.
7. The following parameters include default instructional text. To replace the default settings, remove the i18n.* text and enter your own text:
   - Select Duplicates Instructional Text (Clerical Review)
   - Select Duplicates Instructional Text (Auto-Handling Error)
   - Select Master Instructional Text

Once configured and set as an Asset Selection Screen and a Multi Selection Screen on a Node List component, or as an Advanced Search with Enable Workflow Selection enabled, the Image Deduplication Clerical Review screen will display image cards for all suggested duplicates from a group.

Localizable Dates in Web UI

While STEP handles ISO dates better than localized dates when doing search, compare, and order operations, many users want to see localized dates and times displayed when they are in the Web UI.

Attributes with 'ISO Date' and 'ISO Date and Time' validation types can be configured to display in a localized format when set up to display using an Attribute Value, Parent Value, and Attribute Value Group Component within a Node List or while displayed using an Attribute Value and Attribute Value Group Component within a Node Editor.

Just like the Web UI localization of the Date attribute, which is shown localized by default, the locale is defined by the selection made during login.

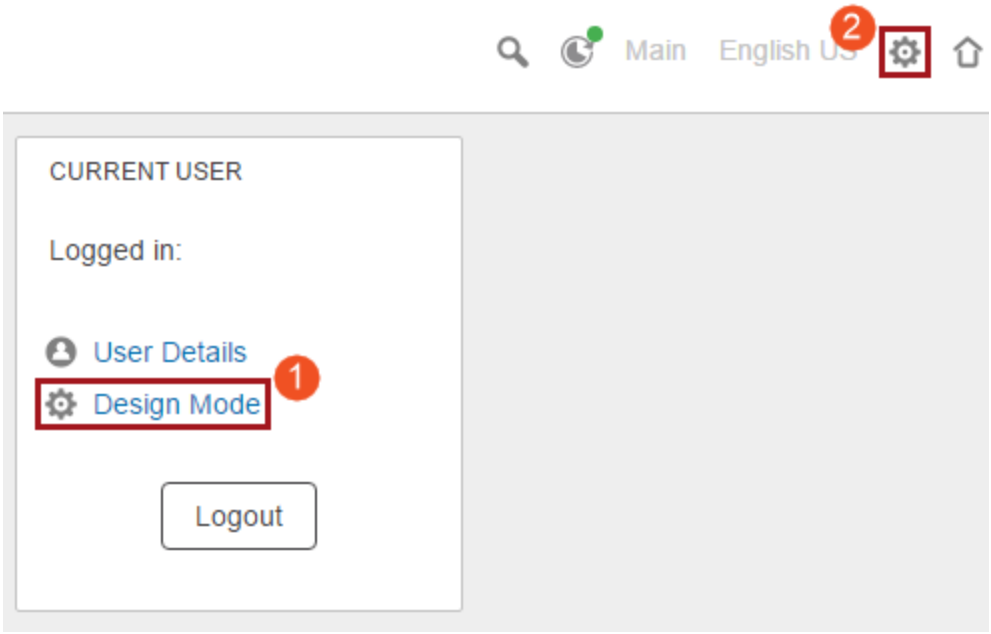
Dates converted to locale will follow the DateFormat.SHORT Java formatting style. Times converted to locale will be the DateFormat.MEDIUM formatting style.

Locale Date and Time (DateFormat) Samples	English (United States)	Danish (Denmark)	French (France)
Date (SHORT)	8/14/15	14-08-15	14/08/15
Time (MEDIUM)	11:25:40 AM	11:25:40	11:25:40

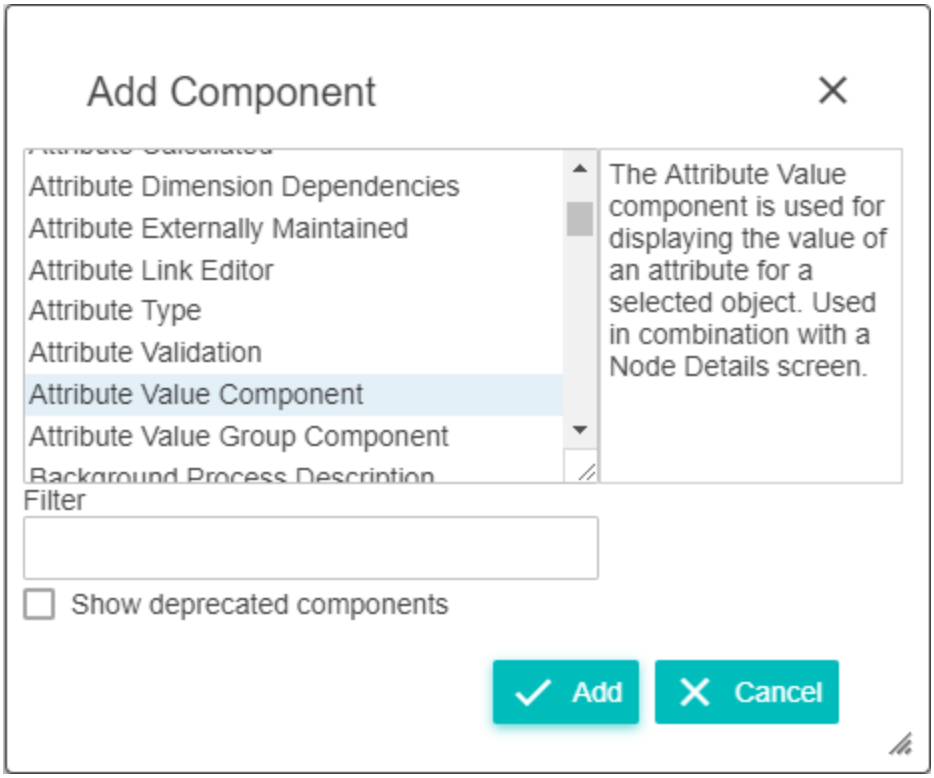
Localization Setup

To localize the 'ISO Date' and 'ISO Date and Time' attributes displayed in Web UI, follow these steps.

1. Log in to the Web UI. User must have privileges to edit Web UI configurations.
2. Click the design mode launch button found on the homepage (in the user widget) or from the toolbar in the top right.



3. Navigate to the Node Editor or Node List properties screen to add / edit the date attributes.
4. Click on Add button in Child Components section.

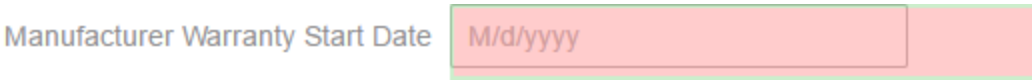


5. On the Attribute Value Component, Parent Value, or Attribute Value Group Component properties screens (for Node Editor) or the Attribute Value Header and Attribute Value Group Header properties screens (for Node List), click on the Advanced arrowhead to expand the Advanced options.
6. Click on the box to the right of Enable Locale Formatting.
7. Select the required Attribute in Attribute option on Attribute Value Component Properties.
8. Click the Add button.
9. Save and close the Node Editor / Node List properties screen.

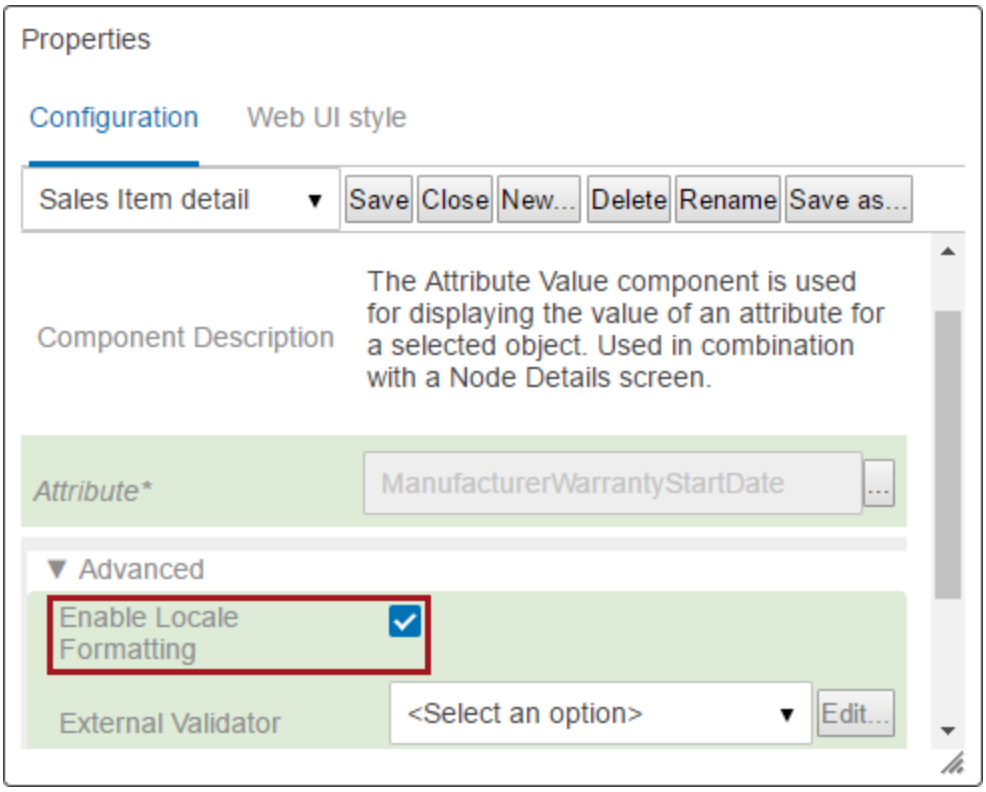
The dates will now show as localized on the screen. The values will continue to display localized based on the login locale until the Enable Locale Formatting parameter is disabled.

The below example explains using Attribute Value Component in Node Editor Properties screen.

As an example, this is an attribute with a 'ISO Date' Validation Base Type prior to localization as shown in Web UI designer mode:

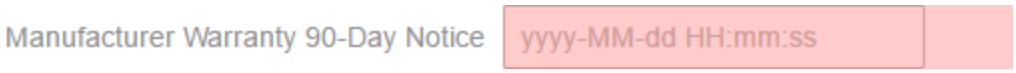


Under Advanced, the properties screen is now configured to localize the selected attribute.



This is the same 'ISO Date' Validation Base Type attribute after being localized (English / US locale):

Also, for example purposes, this is an 'ISO Date and Time' attribute before and after Enable Locale Formatting is selected.



Note: Follow the above steps to configure Attribute Group Component in Node Editor Properties Screen. To View the display of ISO date on other context, change the locale on the Login page.

The below example explains using Attribute Group Header Component in Node List Properties screen. The Multi Edit Display Mode is used in the example below:

1. Navigate to the Node List Properties screen.
2. Click on 'Multi Edit Display Mode' in Child Component of Node List, or Add the 'Multi Edit Display Mode.'
3. In Multi Edit Display Mode Properties, Add 'Attribute Value Group' or 'Attribute Value Group Header' in Headers section.
4. In Attribute Value Header Properties screen, check the check box of Enable Locale Formatting option.
5. Select the required Attribute in Attribute option in Attribute Value Component Properties.
6. Click on Add button.

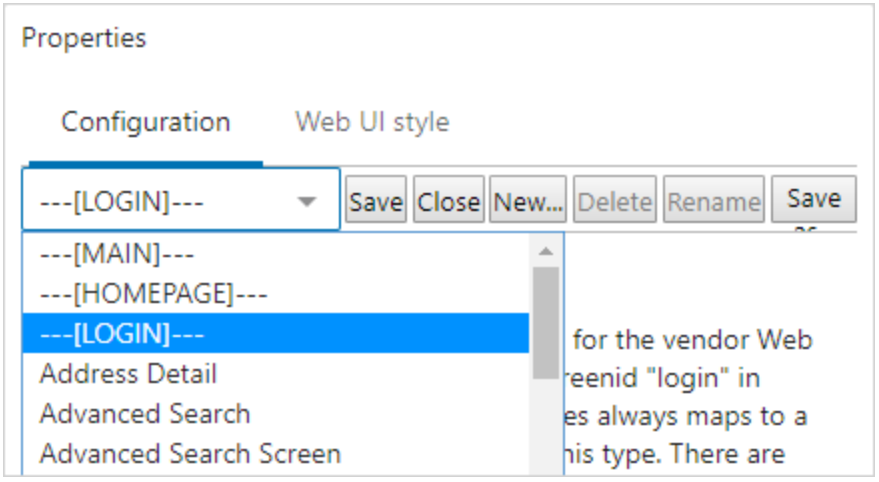
Considerations and Limitations

- Date localization only works on attributes with these validation base types: Date (DD-MON-YYYY), ISO Date (YYYY-MM-DD), and ISO Date and Time (YYYY-MM-DD HH24:MI:SS). Changing the way these attributes display in Web UI does not impact the validation base type.
- Web UI ISO Date display settings are configured per component and display mode, meaning that they must be individually set in each instance where the localized display is desired.

- For information regarding converting existing attributes from Date to 'ISO Date' validation type, see the **Converting Attributes from Date to ISO Date** topic in the **System Setup / Super User Guide** documentation.
- For information regarding Localization, see the **Localization** topic in the **Administration Portal** documentation.

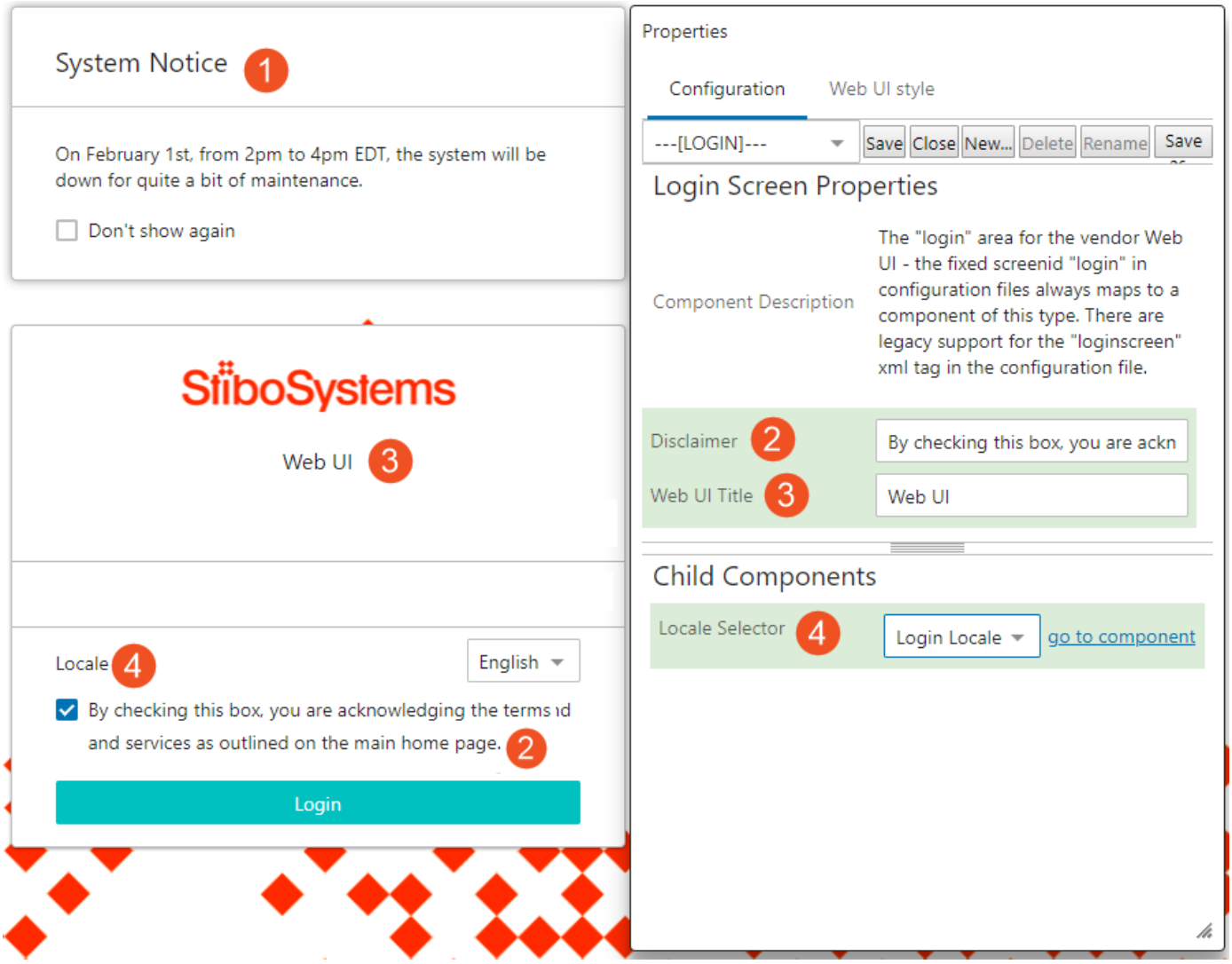
Login Screen Properties

In the designer, the **Login** option on the screen selector dropdown provides access to a series of options for customizing the associated Web UI's login page.

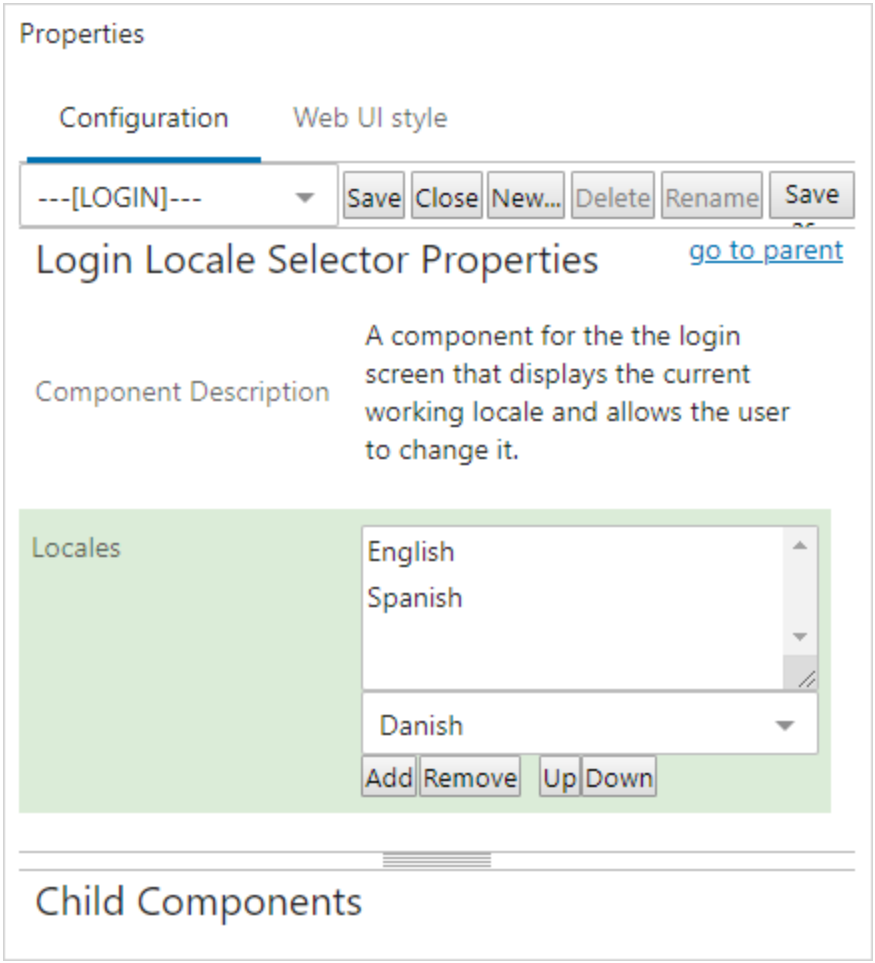


Component Properties

The Web UI login page allows appropriately privileged users to provide their username and password to access the Web UI. Designer users may specify additional information like local, the title of the Web UI login, and a disclaimer in the 'Login Screen Properties' in the designer.



1. Announcements - STEP allows Web UI designers to create announcements that display on the login page. This is valuable for alerting users to, for example, scheduled downtime related to system maintenance. For more information, see the Adding Announcements to the Login Page topic in the Web UI Getting Started documentation.
2. Disclaimer - The disclaimer field allows Web UI designers to set a message that users must acknowledge with a checkmark before the system will allow a user to login. This field can only contain plain text.
3. Title - This is the name of the Web UI, as it appears on this screen.
4. Child Components - The only component available is the Login Locale selector. This child component allows admin users to set which languages a user may select from prior to accessing the Web UI.


Properties
Configuration
Web UI style
---[LOGIN]---
Save
Close
New...
Delete
Rename
Save
Login Locale Selector Properties
go to parent
Component Description
A component for the the login screen that displays the current working locale and allows the user to change it.
Locales
English
Spanish
Danish
Add
Remove
Up
Down
Child Components

Main Properties

The **Main Properties** configuration determines the overall behavior of a Web UI. The Main Properties parameters are found within the three sections: Main, Advanced, and Child Components. Below is an overview and links to more details (when applicable) for each of the parameters listed in the order they appear on the Main Properties.

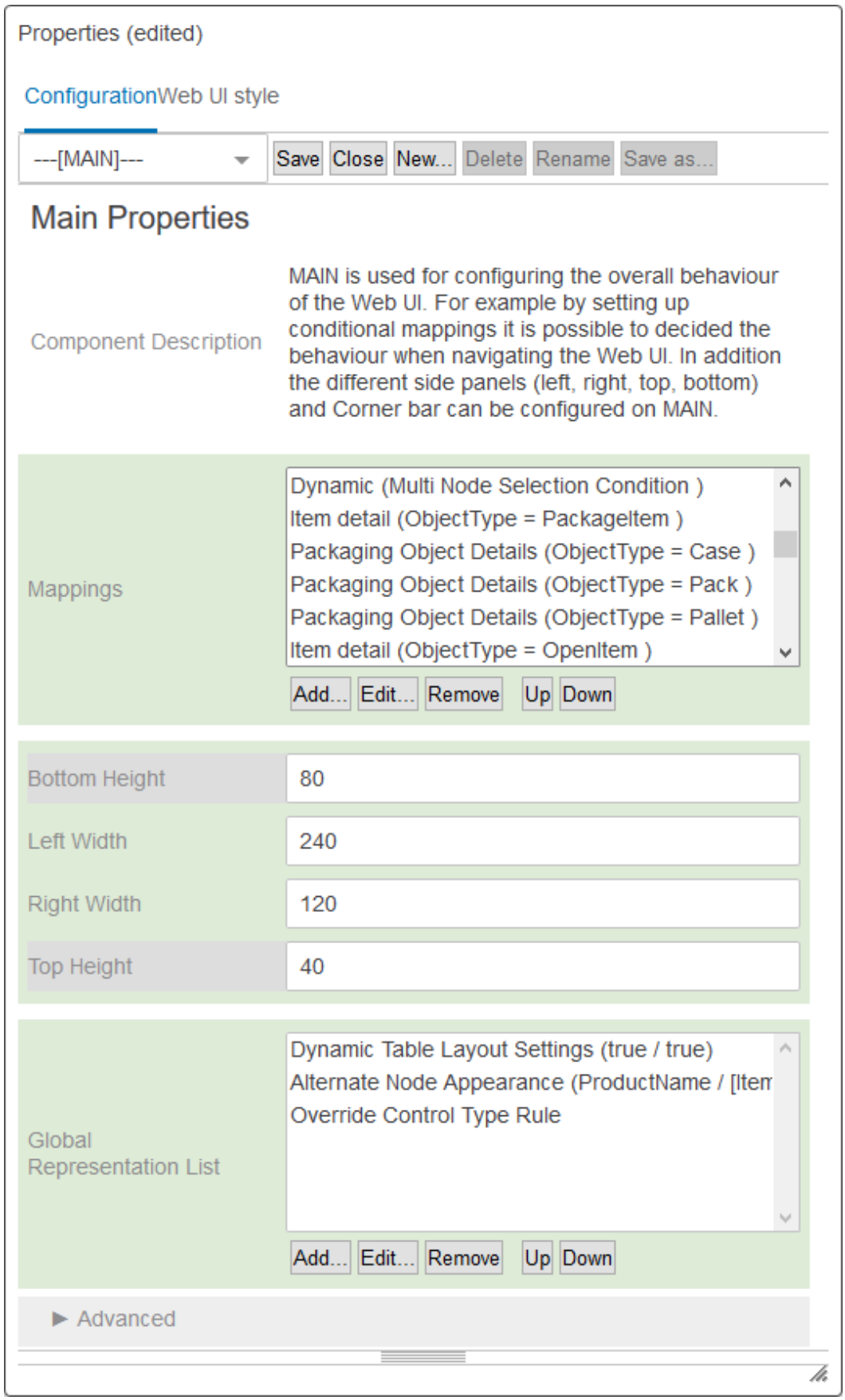
Prerequisites

All the steps provided in this topic assume the Web UI designer is in design mode and on **Main Properties** prior to starting the configuration process. For more information about getting started using a Web UI and details about design mode access / usage, see the **Web User Interfaces / Web UI Getting Started** documentation.

Configuring the Parameters

Main Parameters

Configure the parameters as needed.


Properties (edited)
ConfigurationWeb UI style
---[MAIN]---
Save
Close
New...
Delete
Rename
Save as...
Main Properties
Component Description
MAIN is used for configuring the overall behaviour of the Web UI. For example by setting up conditional mappings it is possible to decided the behaviour when navigating the Web UI. In addition the different side panels (left, right, top, bottom) and Corner bar can be configured on MAIN.
Mappings
Dynamic (Multi Node Selection Condition)
Item detail (ObjectType = PackageItem)
Packaging Object Details (ObjectType = Case)
Packaging Object Details (ObjectType = Pack)
Packaging Object Details (ObjectType = Pallet)
Item detail (ObjectType = OpenItem)
Add...
Edit...
Remove
Up
Down
Bottom Height
80
Left Width
240
Right Width
120
Top Height
40
Global Representation List
Dynamic Table Layout Settings (true / true)
Alternate Node Appearance (ProductName / [Iten
Override Control Type Rule
Add...
Edit...
Remove
Up
Down
Advanced

- **Mappings:** Screens display in Web UI based on the Mappings values. When a new screen is created, typically a mapping also needs to be set up. The mappings are shown as 'screen ID (condition)' for the Mappings parameter and are evaluated one-by-one in the order shown. When the first mapping condition is met, the evaluation stops, and the screen configured for that condition is displayed. If no mappings match, then the default target screen is the Homepage. For more information, see the Mappings topic.
- **Bottom Height***: Determines the width of the bottom of the Web UI screen.
- **Left Width**: Determines the width of the component added to the Child Component > Left. The component is placed on the left side of the screen and expands out to the right.
- **Right Width**: Determines the width of the component added to the Child Component > Right. The component is placed on the right side of the screen and expands out to the left.
- **Top Height***: Determines the width of the Web UI's header in which the Global Header Search bar and Corner Bar components display.

* These parameters were removed in an earlier version of STEP. If creating a new Web UI, these parameters do not display. If displayed in a Web UI, they are shaded gray (as shown above) to indicate that they have been withdrawn.

Note: The width settings apply to the components set up to display as Child Components in Main Properties (described later in this topic). The screenshot above displays the default pixel settings, but each can be adjusted as needed (as shown in the screenshot below).

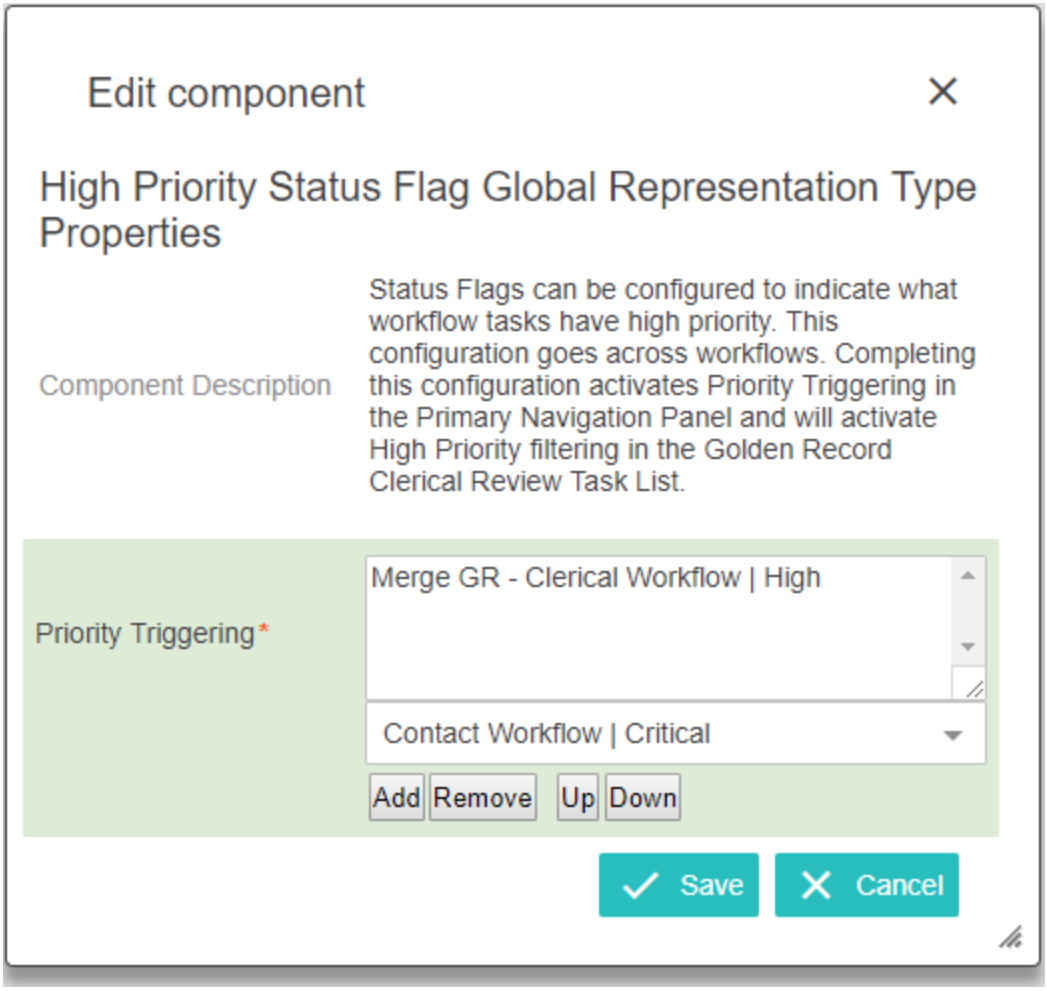
- **Global Representation List:** The Global Representation List parameter allows Web UI designers to add a global representation of specific functionality. Each global representation can only exist once in this list. Details for each of the available representations can be found below.
  - **Alternate Node Appearance:** Alternate Node Appearance allows users to configure nodes in the Tree Navigator to display with a colored dot to indicate that objects in that node contain a specific attribute value on a particular attribute. Hover text can also be configured for each trigger value to quickly inform users

about the meaning of each indicator. For full details on how to configure this component, see the **Configuring Alternate Node Appearance** section of the **Tree Navigator Component** documentation.

- **Data Visualization Representation:** Data Visualization in Web UI allows users to see a visual representation of objects in STEP and how they relate to one another. If a Display Relations Screen type is not in use anywhere in the Web UI, then skip this parameter. For full details on how to configure this parameter and the subsequent component, see the **Configuring Data Visualization** section of **Data Visualization** within the **Web User Interfaces** / **Using a Web UI** documentation.
- **Dynamic Table Layout Settings:** The Dynamic Table Layout Settings component is used to define behavioral rules for a table using the display modes Multi Editor or Compare View. By setting a minimum and maximum value for 'row height' and 'column width' a range is defined within which a table is allowed to increase the height of rows and width of columns to display the most cell content. A table will increase the width of a column before increasing the height of a row. When defined the settings apply globally for all tables in a Web UI configuration.
- **Global Data Container Configurations:** This component provides a centralized configuration for data container displays in Web UI. Multiple configurations can be stored for any number of different data container types within this component. For more information, see the **Global Data Container Configurations** section of the **Web User Interfaces** / **Using a Web UI** documentation.
- **Hierarchy Representation:** This option is only displayed as part of the Company Data Visualization component and defines the representation of pairs of object types and reference types in the Hierarchy Screen. If a Hierarchy Screen type is not in use anywhere in the Web UI, then skip this parameter. For full details on how to configure this parameter and the subsequent component, see the **Configuring a Company Data Hierarchy Screen** section of **Company Hierarchy Visualization and Maintenance** within the **Web User Interfaces** / **Using a Web UI** documentation.
- **High Priority Status Flag Global Representation Type:** Configuring this component activates priority triggering in the Primary Navigation Panel. When high priority tasks exist in a clerical review workflow, a high priority alert will appear beside the task list name in the Tasks child component. For more information, see the **Primary Navigation Panel Component** section of the Web UI documentation.

  In addition, this component activates High Priority filtering in the Golden Record Clerical Review Task List. For more information, see the **Golden Record Clerical Review Task List** section of the Web UI documentation.

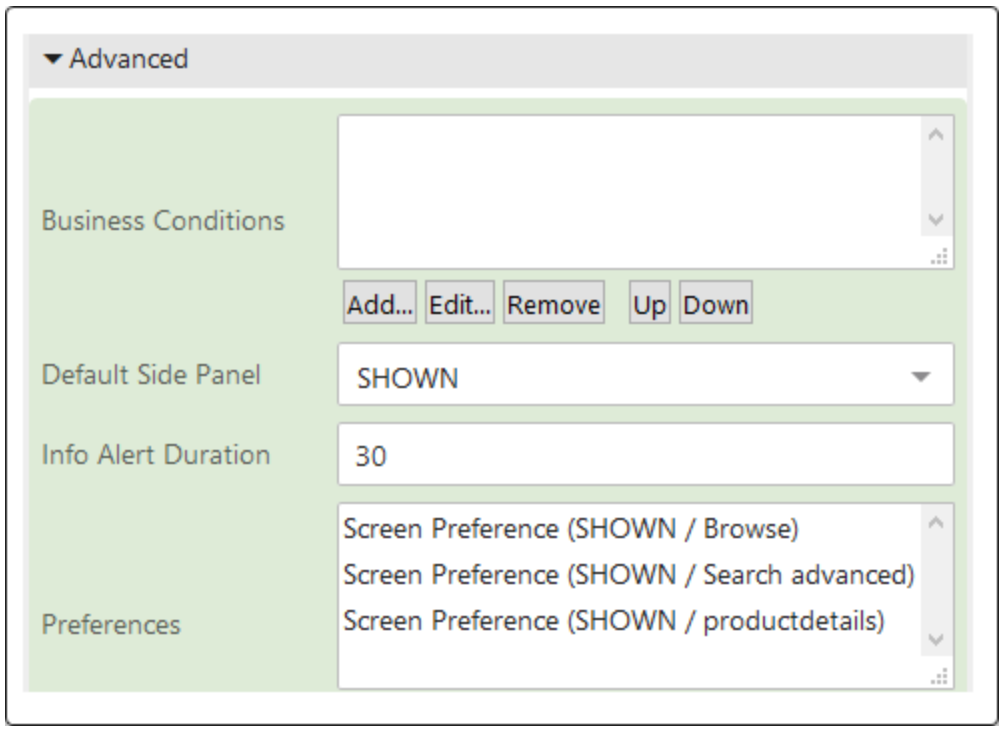
  To configure this component, navigate to the **Priority Triggering Status Flag** parameter and use the dropdown to select the desired workflow / status flag combination, then click **Add**. When added to the list, any tasks flagged as such in the workflow will display an alert next to the task list name in the Primary Navigation Panel Component. Likewise, when those tasks are present in the currently selected workflow state, a High Priority filter will be displayed.



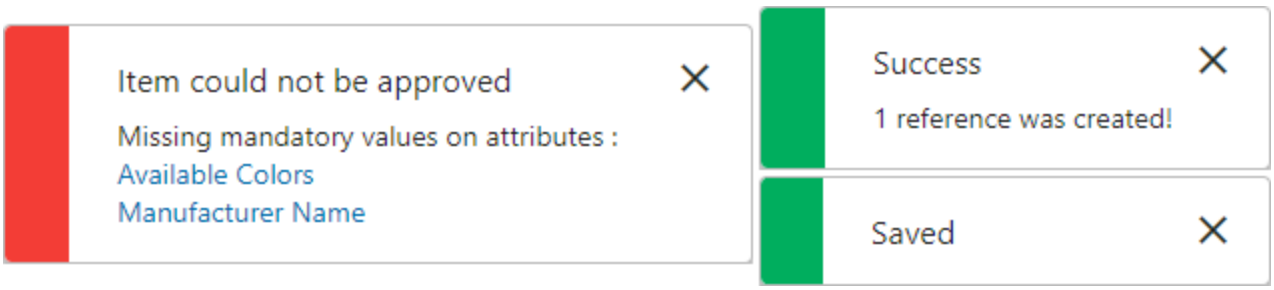
- **Override Control Type Rule:** Using the Override Control Type Rule, Web UI designers have options for efficiently configuring the display and behavior of attribute values with the following validation base types: List of Values, Numeric Text, Numeric Text (exclude tags), Text, and Text (exclude tags). Using this rule allows attributes to be added to an attribute group, and properly display in Web UI, without further involvement of the Web UI designer. To manage exceptions, when an Attribute Value component is configured to use specific control type settings, then those local settings will override the global Override Control Type Rule. This allows for the efficiencies of a global rule, with localized control when you need it. For full details on how to configure this parameter and the subsequent component, see the **Override Control Type Rule** topic.

Advanced Parameters

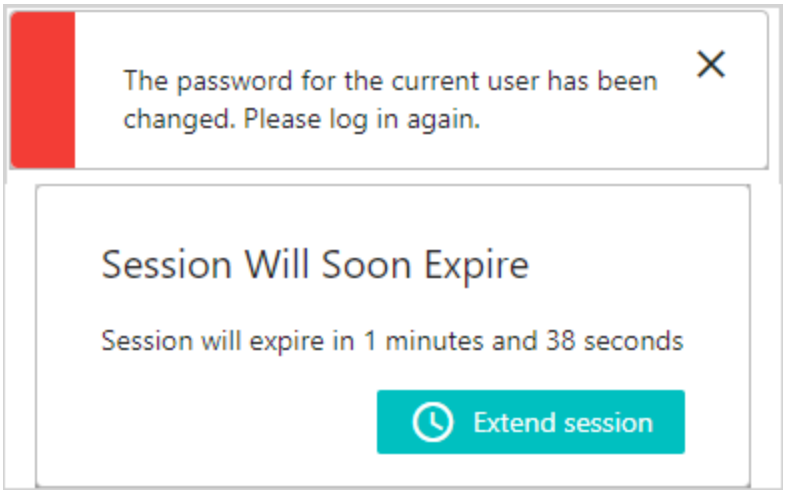
Click the arrowhead next to the **Advanced** heading to see the parameters available. A description of each parameter follows. Configure the parameters as needed.



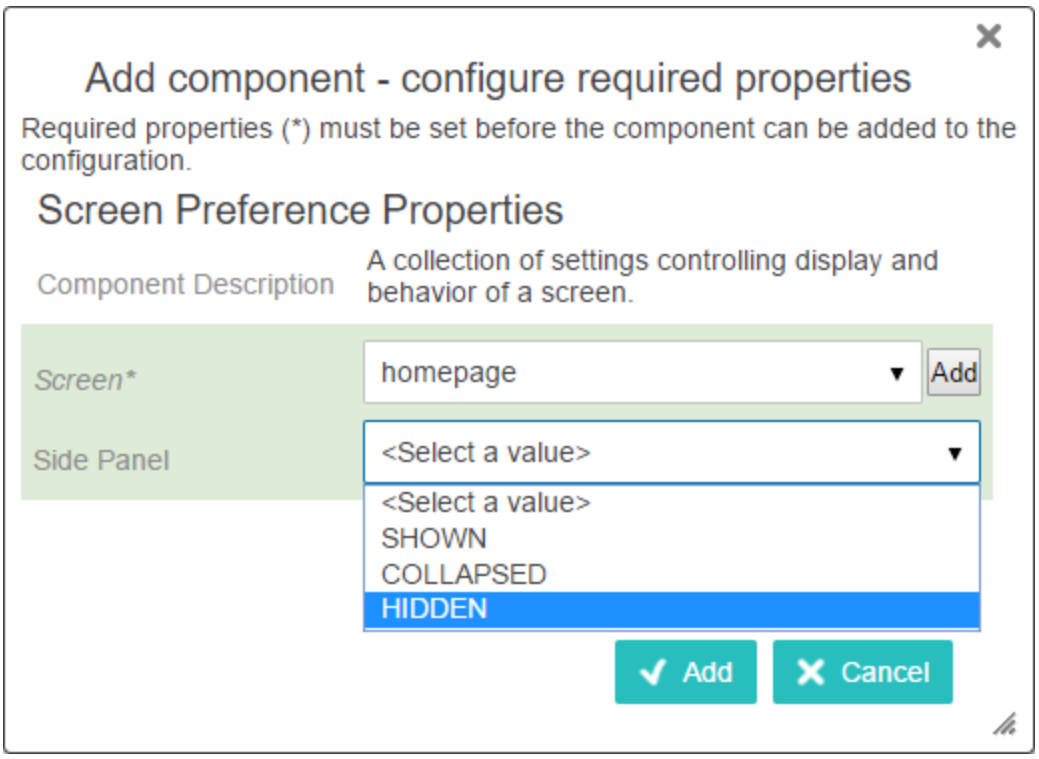
- **Business Conditions:** Any business conditions added become global conditions. This means that the conditions will be evaluated together, as applicable, with any additional business conditions configured for a screen, component, or parameter that you may be working with. For more information about business conditions, see **Business Conditions** in the **Business Rules** documentation.
  - To add a business condition to the Business Conditions parameter:
    1. Click **Add...** and then configure the Business Condition Properties that display.
    2. Click **Add** to apply the condition.
    3. Repeat steps 1 and 2 to add multiple conditions.
- **Default Side Panel:** Determines the behavior of the Left child component on all the pages within Web UI. Make a selection using the dropdown. An explanation of each option follows.
  - **HIDDEN**: (Default) The component will not automatically display on the screen.
  - **SHOWN**: The component remains static on the left side of the screen as you navigate through Web UI.
  - **COLLAPSED**: The component does not automatically display on the screen but is accessible by clicking on a show / hide button (›) shown on the left side of the screen.
- **Info Alert Duration:** When set, info alert boxes, like those shown below, will automatically close after the specified time (seconds).
  - If the value field is blank, then info alert boxes will remain on the screen until the user manually clicks the close button on the message box.



- If an alert requires a user action such as clicking a button to make a decision or acknowledge a message, or if the alert is a warning requiring action by the end user (e.g., fixing a validation error, re-logging in), then the alert duration value does not apply. A few examples of these alert types are below.

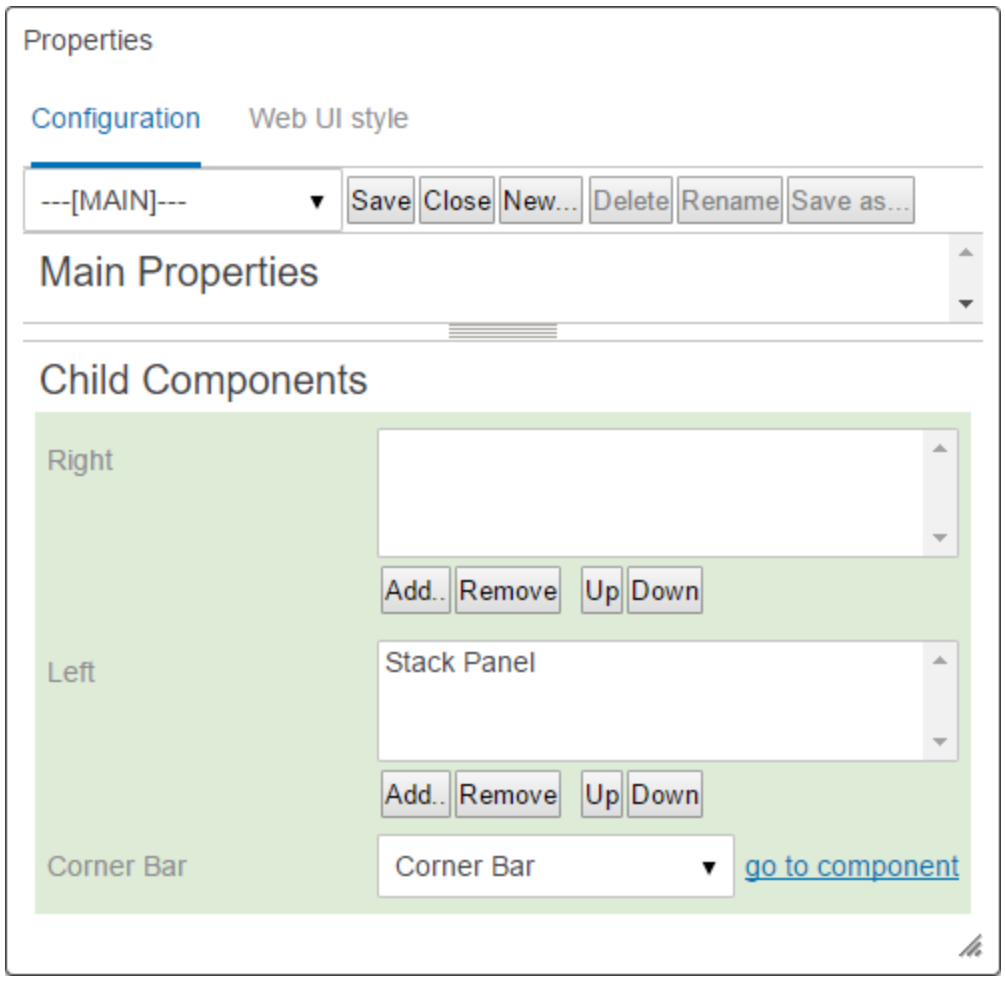


- **Preferences:** Use the Preferences parameter to overwrite the Default Side Panel settings for screens. As an example, you may decide that it is best to display the Left child component on some screens (e.g., Homepage) although the Side Panel default is HIDDEN.
  - To add a screen to the Preferences parameter:
    1. Click **Add...** and make or select a Screen and Side Panel setting on Screen Preference Properties.
    2. Repeat to add additional screen preferences.
    3. Optionally, use the **Edit...** or **Remove** buttons to modify the selected screen preferences.
    4. Optionally, use the **Up** and **Down** buttons to alter the order of the screen preferences.



Child Components

Add components to all screens using the Child Components section of Main Properties. Once added, components can be reorganized and removed.



- **Right:** Allows designers to add components designed to display on the side of a screen. The default display width of the component is determined by the settings configured using the Right Width parameter (described in the Main parameters section above). Most of the same add component options are available for the Left child component, allowing designers to configure screen layouts to best fit the needs of their users. Common setup is to add a Tree Navigator using a Stack Panel component configured with a Stack Panel Item.
- **Left:** Allows designers to add components designed to display on the side of a screen. The default display width of the component is determined by the settings configured using the Left Width parameter (described in the Main parameters section above). Most of the same add component options are available for the Right child component, allowing designers to configure screen layouts to best fit the needs of their users. Common setup is to add a Tree Navigator using a Stack Panel component configured with a Stack Panel Item.

  For step-by-step instructions on how to add the Tree Navigator Component to display in the Web UI, see the **Tree Navigator Component** document in the **Web User Interfaces** / **Using a Web UI** documentation.

  Alternatively, the Primary Navigation panel component can be configured. This component is not compatible with the Right child component.

Note: The Primary Navigation panel requires a Customer MDM license to use.

For step-by-step instructions on how to add the Primary Navigation panel component to display in the Web UI, see the **Primary Navigation Panel Component** document in the **Web User Interfaces** / **Using a Web UI** documentation.

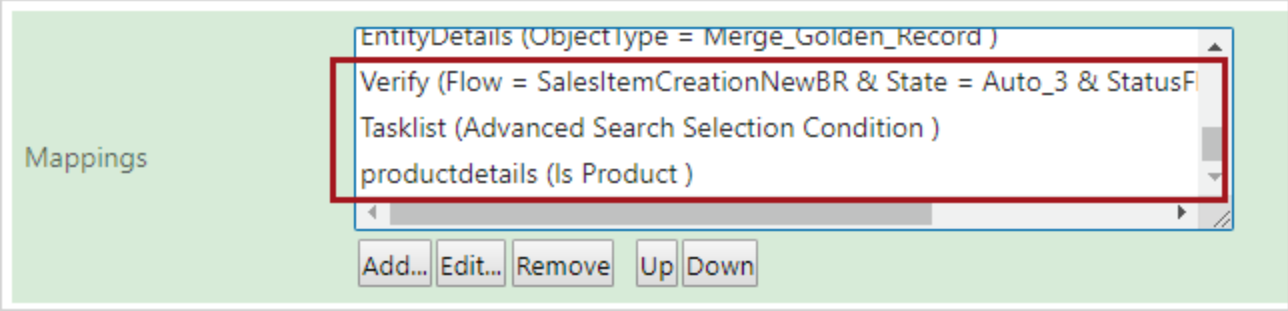
- **Corner Bar:** The Corner Bar allows for quick navigation options that will display in the top right of all screens. For information on how to configure this parameter, see the **Corner Bar Component** documentation.

Mappings

One of the ways screens configured in the Web UI can display is through values established in the Mappings field, located on the MAIN screen in the designer. A 'mapping' in this context refers to a direction given to the system from the admin user that a specific screen will display when the end user takes a specific action. For instance, a mapping can be set up that will direct the Web UI to display a 'Product Details' screen if a user stands on an object of the 'Product' super type. Mappings are powered by one or more conditions, which are the rules that tell the system which criteria must be met to activate display of a specific screen. For instance, to ensure that a 'Product Details' screen displays when a user stands on an object type of the 'Product' super type, users will configure an 'Object Type condition' in the mapping that establishes the mapping condition.

When a screen is created, a mapping for that screen must also be created, or else the screen will never display.

The format for the mappings that display in the 'Mappings' field (shown in the screenshot below) is the user-assigned screen title displays first, followed by the condition type that enables the mapping in parentheses. Multiple conditions can be applied in a single mapping for more.



The sequence of mappings in this field are important. When an action is taken in the Web UI, the system performs an evaluation to determine if any of the mapping conditions listed in this field have been met. When the first mapping condition in the sequence is met, the evaluation stops and the screen configured for that mapping displays. If no mappings match, then the default target screen is the Homepage. The mapping order should be set based on the requirements of the specific Web UI. Admin users should take care to avoid mapping conflicts (e.g., multiple mappings that use the same condition but different screens) as they often result in errors or unexpected UI behavior.

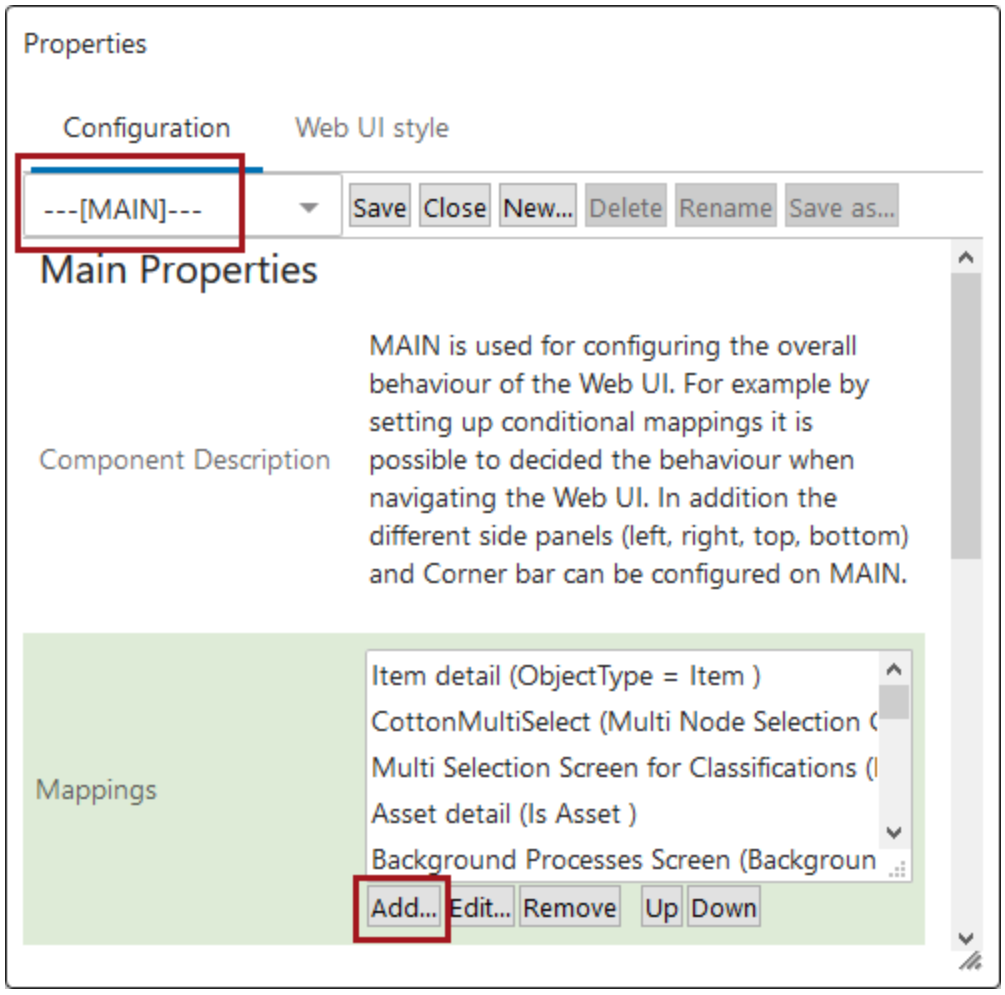
To demonstrate the importance of the mapping sequence, let us say a user clicks on a 'Sales Item', which is a product. A mapping is created using a 'Product Condition' that displays a 'Product Details' screen when the user stands on any product. A different, more targeted mapping has also been configured, this one with an 'Object Type Condition', which displays a 'Sales Item Screen' when the user stands on a Sales Item product-object. The expectation is that when users select a 'Sales Item' object, they will see one screen, and if they click on any other product object type, they will see a different screen. However, if the mapping that shows the more general 'Product Details' screen when standing on **any** product-type object has been set higher in the sequence than the mapping that shows the more specific 'Sales Item Screen' when standing on a **specific** product-type object, in this instance a Sales Item object, the system evaluation will end once the first encountered mapping condition has been met. The result is that when a user clicks on a 'Sales Item' object expecting to see the 'Sales Item Screen', the user will instead see the 'Product Details' screen. To correct this, the mapping using the 'Object Type Condition' to display the 'Sales Item Screen' whenever a user stands on a 'Sales Item' object should be moved higher in the sequence than the more generalized mapping for all product objects.

If a user encounters an unexpected screen when navigating Web UI, users should review the mappings to solve the issue. The condition / screen combinations and mapping sequence may be configured incorrectly.

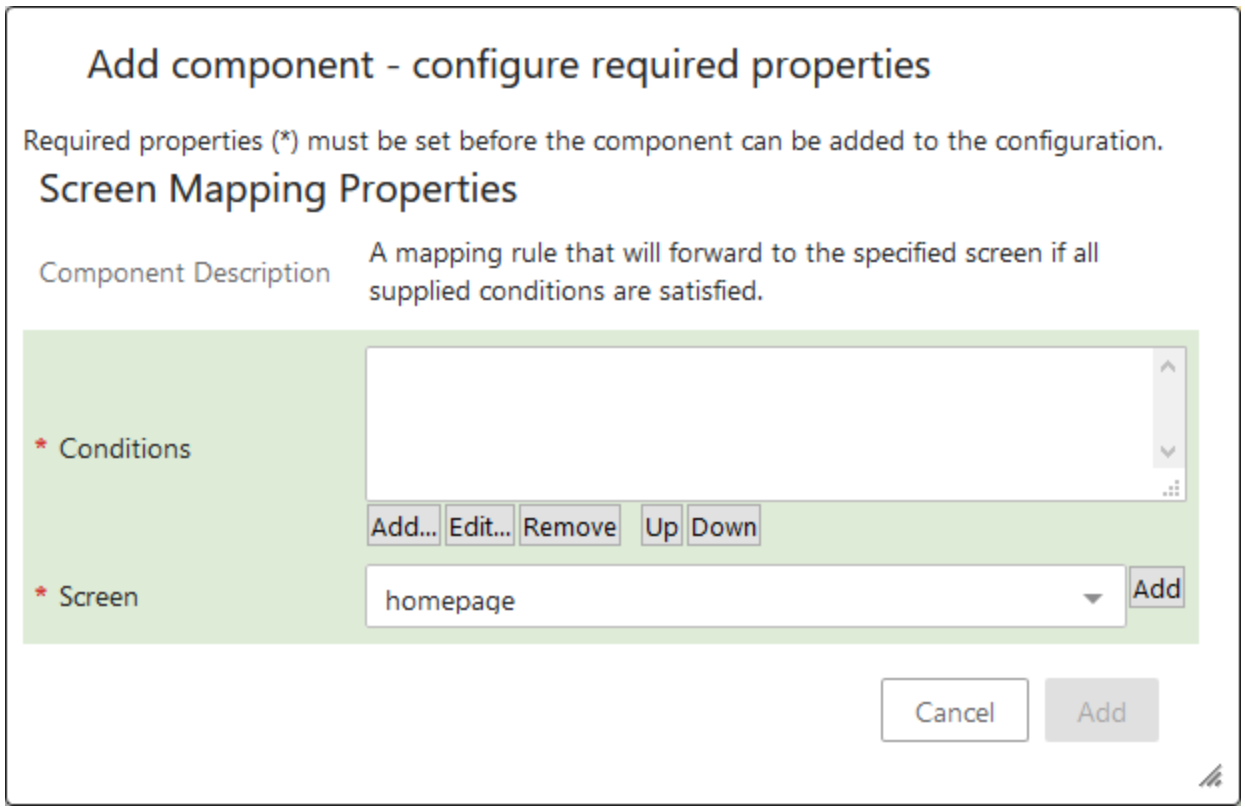
Configuring Mappings

To configure a mapping, follow the directions described below.

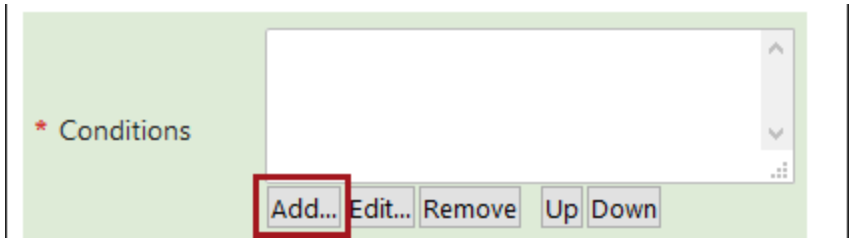
1. Navigate to [MAIN] in the designer. Then click the 'Add' button under the 'Mappings' field.



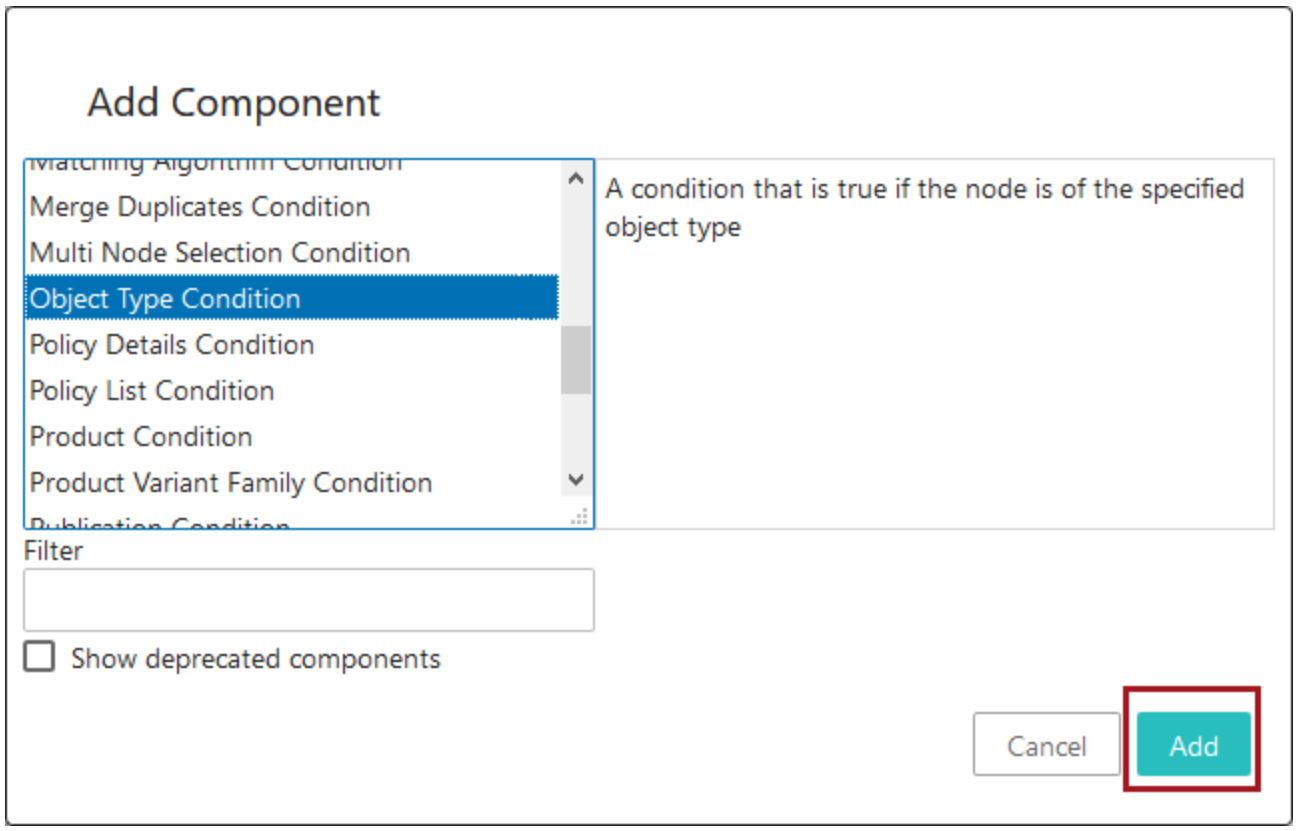
2. In the 'Screen Mapping Properties' window that displays, there are two parameters: 'Conditions' and 'Screen'. Both most be configured to successfully create a mapping.



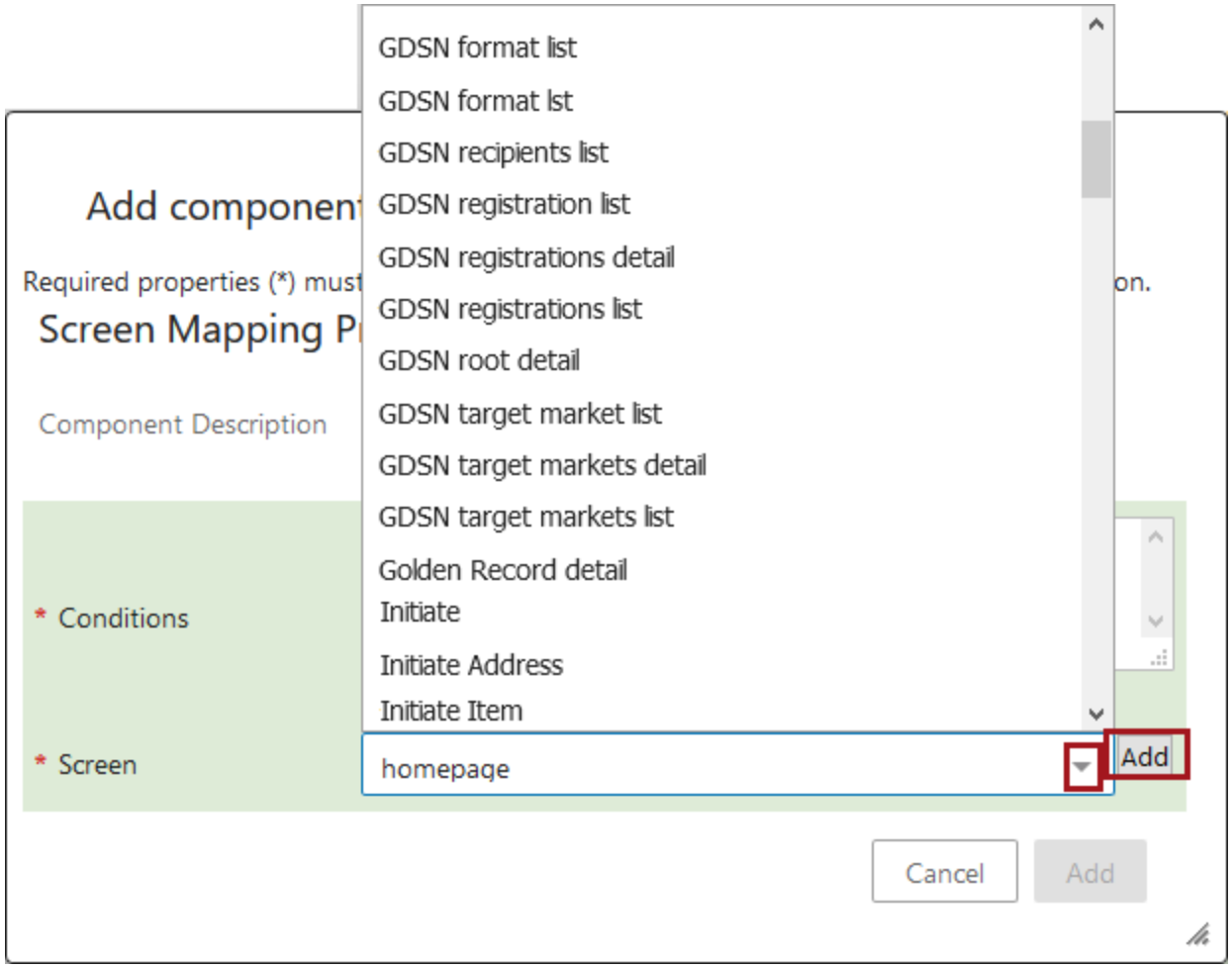
3. To add a condition to the mapping, click the 'Add...' button beneath the 'Conditions' field.



4. In the 'Add Component' window that displays users will find a list of all available conditions that can be added to a mapping. To add a condition, select the desired condition and click 'Add'.



5. Back on the 'Screen Mapping Properties' window, select the screen that should display when the condition has been met. To select the screen, click the dropdown to see a list of all screens that have been created in the Web UI. Users may also click 'Add' to initiate creation of a new screen that can be selected for the mapping.


Add componen
Required properties (*) must
on.
Screen Mapping P
Component Description
* Conditions
* Screen
homepage
Add
Cancel
Add
GDSN format list
GDSN format lst
GDSN recipients list
GDSN registration list
GDSN registrations detail
GDSN registrations list
GDSN root detail
GDSN target market list
GDSN target markets detail
GDSN target markets list
Golden Record detail
Initiate
Initiate Address
Initiate Item

Override Control Type Rule

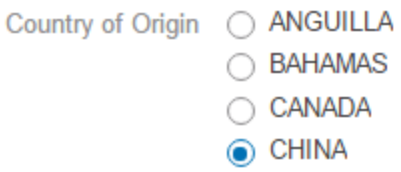
Within Web UI, attribute values are commonly displayed using a Node Details screen configured with the following components: Attribute Value, Attribute Value Group, and Grouping. Each of these components offer optional settings that allow a Web UI administrator to configure the display and behavior of the attribute values. However, the Web UI administrator can also use the Override Control Type Rule component to create global rules for overriding the default control types for attributes with the following validation base types: List of Values, Numeric Text, Numeric Text (exclude tags), Text, and Text (exclude tags). This is especially beneficial for when users create new attributes or add attributes to an attribute group, because the newly added attributes can properly display in Web UI, without further involvement of the Web UI designer.

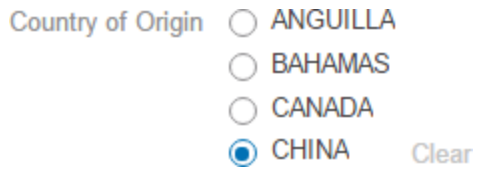
The Override Control Type Rule allows designers to globally control:

- The display of attribute values depending on the attribute validation base type, control type, LOV hardness (ability to add values), and multi-value settings.
- The display of LOV attribute values that contain a specified number of values. E.g., if an LOV contains between 2 - 6 values, then display the values using the Radio button control type.
- The number of columns and/or rows to be used when displaying LOV attribute values. E.g., if an LOV contains more than 10 values, then display the values across 5 columns.

For example, it is possible to display LOVs that are multi-valued using the checkbox control type, and then display LOVs that are not multi-valued using the radio control type. LOVs with more values than a specified number can be displayed using a typeahead control type, and LOVs with values between two specified numbers can be displayed using a radio with clear options control type. Also, to manage exceptions, when an Attribute Value component or Attribute Management screen type is configured to use specific control type settings, then those local settings will override the global Override Control Type Rule. This allows for the efficiencies of a global rule, with localized control when you need it.

The following control type overrides are available, but their availability is determined by the validation base type of the attribute. The table below describes the available control types and their options.

Override Control Type	Description	Validation Base Type	User Added Values	Multi Value	Row and Column	Display Example
Checkbox	Displays each LOV with a checkbox.	LOV	No	Yes	Yes	
Radio	Displays each LOV with a radio button.	LOV	No	No	Yes	

Override Control Type	Description	Validation Base Type	User Added Values	Multi Value	Row and Column	Display Example
Radio with clear option	Displays each LOV with a radio button, and an additional 'Clear' button.	LOV	No	No	Yes	
Rich Text	Displays a re-sizable value field with access to a text editor for entering rich text.	Text, Text (exclude tags), Numeric Text, Numeric Text (exclude tags)	Yes	Yes	No	
Text Area	Displays a re-sizable value field that can accommodate long values.	Text, Text (exclude tags), Numeric Text, Numeric Text (exclude tags)	Yes	Yes	No	
Text Box	Displays a single line value field for entering the attribute value.	Text, Text (exclude tags), Numeric Text, Numeric Text (exclude tags)	Yes	Yes	No	

Override Control Type	Description	Validation Base Type	User Added Values	Multi Value	Row and Column	Display Example
Typeahead	Allows the user to enter the first alpha or numeric characters into a value field to filter down the number of suggestions provided in the dropdown list.	LOV	Yes	Yes	No	

Important: By default all attribute values using the Number validation base type (multi-value and single value) will display in Web UI as text boxes. No other control type is applicable, therefore an option for Number validation base types is not offered as an override control type.

Configuring

Recommended practice when displaying attributes within Web UI is to use the Attribute Value Group component and then manage the display behavior of the validation base types using one or more global rules created using the Override Control Type component.

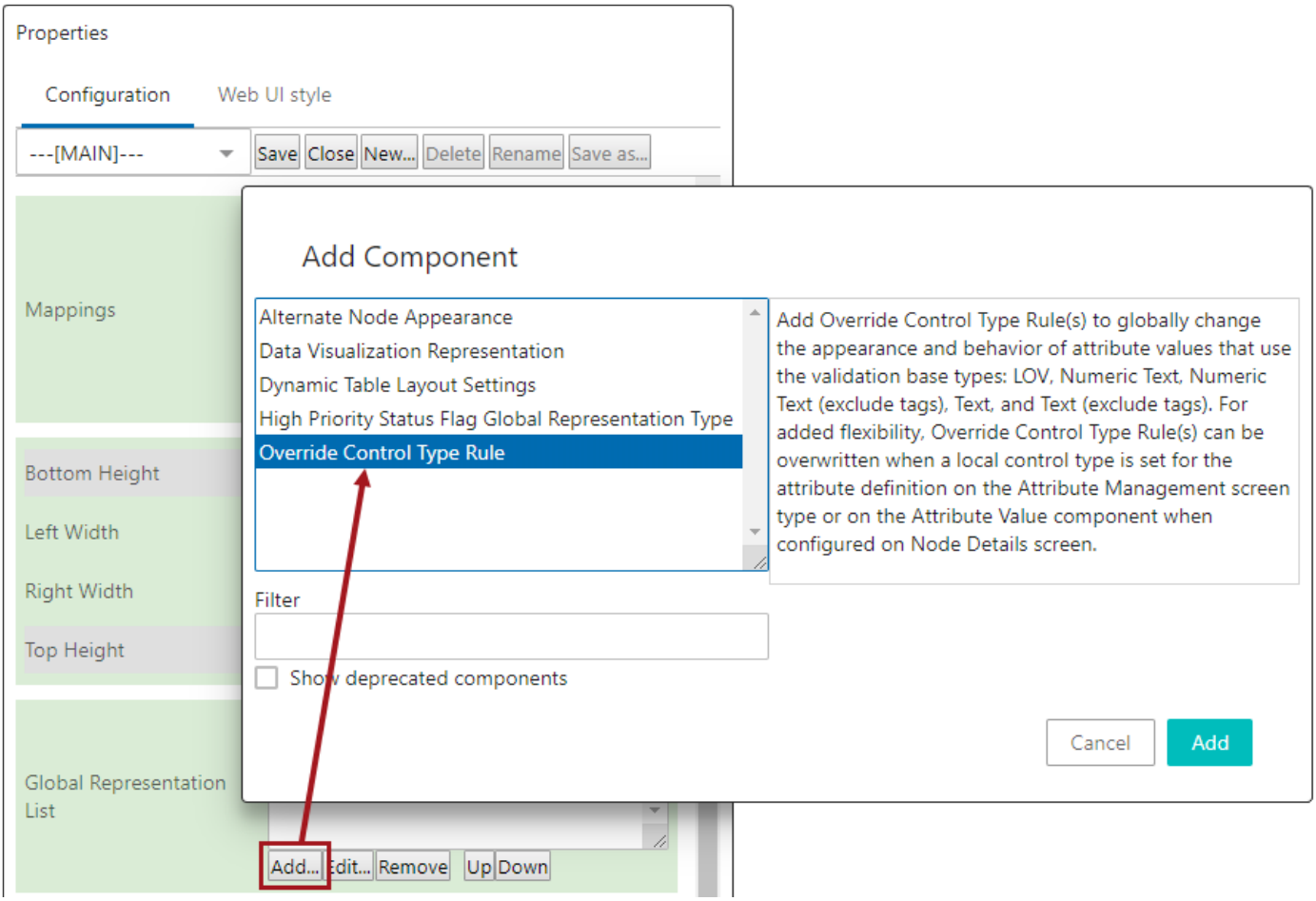
Steps for configuring the Override Control Type Rule are below.

Adding the Override Control Type Rule to the Main Properties Global Representation List

Before Control Type Rule Definitions can be created, the Override Control Type Rule component must be added once to the Main Properties Global Representation List. The Override Control Type Rule component can only exist once, however many Control Type Rule Definitions can be created within the component.

Steps for adding the Override Control Type Rule component to the Main Properties Global Representation List are below.

1. In the designer window, select the **---[MAIN]---** screen.
2. Go to the Global Representation List, click the **Add** button, and the Add Component dialog will display



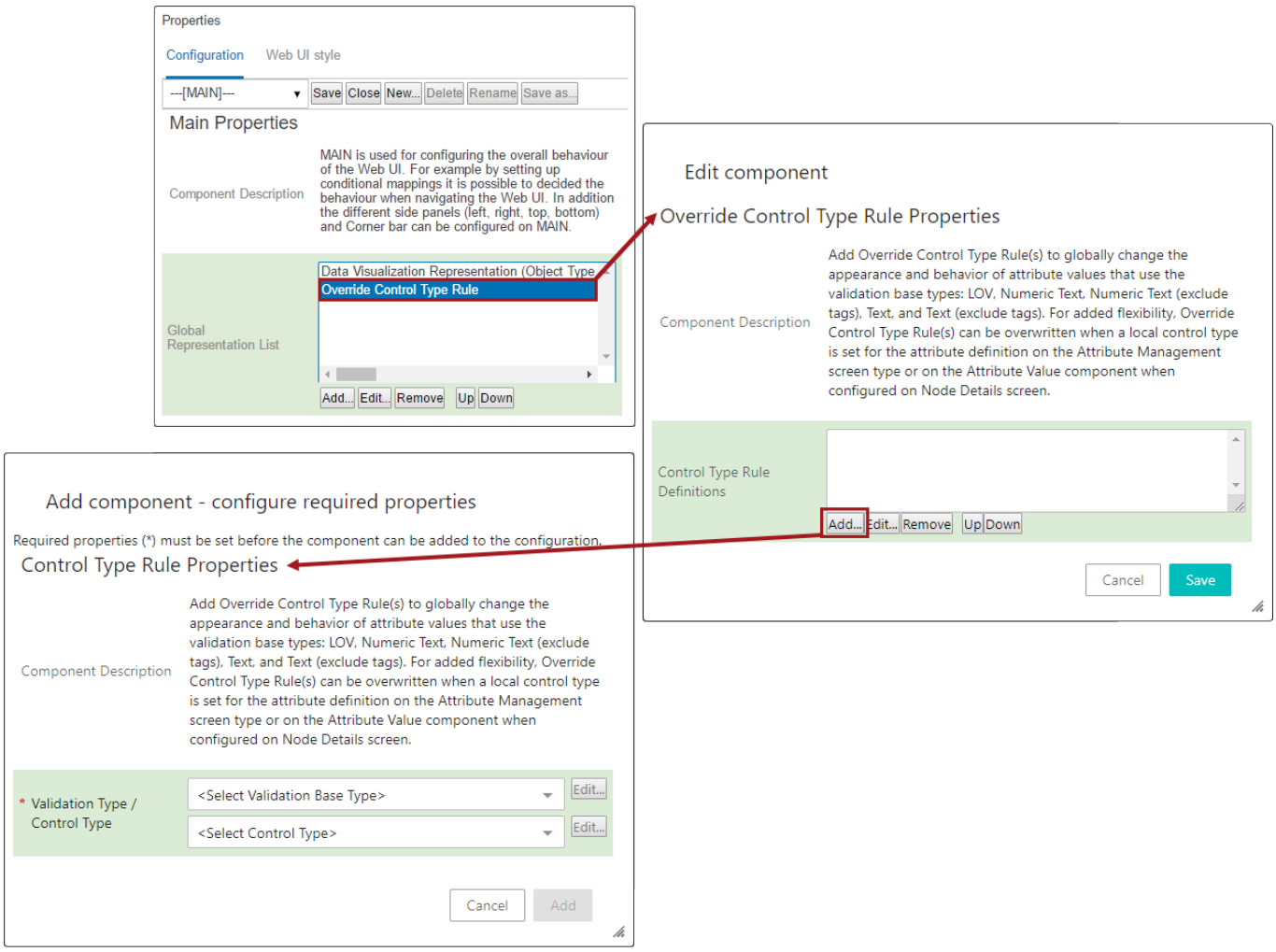
3. Select the **Override Control Type Rule**, click the **Add** button, the Add Component dialog will close, and the Global Representation List parameter will display with the Override Control Type Rule.
4. Click the **Save** button for the designer.

Adding an Override Control Type Rule definition to the Override Control Type Rule component

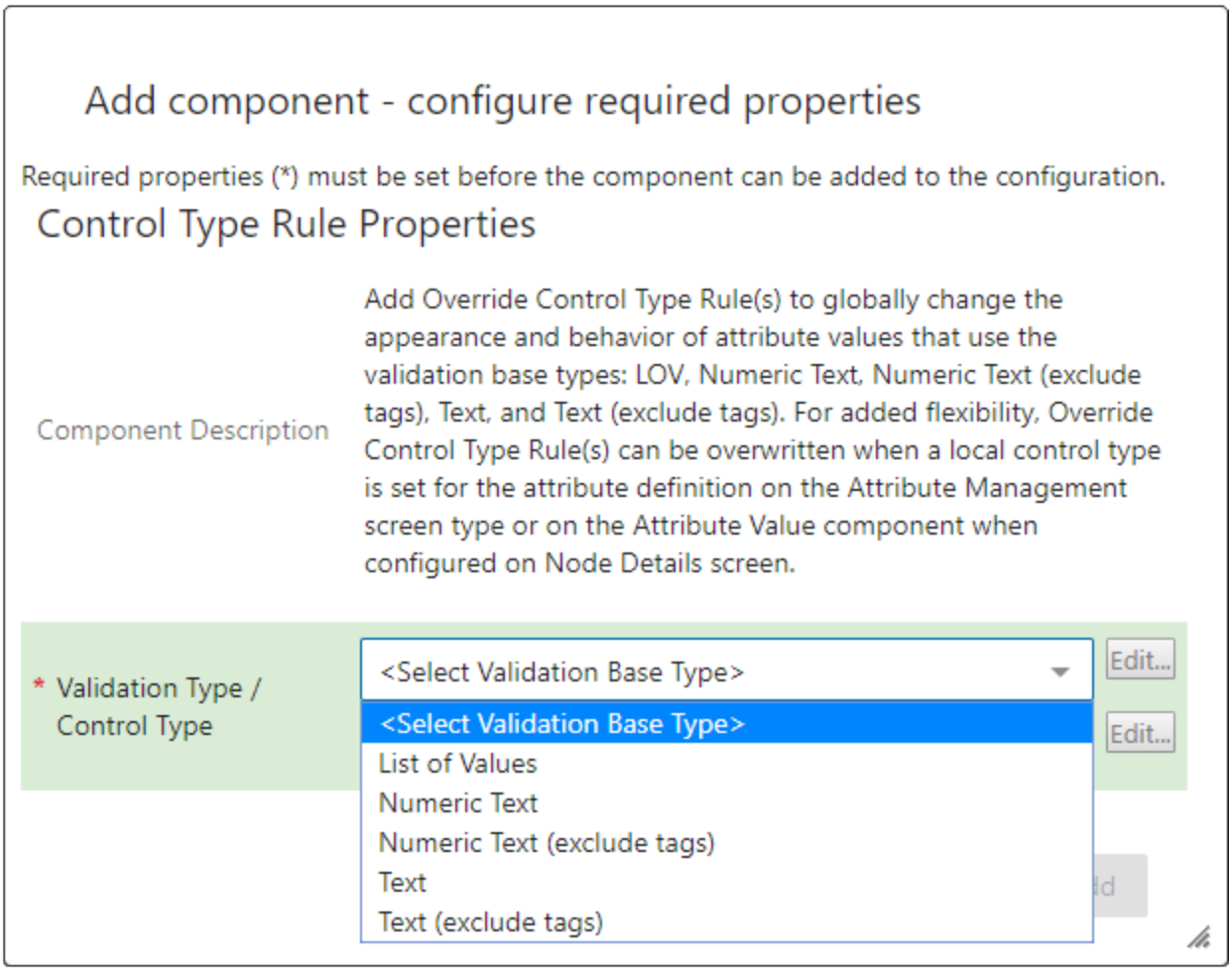
Once the Override Control Type Rule component has been added to the Main Properties Global Representation List, one or more Override Control Type Rule definitions can be added to easily display attribute values in more preferred ways.

Steps for adding an Override Control Type Rule definition to the Override Control Type Rule component are below.

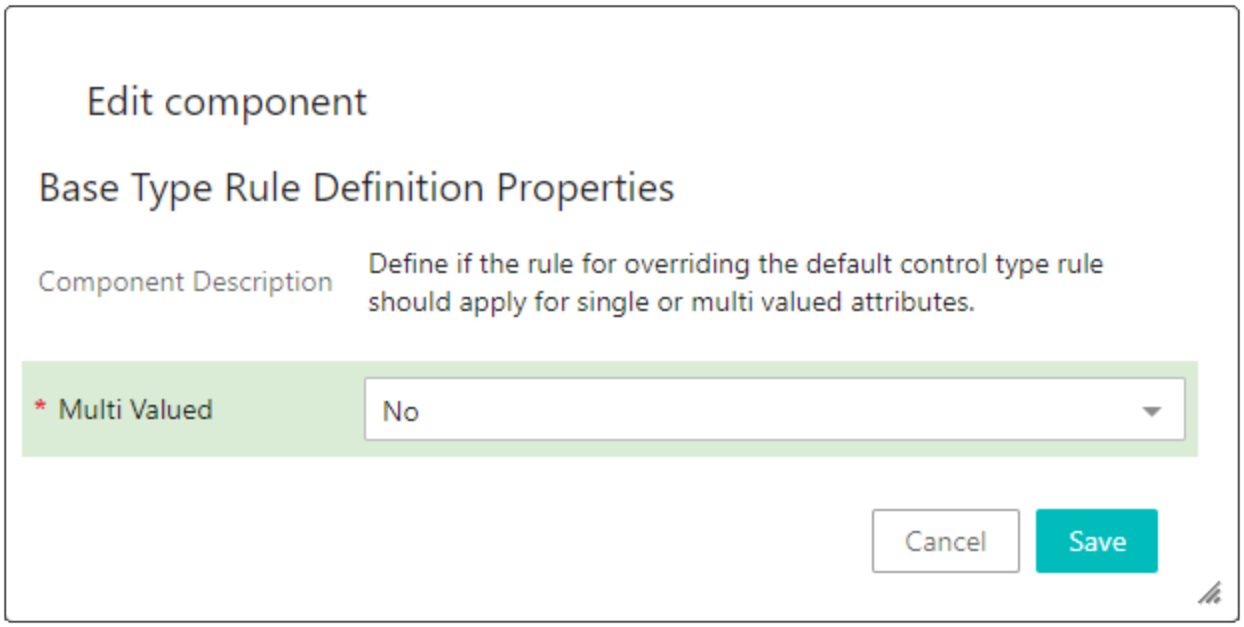
1. Go to the Main Properties Global Representation List, double click on the **Override Control Type Rule** component previously added (or select the Override Control Type Rule from the list and click the **Edit** button), and the Edit Component dialog will display with the Control Type Rule Definitions parameter.
2. Click the **Add** button, and the Add component Control Type Rule Properties dialog will display the Validation Type / Control Type parameters.



3. Select a validation base type from the dropdown list, and a dialog will display based upon your selection.

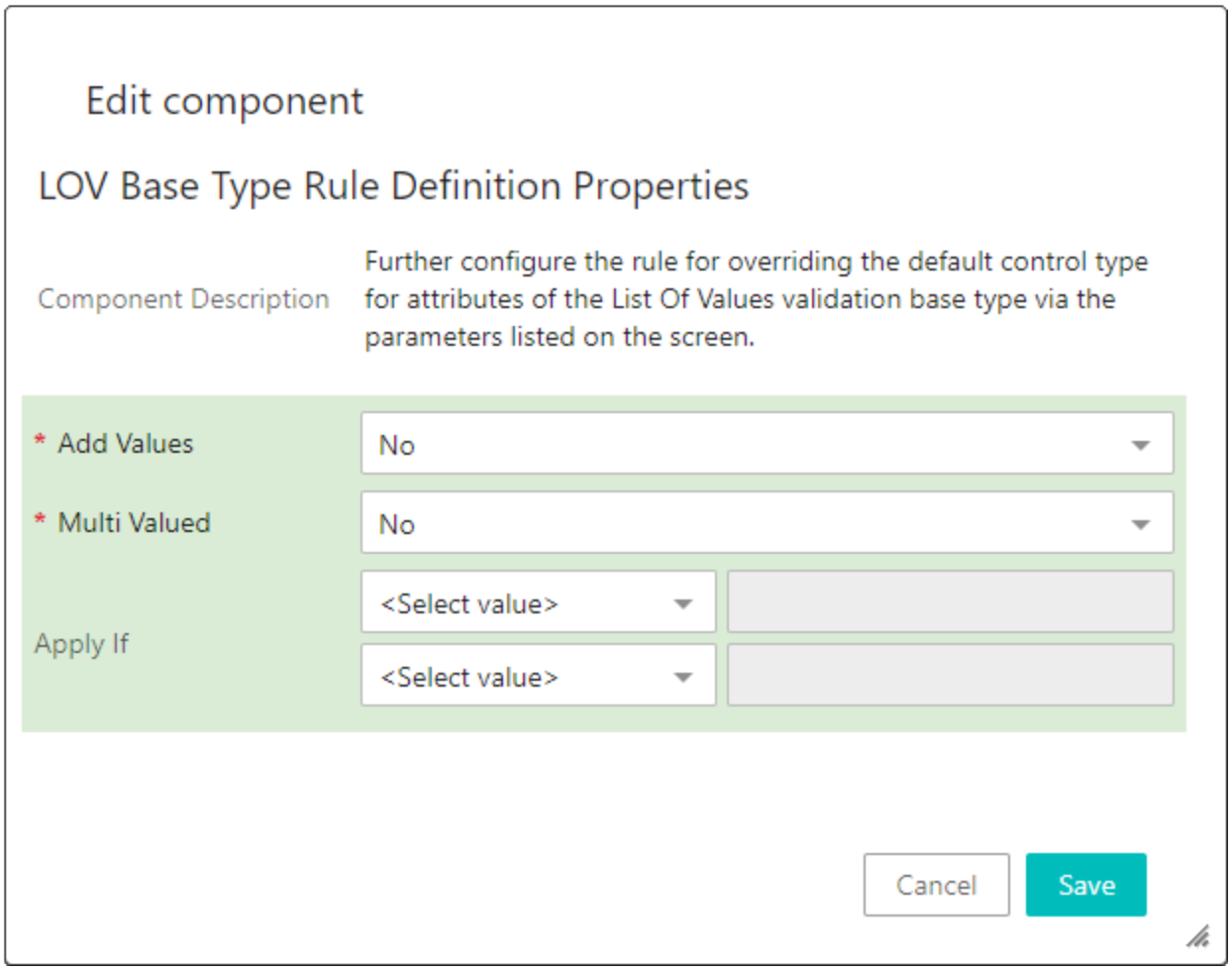


When the **Numeric Text**, **Numeric Text (exclude tags)**, **Text**, or **Text (exclude tags)** Validation Base Types are selected, the Base Type Rules Properties dialog displays, prompting selection for the Multi Valued parameter.

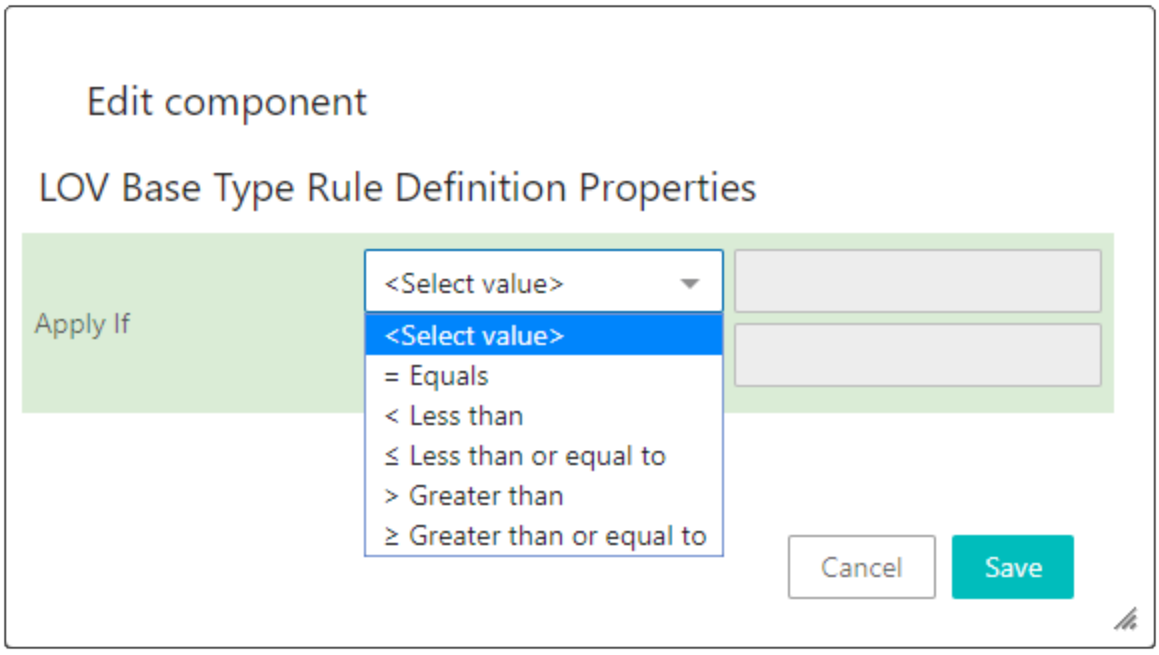


- **Multi Valued:** Determines the types of attributes to which the rule should apply.
  - Select **Yes** (default) if the rule should affect attributes with the default setting of Multi Valued enabled
  - Select **No** if the rule should affect attributes with the default setting of Multi Valued disabled

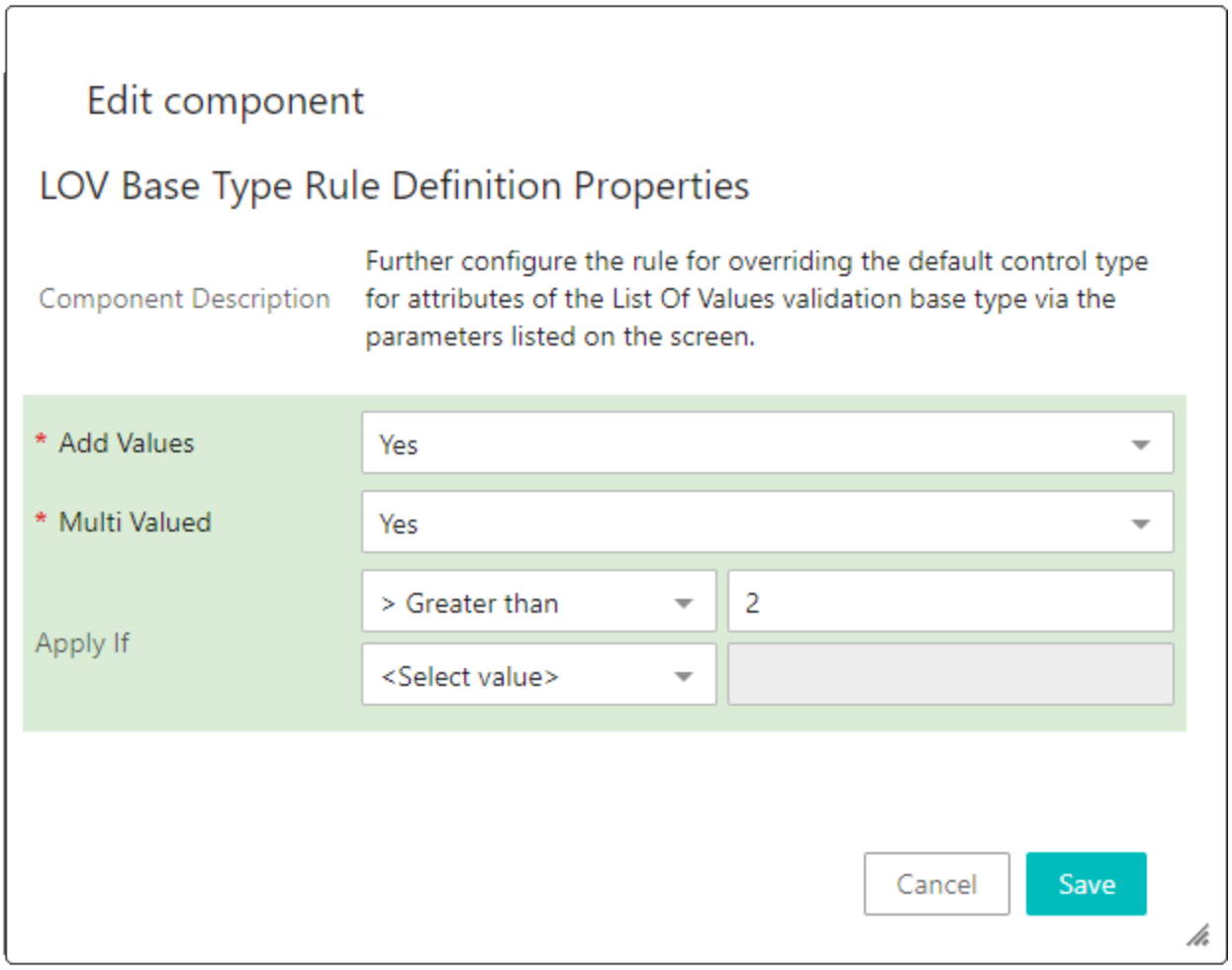
When the **List of Values** Validation Base Type is selected, the LOV Base Type Rule Definitions Properties displays, prompting selection for the following parameters:



- **Add Values:** Determines the types of LOVs to which the rule should apply.
  - Select **Yes** if the rule should affect LOVs with the default setting of Add Values enabled.
  - Select **No** (default) if the rule should affect LOVs with the default setting of Add Values disabled.
- **Multi Valued:** Determines the types of attributes to which the rule should apply.
  - Select **Yes** if the rule should affect attributes with the default setting of Multi Valued enabled
  - Select **No** (default) if the rule should affect attributes with the default setting of Multi Valued disabled
- **Apply If:** Determines if the rule should apply to attribute values that contain a specified number of values (i.e., If an LOV contains between 2 - 6 values, then display the values using the Radio buttons control type).
  - Select an option from the first dropdown, and the relative parameter to the right will become editable.

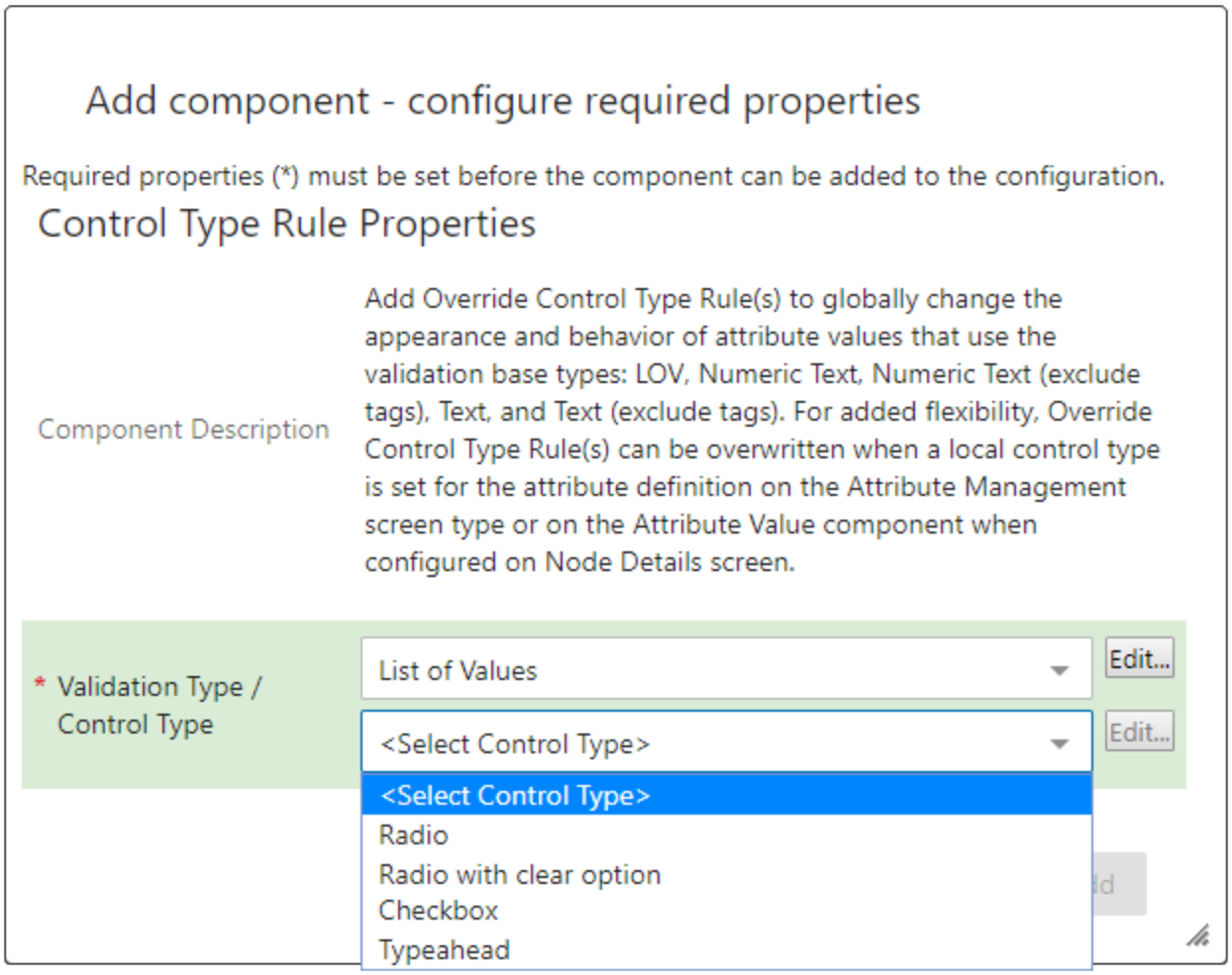


- Enter a numeric value in the relative parameter, and optionally choose from the dropdown list on the second parameter.



Important: When using the Apply If parameter options, if the second row is used, then the first row must be populated. The second row cannot be used without the first row; however, the first row can be used with the second row blank. For example, if an LOV contains '> Greater than' 20 values, then display the values using the Checkbox control type.

4. Once the desired settings are chosen, click the **Save** button, the dialog will close and the Control Type Rule Properties dialog will display. To return to the previous dialog, click the Edit button next to the Validation Type parameter.



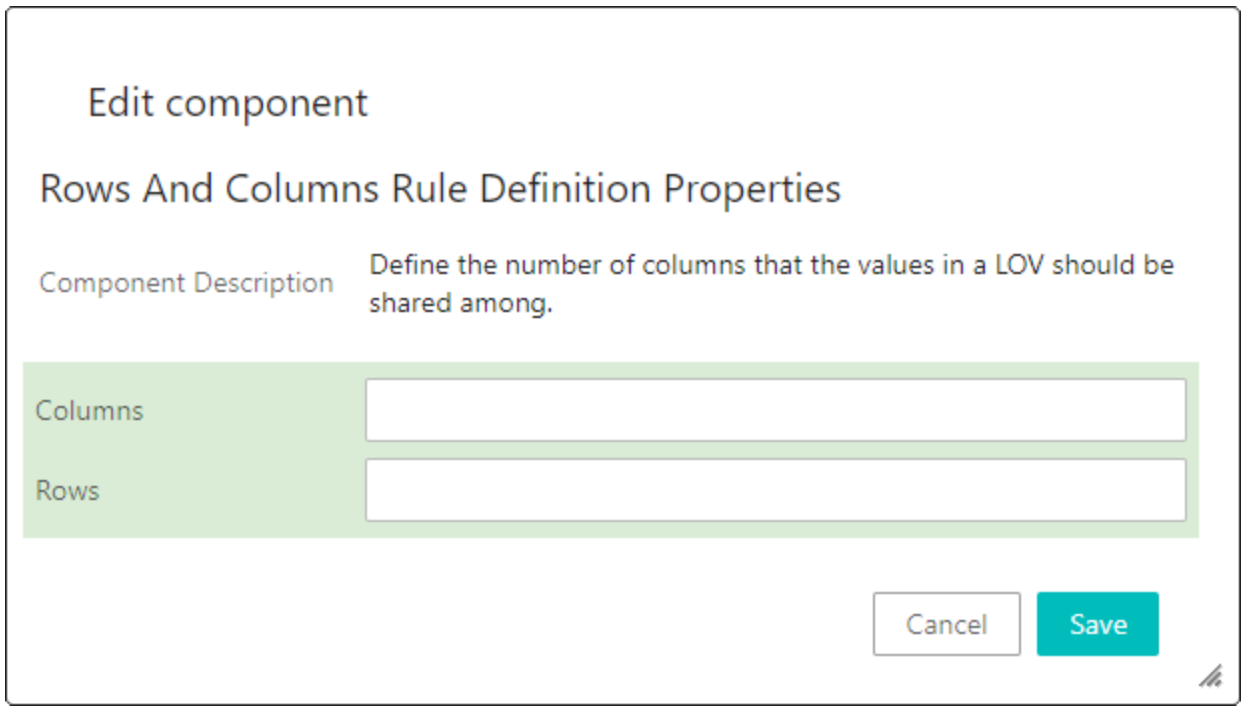
5. Select a control type from the dropdown list, and a dialog will display based upon your selection.

Control types drop down list depends on the LOV Base Type Rule definition Properties - Add Values and Multi Valued parameters as described in the below table:

Control Types Available	Add Values parameter	Multi Valued Parameter
Radio, Radio with clear option, Typeahead	No	No
Typeahead	Yes	No
Checkbox, Typeahead	No	Yes
Typeahead	Yes	Yes

Important: The selections made previously within the LOV Base Type Rule Definitions Properties affect the valid control types that will display. (i.e., Multi Valued LOVs must use Checkboxes or Typeahead, and Single Valued LOVs must use Typeahead, Radio, or Radio with clear option.)

When the Checkbox, Radio, or Radio with clear option is selected, a Rows and Columns Rule Definition Properties dialog will display with the following parameters:



- **Columns:** Determines the number of columns that should be used to distribute the LOV values across.
- **Rows:** Determines the number of rows to display before a scroll bar is displayed to the user.

6. Once the desired settings are chosen, click the **Save** button, the dialog will close and the Control Type Rule Properties dialog will display again.
7. Click the **Add** button, the dialog will close, and the Override Control Type Rule Properties dialog will display with the newly added control type rule definition.
8. Click the **Save** button to close the dialog, and the Main Properties will display.
9. Click the **Save** button for the designer.
10. Click the **Close** button for the designer.

Important: Override Control Type rules can be overwritten if a local control type is set on the attribute definition of the Attribute Management screen or on the Attribute Value component. To manage exceptions, when the override control type setting is used on the Attribute Value component within a Node Editor, it will take precedence over settings used on the Attribute Management Screen (via the Attribute Validation component), and the settings used on the Attribute Management Screen will take precedence over the global rules set using the Override Control Type Rule.

For more information on managing how attribute values display and behave in Web UI, see the **Attribute Value Component** topic, the **Attribute Value Group Component** topic, and the **Attribute Management Screen** topic.

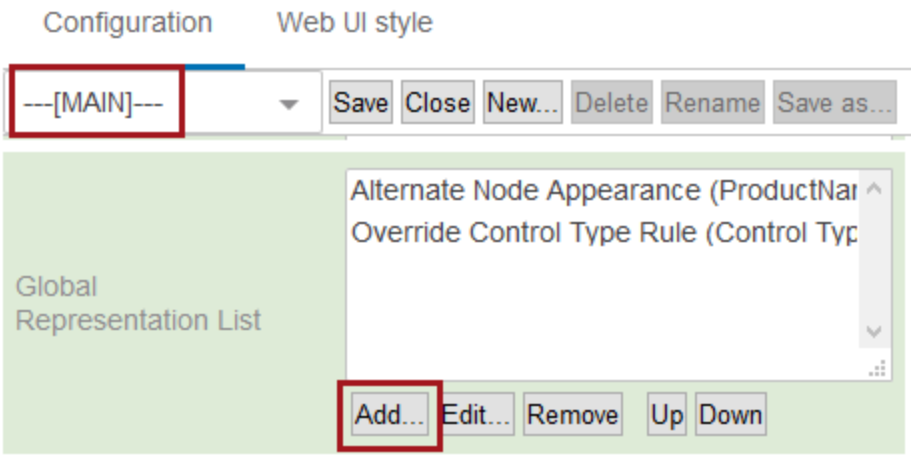
To control the attribute override type from workbench once this setup is done in Web UI, see the 'Control override meta attribute' section of the **Web UI Settings** topic in the **System Settings** section. This can be found by going to **Users and Groups** within the **System Setup / Super User Guide** information.

Dynamic Table Layout

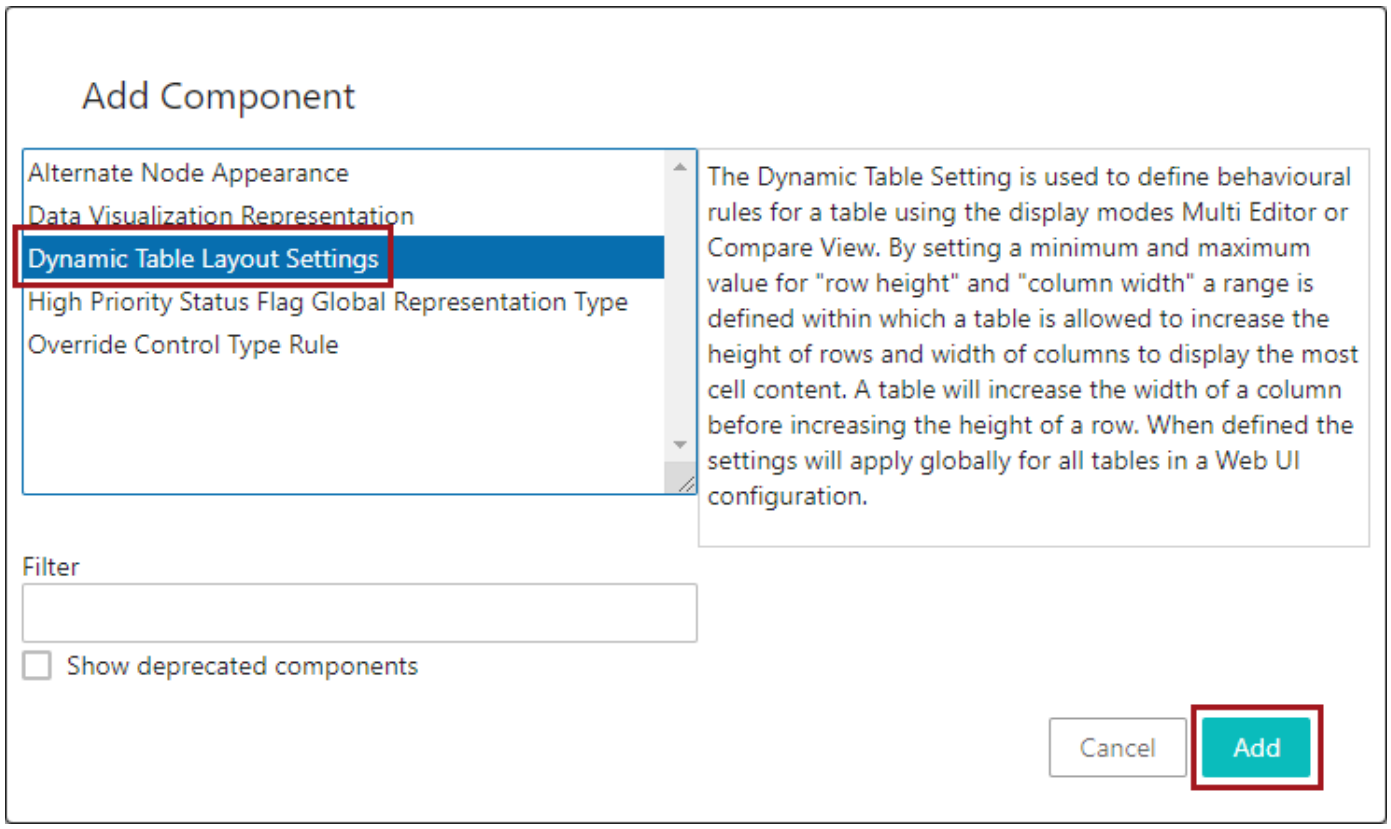
With the Dynamic Table Layout component enabled for the Web UI, tables that display on a Node List in either the Multi Edit or Compare View display modes will expand (or contract) dynamically based on the content in the cell. The dynamic formatting will be done both to accommodate existing table content and new content added in real-time. Enabling the Dynamic Table Layout Settings component and any settings configured therein apply to Web UI tables across the Web UI.

To enable Dynamic Table Layout, follow the steps below:

1. In the designer, navigate to [MAIN], and then to the Global Representation List. Click **Add...**.

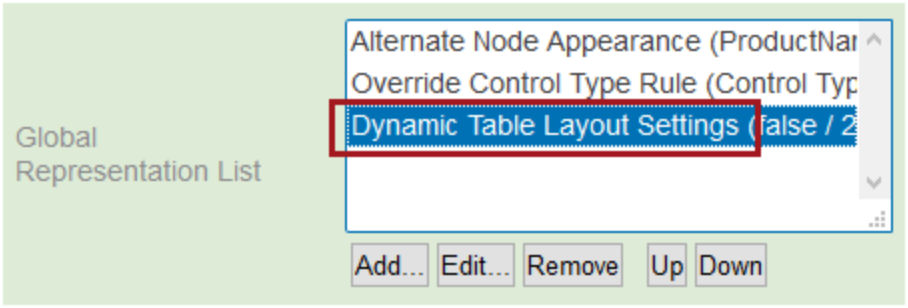


2. In the 'Add Component' dialog that displays, select the 'Dynamic Table Layout Settings' component, and click **Add**.

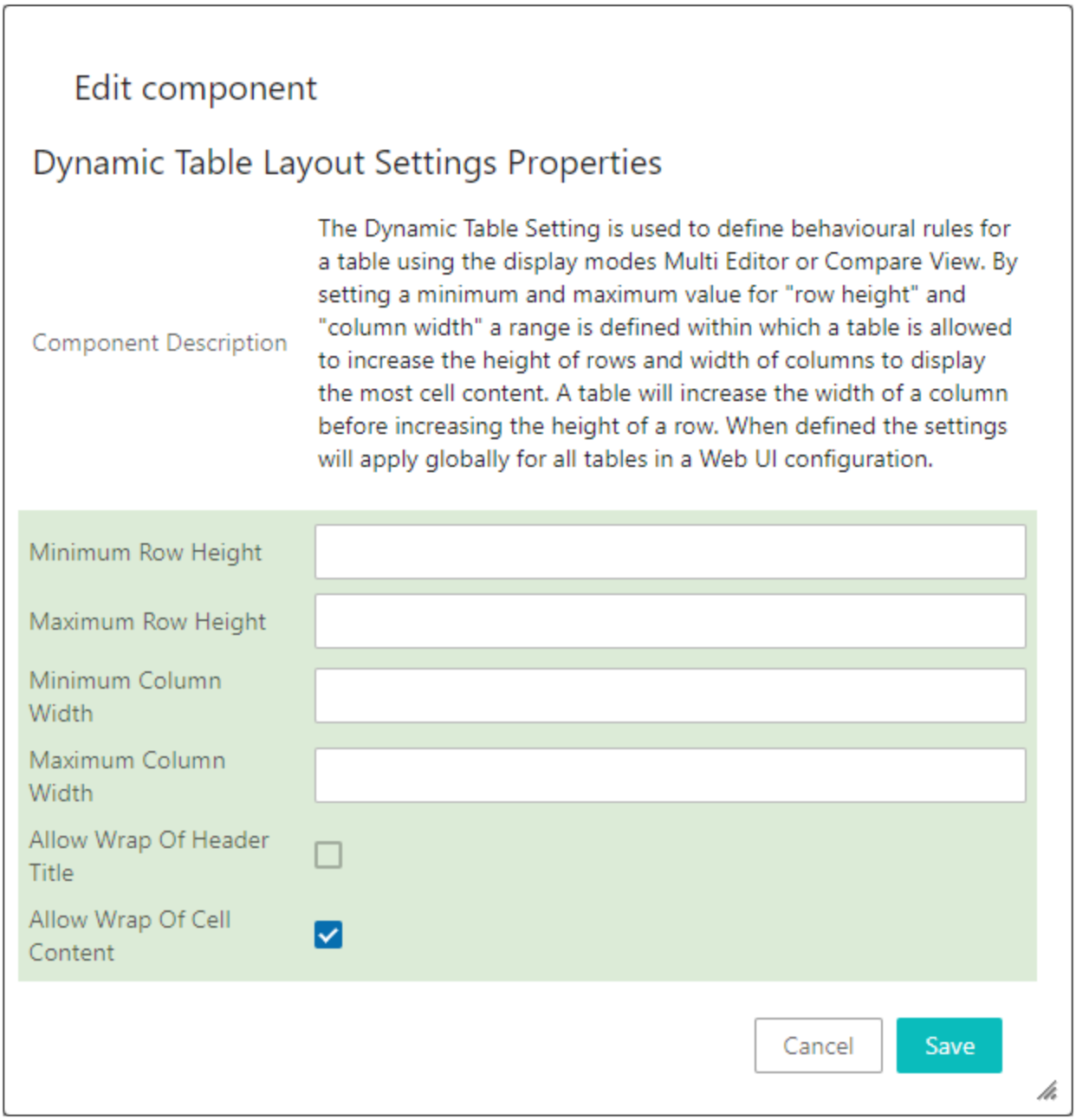


With the 'Dynamic Table Layout Settings' component added and the configuration saved in the designer, much of this feature's utility will already be applied to the relevant tables. To configure further, additional settings must be applied.

3. Back on the Global Representation List, double click the newly added 'Dynamic Table Layout Settings' component to edit it.



4. This opens the 'Dynamic Table Layout Settings Properties' window.



Configuration of the minimum and maximum row / column height / width parameters on this screen in the designer allows users to further define how much the tables will adjust to fit the cell content. Once added, the tables will dynamically adjust row width until hitting either a default (or configured) maximum width, and then expand row height as needed. This 'First out, then down' logic helps ensure dynamically formatted tables do not expand to the point where readability is negatively impacted. These are the parameters available to be configured on this designer screen:

Minimum Row Height: The number (in pixels) added in this field determines the minimum height of table rows. This number becomes the baseline height of table rows. As a rule of thumb, twenty pixels for height translates roughly into one line of text.

Maximum Row Height: The number (in pixels) added in this field determines the maximum height of table rows.

Minimum Column Width: The number (in pixels) added in this field determines the minimum column width. This number becomes the baseline width of a table column based on the largest cell in that column.

Maximum Column Width The dynamic table layout component follows a logic that directs the cell to fit the cell content to the maximum width set in this field (number value in pixels) before increasing in height up to the Maximum Row Height setting.

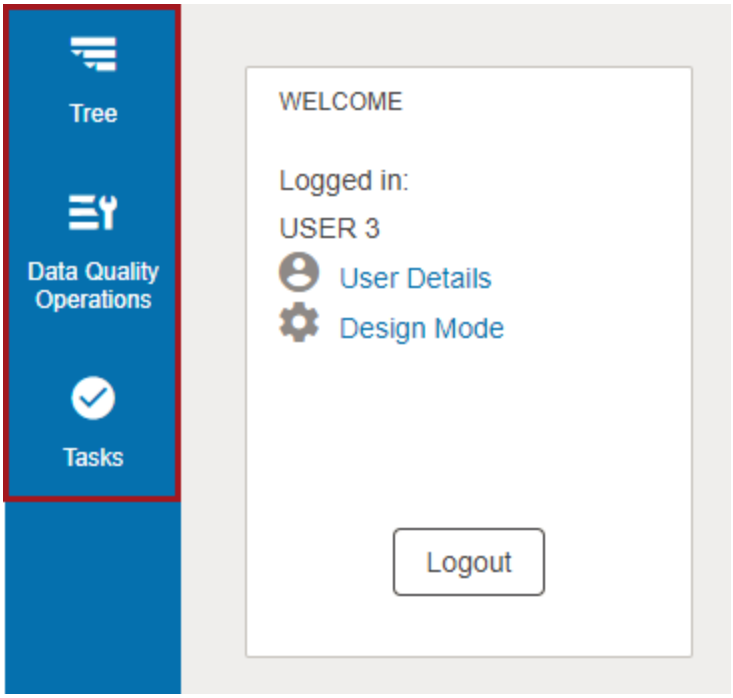
Allow Wrap of Header Title: When checked, header titles will break, or 'wrap,' into multiple lines, enabling display of as much of the header title as allowed by either the default dimensions of the Dynamic Table Layout feature or the row and column dimensions specified in the Dynamic Table Layout Settings Properties window. No header content will resolve into ellipses with this box checked.

Allow Wrap of Cell Content: When checked, cell content will break, or 'wrap,' into multiple lines enabling display of as much of the cell content as allowed by either the default dimensions of the Dynamic Table Layout feature or the row and column dimensions specified in the Dynamic Table Layout Settings Properties window. No cell content will resolve into ellipses with this box checked.

Important: Enabling the Dynamic Table Layout component overrides the table dimension defaults or any dimension settings manually applied to affected tables. As examples, the Multi Edit Display Mode, which allows users to set the table dimensions, and the Attribute Value Group Header component, which allows users to determine whether the cell content will wrap to multiple lines, will be overridden by the Dynamic Table Layout component.

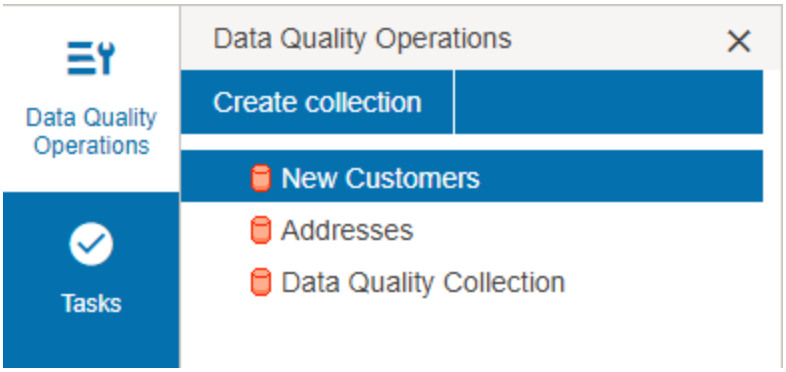
Primary Navigation Panel Component

The Primary Navigation Panel component is a customizable navigation panel that can be used for creating / browsing collections, navigating object hierarchies, and task handling in Web UI.



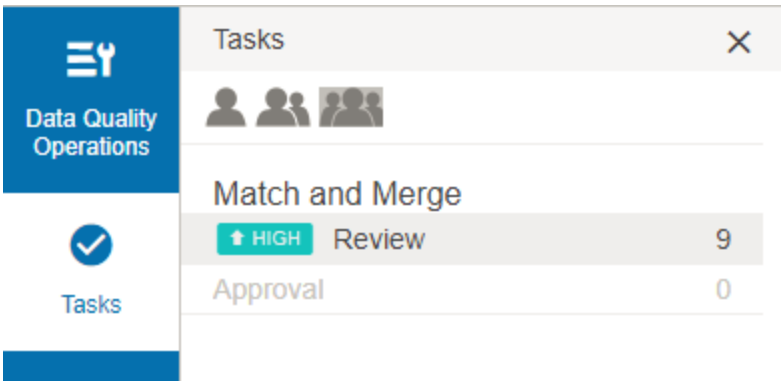
The following three child components can be configured:

- The **Tree Navigator** child component, which provides a hierarchical display of objects in STEP and is similar to the Tree tab within the workbench. It can also be configured to display attribute groups, attributes, List of Values (LOV) groups, and LOVs—similar to the System Setup tab within workbench.
- The **Data Quality Operations** child component, which can be configured to display specific collections. Collections can also be created via this component.



- The **Task** child component, which provides an overview of a user's workflow tasks by organizing them into related groups, and displays them together in one centralized location within the navigation panel. With

these configurable groups, users can create logical subdivisions of related tasks.



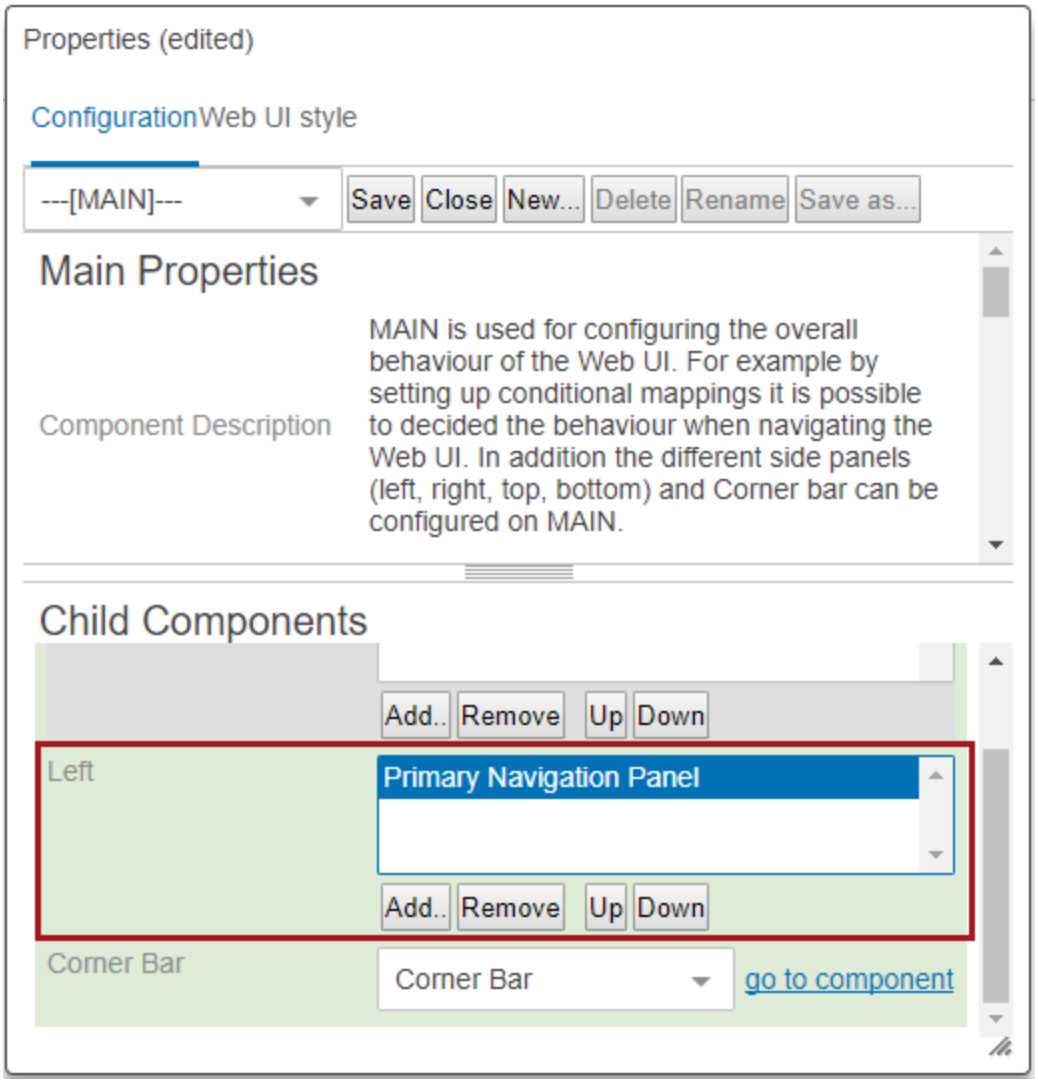
When configured, the Primary Navigation panel is present on all screens and will remain available while navigating the Web UI and browsing content.

Important: To use the Primary Navigation Panel component, the applicable license must be in place and the installation recipe applied. For more information on this license, ask your system administrator.

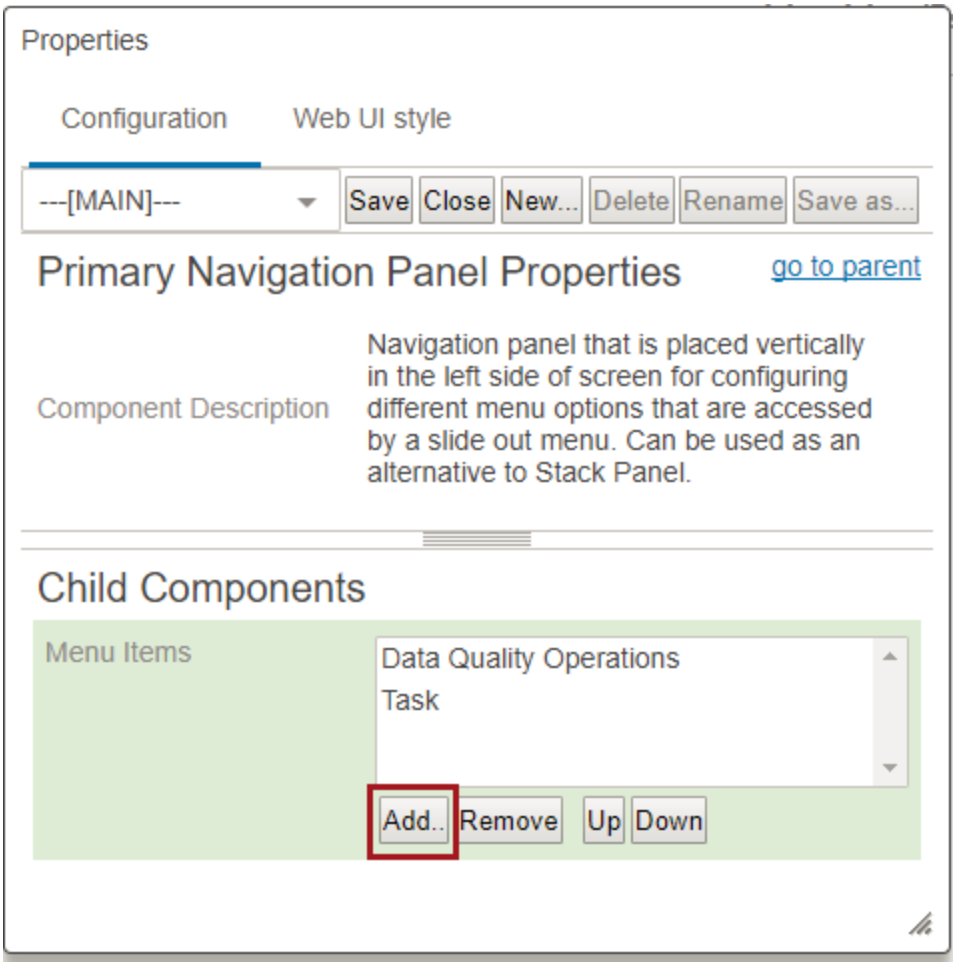
Configuring Primary Navigation Panel Child Components

The Primary Navigation Panel component is ultimately configured through **Main Properties** > **Child Components**.

Note that all steps provided in this topic assume the Web UI designer is in design mode and on the **---[MAIN]---** screen prior to starting the configuration process. A full description of how to configure and access the Main Properties screen can be found in the **Main Properties Overview** section of the **Web User Interfaces** / **Using a Web UI** documentation.

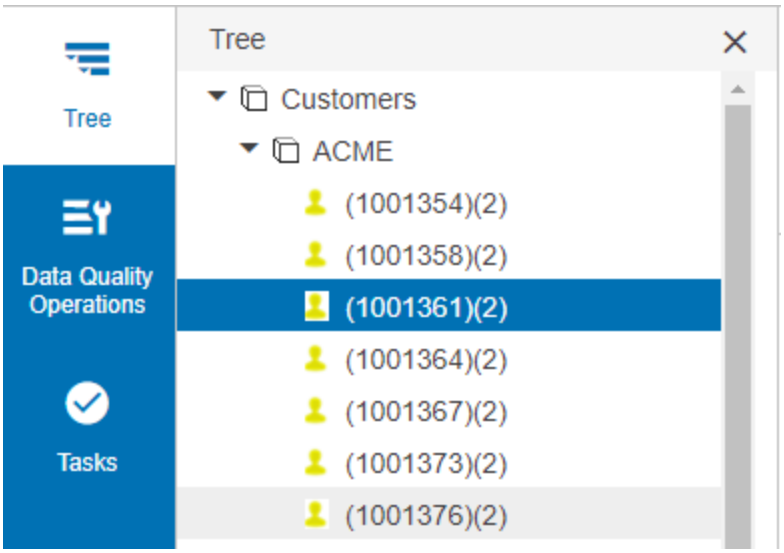


1. To add a child component, navigate to **Main Properties** > **Child Components** and double click **Primary Navigation Panel**.
2. In **Primary Navigation Panel Properties** > **Child Components**, click **Add**.



3. In the **Add Component** dialog, select the desired child component and click **Add**.

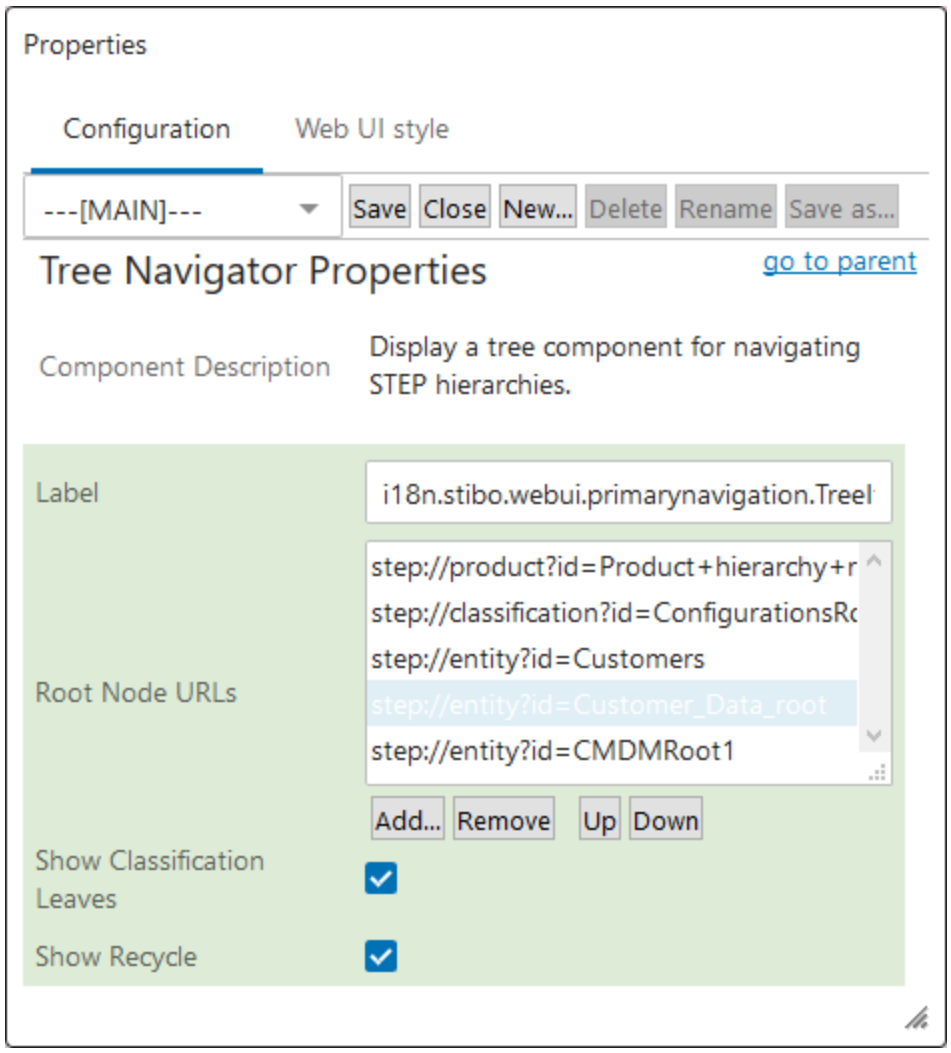
For instructions on configuring specific child components, see the following two sections below.



Configuring the Tree Navigator component

The Tree Navigator component can be configured to display specific objects, attribute groups, attributes, List of Values (LOV) groups, and LOVs.

1. Once added as a Child Component, double click **Tree Navigator** from the **Menu Items** field to configure the child component.

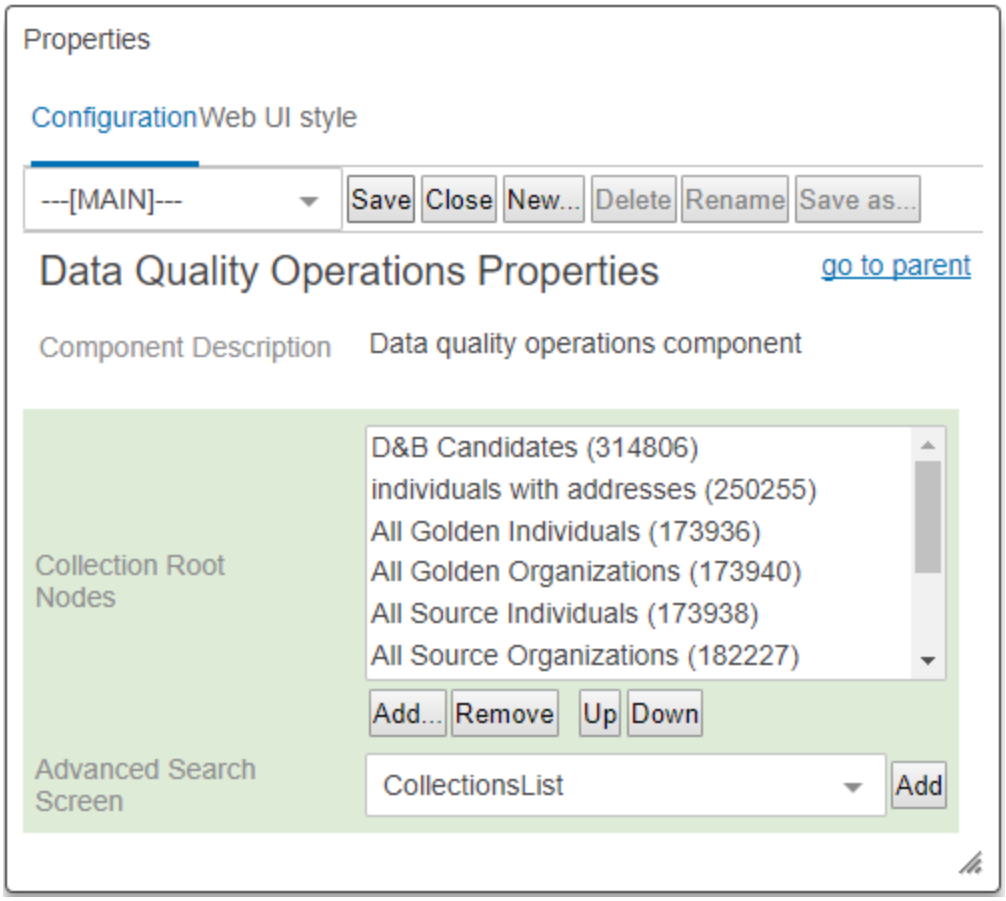


2. In the **Label** parameter, enter a label for the tree navigator. This label will appear below the tree icon in the Primary Navigation Panel.
3. In the **Root Nodes URLs** parameter, click **Add**, and in the **Select Node(s)** dialog that appears, browse or search for the node(s) to be added to the Tree Navigator. Click **OK** once selections have been made.
4. In the **Show Classification Leaves** parameter, check the box if leaf objects, defined as any object whose object type does now allow child objects, will display in the Tree Navigator for classification hierarchies.
5. In the **Show Recycle** parameter, check the box if the Recycle Bin should be visible in the navigator.

Configuring and Using the Data Quality Operations component

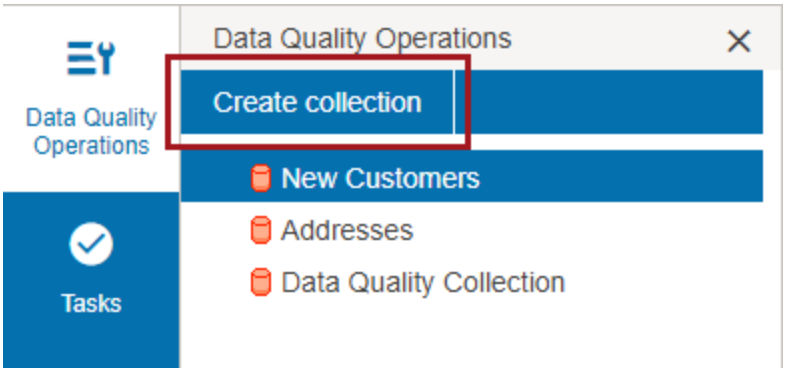
The Data Quality Operations component can be configured to display specific collections and create new ones.

1. Once added as a Child Component, double click **Data Quality Operations** from the **Menu Items** field to configure the child component.



2. In the **Collection Root Nodes** parameter, click **Add**, and in the **Select Node(s)** dialog that appears, browse or search for the node(s) to be added to the Data Quality Operations component. Click **OK** once selections have been made.
3. In the **Advanced Search Screen** parameter, use the dropdown to select the screen that should be used when creating new collections. Alternatively, a new screen can be created for this purpose via **Add**.

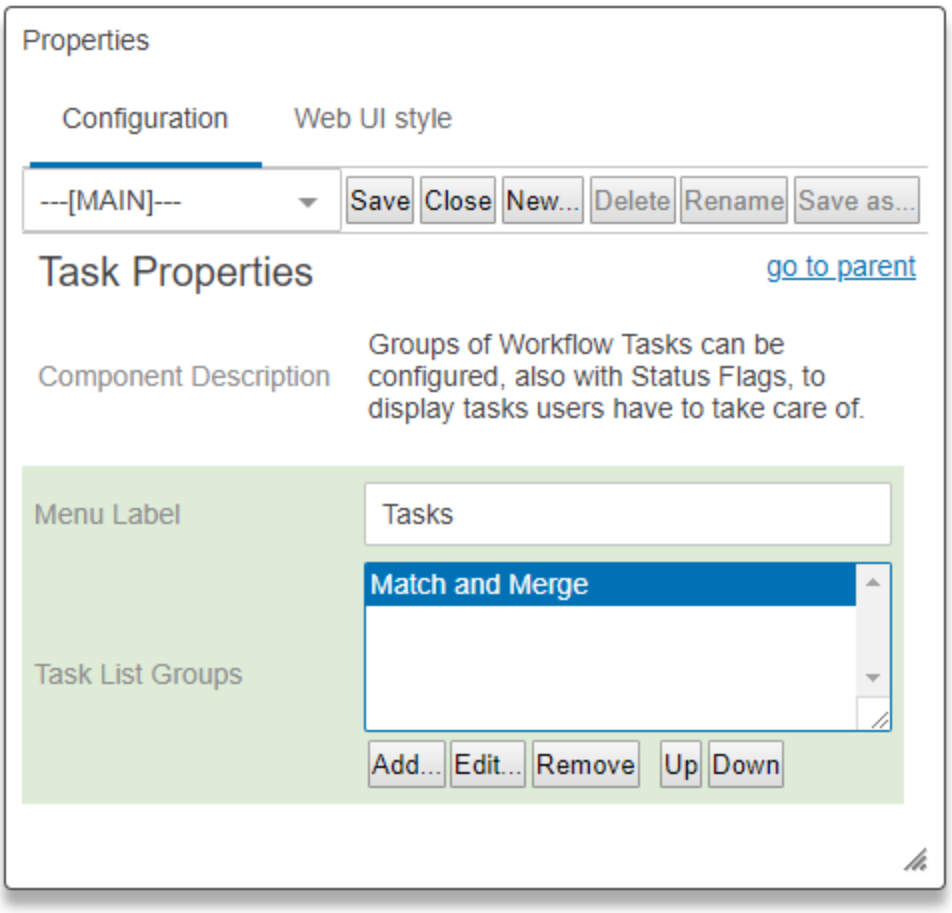
   Once this parameter is configured, collections can be created via the **Create Collection** button in the Data Quality Operations panel.



Configuring and Using the Task component

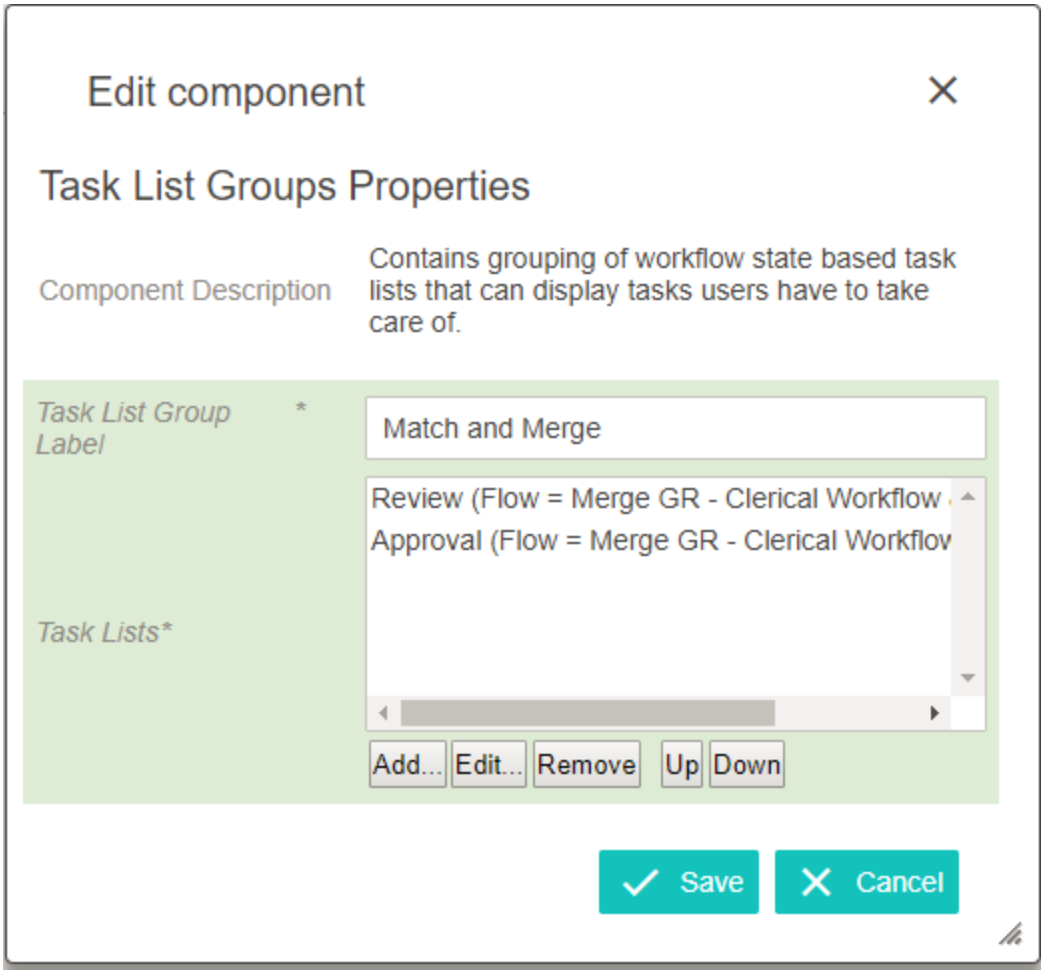
The Task component can be configured with task list groups.

1. Once added as a Child Component, double click **Task** from the **Menu Items** field to configure the child component.

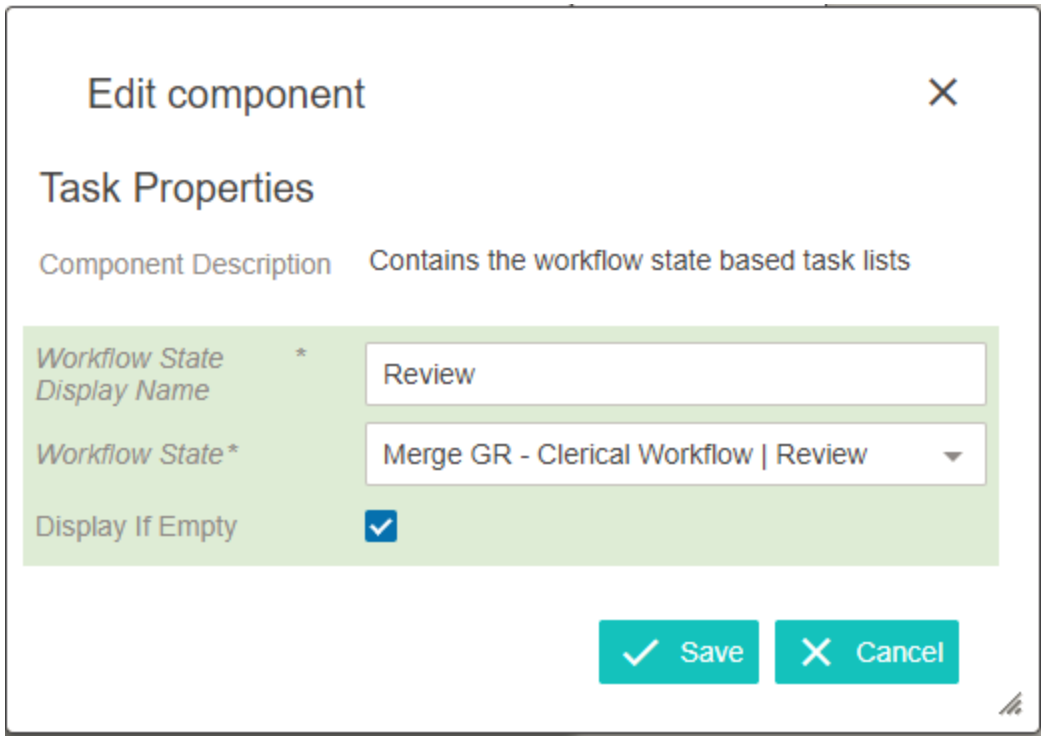


2. In the **Menu Label** parameter, enter a name for the label that appears under the Task icon.
3. In the **Task List Groups** parameter, click **Add** to create a task list group.

In the **Task List Group Properties** dialog, enter a label for the task list group via the **Task List Group Label** parameter. Then, in the **Task Lists** parameter, click **Add** to add specific workflow state based task lists to the group. Click **Save** when the desired task lists have been configured.

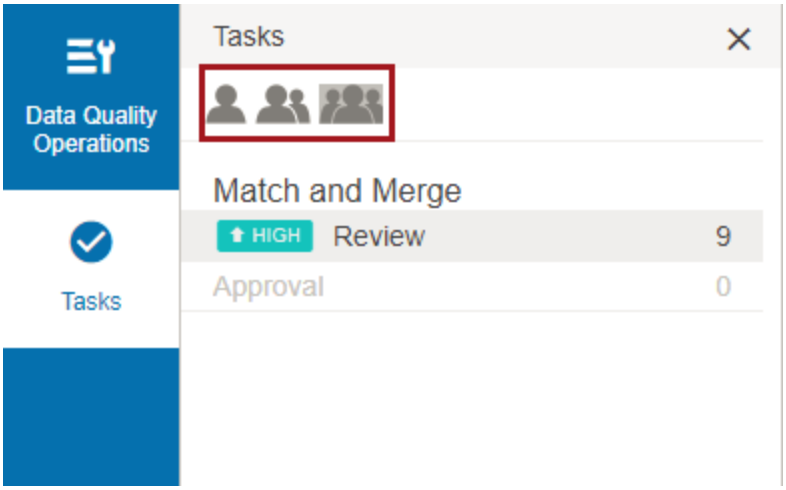


Additional configuration is required for each task list. Adding a new task list or clicking **Edit** will open the **Task Properties** dialog:

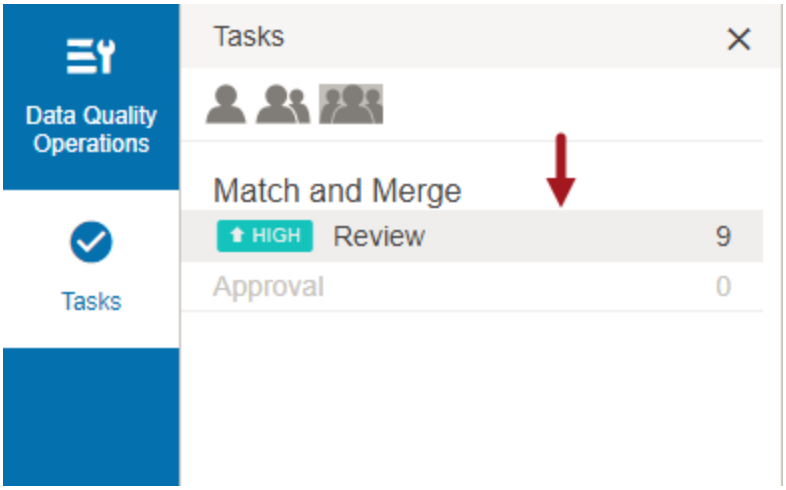


- In the **Workflow State Display Name** parameter, enter a name for the workflow state.
- In the **Workflow State** parameter, select the desired workflow state to display tasks from via the dropdown.
- In the **Display If Empty** parameter, check the box if the task list should be visible when there are no tasks in the specified workflow state.
- Click **Save** when finished.

Similar to the Status Selector Homepage Widget, the Task component can filter tasks by assignee.



If an appropriate screen is already mapped, users can view specific task lists by clicking on the task list in question. Otherwise, a screen must first be mapped via **Main Properties** > **Mappings**. These mappings are created using the 'Status Selector Selection Condition'.



For more information on screen mappings, see the **Mappings** section of the **Web User Interfaces** documentation.

Any tasks flagged as high priority in the workflow will display an alert next to the task list name.

For more information on displaying these status flag alerts, see the Main Properties Overview section of the Web UI documentation.

Global Data Container Configurations

The Global Data Container Configurations component provides a centralized space for data container display configurations. Any number of configurations can be stored for different data container types and under various conditions.

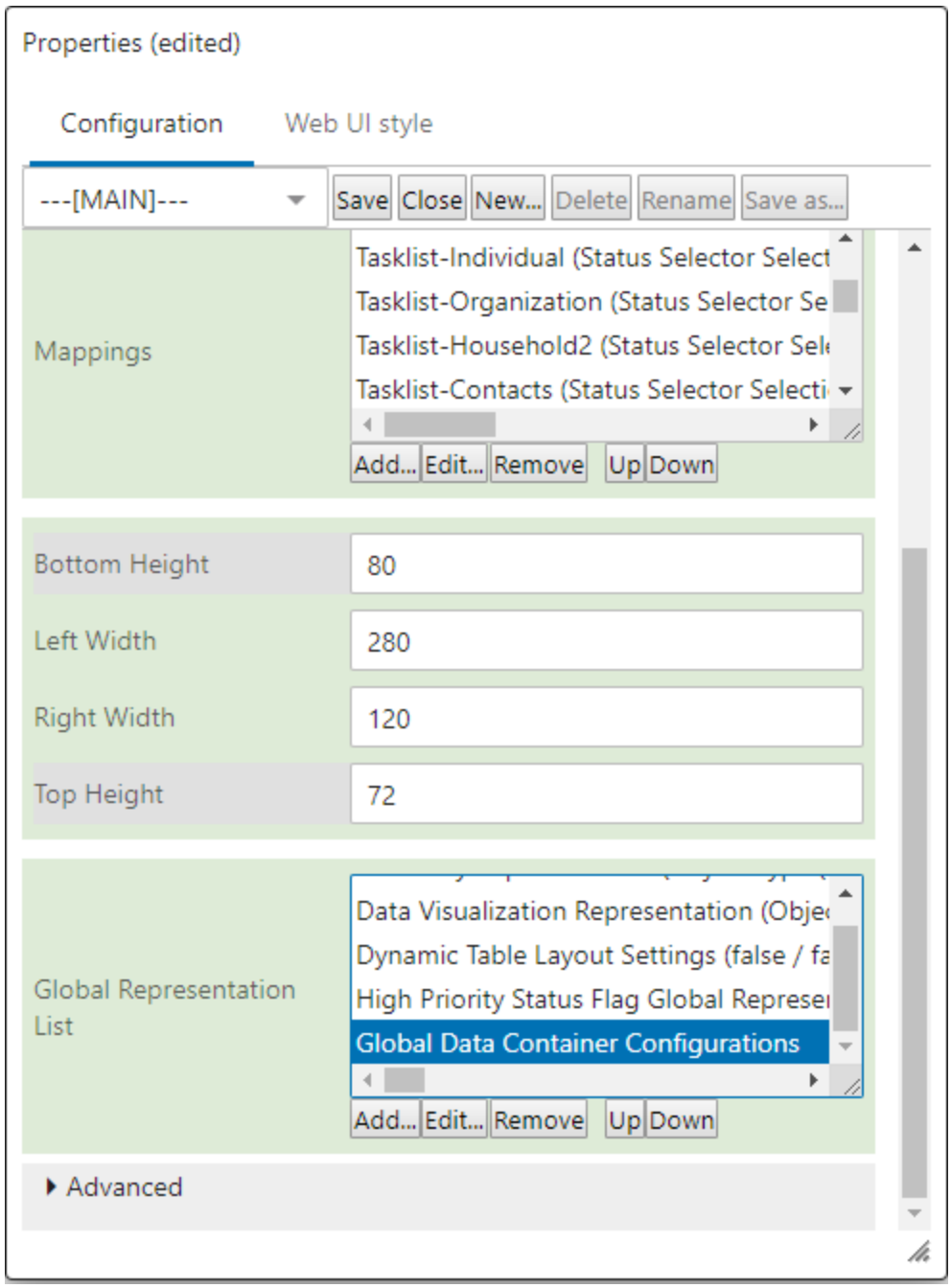
Prerequisites

It is expected that anyone configuring the Global Data Container Configurations component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Initial Setup

Before data container configurations can be created, the component must be configured in **MAIN** properties.

1. Enter design mode and select **--[MAIN]--** from the screen dropdown list.
2. Go down to the **Global Representation List** parameter.
3. Click the **Add...** button under the value field.
4. Select **Global Data Container Configuration** from the Add Component dialog.



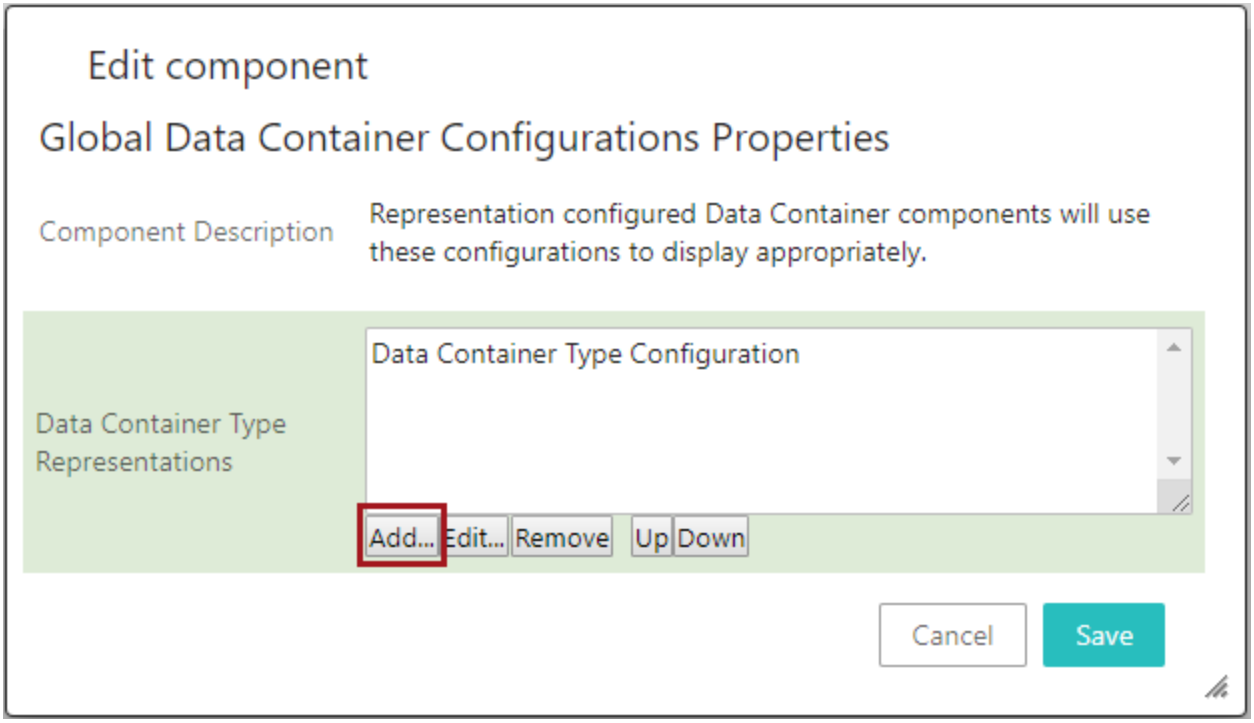
Creating a Configuration

Once the component has been added to **MAIN** properties, any number of data container configurations can be created within it. Within each configuration relevant data container types must be specified, along with their representation settings.

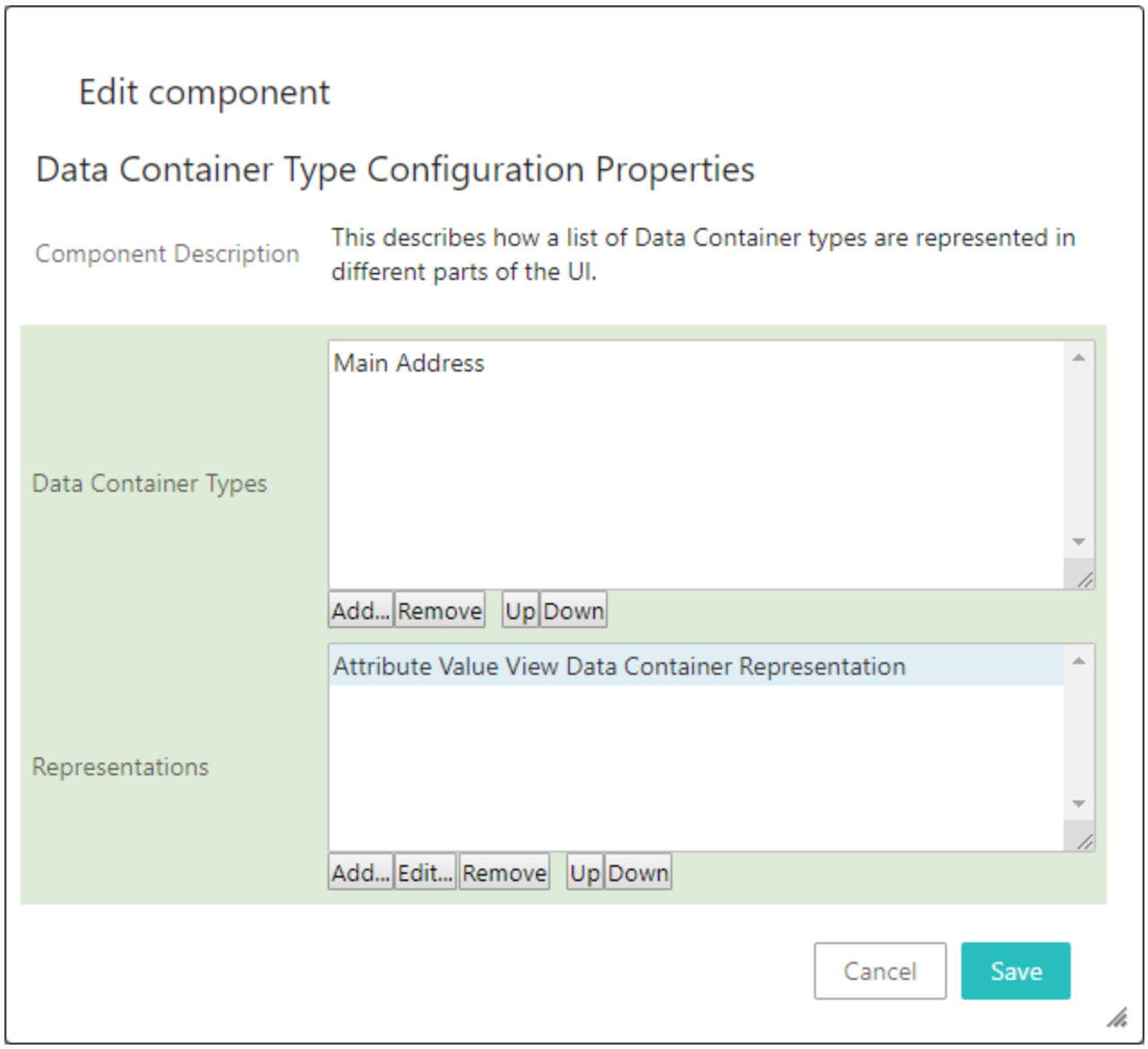
If display settings vary by data container type, multiple configurations must be created. Additionally, if display settings vary due to which screen they appear on, multiple representations must be created within each configuration.

Important: These configuration settings dictate the display of data containers for the **Data Container Default Editor** component only. All other components that display data containers use their own native configuration settings.

1. Double click on **Global Data Container Configurations** from within the **Global Representation List** field.
2. In the **Global Data Container Configurations Properties** window, click **Add...** to add a new configuration.

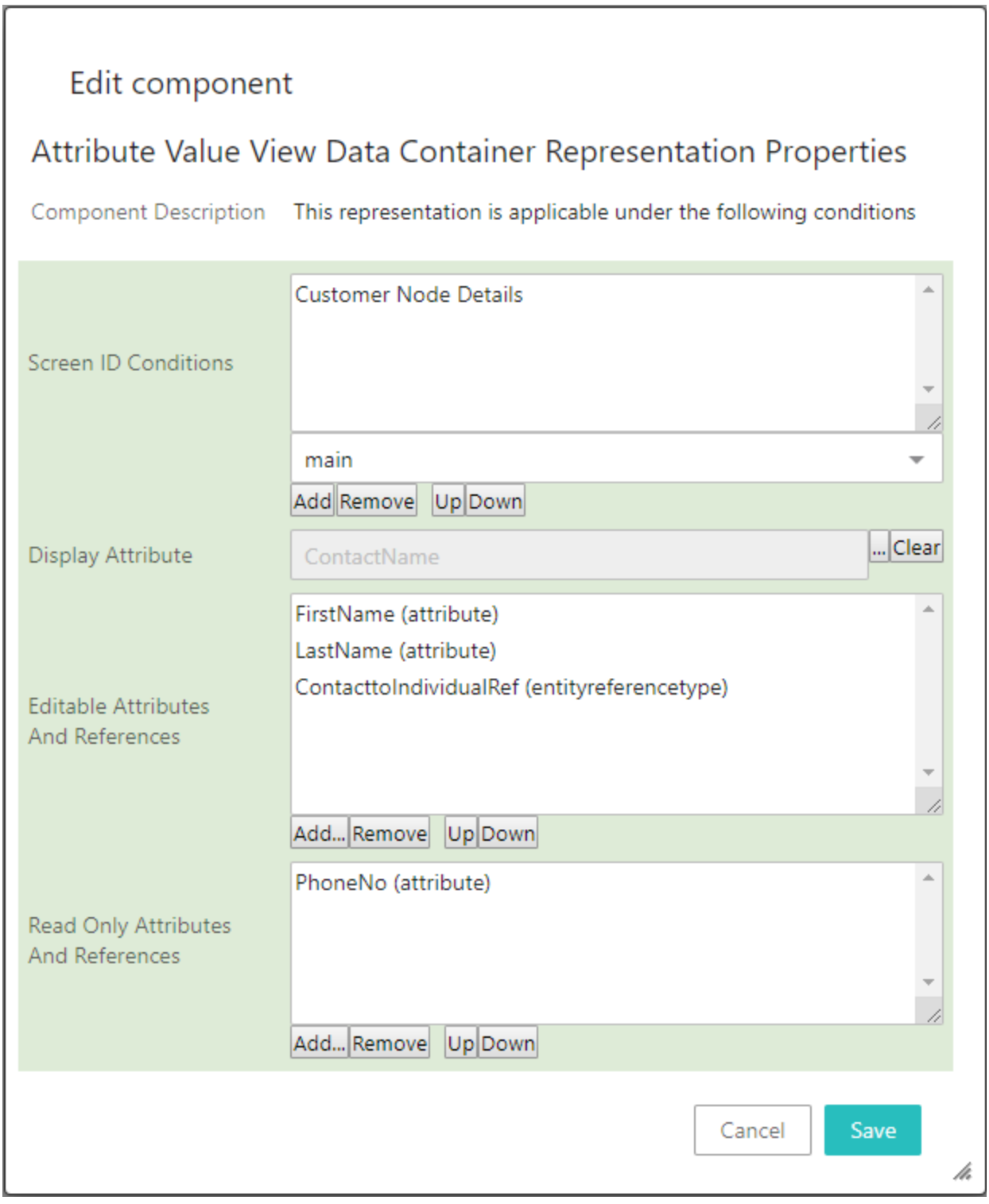


3. Double click the newly created configuration to access the **Data Container Type Configurations Properties** window. Different data container types can be specified along with their display options and the conditions in which this configuration should be applied.



4. To specify a data container type to include in this configuration, click **Add...** under the **Data Container Types** parameter. Browse or search for the relevant data container type, select it, and click **OK**.
5. Several different ways of representing the specified data container types can be configured via the **Representations** field. The representation used to display the data is determined by conditions set on each representation instance. If more than one representation setting is valid for a given data container type, the valid representation that appears highest on this parameter's list is used.

   To create a representation configuration, click **Add...** under the **Representations** parameter.
6. Double click the newly created representation to access the **Attribute Value View Data Container Representation Properties** window.



Configuration options for each representation include:

- **Screen ID Conditions** - For this parameter, select a screen mapping from the dropdown and click **Add...**. Mapping a screen makes it so that these representation settings are only valid for displaying the

data of the relevant data container type(s) when viewing the specified Web UI screen. Not mapping a screen allows these representation settings to apply to data containers on any screen in the Web UI.

- **Display Attribute** - For this parameter, click the ellipsis button (...) and browse or search for the relevant calculated attribute to display data containers listed in the corresponding data container component. This calculated attribute should convey the most important details for differentiating the individual data containers.

  For more information on calculated attributes, see the **Calculated Attributes** section of the **System Setup / Super User Guide** documentation.

  When used to display address data, it is recommended to use a formatted address attribute. For more information, see the **Address Formatting Functions** section of the **Resource Materials** online help.

Note: It is not recommended to use LOVs that are configured to allow users to add values for this calculated attribute.

- **Editable Attributes And References** - For this parameter, click **Add...** and browse or search for the attributes / references whose values should be editable within the corresponding data container component.

Note: Multi-valued attributes that are configured in this parameter cannot be edited.

- **Read Only Attributes And References** - For this parameter, click **Add...** and browse or search for the attributes / references that should be displayed by the corresponding data container component, but whose values should not be editable.

7. Once the representation settings have been finalized, click **Save**.

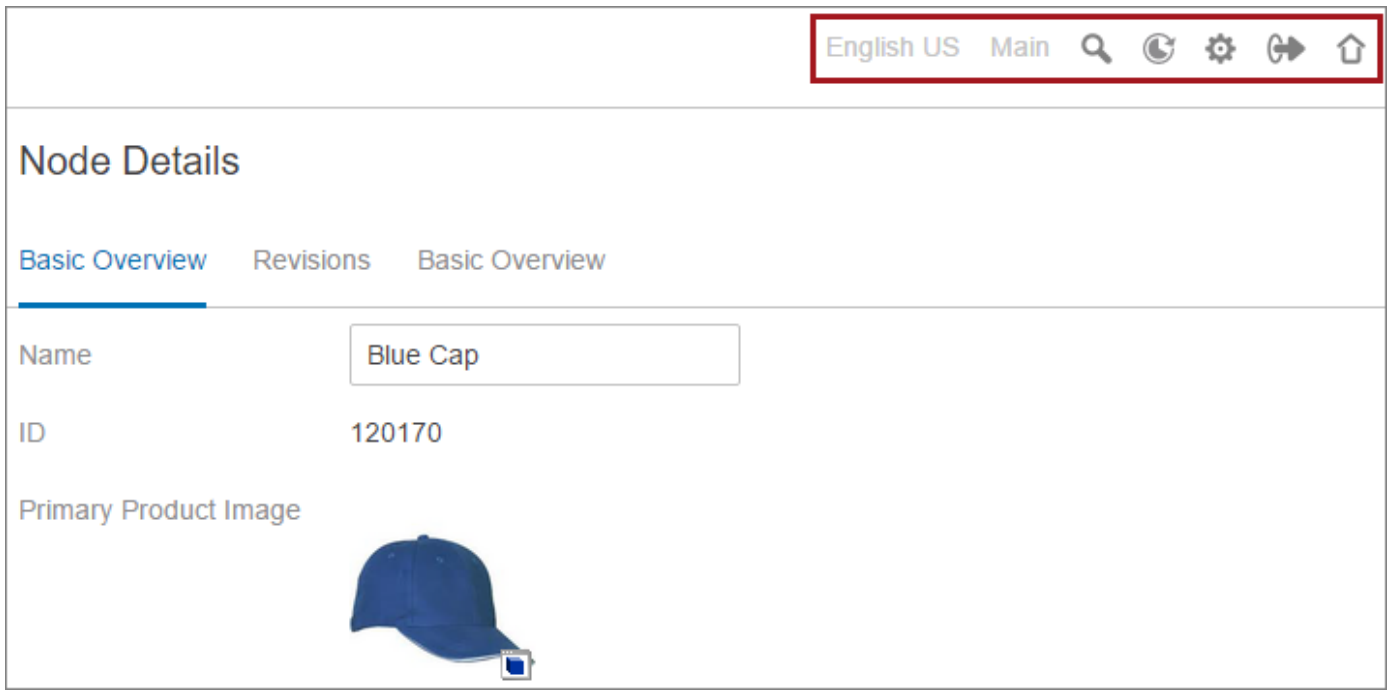
Configuration Examples

1. User has two sets of data container types that do not utilize the same attributes and references.
   - **Solution:** Create two different data container type configurations. Specify the relevant data container types for each in the Data Container Types parameter, and under Representations, specify the relevant attributes / references.
2. User requires different attributes and references to be displayed based on which screen the corresponding Data Container component appears on.
   - **Solution:** Create two different representations under the Representations parameter. In each representation, specify different screen IDs and the appropriate attributes / references that should appear on each.

Corner Bar Component

The Corner Bar allows for quick navigation options that will display in the top right of all screens.

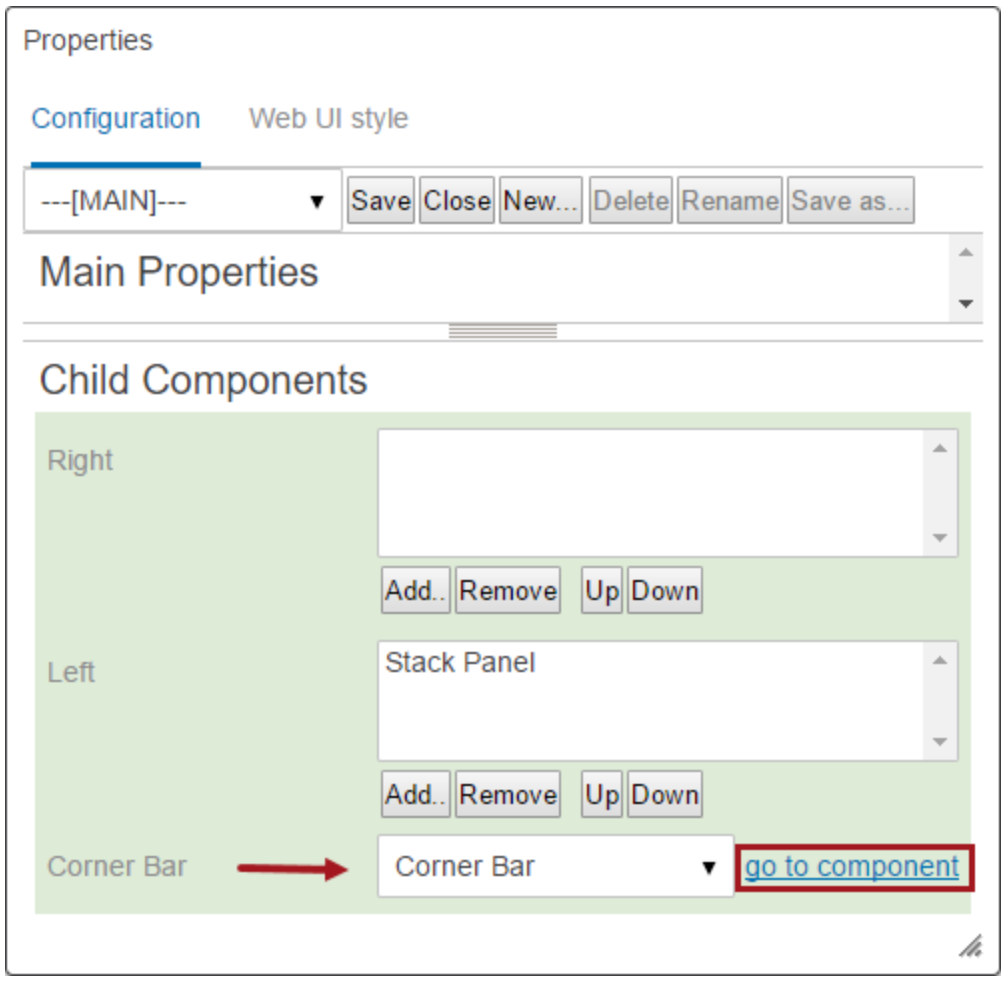
The home icon ( ) on the far right is a standard icon that will display even if the Corner Bar is not selected / set up in Main Properties. Clicking this icon will take the user to the Homepage. Below is an example of how the configured Corner Bar displays.



Configuring the Corner Bar Component

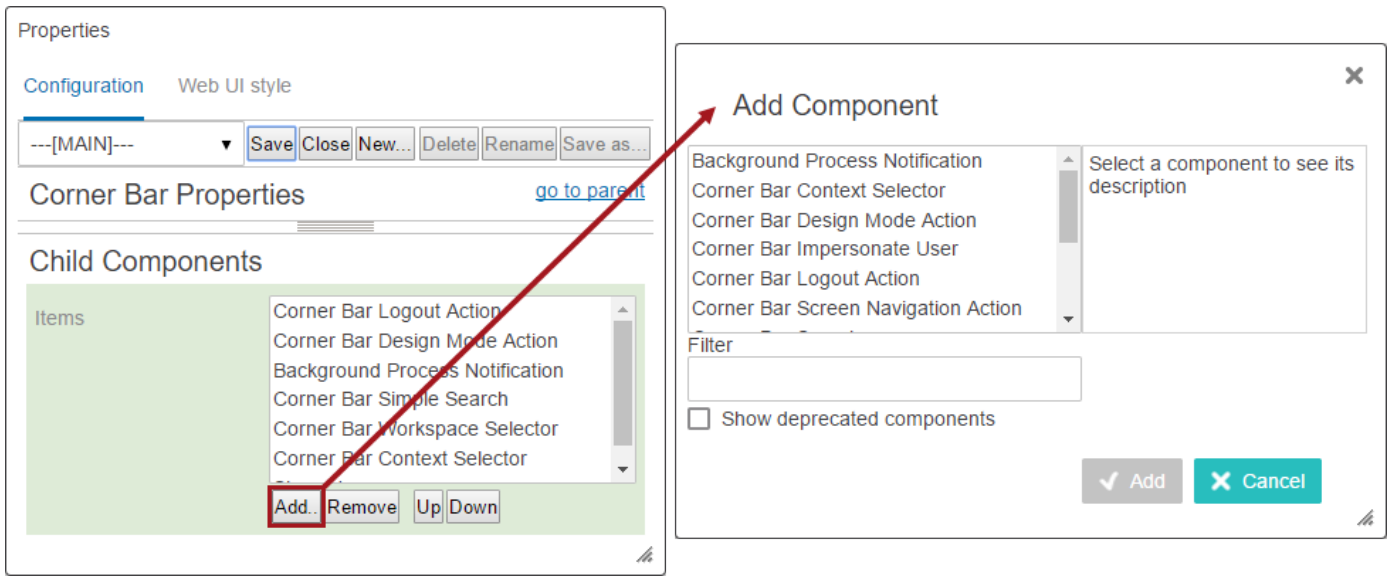
To configure the corner bar, follow these steps:

1. With the designer open, select the **---[MAIN]---** screen type.
2. Go to the Child Components section > Corner Bar parameter, click the **go to component link**, and the Corner Bar Properties will display.



Note: If the component has not been previously configured, then you may have to select the Corner Bar option from the Corner Bar parameter dropdown list and click the Save button for the designer.

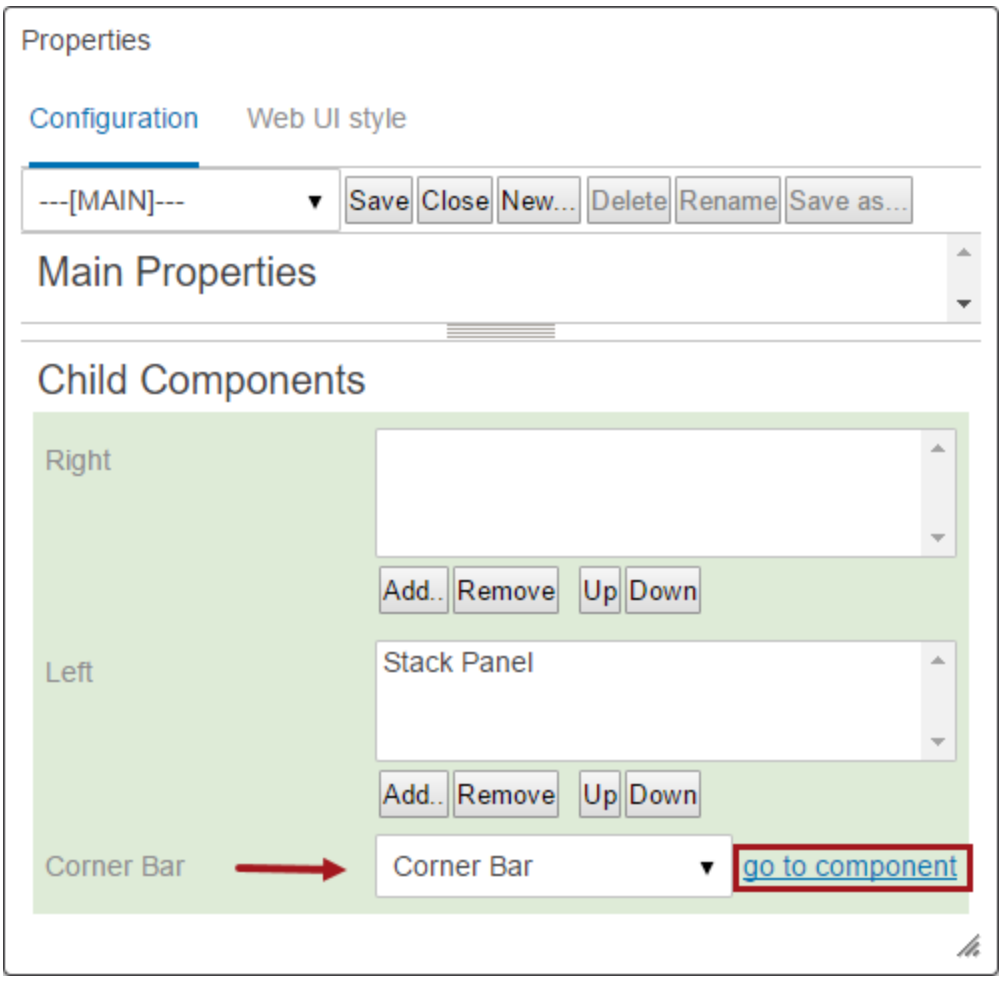
3. From the Corner Bar Properties > Child Component, click Add button and the 'Add component' dialog will display.



For more information on configuring Corner Bar Child Components, see the **Corner Bar Child Component** topic in this documentation.

4. Select the desired component, click the **Add** button, the Add Component dialog will close and the newly added component will be displayed at the bottom of the Items list. Some components require additional configuration (e.g., Corner Bar Simple Search Properties). In those cases, an additional properties dialog will display.
5. Once the component has been added to the Items list, optionally use the **Up** and **Down** buttons to edit the display order of the components in the list.

Note: Items added to the Corner Bar Properties > Child Components > Items parameter will display so that the top most items appear closest to the right corner. Since the Home icon ( ) is mandatory, the first item listed (the top item in the Items list) will appear to the left of the Home icon, and additional items will display to the left of the previous item. Each icon is easily identifiable to the end user as hover text displays when mousing over each icon. The screenshot below accurately displays the Corner Bar Properties Child Components configured with items from the example above.



6. Additional items can be added by repeating the steps above.
7. Once the desired components have been added in an acceptable order, click the Save and then the Close button for the designer.

Corner Bar Child Components

There are a number of Corner Bar Child Components that can be added to an Items field on the Corner Bar Properties. Each of these components requires little or no further configuration when added.

Corner Bar Components discussed in this topic

- Corner Bar Design Mode Action
- Corner Bar Impersonate User
- Corner Bar Logout Action
- Corner Bar Screen Navigation Action
- Corner Bar Workspace Selector
- Show User

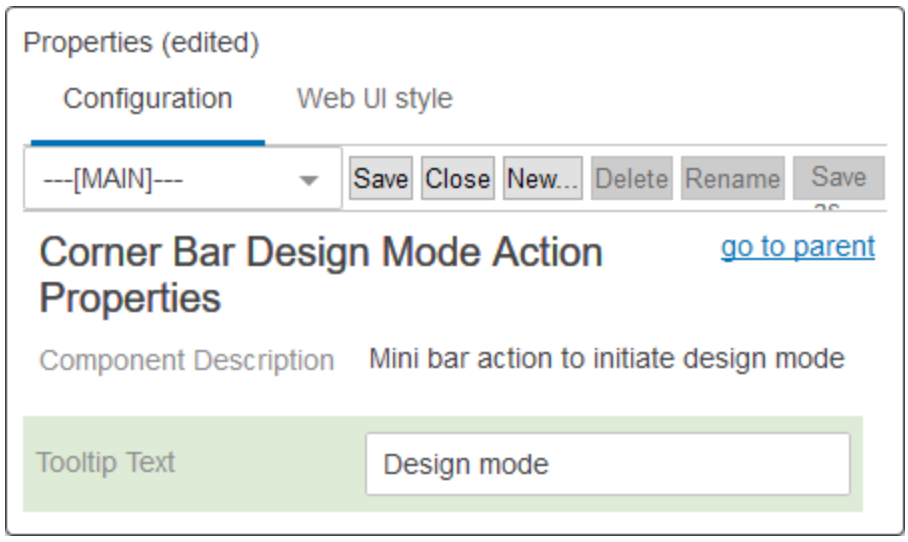
Corner Bar Components not included in this topic

- Background Process Notification Component
- Acrolinx Sidebar Component
- Corner Bar Basket
- Corner Bar Context Selector Component
- Corner Bar Search Component
- Corner Bar Simple Search- Superseded component, see Corner Bar Search Component
- Corner Bar Supplier Selector Component
- Corner Bar Warning Notifications Component
- Links Folder
- Global Header Search Component

Corner Bar Design Mode Action

Allows you to access the designer for further configuration of Web UI.

You can add a tooltip by double clicking on the Corner Bar Design Mode Action once it has been added to the Items parameter.

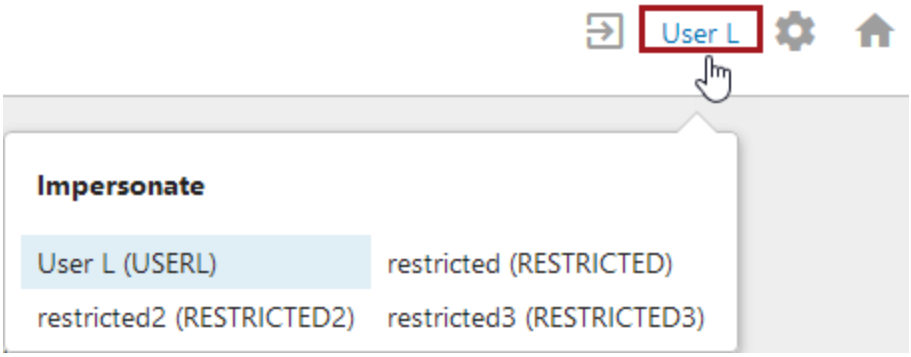


For more information on the designer in Web UI, see the **Designer Access** topic in the **Web UI Getting Started** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

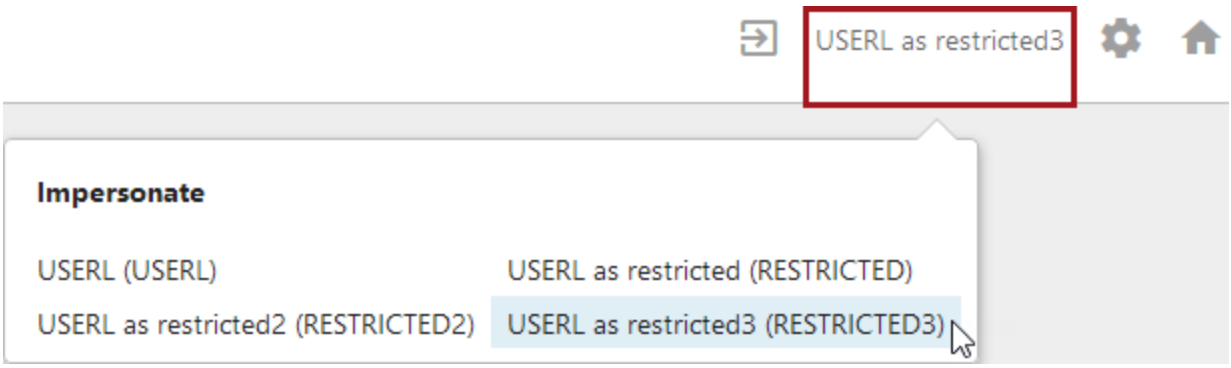
Corner Bar Impersonate User

This feature allows you to see and interact with the current Web UI as another user would experience it. This could be beneficial if you are adjusting privilege settings, and want to view what the user in question would see and be able to access.

Click on the Impersonate Action button to display the dropdown of those users you are able to impersonate.

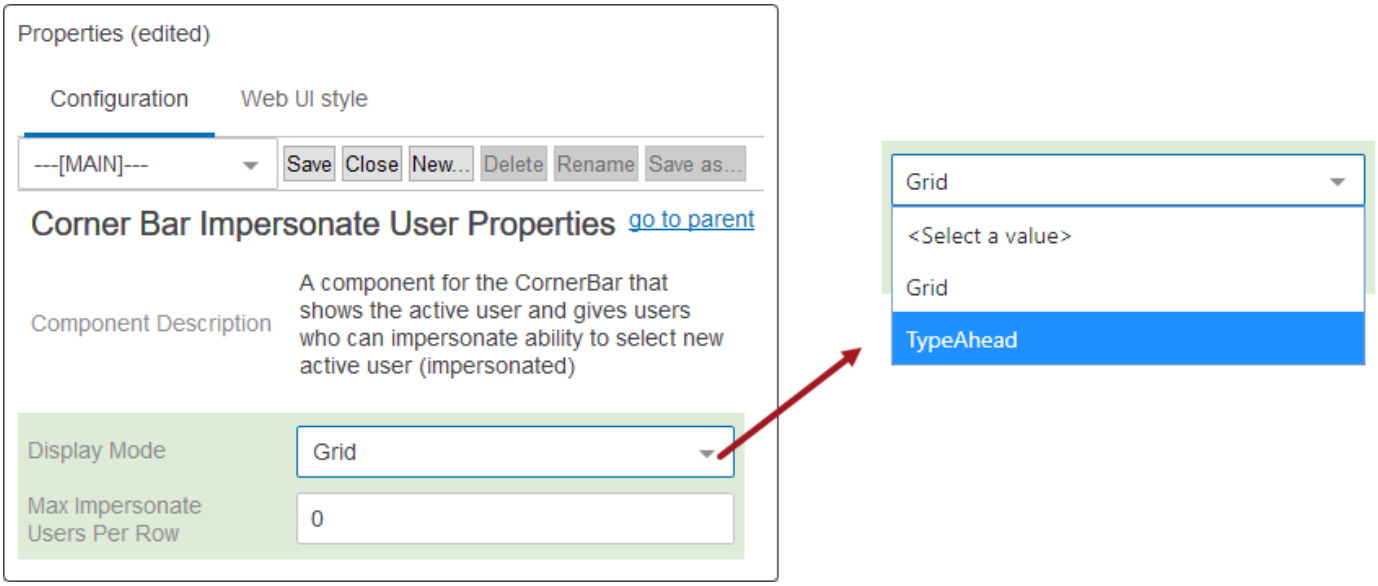


The current user is highlighted, in this case it is your username and ID. To switch to a different user, click on the user that you wish to impersonate. Once you are in the Web UI again, notice how the Impersonate Action button reflects that you are currently impersonating a different user.



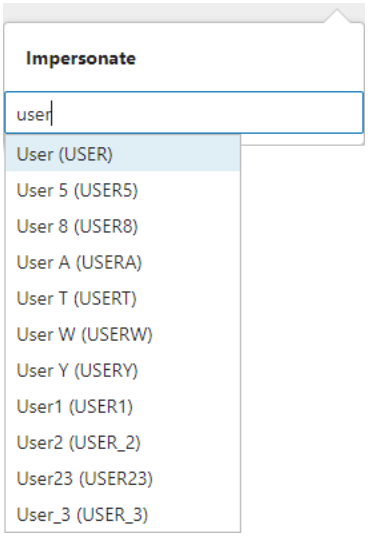
To switch back to your own user again, click on your username and ID.

When configuring the Corner Bar Impersonate User component, you can choose to display the users targeted for impersonation in a grid format or as a typeahead (as shown in the image below).



If choosing 'Grid,' you can also define the max number of users per row. For example, if you want to see users in a single column, put 1 in the Max Impersonate Users per Row parameter.

Typeahead only becomes possible when the user group or groups configured as the targets for impersonation contain 16 or more users (combined). Even if selecting 'TypeAhead' as your Display Mode, the impersonation list will display in grid format until the total number of users reaches 16.

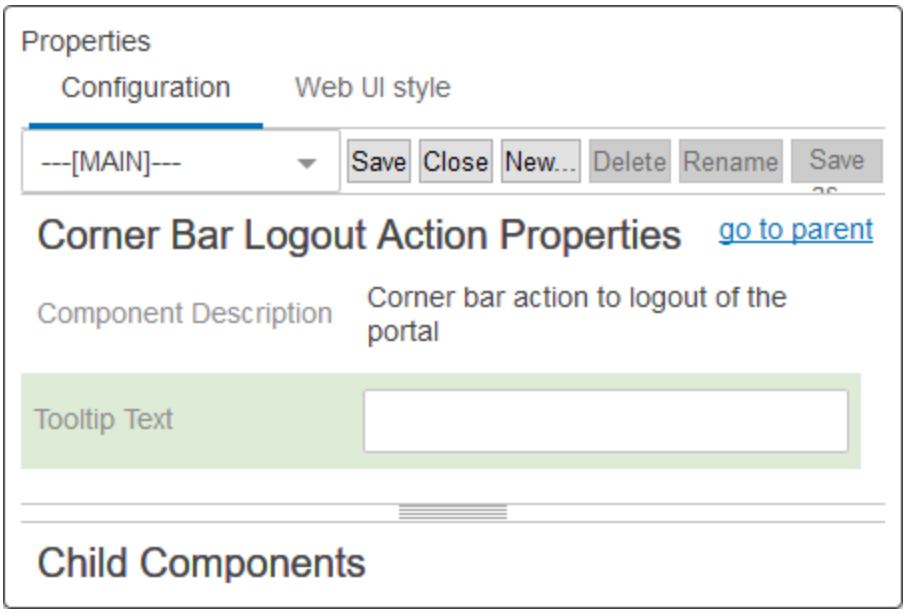


For more on User Impersonation and to learn about the privilege setup required, see the **Web UI User Impersonation** topic in the **Users and Groups** section of the **System Setup / Super User Guide** documentation.

Corner Bar Logout Action

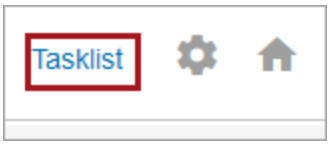
Clicking this action will log you out of Web UI.

Double clicking the Corner Bar Logout Action in the Items parameter enables you to add a tooltip.



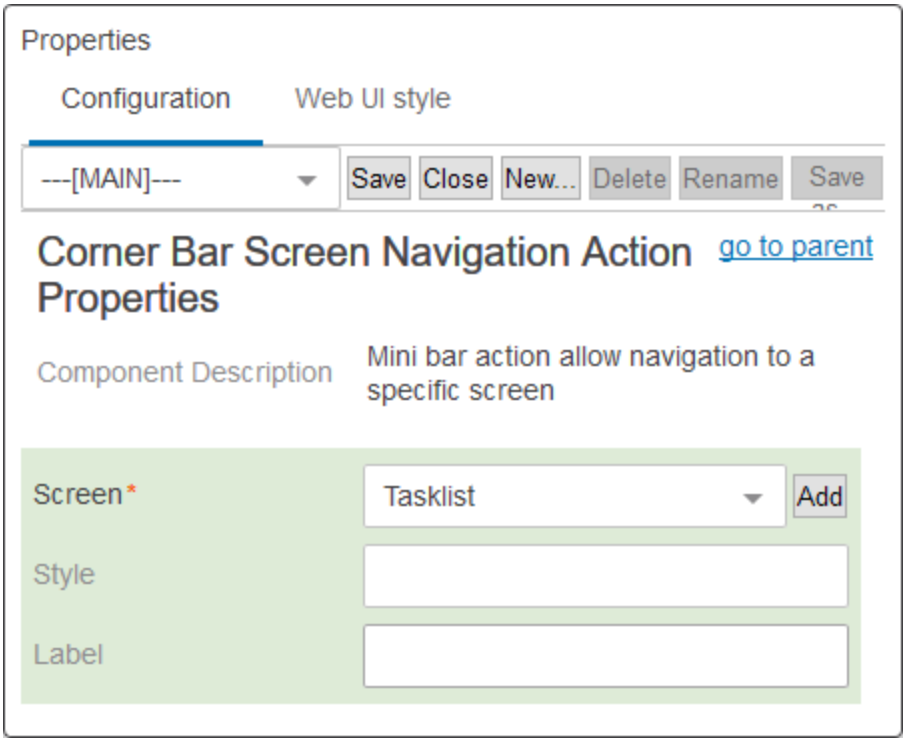
Corner Bar Screen Navigation Action

Clicking the Corner Bar Screen Navigation Action brings you to the configured screen. In the example below, clicking 'Tasklist' brings you to the Task List screen.



When adding the Corner Bar Screen Navigation Action, on the Screen parameter:

- **Screen**: Choose a result screen from the dropdown, or click the Add button to create a new screen.
- **Style**: If desired, specify the style for the icon used.
- **Label**: Enter a label, otherwise, if no label is provided, the screen name will display.

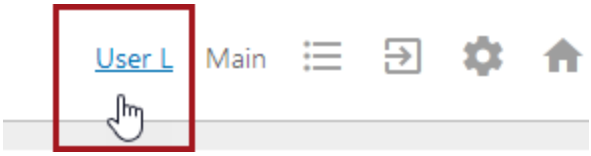


Corner Bar Workspace Selector

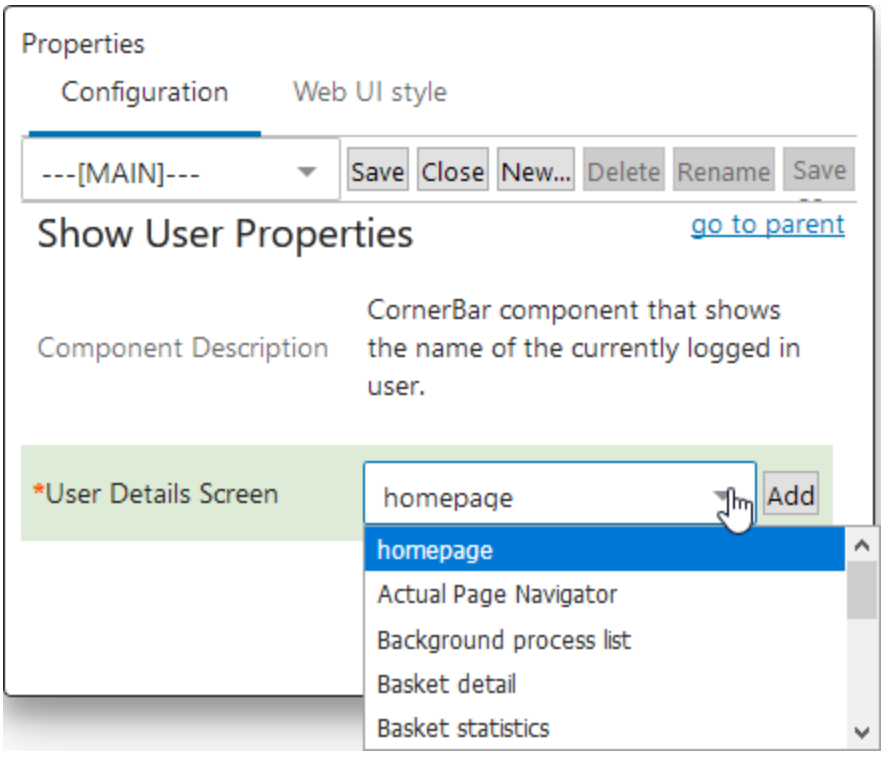
The Corner Bar Workspace selector displays the current workspace and allows for a different workspace to be selected in the dropdown menu. For more on workspaces, see the **Workspaces** topic in the **System Setup / Super User Guide** documentation.

Show User

The Show User component displays the name of the user currently logged into the Web UI.



When adding this component, you can choose the screen that will display when clicking the user name, regardless of where you are in the Web UI. In the example below, clicking the user name will bring the user back to the Web UI homepage.

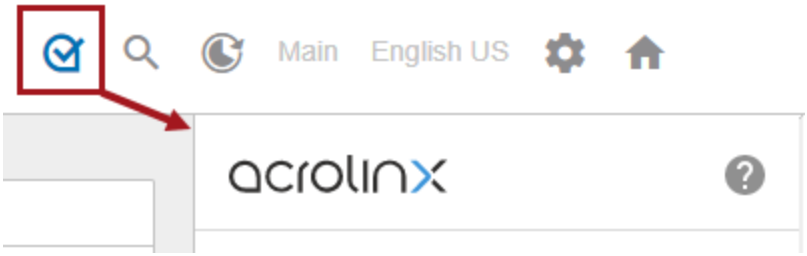


Acrolinx Sidebar

Acrolinx is a third-party content standardization tool that, when integrated with STEP, is used to check and improve the quality of text-based content authored in the Web UI. The Acrolinx platform uses an advanced linguistic analysis engine that 'reads' content and guides writers to make it better. Through artificial intelligence technology, Acrolinx enables users to create accurate, consistent, and impactful copy.

The integration between Acrolinx and STEP is achieved through the **Acrolinx Sidebar**, a product of Acrolinx that is added to the Web UI as a child component of the Corner Bar. The Acrolinx Sidebar works with text fields in the Web UI and, with the click of a button, gives users guidance and feedback on their content. Acrolinx checks content for issues such as spelling, grammar, style, valid terminology, and tone of voice, then returns an Acrolinx Score that grades the overall quality of the content. Content with a higher Acrolinx Score is considered to be of greater quality, taking much of the guesswork out of content improvement.

Once configured in the Corner Bar, the Acrolinx Sidebar is accessed by clicking on the Acrolinx icon, as shown in the below screenshot.



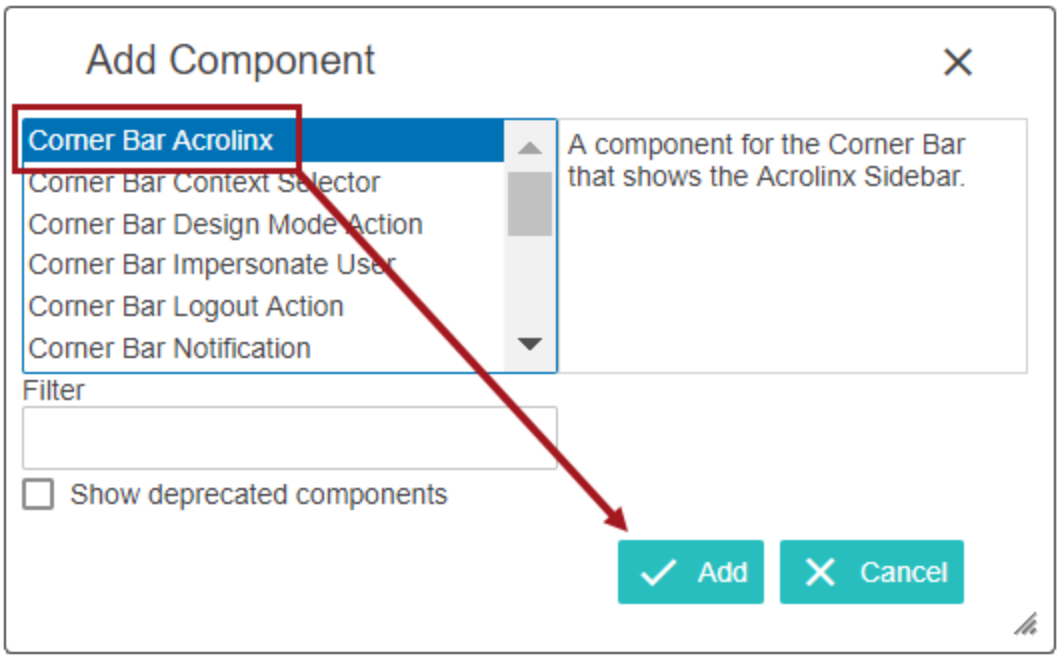
Note: The functionality of the Acrolinx Sidebar itself is controlled by Acrolinx, and the specific criteria checked by the sidebar is determined by users, not by Stibo. For more information on configuring Acrolinx functionality within the Acrolinx Sidebar, refer to the Acrolinx documentation (https://docs.acrolinx.com/doc/en).

Prerequisites

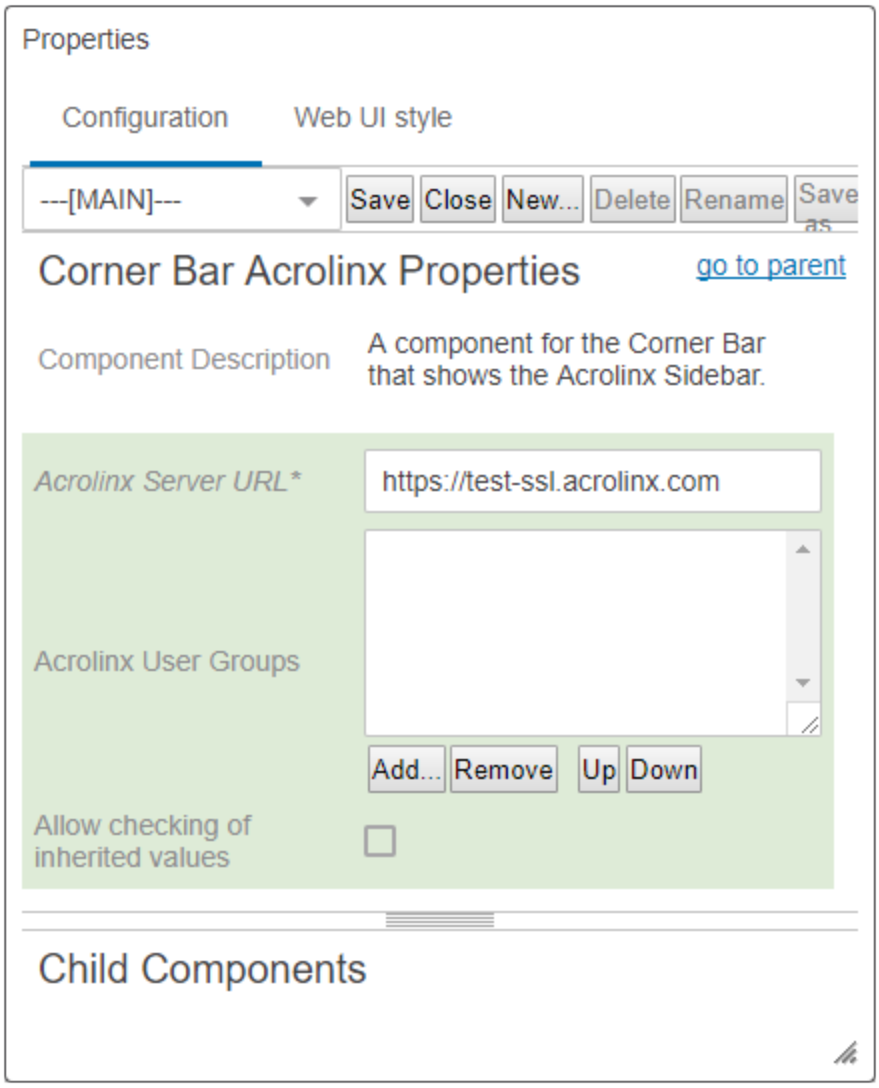
- To use the Acrolinx functionality, the applicable license must be in place and the installation recipe applied. Additionally, users must have established an account with Acrolinx. Contact your Stibo Systems account manager or partner manager for details.
- It should be determined which users need access to the Acrolinx Sidebar prior to its configuration in the Web UI. Privileges to view the Acrolinx sidebar are controlled by configurations within the Web UI designer and not through User Actions applied in the workbench. However, users must be granted the required privileges (from within the workbench) to view and edit attribute values.

Configuring the Acrolinx Sidebar

1. Follow steps 1 - 3 in the 'Configuring the Corner Bar Search Component' subsection of the **Corner Bar Component** topic to access the list of Child Components for the Corner Bar.
2. Select the 'Corner Bar Acrolinx' component from the component list, then click **Add**.



3. In the 'Corner Bar Acrolinx Properties' designer screen, additional configurations are required to enable the Acrolinx Sidebar.



- **Acrolinx Server URL:** This property is required. Enter the URL to the sidebar on the Acrolinx Server (for example, <SERVER_ADDRESS>[:<PORT>]/). The server address is determined by the user's agreement with Acrolinx.
- **Acrolinx User Groups:** The list of user groups for which the Acrolinx Sidebar is valid. If user groups are added, only members of these groups will be able to see the Acrolinx Sidebar. If left empty, the sidebar will be visible to all users.

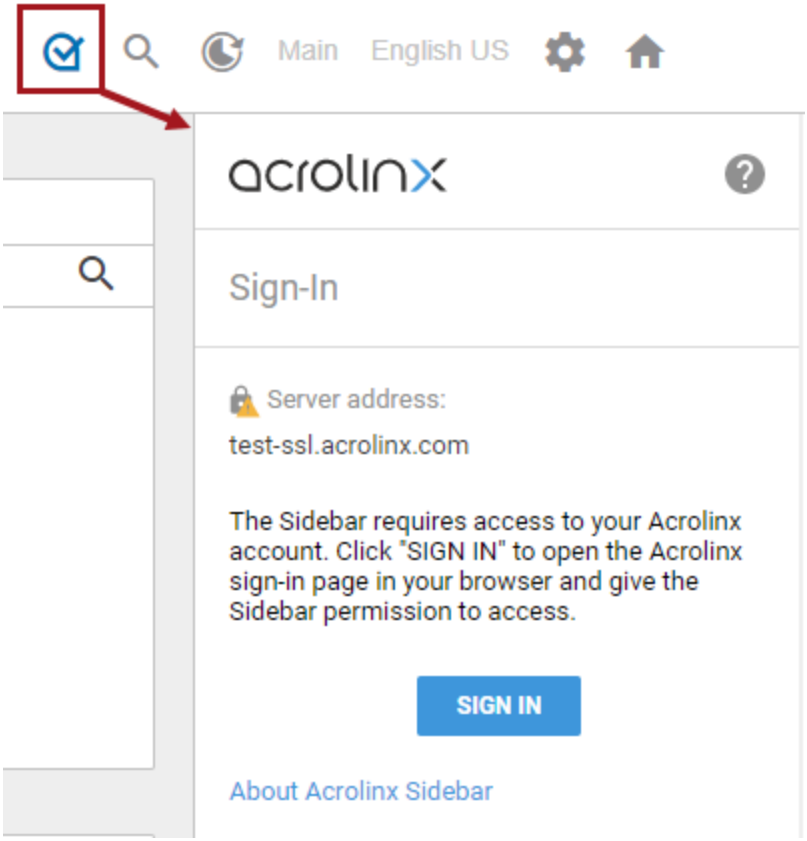
  Click 'Add...' to browse to or search for the relevant user group(s). Click 'Remove' to remove a selected user group. Click 'Up' or 'Down' to reorder a selected user group.

- **Allow checking of inherited values:** Check this box to allow the sidebar to check inherited values as well as local values. This applies to both normal tree inheritance and dimension inheritance.

4. Click **Save**, then **Close** on the designer to save the configurations and exit the designer.

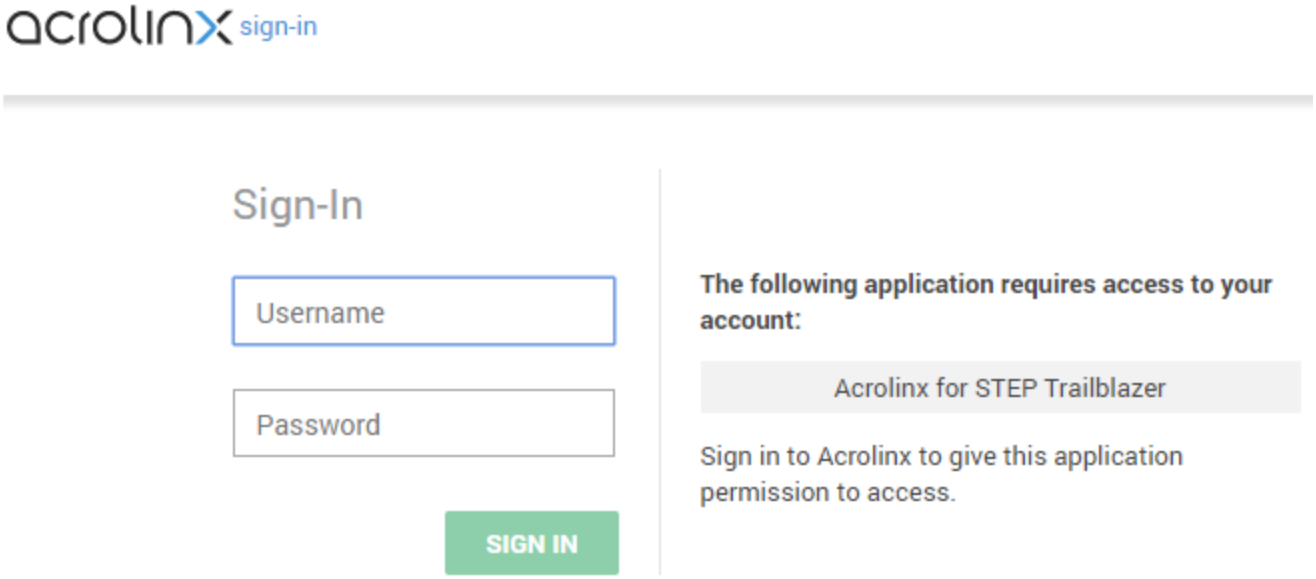
Accessing the Acrolinx Sidebar

1. Click the Acrolinx toggle button to open the Acrolinx Sidebar. On first launch, the sidebar will display a sign-in prompt. The 'Server address' field will be prepopulated with the sidebar URL (either server or cloud) that was provided when configuring the component in the Web UI designer.

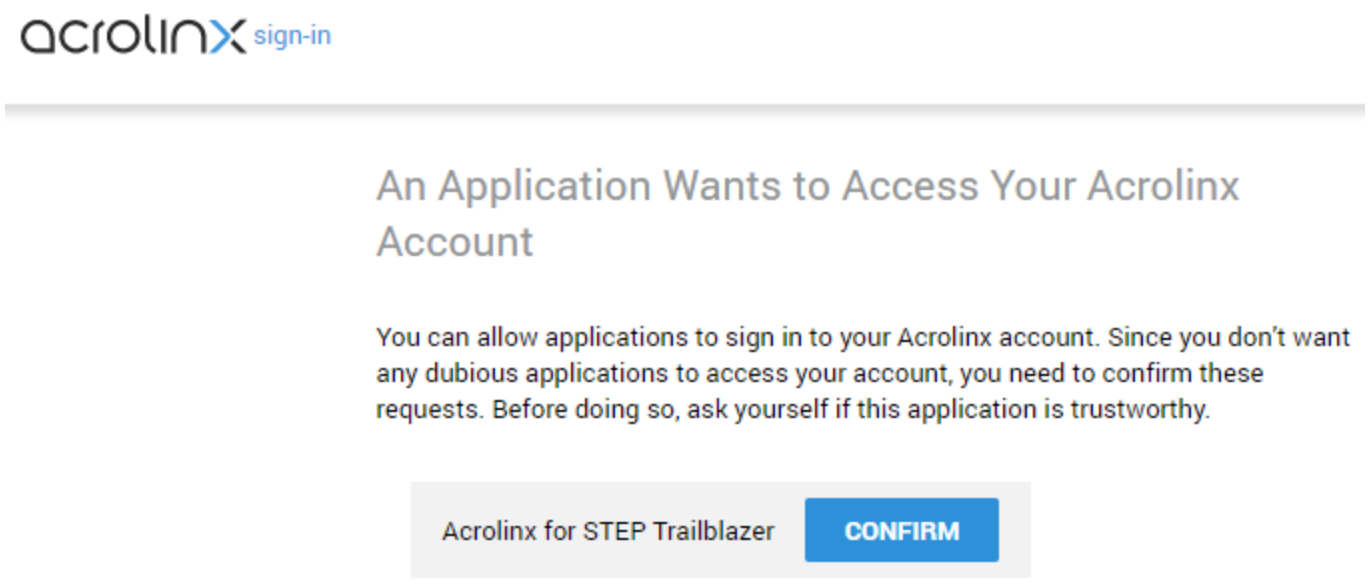


2. Click **SIGN IN** to open the Acrolinx sign-in page. The page will open in your browser.
3. On the sign-in page, enter your Acrolinx username and password, then click **SIGN IN**.

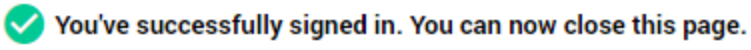
Note: This login information is not the same as your STEP login.



4. After logging in, the Acrolinx website displays a prompt to provide access to 'Acrolinx for STEP.' Click **CONFIRM**.

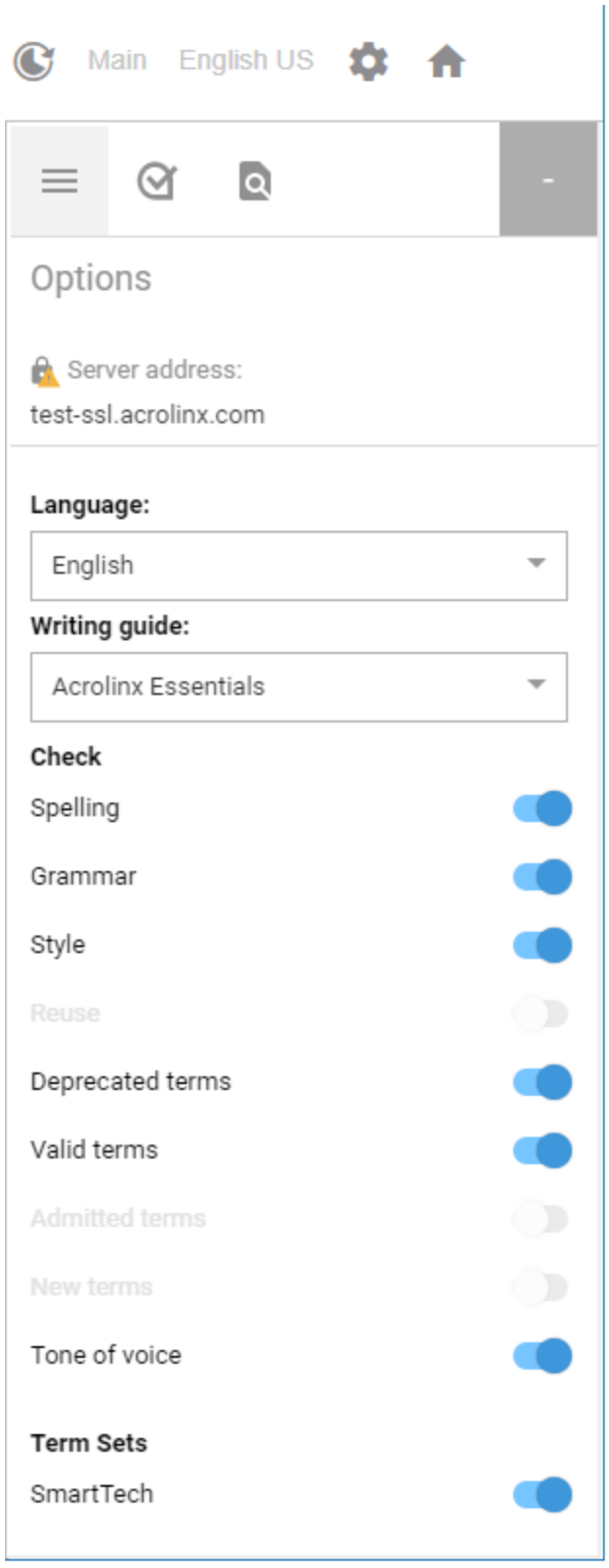


5. Close the page after receiving the 'You've successfully signed in' message.



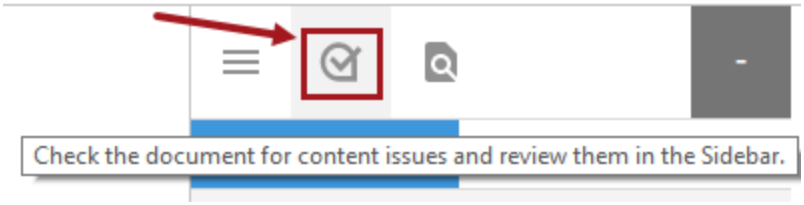
6. The Acrolinx Sidebar now displays on the right side of the screen. When first opened, the sidebar may display a list of options such as Spelling, Grammar, Style, Valid terms, and Tone of voice, as shown in the below screenshot.

Note: The actual options displayed are driven by users' business needs and configured on the Acrolinx Server side. These options are not determined by Stibo Systems or controlled through configurations in the Web UI.

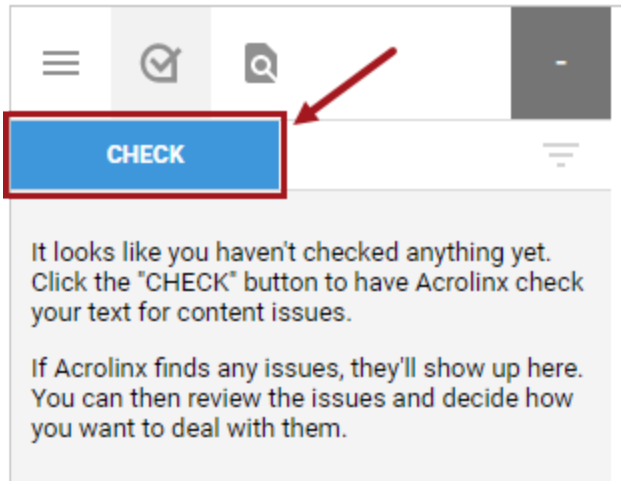


Using the Acrolinx Sidebar

1. Navigate to the object containing the content that you want to check. This typically will be a product object, and content will typically be on a Node Details screen.
2. To begin a check, click on the Acrolinx icon at the top of the sidebar.



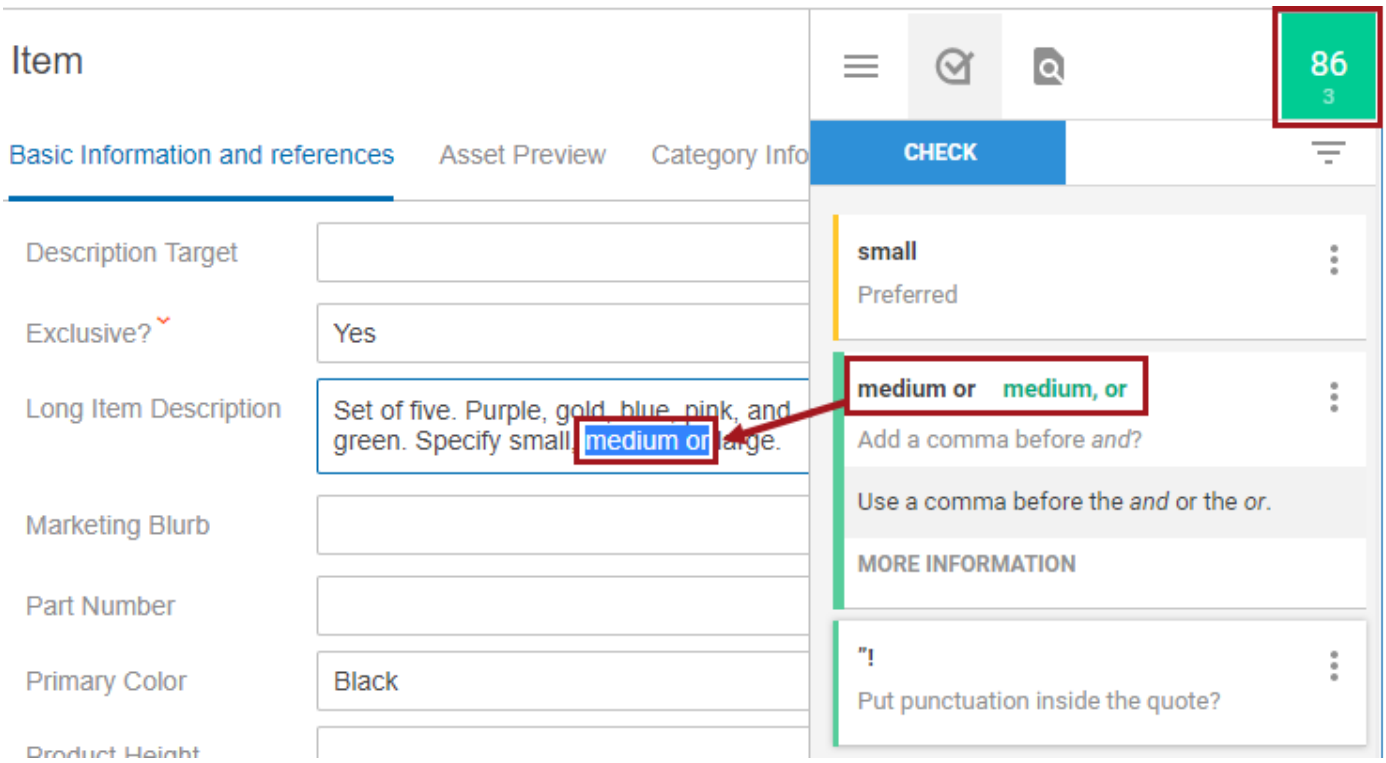
3. Next, click on the **CHECK** button. Clicking CHECK sends data to Acrolinx for inspection.



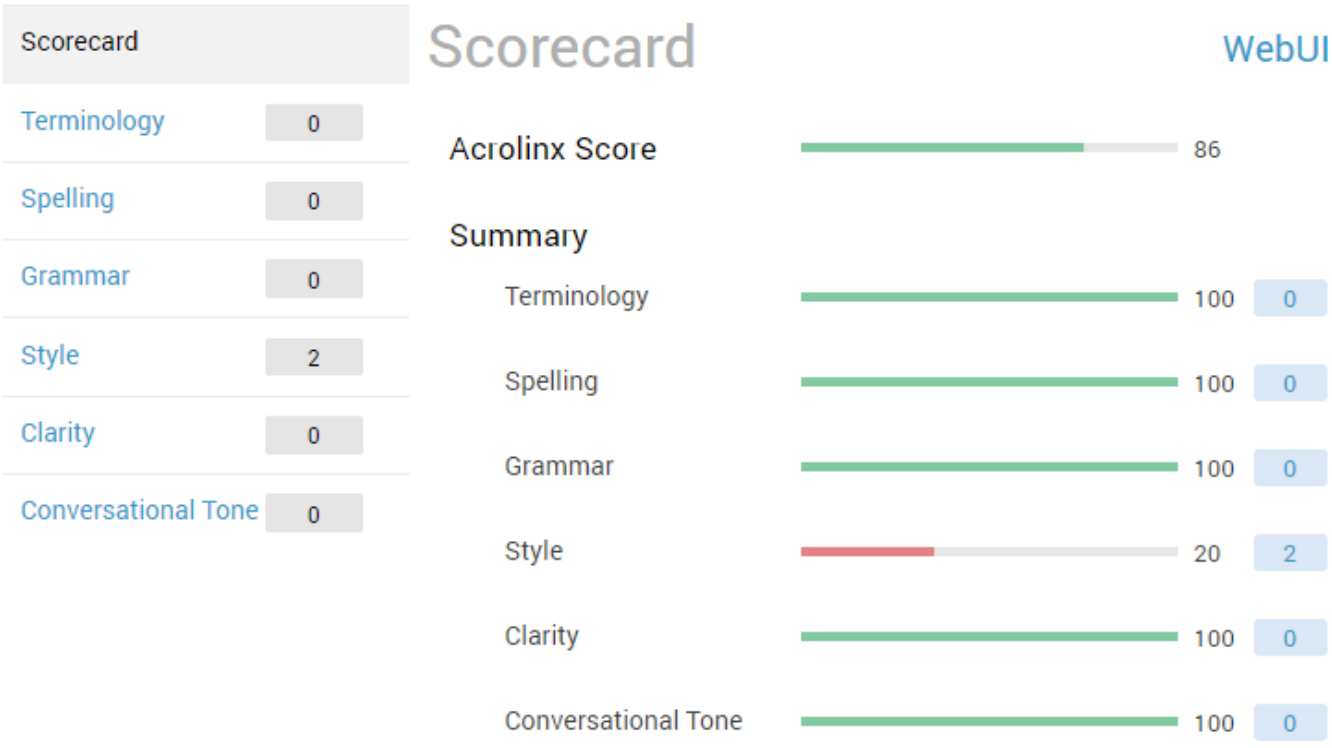
4. Once the check completes, Acrolinx returns a list of issues (contained in 'cards') along with an overall Acrolinx Score in the upper right-hand corner of the Sidebar. The Acrolinx Score indicates the overall quality of the content. The identified issues display as black text in their respective cards.
5. Click on the **black** text (or any blank area) in the card to highlight the problematic content in the text field on the Node Details screen. To automatically correct the issue, click on the **green** text in the card. Click on MORE INFORMATION to go to an Acrolinx page in your browser that provides more information on the error.

   The below screenshot shows an example of an Acrolinx check run on product attribute values on a Node Details Page. The highlighted error is a prompt to add a comma. An Acrolinx Score of 86 is displayed in the upper right corner of the sidebar, with the number of located errors (3) beneath it.

Note: If the problematic text is within a rich text field and you open the rich text editor, the text will not be highlighted within the rich text editor.



6. Click on the Acrolinx Score to view to the Acrolinx Scorecard, which opens in a new browser tab (or window, depending on your browser settings).



Filtering Attributes and Inline References From Acrolinx Checks

It is possible to filter out which STEP attributes are checked by the Acrolinx Sidebar and also prevent the content of inline references from being included in the checks. This is done by setting up the relevant rules (for example, *exclusion_elements* and *inclusion_elements*) in a context segmentation definition (CSD) file on the Acrolinx Server. The below subsections give a brief overview of how to set this up, but does not go into extensive detail. For more information about configuring the server-side extraction, refer to the Acrolinx documentation (https://docs.acrolinx.com/doc/en).

Note: Each customer will most likely need a CSD file that is specific to them to define which attributes to include in the check and which to exclude (not all editable content will need to be checked).

Filtering Attributes From Checks

One method to filter out attributes from Acrolinx Sidebar checks is to configure the Web UI to have a specific 'Acrolinx page' (which could be a tab page on a screen) that only contains specific attributes that should be checked. This is fully configured in the Web UI and not on the Acrolinx server.

Another method is to set up rules on the Acrolinx Server that govern which fields to check and which to ignore by using a CSD file.

The following is an example of the text that is sent to the Acrolinx Server. The ID of the attribute is stored in the *data-step-component-id* attribute.

```
<div class="FormFieldWidget" lang="fr-FR" data-element-id="Description" data-
step-component-id="Description" id="acrolinx_integration0">This is some
content</div>
```

It is possible to exclude the attribute reference by setting the following in the relevant CSD file on the Acrolinx Server:

```
exclusion_elements=<div data-step-component-id="Description">,<div data-step-
component-id="AnotherAttributeID">
```

Filtering Resolved Inline References From Checks

Resolved inline reference values will be checked if they are not set up as *exclusion_elements* in the CSD file on the Acrolinx Server. If not configured for exclusion, the resolved values will be checked and errors will appear in the sidebar. But even if the errors are corrected, the changes will be discarded upon save and the original values will return. As such, it is useful to have the sidebar avoid checking the values of inline references in the first place.

This is an example of the text that is sent to the Acrolinx Server when the content contains an inline reference:

```
<div class="FormFieldWidget" lang="fr-FR" data-element-id="Description" data-
step-component-id="Description" id="acrolinx_integration0"><p>This <span
class="step-rt-fmt-bolditalic">has</span> a spellling mistake.</p><p>And a
second paragraph.</p><p>And a reference to another object <span attrid=""
class="step-rt-fmt-non_editable step-rt-fmt-ref" contenteditable="false"
equalsign="=" includeattrname="false" objecturl="step://product?id=22359"
resolveto="objname" separator=";" stibotag="ref">Edgar Allan Poe - The Pit and
The Pendulum</span></p><p>is 6 <span class="step-rt-fmt-non_editable step-rt-
fmt-lt" contenteditable="false" stibotag="lt">&lt;</span> 5?</p></div>
```

Specifically, the inline reference is defined as:

```
<span attrid="" class="step-rt-fmt-non_editable step-rt-fmt-ref"
contenteditable="false" equalsign="=" includeattrname="false"
objecturl="step://product?id=22359" resolveto="objname" separator=";"
stibotag="ref">Edgar Allan Poe - The Pit and The Pendulum</span>
```

It is possible to exclude the inline reference by setting the following in the relevant CSD file on the Acrolinx Server:

```
exclusion_elements=<span contenteditable="false">
```

Considerations and Limitations

Acrolinx Sidebar Functionality

- The Acrolinx Sidebar analyzes content on a per-product basis and does not handle batch or multi-node processing of products. However, since direct user interaction is key to content improvement, this hands-on approach ensures that data is of the highest possible quality.
- All editable fields that are visible on the Web UI screen being checked by the Acrolinx Sidebar are passed to Acrolinx. Only attribute value fields are checked; name fields are not checked. Read-only fields are not checked, nor are they recognized as text by the sidebar.

Note: if the Web UI screen contains multiple tabs, the Acrolinx Sidebar only operates on the tab that is currently selected. Also, some attributes may not be visible due to vertical scrolling, but they will still be checked.

Acrolinx Updates

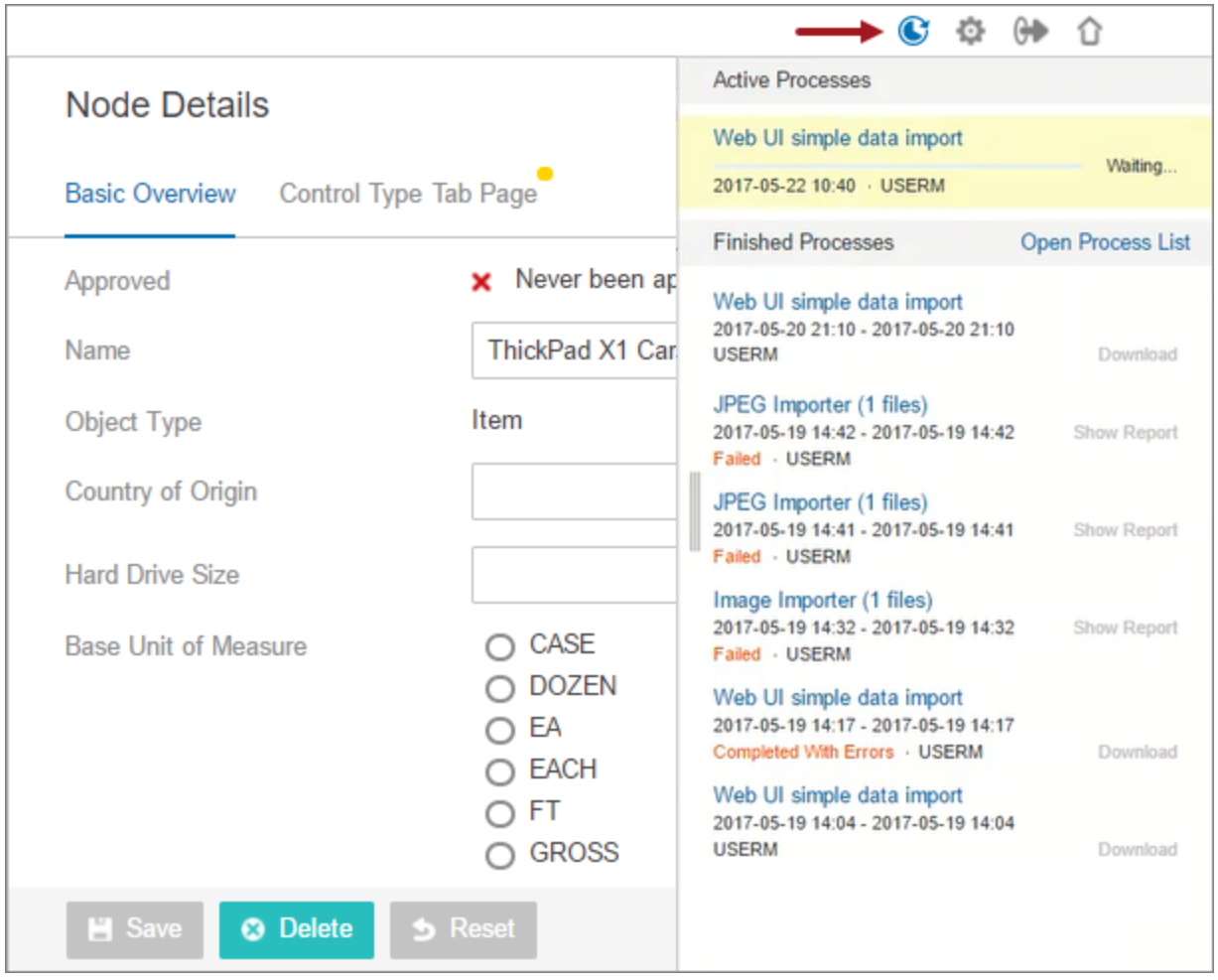
- For customers running the Acrolinx Sidebar, refer to the Acrolinx support / help center website for information on major updates to the Acrolinx core platform: https://support.acrolinx.com/hc/en-us/.
- Before updating to a new version of Acrolinx, contact your Stibo Systems account manager or partner manager for advice on compatibility between STEP and Acrolinx.

Background Process Notification Component

When the Background Process Notification component is configured, managing the process of importing data is much more efficient. Users can be automatically notified once an import has completed successfully or with errors, can easily view the overall status and important details of their latest imports, and can continue to use or edit objects in a desired Web UI screen. This means a user can see the detail page of the imported object (e.g., product details page) at the same time as the error messages, and correct data corresponding to information in the error message in real time.

Once an import has completed successfully, the gray background process (BGP) notification icon will display with a green dot . If the import has failed or completed with errors, the BGP notification icon will display with an orange dot . Clicking the BGP notification icon will display the resizeable BGP side panel, on the right side of the screen. When the BGP side panel is displayed, the gray BGP notification icon will display blue, , indicating the panel is active. To hide the side panel, click the blue BGP notification.

While the BGP side panel is active, the previously mentioned green / orange dot BGP notification icons will not display. Instead, when a data import status changes, the respective BGP will display highlighted with yellow (shown below), allowing a user to monitor the status of many data imports at once.



In the example above, one import displays within the Active Processes section of the BGP side panel overview. The active BGP is waiting to start, as indicated by the blank process bar, and because the status recently changed, it is highlighted in yellow.

At a glance, the user has access to improved overview and functionality (for up to 99 of their BGPs) that includes:

- An 'Active Processes' section which displays active BGPs (if there are no active BGP, this section is not visible)
- An enhanced title that incorporates the BGP description and links to the BGP Details screen (if one is configured)
- Active processes will display a progress bar along with a progress status of 'Waiting...' or a percentage of completion
- A 'Finished Processes' section displays the completed BGPs
- An 'Open Process List' link will display a Background Processes List screen (if one is configured) on the main screen
- Warning messages, such as 'Failed' or 'Completed With Errors,' will display in red so they stand out to the user
- Once an import has completed, a 'Download' link will display as a 'save as' dialog (when applicable)
- A 'Show Report' link will display the Import Summary Report within the BGP side panel as shown below

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Note: When more then one file is initiated for transfer or import, then the notification within the side panel will display a file count instead of the file name.

To configure the Background Process Notification Component, add it to the Main Properties Corner Bar Component. For more information, see the **Corner Bar Component** section of the **Main Properties Overview** documentation.

Because the Background Process Notification Component and the File Loading Widget have been developed to work together, it may be helpful to view the **File Loading Widget** topic within the **Web User Interfaces** section of **STEP Online Help**.

Import Summary Report

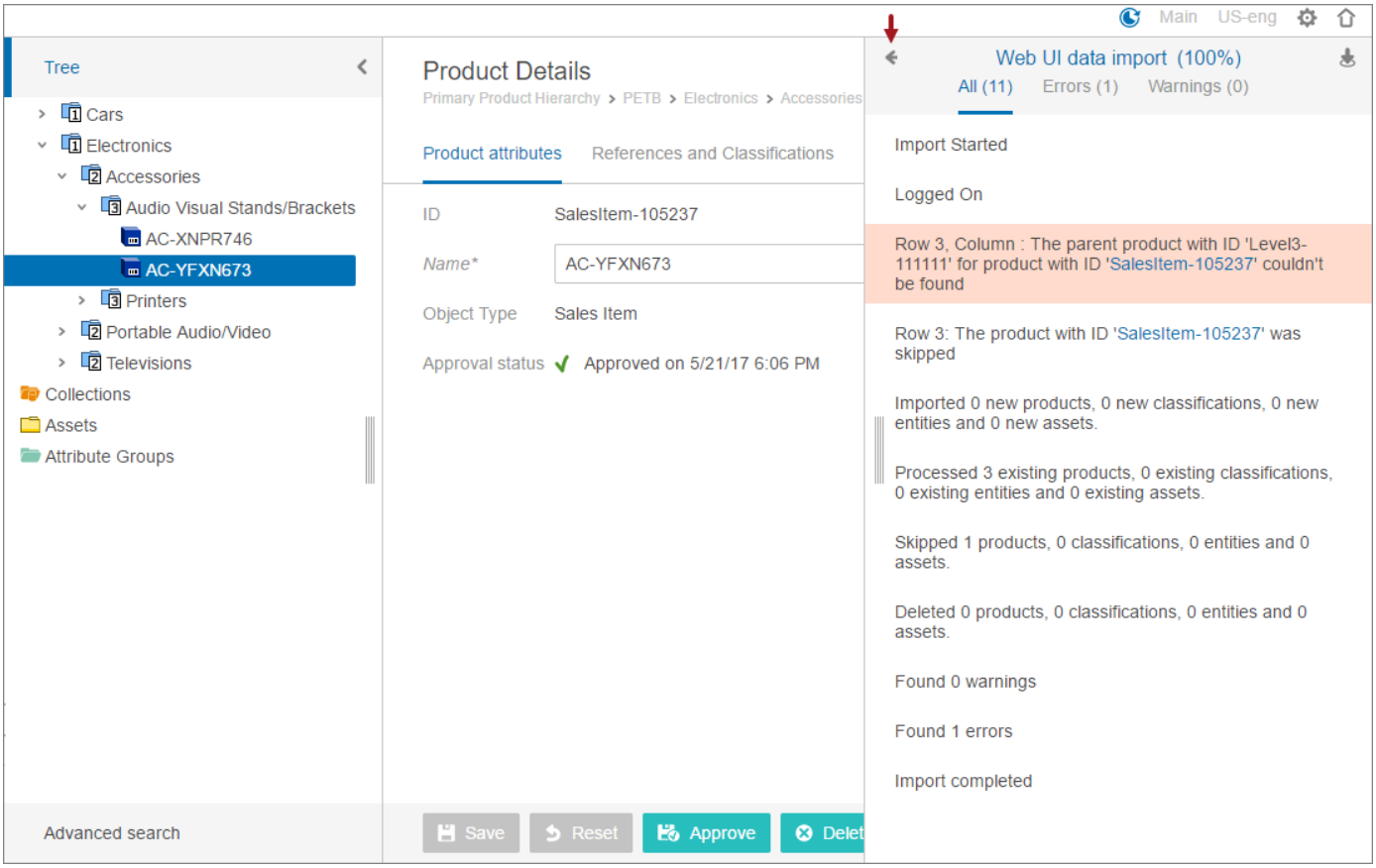
An Import Summary Report is simplified information taken from a background process execution report. However, the Import Summary Report will only display for those components that support this feature (i.e., Asset Importer, Data Importer, GDSN).

When the Import Summary Report is displayed within the Background Process Notification component the user can see:

- Headings with the total number of 'Errors' and 'Warnings' (clicking the headers will filter to display only those details)
- Number of items successfully created (imported) / updated
- Number of items rejected and/or failed

- Improved error messages that allow users to more easily identify an issue with links directly to error related data so that users can view and correct data, so that the data import can be properly completed

In the example below the 'Show Report' link corresponding to the 'Web UI data Import' BGP was selected from the active BGP side panel overview, triggering the Import Summary Report to display within the BGP side panel. To return to the BGP side panel overview, click the gray 'back arrow' located at the top left of the BGP side panel.



Corner Bar Context Selector Component

The Corner Bar Context Selector component provides Web UI users with an easy way to change the context in which they are working. The Context Selector, once added, is accessed by clicking the current working context name, which is displayed in the corner bar.

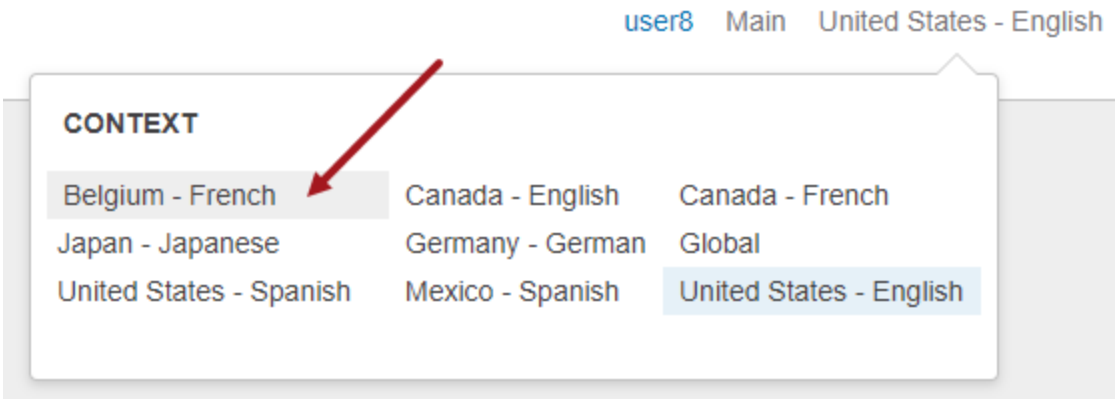
To add and configure the Corner Bar Context Selector component, add it to the Main Properties > Corner Bar child component. For more information on adding corner bar components, see the **Corner Bar Component** section of the **Main Properties Overview** documentation.

Using the Context Selector

The Corner Bar Context Selector is accessed by clicking the current context shown in the corner bar. When engaged, the Corner Bar Context Selector displays contexts that can be selected. The contexts shown are dependent on how the component has been configured.

In the example that follows, a user clicks on 'United States - English'.

The CONTEXT options are shown, and the user clicks the desired context to work in.



The main context is now updated in the corner bar.

Configuring the Context Selector

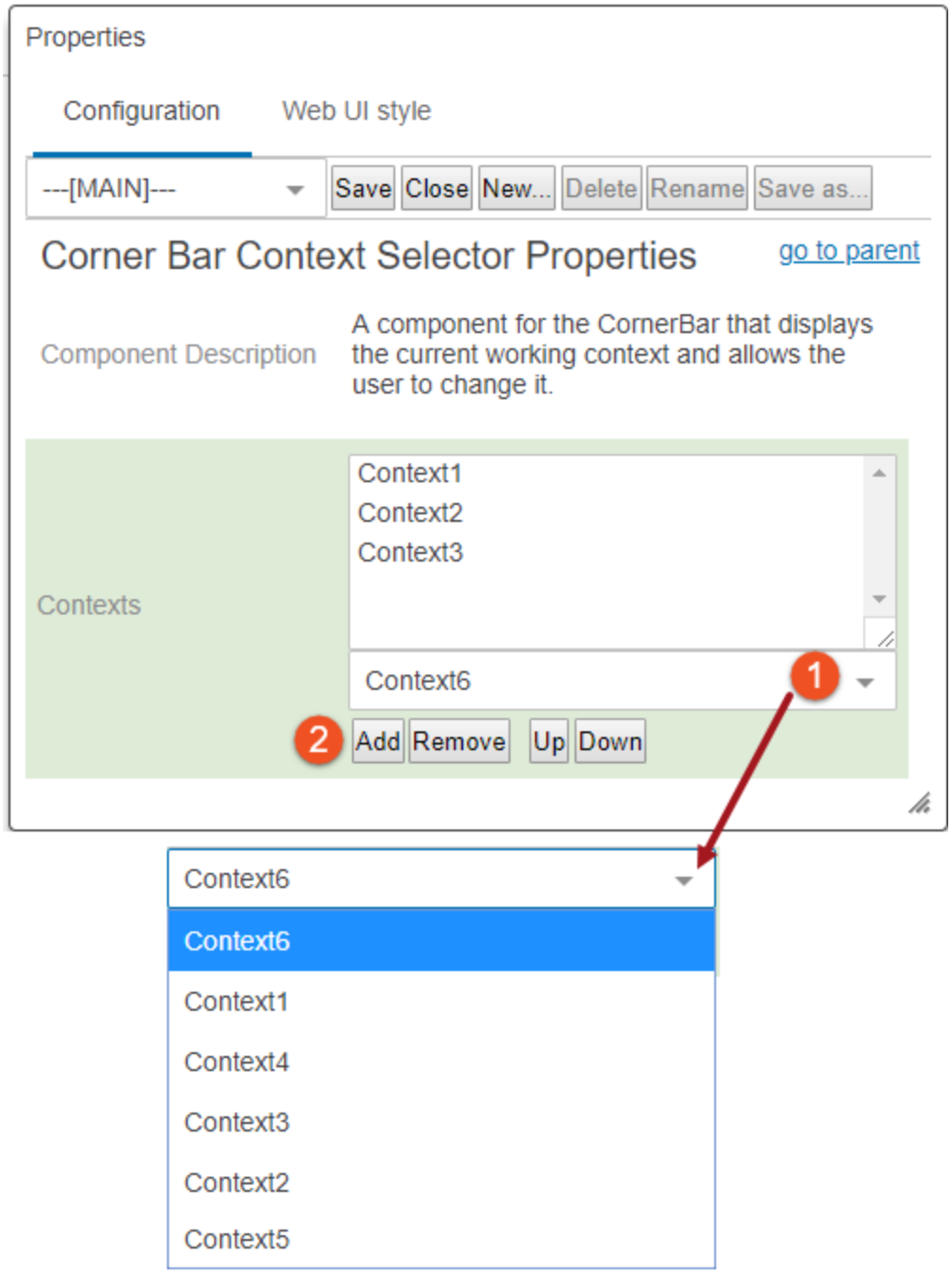
If all contexts should be displayed to Web UI users, then no configuration is required once the Context Selector component has been added.

To limit the contexts available to users:

1. Open the Corner Bar Context Selector Properties.
2. Click the dropdown under the Contexts parameter to see the available contexts.

Note: While contexts display by name in the corner bar, the contexts show by ID in the dropdown.

3. Select one and then click Add.
4. Continue the second and third steps until all contexts are added.
5. Click Save and Close to exit design mode.

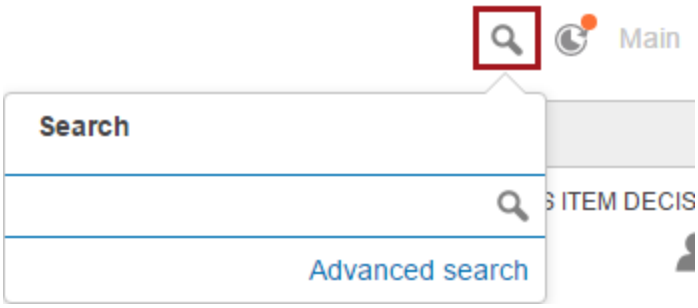


To learn more about contexts in general, see the **Contexts** section in the **System Setup / Super User Guide** documentation. Additionally, in Web UI, the Multi Context screen is designed to show attribute values and outbound references of an object in multiple contexts on the same screen. See the **Multi Context Screen** topic.

Corner Bar Search Component

The Corner Bar Search component is a widget that can be configured on the corner bar, which enables users to run searches on ID, Name, and additional search criteria via configurable search plugins. This widget can be configured to search broadly throughout STEP, or it can be configured to only search a narrow segment of the system, depending on the needs of the user.

Users should be aware that objects within the Recycle Bin are not searched and will not display in search results.



Prerequisites

It is expected that anyone configuring the Corner Bar Search component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

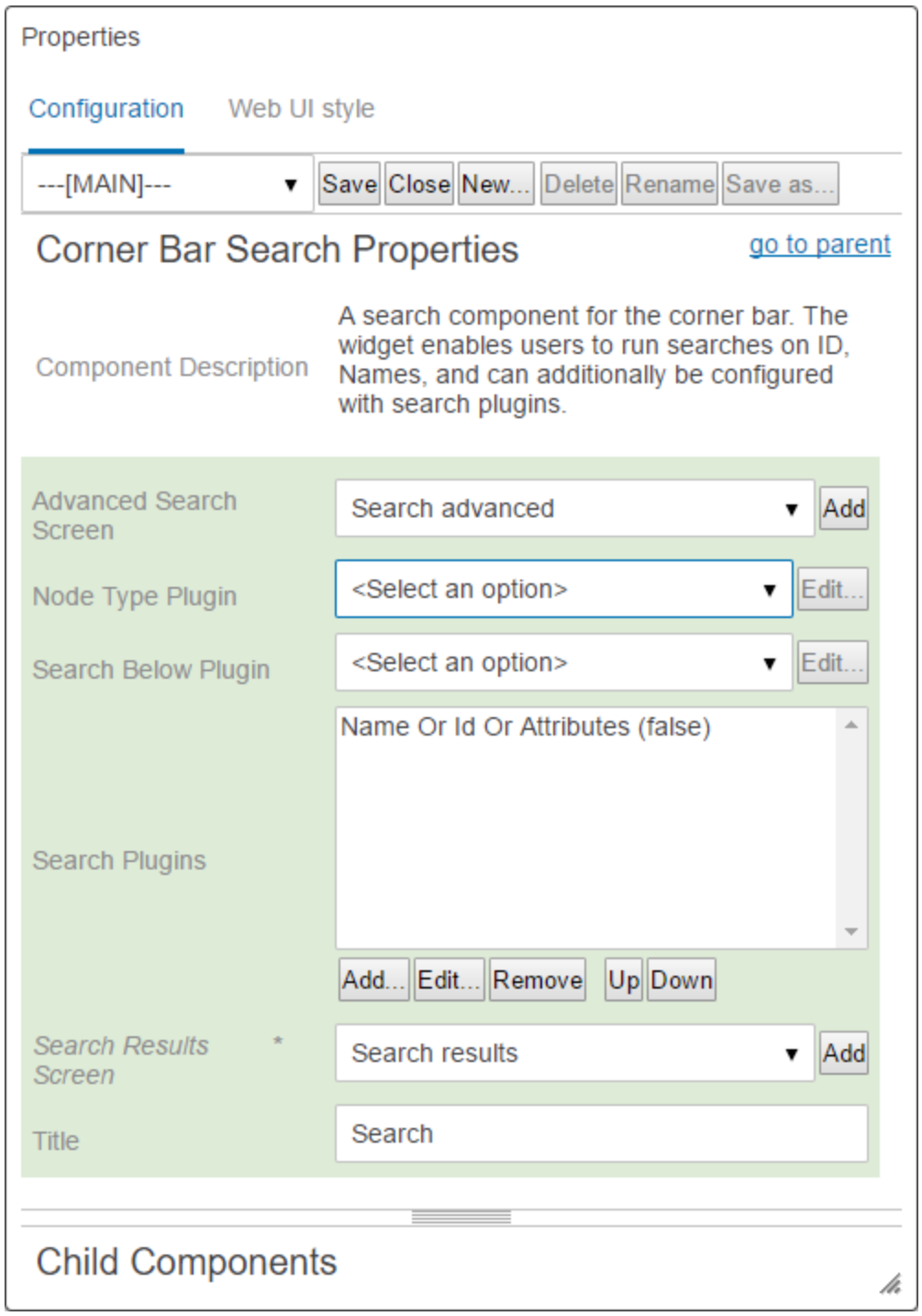
Note: The Corner Bar Search Component supersedes the Corner Bar Simple Search component. The Corner Bar Simple Search component asks you to select an Advanced Search Screen and a Search Results Screen, however the Corner Bar Search Component allows you to execute more granular searches.

Configuring the Corner Bar Search Component

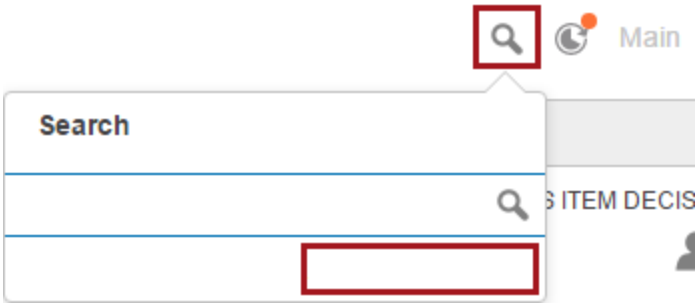
To add a corner bar search widget, navigate to MAIN > Child Components > select 'Corner Bar' from the Corner Bar dropdown. Click the **go to component** link to display the Corner Bar Properties window. (For details, see the **Corner Bar Component** topic in this guide.)

In the Child Components section, click the **Add** button under the Items parameter, select **Corner Bar Search** from the Add Component list and click the **Add** button. The Corner Bar Search Properties window displays and allows you to configure the widget.

The Corner Bar Search component offers several configuration options that can help narrow your search. The only required field is the 'Search Results Screen' parameter.



1. **Advanced Search Screen**: In this parameter, open the dropdown and select a screen to map to the 'Advanced Search' link found on the widget. The Advanced Search link is only displayed in the search widget when an Advanced Search Screen is selected. The following image shows the Corner Bar Search without a specified Advanced Search Screen.



2. **Node Type Plugin**: In this parameter, select 'Static Object Types' from the dropdown if you want to limit what types of object types can be searched for. To specify which object types can be searched for, click **Edit...**. In the Static Object types Properties window, click **Add...** and browse or search for the desired object type(s), then click the **OK** button. Once the selections have been made, click the **Save** button.

   Note: If the Node Type Plugin parameter is not set, the widget will search for all asset, classification, entity, and product object types.

3. **Search Below Plugin**: In this parameter, select a node(s) from the dropdown that the widget will search below.
   - 'Attribute Group Root Node': Select this, and click **Edit...** to specify an attribute group to search under. In the Attribute Group Root Node Properties window, click the ellipsis button (...) and browse or search for the desired attribute group root node, then click **OK** and **Save**.
   - 'Supplier Asset Folders': Select this to list the asset folders for the suppliers that the user is a member of. Since there are no additional parameters, clicking the **Edit...** button shows only the component description.
   - 'Static Root Node': Select this, and click **Edit...** to specify which nodes to search under. In the Static Root Nodes Properties window, click **Add...** and browse or search for the desired object type(s), then click **OK**. Once the selections have been made, click **Save**.
4. **Search Plugins**: In this parameter, customize how the search handles the entered value by clicking **Add...** and specifying one or more plugins.
   - The Below Search plugin determines under which nodes to run the search. Every node will be searched if this parameter is not configured.
   - The Object Type Search plugin determines which object types to search for.
   - The 'Name Or Id Or Attributes' plugin alters the search logic so that it matches the search string against ID, Name, or Value of one or more attributes.
   - The 'Golden Record - Source Record ID' plugin alters the search logic so that it matches the search string against golden record IDs or the IDs of the source records that contribute to a golden record, and returns the active golden record.

Note: Unless it is explicitly required, the 'Golden Record - Source Record ID' plugin should not be configured together with any other parameters. Doing so might cause poor performance / empty results.

5. **Search Result Screen:** In this parameter, select the desired screen from the dropdown. The results of a search can be displayed on either a screen of type generic Search or of type Node List Browser. The generic search screen can be configured with one or more display modes to show the results, and the Node List Browser screen will show a detail screen with the first result and the option of paging through the result list.
6. **Title:** Enter a title for the search widget.

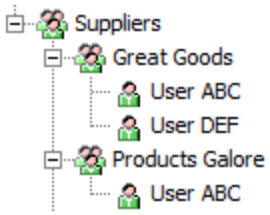
Corner Bar Supplier Selector Component

The Corner Bar Supplier Selector component provides Web UI users with an easy way to change the supplier group in which they want to work in, if they are users within multiple supplier groups. The Supplier Selector, once added, is accessed by clicking the current working supplier name, which is displayed in the corner bar.

To add and configure the Corner Bar Supplier Selector component, add it to the Main Properties > Corner Bar child component. For more information on adding corner bar components, see the **Corner Bar Component** section of the **Main Properties Overview** documentation.

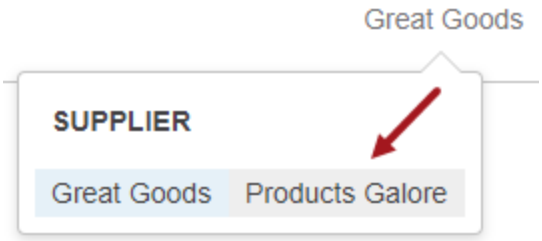
Using the Supplier Selector

The Corner Bar Supplier Selector is accessed by clicking the supplier name shown in the corner bar. When engaged, the Corner Bar Supplier Selector displays all the supplier groups (by name) in which the user belongs.



In the example that follows, a User ABC clicks on 'Great Goods'.

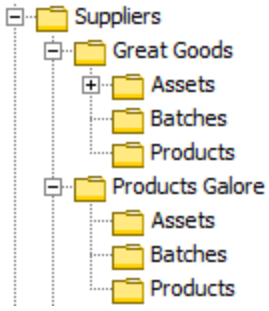
The SUPPLIER options are shown. The current selection is highlighted in blue, and when User ABC clicks a different supplier to work under, the selection has a gray background.



The new supplier name is now updated in the corner bar. All work done in the Web UI from this point will be with data that is created / maintained by the Products Galore supplier group.

Supplier selection is important in Web UI. If a user is a member of multiple vendor groups, they are able to upload assets to a specific supplier that they are acting on behalf of and the supplier selection is passed along in the process. For example, vendor selection impacts usage of components such a the Asset Import Widget and the

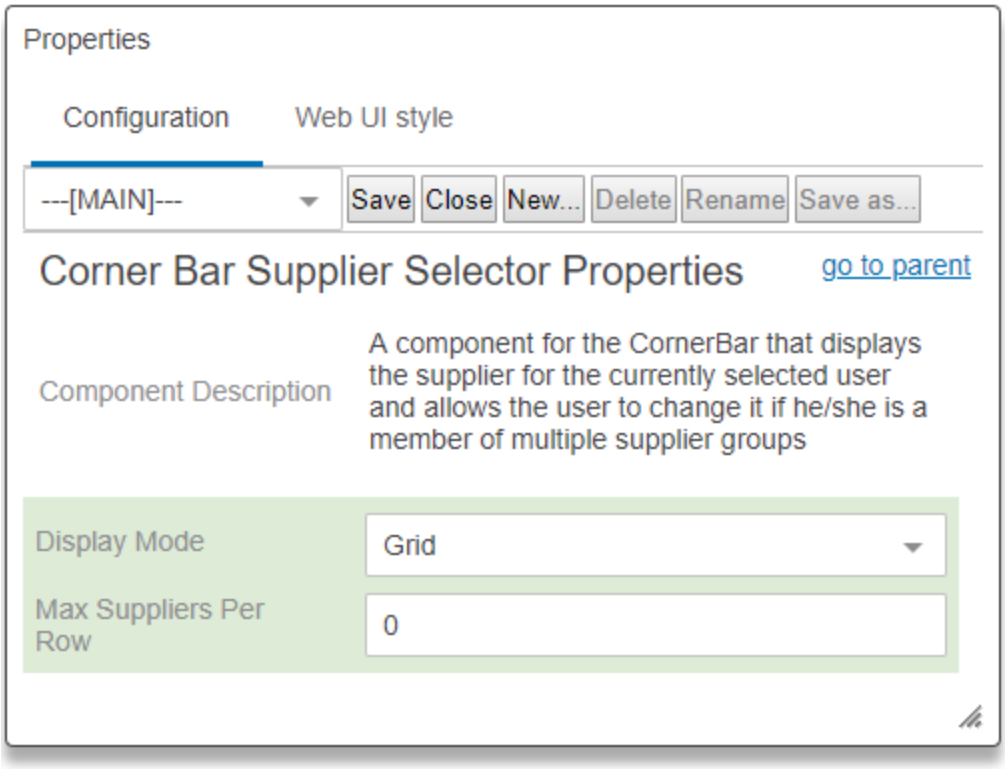
Referenced Asset Representation component, ensuring the correct supplier / vendor classification assets folder is selected to import the asset into.



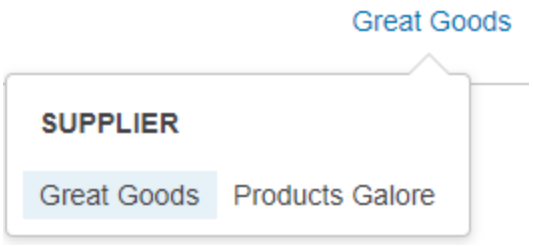
For more information on the components mentioned in the example above, see the **Asset Importer Widget** topic and the **Referenced Asset Representation** topic in the **Web User Interfaces** documentation.

Configuring the Supplier Selector

No configuration is required once the Supplier Selector component has been added. However, the Display Mode and the Max Suppliers Per Row can be configured, if desired.

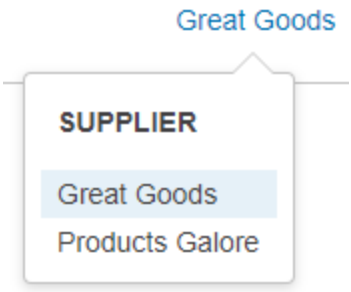


1. Open the Corner Bar Supplier Selector Properties.
2. The Display Mode parameter determines how the supplier values display to the user when engaged from the corner bar. Keep the default 'Grid' selection to see suppliers in grid format (shown below), or select 'TypeAhead' to display a typeahead field (if there are many suppliers).



3. Change the Max Suppliers Per Row selection, if desired, to limit the number of suppliers listed in each row when the supplier names are shown in 'Grid' mode. The default is 0, which means there is no maximum and suppliers will be listed in a single row.

   For example, if the Max Suppliers Per Row is set to 1, the supplier names will display as follows:



4. Click Save and Close to exit design mode.

To learn more about suppliers and Web UI, see the legacy **Supplier Web UI** topic and **Supplier Web UI Setup Guide** topic in the **Web User Interfaces** documentation.

Users should also refer to the full set of **Web User Interfaces** documentation for more information on current Web UI functionality, which may not be reflected in the legacy topics referred to above.

Corner Bar Warning Notifications Component

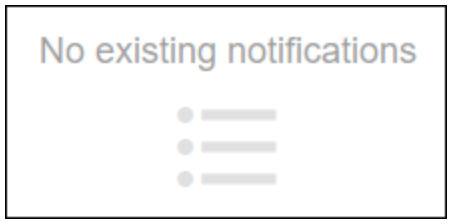
The Corner Bar Warning Notifications component provides users with a clear and easily accessible panel that displays all recent errors and warnings encountered in the Web UI. The Warning Notifications panel, once added, can be opened by clicking the panel's icon in the Web UI's corner bar.

To add and configure the Warning Notifications Component, add it to the Main Properties Corner Bar Component. For more information on adding corner bar components, see the **Corner Bar Component** section of the **Main Properties Overview** documentation.

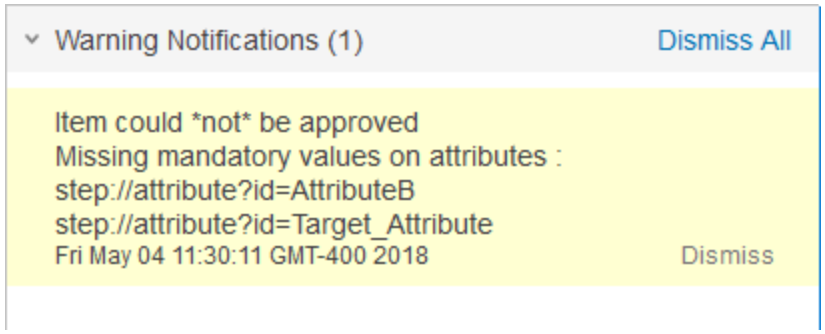
Using the Warning Notifications panel

The Corner Bar Warning Notifications Panel can be accessed by clicking the Warning Notifications panel icon, which looks like three bullet points . The panel holds all warning and error notifications that have been surfaced via popup dialog since the start of a Web UI session, or, if occurring more recently, a browser refresh action. All notifications in the Warning Notifications panel are cleared upon log out, but also upon browser refresh / reload actions. Whether the browser page or tab is refreshed manually or automatically, all warnings will be cleared from the panel when the browser is refreshed.

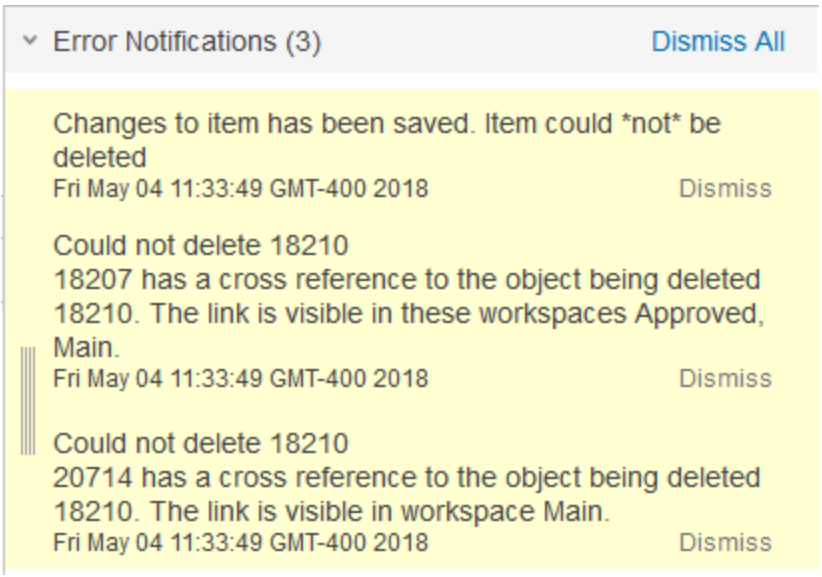
- When showing no errors or warnings, the panel will display the Warning Notifications panel icon with the text, 'No existing notifications.'



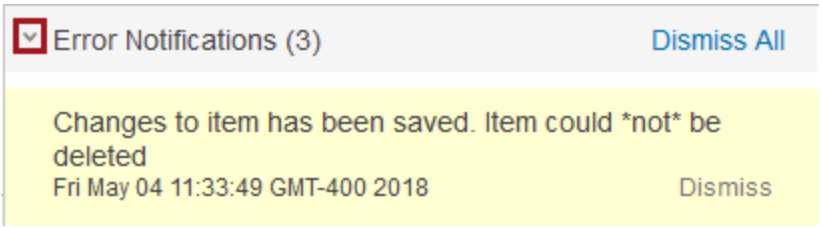
- When an action taken in the Web UI prompts a warning notification popup, a yellow dot will appear to the upper right of the Warning Notifications panel icon . This marker means the warning notification is now listed in the panel. When the panel is opened, the dot disappears and the new warning notification is briefly highlighted in the panel with a light yellow background.



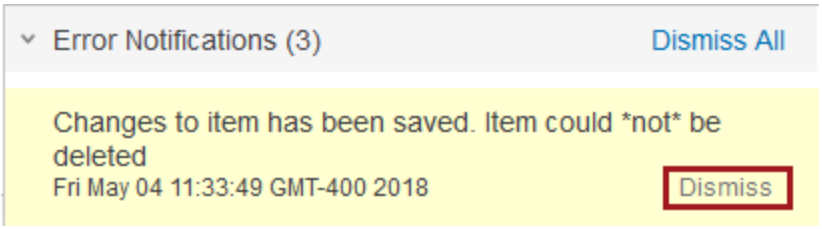
- When an action taken in the Web UI prompts an error notification popup, an orange dot will appear to the upper right of the Warning Notifications panel icon . This marker means the error notification is now listed and described in the panel. When the panel is opened, the dot disappears and the new error notification is briefly highlighted in the panel with a light yellow background.



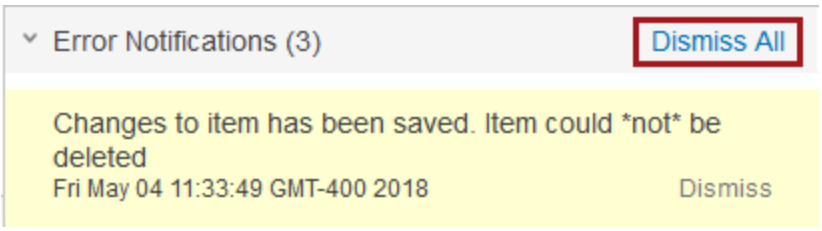
- Clicking the 'Click for details' link in some error and warning notifications popup dialogs will open the Warning Notifications panel. The relevant notifications are highlighted briefly.
- All error notifications will be grouped on the Warning Notifications panel under the header 'Error notifications.' All warning notifications will be grouped under the header 'Warning notifications.' If there are only notifications of one type to display in the panel, only that header will display with its notifications beneath it. Beside each header is a number contained inside a parentheses that represents the number of notifications currently displaying beneath that header. For instance, if there are three (3) error notifications displaying in the panel, then a '(3)' will display beside the 'Error Notifications' header.
- Clicking the header will collapse all notifications displaying beneath the header. Clicking the header again will expand display of the collapsed notifications. Default presentation is for the expanded view.



- Each notification displays in the Warning Notifications panel with the clickable text 'Dismiss' displaying to the right of the notification text. Clicking 'Dismiss' clears the notification from the panel. If the last displayed notification is dismissed, the notification and the header will be cleared from view.



- Each header ('Warning' and 'Error') displays with the clickable text 'Dismiss All' displaying to its right. Clicking that text will clear the header and all notifications displaying beneath that header from the panel.

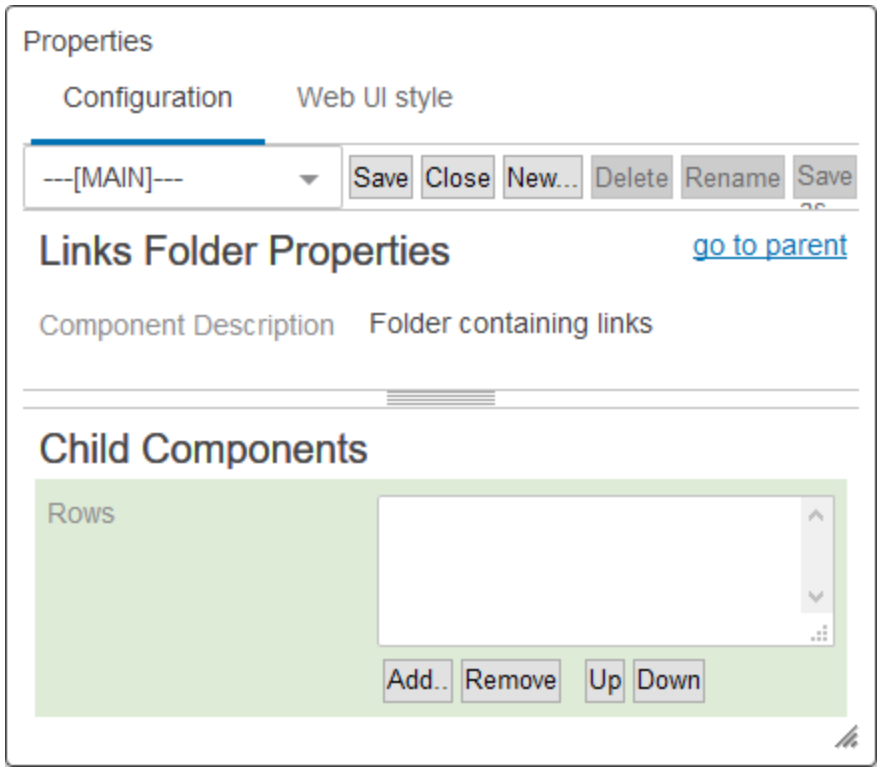


Links Folder

The Links Folder Corner Bar component item enables you to add a number of quick links. These links range in their capabilities and are explained further in this topic.

To add a Links Folder to your Web UI, add it to the Main Properties > Corner Bar child component. For more information on adding corner bar components, see the **Corner Bar Component** section of the **Main Properties Overview** documentation.

After adding a Links Folder to a Corner Bar Properties, double click on the Links Folder to configure the Links Folder Properties.



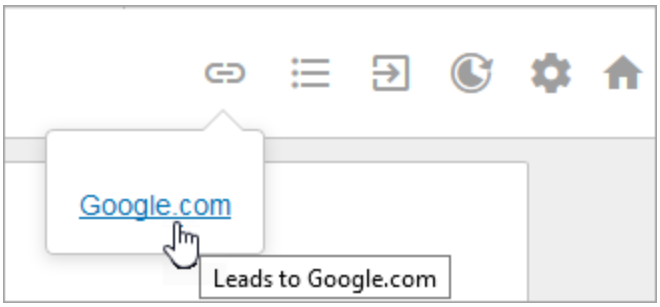
The available Links Folder Child Components are:

- External Navigation
- GDSN Create RFCIN Link Action
- Navigation
- Node Navigation
- Screen Navigation
- Smart Sheet Import Action
- Static Html
- Static Text

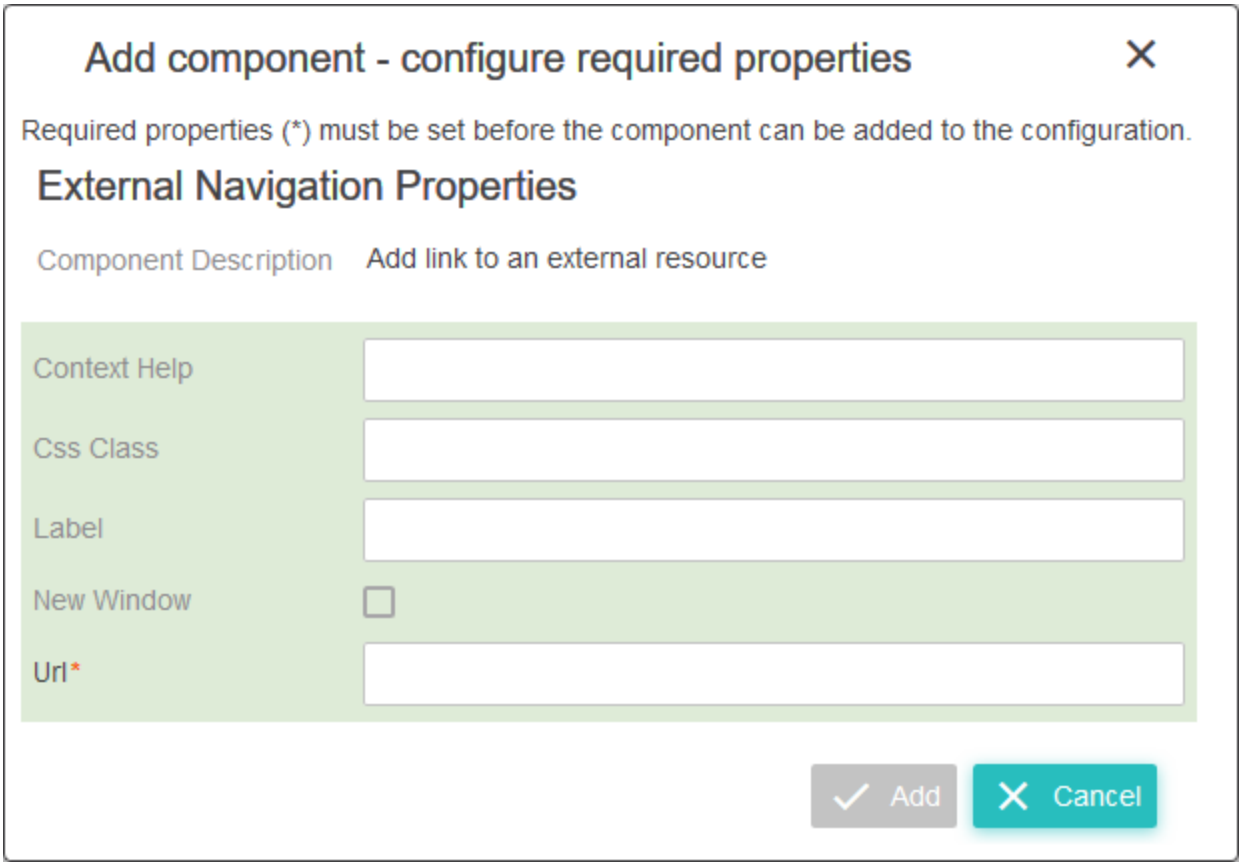
Each of these component options is further explained below.

External Navigation

Adding an External Navigation enables you to click on a web link that directs you away from the Web UI and to the designated web URL. In the example below, clicking the External Link will lead you to Google.com.



When adding the External Navigation to the Links Folder, the External Navigation Properties displays. All fields are described below:



Context Help: Enter in text that will help the user.

Css Class: Enter an optional name of a CSS-style to be set as the primary style for the component.

Label: Provide a label for the external website.

New Window: Check this if the link should open the designated website in a new window rather than the one being currently viewed.

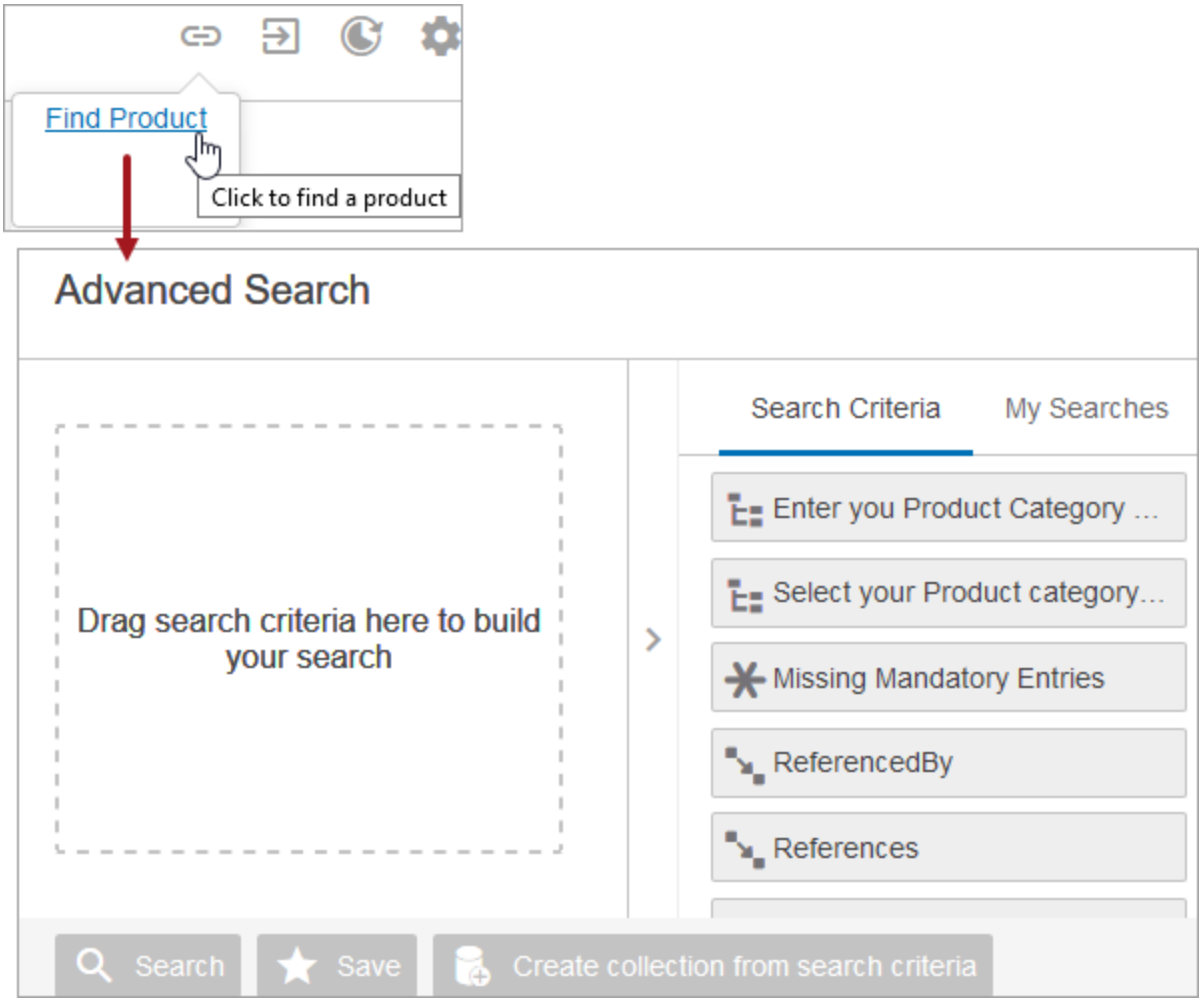
Url: This is the only mandatory field. Enter in the desired website address.

GDSN Create RFCIN Link Action

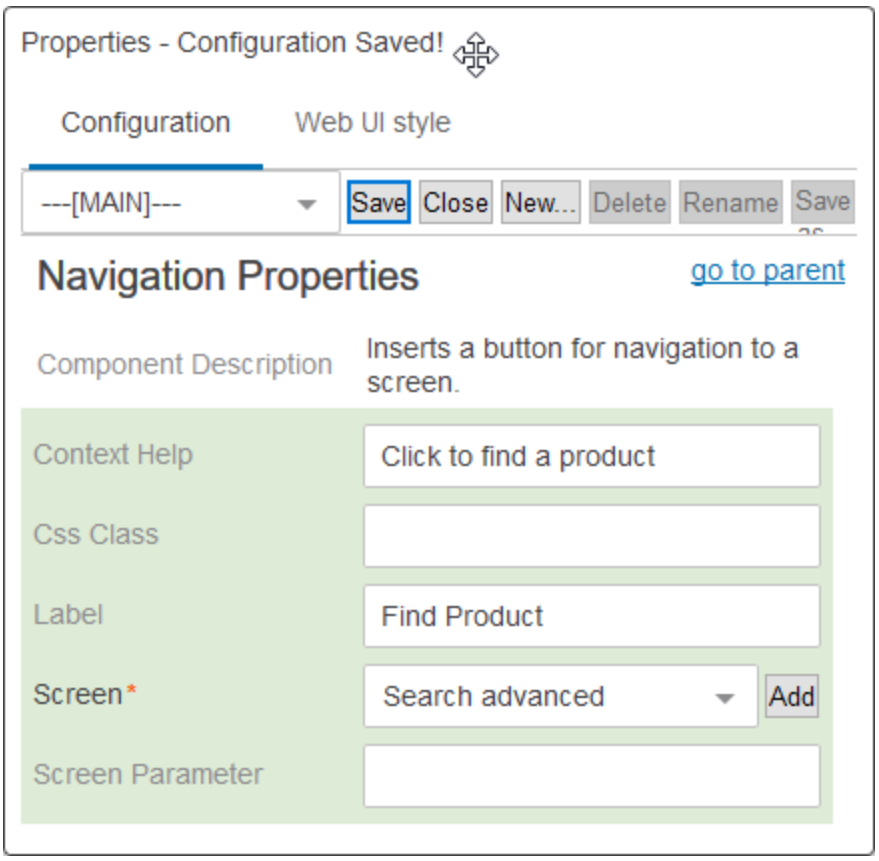
See the GDSN Receiver documentation for more information on GDSN and the RFCIN Link Action.

Navigation

Clicking the Navigation link brings you to the configured Web UI screen. In the example below, clicking 'Find Product' brings you to the Advanced Search screen.



When adding the Navigation link to the Link Folder, the Navigation Properties displays. All fields are described below:



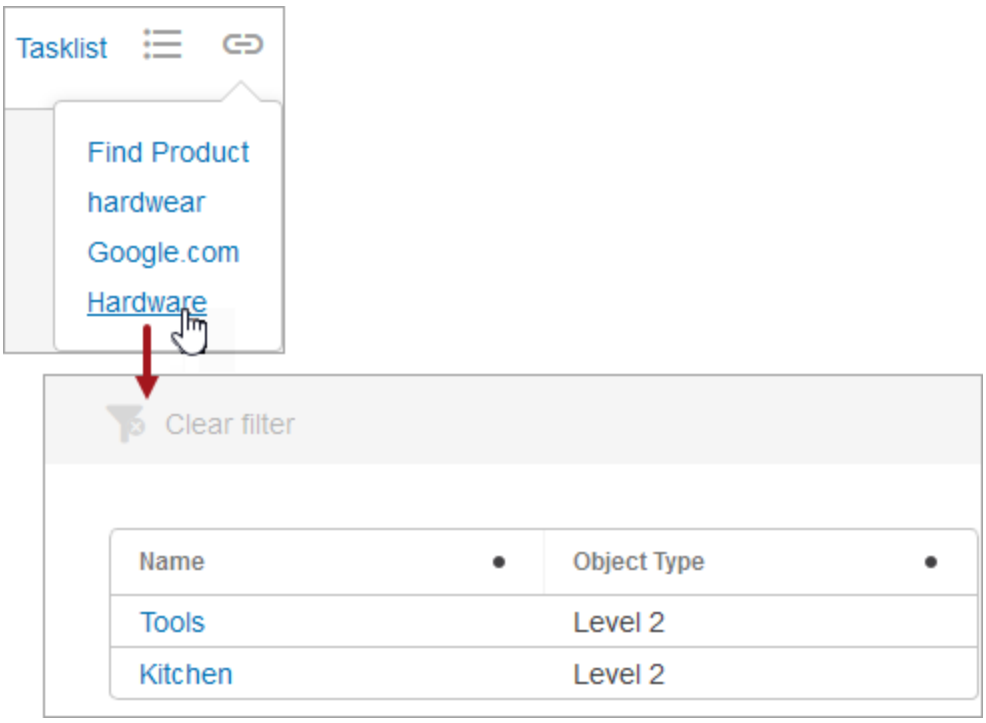
- **Context Help:** Enter in text that will help the user.
- **Css Class**: Enter an optional name of a CSS-style to be set as the primary style for the component.
- **Label**: Enter a label, otherwise, if no label is provided, the screen name will display.
- **Screen**: This is the only mandatory field. Choose a result screen from the dropdown, or click the Add button to create a new screen.
- **Screen Parameter**: Applies to the screen defined in the Navigation component.

Node Navigation

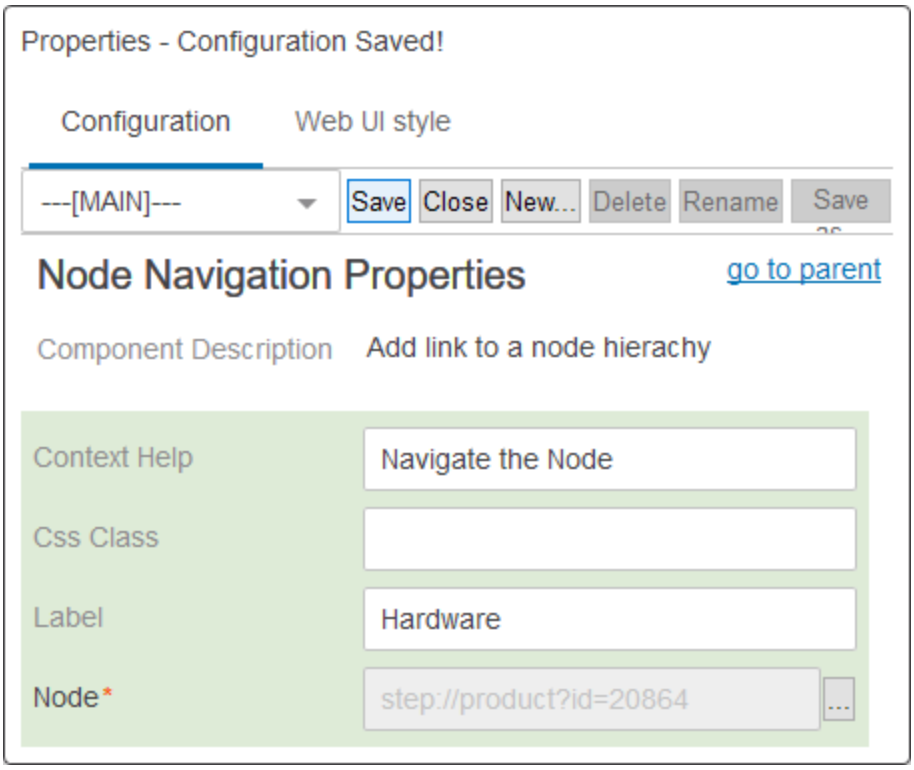
Important: A configured and mapped Children of Types Screen must be in place for this to work. For more information, see the **Children of Types Screen** topic in the **Web UI Getting Started** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Clicking the Node Navigation link will bring you to a configured and mapped Children of Types Screen. You can view, at a glance, child objects of a specified object type or types.

In the example below, the top node configured is called 'Hardware,' and clicking this displays its children.



When adding the Node Navigation, the Node Navigation Properties displays. All fields are described below:

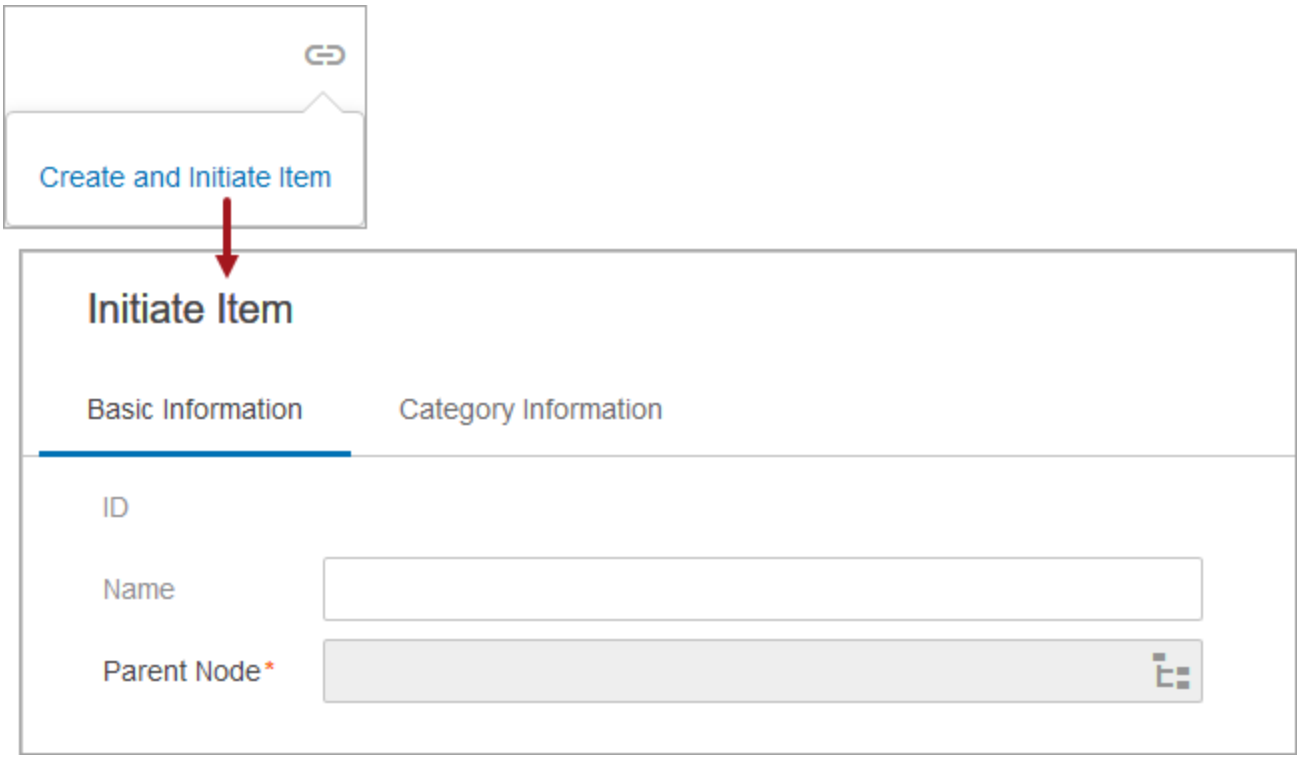


- **Context Help:** Enter in text that will help the user.
- **Css Class**: Enter an optional name of a CSS-style to be set as the primary style for the component.
- **Label**: Enter a label, otherwise, if no label is provided, the node name will display.
- **Node**: This is the only mandatory field. Click the ellipsis button (...) next to the field and select the desired node.

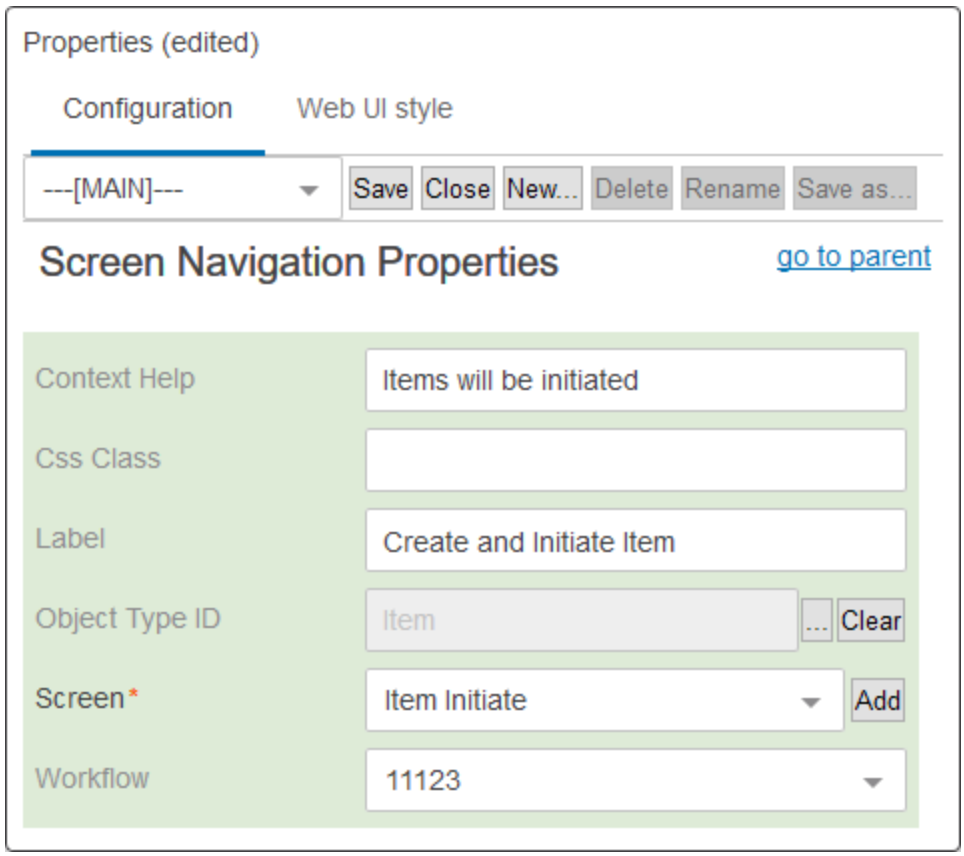
Screen Navigation

The Screen Navigation link brings you to the desired screen in Web UI. It is primarily used for creating designated object types with the option of initiating them into workflows using the Initiate Item Screen. For more on creating and item initiating, see the **Initiate Item Screen** topic in the **Workflows in Web UI** section of the **Web User Interface / Web UI Setup and User Guide** documentation.

In the following example, clicking on the 'Create and Initiate Item' link displays the Item Initiate Screen.



When adding the Screen Navigation, the Screen Navigation Properties displays. All fields are described below:

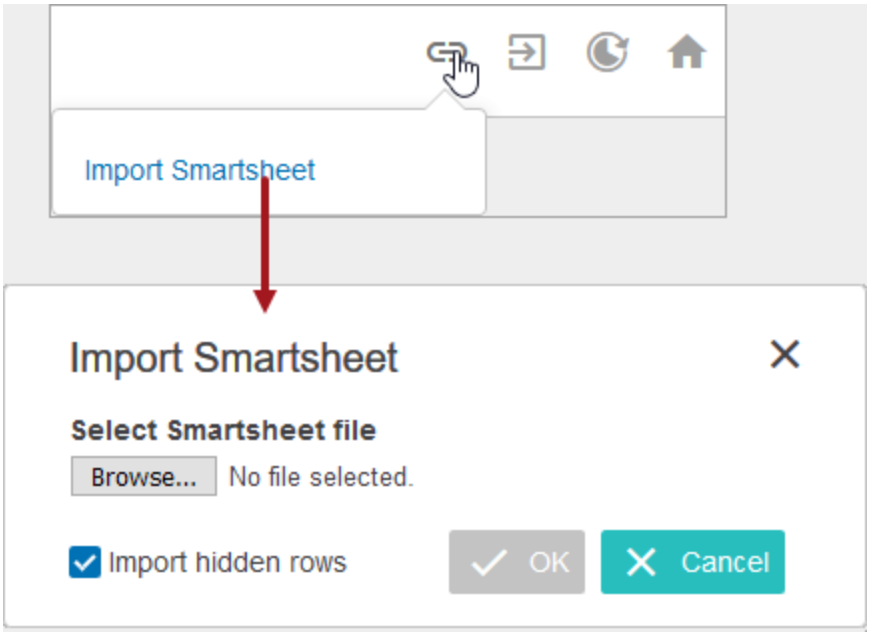


- **Context Help:** Enter in text that will help the user.
- **Css Class**: Enter an optional name of a CSS-style to be set as the primary style for the component.
- **Label**: Enter a label, otherwise, if no label is provided, the node name will display.
- **Object Type ID**: Select the object type that is to be created, initiated, or both.
- **Screen**: This is the only mandatory field. Choose a screen from the dropdown, or click the Add button to create a new screen.
- **Workflow**: Select the desired workflow from the dropdown menu for the designated object type to be initiated into.

Smart Sheet Import Action

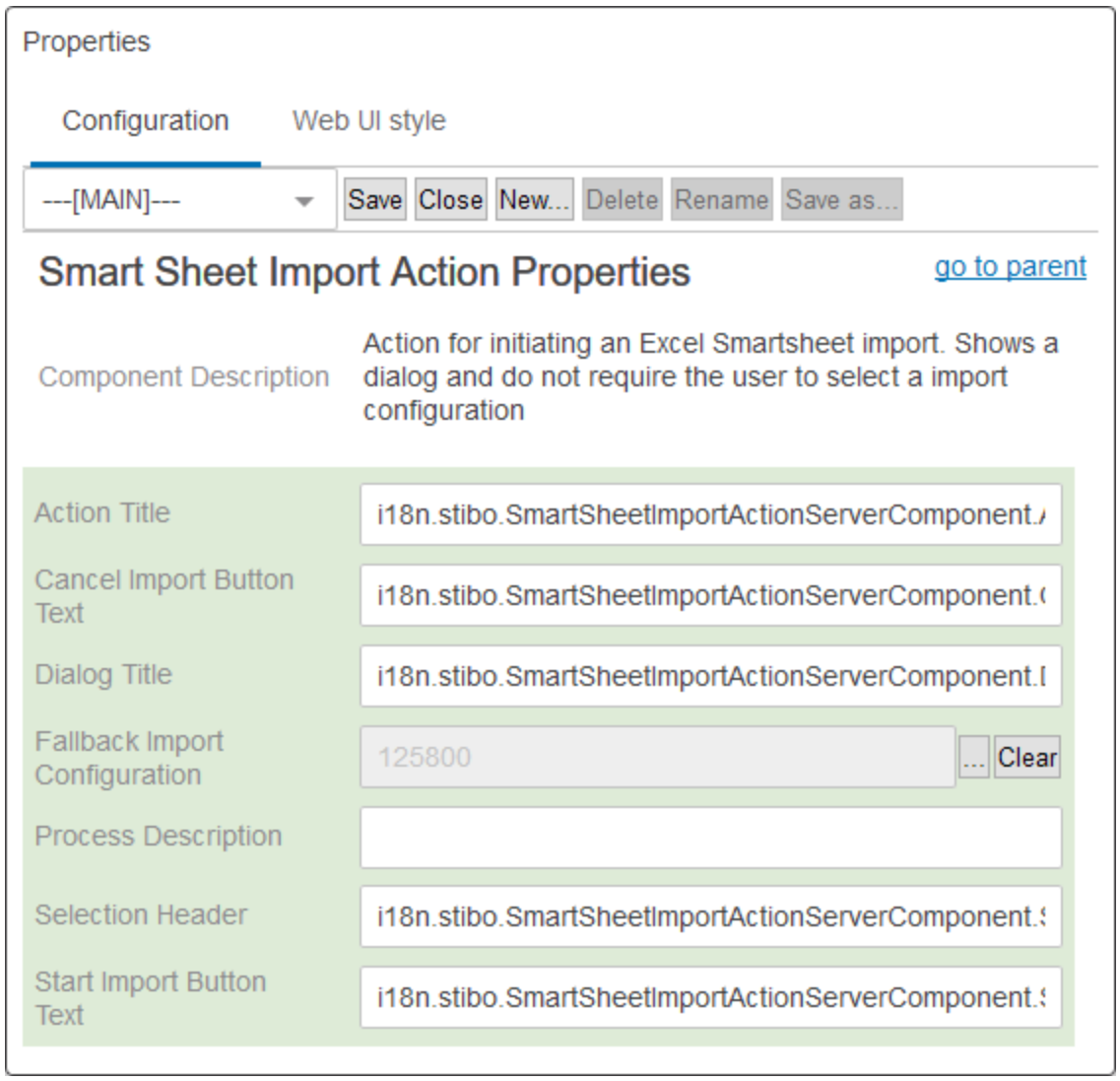
Note: To use Smartsheets, you must be logged in as a supplier.

The Smart Sheet Import Action is used to import product data into STEP. Smart Sheet Import Action shows a dialog and does not require the user to select a import configuration.



For more on importing Smartsheets, see the **Smartsheet Import Action** topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

When adding the Smart Sheet Import Action, the Smart Sheet Import Action Properties displays. All fields are described below:



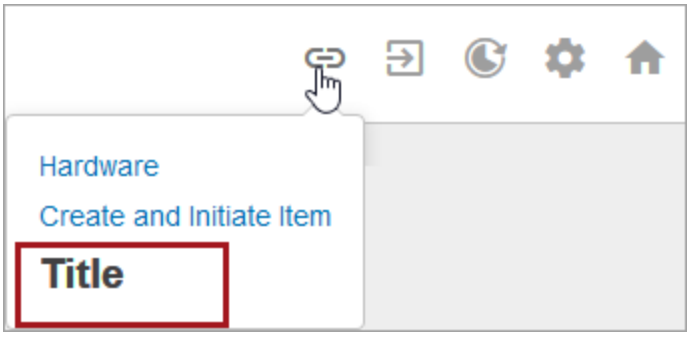
Note: All messages, titles, or labels in this configuration are displayed from the translation i18n keys which resides on the server.

5. In the **Action Title** parameter, enter a name for the action.
6. In the **Cancel Import Button Text** parameter, enter the displayed text for the cancel button.
7. In the **Dialog Title** parameter, enter a title for the import dialog.
8. In the **Fallback Import Configuration** parameter, click the ellipsis button (...) and select an existing import configuration to apply to all Smartsheet imports where no import configuration was specified in the export configuration.
9. In the **Process Description** parameter, enter a template for the process description.
10. In the **Solution Header** parameter, enter a label for the select file prompt.
11. In the **Start Import Button Text** parameter, enter the text that should appear for the start import button.

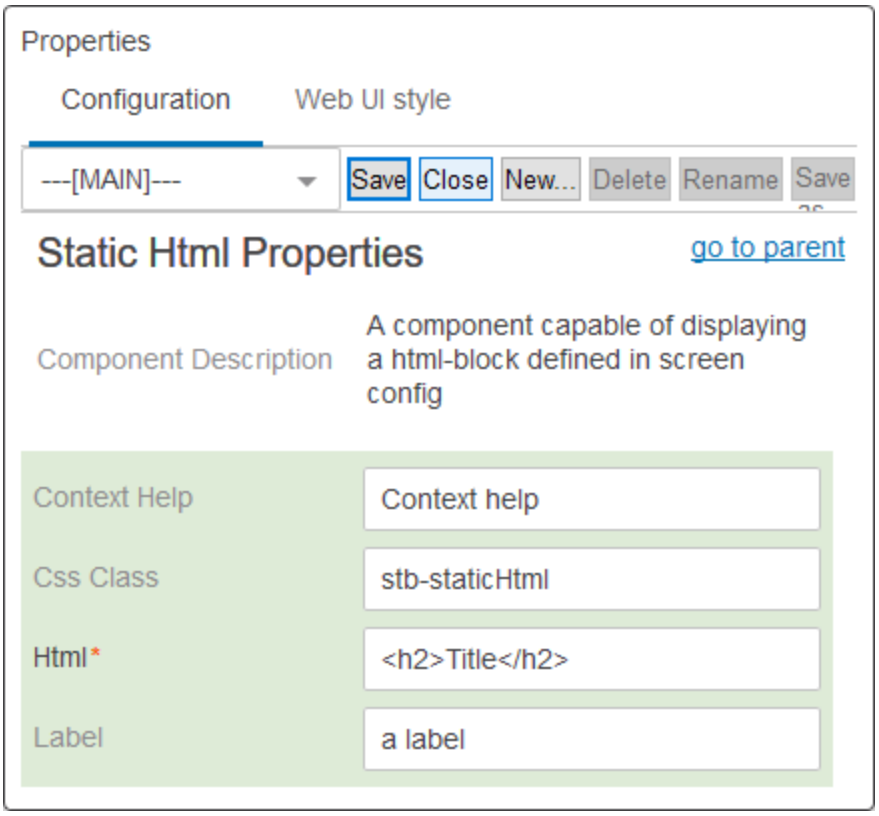
Static Html

The Static Html component is capable of displaying an html-block defined in screen configuration.

In the example below, the html tag '<h2>Title</h2>' was used.



When adding the Static Html component, the Static Html Properties displays. All fields are described below:



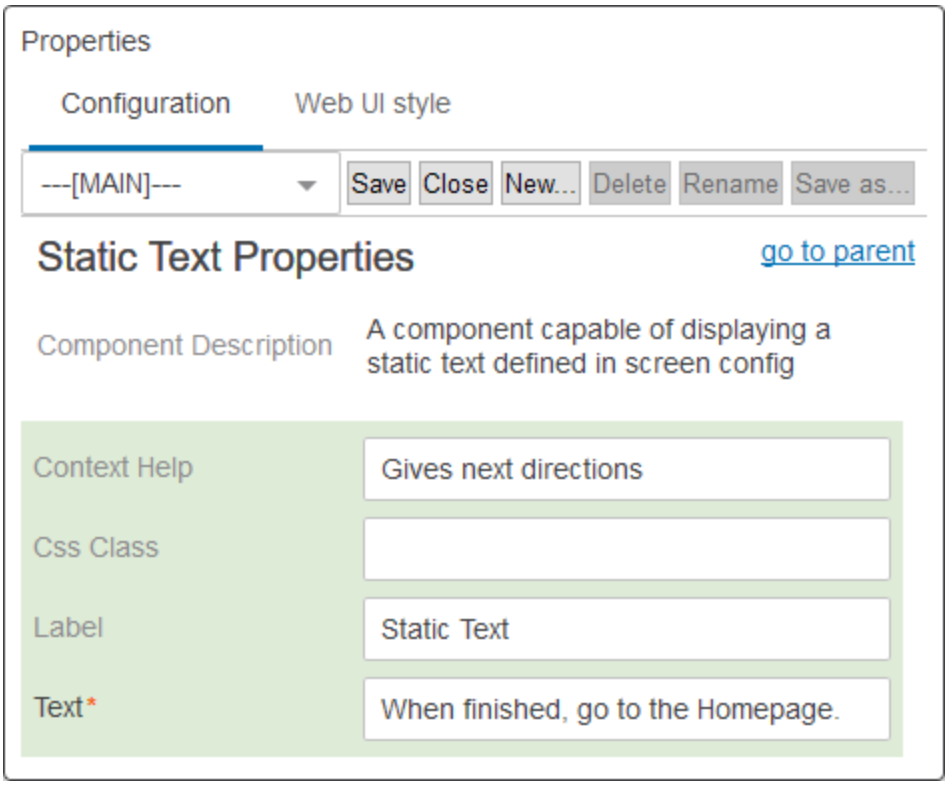
- **Context Help:** Enter in text that will help the user.
- **Css Class**: Enter an optional name of a CSS-style to be set as the primary style for the component.
- **Html**: This is the only mandatory field. Enter in the desired html code.
- **Label**: Enter a label, otherwise, if no label is provided, the node name will display.

Static Text

Static Text is a component that displays text that is defined in screen configuration.

In the example below, directions are given to the user.

When adding the Static Text component, the Static Text Properties displays. All fields are described below:



- **Context Help:** Enter in text that will help the user.
- **Css Class**: Enter an optional name of a CSS-style to be set as the primary style for the component.
- **Label**: Enter a label, otherwise, if no label is provided, the node name will display.
- **Text:** This is the only mandatory field. This displays text that is defined in screen configuration.

Global Header Search Component

The Global Header Search component displays in the Web UI's global header, which is defined as the strip of space that runs across the top of the Web UI, and is accessible regardless of which screen in the Web UI is being viewed. Search terms can be entered in the Global Header Search and searched on instantly. Multiple search types made up of any combination of four search plugins can be configured for the search bar, and may then be selected via a dropdown located adjacent to the search field.

The Global Header Search component supports a standard search on ID and Name without configuration, and other search criteria via configurable search plugins. This component can be configured to search broadly throughout STEP, or to search only a sub-section of the system, depending on the needs of the user.

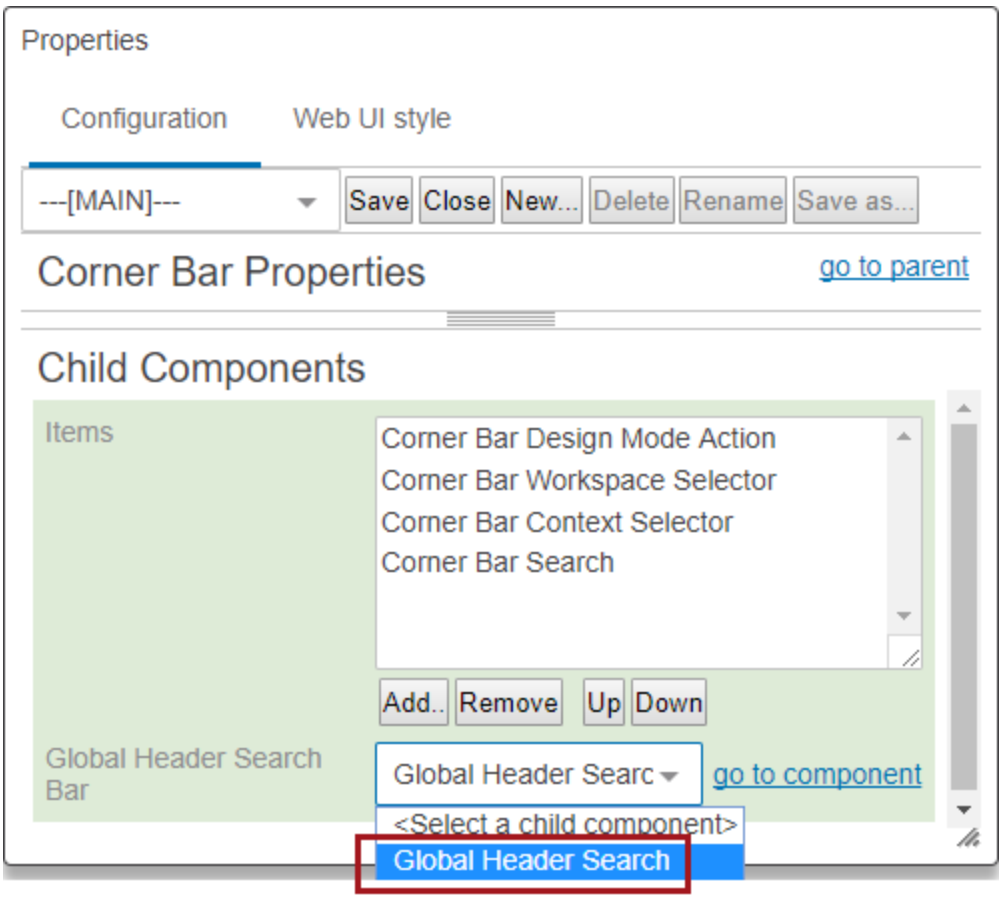
Prerequisites

It is expected that anyone configuring the Search bar in the global header is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

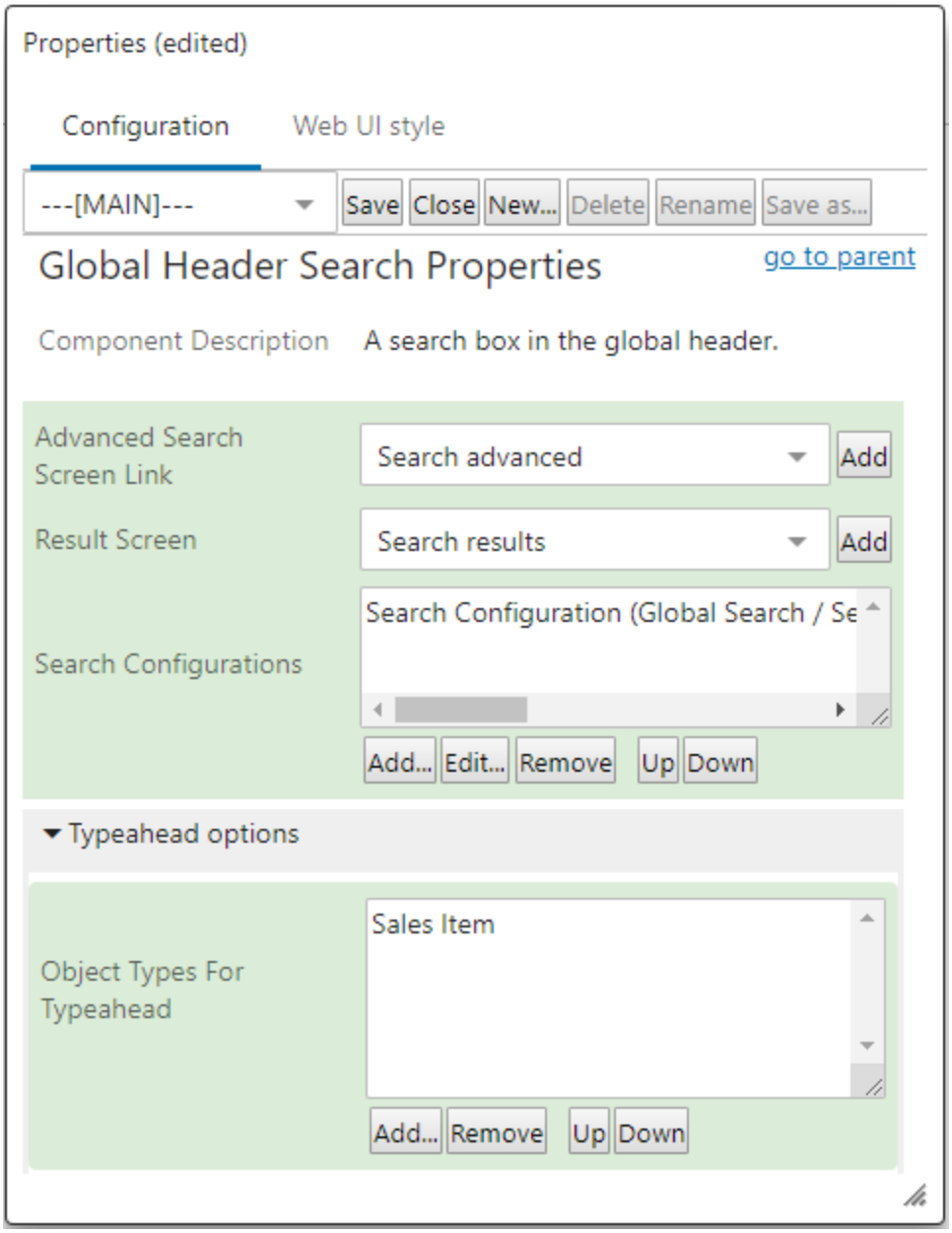
Configuring the Global Header Search component

To add the Global Header Search component, from the Web UI Designer, navigate to the MAIN screen > Child Components, then select 'Corner Bar' from the Corner Bar dropdown. Click **go to component**. At the bottom of Corner Bar Properties' Child Components section, there is a parameter titled 'Global Header Search Bar.'

To add the Global Header Search to the Web UI, select the 'Global Header Search' component from the dropdown and then click 'Save.' Without further configuration, the Global Header Search will display in the global header and any search terms entered into the search bar will be matched against the name and ID of objects in the system.



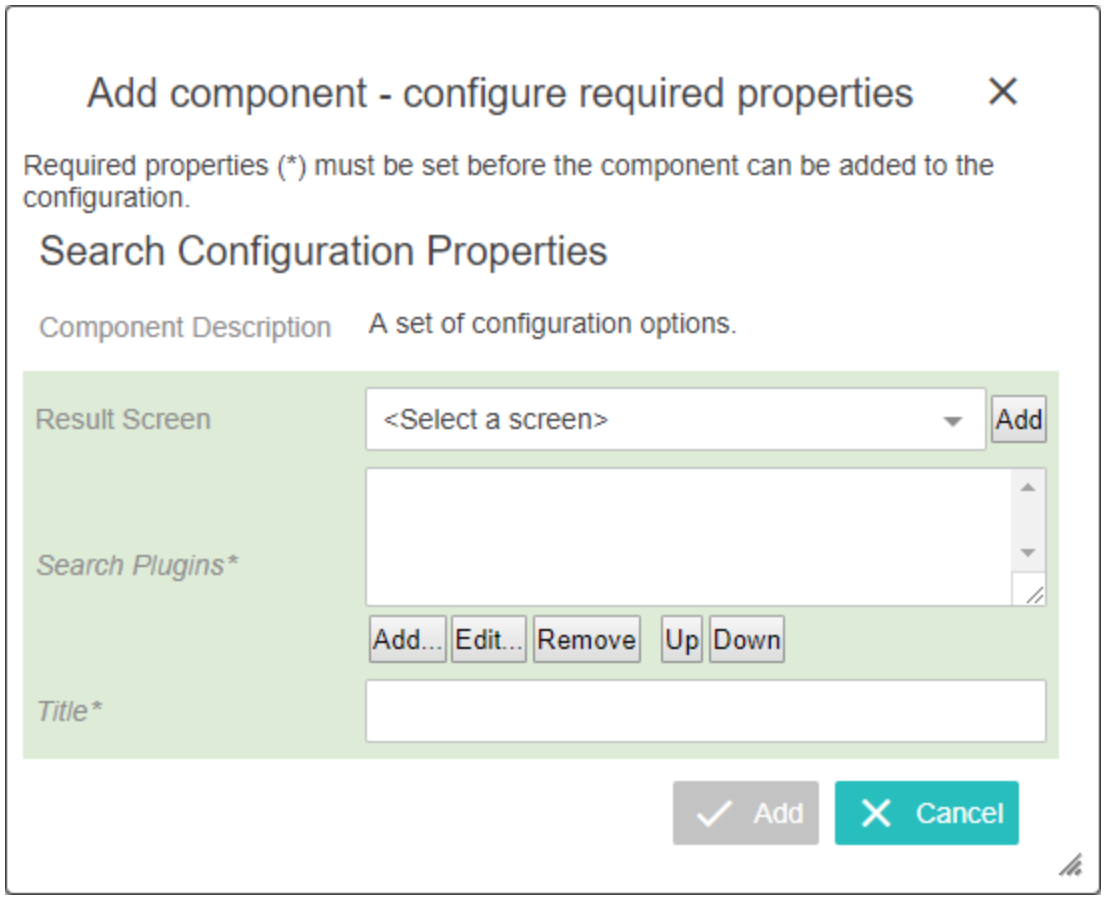
To configure the Search Bar in Global Header to execute more targeted searches, users will click 'go to component'. The following designer screen will then display:



1. **Advanced Search Screen Link**: By selecting a screen from the dropdown on this parameter, the user is both adding a hyperlink to the right of the Global Header Search bar that reads, 'Advanced search', and determining which screen will display when that hyperlink is clicked. Though all Web UI screens are available to choose from, users are encouraged to select an 'Advanced Search' screen.
2. **Result Screen**: By selecting a screen from the dropdown on this parameter, the user chooses which screen displays the search results. Recommended practice is to select a generic search or advanced search screen. If this parameter is not set, then the search result display will default to the 'Advanced Search' screen.
3. **Search Configurations**: In this parameter, users can customize how the Global Header Search processes search terms. By clicking the **Add...** button beneath the field, users may add and configure one or multiple

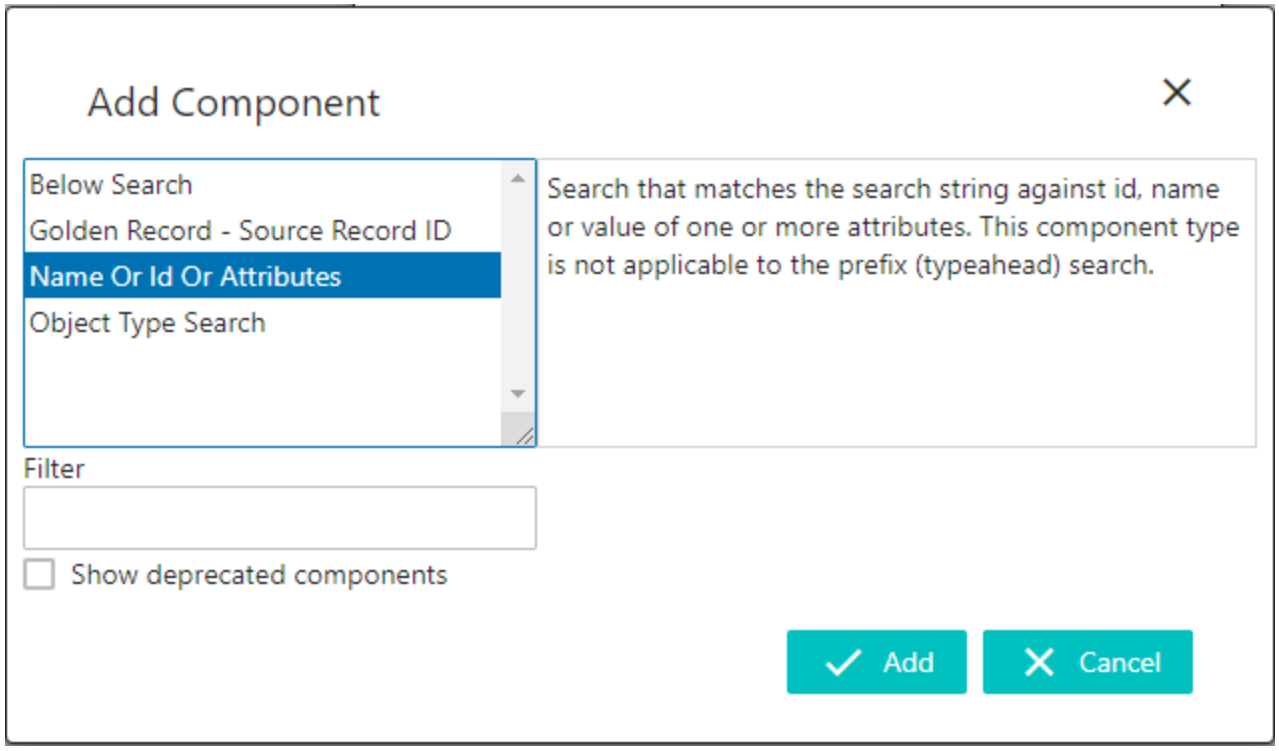
plugins. Each configured plugin will appear in a dropdown attached to the left side of the Global Header Search bar. Users may also select an existing search plugin and click **Edit...** to make changes to its configuration. By clicking the **Remove** button, users may delete existing search plugins. Users may configure the order in which the plugins appear in the dropdown by selecting a plugin and clicking the **Up** and **Down** buttons until the order is correct.

Clicking either the **Add...** or the **Edit...** buttons will open a 'Search Configuration Properties' window, as shown below.



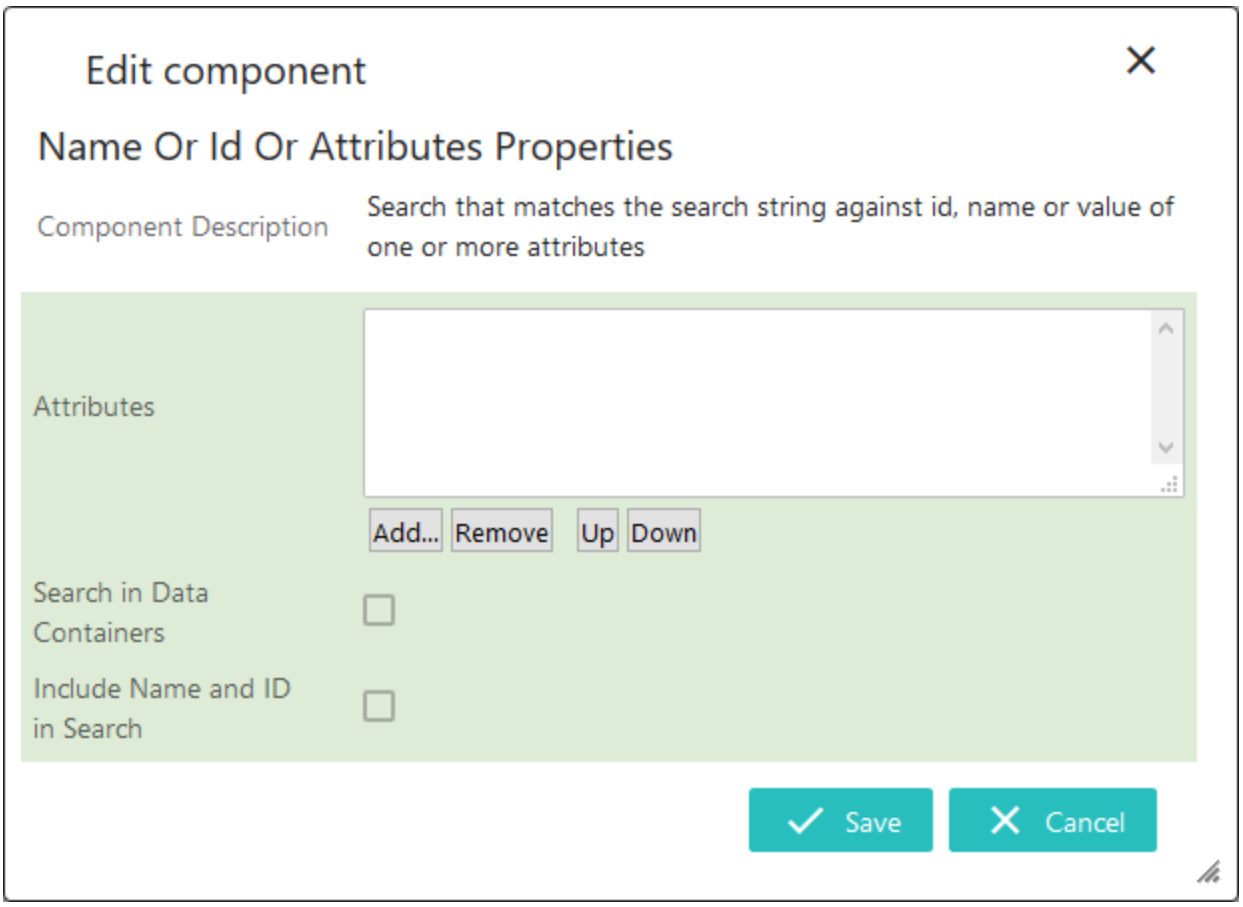
In the 'Search Configuration Properties' window, users will find three parameters:

- **Result Screen**: By selecting a screen from the dropdown on this parameter, the user determines which screen will display the results of a search initiated using this search plugin. Recommended practice is to select a generic or advanced search screen. If this non-mandatory parameter is not set, then the search results for the search plugin display will default to the 'Advanced Search' screen.
- **Search Plugins**: In this parameter, users will add and configure the search type in their Global Header Search plugin through configuration of one (or more) of four search components. By clicking the **Add...** button beneath this field, an 'Add Component' window displays.



The search components available are:

- The **Below Search** component determines under which nodes to run the search. If this component is not specified, every node in the system will be searched.
- The **Golden Record - Source Record ID** component alters the search logic so that it matches the search string against golden record IDs or the IDs of the source records that contribute to a golden record, and returns the active golden record. To use this plugin, one or more matching algorithms must be set on the widget by selecting the plugin once it has been added and clicking **Edit...**. In the Golden Record - Source Record ID Properties window, click **Add...** and browse or search for the desired matching algorithm, then click **OK**. Once the selections have been made, click **Save**. It should be noted that this component should not be configured with any other search component as doing so may cause poor performance and empty results.
- The **Name Or Id Or Attributes** component, when added, amends the search logic so that the search string entered into the global search field searches against the ID and Name of objects in the system. To further configure the Name Or Id Or Attributes component, users can double-click on the component, which prompts display of this 'Edit component' window:



By clicking the 'Add...' button beneath the 'Attributes' field, users may add specific attributes the search will run against. However, if one or more attributes are added to this field, the Global Header search will no longer run search string data against all Names and IDs in the system. To include Names and IDs in a search along with configured attributes, users must also check the box beside 'Include Name and ID in Search'. To add data containers to a Global Header search, users must check the box beside 'Search in Data Containers'.

- The **Object Type Search** component determines which object types to search for.

These search components may be added, one per Global Header Search plugin, or they can be used in conjunction with one another to configure a single Global Header Search plugin. For instance, a **Below Search** component can be added to a plugin to specify to which nodes an initiated search should be restricted. Then, to that same plugin, an **Object Type Search** component can be added to further narrow the search to only a specific object type in the configured nodes.

- **Title**: The text value added to this mandatory field determines the title of the search as it appears in the Global Header Search dropdown.

4. **Object Types for Type Ahead:** In this parameter, click **Add...** and browse or search for the object types that should be valid for the search bar's type ahead functionality. Only objects of the specified types will appear in the type ahead results.

For more information on using the Advanced Search screen, see the **Advanced Search** section of the **Web User Interfaces** documentation.

Merging Confirmed Matches

Once two objects have been confirmed as duplicates they can be viewed on a Confirmed Matches component screen. The user can decide whether to merge the duplicates together or reject the confirmation, reverting the objects back into potential duplicates. Opting to merge the matches will invoke a Merge Nodes screen, allowing users to choose which of the two objects will persist following the merge, which will be deleted, and to select the specific attribute values and outgoing references to be applied to the surviving record.

For more information about the Potential Duplicates List component, see the **Potential Duplicates List** section of the **Web UI** documentation.

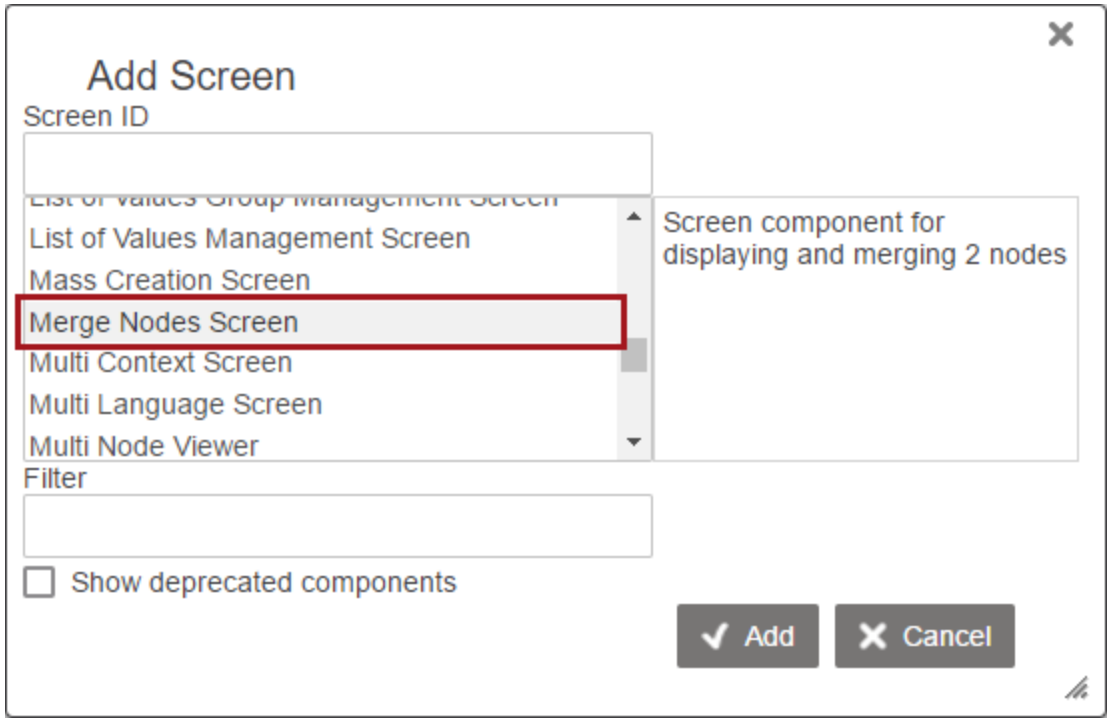
For more information about how to merge confirmed matches via workbench, see the **Handling Potential Duplicates** section of the **Matching and Linking** documentation.

Note: While the Merge Nodes Screen can be used to merge random nodes of the same super type, it is intended for usage with matching algorithms using the Match Action for Identify Duplicates in conjunction with the Merge Confirmed Match From Grid action in the Confirmed Matches component.

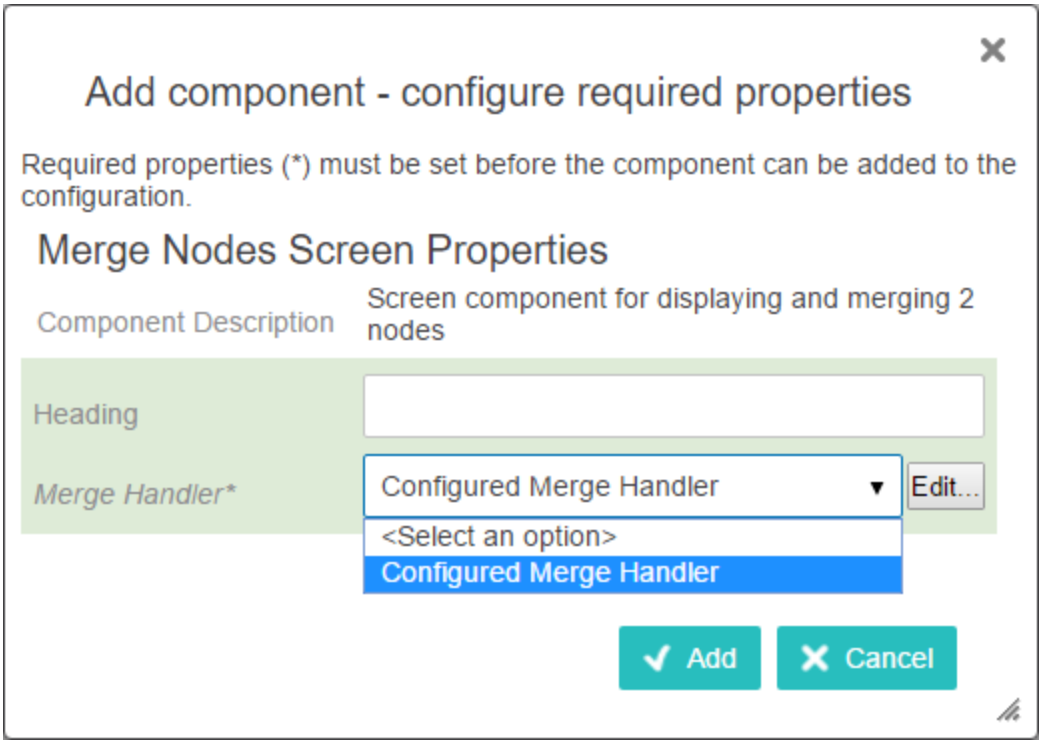
Configuration

Add Merge Nodes Screen

1. In design mode, select **New**.
2. In the 'Add screen' window that appears, select 'Merge Nodes Screen', enter a Screen ID, and then click **Add**.



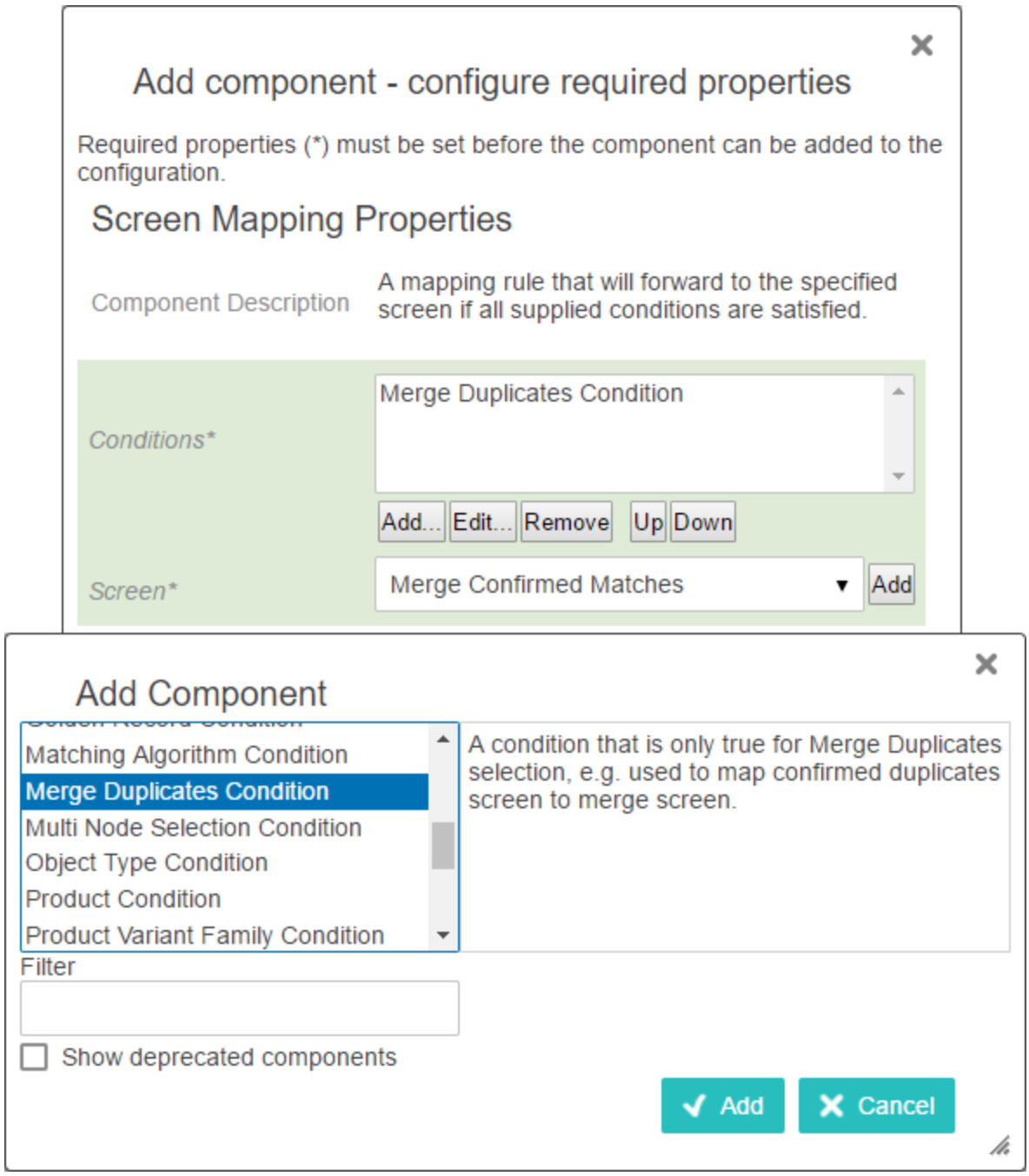
3. In the 'Merge Nodes Screen Properties' select 'Configured Merge Handler' from the 'Merge Handler' dropdown selector.



4. Click the **Add** button.

Map Merge Node Screen

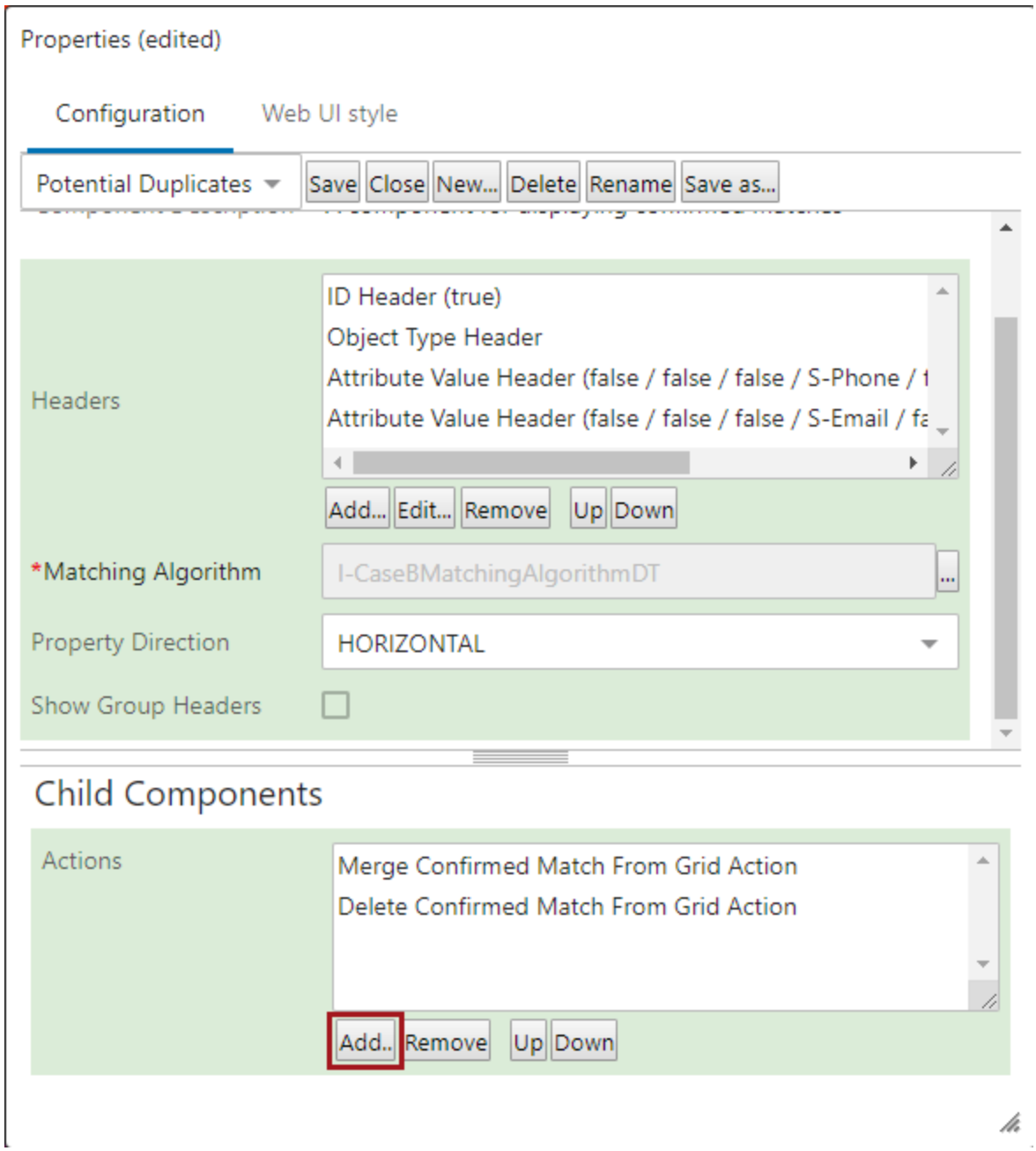
1. In design mode, navigate to [MAIN].
2. Under 'Mappings', click **Add**.
3. Under 'Conditions', click **Add**, and select 'Merge Duplicate Condition' from the list that appears. Click **Add**.



4. Under the 'Screens' dropdown, select the Merge Nodes screen configured in the previous section.
5. Click the **Add** button.

Add Merge Confirmed Match From Grid Action

1. In design mode, select a 'Confirmed Matches' component screen. If one does not exist, configure it on any Tab Page or Node Details component.
2. Under 'Child Components', in the 'Actions' field, click **Add**.



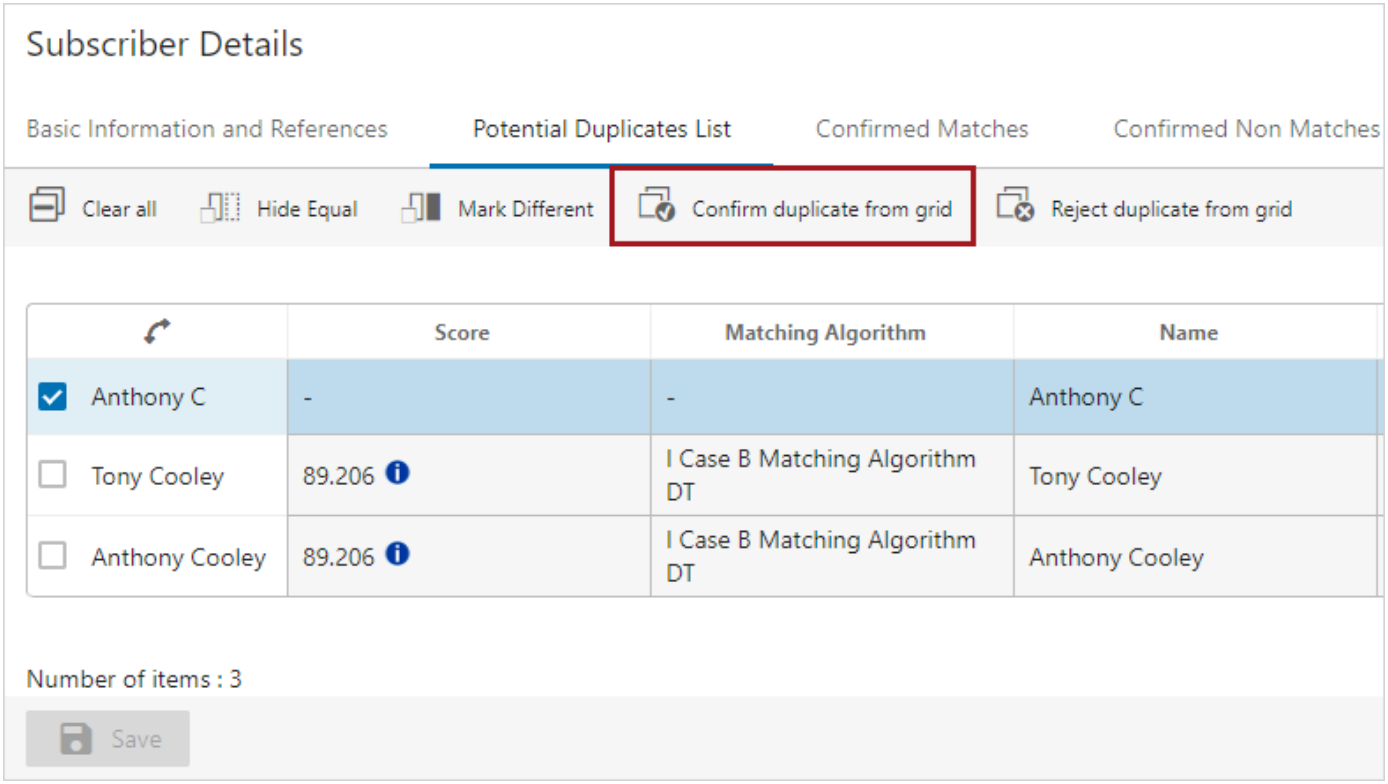
3. In the window that appears, select 'Merge Confirmed Match From Grid Action' from the list. Click **Add**.
4. Click **Save**.

Performing a Merge

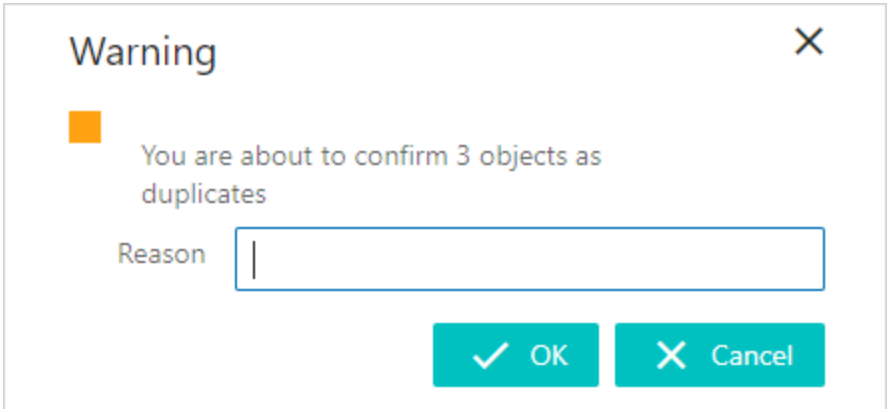
Before beginning the merge process there are a few caveats to consider. Metadata and inherited attributes, as well as inbound references, cannot be merged. Additionally, if the object that remains after the merge does not contain data for a given attribute or reference in any context, the data is taken from the deleted object and merged into the remaining object.

All attributes and references eligible for merging will appear in the table.

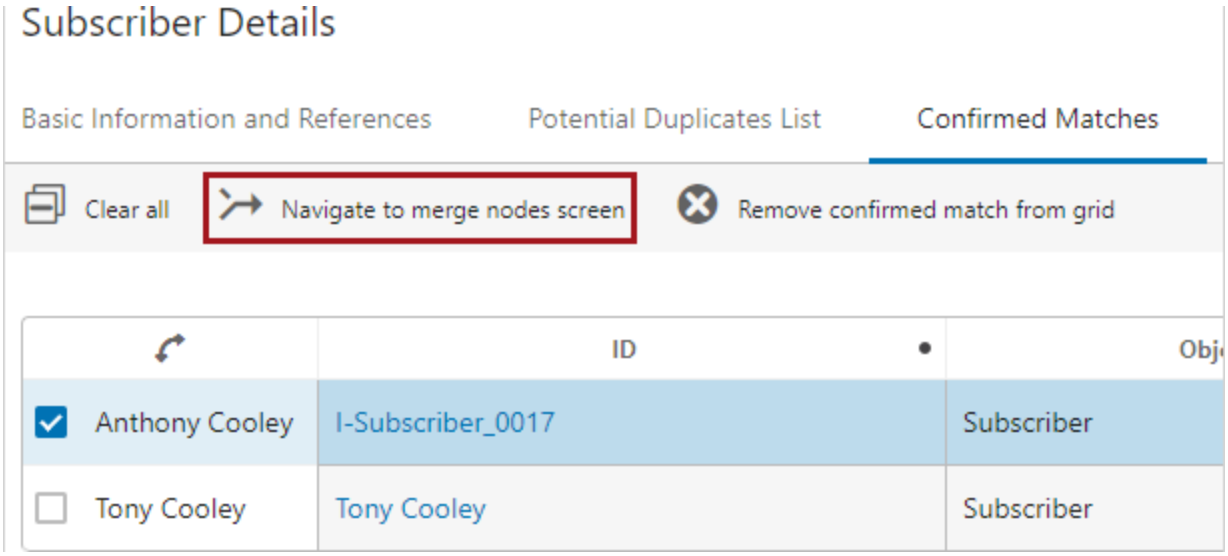
1. While on a 'Potential Duplicates List' screen, choose which object to merge with the currently selected node. Next, click the 'Confirm duplicate from grid' button.



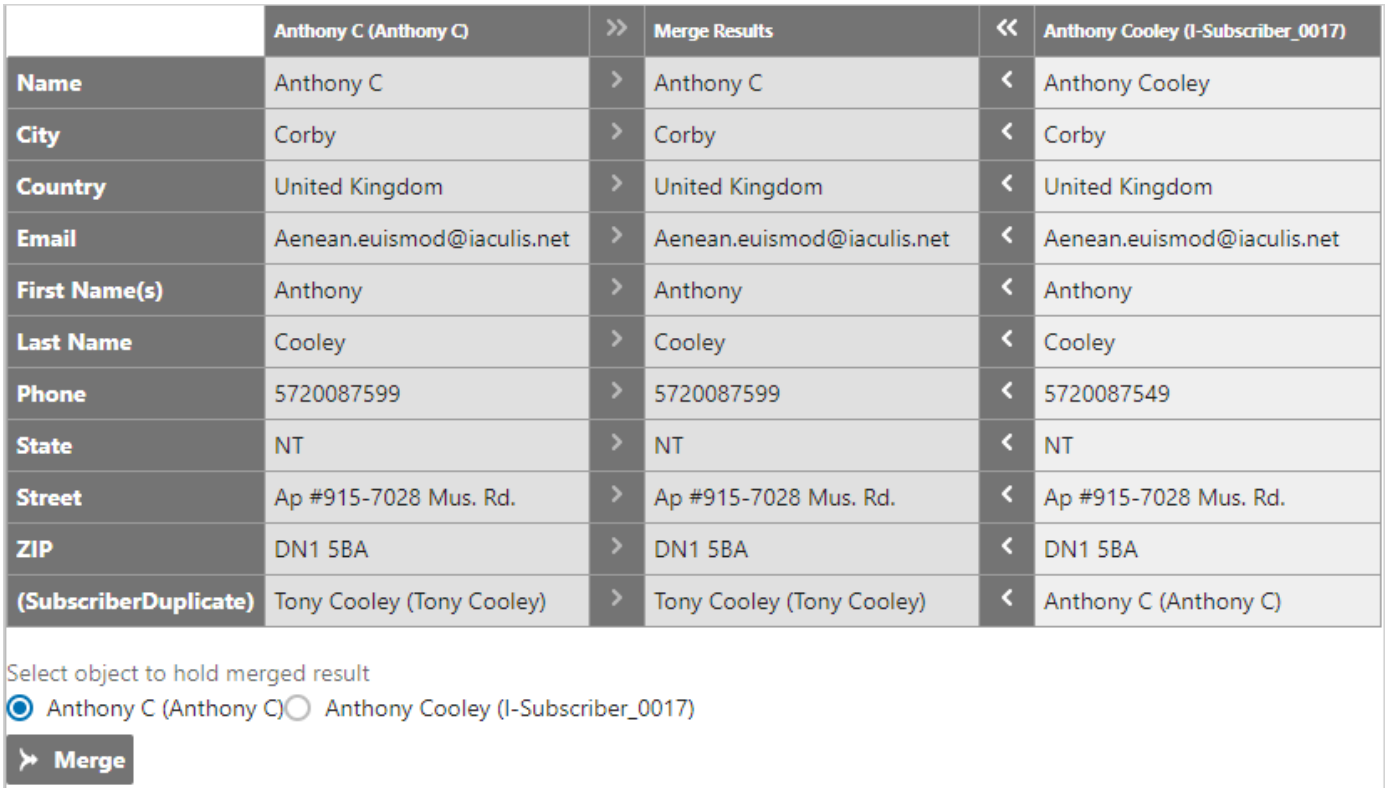
2. In the message that pops up, provide a reason for why they are duplicates, and then click **OK**.



3. Navigate to the 'Confirmed Matches' component screen and select which match to merge the currently selected node with. Then, click the 'Navigate to merge nodes screen' button.



4. On the merge screen that pops up, choose which attributes and references will survive the merge by clicking the arrows next to them. Surviving attributes / references are highlighted green and appear in the 'Merge Results' column. Select the surviving node via the radio buttons that appear above the **Merge** button.



	Anthony C (Anthony C)		Merge Results		Anthony Cooley (I-Subscriber_0017)
Name	Anthony C	›	Anthony C	‹	Anthony Cooley
City	Corby	›	Corby	‹	Corby
Country	United Kingdom	›	United Kingdom	‹	United Kingdom
Email	Aenean.euismod@iaculis.net	›	Aenean.euismod@iaculis.net	‹	Aenean.euismod@iaculis.net
First Name(s)	Anthony	›	Anthony	‹	Anthony
Last Name	Cooley	›	Cooley	‹	Cooley
Phone	5720087599	›	5720087599	‹	5720087549
State	NT	›	NT	‹	NT
Street	Ap #915-7028 Mus. Rd.	›	Ap #915-7028 Mus. Rd.	‹	Ap #915-7028 Mus. Rd.
ZIP	DN1 5BA	›	DN1 5BA	‹	DN1 5BA
(SubscriberDuplicate)	Tony Cooley (Tony Cooley)	›	Tony Cooley (Tony Cooley)	‹	Anthony C (Anthony C)

5. Click **Merge** to merge the two objects. The object that was not picked to survive will be deleted. Note that this deletion is not automatically approved.

Multi Context Screen

The Multi Context Screen is a screen type designed to show attribute values and outbound references of an object in multiple contexts on the same Web UI screen. Working across different contexts, comprised of a variety of dimension points (e.g., language, country), allows customers to specify data valid for each of the contexts. Using a Multi Context screen means that users do not need to switch contexts manually to evaluate attribute values one context at a time.

The Multi Context screen needs to be configured to display attributes and reference types. If configuration allows it, end users can set up their own customizable views, including deciding which attributes and references to display. Plus, there are on-screen data filtering options to hide equal values or highlight differences in the data. This can be especially useful to evaluate data between multiple contexts, quickly identifying which values differ across the displayed contexts.

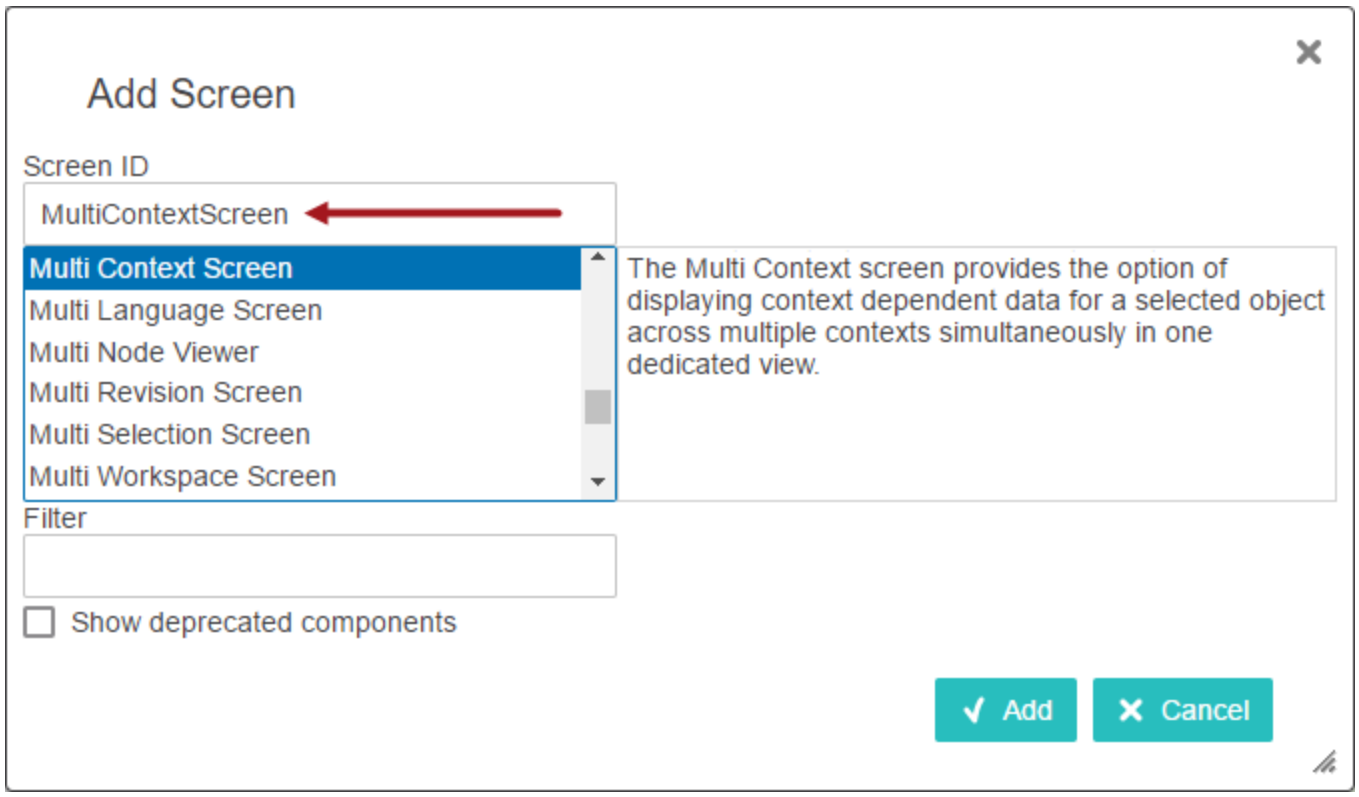
Additionally, users can suppress references and remove suppression of references, when the functionality is enabled. A reference may be suppressed for various reasons. One example is an image—what may be acceptable in one country may not be acceptable in or may not be relevant to another country or there may be licensing restrictions. Another example is product documentation that is translated into various languages but applicable to only certain countries in which a product is sold.

Prerequisites

It is expected that anyone configuring the Multi Context Screen component is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Adding a New Multi Context Screen

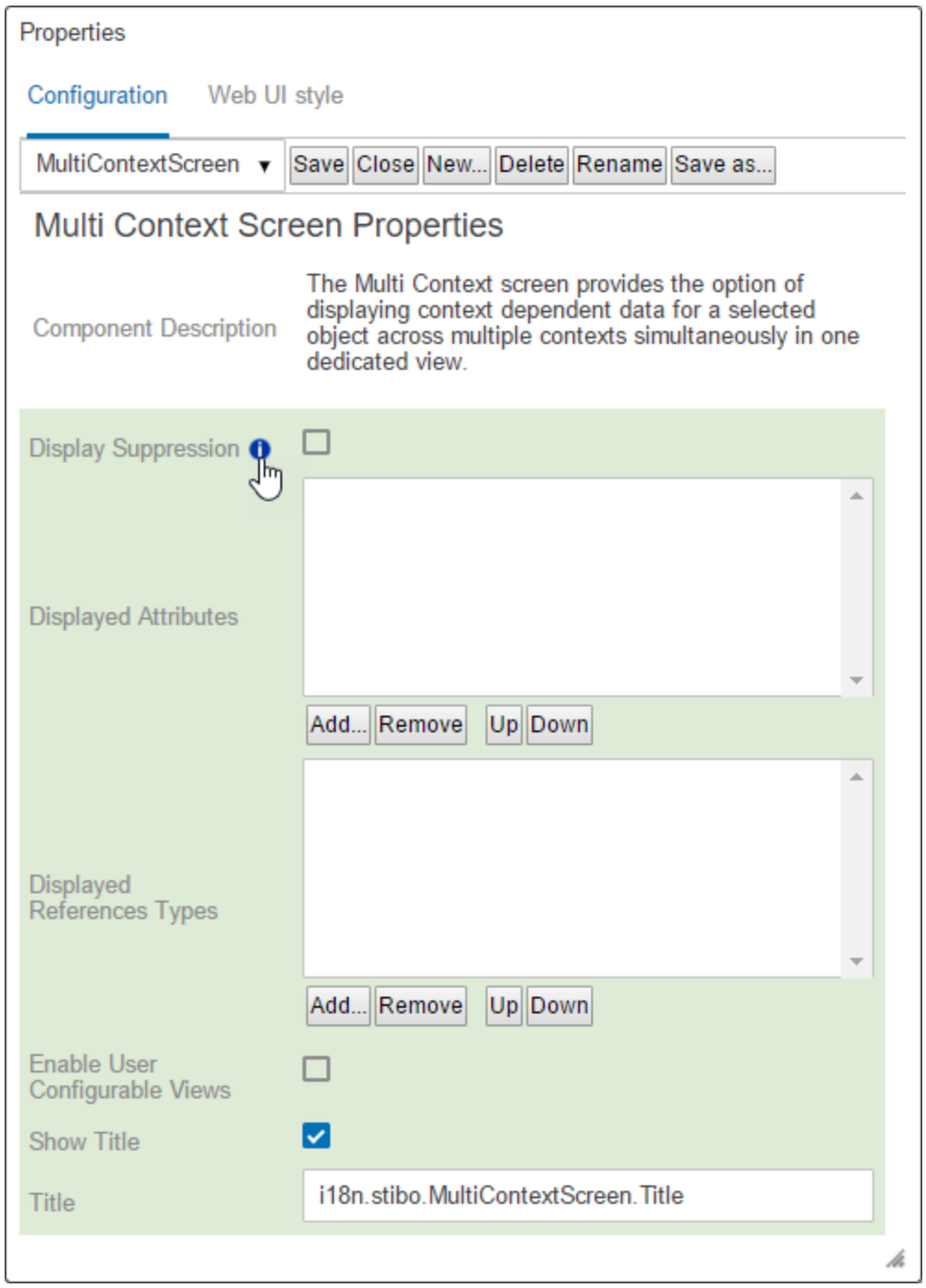
Steps for creating a new screen are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic. Select 'Multi Context Screen' as the screen type (shown in the screenshot below).



At this point, either close the designer and configure the screen at a later time, or continue on with the steps in the next section.

Configuring a Multi Context Screen

Each parameter should be configured as needed. To guide you in your setup, help text is available for each parameter and is accessible by clicking the info icon to the right of each parameter name (displays upon mouse over).

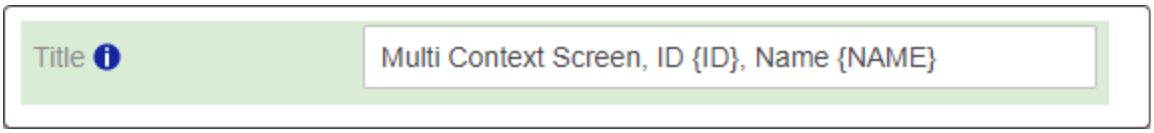


1. With the designer window open, select the screen ID for the **MultiContextScreen** using the screen dropdown list. If continuing on after creating a new Multi Context screen, Multi Context Screen Properties should already be displayed.
2. Enable **Display Suppression** if users should have the option to suppress dimension-dependent references. When enabled, a Suppression header (for displaying the suppression status) is added to the

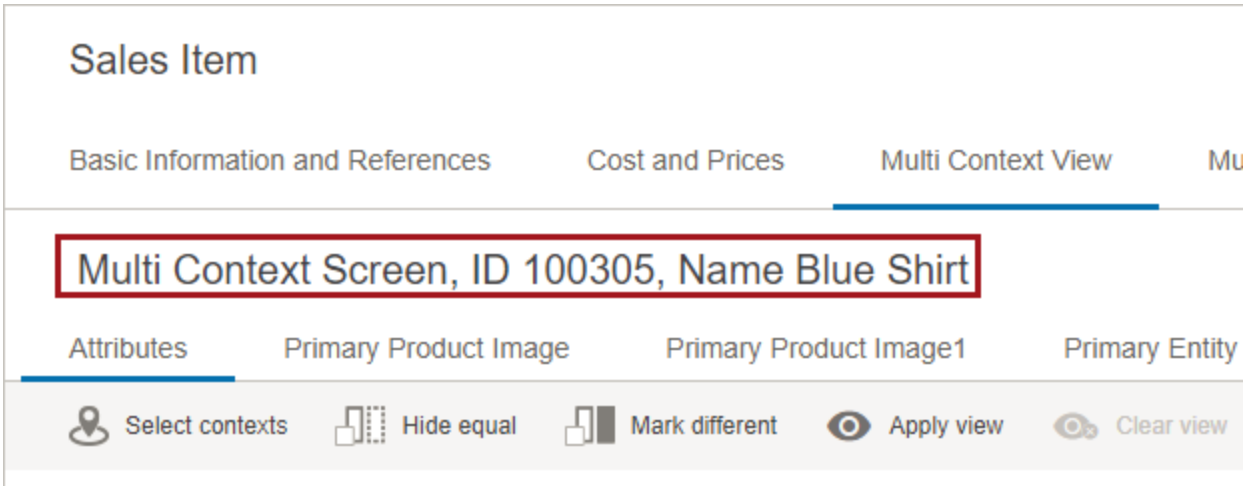
tables within the reference type tabs together with the actions for suppressing and removing a suppression of a reference.

3. Click **Add** under the **Displayed Attributes** value field. Select attributes or attribute groups from the Select Node(s) dialog. These will display in columns on the Attributes tab. Click **OK** when done. In addition to the selected attributes, ID and Name display as columns within the grid.
4. Click **Add** under the **Displayed References Types** value field. Select reference types from the Select Node(s) dialog. Each reference type displays as its own tab on the Multi Context screen. Click **OK** when done. In addition to the metadata attributes valid for each reference type displaying in the grid, Title also displays as a column and displays the referenced object name.
5. **Enable User Configurable Views** gives end users an option to create and save their own customized views by adding and removing attribute columns within the table on the Attributes tab. This parameter is enabled by default. Click the checkbox to disable and users will no longer see the Apply view / Clear view icons.
6. Determine if you want to display the title. Leave the **Show Title** parameter enabled if the Multi Revision Screen should display the title. Disable the parameter to hide the title and its associated white space.
7. If a title should display, determine if the default title should remain, or if a custom or descriptive title is necessary. The default title will display as 'Multi Context' on the screen in the top left corner. Adding a descriptive **Title** is optional. Static text can be entered and/or placeholders ({ID}, {NAME}) can be used for including the ID and Name of the selected object. If text is entered, the title will be displayed in the upper left corner of the screen.

   As an example, this is the text / placeholders entered as part of the configuration:

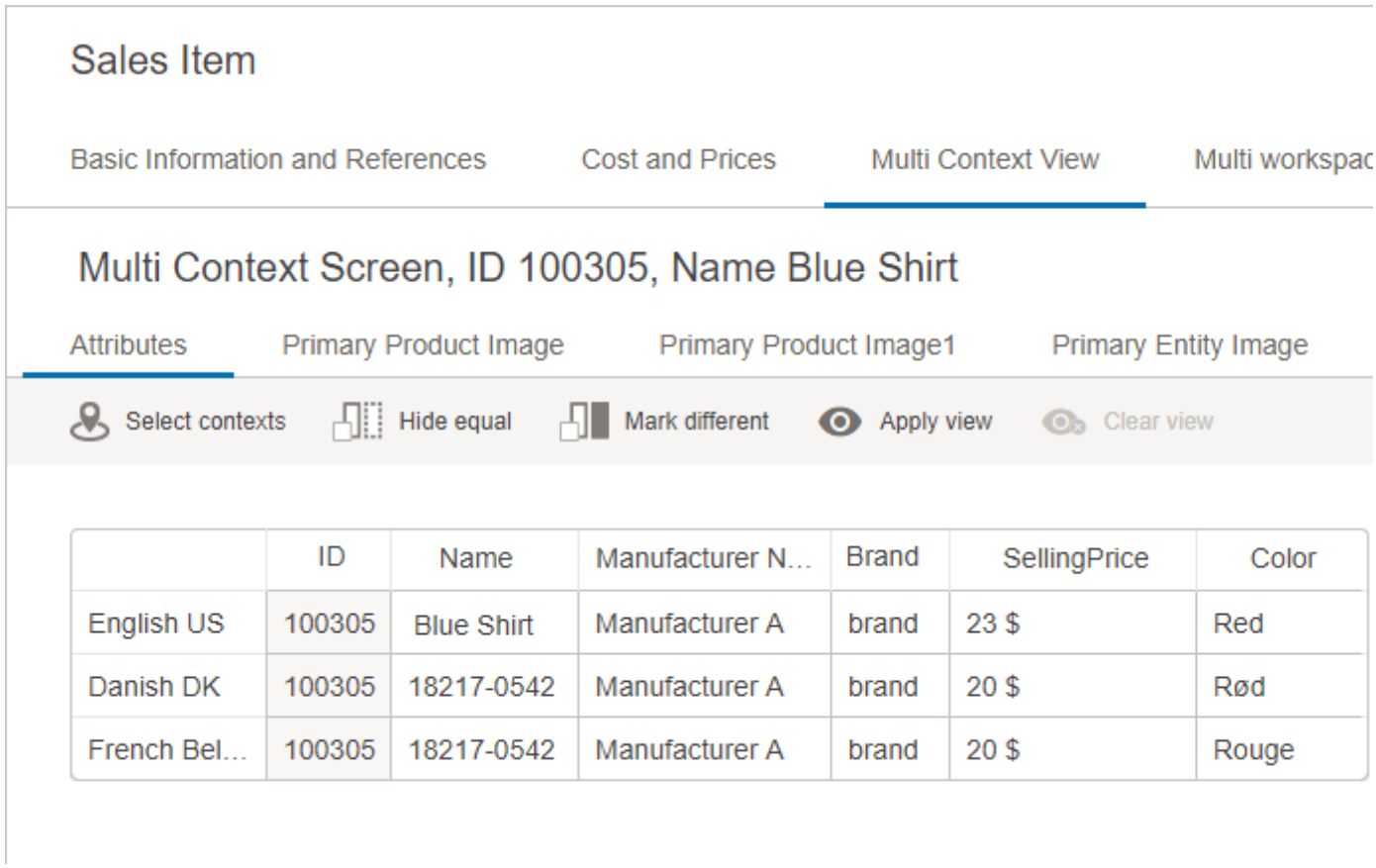


   This is the resulting title:

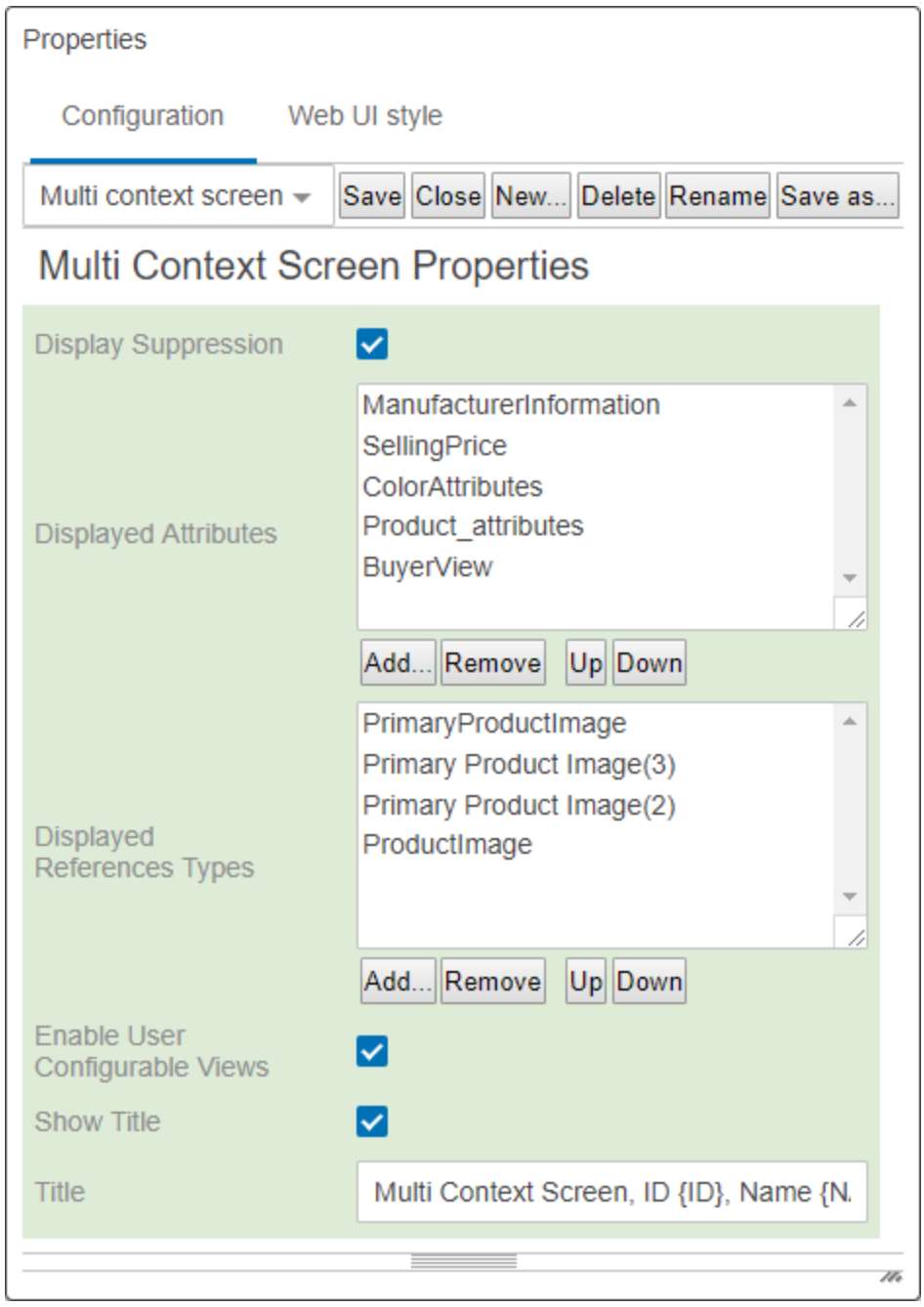


8. Click **Save** in the designer window. Close the window or complete the next step before existing design mode.
9. Determine how the user will access the Multi Context Screen. It can either be mapped using Main Properties or added to a sub screen tab page on a Node Details Screen. For more information about mapping, see **Configuring the Parameters** in the **Main Properties** documentation, and for more information about sub screen tab pages, see the **Tab Pages** topic in the **Node Details Component** section of the **Web User Interface / Web UI Setup and User Guide** documentation.

This is an example of a Multi Context Screen configured to display as a sub screen tab page on a Node Details screen.



The parameters are set as follows:



In this example, the attribute 'Price' is not valid for the object type and therefore does not display in the table.

As with any screen, the Multi Context screen must be mapped appropriately in Main Properties > Mappings for end users to be able to access it. As an alternative to mapping, the Multi Revision screen can be added as a Sub Screen Tab Page on a Node Details screen (as shown in the examples within this topic).

For more information about mapping, see **Configuring the Parameters** in the **Main Properties** topic, and for more information about sub screen tab pages, see the **Tab Pages** topic in the **Node Details Component** section of the **Web User Interface / Web UI Setup and User Guide** documentation.

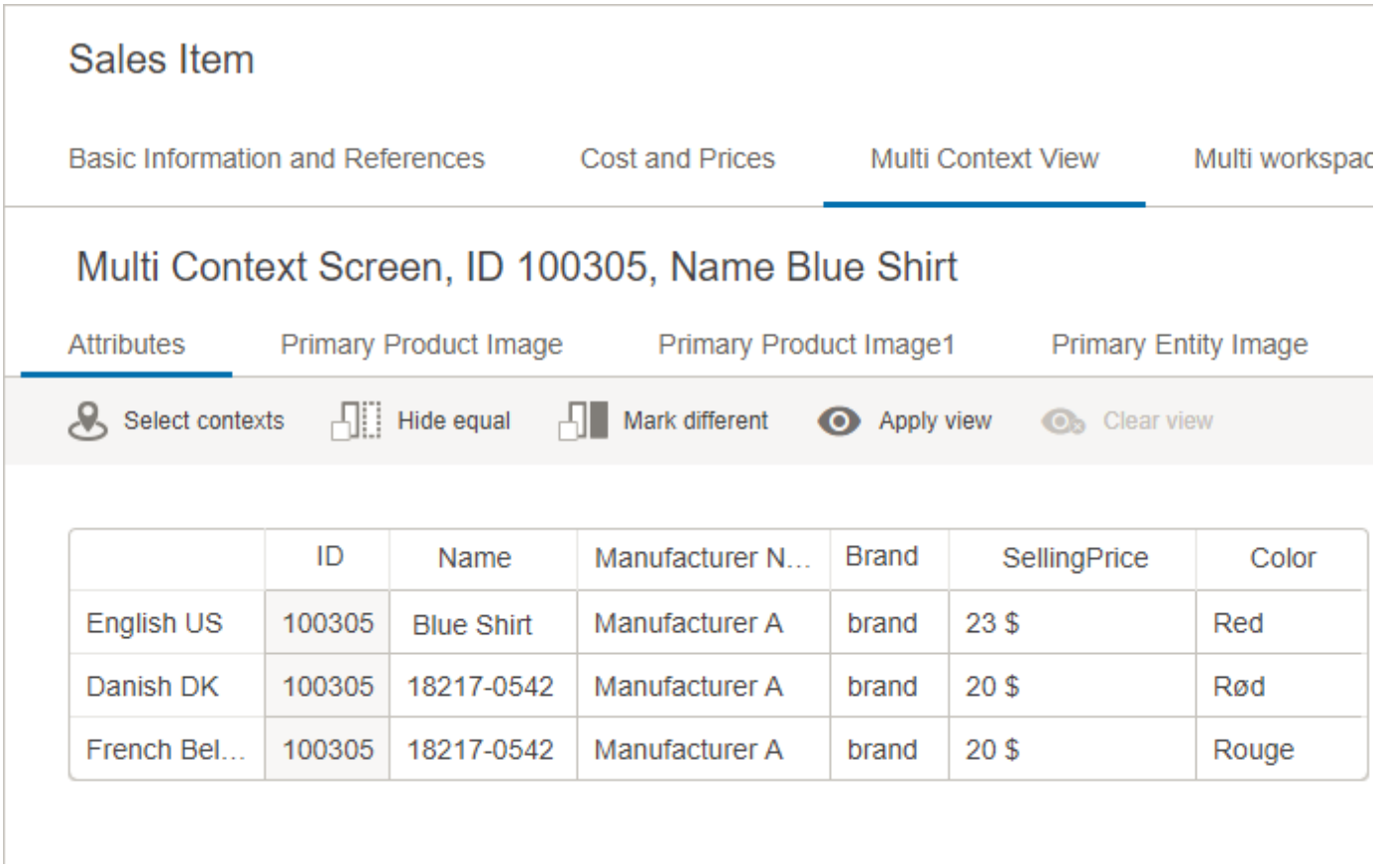
Using a Multi Context Screen

There are a number of reasons that working with data in different contexts is a fundamental part of most business models, such as doing business across international markets. Certain attributes (e.g., price) may be different depending on the context and references also may differ per country / language.

Instead of users manually switching Web UI to different contexts when editing attributes, the Multi Context screen displays attributes in multiple contexts all on the same screen. The screen is designed to also display references for an object, organized by reference type. Users can also edit reference attributes, add / remove references, and suppress / remove suppression on references (if enabled).

Attributes

The attributes displayed and the actions available on the Attributes tab may be different than outlined below depending on how the administrator configured the Multi Context Screen Properties. If disabled by an admin user, end users will not have configurable view options (Apply view / Clear view).

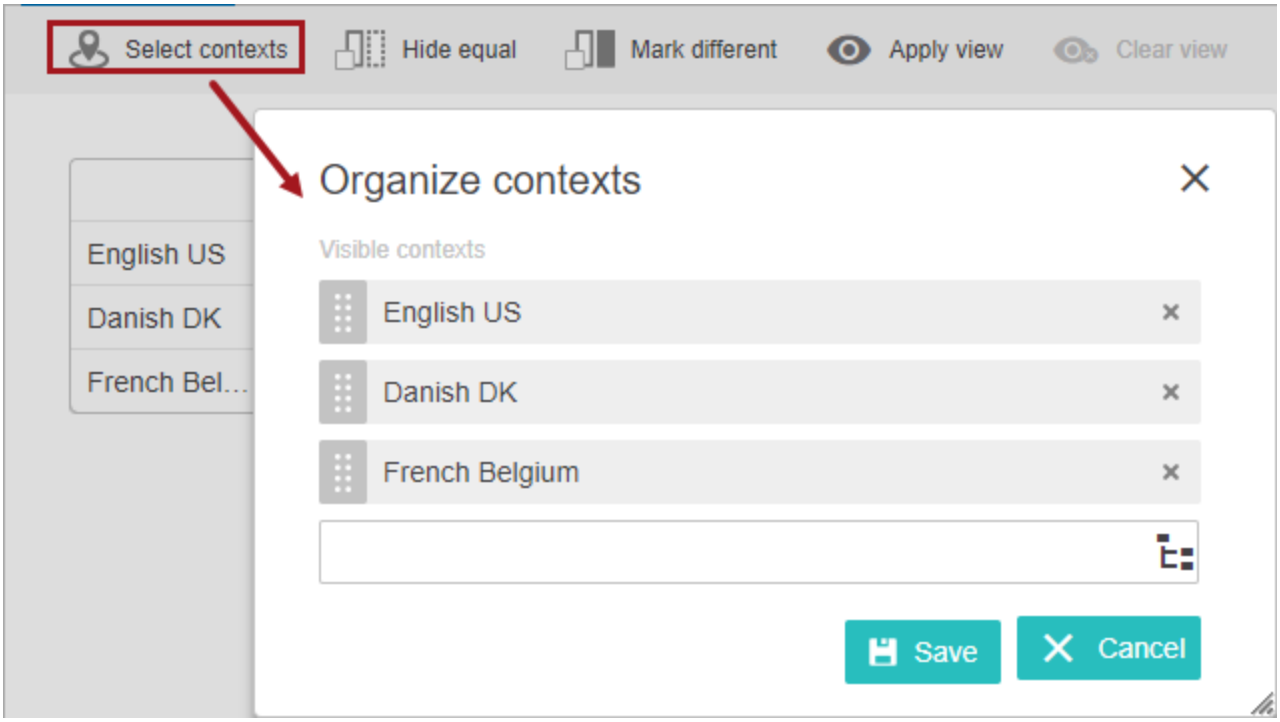


	ID	Name	Manufacturer N...	Brand	SellingPrice	Color
English US	100305	Blue Shirt	Manufacturer A	brand	23 $	Red
Danish DK	100305	18217-0542	Manufacturer A	brand	20 $	Rød
French Bel...	100305	18217-0542	Manufacturer A	brand	20 $	Rouge

Using the actions or clicking within the cells of the table, users can:

- **Select Contexts** - Select the contexts to display and determine the display order (via the drag handle for each context); selections apply to all tabs.

The first time a user enters a Multi Context screen only the current context is displayed. The user then selects the desired contexts to display for the attributes / reference types on the screen. On subsequent visits, Web UI displays the user's last applied view within Multi Context.



- **Edit attributes** - Editing is available in unshaded cells in the table on each tab. After making edits, users need to click the Save icon to the right of the table. The reset button allows users to discard any changes they have made. While users must save changes—or lose edits—before moving to another tab / screen outside of Multi Context, users can navigate between the Attributes tab and the Reference Type tabs without losing the edits. Users need to click save before navigating outside of the Multi Context screen to retain edits.

  All editable attributes values for the selected object can be edited regardless of the settings for Dimension Dependencies. Values for attributes not configured to be dimension dependent will be updated across all contexts upon save, similar to other screens such as Multi Language. Copying and pasting can be done into a single cell or in multiple cells if the number and order of cells copied from matches the number of cells pasted into.

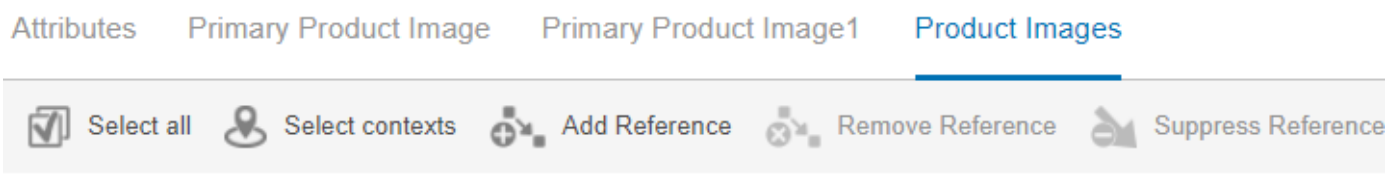
  Note that on attributes not dimension dependent, if the user pastes three new values in three different contexts (a cell per context) for an attribute that is not dimension dependent, it is the value of the last cell that was be paste in with populate all contexts upon save. For example, three cells with the values 98, 99, 100 are copied from Excel and pasted into three cells in the Multi Context grid, then the value 100 is the one that populates all three cells upon save. Similarly, if a user enters three values manually for three different contexts, the third value will be the one that populates all the contexts when saved.

- Compare contexts using the **Hide equal / Mark different** actions - Click these actions to compare the attributes. Aspects (ID, Name) are not used for the comparison.

- Apply and maintain user views - Clicking **Apply view** allows users to create and save their own views and work with only the columns that they need. Chose from a saved view or create a new one. For more details about the functionality, see the **User Configurable Views** topic.
- Clear an applied view - Clear the current view to return to the default configuration by clicking the **Clear view** icon.

Reference Types

Reference types that populate the individual tabs are determined by the administrator configuring the Multi Context Screen Properties. Users only have access to the reference suppression actions (Suppress Reference / Remove Suppression), if enabled by the admin user. Each reference type tab displays the same action toolbar.



	Title	Caption 4	Suppression
English US	Brown shirt		Visible
English US	Blue Shirt		Visible
French FR	T-shirt bleu		Visible
French FR	null		Suppressed
English UK	Brown Shirt		Visible
English UK	Blue Shirt		Visible
Germany ...	Braunes Hemd		Visible
Germany ...	Blaues Shirt		Visible

Using the actions or clicking within the cells of the table, users can:

- **Select Contexts** - If the contexts were set up on the Attributes tab, those settings apply to all tabs. Editing contexts on a reference type tab applies any changes all Multi Context screen tabs.
- **Edit attributes** - The functionality on the reference type tab matches the functionality on the Attributes tab, as described in the previous section. Again, click the Save icon after making any edits.
- Suppress and unsuppress references - If suppression functionality is enabled, then users will have **Suppress Reference** and **Remove Suppression** icons in the action toolbar. Also, the table on the tab will include a **Suppression** column.

To suppress or unsuppress references individually, select a row by clicking the checkbox shown to the left of the context name. To select multiple rows, either click on additional rows or use the **Select all** action. As soon as a row selection is made, the Select all icon switches to a Clear all icon. Use this to clear all selections or just click a checkbox again to deselect a particular row.

When a reference is suppressed, the word 'Suppressed' displays in the Suppression column. The word 'Visible' displays when references are not suppressed. If a reference cannot be suppressed, the applicable Suppression cell is disabled with the words 'Cannot be suppressed' or 'Inherited' displayed.

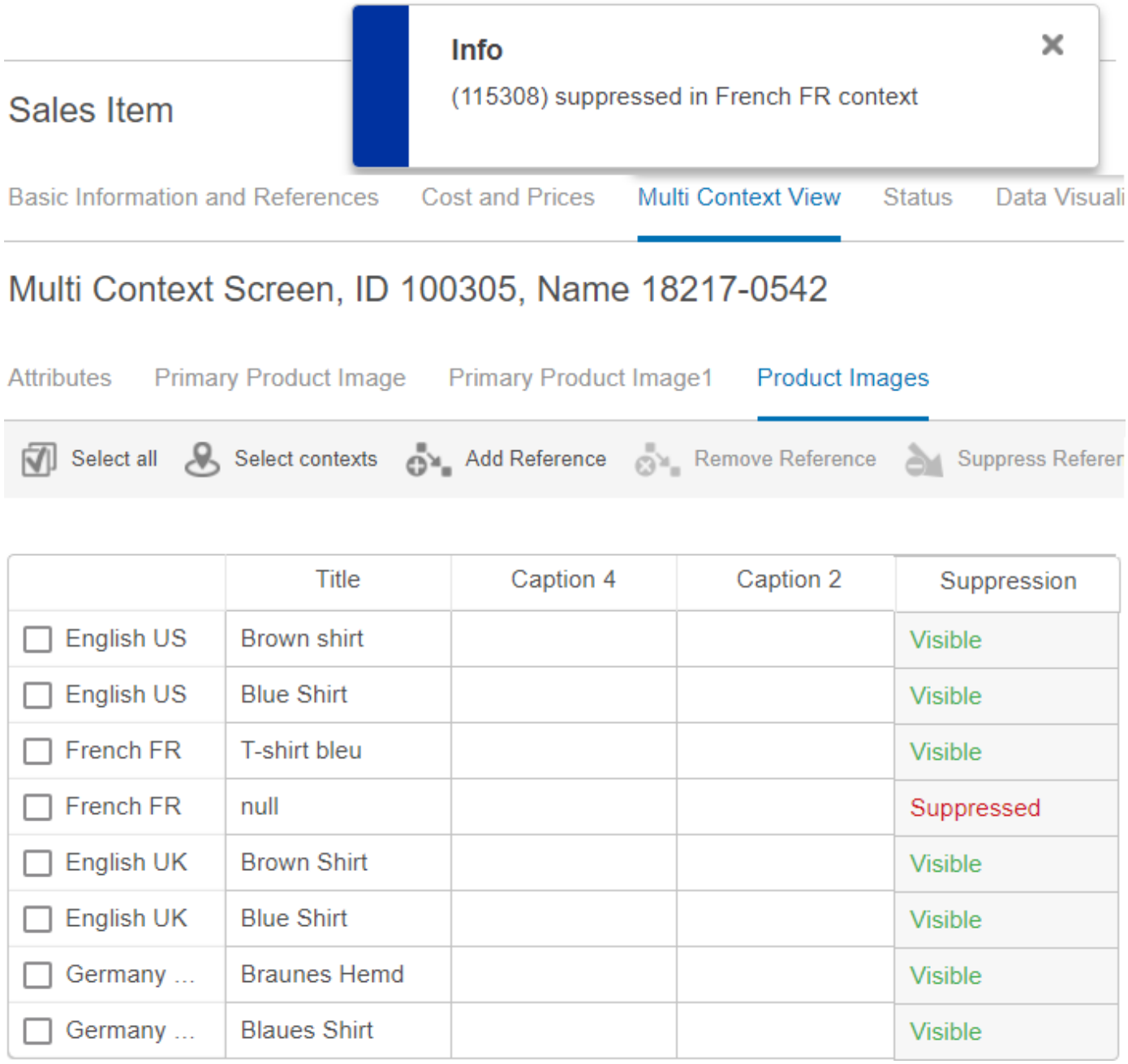
'Cannot be suppressed' means that the reference type is not dimension dependent.

	Title	Caption 4	Suppression
☐ English US	Blue Shirt		Cannot be suppressed
☐ English US	Blue Shirt		Cannot be suppressed

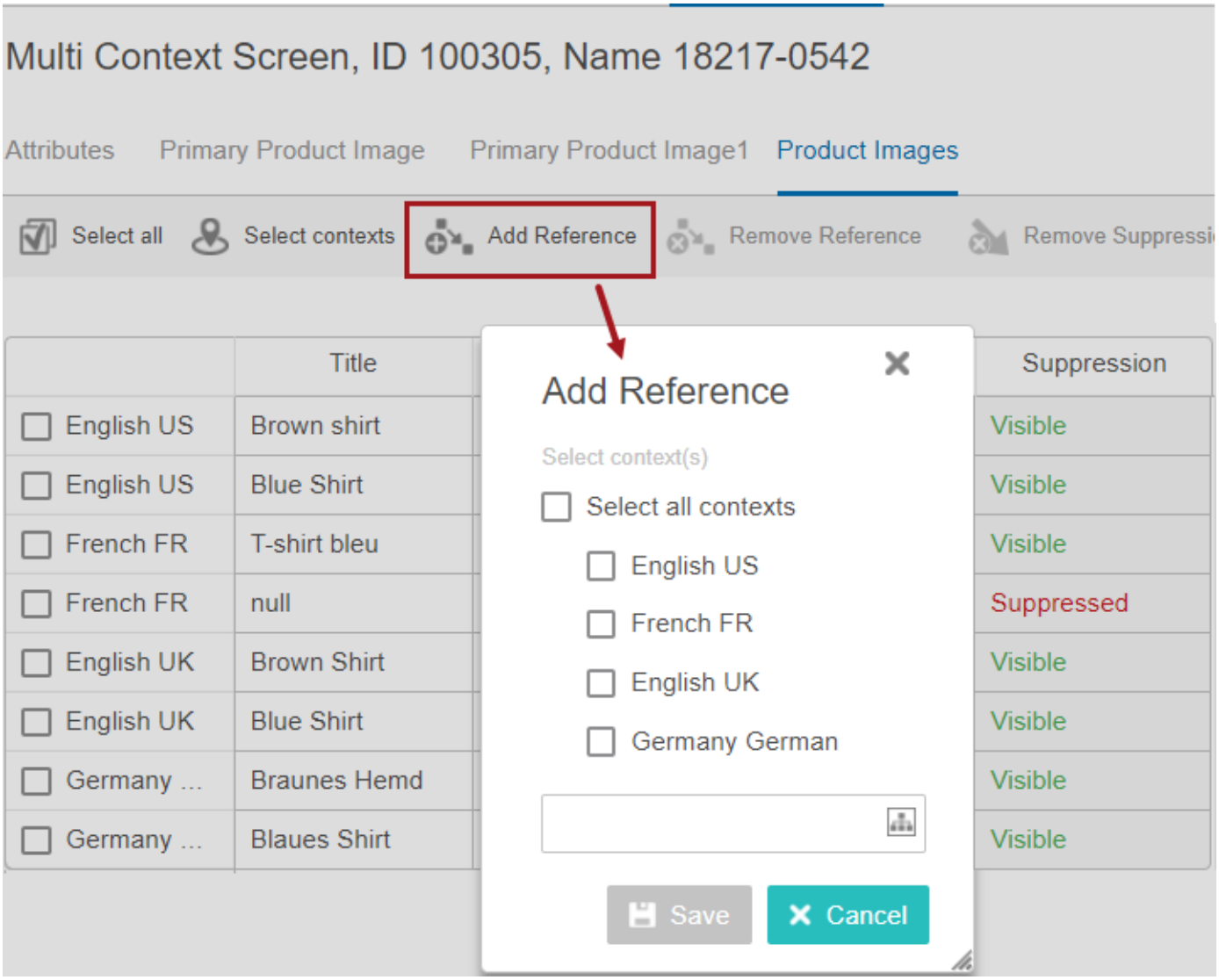
'Inherited' means that the reference is inherited from a parent object; therefore, it is not suppressible.

	Title	Caption 2	Suppression
☐ English US	Hanes Family		Inherited
☐ Danish DK	Hanes Family		Inherited
☐ French Bel...	Hanes Family		Inherited

A notification regarding the suppression status will display on the screen. The message displayed to users upon removing a suppression confirms that 'Suppression was removed' and displays similarly to the suppression confirmation shown below.



- Add a reference - Click the **Add Reference** action and then make a context selection within the 'Add Reference' dialog. Click the Node Picker icon to select a reference, and then click Save.



- Remove a reference - Make a row selection and then click the **Remove Reference** action icon. Confirm you want to remove the reference when the 'Remove References' dialog appears. A message displays at the top of the screen confirming the successful removal of the reference.

Multi Language Screen

The Multi Language Screen is a Web UI screen type designed to display attribute values for more than one language dimension. Users can easily edit attribute values across different language dimensions using the Multi Language Editor. Functionality is similar to workbench, where users can switch to translation mode that allows them to view multiple language dimensions at the same time.

This topic addresses:

- Using a Multi Language Screen
- Configuring a Multi Language Screen

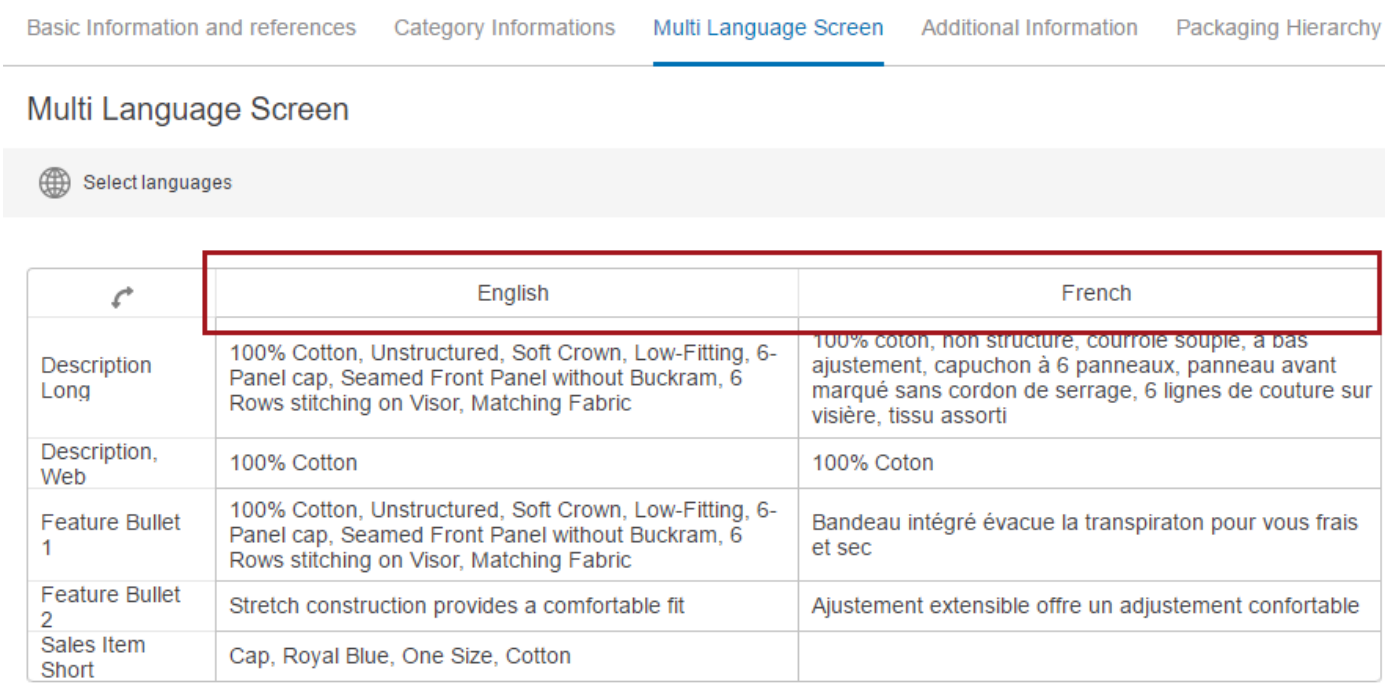
Using a Multi Language Screen

Using a Multi Language Screen allows users to more easily edit attribute values across different languages by displaying each language and the configured attribute values within one table.

There are a variety of ways to configure the Multi Language Screen, for this example the Multi Language Screen is setup to display as a sub-screen tab page on a Node Details screen when a user navigates to an object. The default languages configured (by the admin) to display are English and French, but configuration allows a user to choose other languages to display.

- Navigate to the object (a Sales Item object is used in the examples throughout this topic) and click the **Multi Language Screen** tab.

  Because the Property Direction parameter for the Multi Language Editor has been set to vertical instead of horizontal (*default*), the English and French language dimensions display as column headers, and the configured attributes display as rows. In this scenario, to view the language dimensions as rows instead of columns, click the flip table icon.

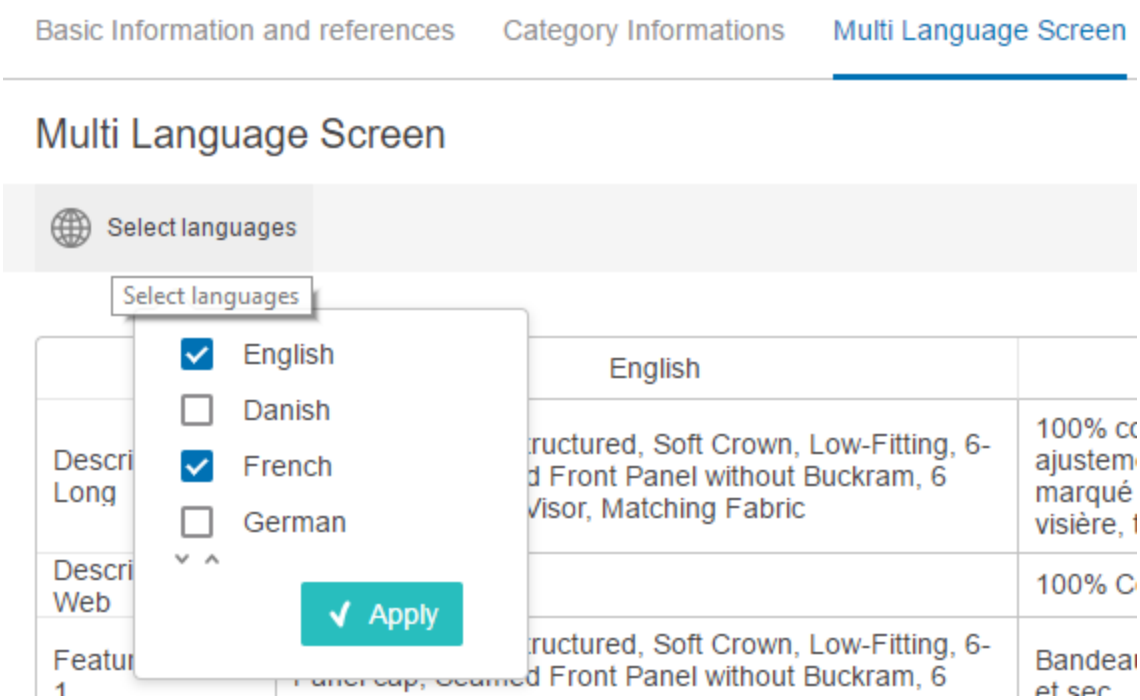


Selecting Languages

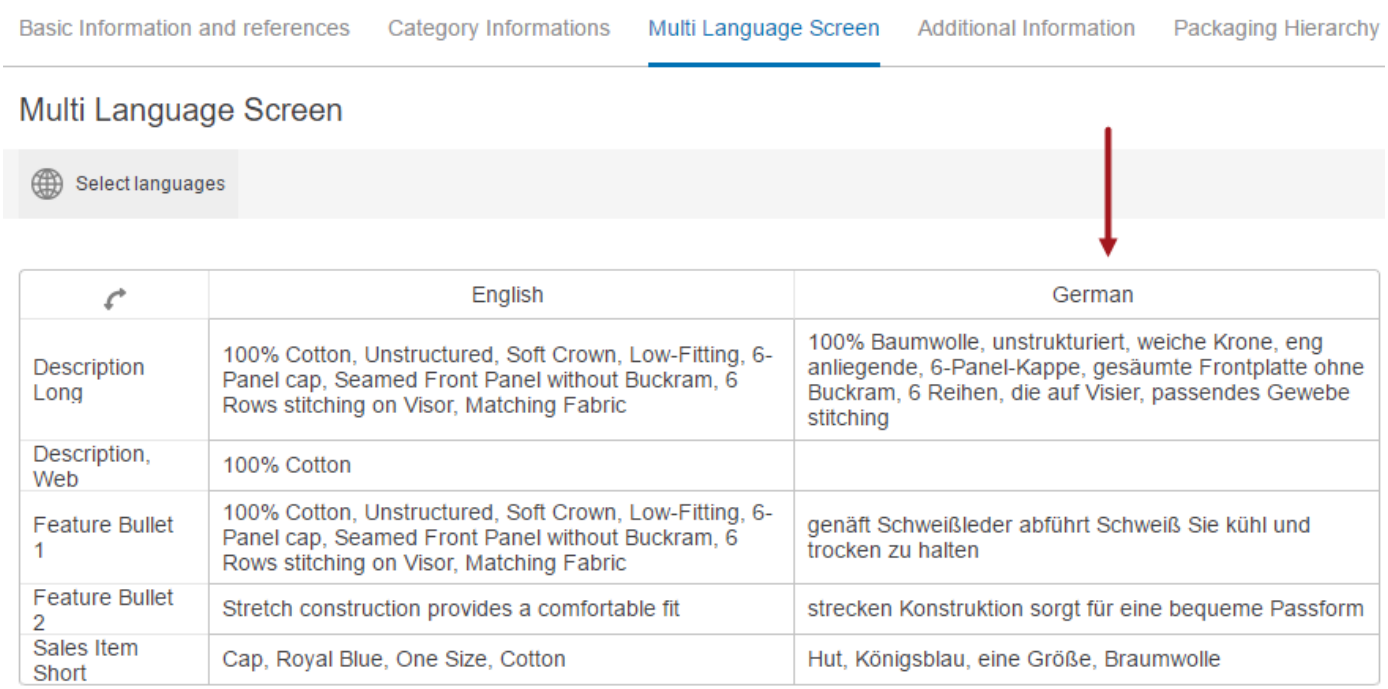
A user can select specific language dimensions to display. The language selection lists varies based upon configuration.

- Click the **Select languages** button

and a dialog will list the language dimensions available for a user to enable or disable. In this example, when the user clicks on the **Select languages** button, the option to enable or disable English, Danish, French, and German have been configured to display.



- Disable French, enable German, and click **Apply** so the English and German language columns will display.



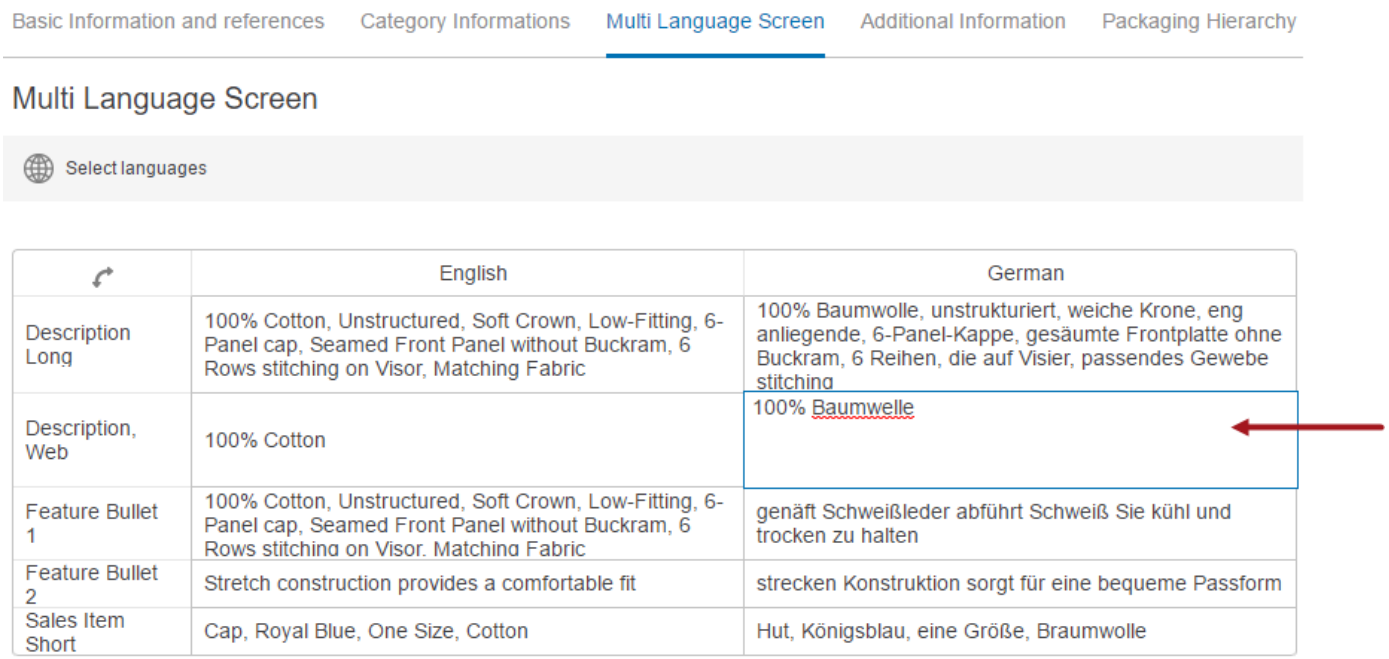
	English	German
Description Long	100% Cotton, Unstructured, Soft Crown, Low-Fitting, 6-Panel cap, Seamed Front Panel without Buckram, 6 Rows stitching on Visor, Matching Fabric	100% Baumwolle, unstrukturiert, weiche Krone, eng anliegende, 6-Panel-Kappe, gesäumte Frontplatte ohne Buckram, 6 Reihen, die auf Visier, passendes Gewebe stitching
Description, Web	100% Cotton	
Feature Bullet 1	100% Cotton, Unstructured, Soft Crown, Low-Fitting, 6-Panel cap, Seamed Front Panel without Buckram, 6 Rows stitching on Visor, Matching Fabric	genäft Schweißleder abführt Schweiß Sie kühl und trocken zu halten
Feature Bullet 2	Stretch construction provides a comfortable fit	strecken Konstruktion sorgt für eine bequeme Passform
Sales Item Short	Cap, Royal Blue, One Size, Cotton	Hut, Königsblau, eine Größe, Braumwolle

The next time a user navigates to the Multi Language Screen, the screen default language dimensions (English and French) will display. If saving local settings is enabled in the properties file, then the Multi Language Screen will display with the setting changes made by the user.

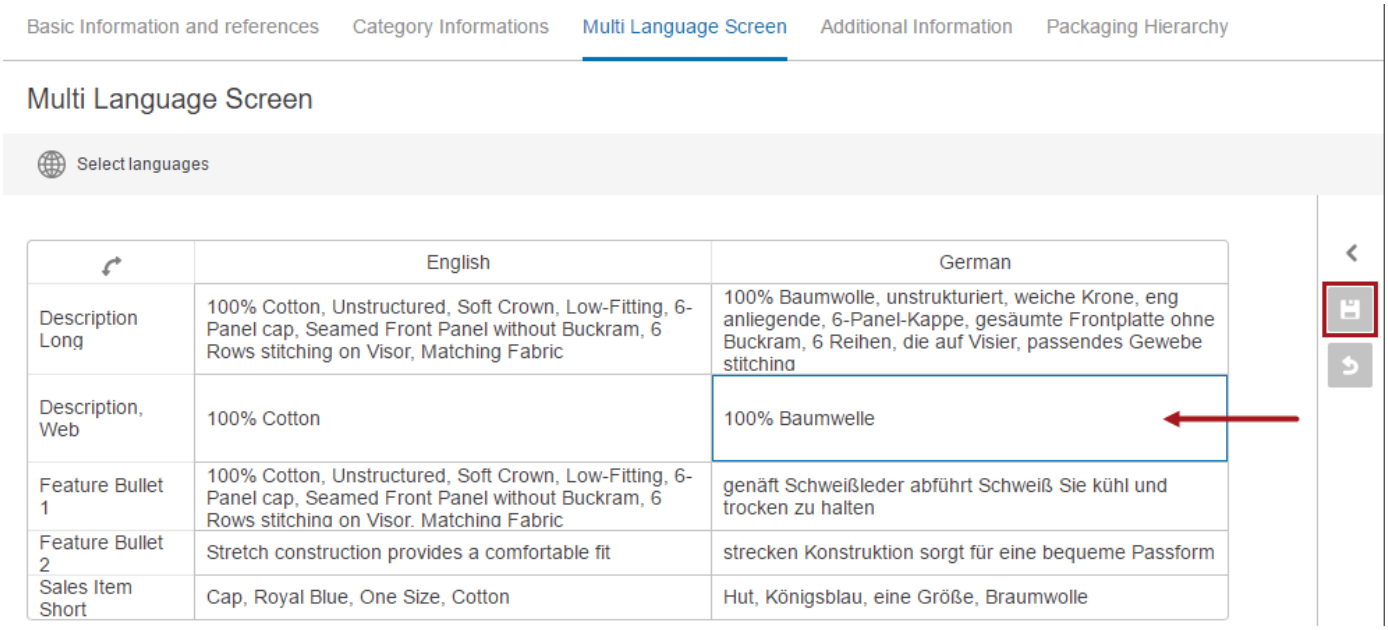
Editing Attribute Values

A user can edit configured attribute values by double clicking within any table cell to edit the text, if language dimension dependencies are enabled. The cell being edited will appear with a dotted line border.

In this case, the 'Description, Web' attribute value for the German language dimension needs to display '100% Baumwolle.'

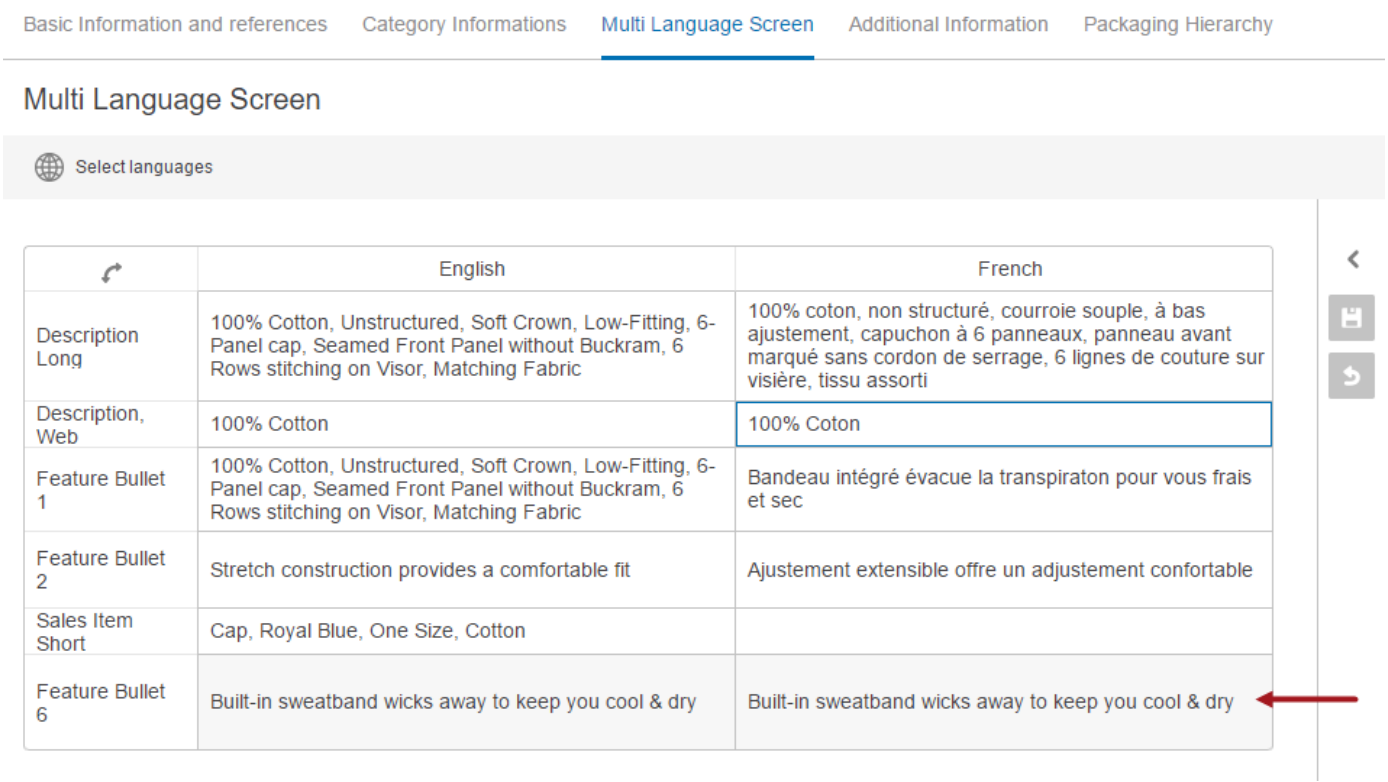


While the cursor is in the edited cell, the dotted line border remains. However, the Multi Language Screen configuration determines how the changes are saved. If the configuration uses immediate save, then the changes will be saved after the cursor leaves the edited cell. If immediate save is not enabled, then after the cursor leaves the edited cell, the edited cell will display shaded and the save icon will activate. In this case, the changes are not saved until the user selects the save icon.



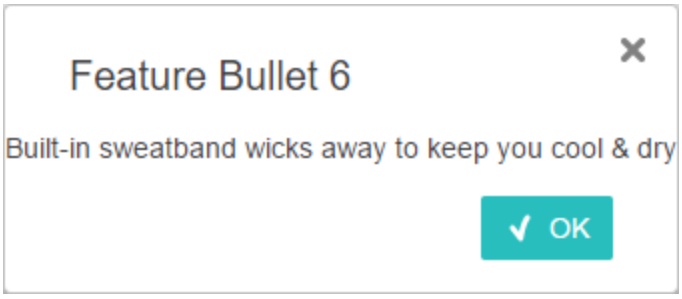
	English	German
Description Long	100% Cotton, Unstructured, Soft Crown, Low-Fitting, 6-Panel cap, Seamed Front Panel without Buckram, 6 Rows stitching on Visor, Matching Fabric	100% Baumwolle, unstrukturiert, weiche Krone, eng anliegende, 6-Panel-Kappe, gesäumte Frontplatte ohne Buckram, 6 Reihen, die auf Visier, passendes Gewebe stitching
Description, Web	100% Cotton	100% Baumwelle
Feature Bullet 1	100% Cotton, Unstructured, Soft Crown, Low-Fitting, 6-Panel cap, Seamed Front Panel without Buckram, 6 Rows stitching on Visor, Matching Fabric	genäft Schweißleder abführt Schweiß Sie kühl und trocken zu halten
Feature Bullet 2	Stretch construction provides a comfortable fit	strecken Konstruktion sorgt für eine bequeme Passform
Sales Item Short	Cap, Royal Blue, One Size, Cotton	Hut, Königsblau, eine Größe, Braumwolle

Attribute values that do not have language dimension dependencies enabled will display with a lightly shaded background and are not editable. In the example below, the 'Feature Bullet 6' attribute is not configured to allow language dimension dependencies.

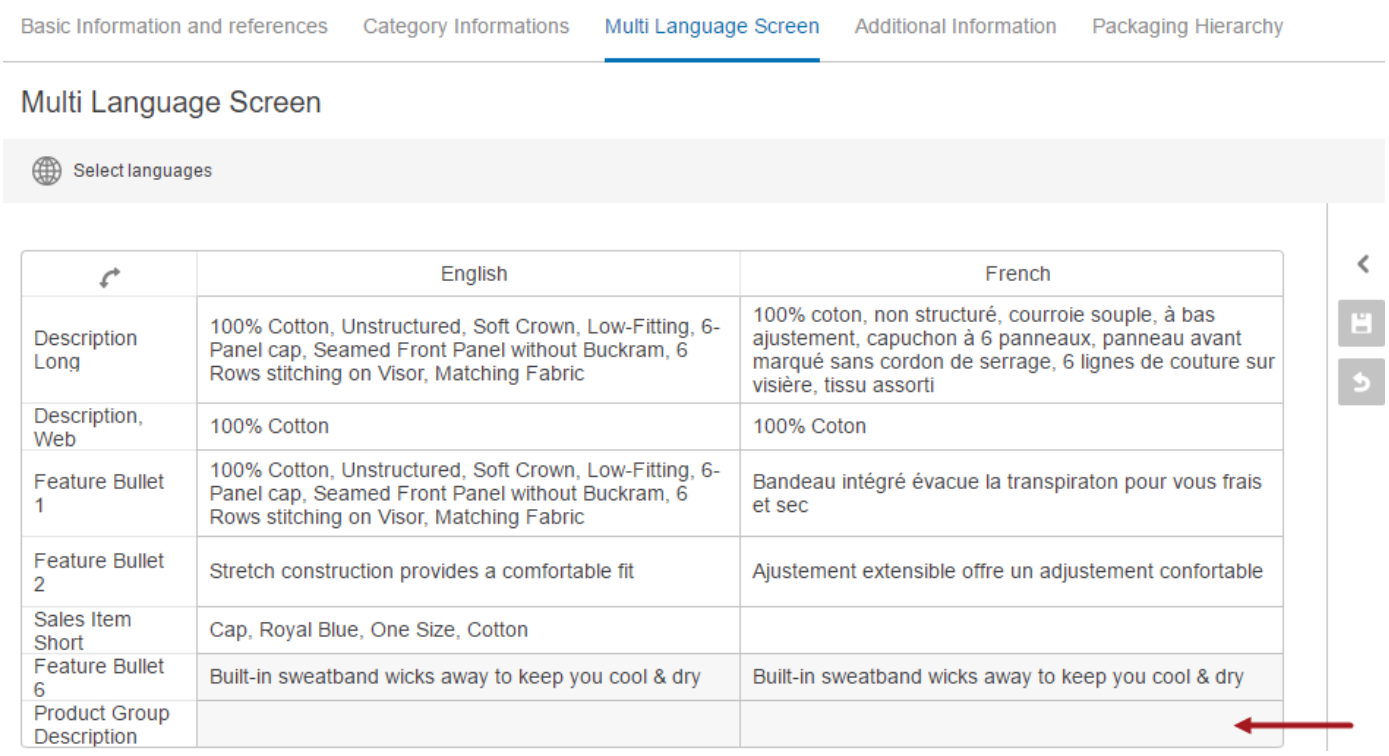


	English	French
Description Long	100% Cotton, Unstructured, Soft Crown, Low-Fitting, 6-Panel cap, Seamed Front Panel without Buckram, 6 Rows stitching on Visor, Matching Fabric	100% coton, non structuré, courroie souple, à bas ajustement, capuchon à 6 panneaux, panneau avant marqué sans cordon de serrage, 6 lignes de couture sur visière, tissu assorti
Description, Web	100% Cotton	100% Coton
Feature Bullet 1	100% Cotton, Unstructured, Soft Crown, Low-Fitting, 6-Panel cap, Seamed Front Panel without Buckram, 6 Rows stitching on Visor, Matching Fabric	Bandeau intégré évacue la transpiraton pour vous frais et sec
Feature Bullet 2	Stretch construction provides a comfortable fit	Ajustement extensible offre un adjustement confortable
Sales Item Short	Cap, Royal Blue, One Size, Cotton	
Feature Bullet 6	Built-in sweatband wicks away to keep you cool & dry	Built-in sweatband wicks away to keep you cool & dry

If a user double clicks on one of these attribute values, then a dialog will display with the attribute and its value.



Depending upon configuration, attribute values without product-type validity will also display with a lightly shaded background and are not editable. For this example the 'Product Group Description' attribute is not valid for the product type, and the attribute values are lightly shaded. If the Multi Language Editor has been configured to show only valid attributes, then the values without product-type validity will not display.



	English	French
Description Long	100% Cotton, Unstructured, Soft Crown, Low-Fitting, 6-Panel cap, Seamed Front Panel without Buckram, 6 Rows stitching on Visor, Matching Fabric	100% coton, non structuré, courroie souple, à bas ajustement, capuchon à 6 panneaux, panneau avant marqué sans cordon de serrage, 6 lignes de couture sur visière, tissu assorti
Description, Web	100% Cotton	100% Coton
Feature Bullet 1	100% Cotton, Unstructured, Soft Crown, Low-Fitting, 6-Panel cap, Seamed Front Panel without Buckram, 6 Rows stitching on Visor, Matching Fabric	Bandeau intégré évacue la transpiraton pour vous frais et sec
Feature Bullet 2	Stretch construction provides a comfortable fit	Ajustement extensible offre un adjustement confortable
Sales Item Short	Cap, Royal Blue, One Size, Cotton	
Feature Bullet 6	Built-in sweatband wicks away to keep you cool & dry	Built-in sweatband wicks away to keep you cool & dry
Product Group Description		

Information regarding configuration can be found in the **Configuring a Multi Language Screen** topic.

Configuring a Multi Language Screen

Any number of Multi Language Screens can be added to a Web UI. Once added, as with any screen, an admin user must configure how users access a Multi Language Screen. Other configuration options include configuring a default layout, language dimensions available to users, what headers can users view and edit, and how edits are saved.

This topic addresses design Prerequisites, Creating a New Multi Language Screen, and Configuring:

- Access to a Multi Language Screen
- Multi Language Screen Properties
- Multi Language Editor Properties
- Headers for the Multi Language Editor
- Specific Language Dimensions

Prerequisites

It is expected that anyone configuring the Multi Language Screen component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, users must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Also, for configuration of the Multi Language Screen, it is expected to be familiar with the **Dimension Dependent Data** section of the **Contexts** documentation, and know how to use attribute values / attribute value groups, which is explained in the **Attribute Value Component** documentation, and the **Attribute Value Group Component** documentation.

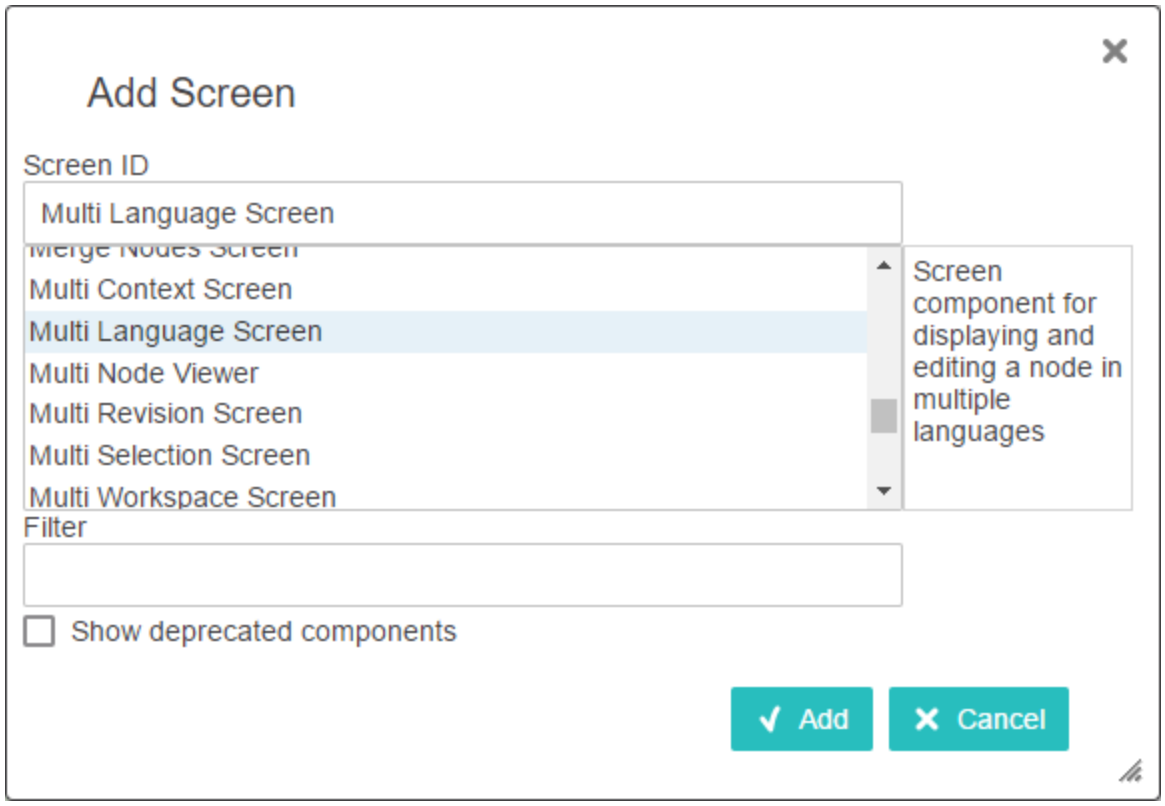
Creating a New Multi Language Screen

Steps for adding a new Multi Language Screen are below. Additional details for creating a new screen are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic.

1. With the Designer window open, click the **New** button to create a new screen.

2. Choose **Multi Language Screen** from the screen list.
3. Type in a descriptive Screen ID.

4. Click **Add**.



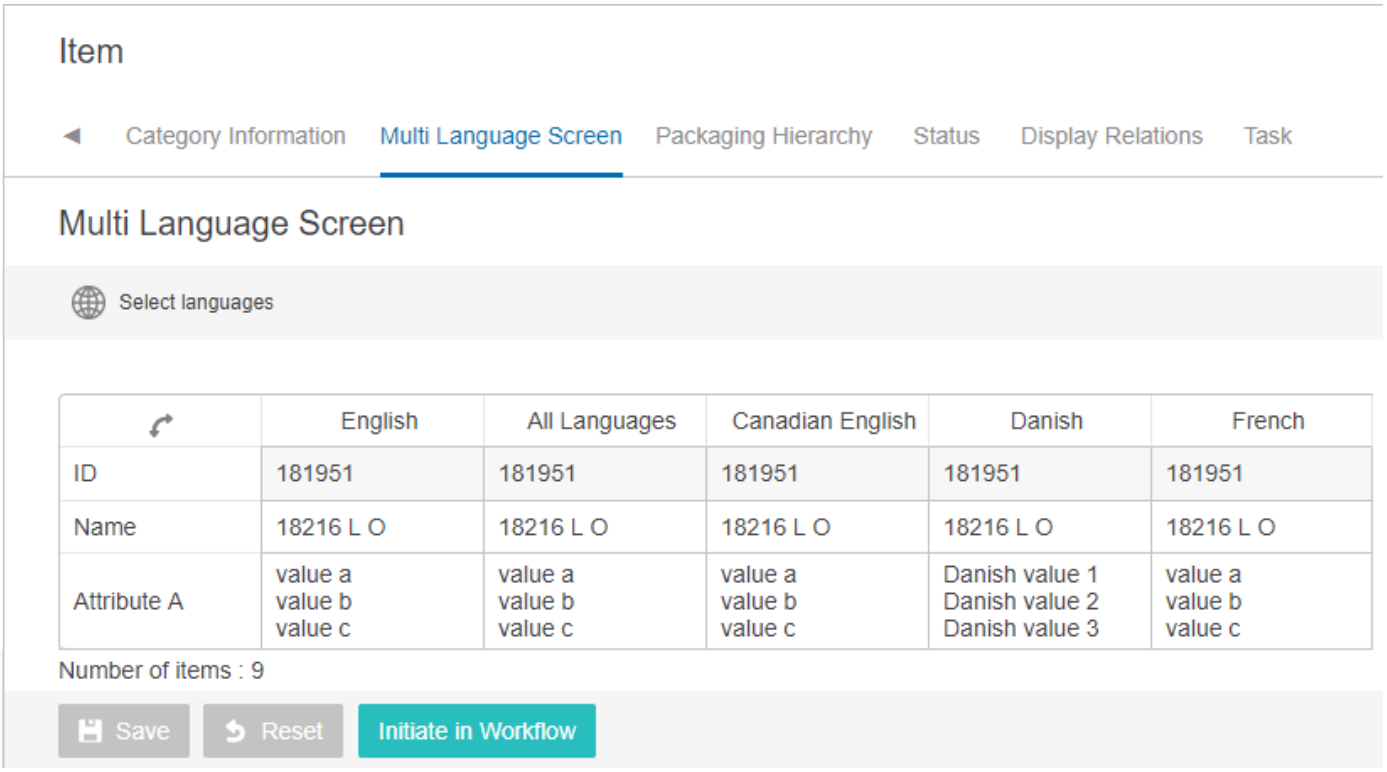
At this point, either close the designer and configure the screen at a later time, or continue on with the steps in the next section.

Configuring Access to a Multi Language Screen

An admin user must configure how a user will access a Multi Language Screen. The Multi Language Screen can be either mapped using Main Properties or added to a Sub Screen Tab Page on a Node Details Screen.

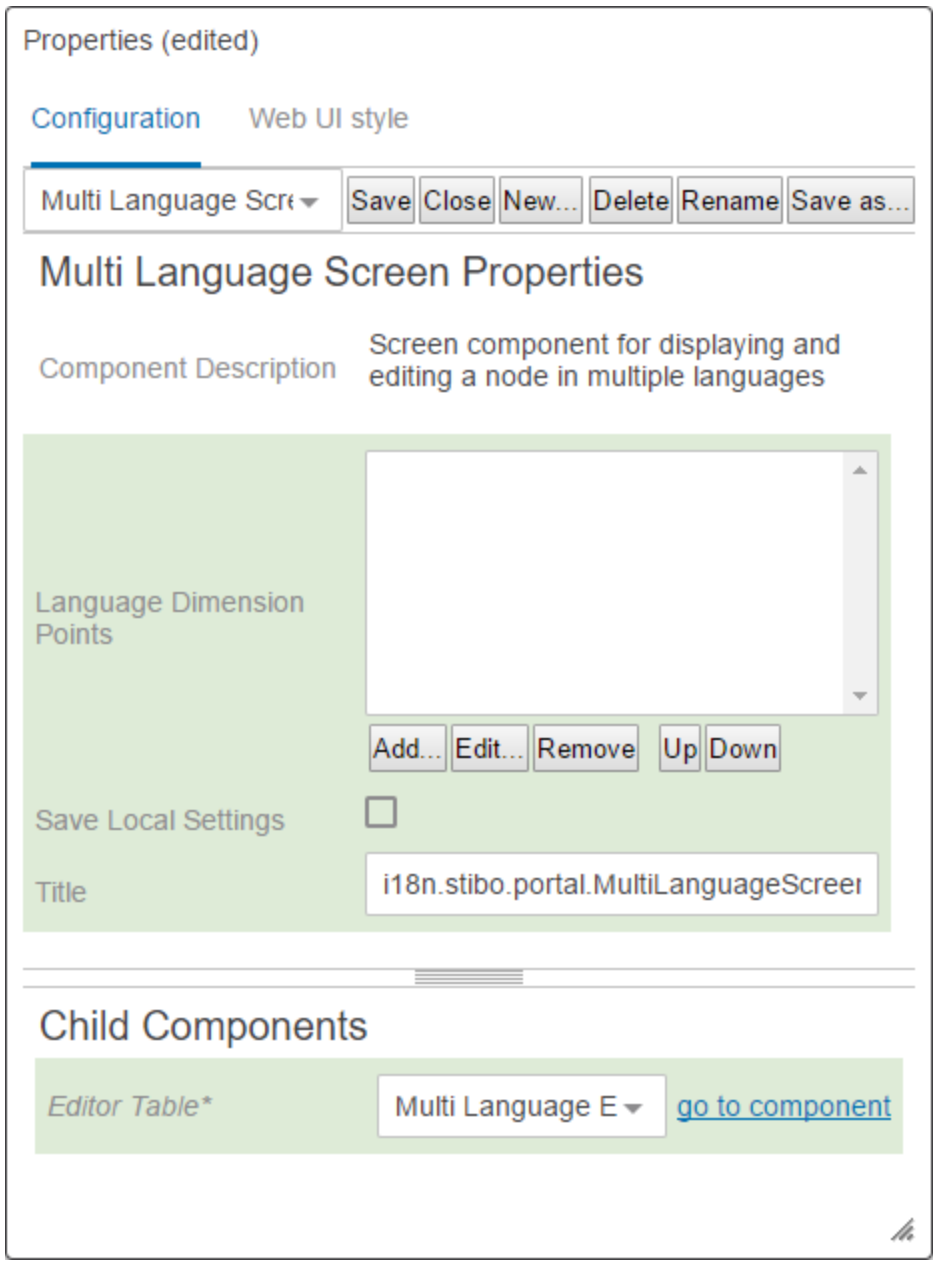
For more information about mapping, see **Configuring the Parameters** in the **Main Properties** topic, and for more information about Sub Screen Tab Pages, see the **Tab Pages** topic in the **Node Details Component** section of the **Web User Interface / Web UI Setup and User Guide** documentation.

The example below shows the Multi Language Screen displayed as a sub screen tab page on a Node Details screen and is displayed when an object is selected.



Configuring Multi Language Screen Properties

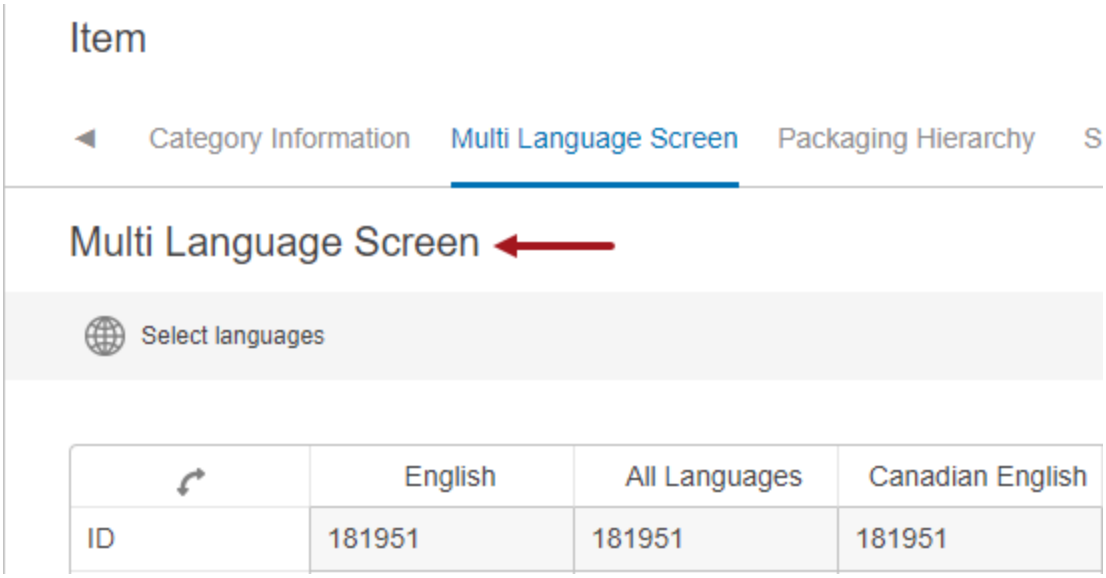
Steps for configuring the Multi Language Screen Properties are below.



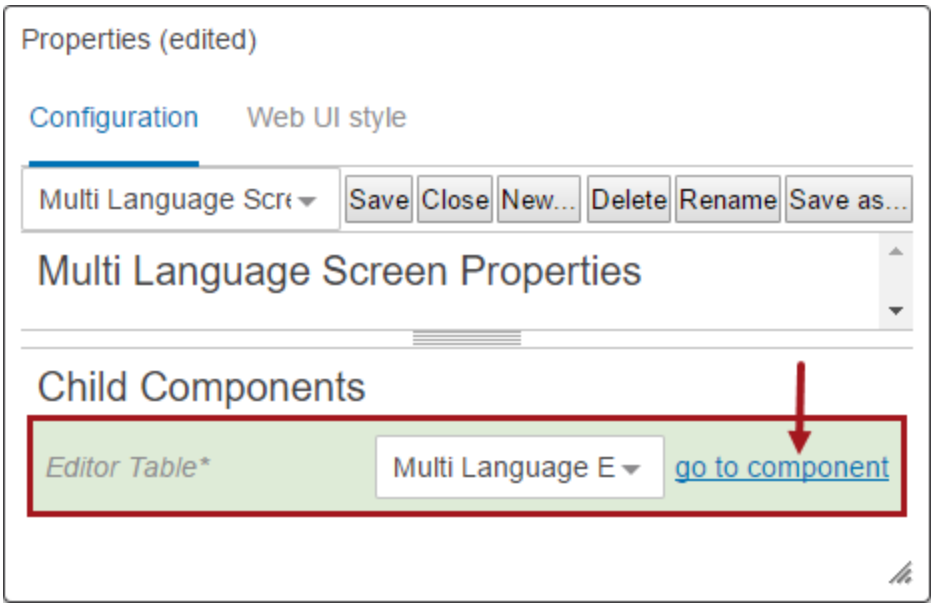
1. With the designer window open, select the screen ID for the **Multi Language Screen** using the screen dropdown list. (If continuing on after creating a new Multi Language Screen, Multi Language Screen Properties should already be displayed.)
2. Optionally, add Language Dimension Points to restrict the languages available to the user. When left blank, all languages available within STEP Workbench are displayed to the Web UI user. Steps for adding Language Dimension Points are found in the **Adding Language Dimension Points** section in the **Configuring a Multi Workspace Screen** documentation.
3. Determine if you want to enable the Save Local Settings parameter. If enabled, when a user makes changes to the languages shown on the screen, those changes are saved and the screen will display with the users

preferred settings instead of the default. If disabled, the default languages will display each time a user accesses the Multi Language screen.

4. Type in a title for the screen, if desired, and the title will display on the screen in the top left corner. When blank, no title appears.



5. The Child Components > Editor Table parameter is pre-populated with the Multi Language Editor value dropdown, since it is mandatory to configure the editor before the Multi Language Screen will render correctly.

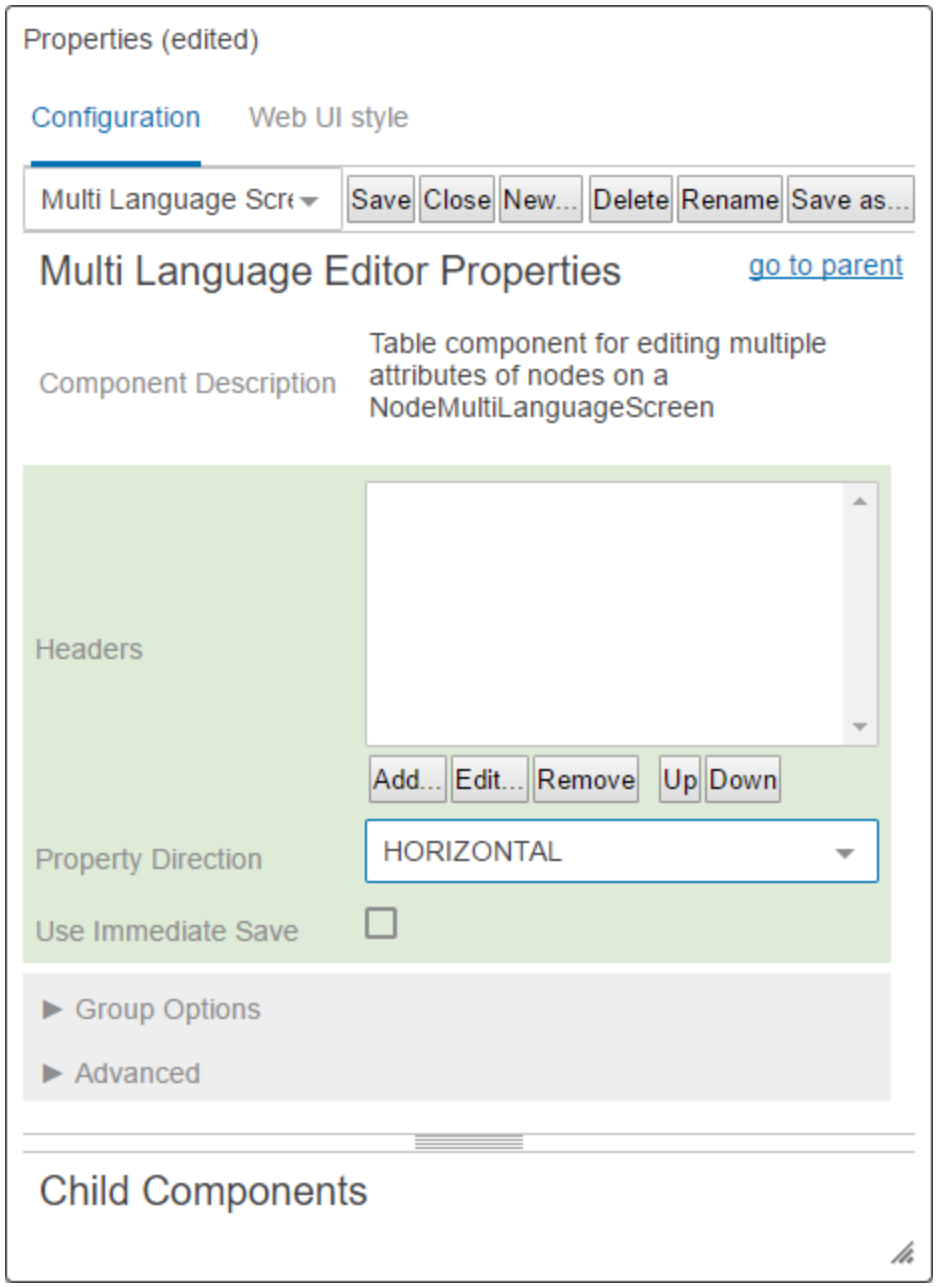


Configuring Multi Language Editor Properties

Steps for configuring the **Multi Language Editor Properties** are below.

1. Go to the Multi Language Screen Properties > Child Components > Editor Table > Multi Language Editor > Click **go to component** (as seen in the above picture).

   The Multi Language Editor Properties will display.



2. Adding components to the **Headers** parameter determines the information that will display on the Multi Language Screen. If left blank then the ID and Title (Language) headers will display. Add, edit, remove, and reorganize table headers, as desired, in the **Headers** value field. Relevant headers to consider including, as needed, are: ID Header, Name Header, Attribute Value Header and Attribute Value Group Header. Steps for adding Headers can be found in the **Adding Headers** section below.

3. Determine the direction of the table using the **Property Direction** parameter. If no selection is made, then HORIZONTAL is the default selection and displays after the properties are saved the first time.
   - **VERTICAL** will display the added Headers as rows.
   - **HORIZONTAL** will display the added headers as columns.
4. Enable **Use Immediate Save** if edits made by a user should be auto-saved as soon as the cursor leaves the cell. If the user should be required to manually Click the save button after editing, then leave this parameter disabled. For details, see the **Auto-Save in the Web UI** topic.
5. Display additional optional parameter settings by clicking the **Group Options** heading and/or the **Advanced** heading. Make selections as desired. Each parameter features help text, accessible by clicking the info icon to the right of each parameter name.

Group Options Flipper

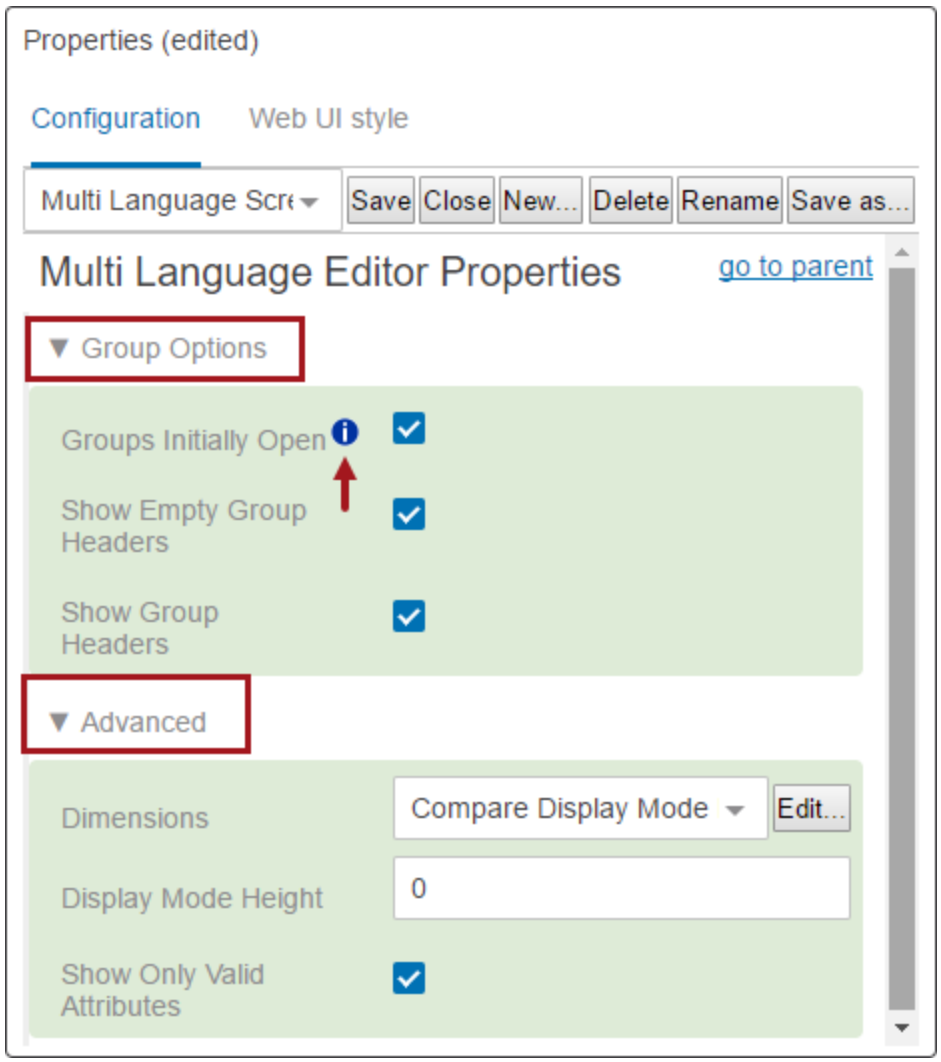
- **Groups Initially Open**: This option works in combination with the option **Show Group Headers**. If enabled, the attribute groups header will always be displayed open, showing all the attributes underneath the flipper, unless manually being closed by the user. If disabled, which is the default setting, the attribute groups header will remain closed, and a user has to open the attribute header to access those attributes manually.

Note: If Show Group Headers option is disabled, then the attributes underneath the Attribute Group flipper will always be opened without group headers displayed.

- **Show Empty Group Headers**: If enabled, which is the default setting, it displays the attribute group header even if the attribute group is empty. This occurs even if the Show Only Valid Attributes option is enabled and there are no valid attributes in the group. If disabled, the attribute group headers having no attributes in it is also displayed.
- **Show Group Headers**: If enabled, which is the default setting, it shows the header for attribute groups. If disabled, all attributes are expanded and displayed without an option to expand or collapse the attribute group header.
- **Display Mode Height**:This is the height of the top half of the screen in px where the items are displayed.

  Note: This is only applicable when ShowDetails is 'true.'

- **Show only Valid Attributes**: Located under the Advanced flipper, if enabled, it displays only the attributes which are valid to the selected product. If disabled, which is the default setting, it displays all the attributes, irrespective of the validity to the selected product, which is defined / added in the Headers option.



2. Click **Save**.

Configuring Compare Display Mode Dimensions

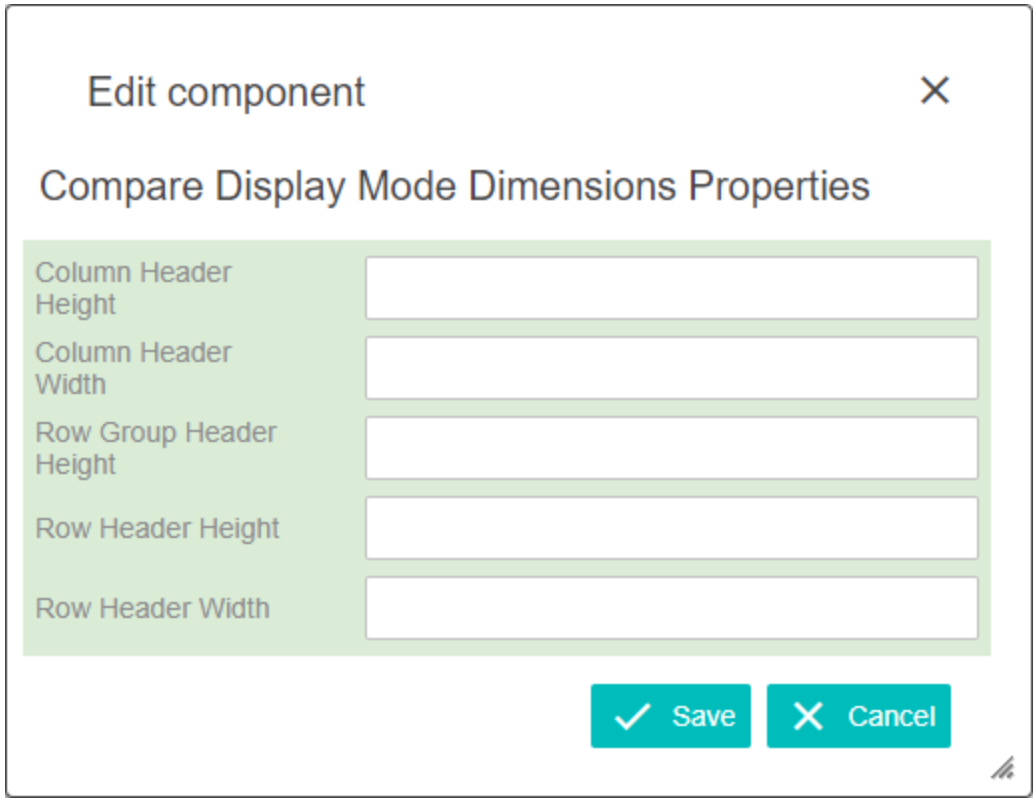
Below are the steps to configure the dimensional properties of 'Compare Display Mode Component' in pixels. The dimensional values of the Column header height, Column Header width, Row group Header Height, Row Header height, Row Header width can be configured. This can only be used to configure a compare display mode component and it cannot be used as a standalone component.

1. Open the Advanced flipper > Dimensions
2. Select the option Compare Display Mode Dimensions from the dropdown > Select Edit

In the Compare Display Mode Dimensions Properties the following properties are to be filled out:

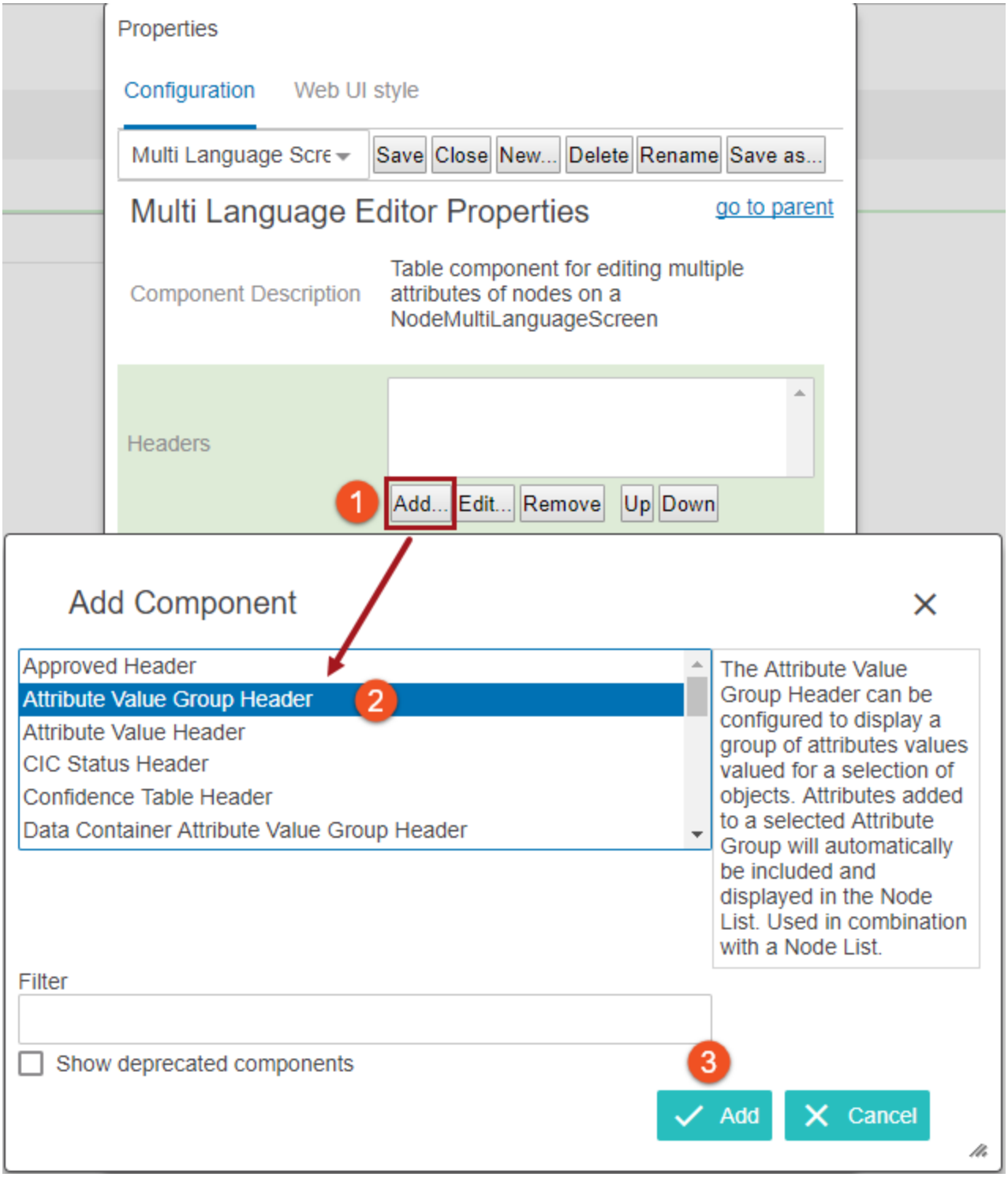
- **Column Header Height**: Alters the height of the column header in pixels.
- **Column Header Width**: Alters the width of the column header in pixels.
- **Row Group Header Height**: Alters the height of the grouping row headers in pixels.

- **Row Header Height**: Alters the height of the row header in pixels.
- **Row Header Width**: Alters the width of the row header in pixels



Configuring Headers for the Multi Language Editor

To display specific attribute values within the Multi language Screen, an admin user must add and configure Headers within the Multi Language Editor Properties. If left blank then ID and Title (Language) headers will display.



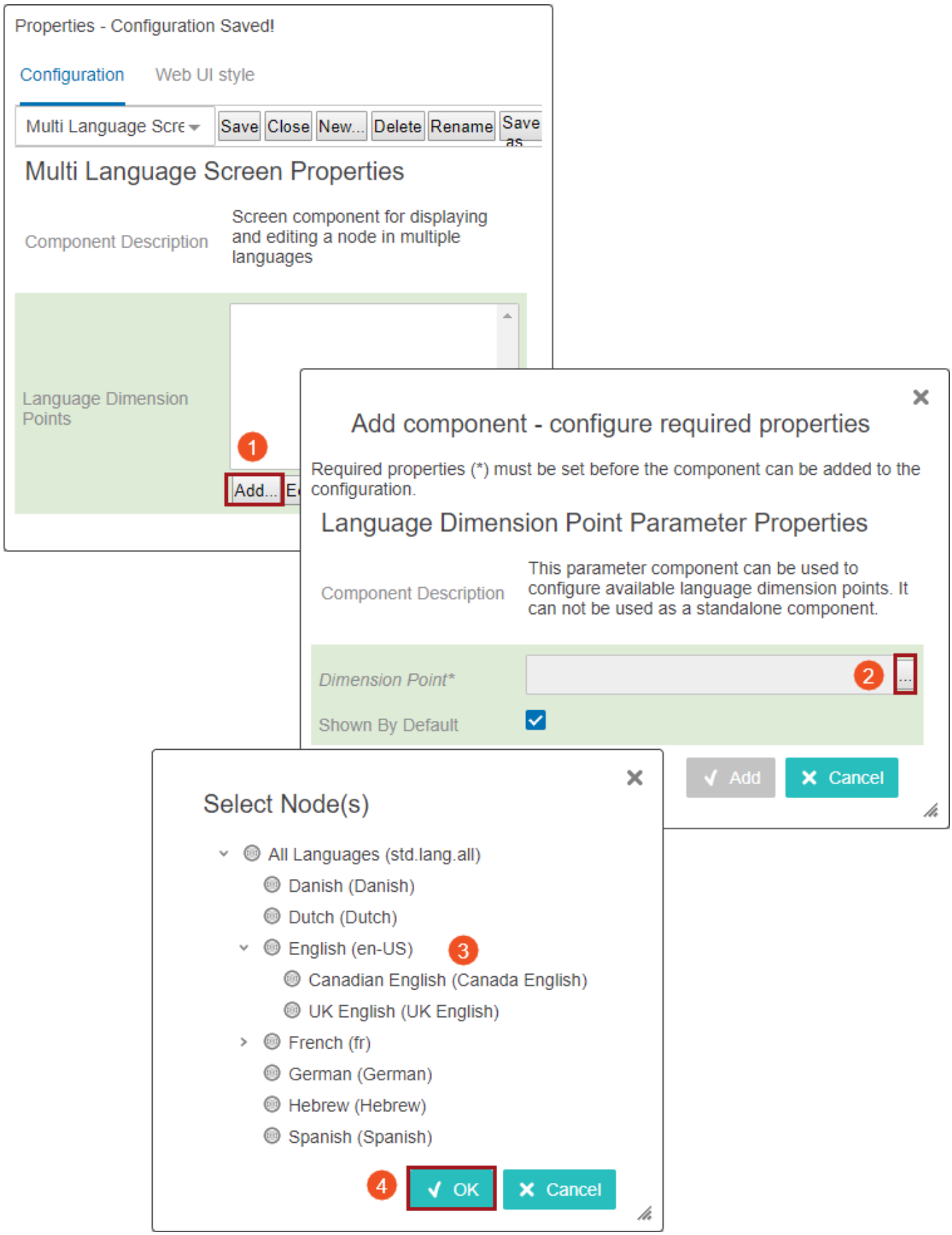
1. Go to the Multi Language Editor Properties > Headers > Click **Add**.
2. The 'Add Component' for the Multi Language Editor Properties will display. Attribute Value Header and Attribute Value Group Header can be used to display the attribute values.

3. After the selection is made, click **Add** to close the dialog. Fill out any required properties that may display after a selection is made, clicking **Add** again to return to the Multi Language Editor Properties. Add, edit and organize any additional headers.
4. Click **Save**.
5. Click **Close**.

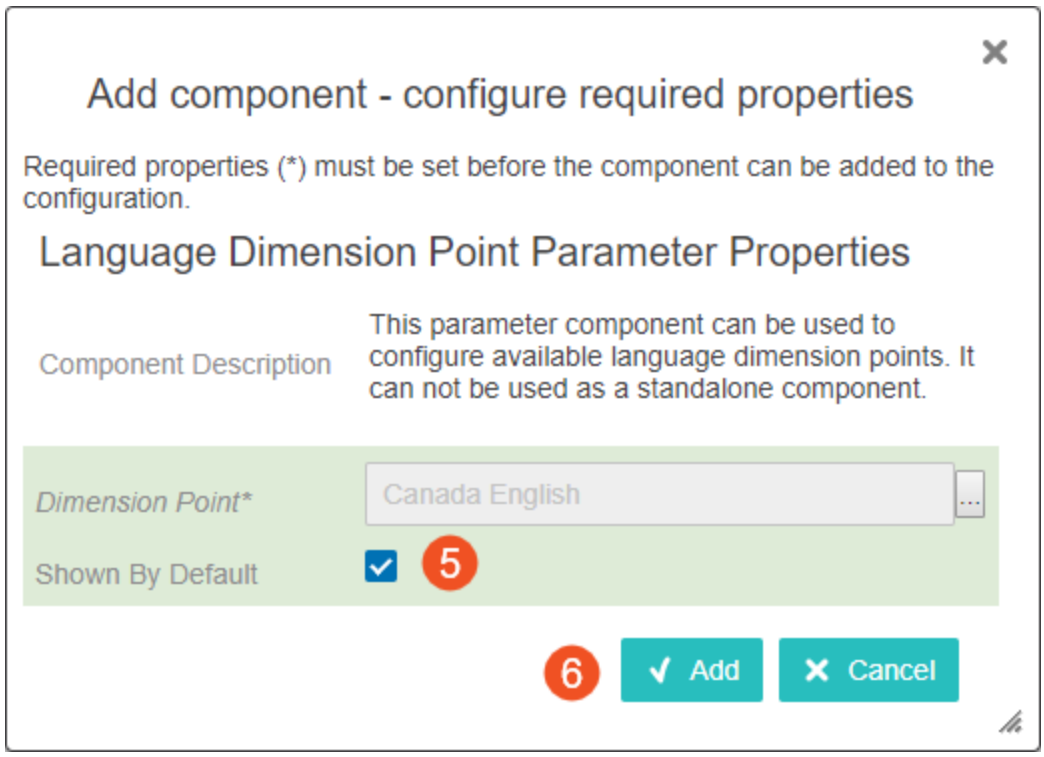
Configuring Specific Language Dimensions

If only specific languages need to display to the Web UI user, then the following steps can be used to display specific language dimension points. When left blank, users will see all languages within STEP.

1. Go to Multi Language Screen Properties > Language Dimension Points. Click **Add**.
2. The Language Dimension Point Parameter Properties dialog will display. Click the ellipsis button (...) for the Dimension Point parameter.
3. The 'Select Node(s)' dialog will display. Select one language.
4. Click **OK**.


Properties - Configuration Saved!
Configuration
Web UI style
Multi Language Scre
Save
Close
New...
Delete
Rename
Save as
Multi Language Screen Properties
Component Description
Screen component for displaying and editing a node in multiple languages
Language Dimension Points
1
Add...
Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
Language Dimension Point Parameter Properties
Component Description
This parameter component can be used to configure available language dimension points. It can not be used as a standalone component.
Dimension Point*
2
Shown By Default
Add
Cancel
Select Node(s)
All Languages (std.lang.all)
Danish (Danish)
Dutch (Dutch)
English (en-US)
3
Canadian English (Canada English)
UK English (UK English)
French (fr)
German (German)
Hebrew (Hebrew)
Spanish (Spanish)
4
OK
Cancel

5. You are returned to the Language Dimension Point Parameter Properties dialog. The checkbox for Shown By Default is enabled by default. Selecting this ensures the selected language dimension will display when a user navigates to the Multi Language Screen, unless Save Local Settings is enabled.
6. Click **Add**.



7. The Multi Language Screen properties will display. Add additional language dimension points by repeating the 'Adding Language Dimension Points' steps.
8. If a user will need the ability to select other language dimension points, after the selected languages display by default, repeat the steps above and disable the Shown By Default option. This will allow a user to select the language from the 'Select languages' icon, but not show those languages by default.
9. Click **Save**.

For an example regarding how to use the screen once configured, see the **Multi Language Screen** topic.

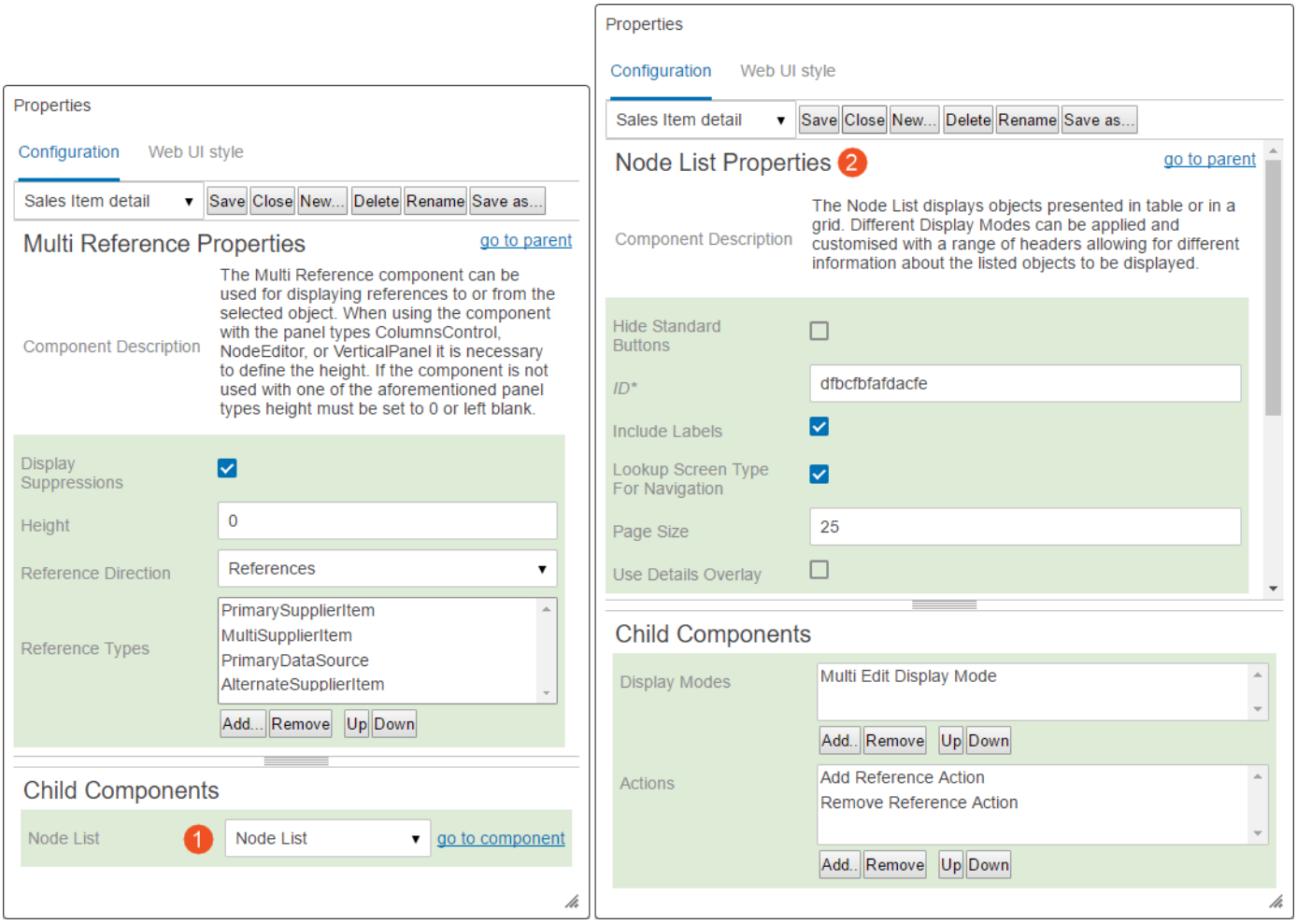
Multi Reference Editor

(Component name: Multi Reference. Available on a Tab Page, Node Editor, or as a child to a display mode.)

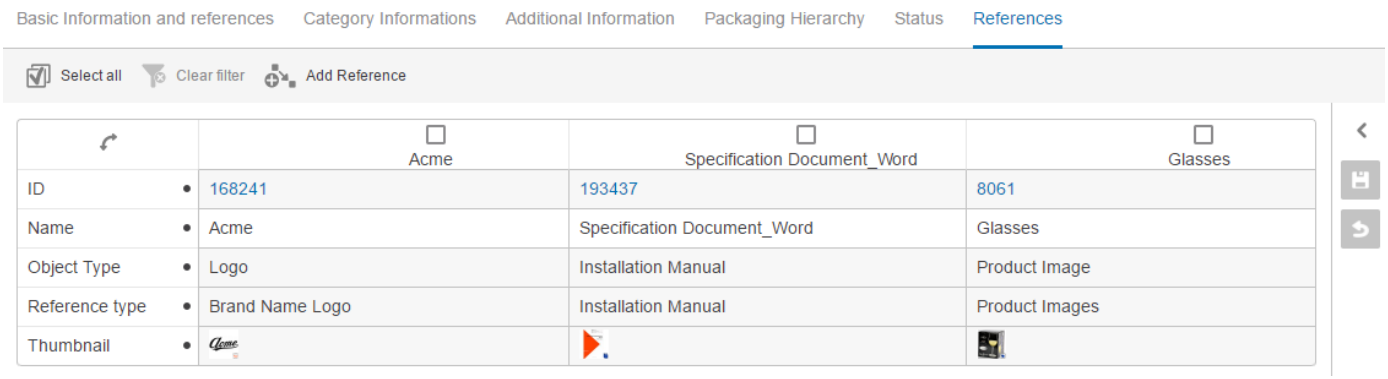
The Multi Reference Web UI component can be used to display references with multiple reference types and classification link types in the same table. It can be configured with a list of reference types and/or classification link types to narrow the references (links) that are shown in the table.

Additionally, it can be configured to display either forward references or reverse references (referenced by mode).

The Multi Reference component is pre-configured with a Node List in Multi Edit Display Mode with the 'Add' and 'Remove Reference' toolbar actions shown. It can be inserted where a container component can be inserted (e.g., as the content of a Tab Page or as content of the Split Panel or Columns components).



Since the Multi Reference component is based on the Node List component and the Multi Edit Display Mode, sorting and filtering of the header component values are supported. This allows for multiple reference types to be shown in the same table with the column filtering capabilities. Also, the number of reference items shown in the configured table is displayed under the table, allowing a user to see how many references there are without having to scroll through the data.

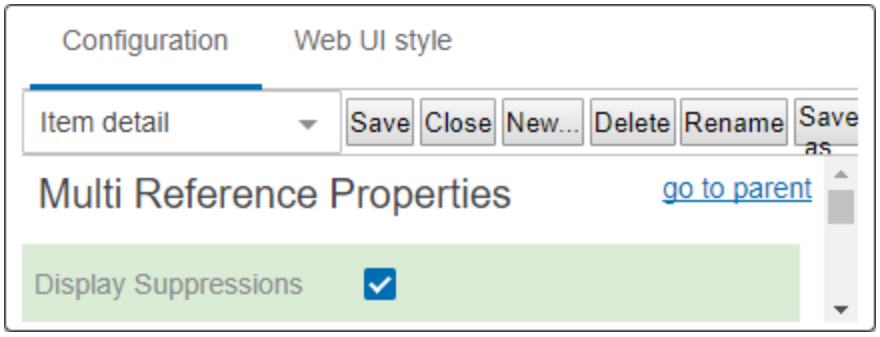


Multi Reference Properties

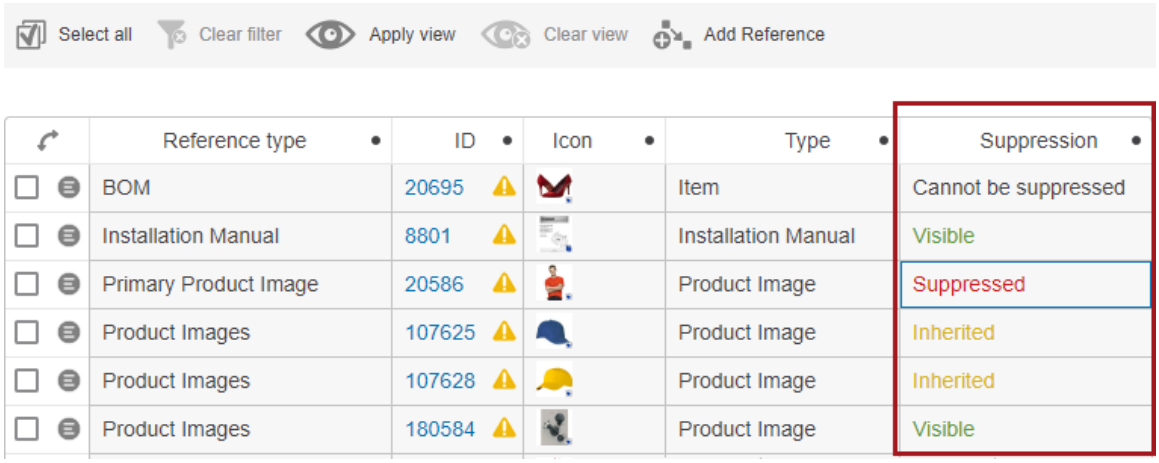
Each parameter features help text, accessible by clicking the info icon to the right of each parameter name.

Display Suppression

- If enabled, which is the default setting, then the suppressed references if any in the current context will be listed in the Multi Reference Editor



- If disabled, then any suppressed references in the current context will not be listed in the Multi Reference Editor.



For more information on Reference Suppression, see the **Suppressing References in the Multi Reference Editor** topic in the **Web User Interfaces** documentation.

Height

When using the component with the panel types Columns Control, Node Editor, or Vertical Panel, it is necessary to go into Design mode and define the **Height** parameter found on the properties screen. If the component is not used with one of these panel types, then the height must be set to 0 (zero) or left blank.

Reference Direction

With the **Reference direction** parameter is possible to choose the direction of the displayed references:

- References where the selection is the source (References)
- Reverse references where the selection is the target (Referenced by)

Reference Types

Select specific reference type nodes using the **Reference types** parameter **Add** button. Reference types can be re-ordered and removed, as needed.

Node List

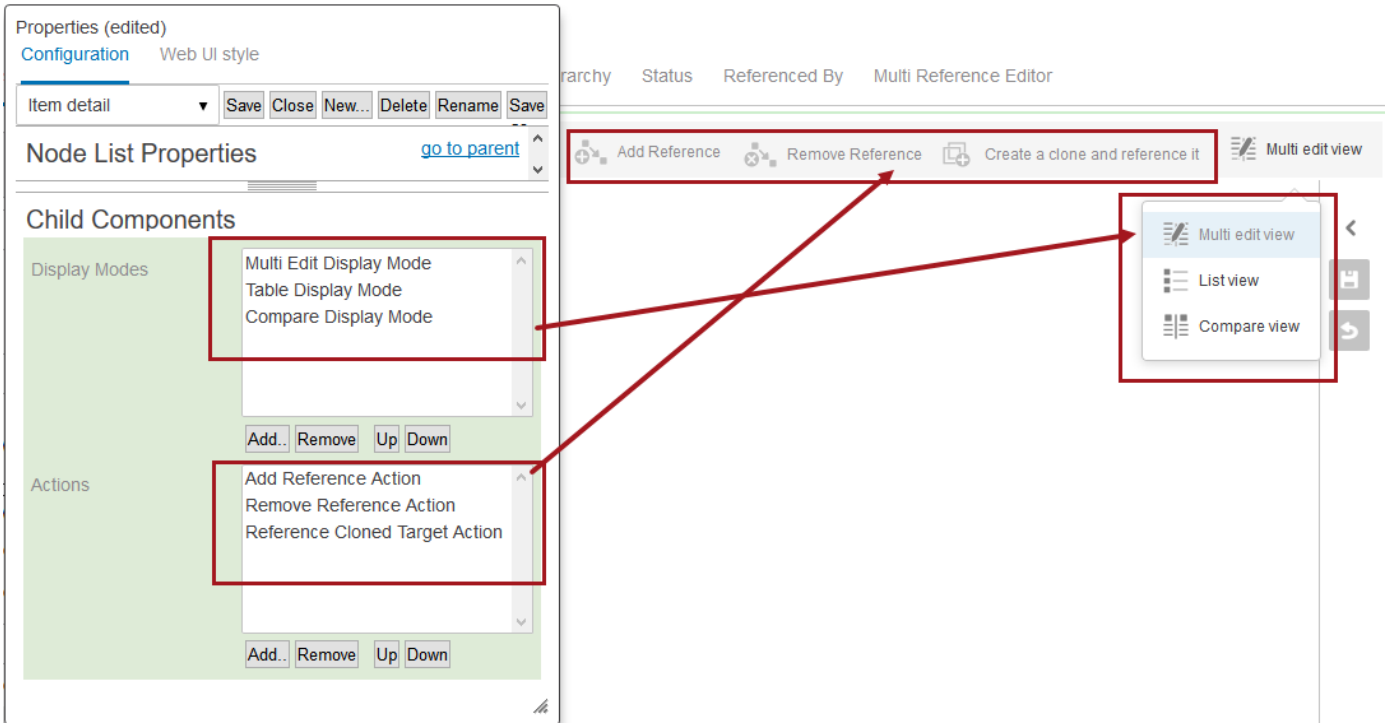
Click on 'go to component' to the right of the **Child Components** > **Node List** field. The **Node List Properties** screen will display.

Node List Properties

Each parameter features help text, accessible by clicking the info icon to the right of each parameter name.

Additional information about the node list properties can be found in the **Node List Component** section of the **Web User Interfaces** documentation.

In the Child Components section of the properties screen:



Display Modes

Click the **Add** button to select display modes. Each display mode has a corresponding button that displays above the Node List. Re-order the list or remove unneeded display modes.

One option is **Multi Edit Display Mode**, and it comes pre-configured on this particular Node List. As the name implies, you can edit multiple objects and multiple object attributes on the same screen and save the changes automatically (using the 'Use Immediate Save' parameter) or manually. For details, see the **Auto-Save in the Web UI** topic.

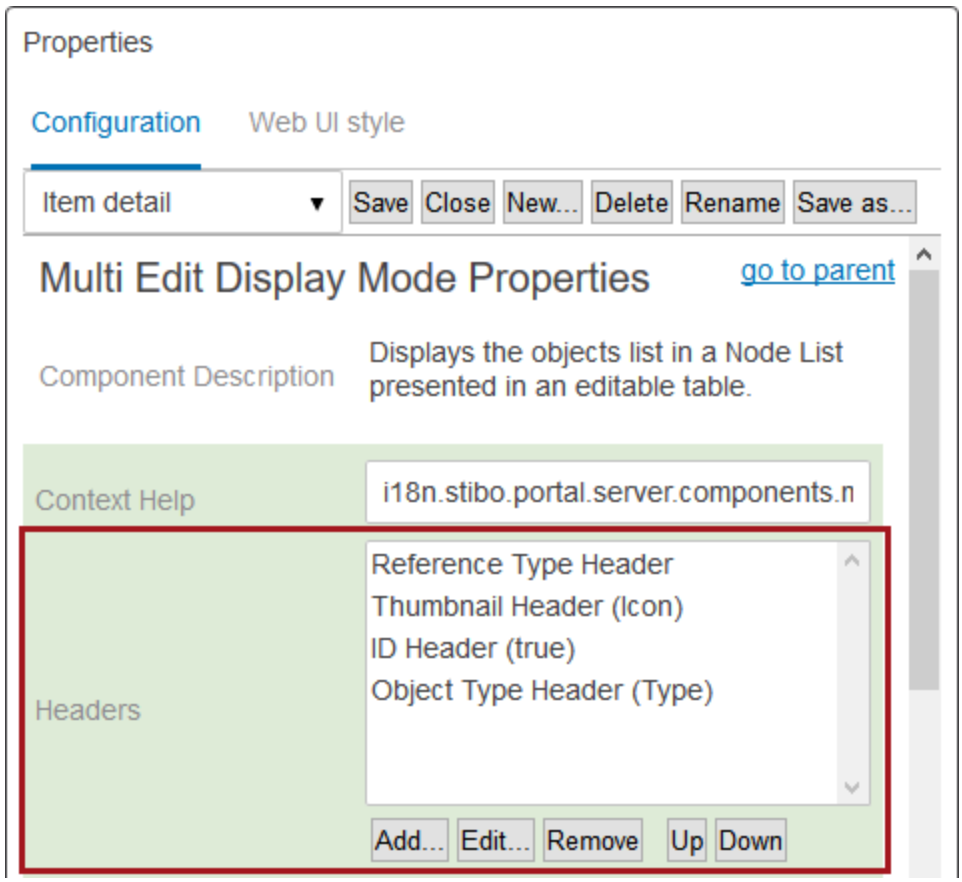


Table Headers

While configuring the headers in Display Mode properties, a user can choose to set up the table sort order based on a specific header. By editing a particular header's properties, sorting order (ascending or descending) can be designated using the dropdown next to Table Sorting. Once the properties are saved, the table will re-sort itself based on the new header settings, and the Display Mode properties will be retained until configured differently.

The Table Sorting designation can only apply to one header at a time. It has to be removed from one header before set up on another. Additionally, if 'Enable Default Sorting' is enabled / selected in the Node List properties, selecting a header to sort by overwrites this setting.

Below are some header examples. The bullet under each header explains what is displayed in that header column. Additional headers may be used (e.g., Name, ID Shared Target, Attribute Value, Attribute Value Group). When adding headers, you can read a description of each before adding them to the Headers field.

Note: It is suggested that the **ID Shared Target Header** be used in place of the ID Header to prevent unintended data changes to shared objects. When used, a visual indicator (⚠) appears in the ID cells for objects that are referenced by two or more other objects.

Reference Metadata Value Header

- The value of a metadata attribute on the reference / link

Reference Type Header

- The title of the reference type or the classification link type for the reference / link in the table

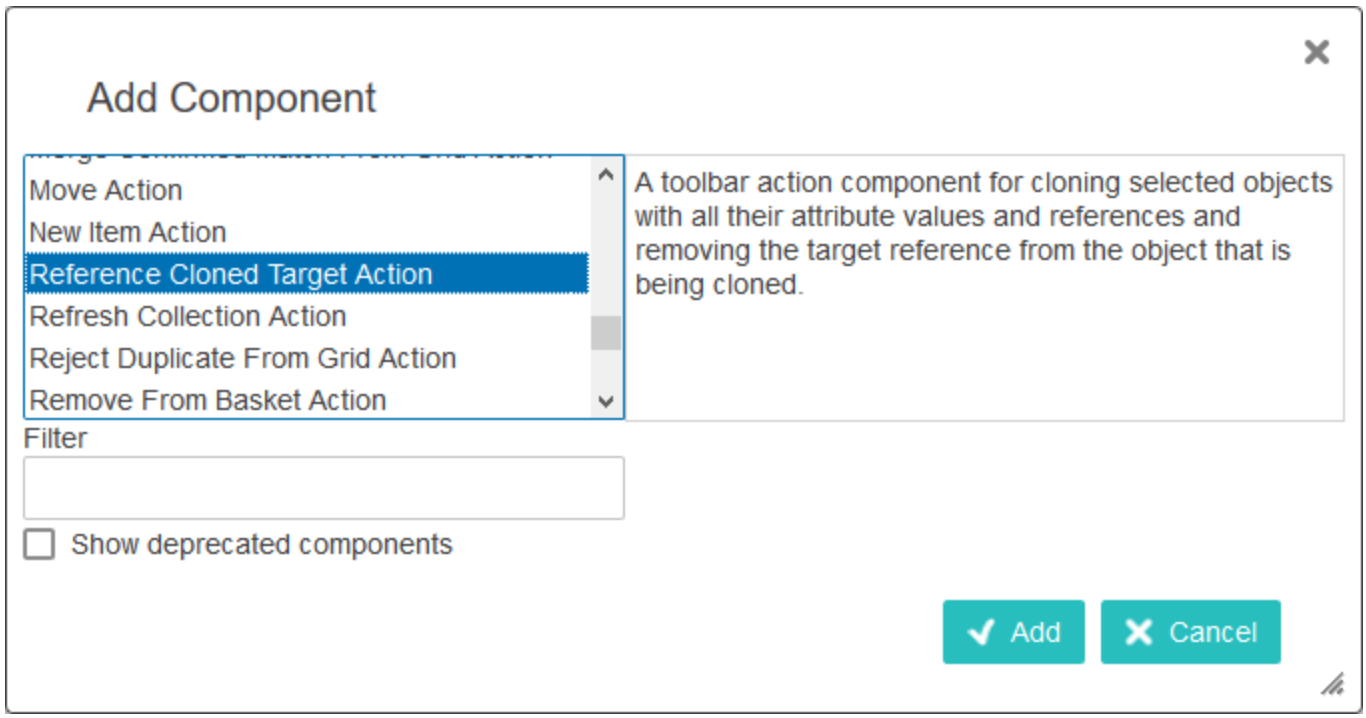
Reference Visibility Header

- The contexts in which the reference or classification link is visible

Actions

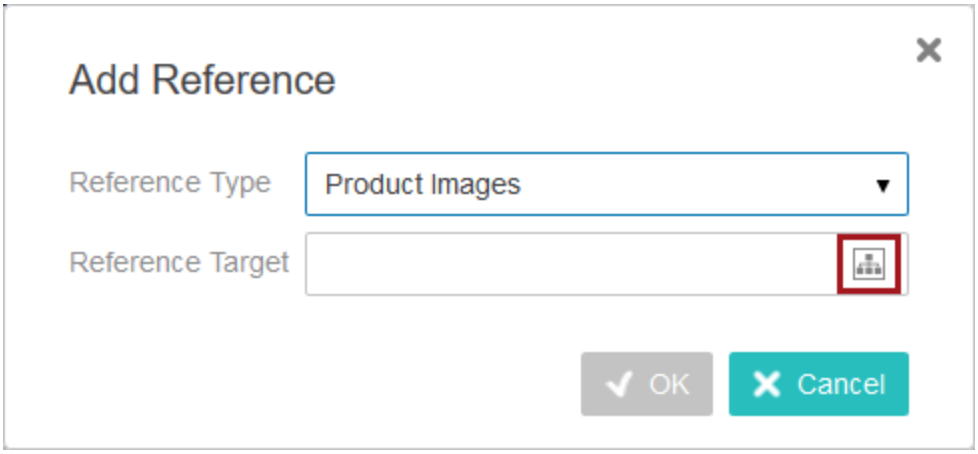
A number of action buttons can be added to a screen to be used with a Node List. These are all added and configured within the **Actions** field on the Node List Properties screen. The **Add Reference Action** and the **Remove Reference Action** come pre-configured. These actions and the Reference Cloned Target Action are described below. Other actions may be appropriate for you to use.

After you click Add, you can view action component descriptions in the 'Add component' dialog.

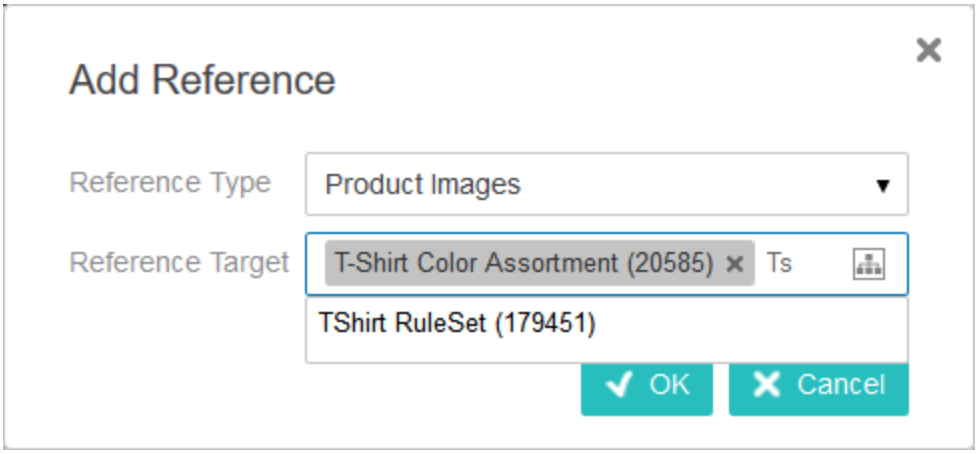


Add Reference Action

The **Add Reference Action** component ( ) opens an 'Add reference' dialog with Reference type and Reference target (or Reference source depending on the reference direction) options.



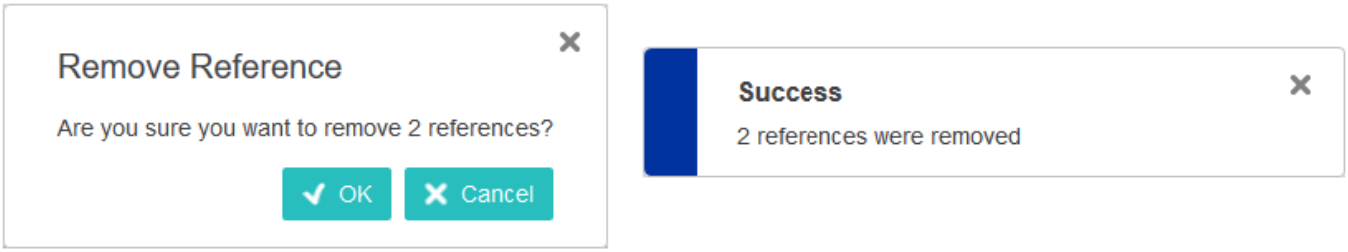
When a user clicks on a node picker icon (as shown in the screenshot above), they are presented with standard Browse and Search tabs to use when selecting or multi-selecting an existing object or objects to reference. The 'Reference target' and 'Reference source' value fields support typeahead (by name) functionality, which allows users to easily add and remove references without having to click through various hierarchies and/or folders.



Additional functionality can be configured that allows users to create new objects using existing objects as a template, search for existing objects in an effort to avoid duplicating data, or narrow the available nodes in the node picker to aid efficient reference object selection. For more details regarding how to fully configure the properties for the Add Reference Action component, see the **Add Reference Action** section of the **Web User Interfaces / Using a Web UI** documentation.

Remove Reference Action

The **Remove Reference Action** ( ) is enabled when a reference is selected in table. When clicked, it will show a dialog with a warning asking if you want to remove the references and telling you how many references are about to be removed. A success message displays upon removal.

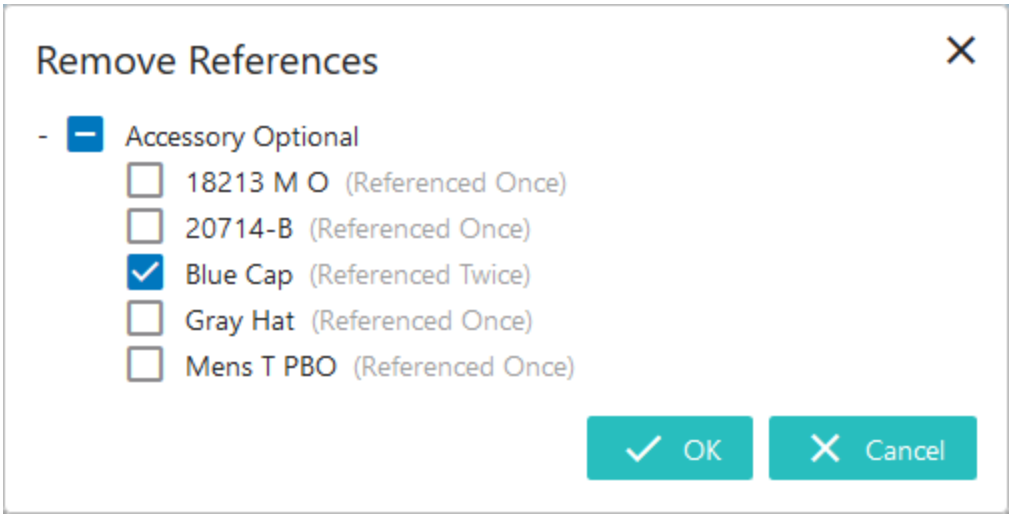


Remove References Action

The **Remove References Action** ( ) allows a user to remove multiple references to target objects from multiple objects in a Node List. For example, if a series of stereo products all reference one particular headphones product, and that headphones product is discontinued, users can use the 'Remove References Action' to remove all headphones references from the stereo products with a single action.

Once added to a Node List, initiating this action will display a menu that shows all configured reference types for which there are references, along with the objects referenced using that reference type.

In the screenshot below, the selected objects in the Node List reference objects using only one of the configured reference types, Accessory Optional. Listed beneath the reference type are the objects referenced using that reference type, along with the number of times that object is referenced.



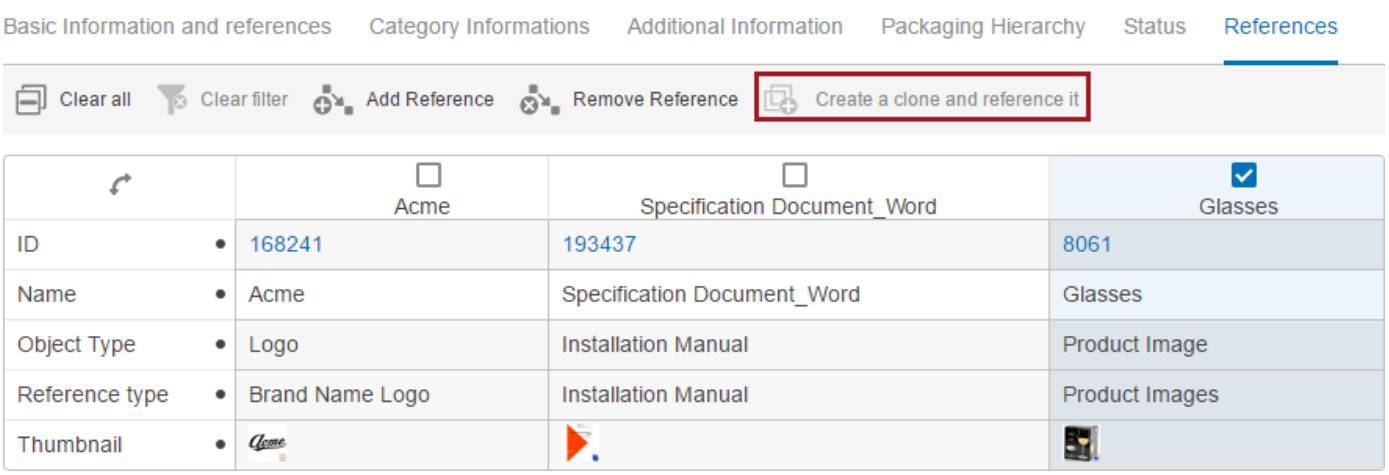
To remove all references of the listed reference type from the selected object(s), check the box beside the reference type name. Doing so automatically checks all references displaying beneath the reference type. Click 'OK' to remove all selected references. To select specific references to remove under a given reference type, check the box beside the referenced object(s) to which all references should be removed, and click 'OK'. To remove all references to a specific object referenced using multiple reference types, that object must be selected for each reference type used to reference that object.

Reference Cloned Target Action

The **Reference Cloned Target Action** ( ) allows a user to select an existing reference target and duplicate / clone it, creating a new object that includes the original attribute values and references. This is particularly useful in making sure a user does not inadvertently edit shared data that could have implications to other objects with the same reference. When a user needs to make changes to data that is shared (e.g., the object is referenced by multiple objects), they can clone the existing object and freely edit the data on the clone, without fear of impacting the other objects with references to the original object. An example is shown below.

Note that users can only clone one object at a time, and objects being cloned must use auto-generated IDs.

Important: Asset References cannot be cloned.

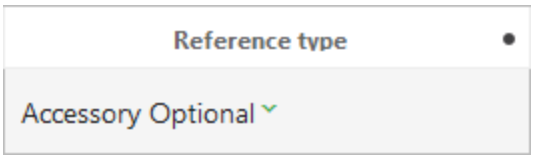


Display of inheritance in reference components

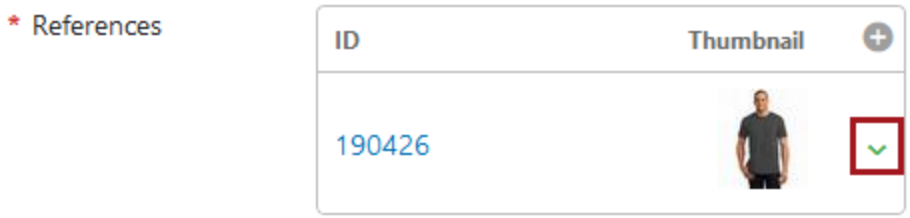
References inherited from a parent object or parent context will display with colored arrows to visually indicate their inheritance.

Inherited from parent

If a reference is inherited from a parent object, a green arrow will display next to the reference type in the 'Reference Type Header' on a Node List.

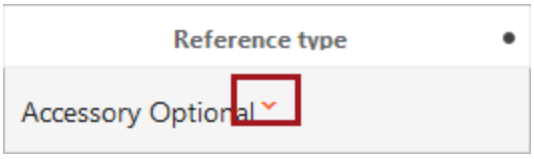


When a 'References' component has been configured on a Node Editor, references inherited from a parent object will display with a green arrow to the right of any configured columns, as in the screenshot below.

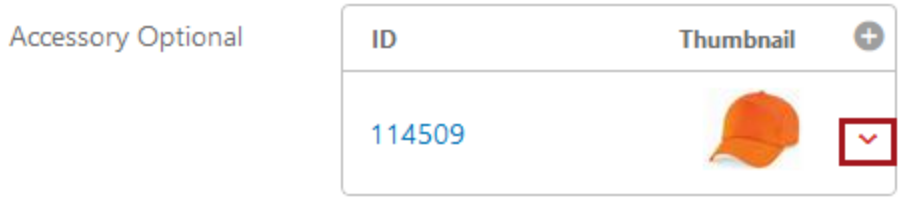


Inherited from context

If a reference is inherited from a parent context, a red arrow will display next to the reference type in the 'Reference Type Header' on a Node List.

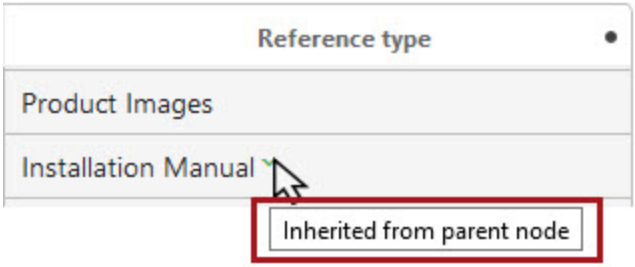


When a 'References' component has been configured on a Node Editor, references inherited from a parent context will display with a red arrow to the right of any configured columns, as in the screenshot below.



In instances where a reference is inherited from both a parent object and a parent context, the green and red arrows will display together, side by side.

In all instances, when the cursor is placed over either a red or green error, a text box displays with information about why the arrow is displaying. In the example below, the reference is inherited from a parent node.



For more information on inherited references, see the **Inheritance in the Product Hierarchy** topic in the System Setup / Super User Guide documentation.

Considerations and Limitations

- The Multi Reference Editor is not compatible with the Target Value Header.
- The Multi Reference Editor cannot be used with the Split panel display mode.

Add Reference Action

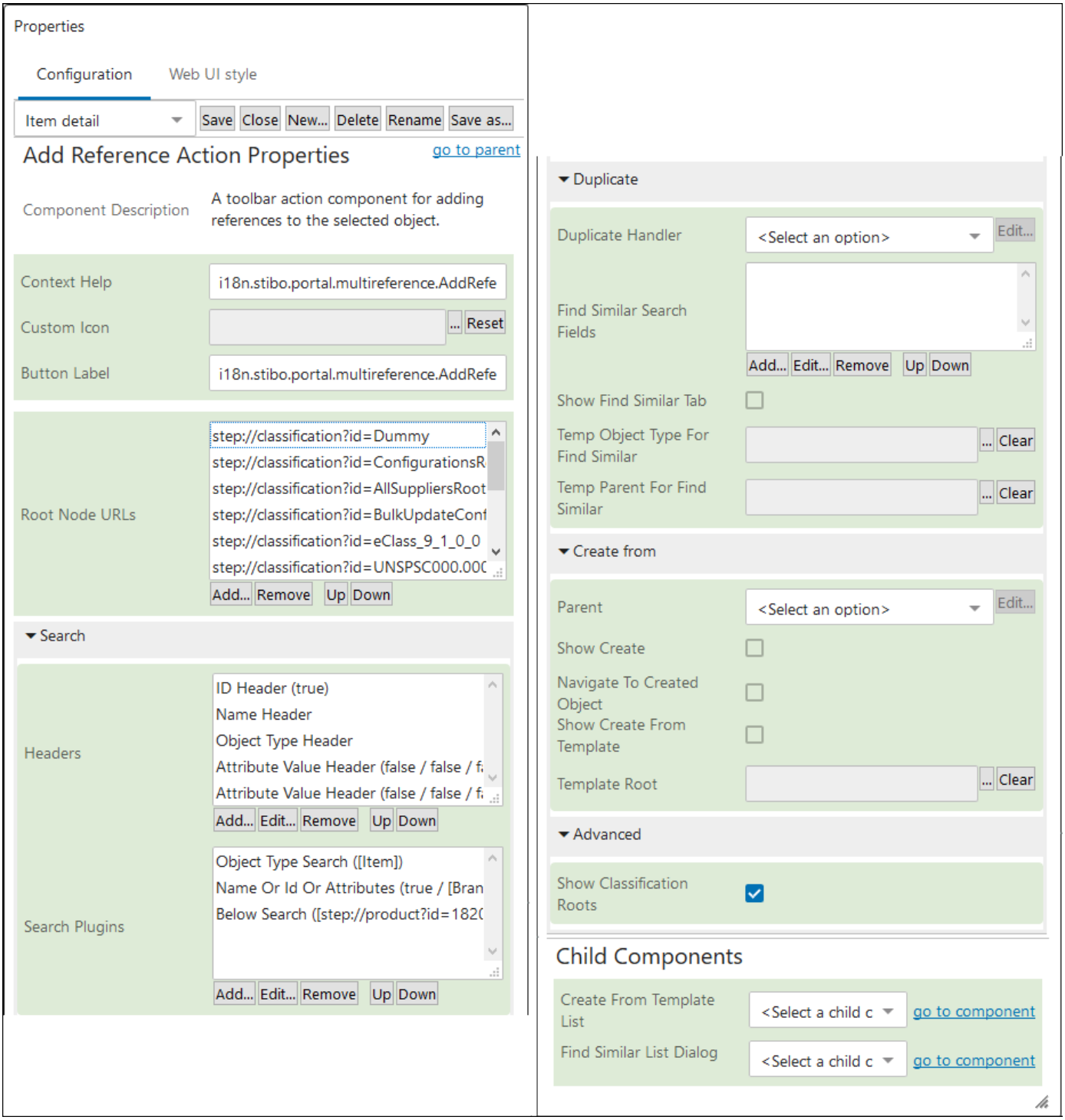
The Add Reference Action functionality can be configured beyond the basic Browse / Search functionality described in the **Multi Reference Editor** section of the **Web User Interfaces / Using a Web UI** documentation.

If configured to do so, the Add Reference Action dialog can also include the **Create** and **Create From Template** tabs to allow users to create new objects to reference rather than having to choose from existing objects only. Additionally, **Find Similar** functionality allows users to search for and identify similar objects on a more granular level prior to adding references and creating target objects. These tabs are all omitted by default but can be enabled within the Add References Action Properties.

All the steps provided in this topic assume the Web UI designer is in design mode and on the **Add Reference Action Properties** screen prior to starting the configuration process. It is also assumed that all users (designers and end users) have the proper privilege to work with the Multi Reference Editor and its features. For more information about privileges and user setup, see the **Users and Groups** section and **Adding User Privileges for a Group** section of the **System Setup / Super User Guide** documentation.

Add Reference Action Properties

Each parameter is explained following the image below. Also, the parameters required to set up the Create, Create From Template, and Find Similar tabs are described as a whole in the applicable section. Anyone designing the Web UI can determine what features or combination of features are preferred and set them up based on the descriptive info below.

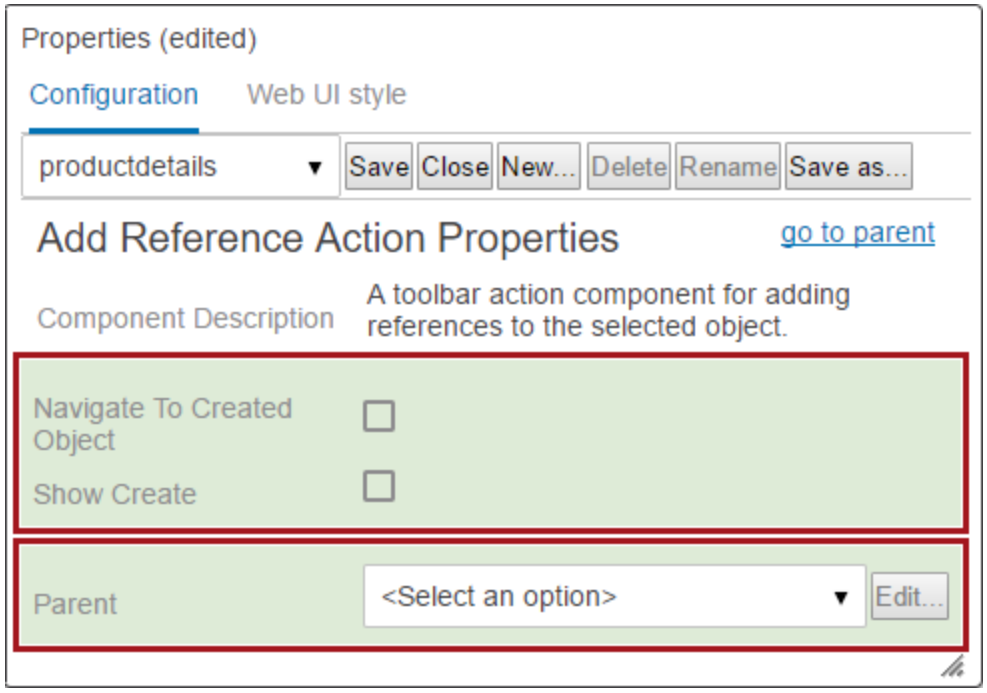


The Add Reference Action component is highly configurable. Each parameter features help text, accessible by clicking the info icon to the right of each parameter name. An expanded description of each parameter is available below.

Parameter	Description
Context Help	The name of the action when displayed.
Custom Icon	Adding a custom icon will override the default icon displayed. The recommended size in pixels is 20 high x 35 wide. The recommended colors should be jewel toned, deep colors that will fade well when the item is disabled.
Button Label	The name of the action, shown as hover text on the toolbar action.
Root Node URLs	This parameter allows users to select which nodes will be available in the node picker when adding a reference. Regardless of the selected reference type, only the nodes added will be available to pick a source / target object to reference. If no nodes are added, all available nodes will display.
Headers	Add configurable headers that will display information in the Search tab on the Node Picker following initiation of a search.
Search Plugins	Search types that can be applied to a Node Picker when running a search in the Search tab include Below Search, Golden Record - Source Record ID search, Name or Id Or Attributes search, and Object Type Search.
Duplicate Handler	A parameter / option required when using Find Similar; works with Find Similar functionality to return potential duplicate objects based on search values and a matching algorithm
Find Similar Search Fields	The object attribute or referenced object attribute fields that end users can search upon to determine if a similar object already exists in STEP; Find Similar functionality
Show Find Similar Tab	The selection that determines if the Find Similar tab should be shown in the node picker dialog; if enabled, then Duplicate Handler, Find Similar Search Fields, Temp Object Type for Find Similar, Temp Parent for Find Similar, and the Child Component > Find Similar List Dialog also need to be configured
Temp Object Type for Find Similar	The temporary object type for objects that are stored while the Find Similar functionality is being used

Parameter	Description
Temp Parent for Find Similar	The location that temporary objects reside when searching with the Find Similar functionality
Parent	This setting allows the designer to determine a single parent under which all new objects will be created; used with Create and Create From Template
Show Create	The Create tab will be shown in the node picker dialog
Navigate to Created Object	The parameter that decides if the 'Go to created object' option on the Create tab is enabled by default; when enabled, the end user will be auto-navigated to the new object upon creation (using Create)
Show Create From Template	The Create From Template tab will be shown in the node picker dialog
Template Root	The root node from which child objects can be used as templates (Create From Template)
Show Classification Roots	This parameter allows users to see classification root nodes on the Browse tab in the Node Picker, if the classification nodes are configured, and the reference type selected is a Product Reference type.
Create From Template List	The configurable results list when using the Create From Template functionality; List Dialog must be selected from the dropdown; a Dialog List Screen needs to be created, selected, and configured
Find Similar List Dialog	The configurable results list when using the Find Similar functionality; List Dialog must be selected from the dropdown; a Dialog List Screen needs to be created, selected, and configured

Create

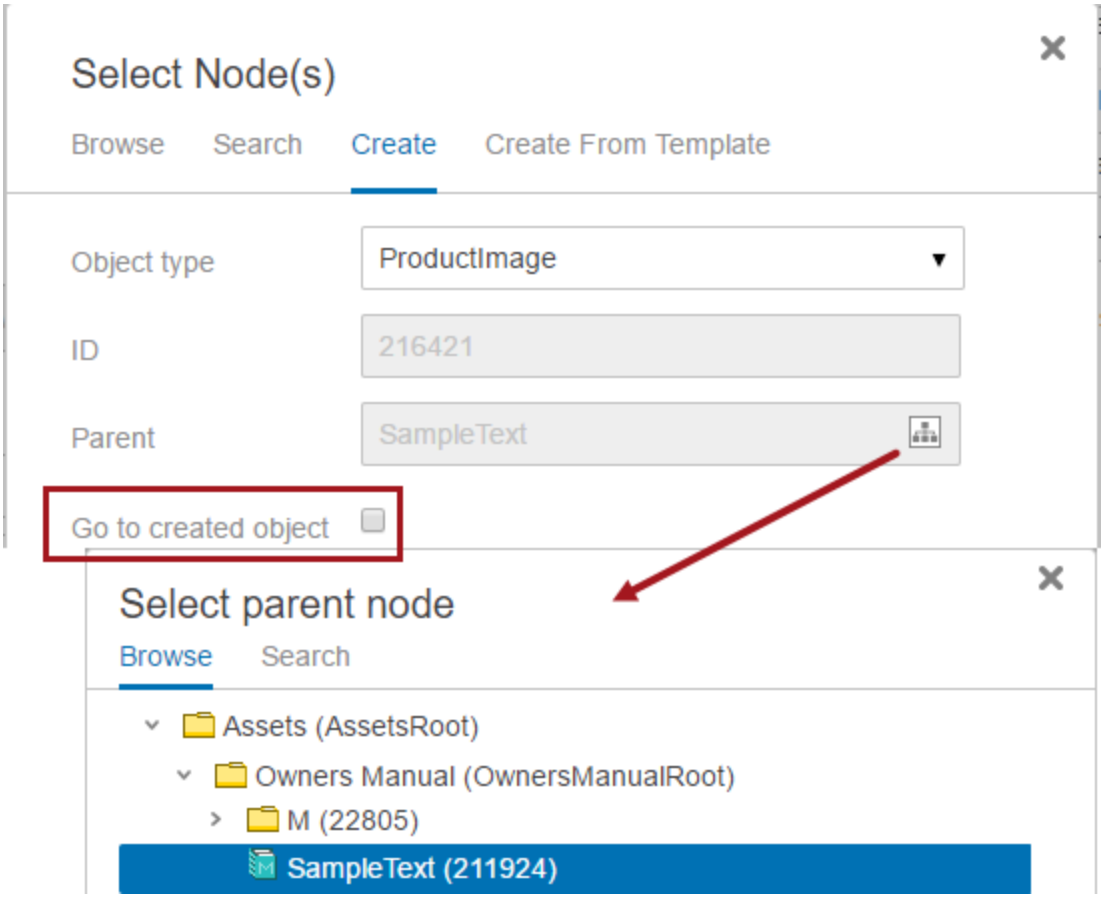


Follow these configuration steps to display the Create tab when adding references:

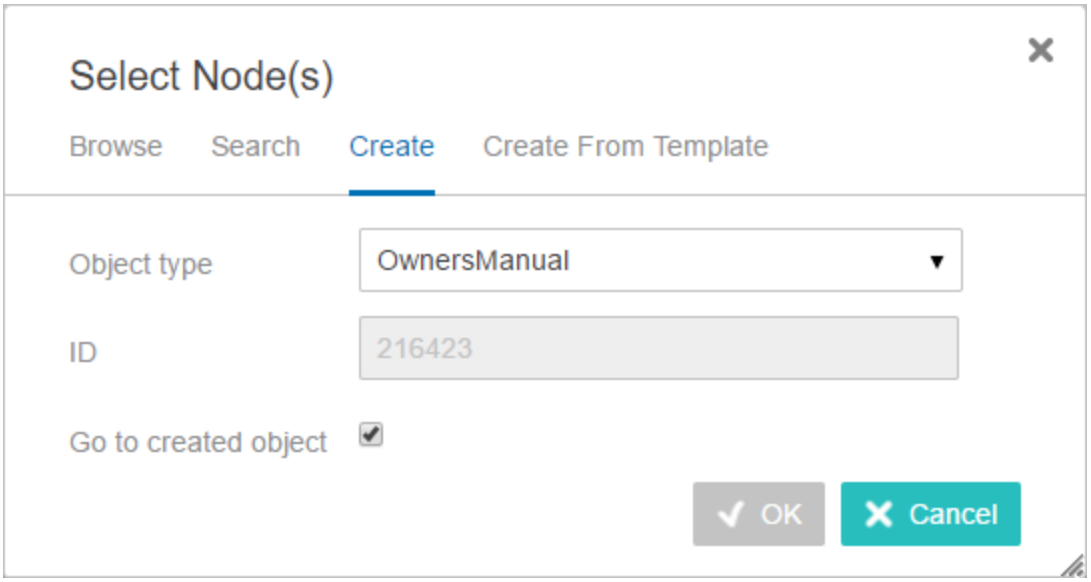
1. Enable **Navigate to Created Object** if the 'Go to created object' option on the Create tab should be enabled by default (shown as disabled in the screenshot in Step 3 below).
2. Enable the **Show Create** parameter.
3. Select a **Parent**, if desired. Choose **Configured Parent Handler** from the dropdown in the value field. In the **Configured Parent Handler Properties** that pops-up, click the ellipsis button (...) to the right of the **Parent** value field to browse or search to select a single parent under which all new objects will be created.

   When the **Show Create** parameter is selected (checked), users are able to create new objects when building references.

   Users must select a valid object type and parent combination, and the object type selection must align with the reference type selected.



If the **Parent** parameter is left not configured, end users will have the option to select any valid parent from existing objects. Choosing a **Parent** is useful if the Multi Reference Editor will only be used to create a single object type which will reside in a flat hierarchy structure. In this case, end users are not presented with a parent selection option.

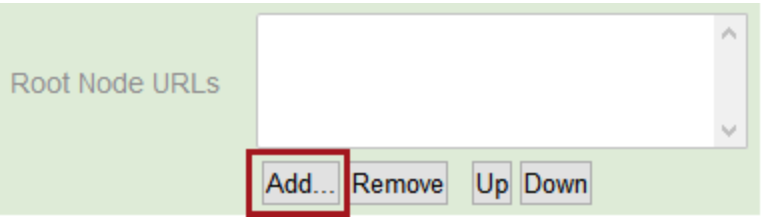


When creating new objects from the Multi Reference Editor, the ID field is editable unless the objects being created utilize auto-generated IDs.

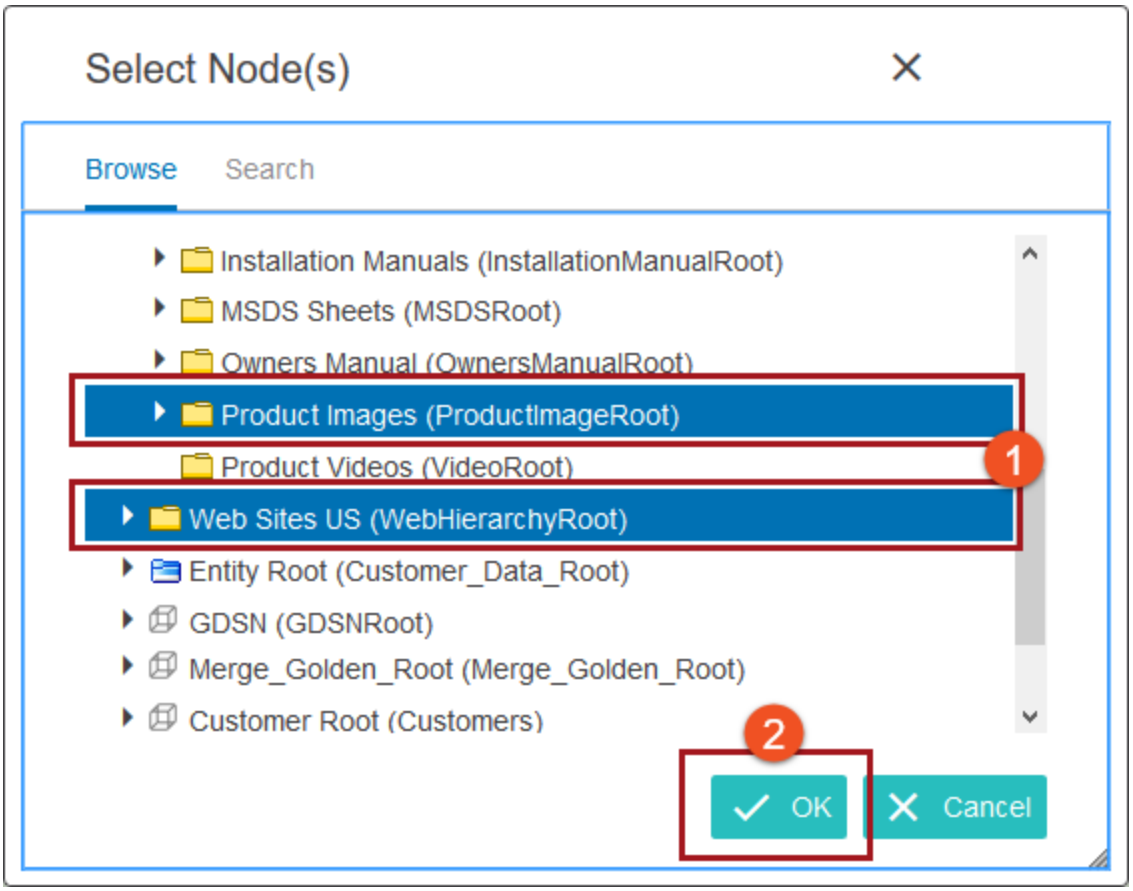
Configuring the Node Picker

Follow these steps to configure which nodes are available in the Node Picker when adding a reference.

1. On the **Root Node URLs** parameter, click **Add...**.

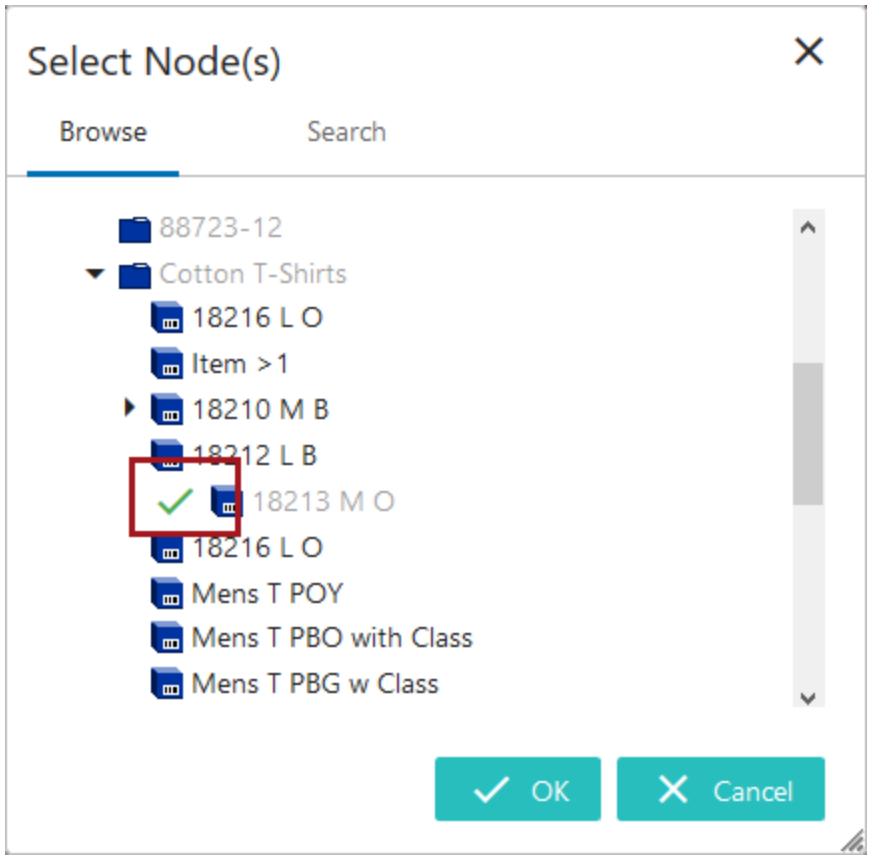


2. From the Node Picker, select the node or nodes that should appear in the Node Picker when a user has clicked the **Add Reference** button. Users may multi-select by holding CTRL (or CMD for Mac users) while making selections (multi-select is shown in the screenshot below). When the relevant nodes are selected, click **OK**.



Objects that are of an object type that is invalid for the configured reference type will display in gray text and cannot be referenced. Objects that can be referenced will display in black text.

Additionally, as shown in the screenshot below, objects that have already been referenced will display in gray text with a green checkmark, and cannot be selected.



Target objects in inherited references will show with a green checkmark to indicate that they are already referenced, but will display in black text because they can be referenced again.

The **Headers** and **Search Plugins** parameters allows users to configure the Search tab in the Node Picker. Configurable headers added to the **Headers** field define which information displays in the Search tab, and the kinds of searches run when the 'Search' button is clicked can be configured and added using the **Search Plugins** parameter. For more information on the Node Picker component and configuring the Search tab, see the **Node Picker Dialog** topic in this documentation.

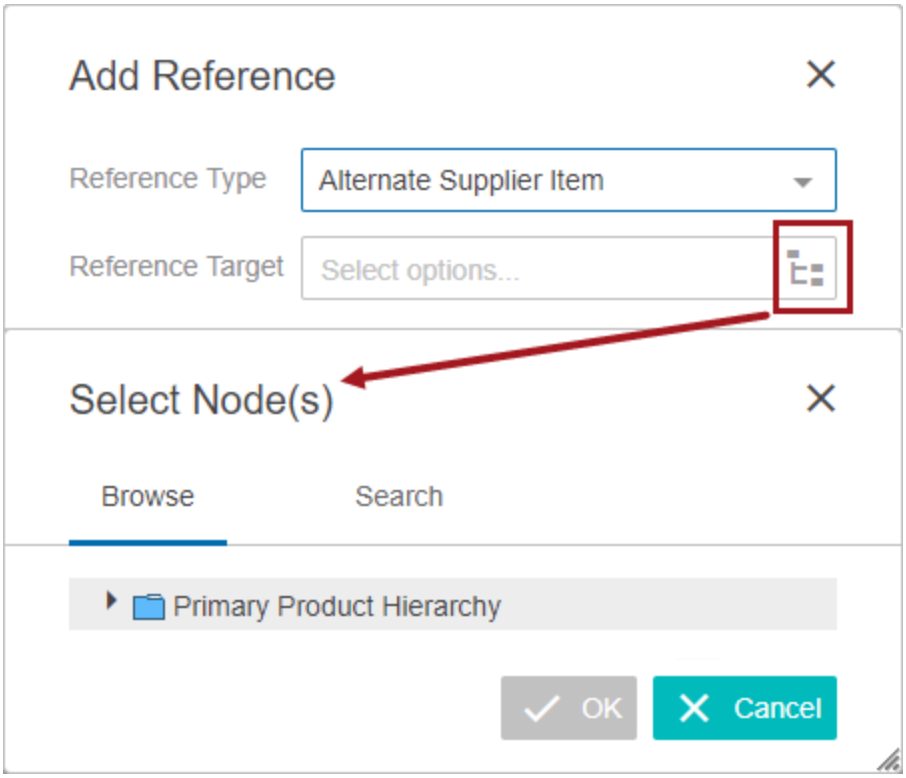
3. Click **Save** and **Close** design mode to return to normal Web UI mode.

Configuration of which nodes display in the **Add Reference Action's** node picker can be set only once per Multi Reference Editor screen. This means that if a user configures a restricted list of nodes to appear in the node picker, this list will appear regardless of the selected reference type. For example, if a user has selected only product image nodes to appear in the node picker when adding a reference, even if that user selects a Product to Product reference type, only the configured product image nodes will be available. For some users, particularly those who maintain references of a single reference type per Multi Reference Editor screen, this may represent a limitation.

To configure the UI to remove this limitation, users may add multiple Multi Reference Editor screens via secondary tabs, and configure the node picker for each screen so that when the **Add Reference** toolbar action is clicked, only the objects relevant to that Multi Reference Editor screen's designated reference type will display.

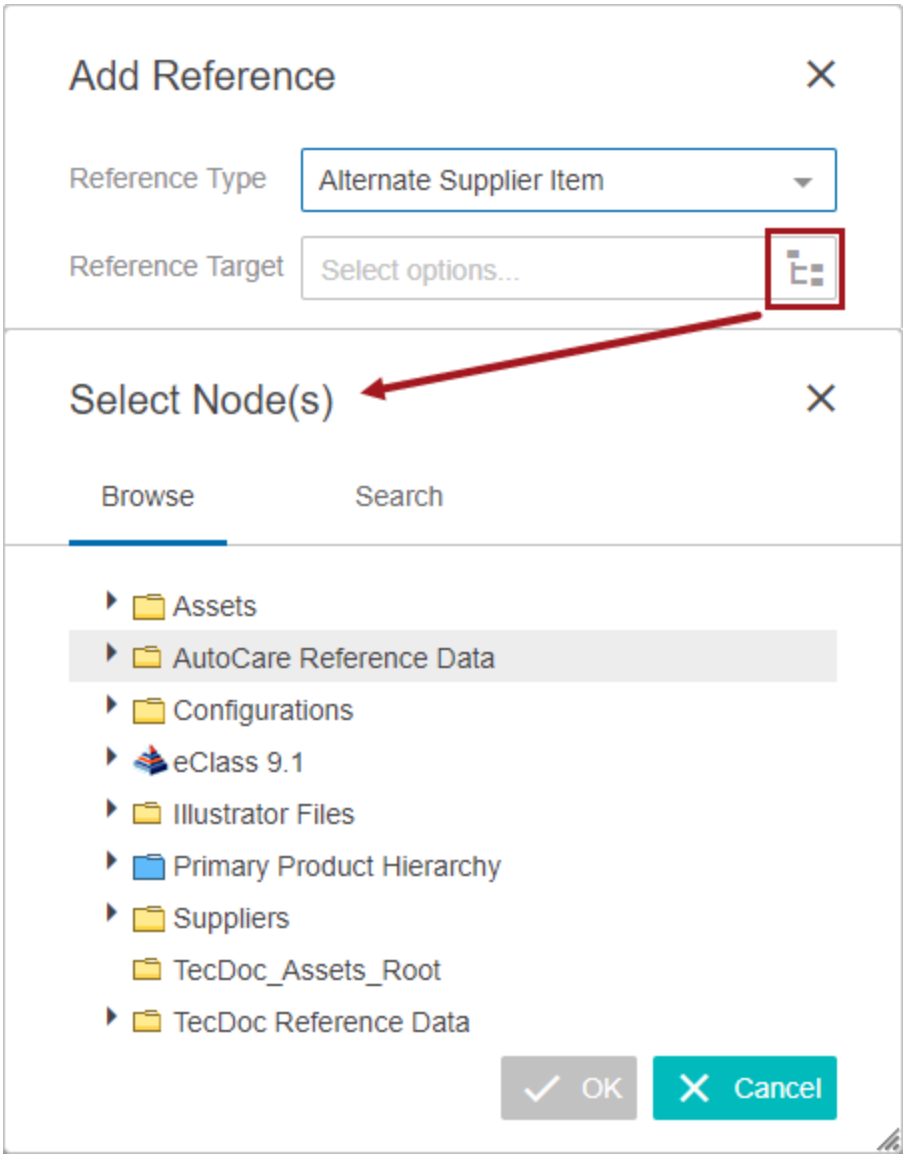
Displaying Classification Roots with Product References

By default, if no root nodes are specified, the Primary Product Hierarchy will be the only selectable root node for Product reference types. Even if classification folders are configured for the Root Node URLs parameter, they will not display within the node picker unless the 'Show Classification Roots' option is enabled as described below.



In systems with a lot of objects where classification folders are used to organize products, the 'Show Classification Roots' option needs to be selected under the Advanced section of the 'Add Reference Action' properties screen.

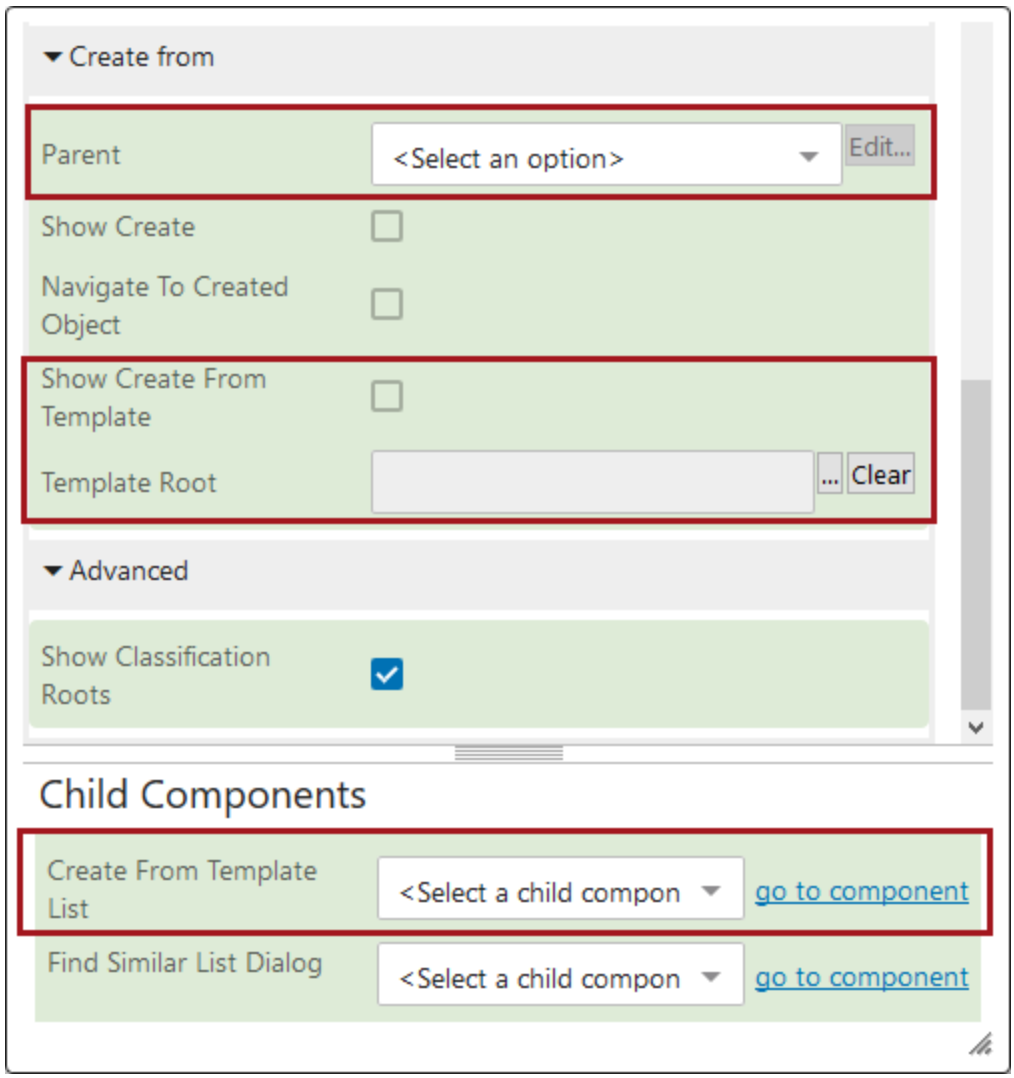
Once this option is selected and the node picker is activated, the classification roots and product nodes are available.



Create From Template

Template objects can be whatever the Web UI designer chooses for them to be. They can be 'live' objects or a set of configured objects that exist only for selection as templates. When a user selects a template object, a new object is created with the same attribute links and values as the selected template object and references it to the selected source. Users then need only to populate the subset of data that differs between the template and the new object.

When creating a new object from a template and following the dialog path of options, users are ultimately presented with a **Pick a Template** option that has three tabs: List, Browse, and Search. In addition to displaying a list of templates (similar to the Browse tab), the List tab is configurable and users can choose to include attributes within the tab view, making it easier to identify the template that best fits the new object.

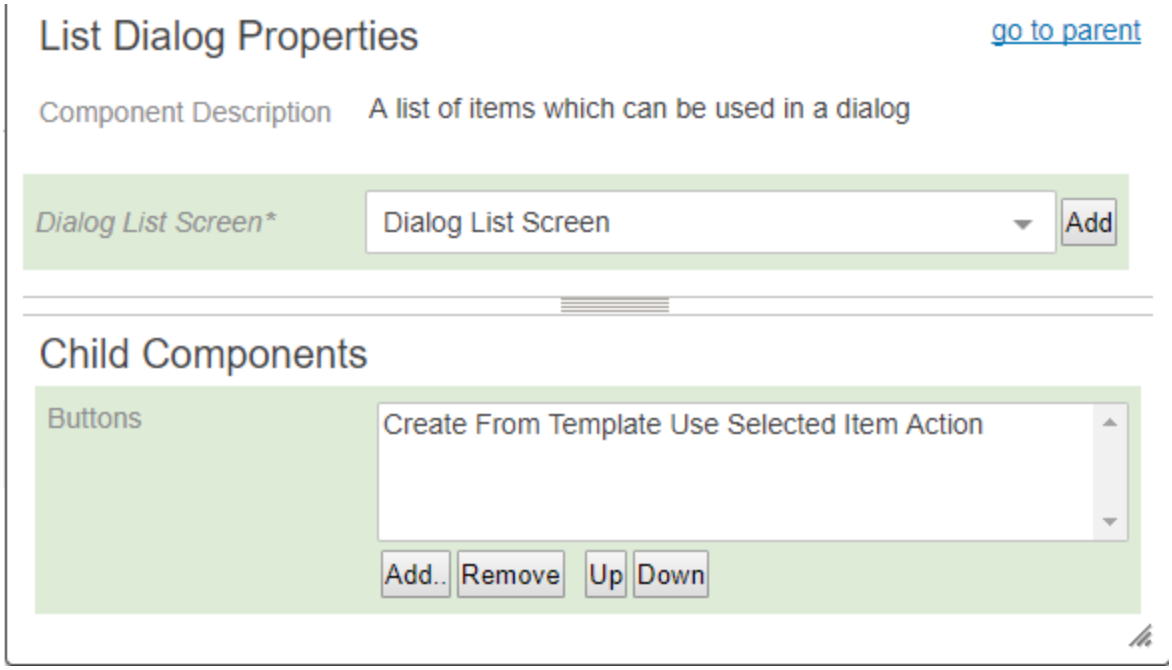


Follow these configuration steps to display the Create From Template tab when adding references:

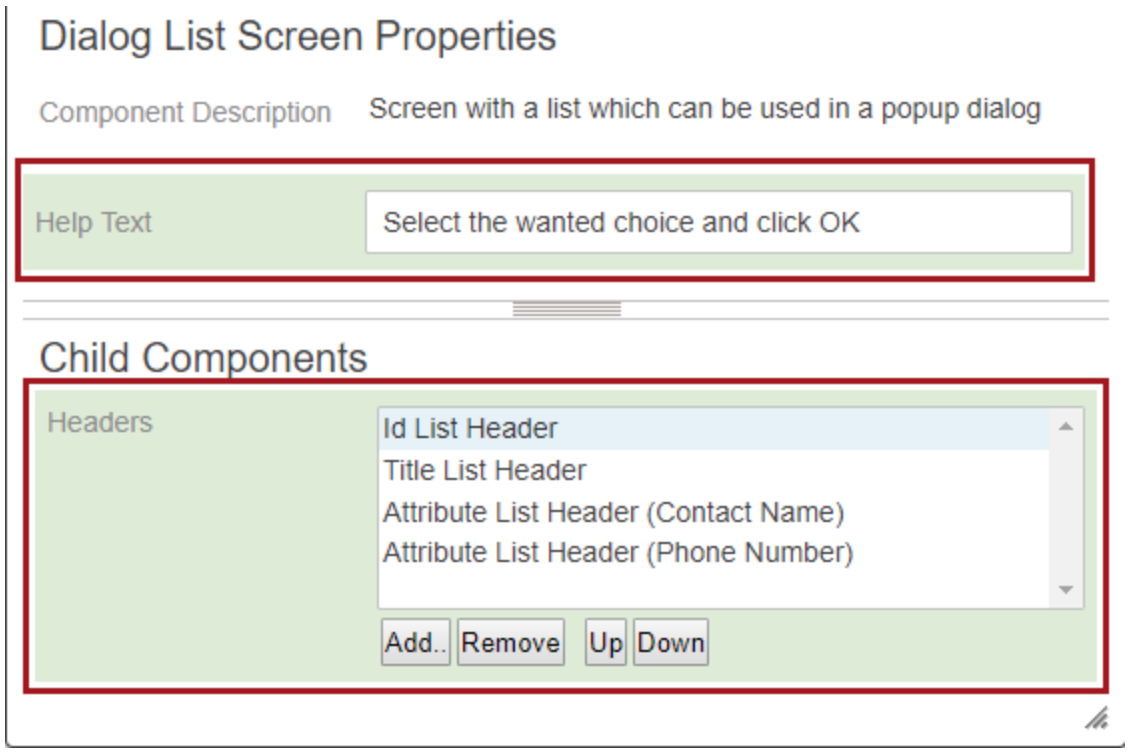
1. Enable the **Show Create From Template** parameter.
2. Click the ellipsis button (...) to the right of the value field to select a **Template Root**. Any objects under the root are available for selection as a template for new object creation. This creates a new object with the same attribute links and values as the selected template object and references it to the selected source so that users need only to populate the subset of data that differs between the template and the new object. It is a good idea to use a specific, limited set of objects, easily identifiable, as templates for an end user to choose from.

Note: The selected template must be valid for the selected reference type, and only a single Template Root may be selected. It is therefore recommended that a separate area be created for this purpose and that all existing objects that are allowed to be used as templates be linked into that area.

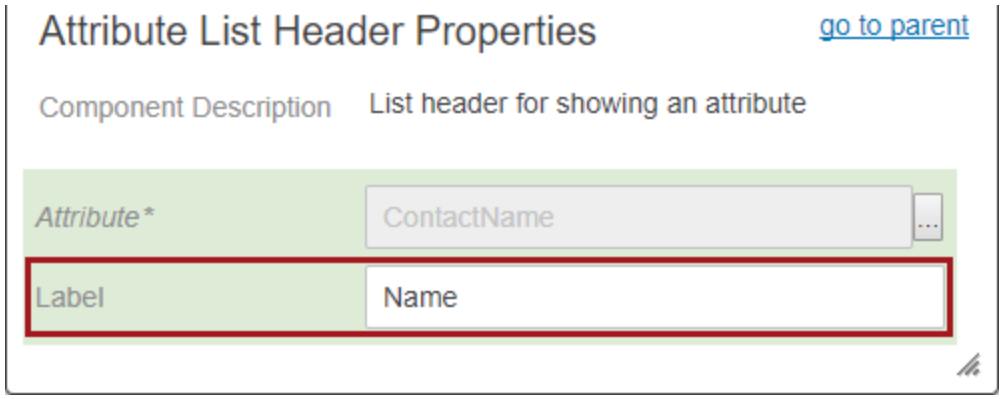
3. Select a **Parent**, if desired. Choose **Configured Parent Handler** from the dropdown in the value field. In the **Configured Parent Handler Properties** dialog that displays, click the ellipsis button (...) to the right of the **Parent** value field to browse or search to select a single parent under which all new objects will be created. If the **Parent** parameter is left unconfigured, end users will have the option to select any valid parent from existing objects.
4. Under **Child Components** > **Create From Template List**, select **List Dialog** from the dropdown menu.
5. When presented with the **List Dialog Properties**, click the **Add** button to the right of the **Dialog List Screen** field.
6. Create a new screen by selecting **Dialog List Screen** from the list of available screen types / components. Enter an easily identifiable Screen ID, click **Add**. The screen ID will automatically populate in the Dialog List Screen value field.
7. If a **Dialog List Screen** already exists, skip the previous two steps and select the screen using the dropdown.
8. Back on the **List Dialog Properties** screen, in the **Child Components** > **Buttons** field, click **Add** and select **Create From Template Use Selected Item Action**. Click **Add**, and then click **Save** in the Designer window.



9. Before exiting design mode, select the Dialog List Screen ID of the screen you just created from the dropdown menu. In the example above, the screen ID is Dialog List Screen - Create from Template.
10. Configure the **Child Components** > **Headers** section of the **Dialog List Screen Properties**. Click **Add** under the value field to set up the attributes that will display in the Create From Template tab for the results list. The **Help Text** is editable and will display at the top of the template results list.



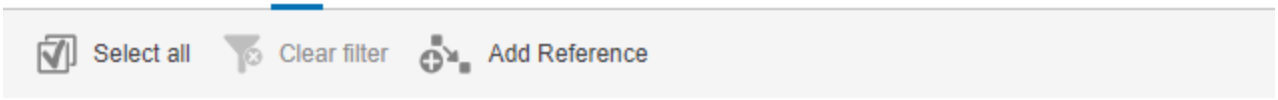
11. Select the headers for the columns to be displayed to end users. If you are using an Attribute List or Attribute Group List, make sure you fill in the **Label** for the attribute to be displayed in the results list.



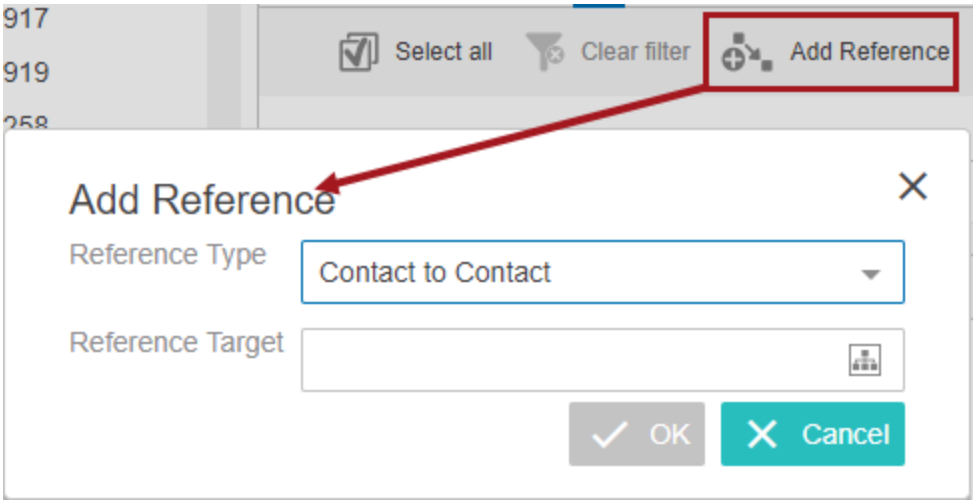
12. Click **Save** and **Close** design mode to return to normal Web UI mode.

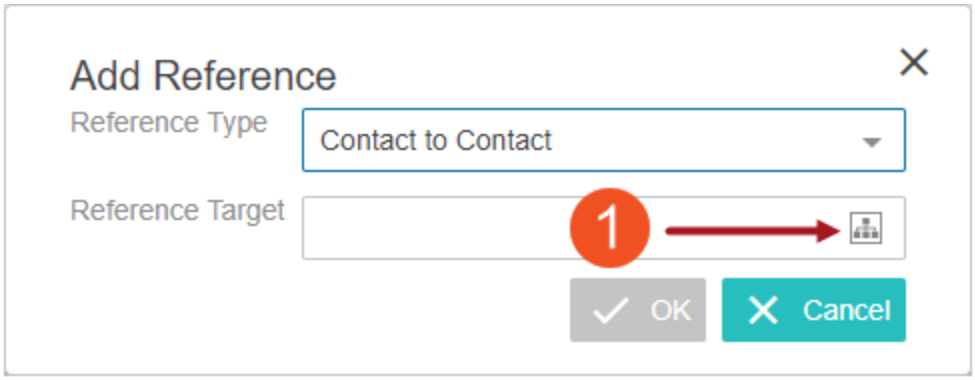
Create From Template Example

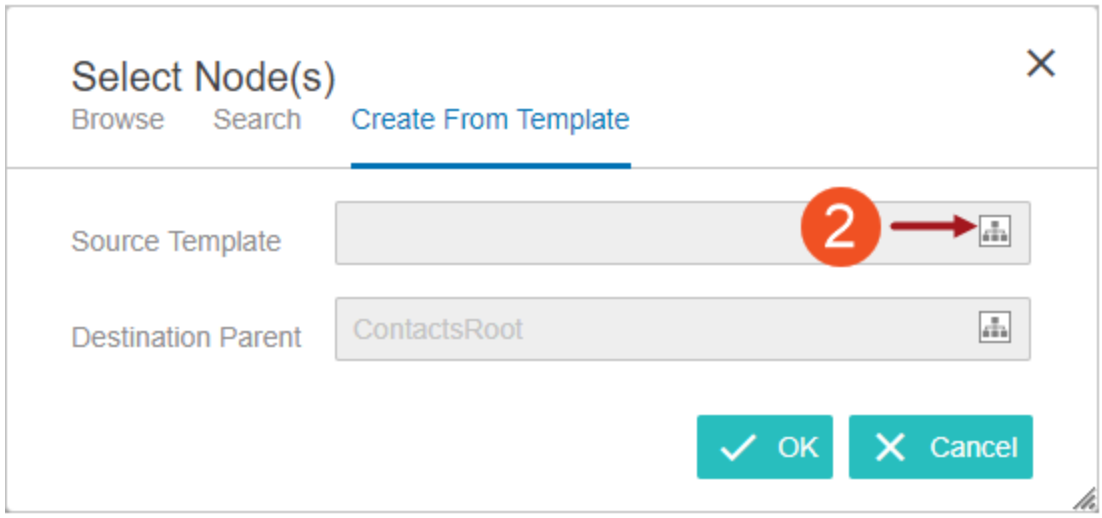
This is an example of a configured Create From Template tab. While using a Multi Reference Editor component, the end user clicked 'Add reference' and then clicked the node picker icon on the 'Add reference' dialog that appeared. The Create From Template tab is displayed in the 'Select Node(s)' dialog. By clicking the node picker icon for the Source Template field, the end users gets a Pick a Template Node dialog that displays the List screen based on the headers / attributes configured to display.

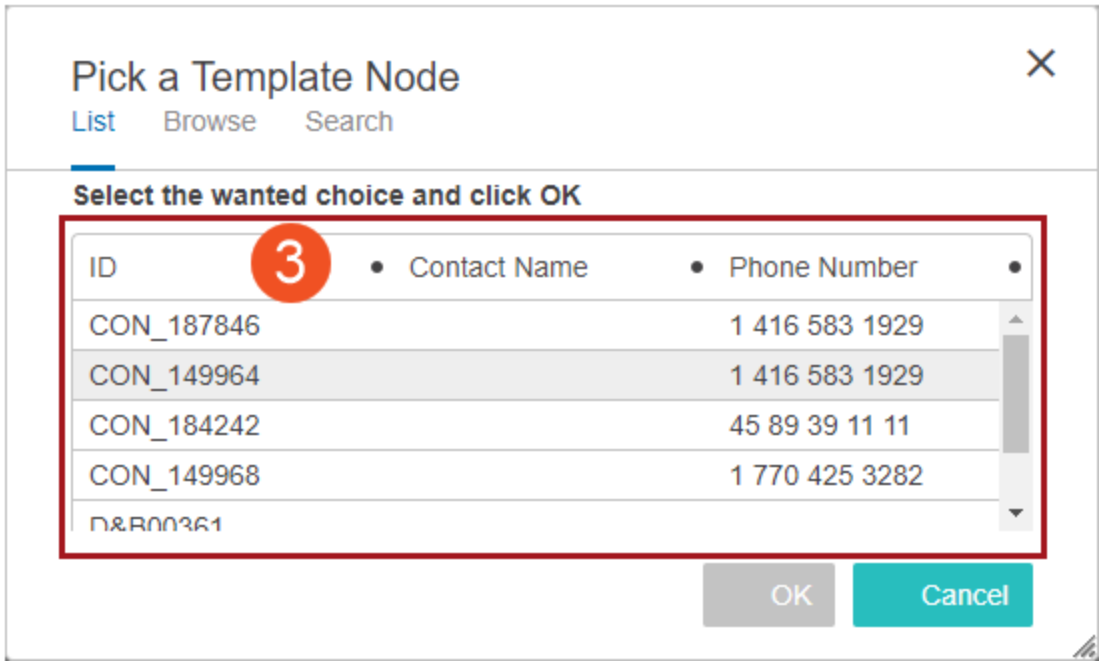


	ID	Contact Name	Object Type	Reference type
John Smith	CON_107842	John Smith	Contact	Contact to Contact
Jimmy Smith	CON_149944	Jimmy Smith	Contact	Contact to Contact

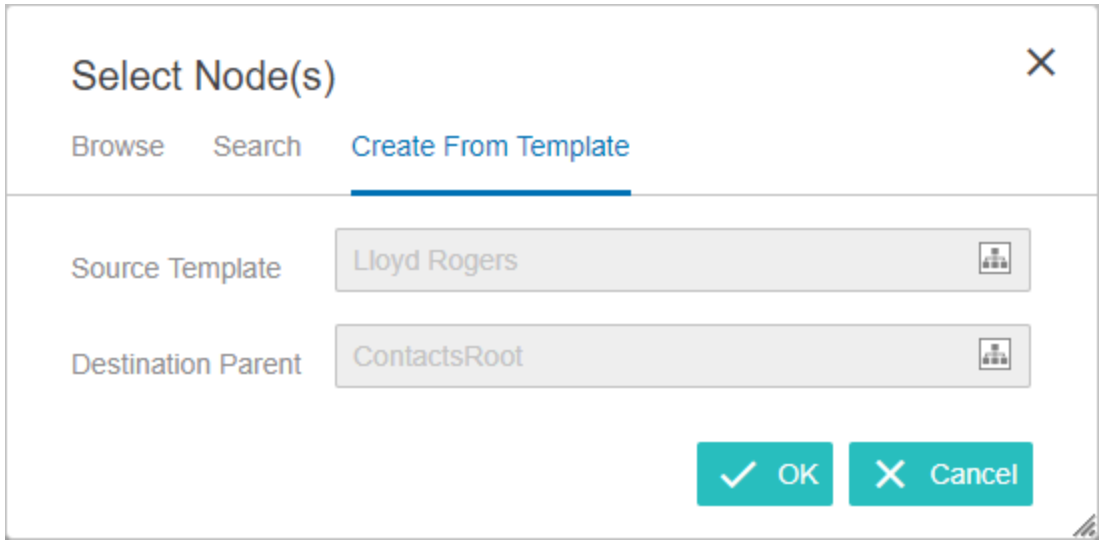


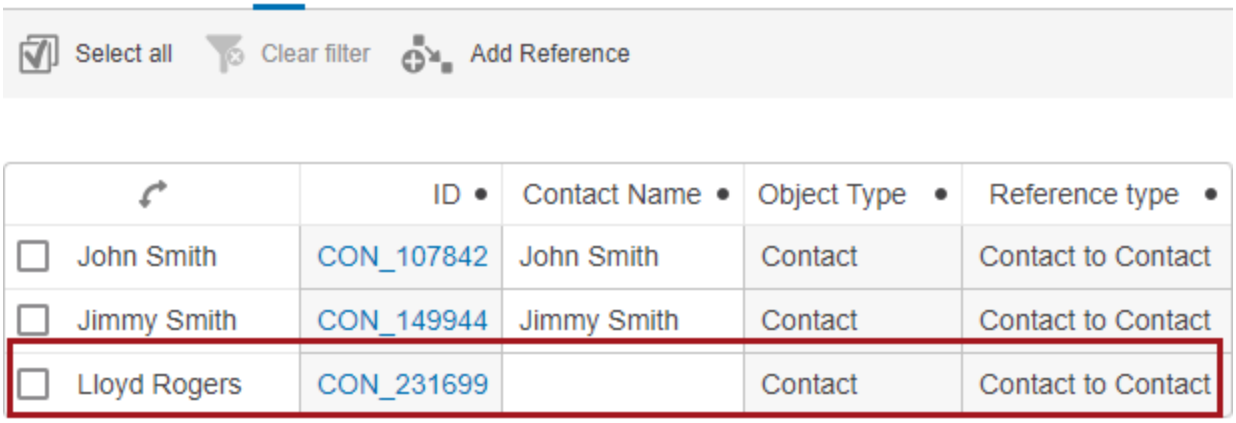

Add Reference
Reference Type
Contact to Contact
Reference Target
1
OK
Cancel


Select Node(s)
Browse
Search
Create From Template
Source Template
2
Destination Parent
ContactsRoot
OK
Cancel


Pick a Template Node
List
Browse
Search
Select the wanted choice and click OK
ID
3
Contact Name
Phone Number
CON_187846
1 416 583 1929
CON_149964
1 416 583 1929
CON_184242
45 89 39 11 11
CON_149968
1 770 425 3282
OK
Cancel

A maximum of fifty (50) template objects are shown at one time on the results list. The end user selects a single template to use. Once a selection is made, the OK button will be available. The end user clicks OK and continues through the remaining dialog screens. The end result will be a new reference that can be edited (the ID field is editable unless the object being created utilizes an auto-generated ID).





Considerations and Limitations

- Create From Template functionality is available for Product and Entity object types only.
- Care must be taken in the configuration of the Add Reference Action component (and in particular of the Create From Template option) to ensure that end users are provided with valid selection options. The selections for object type of the template (if used), object type of the object being created, parent, and reference type must all align to yield valid results based on the data model and configurations.

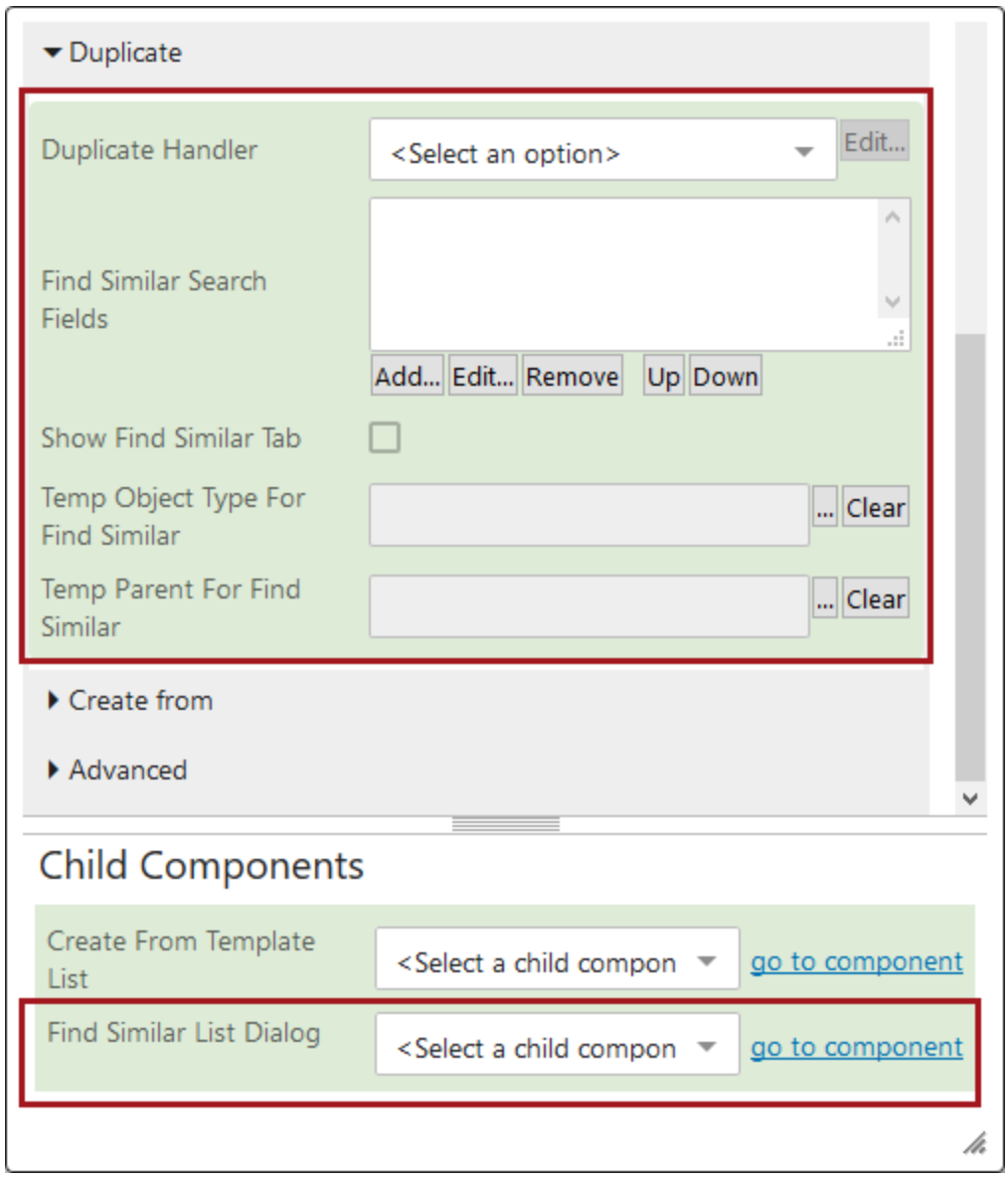
Find Similar Search

To help prevent users from creating duplicate objects in the STEP system, users can now use Find Similar functionality to search for and identify similar objects prior to adding references and creating target objects within a

Multi Reference Editor. When using the Add References Action, the Find Similar functionality can be configured to display on a new Find Similar Search tab. Attribute values of both direct objects and target objects (based on a specific reference type) can be configured as searchable fields. If similar objects are found, a configurable results list will display attribute values for the direct objects. This allows users to compare the results to determine if they can use an existing object.

The key to Find Similar functionality is the **matching setup** that the customer creates and uses for duplicate handling. Every time a user enters data into the search fields and clicks OK, the Find Similar search checks the match code values involved, executes the relevant matching algorithm, and provides a set of results, if any are found. If a user is not getting the results set they expect, then the first place to check is the algorithm configured in the Duplicate Handler parameter in the Add Reference Action Properties. Two bind types work with the Find Similar functionality. They are: **First Match Object** and **Second Match Object**. A relevant Match Code and Matching Algorithm needs to be set up before attempting to use the Find Similar Search tab. For more information about setting up and using matching algorithms, see the **Configuring Matching Algorithms Overview** section of the **Matching, Linking, and Merging** documentation.

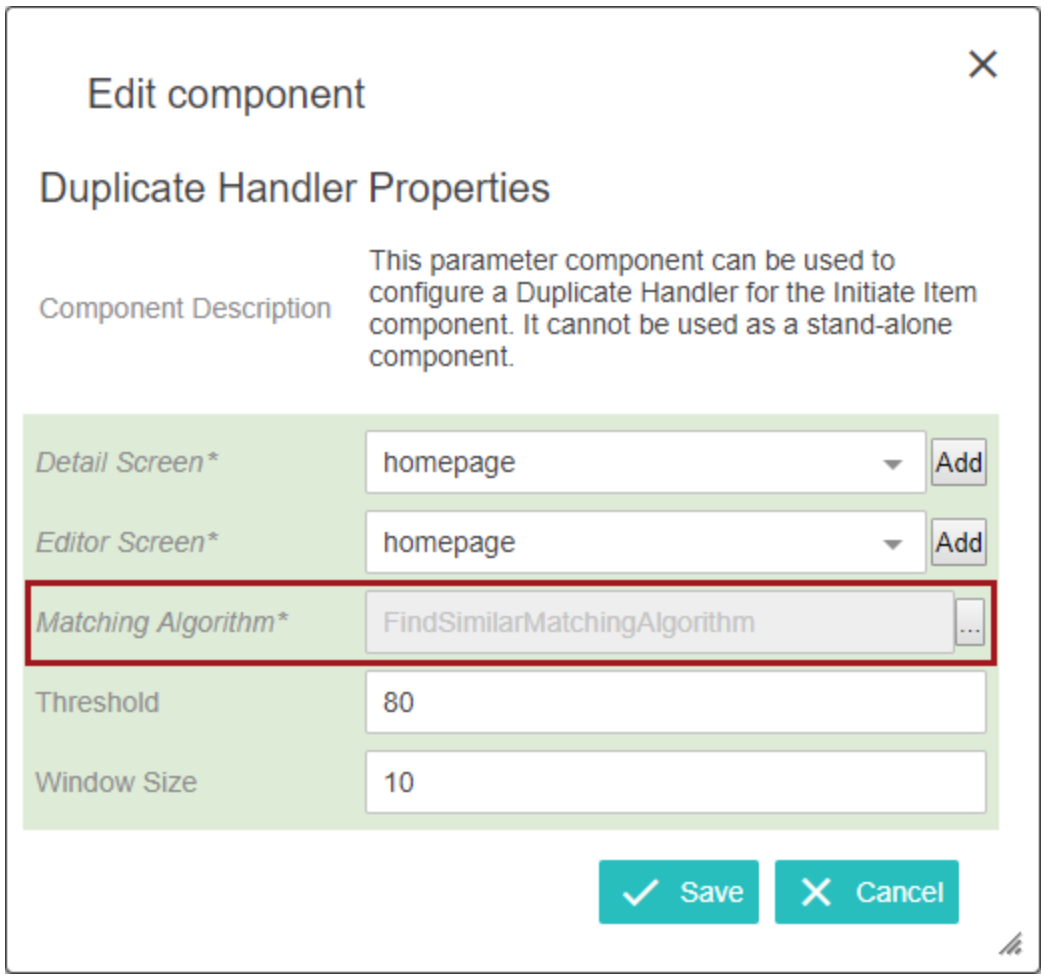
Find Similar functionality is also available using a Find Similar Action Button on an Initiate Item screen type. This functionality is explained in the **Find Similar** section of the **Web User Interfaces / Using a Web UI** documentation.



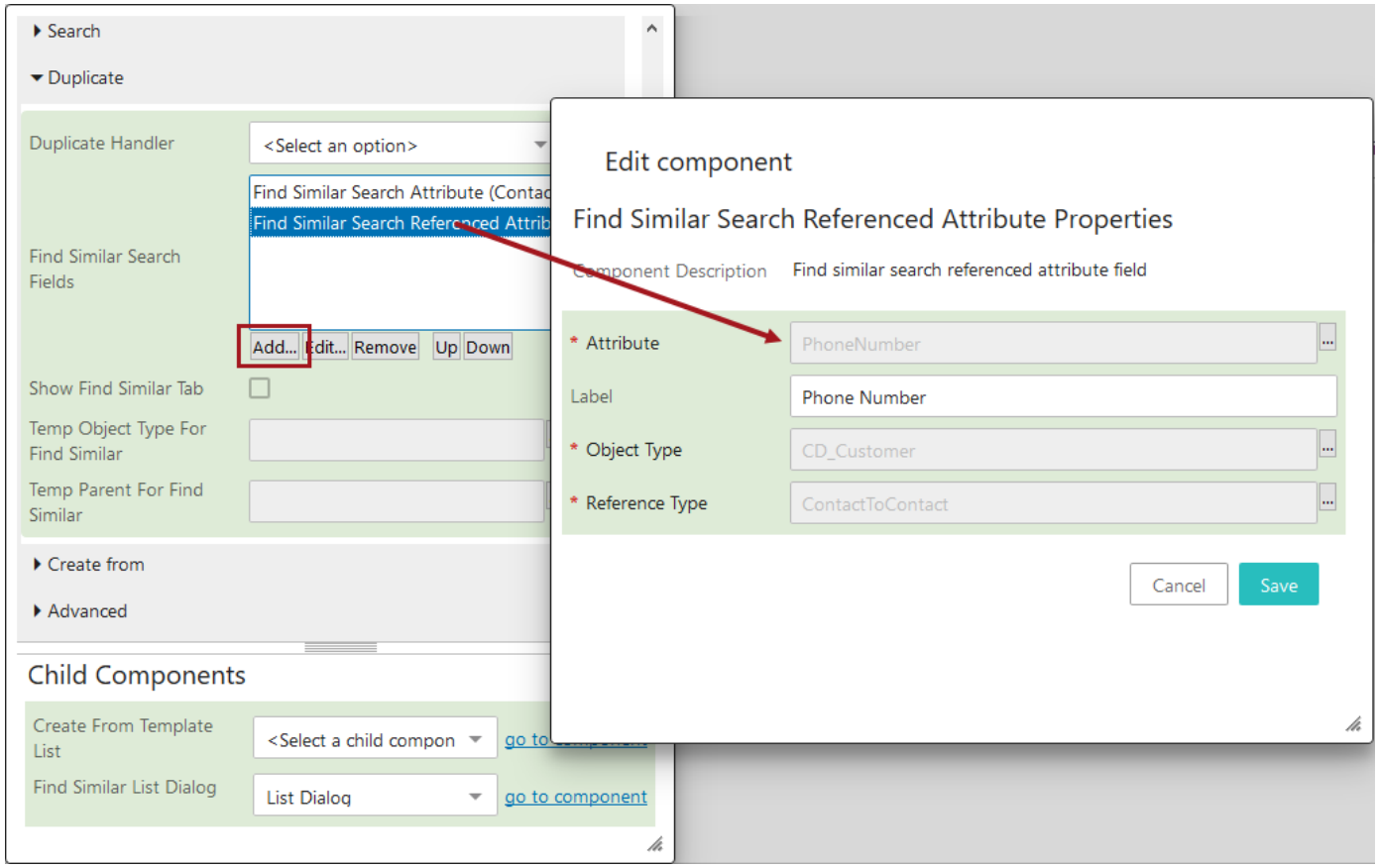
To configure the Find Similar Search tab:

1. Select **Duplicate Handler** in the dropdown for the **Duplicate Handler** parameter.
2. The **Duplicate Handler Properties** screen will display. Select the Detail and Editor screen from the dropdown. Then, select the desired **Matching Algorithm** parameter. Click the ellipsis button (...) to the right of the value field, and select a matching algorithm. Click **Save**.

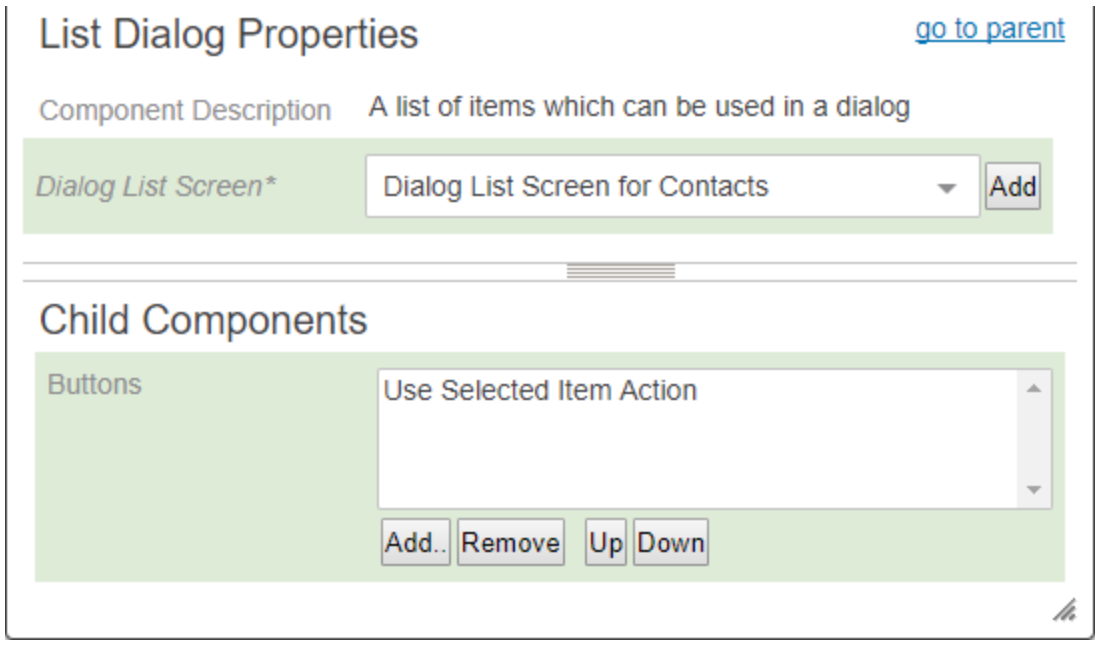
   For more information on matching algorithm, threshold, and window size, see the **Matching, Linking, and Merging Configuration** topic in the **Matching, Linking, and Merging** documentation.



3. Back on **Add Reference Action Properties**, click **Add** under the **Find Similar Search Fields** value box. Add, remove, and re-order **Attribute** and **Referenced Attributes** as desired. Remember that these search fields will need to be incorporated into the matching algorithm configured in the Duplicate Handler parameter.
4. It is important to fill in the **Label** fields during the **Find Similar Search Fields** configuration. These labels will appear on the Find Similar Search tab. If adding a **Find Similar Search Referenced Attribute**, fill in the **Attribute**, **Label**, **Object Type**, and **Reference Type** values. Save all changes.



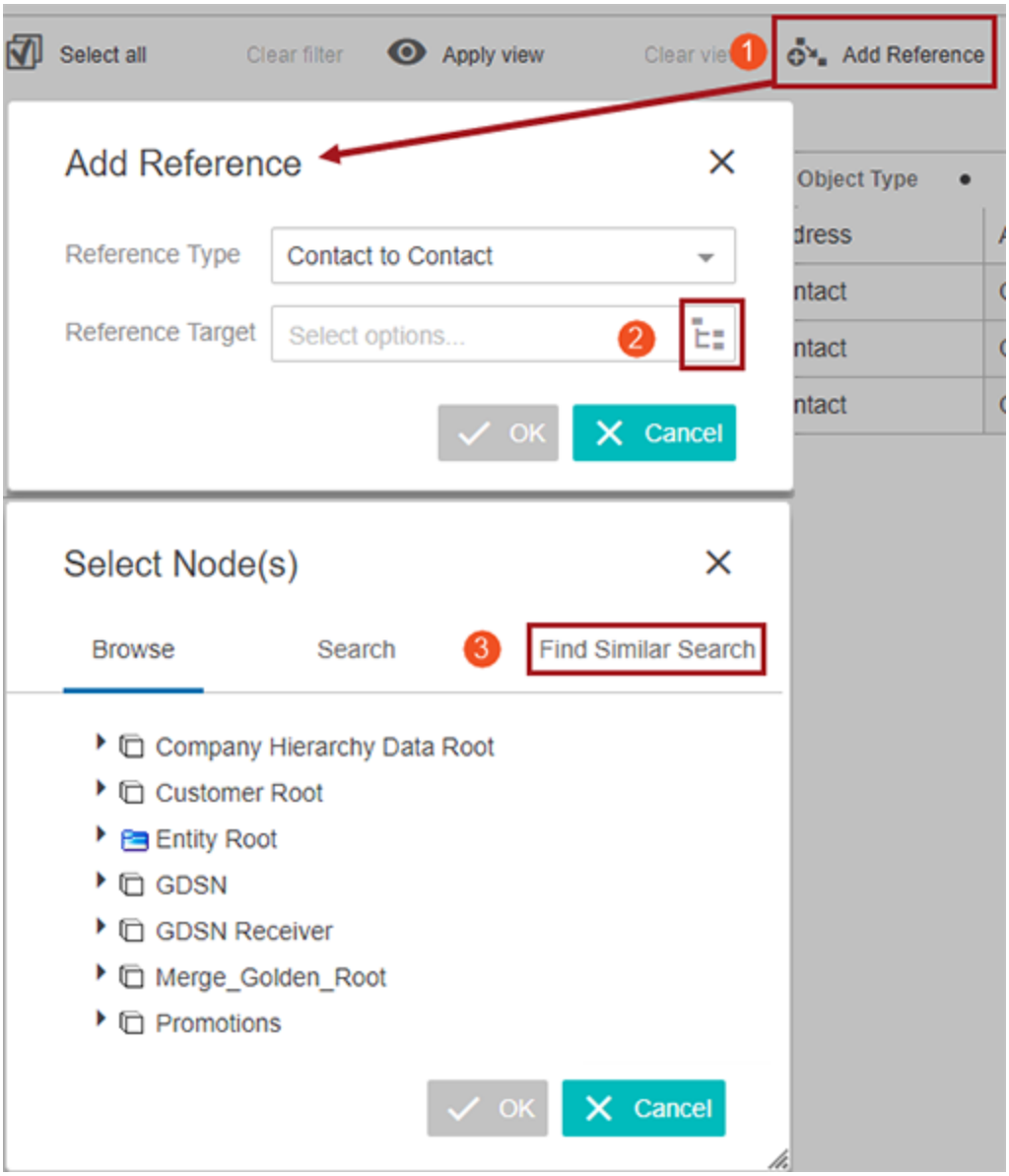
5. Enable the **Show Find Similar Tab** setting back on the **Add Reference Action Properties**.
6. Click the ellipsis button (...) to make a selection for the **Temp Object Type For Find Similar** parameter and the **Temp Parent For Find Similar** parameter. (When the matching algorithm is run, it creates temporary objects based on the input in the search fields. These objects are then used in the algorithm to compare and find similar objects. The temporary objects need a parent and object type to be created. After the user finishes the operation, the temporary objects are deleted by the system. These parameters have to be configured for the functionality to work. The object types of both the direct objects and the referenced objects need to be made valid under the location used for the Temp Parent For Find Similar parameter.)
7. Under **Child Components** > **Find Similar List Dialog**, select **List Dialog** from the dropdown menu.
8. On **List Dialog Properties**, click **Add** to the right of the Dialog List Screen value field.
9. Create a new screen by selecting **Dialog List Screen** from the list of available screen types / components. Enter an easily identifiable Screen ID, click **Add**. The screen ID will automatically populate in the Dialog List Screen value field.
10. If a **Dialog List Screen** already exists, skip the previous two steps and on the **List Dialog Properties**, select the **Dialog List Screen** using the dropdown.
11. Also on the **List Dialog Properties** screen, in the **Child Components** > **Buttons** field, click **Add** and select **Use Selected Item Action**. Click **Add**, and then click **Save** in the Designer window.

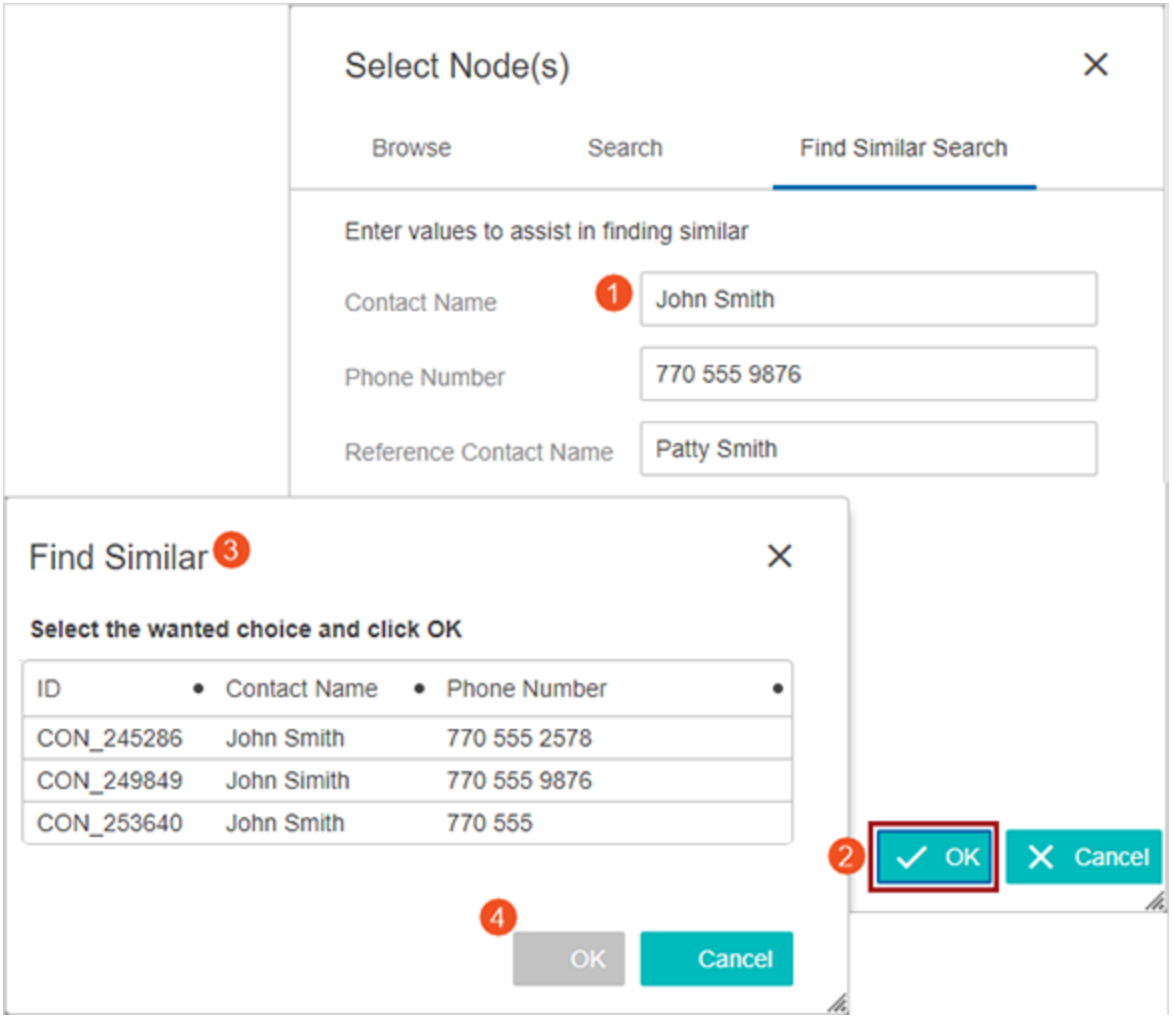


12. Before exiting design mode, select the Dialog List Screen ID of the screen you just created from the dropdown menu. In the example above, the screen ID is Dialog List Screen for Contacts.
13. Configure the **Child Components** > **Headers** section of the **Dialog List Screen Properties**. Click **Add** under the value field to set up the attributes that will display in the Find Similar Search tab for the results list. The **Help Text** is editable and will display at the top of the template results list.
14. Click **Save** and **Close** design mode to return to normal Web UI mode.

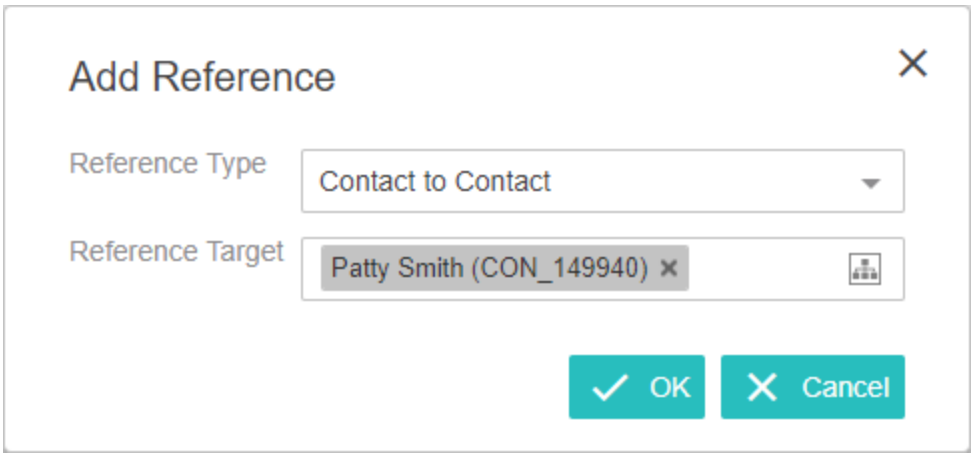
Find Similar Search Example

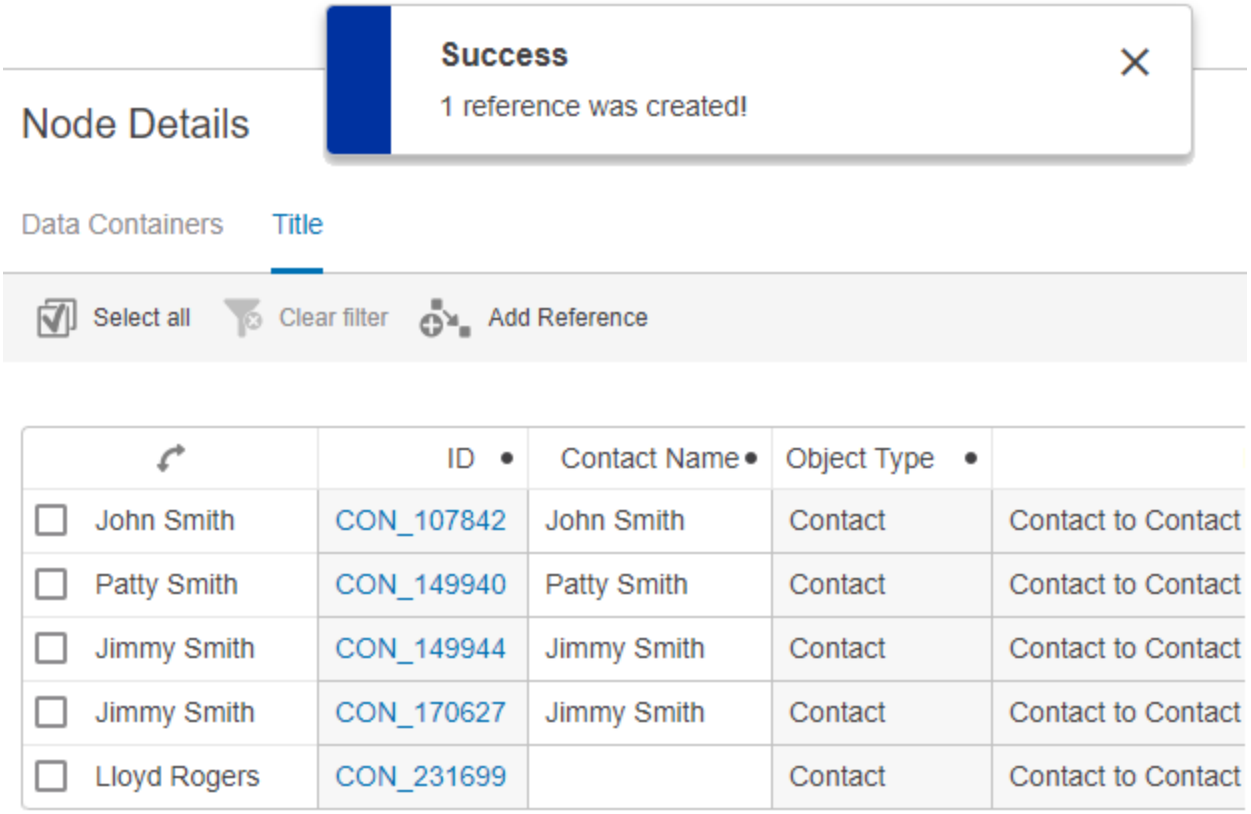
This is an example of a configured **Find Similar Search** tab. While using a **Multi Reference Editor** component, the end user clicked 'Add reference' and then clicked the node picker icon on the 'Add reference' dialog that appeared. The **Find Similar Search** tab is displayed in the 'Select Node(s)' dialog. The end user enters data into the configured attribute fields and clicks OK. The algorithm runs in the background and the configured Dialog List Screen displays. Remember that this is not a standard search and results are based on the matching algorithm running in the background.


Select all
Clear filter
Apply view
Clear vie
1
Add Reference
Add Reference
Reference Type
Contact to Contact
Reference Target
Select options...
2
OK
Cancel
Object Type
dress
ntact
ntact
ntact
Select Node(s)
Browse
Search
3
Find Similar Search
Company Hierarchy Data Root
Customer Root
Entity Root
GDSN
GDSN Receiver
Merge_Golden_Root
Promotions
OK
Cancel



A maximum of fifty (50) objects are shown at one time on the results list. If the end user finds a reference on the results list that they want to use, they click in the row they want. When that selection is made, the OK button will be available. The end user clicks OK and now that reference is saved. If the user does not find a result to use, they can click cancel and create a new reference using the Create or Create From Template functions (both described previously in this topic).





For additional information about the Multi Reference Editor and its features, see the **Multi Reference Editor** section of the **Web User Interfaces / Using a Web UI** documentation.

Suppressing References in the Multi Reference Editor

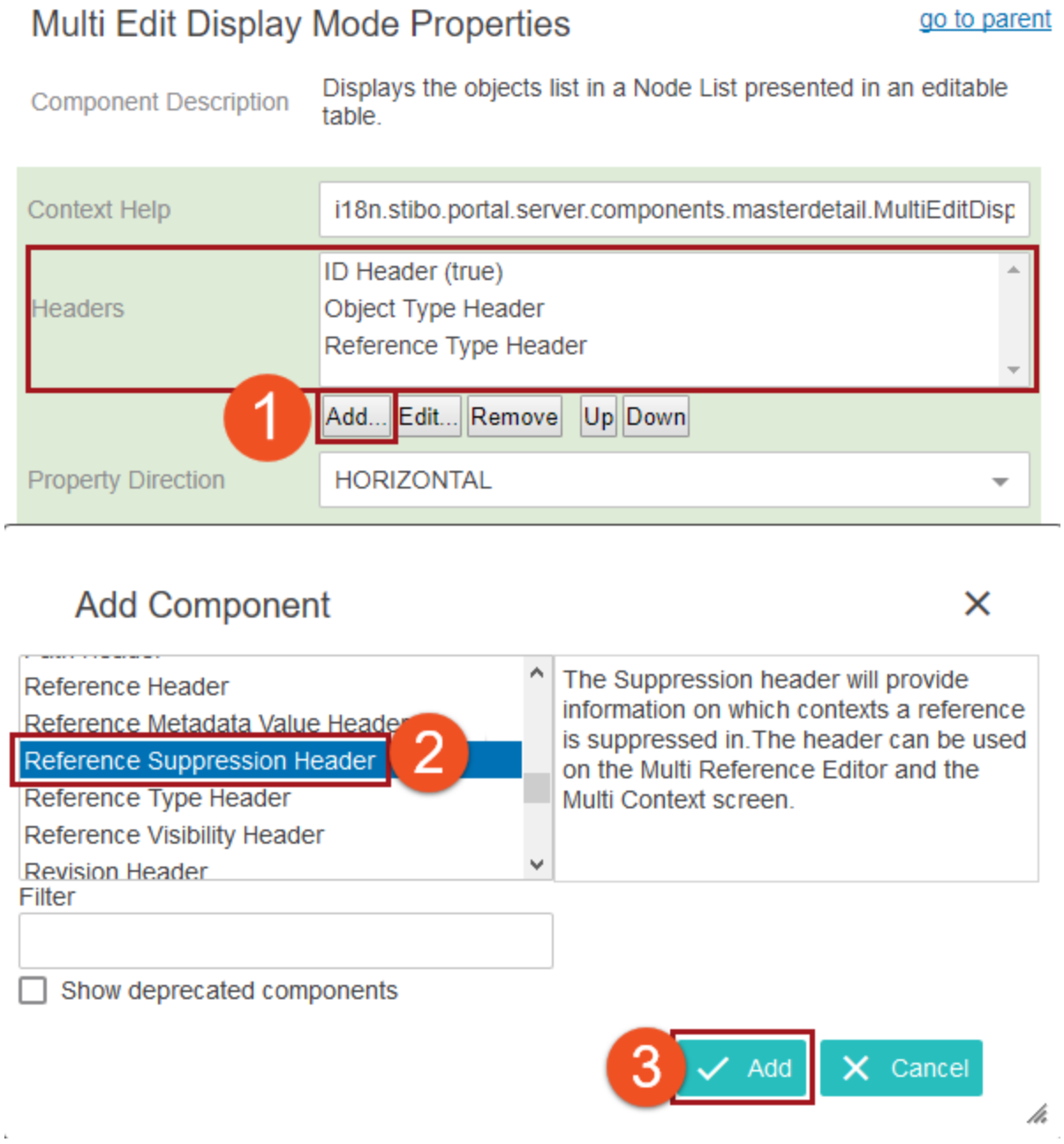
Dimension dependent references may be suppressed, by context, using the Multi Reference Editor in Web UI. For example, let us say an image of a person modeling a t-shirt is referenced by a t-shirt product. The same image is referenced by the t-shirt product in all contexts that the t-shirt product exists in. But for one of the countries where the t-shirt is sold, the image is deemed culturally insensitive. To address the issue, the user could go into the relevant country-language context, suppress the reference to the image in question, and then add a reference to a different, more appropriate image. The image reference would remain for all contexts except for one where it has been suppressed. This action may be taken in Web UI using the Multi Reference Editor.

Configuring Reference Suppression

To add the reference suppression capability to a Multi Reference Editor, an administrator must add and configure a Reference Suppression header, the Remove suppression toolbar action, and the Suppress reference toolbar action.

Reference Suppression header

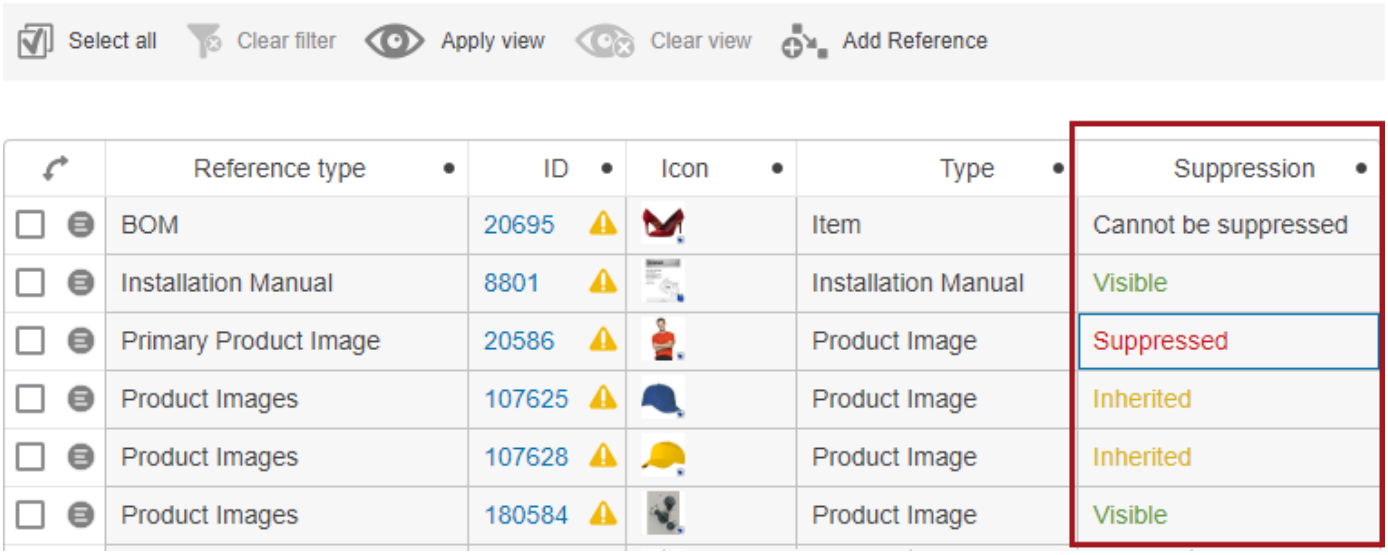
To view whether a reference is suppressed in the current context, an administrator must add the Reference Suppression Header to the Multi Reference Editor in the designer.



To add the Suppression header to the Multi Reference Editor, follow these steps (which correspond to the numbers in the above screenshot):

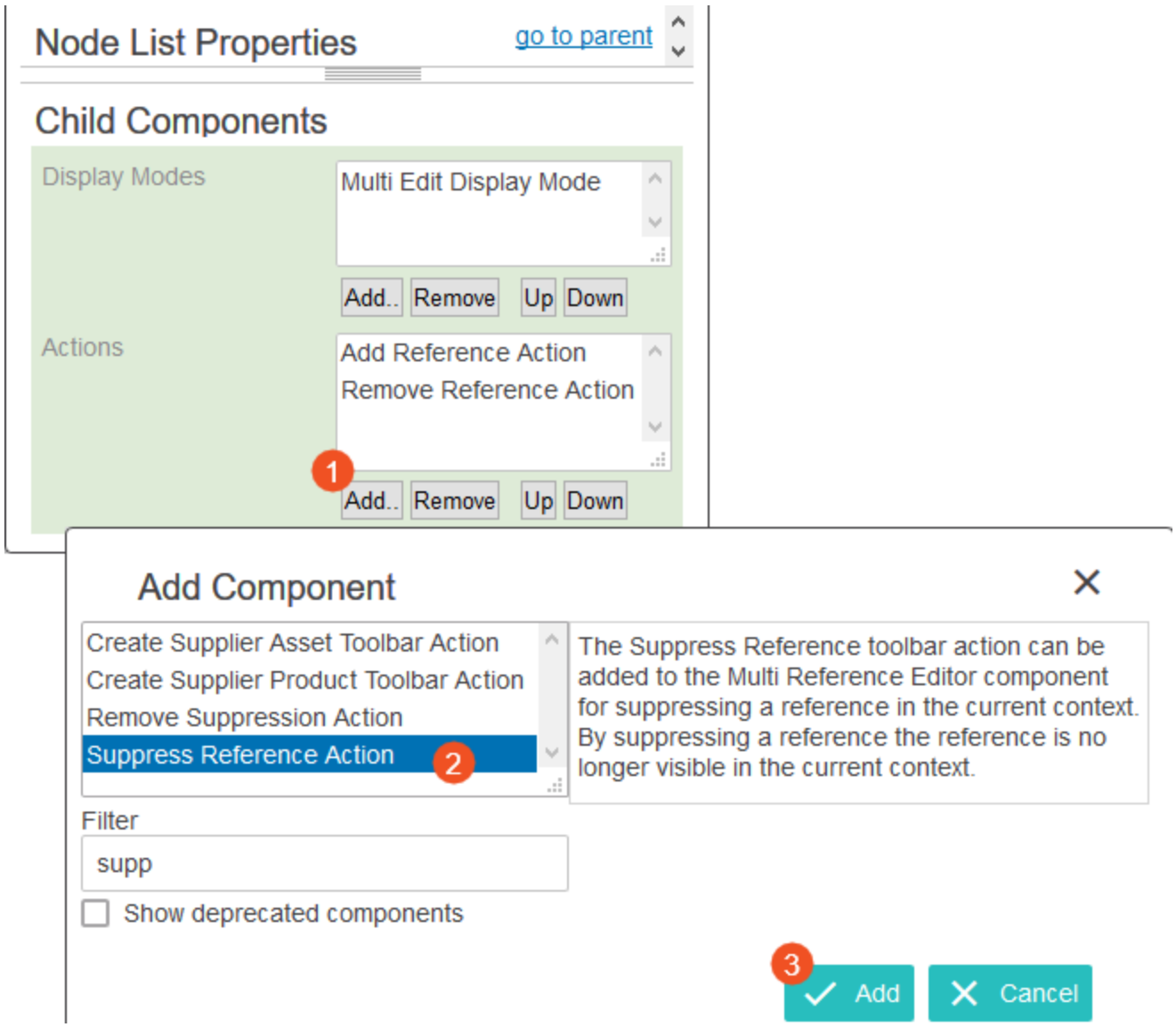
1. On Multi Edit Display Mode Properties, click the **Add...** button for Headers.
2. In the Add component window that displays, select **Reference Suppression Header**.
3. Click the **Add** button.

The Multi Reference Editor may look like this with the new header applied:



Suppression toolbar actions

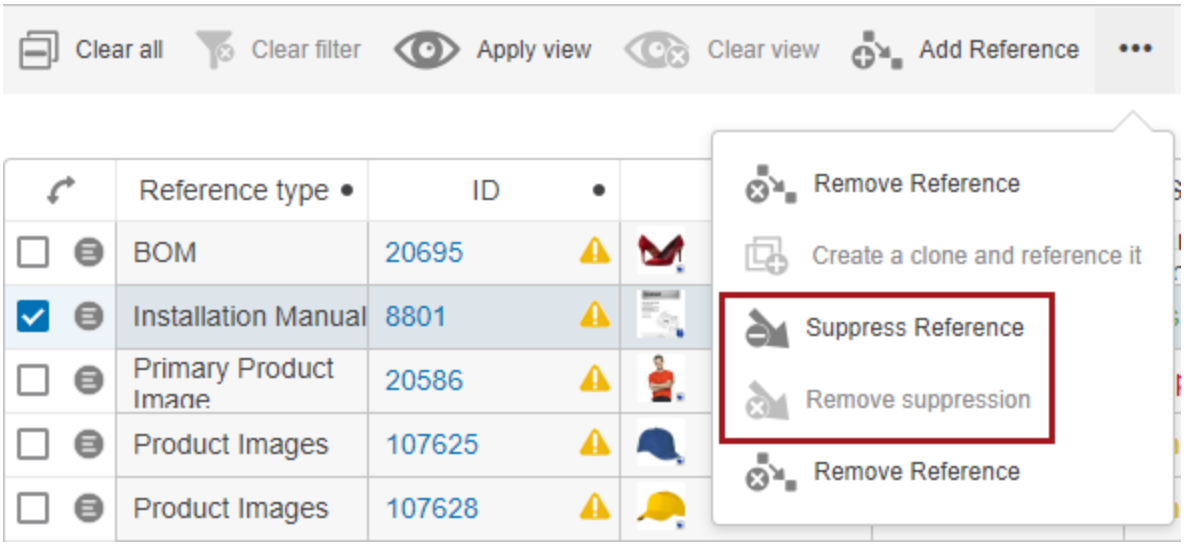
To enable users to suppress a reference or remove an existing suppression from a reference, an administrator must configure two toolbar actions: Suppress reference and Remove suppression.



To add these toolbar actions to the Multi Reference Editor, follow these steps (which correspond to the numbers appearing in the screenshot above):

1. On the Multi Reference > Node List Properties view of the designer, under Child Components, under Actions click the **Add..** button.
2. In the Add Component dialog that displays, select **Suppress Reference Action**.
3. Click **Add**.
4. Repeat these steps to add the Remove suppression action.

When you have saved this configuration and closed the designer, your Multi Reference Editor may look like this:



Note: The toolbar actions are configurable in that their icons and labels can be changed from their defaults. For more information on changing toolbar action labels and icons, see the **Action Button Configuration on a Node** documentation.

Suppressing References in the Multi Reference Editor

To suppress references or remove suppression from references in the Multi Reference Editor, the reference in question must first be checked. If the reference is suitable for the proposed action, the toolbar action will be enabled, otherwise it is disabled.

Note: Checkboxes only appear on the Multi Reference Editor when an administrator has added one or more toolbar actions to the screen using the designer.

Whether a reference can be suppressed or have its suppression removed is dependent on that reference's status in the Suppression column. These are the statuses that may show for a reference, along with the actions available for a reference based on the status:

Cannot be suppressed – The reference cannot have suppression applied to it in the current context. This status shows for references that are not dimension dependent.

Inherited – The reference is inherited from a parent object; therefore, it cannot be suppressed.

Suppressed – Suppression has already been applied to this reference in the current context. On references with this status, the Remove suppression toolbar action is active and the Suppress reference toolbar action is inactive.

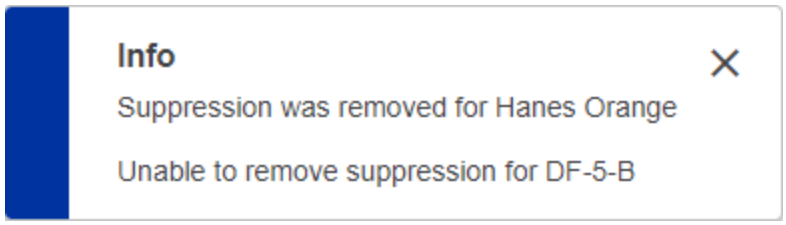
Visible – The reference is currently visible in the current context and can be suppressed. On references with this status, the Suppress reference toolbar action is active and the Remove suppression toolbar action is inactive.

When selecting multiple references with a combination of Visible and Suppressed statuses, both the Remove suppression and Suppress reference toolbar actions are active. However, clicking a suppression toolbar action

causes STEP to only execute the command on the applicable references. For example, if a user selects three references, two that are Visible and one that is Suppressed, and then clicks the Remove suppression toolbar action, the following things will happen:

1. The references with the Suppressed status have the suppression removed.
2. The reference with the Visible status is unaffected.
3. An info window appears listing all references and how they were affected by the selected toolbar action.

Below is an example of an info window that will display in this scenario:



Important: Using the Multi Reference Editor screen, references may only be actioned in the current context. If you are viewing references in the France_French context, as an example, you may suppress references in that context, but you cannot suppress references in the Germany_German context without first switching to that context in the Web UI.

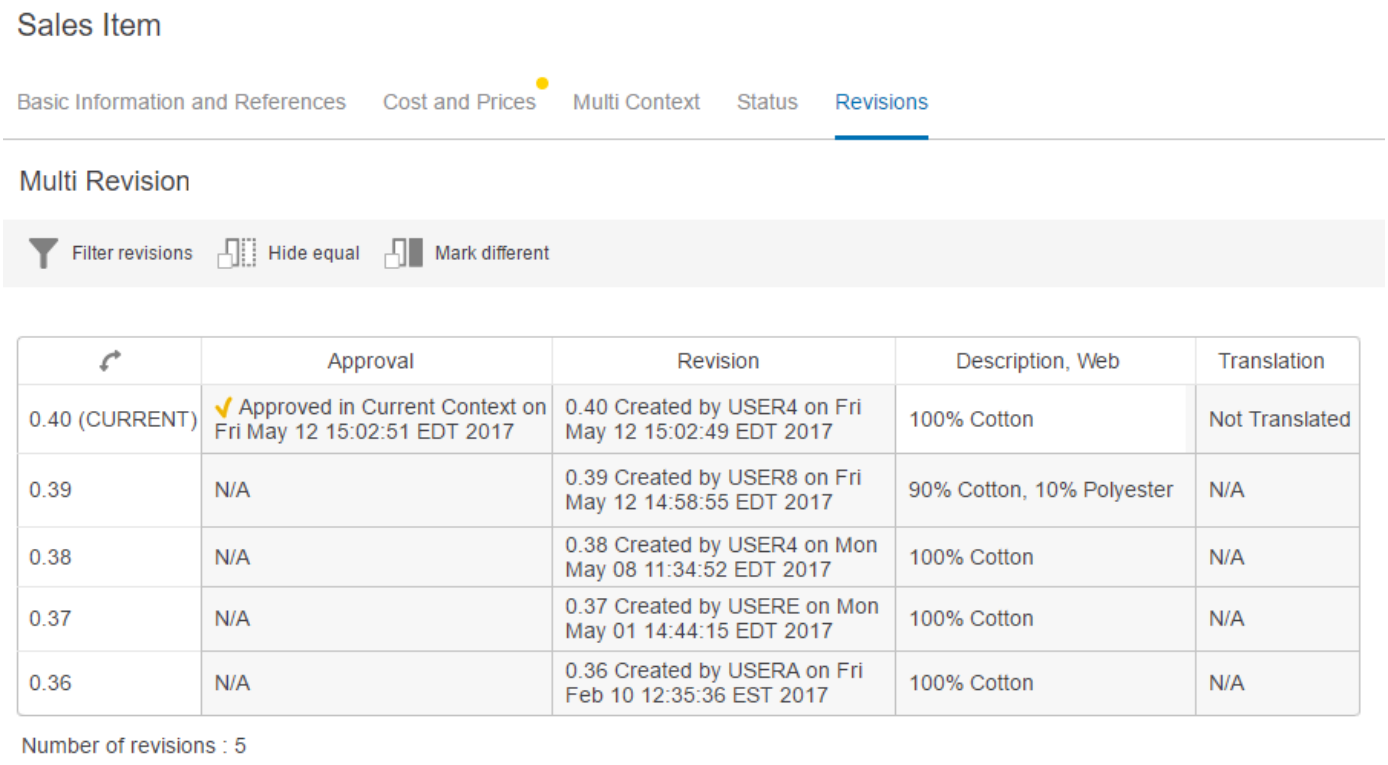
To suppress references in multiple contexts in a single screen in Web UI, consider adding a Multi Context screen to your Web UI. For more information on how to configure and use the Multi Context screen, see the **Multi Context Screen** documentation.

Multi Revision Screen

The Multi Revision Screen is a screen designed to show revision information on the attribute values and outbound references of an object. This screen and its child component, the Multi Revision Editor table, need to be configured to display the desired attributes and references to compare.

By default, a Multi Revision screen displays the last five (5) object revisions, including the current revision. If less than five revisions exist, fewer revisions will display.

Users can filter *all* revisions that exist for an object, not just those shown, using various options.



If an admin user has configured the Multi Revision Screen Properties, then the user may also see the hide equal and/or the mark different action icons, which can be especially useful to quickly evaluate an object for approval. Additionally, if enabled, the user will also have the option to filter all revisions based on the user group (of the user) that made a change and created a revision and use the hide equal and/or the mark different actions. Examples of the different filtering options appear at the end of this topic.

Careful consideration should be taken when using the Multi Revision Screen. If objects contain a large number of attributes or filtering revisions returns numerous revisions, users may experience system slowness as they work in Web UI.

Configuration Prerequisites

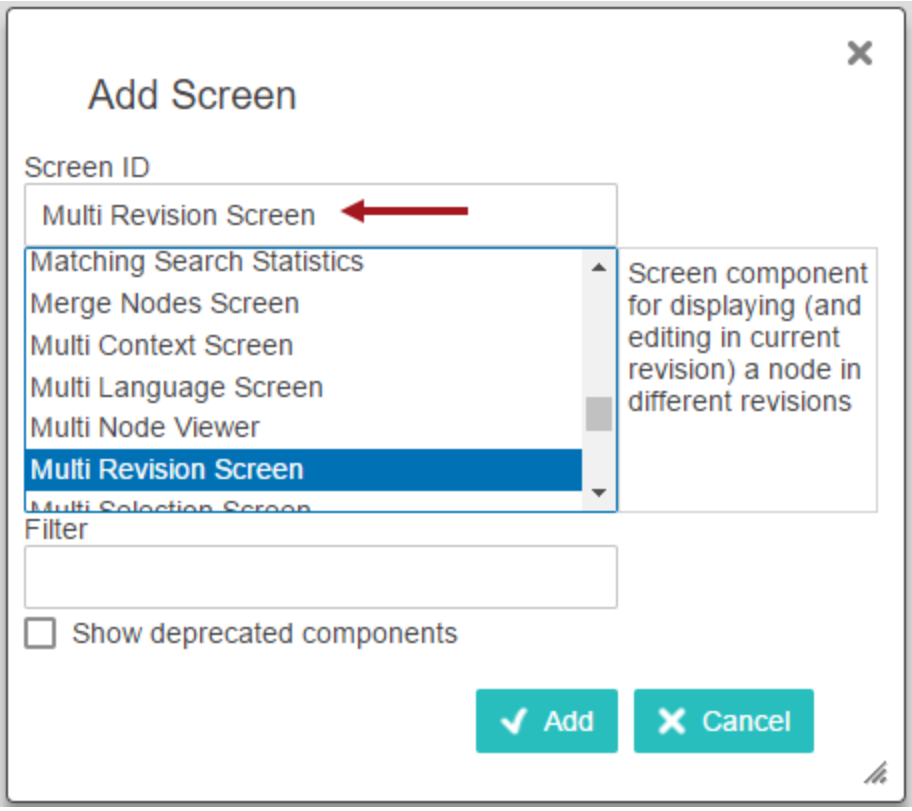
It is expected that anyone configuring the Multi Revision Screen component is familiar with the Web UI Designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access**

section of the **Web User Interfaces / Web UI Getting Started** documentation.

It is also advisable to review the **Revisions** topic in the **System Setup / Super User Guide** documentation.

Adding a New Multi Revision Screen

Steps for creating a new screen are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic. Select 'Multi Revision Screen' as the screen type (shown in the screenshot below).



Configuring a Multi Revision Screen

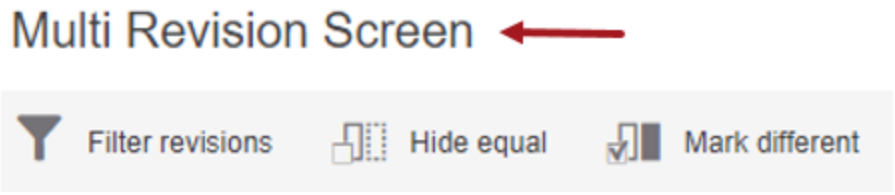
Steps for configuring the Multi Revision Screen Properties are below.

1. In Multi Revision Screen Properties, enable the **Allow Group Filtering** parameter if end users are allowed to filter the revisions by user group as an addition to the standard date filtering options.
2. Determine if you want to enable the Show Hide Equals Button and/or the Show Mark Different Button parameters. If enabled, the concerned action button is created in accordance.

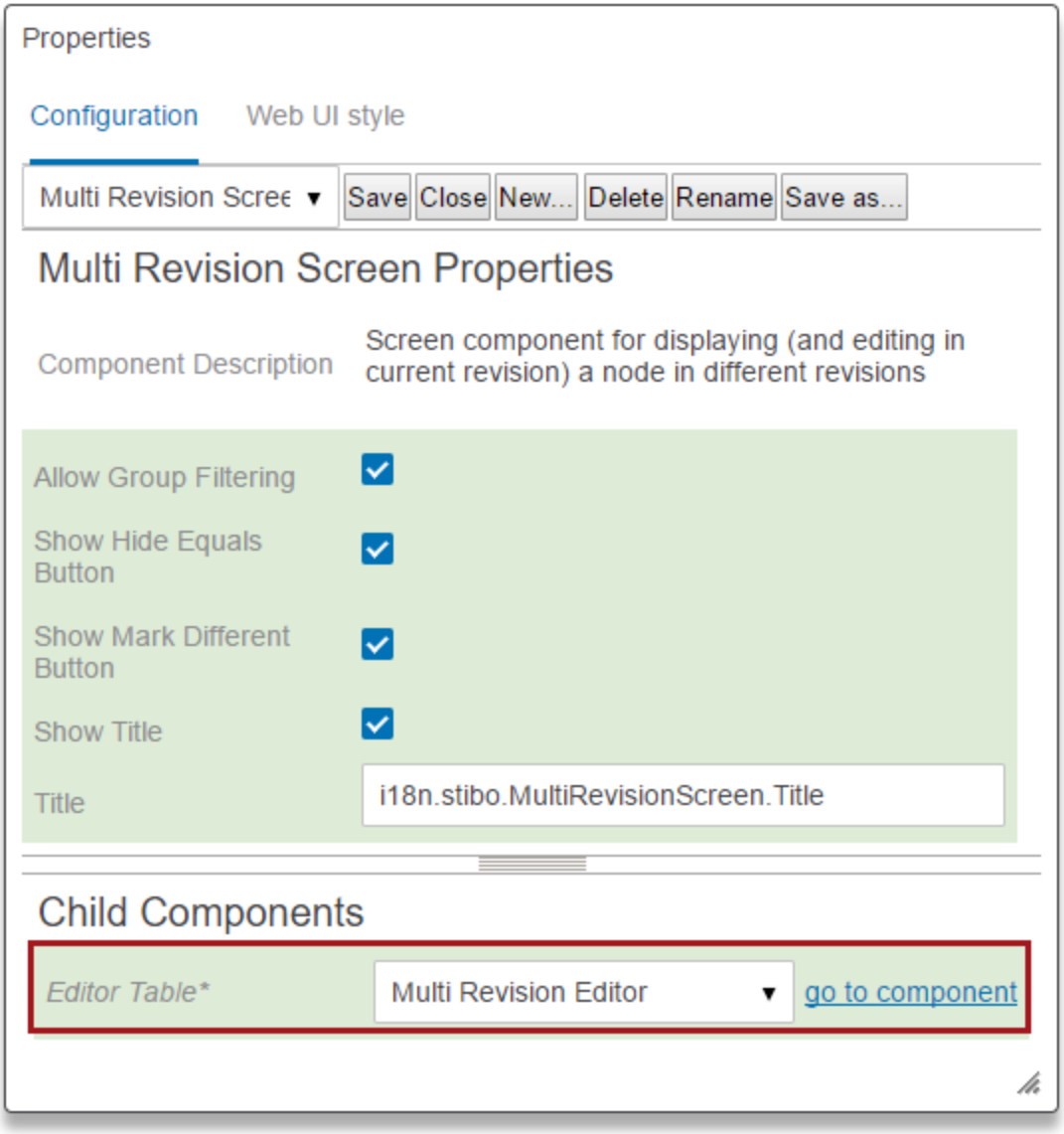
   Details regarding what these parameters do can be found in the **Comparing Data Using Hide Equal and Mark Different** section.

3. Leave the Show Title parameter enabled if the Multi Revision Screen should display the title. Disable the parameter to hide the title and its associated white space.

4. If a title should display, determine if the default title should remain, or if a custom title is necessary. The default label will display as 'Multi Revision Screen' on the screen in the top left corner (an example is shown below) if the label is not overwritten.

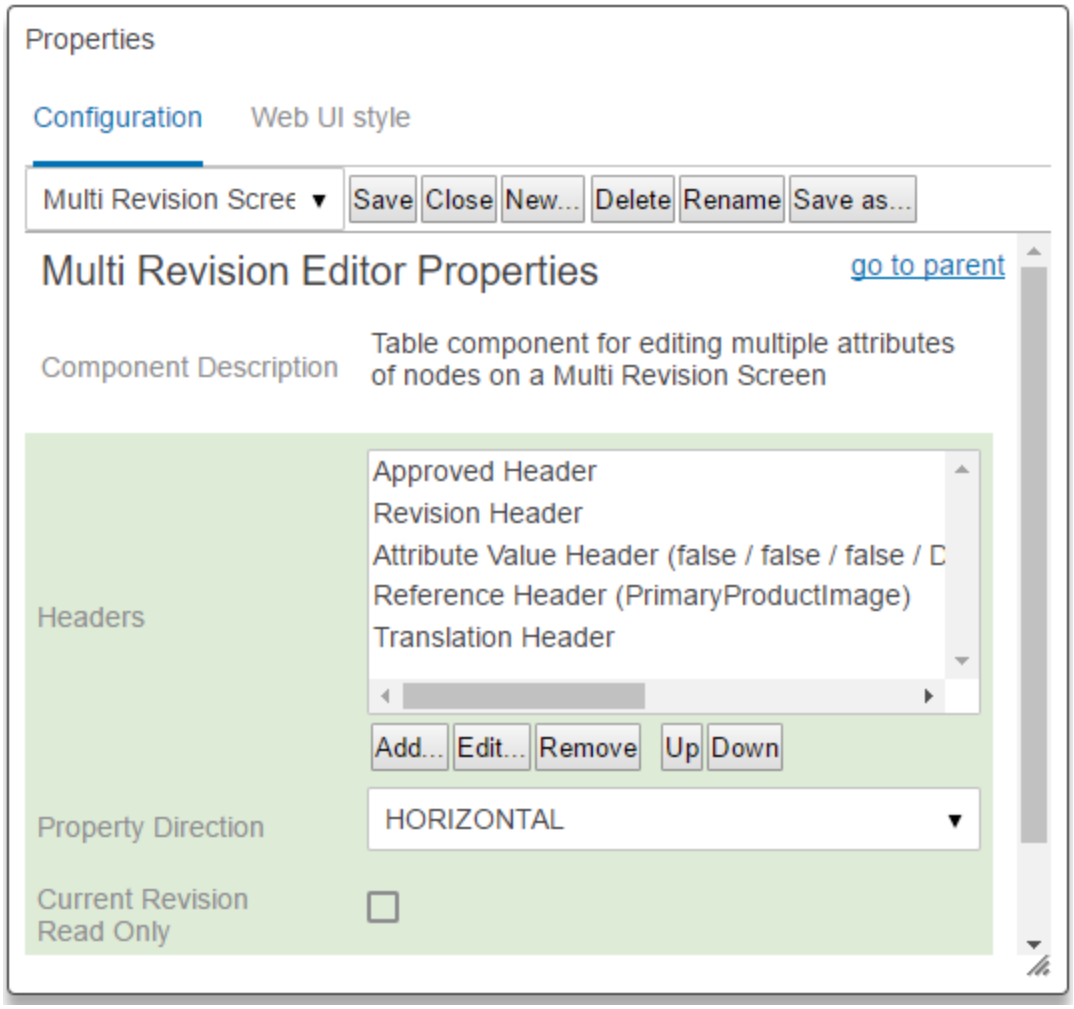


5. Go to the Child Components > Editor Table parameter and select **go to component**. The Multi Revision Editor is pre-populated in the value dropdown since it is mandatory to configure the editor before the Multi Revision Screen will render correctly.

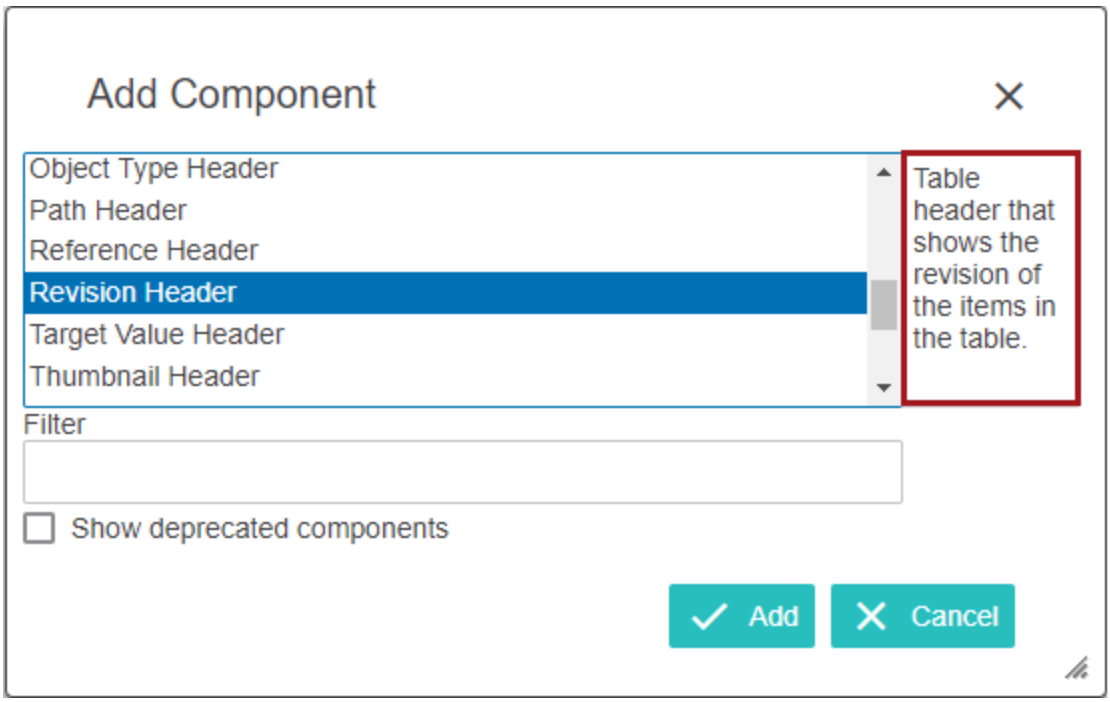


Configuring a Multi Revision Editor

The **Multi Revision Editor Properties** now need to be configured.

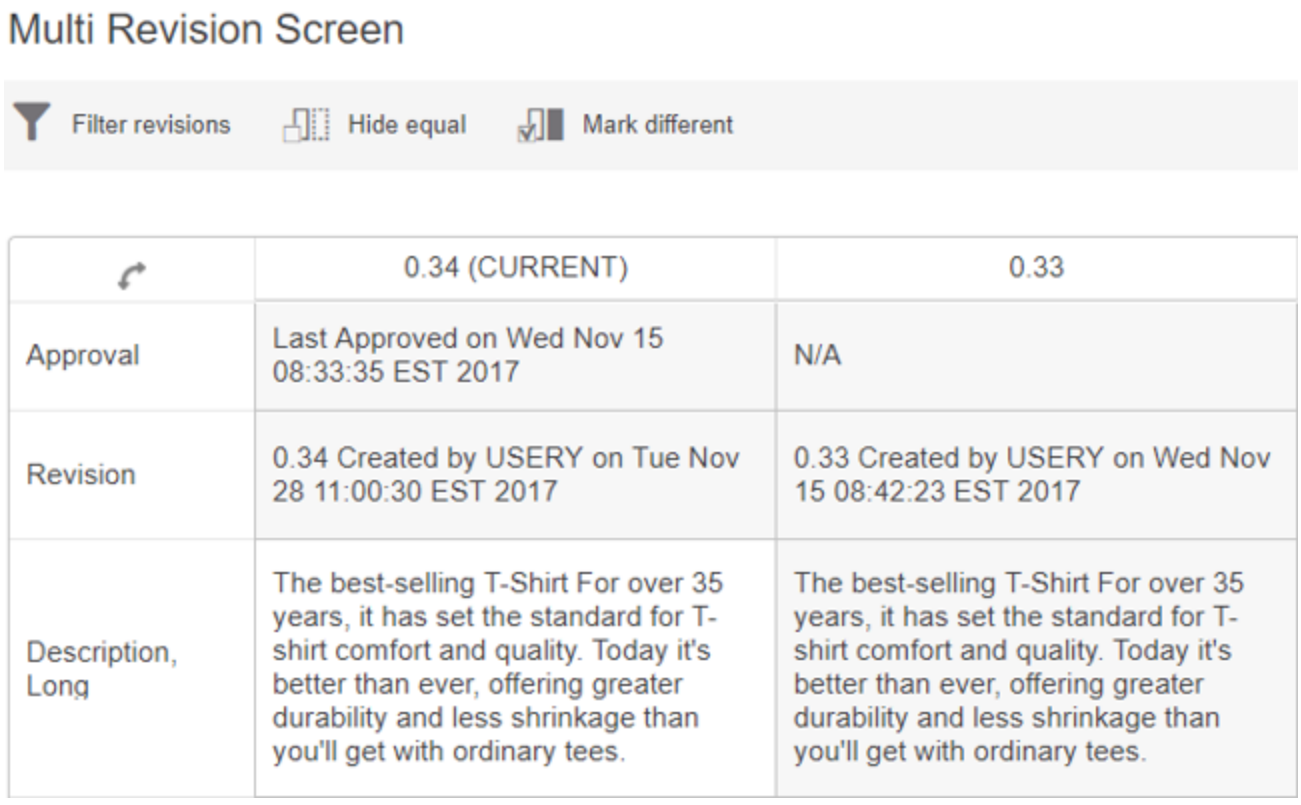


1. Add, edit, remove, and reorganize table headers, as desired, in the **Headers** value field. The image above shows headers that have already been added. Relevant headers to consider including, as needed, are: ID Header, Name Header, Attribute Value Header, Attribute Value Group Header, Approved Header, Revision Header, Path Header, Reference Header (which also shows Links), and Translation Header. Clicking on each component in the 'Add component' dialog provides a description of the component on the screen.

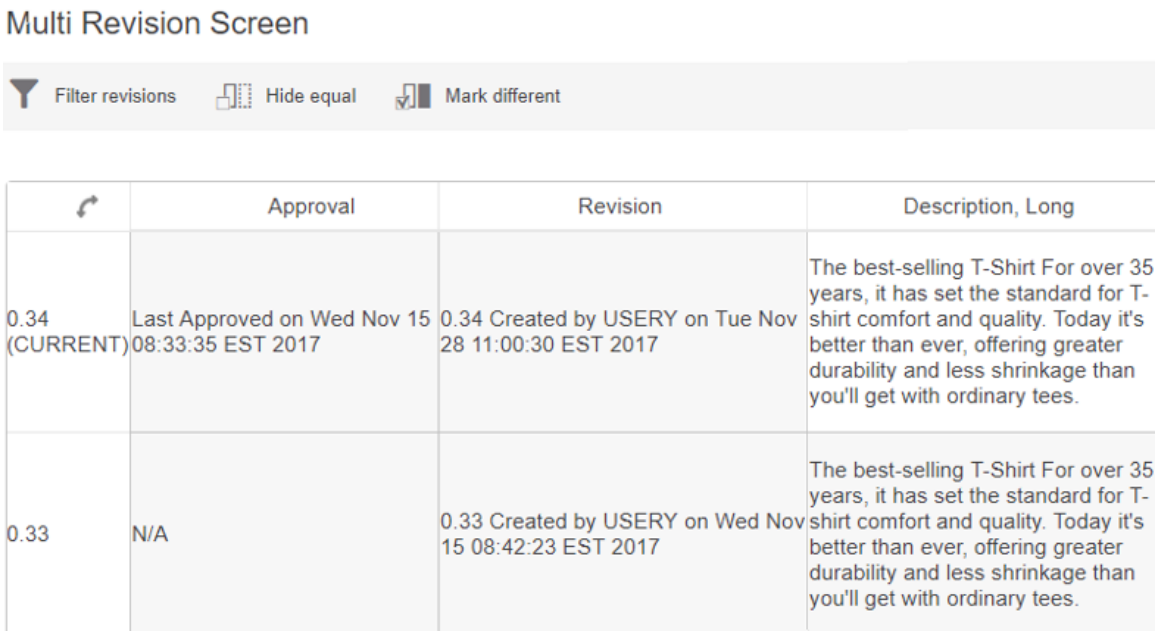


2. Determine the direction of the table using the **Property Direction** parameter.

   VERTICAL means that the data (determined by the headers selected) will appear in rows and the column headers will be the revision numbers.



HORIZONTAL means that data will appear in columns, while the revision numbers are listed as the row headers. If no direction is selected, HORIZONTAL will populate the field once the screen is saved.

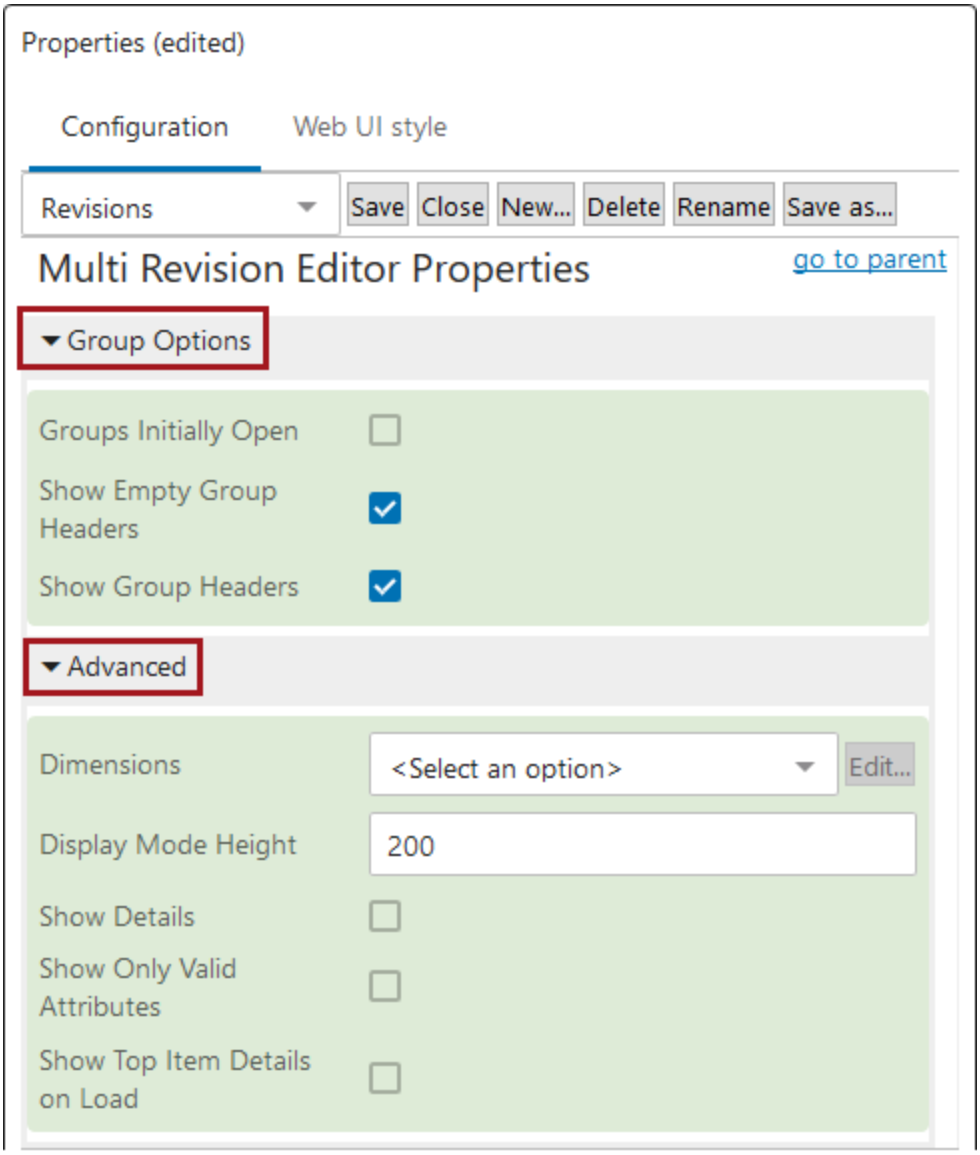


To interchange the Data and Revision numbers on the Multi revision screen as rows to column or vice versa, select the flip table, , icon.

3. **Current Revision Read Only** should be selected if you want to restrict end users from editing the current version of data displayed in the table. The cells will be disabled thus not letting the end user to edit. If disabled (unchecked), then the current revision of data can be edited, as applicable to the selected object.
4. Display additional optional parameter settings by clicking the arrowhead next to the **Group Options** heading and/or the **Advanced** heading. Make selections as desired. Each parameter features help text, accessible by clicking the info icon to the right of each parameter name.

   For more information on the options available under Group Options heading and/or the Advanced heading, refer to the **Configuring a Multi Language Screen** in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

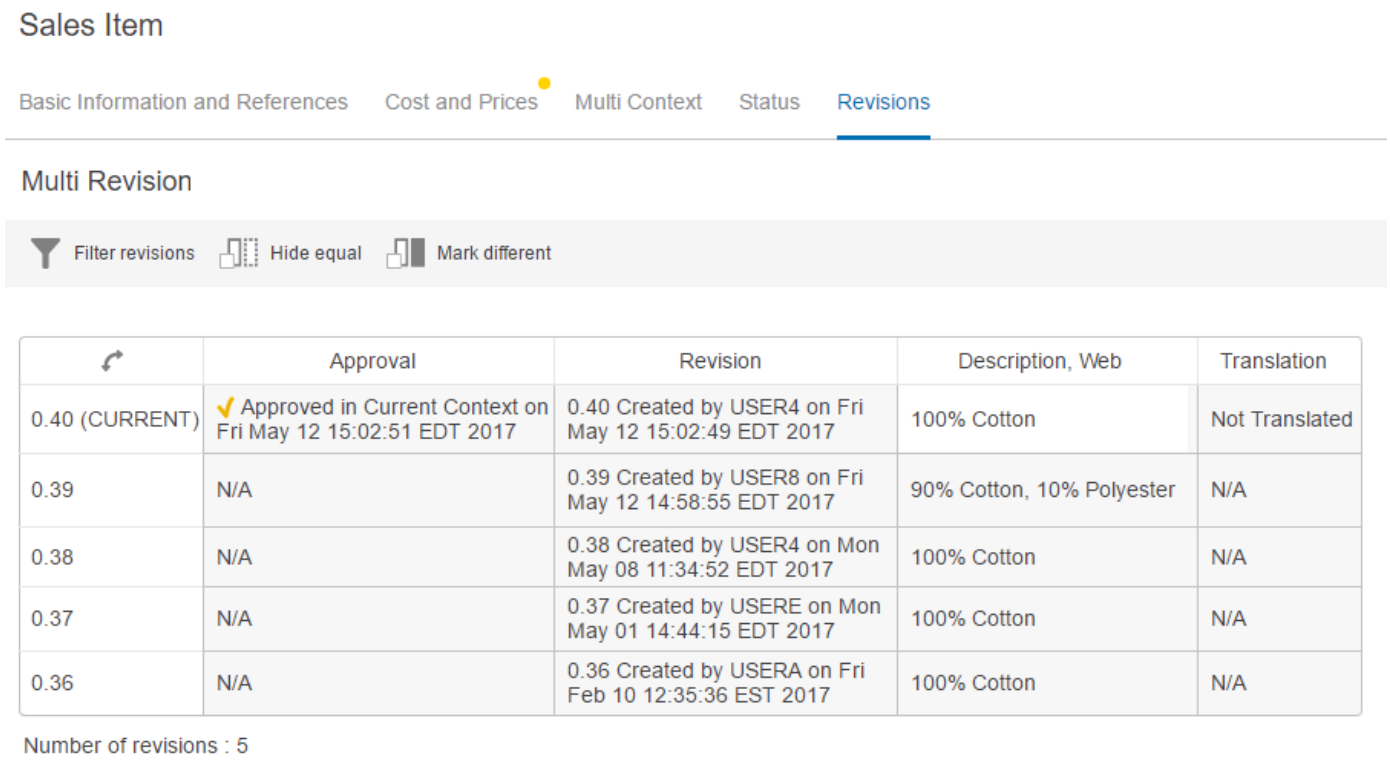
Note: The Advanced 'Show Details' parameter is not applicable to the Multi Revision Screen and enabling / disabling has no impact.



5. **Save** all selections and **Close** the designer.
6. As with any screen, the Multi Revision screen must be mapped appropriately in Main Properties > Mappings for end users to be able to access it. As an alternative to mapping, the Multi Revision screen can be added as a Sub Screen Tab Page on a Node Details screen (as shown in the examples within this topic).

   For more information about mapping, see **Configuring the Parameters** in the **Main Properties** topic, and for more information about sub screen tab pages, see the **Tab Pages** topic in the **Node Details Component** section of the **Web User Interface / Web UI Setup and User Guide** documentation.

This is an example of a Multi Revision Screen configured to display as a Sub Screen Tab Page on a Node Details screen.

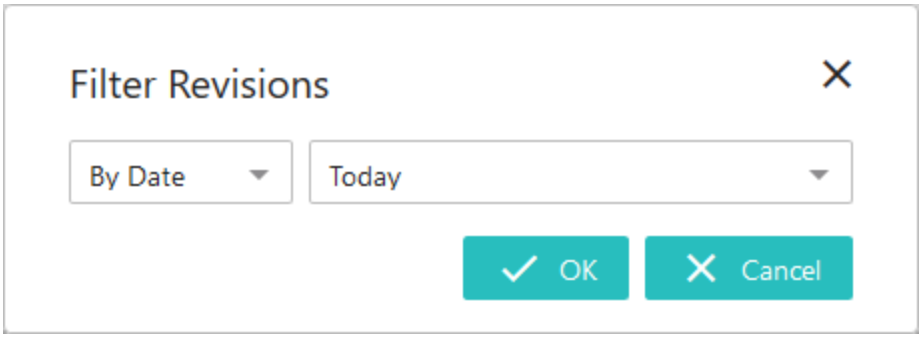


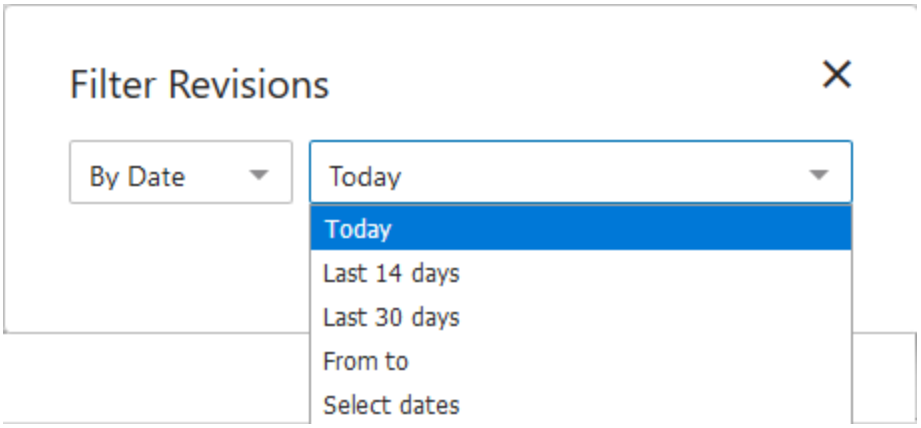
- **Allow Group Filtering** is enabled (checked)
- **Show Hide Equals Button** is enabled
- **Show Mark Different Button** is enabled
- **Title** value is 'Multi revision'
- **Headers**: Approval, Revision, Attribute Value (Description, Web), and Translation
- **Property Direction** is HORIZONTAL
- **Current Revision Read Only** is disabled

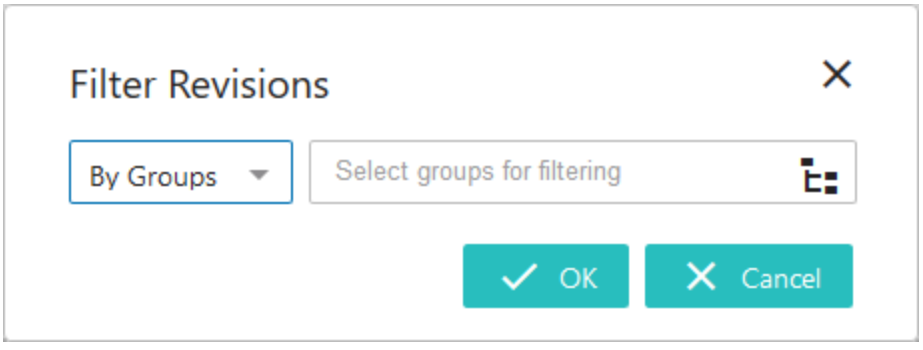
Note: Enabling 'Allow Group Filtering' will not change the look of the screen. The setting impacts the Filter Revisions dialog. When enabled, the Group selection is available. If disabled, 'By Date' and 'By Revision' filtering are the available selections. Examples of the filtering feature appear in the next section.

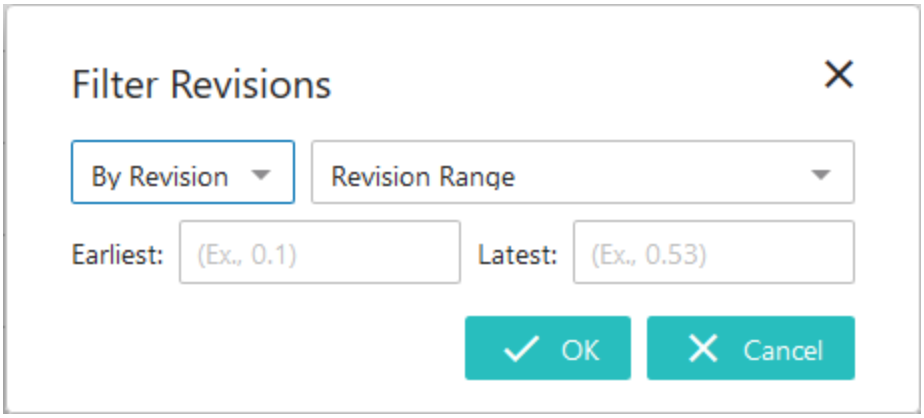
Filtering Revisions Examples

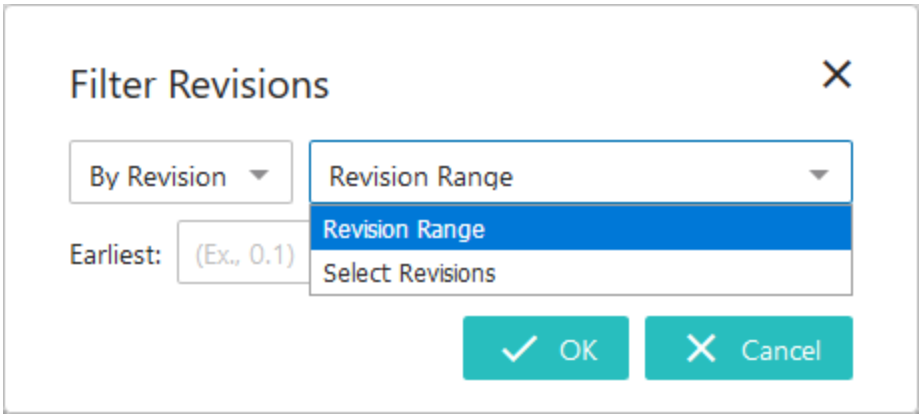
When a user is on the Multi Revision screen and clicks the 'Filter revisions' action icon, the Filter Revisions dialog displays. If 'Allow Group Filtering' is enabled, then the user will have three filtering options: By Date, By Groups, and By Revision (as shown in the examples that follow).







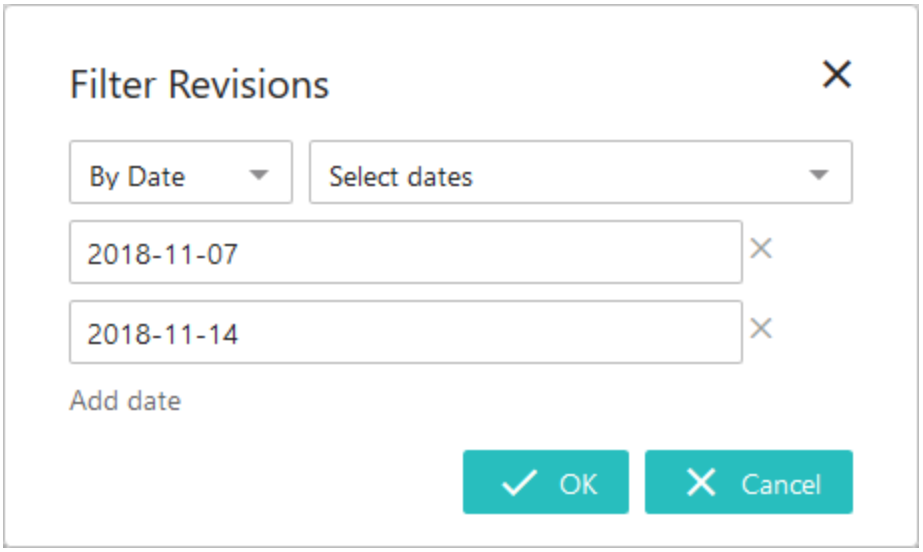




Filtering By Date

With By Date selected (default option), revisions can be filtered based on date ranges, a single date, or multiple (single) dates can be selected for comparison searches (using the 'Select multiple dates' option and adding additional dates by 'Add date' and deleting dates by using the X button).

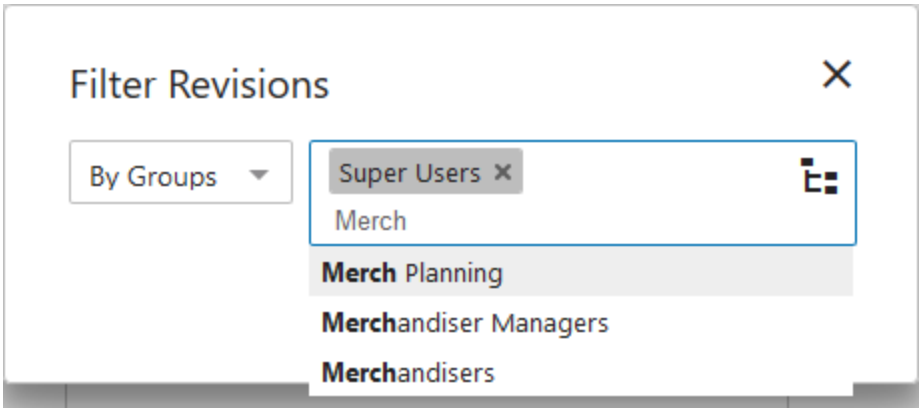
Using the filtering options shown below, any revisions created 2018-11-07 and any revisions created on 2018-11-14 will be displayed to the user after they click OK. The user can compare data using the hide equal / mark different selections to compare the data.



Filtering by Groups

Alternatively, if the Allow Group Filtering parameter is enabled in the Multi Revision Screen Properties, users can filter revisions by user group or user groups. Revision results are returned if a revision was created by a user within one of these groups.

User groups can be selected by putting the cursor in the 'Select groups for filtering' value field and choosing from the list that displays. Users can also start typing and allow typeahead functionality to suggest applicable groups, or the user can also click the Node Picker icon and make a selection from the 'Select User Groups' dialog that displays. Upon clicking OK, the revision screen will display revisions based on the group or groups entered.

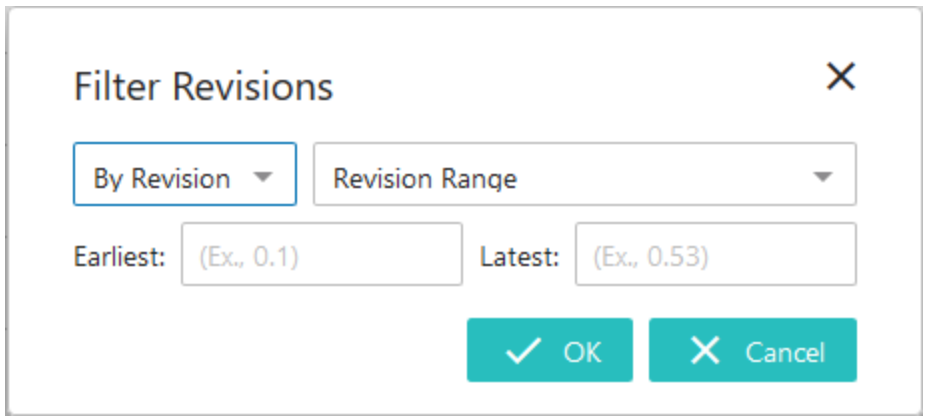


Filtering By Revision

When the By Revision filtering option is selected, users can filter revisions by either defining a range of revisions, or by selecting individual revisions.

- **Revision Range**

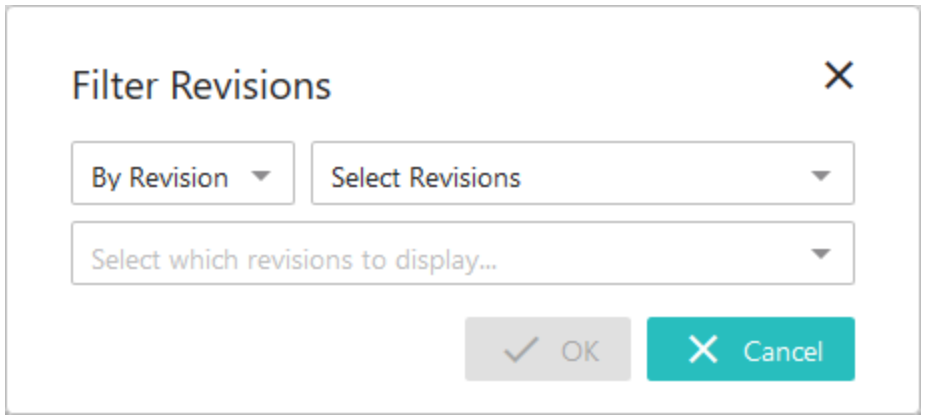
  The Revision Range filtering option allows users to set a range of revisions that will display in the Multi Revision screen.



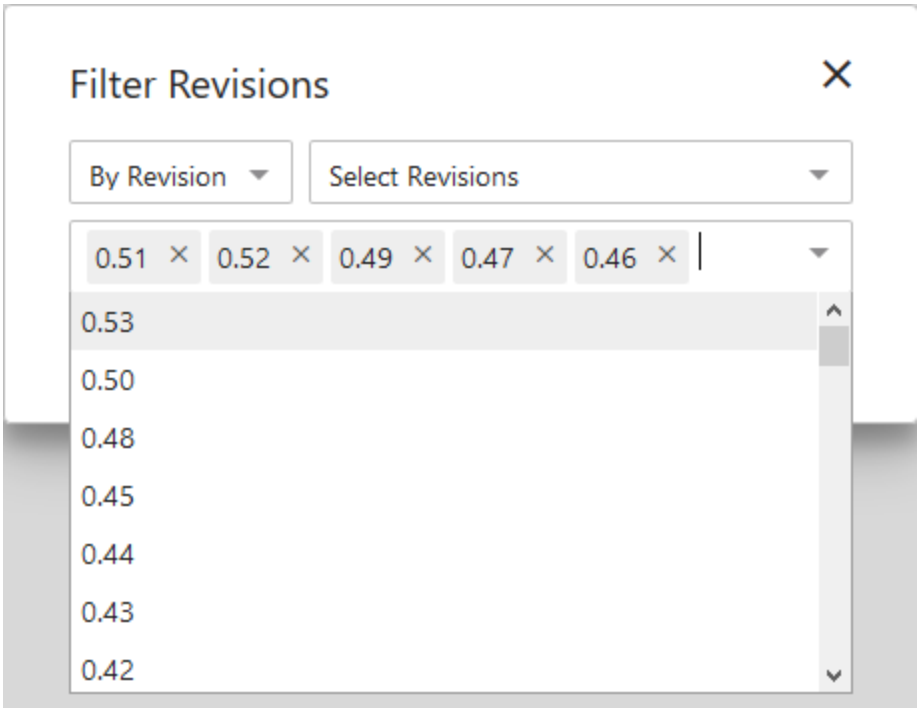
In the 'Earliest' field, enter the number of the earliest revision that should display in the list. This establishes the beginning of the range. In the 'Latest' field, enter the most current revision that should display. This establishes the end of the range. As soon as valid numbers are entered into either the 'Earliest' or 'Latest' fields, a dropdown of viable revision numbers displays beneath the field from which the user can select. When the filter is approved by clicking 'OK', all revisions between the entered revision numbers, including the entered revisions, will display in the Multi Revision screen.

- **Select Revision**

  Select Revision enables users to select only those revisions that should be listed in the Multi Revision screen.



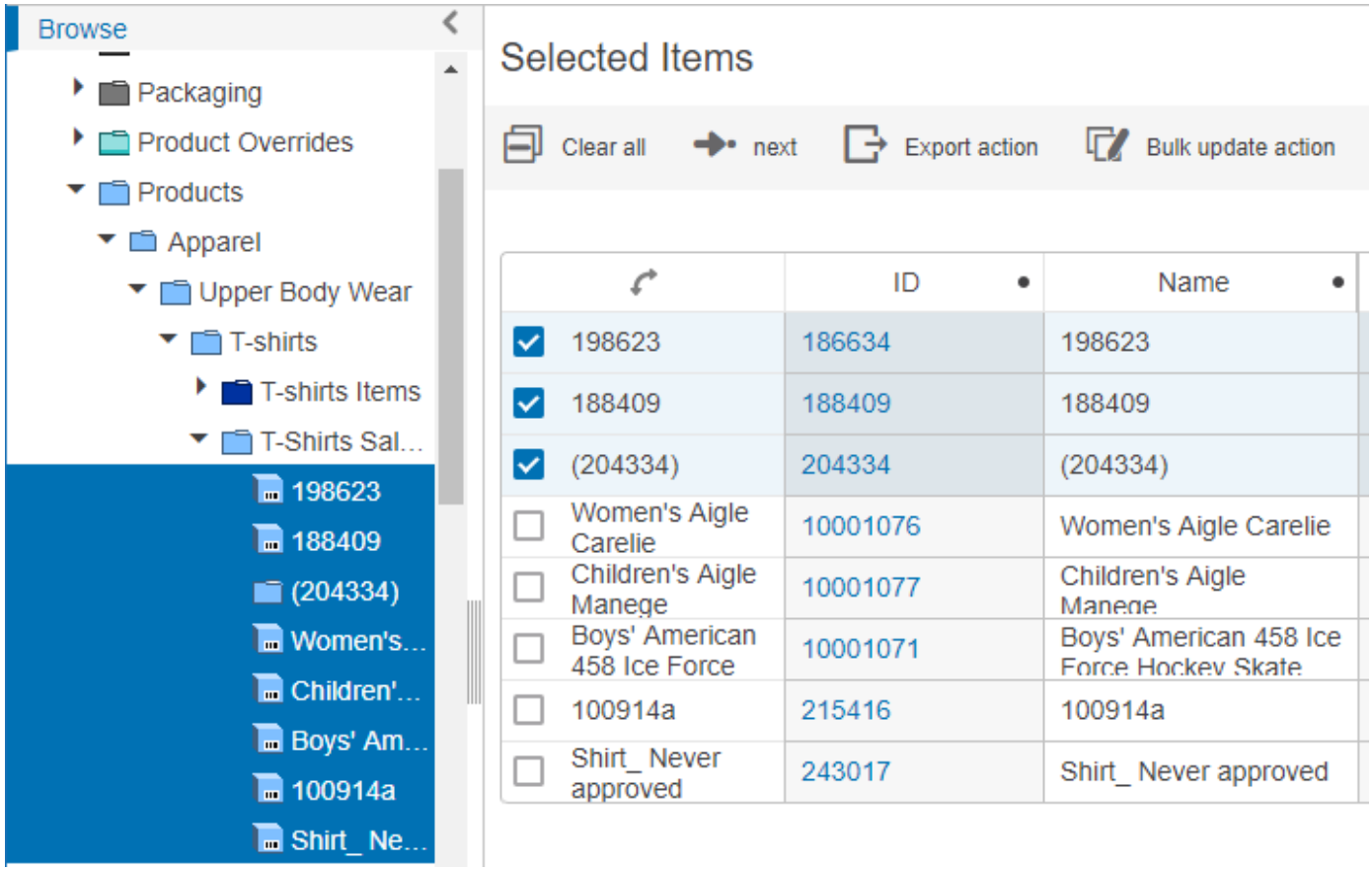
Users can either enter revision numbers, at which point a dropdown of viable revision numbers will display beneath the field from which the user can select, or they can click the arrow at the far right of the field which prompts display of a scrollable dropdown listing all revisions for the object (as shown in the screenshot below). As revision numbers are selected from this dropdown or entered manually, they disappear from the dropdown.



If, for instance, a user selected all revisions from the dropdown, the dropdown would display with no revision options. When the filter is approved by clicking 'OK', only the revisions selected will display in the Multi Revision screen.

Multi-Select from the Tree Navigator

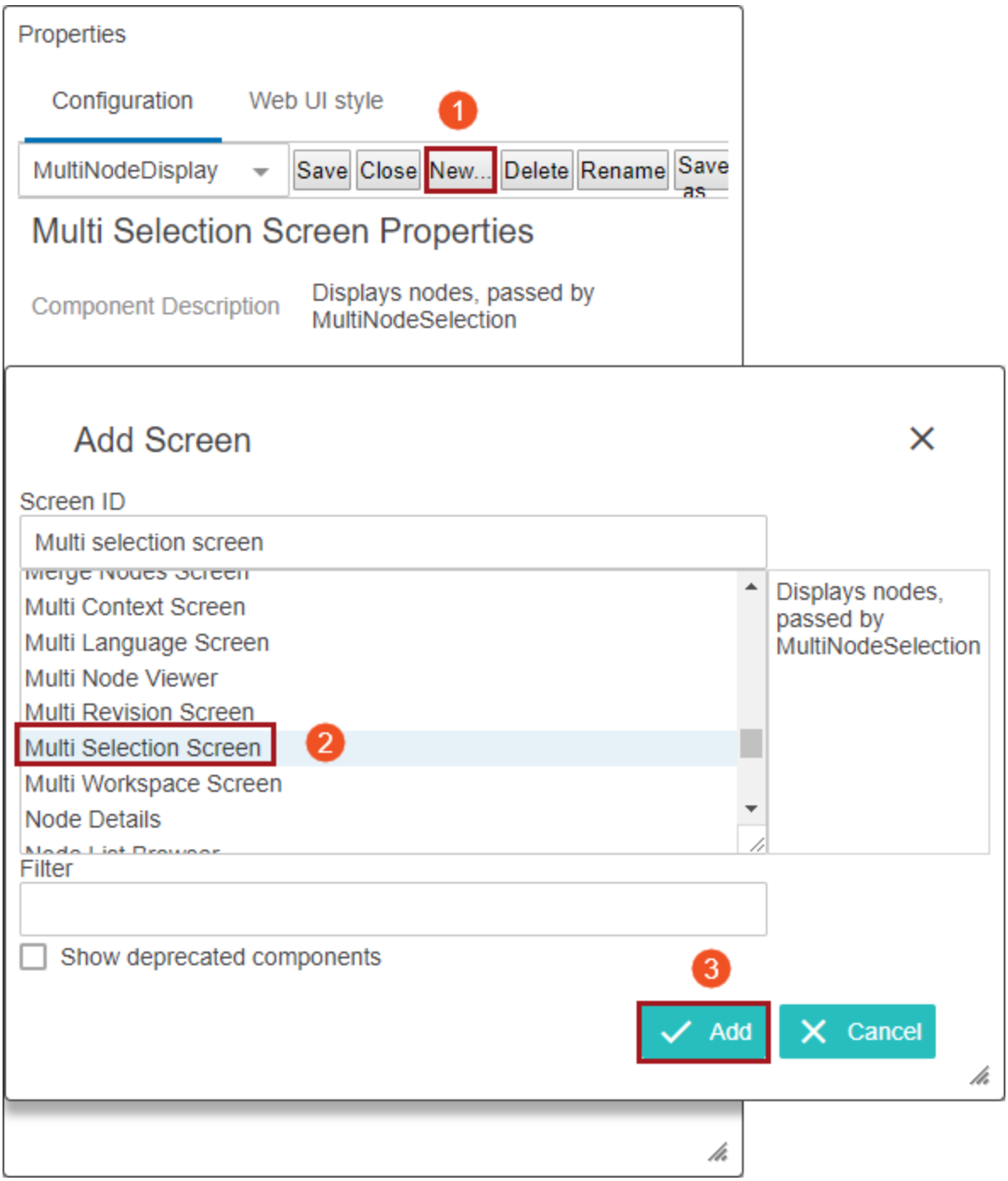
Users browsing through data using the Tree navigator sometimes want to focus in on a small subset of the data in order to perform the same action to all of the selected objects. A mapping condition called Multi Node Selection Condition allows for multi-view and/or multi-editing. When multiple objects are selected from the Tree, the appropriate list view will be shown to the user, as defined by the configuration of the Web UI screen.



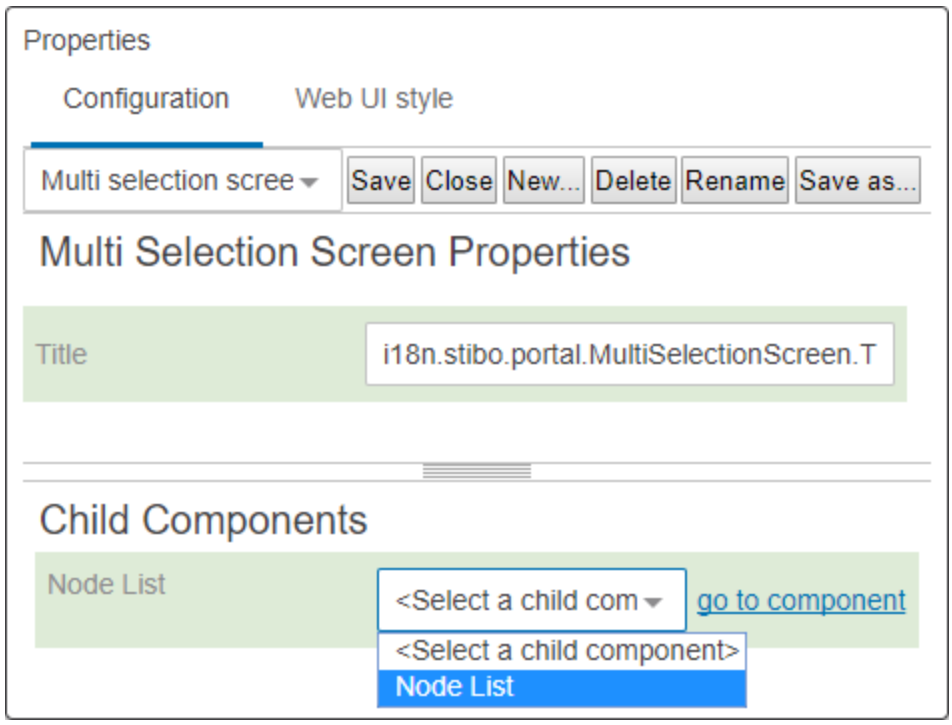
Setting up the Multi-Select from Tree Navigator

To set up the Multi-Select from Tree Navigator function a new screen of the type Multi Selection Screen must be configured.

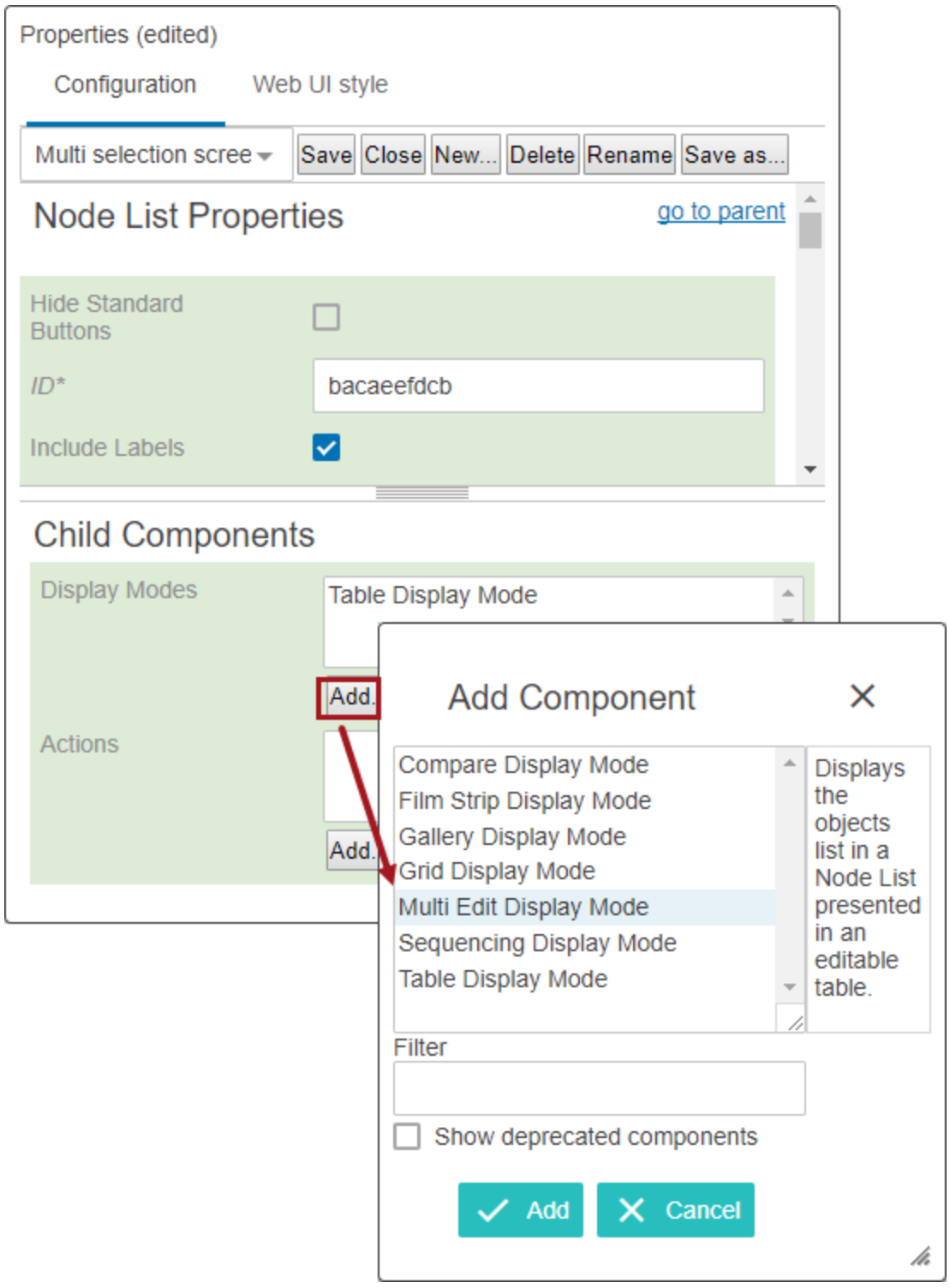
1. This screen is added by selecting "New" in the Portal Designer and then scroll down the list to find the Multi Selection Screen. For more information on configuring screens, refer to the **Design Mode Basics** topic in the **Web User Interface** Documentation.



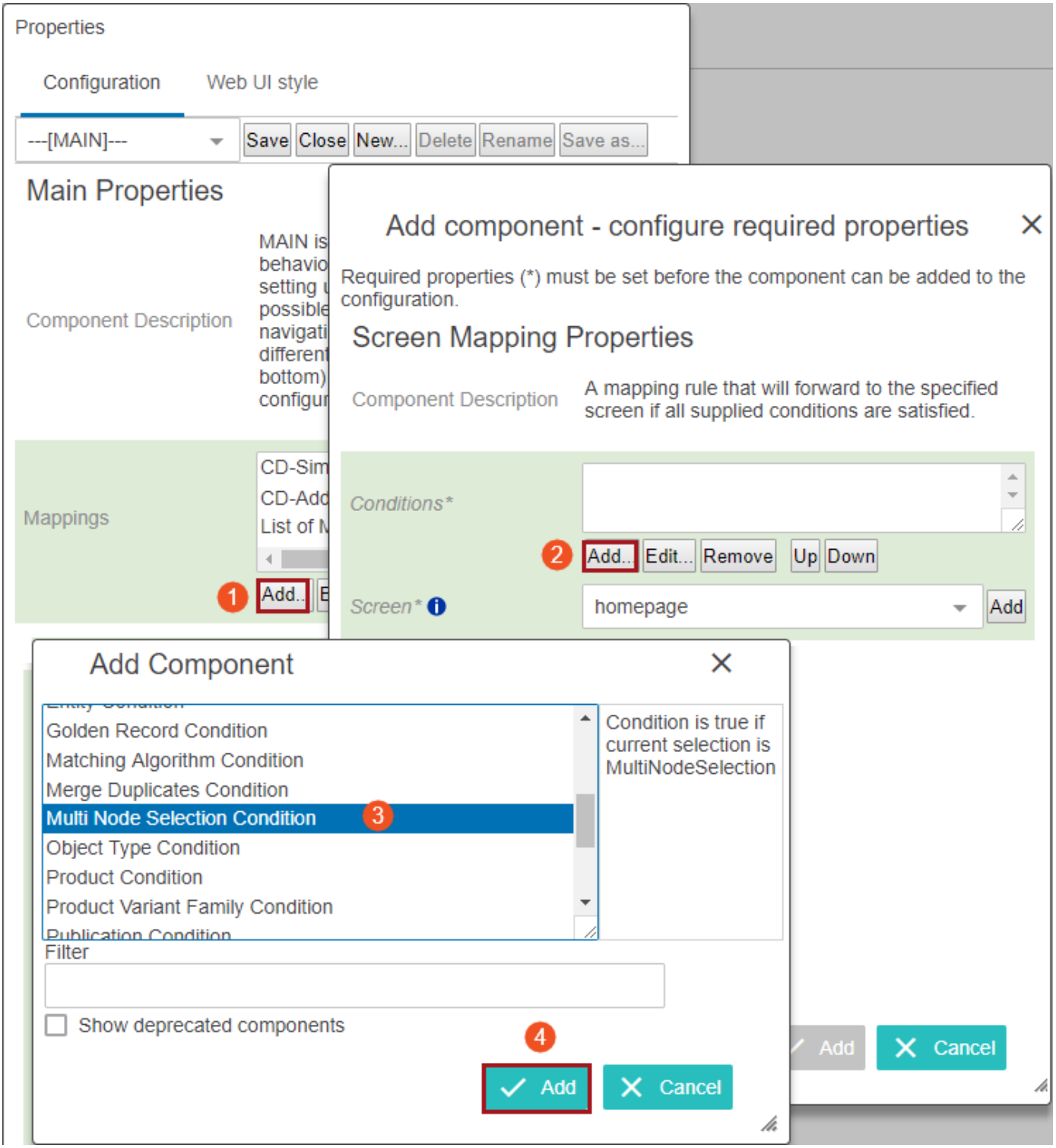
2. Next configure the screen with a Node List (child component) and set it up with the desired Display Modes.



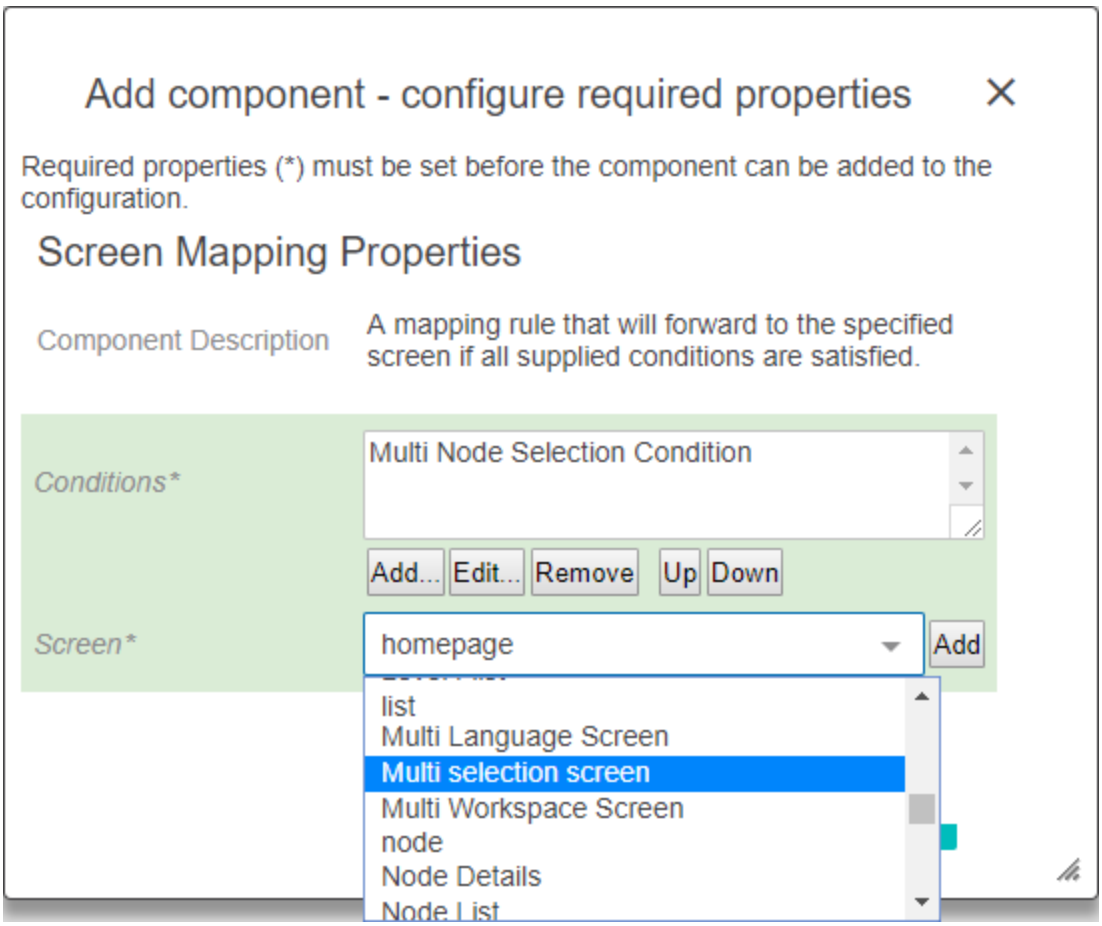
3. If the purpose is to edit the objects selected in the Tree navigator, then be sure to select the Multi-Edit display. When your components are added, press save.



4. After configuring the screen, go to "MAIN" in the designer. Under Mappings click 'Add' to open the Screen Mappings dialog. Click 'Add' under Conditions and find the Multi Node Selection Condition in the list. Click 'Add' to select the mapping condition and thereby add it to the list of Conditions.



5. Now the mapping condition must be paired with a screen. Select the Multi Selection Screen that was configured for the purpose of showing multiple objects. The selected screen is the screen that the condition will forward to when then condition is triggered as the user navigates the Web UI. Press save again.



Note: A dedicated screen (Multi Selection Screen) must be configured to display the multiple objects selected from the tree navigator.

Multi Workspace Screen

The Multi Workspace Screen is a Web UI screen type designed to display both the Main and Approved workspaces, allowing a user to quickly view the differences between the current draft data and approved (uneditable) data for a given object. Users can also easily edit attribute values for the Main workspace using the Multi Workspace Editor.

Similar functionality is available in the workbench. Users can switch to workspace mode, which allows them to view the Main and Approved workspaces at the same time.

This topic addresses:

- Using a Multi Workspace Screen
- Configuring a Multi Workspace Screen

Using a Multi Workspace Screen

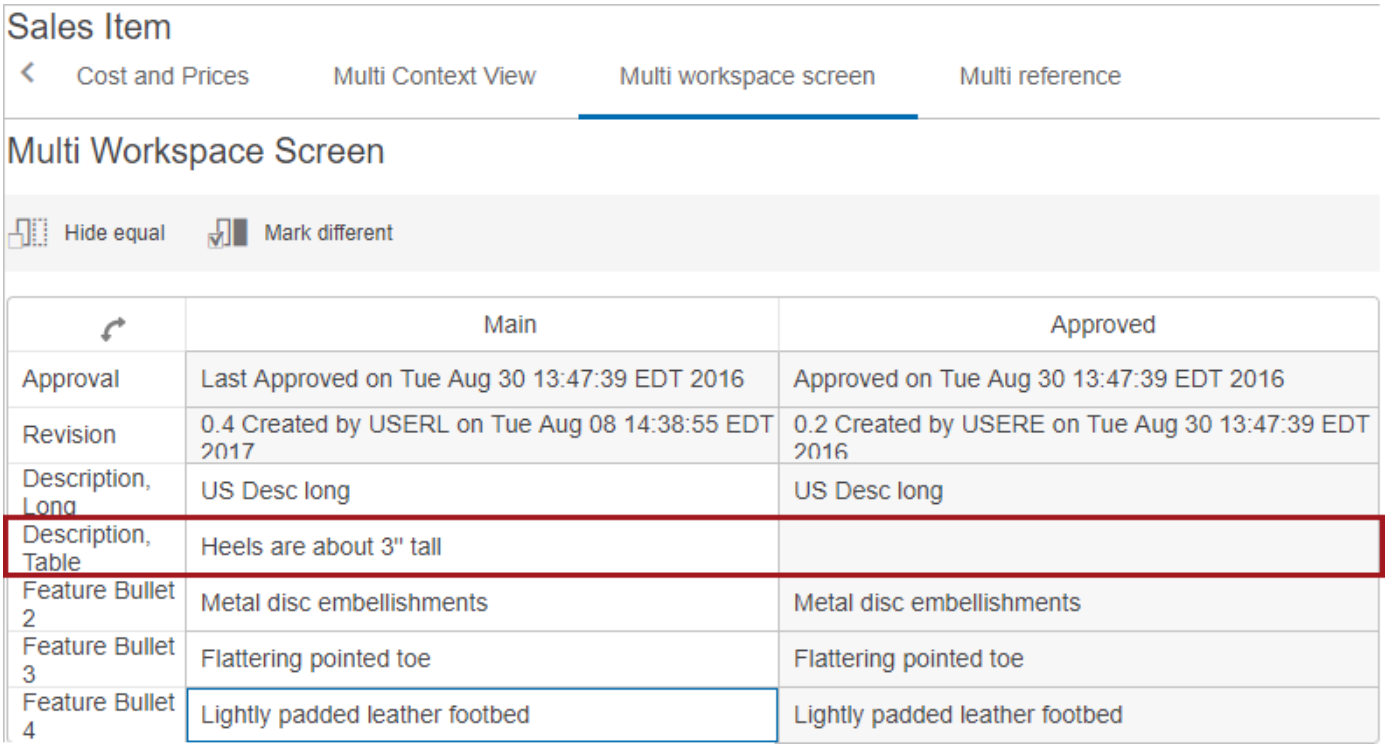
Using a Multi Workspace Screen allows users to more easily edit attribute values for an object while seeing the values that have previously been approved.

In the Main workspace, object information is editable (unless it is configured as read only). However, in the Approved workspace, the user can only *view* values that have been approved. If an object has never been approved, then only Main will display.

There are a variety of ways to configure the Multi Workspace Screen. It can be configured with the Hide Equal and/or Mark Different tools to help the user quickly identify which values do not match across the two workspaces and focus on values that differ from each. For more information on the Hide Equal and Mark Different Buttons, see the **Comparing Data Using Hide Equal and Mark Different** documentation. Additionally, the attributes that you want to view values for can be added via the Multi Workspace Editor.

In the example that follows, when a user navigates to a 'Sales Item' object, the Multi Workspace Screen displays as a sub screen tab page on a Node Details screen. The user has access to both the Hide equal and Mark different actions, can edit attribute values for the Main workspace, and view the attribute values for the Approved workspace.

Because the Property Direction parameter for the Multi Workspace Editor has been set to vertical instead of horizontal (*default*), the Main and Approved workspaces display as column headers, and the configured attributes display as rows. In this scenario, to view the Main and Approved Workspaces as rows instead of columns, select the flip table icon.



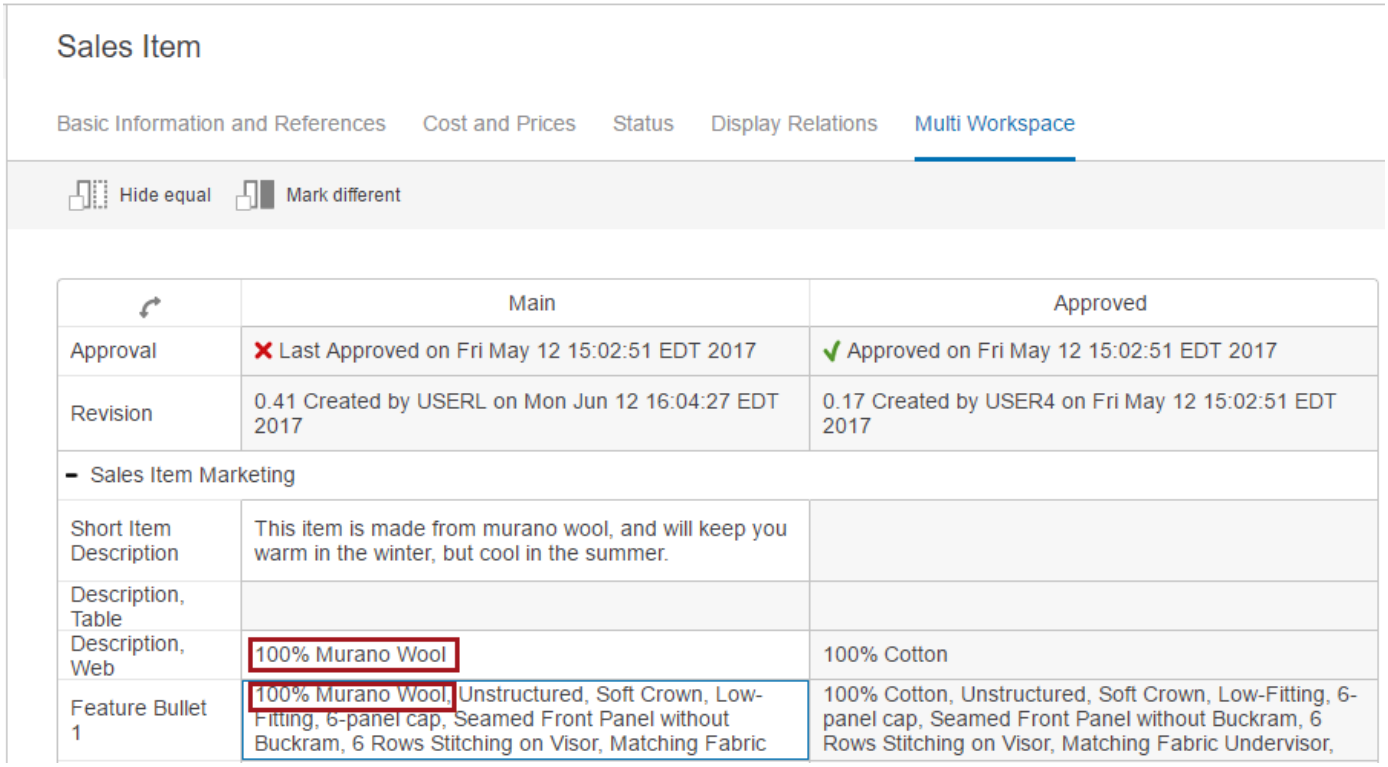
For the example above, the Multi Workspace Screen / Multi Workspace Editor Properties are configured as follows:

- **Show Hide Equals Button** is enabled in the configuration (but not activated in the Multi workspace screen)
- **Show Mark Different Button** is enabled
- **Title** value is set by default
- **Headers** Approved, Revision, Attribute Value Header (In this example it is: Description Long, Description Table, Feature Bullet 2, Feature Bullet 3, Feature Bullet 4)
- **Property Direction** is VERTICAL
- **Use Immediate Save** is enabled (For details, see the **Auto-Save in the Web UI** topic.)

Editing Attribute Values

A user can edit configured attribute values by double clicking within a Main workspace cell. The cell being edited will not be disabled when compared with the uneditable field in the Main or Approved workspace.

In the example below, the 'Description, Web' attribute value and the 'Feature Bullet 1' attribute value for the Main workspace needs to display '100% Murano Wool.'



While the cursor is in the edited cell, the blue line border remains. However, the Multi Workspace Screen configuration determines how the changes are saved. If the configuration uses immediate save, then the changes will be saved after the cursor leaves the edited cell. If immediate save is not enabled, then after the cursor leaves the edited cell, the edited cell will be shaded and the save icon will activate. In this case, the changes are saved once the cursor leaves the edit cell.

Information regarding configuration can be found in the **Configuring a Multi Workspace Screen** topic.

Configuring a Multi Workspace Screen

Any number of Multi Workspace Screens can be added to a Web UI. Once added, as with any screen, an admin user must configure how users access a Multi Workspace Screen. Other configuration options include configuring a default layout, determining which headers (values) users can view and/or edit, how edits are saved, and enabling the use of the Hide equal and / or Mark different actions.

This topic addresses design Prerequisites, Creating a New Multi Workspace Screen, and Configuring:

- Access to a Multi Workspace Screen
- Multi Workspace Screen Properties
- Multi Workspace Editor Properties
- Headers for the Multi Workspace Editor

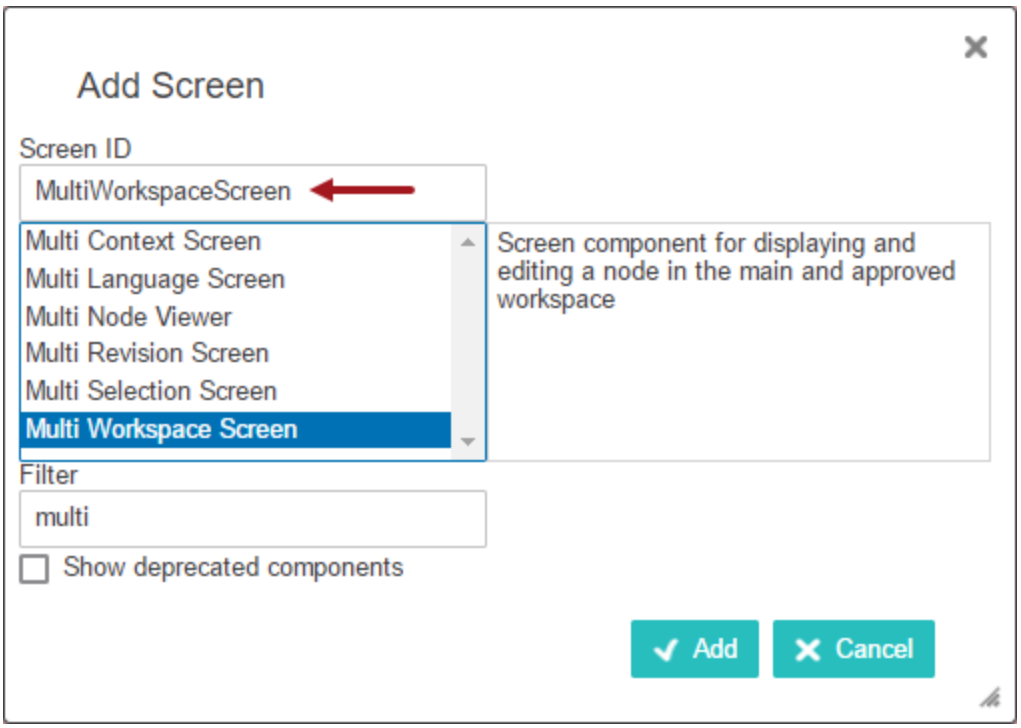
Prerequisites

It is expected that anyone configuring the Multi Workspace Screen component is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Also, for configuration of the Multi Workspace Screen, it is expected to be familiar with the **Workspaces** section of the **System Setup** documentation, and know how to use attribute values / attribute value groups, which is explained in the **Attribute Value Component** documentation and the **Attribute Value Group Component** documentation.

Creating a New Multi Workspace Screen

Steps for creating a new screen are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic. Click 'Multi Workspace Screen' as the screen type (shown in the screenshot below).

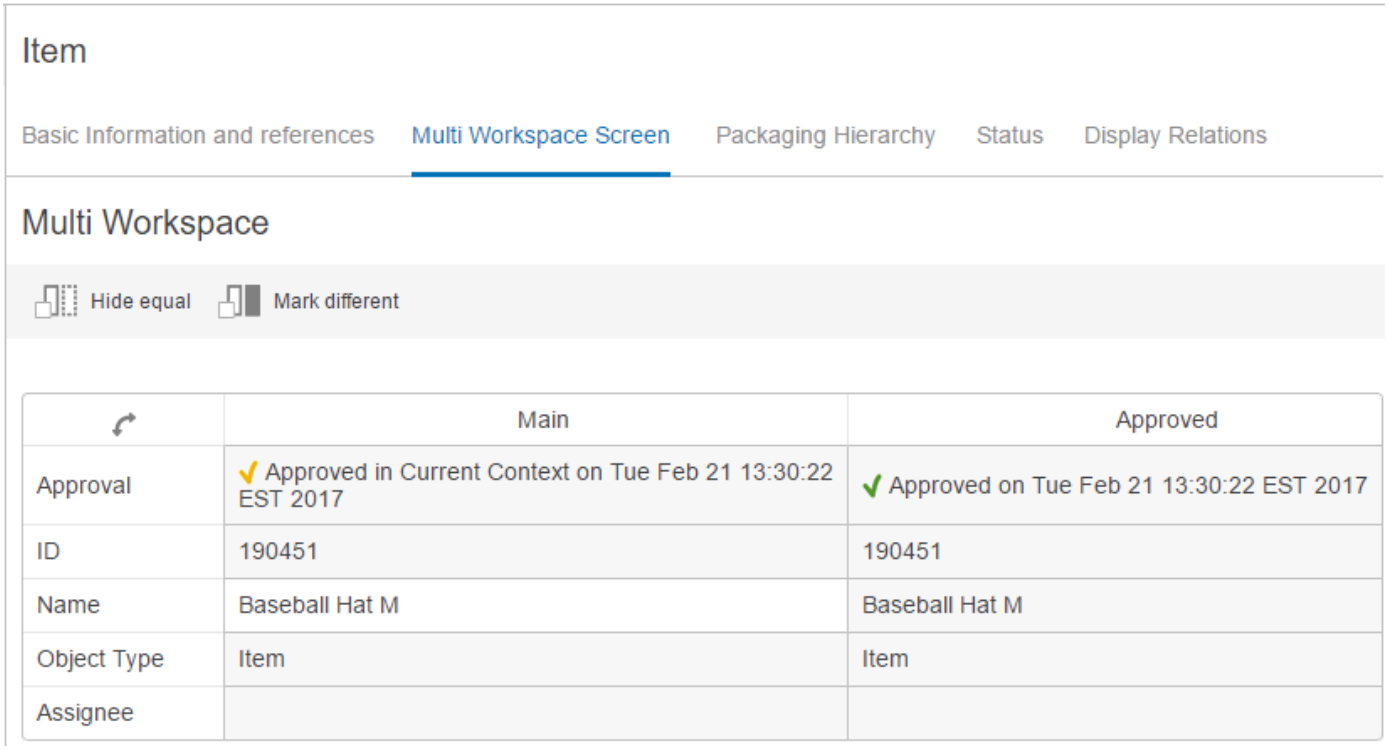


At this point, either close the designer and configure the screen at a later time, or continue on with the steps in the next section.

Configuring Access to a Multi Workspace Screen

An admin user must configure how a user will access a Multi Workspace Screen. The Multi Workspace Screen can either be mapped using Main Properties or added to a sub screen tab page on a Node Details Screen. For more information about mapping, see **Configuring the Parameters** in the **Main Properties** topic, and for more information about sub screen tab pages, see the **Tab Pages** topic in the **Node Details Component** section of the **Web User Interface / Web UI Setup and User Guide** documentation.

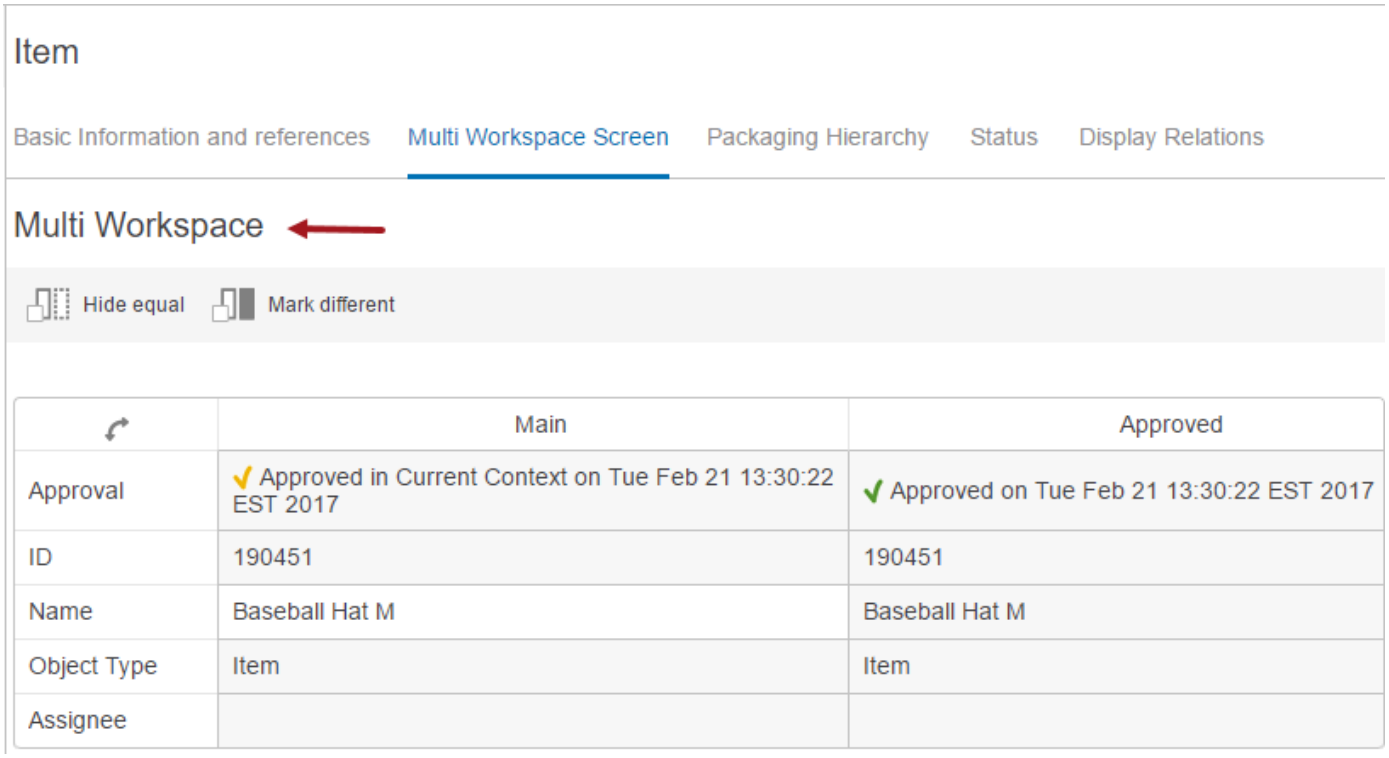
Below is an example of a Multi Workspace Screen that is configured (mapped) to display when an object is selected.



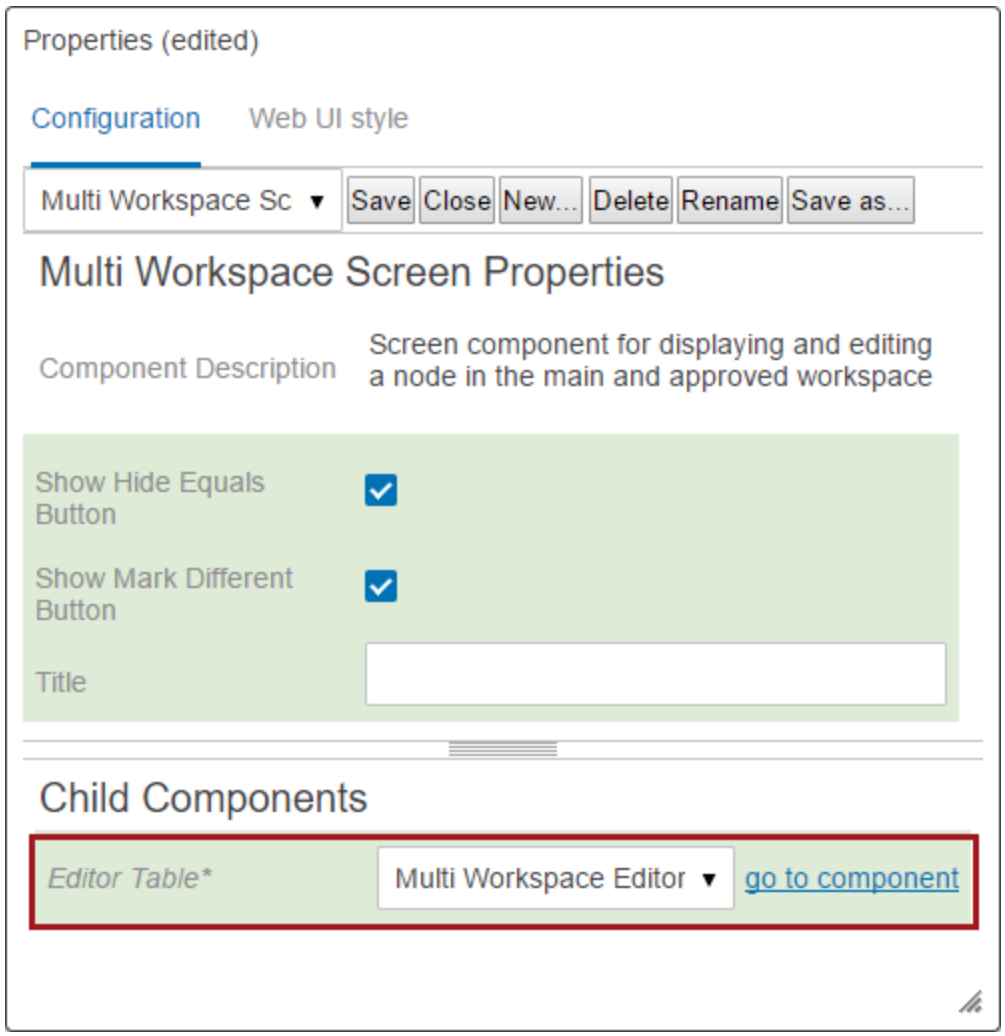
Configuring Multi Workspace Screen Properties

Steps for configuring the Multi Workspace Screen Properties are below.

1. With the designer window open, select the screen ID for the **Multi Workspace Screen** using the screen dropdown list. (If continuing on after creating a new Multi Workspace Screen, Multi Workspace Screen Properties should already be displayed.)
2. In Multi Workspace Screen Properties, determine if you want to enable the Show Hide Equals Button and/or the Show Mark Different Button parameters. Details regarding what these parameters do can be found in the **Comparing Data Using Hide Equal and Mark Different** section of the **Web User Interfaces / Using a Web UI** documentation.
3. If desired, type in a title which will display on the screen in the top left corner. If no text is entered, a default 'Multi Workspace' label is displayed, based on the i18n translation key.



4. Go to the Child Components > Editor Table parameter and click **go to component**. The Multi Workspace Editor is pre-populated in the value dropdown since it is mandatory to configure the editor before the Multi Workspace Screen will render correctly.

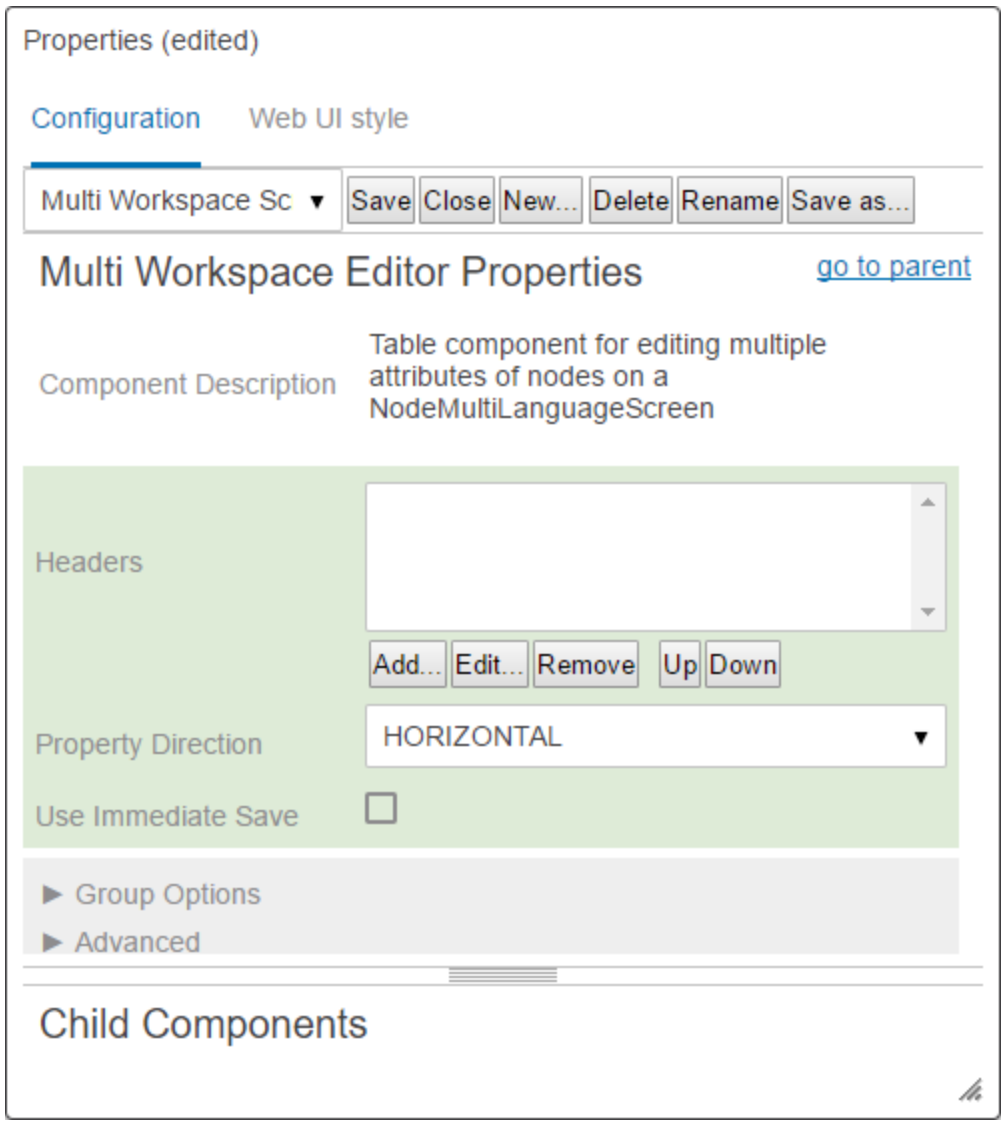


Configuring the Multi Workspace Editor Properties

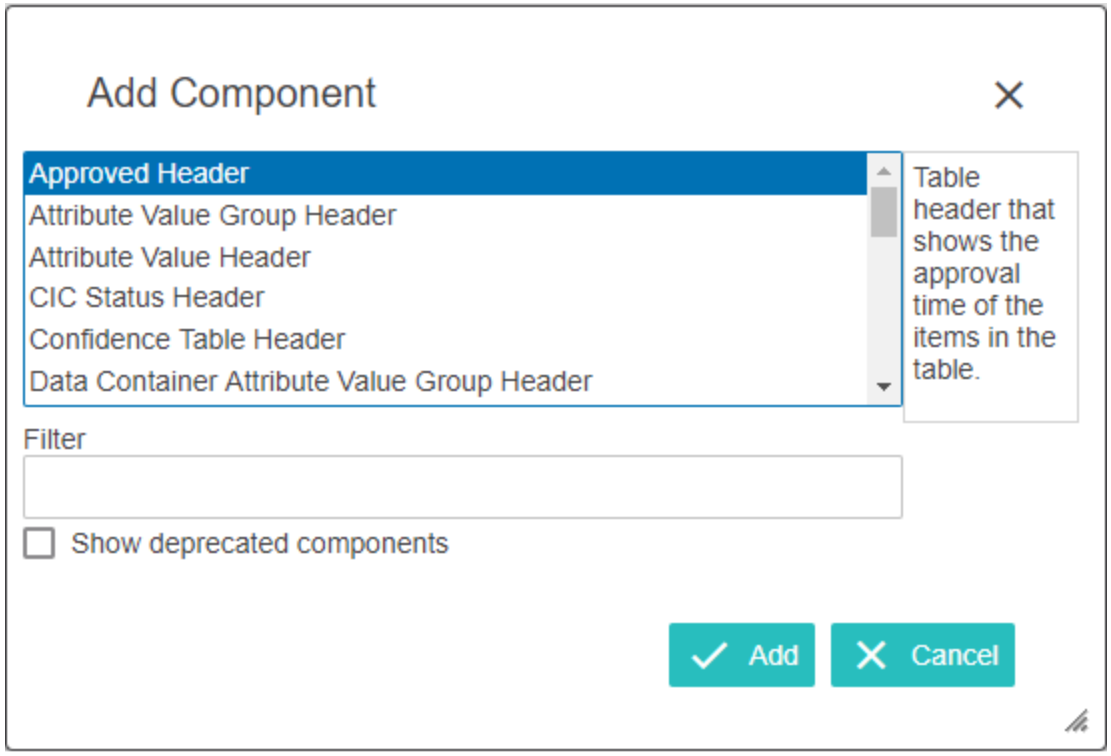
The Multi Workspace Editor Properties now need to be configured.

1. Go to Multi Workspace Screen Properties > Child Components > Editor Table > click **go to component**.

   The Multi Workspace Editor Properties will display.

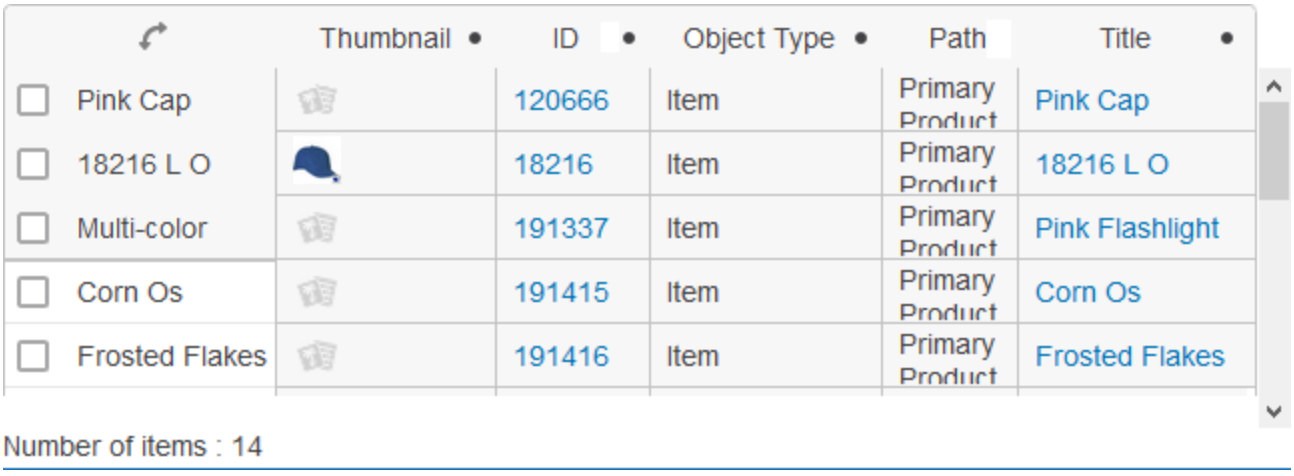


2. Add, edit, remove, and reorganize table headers, as desired, in the **Headers** value field. Relevant headers to consider including, as needed, are: ID Header, Name Header, Attribute Value Header, Attribute Value Group Header, Approved Header, and Revision Header. Clicking on each component in the 'Add component' dialog provides a description of the component on the screen.



3. Click the arrow button ( ) to determine the direction of the table using the **Property Direction** parameter. The two options are:

- **VERTICAL** will display the added Headers as rows. **HORIZONTAL** will display the added headers as columns.



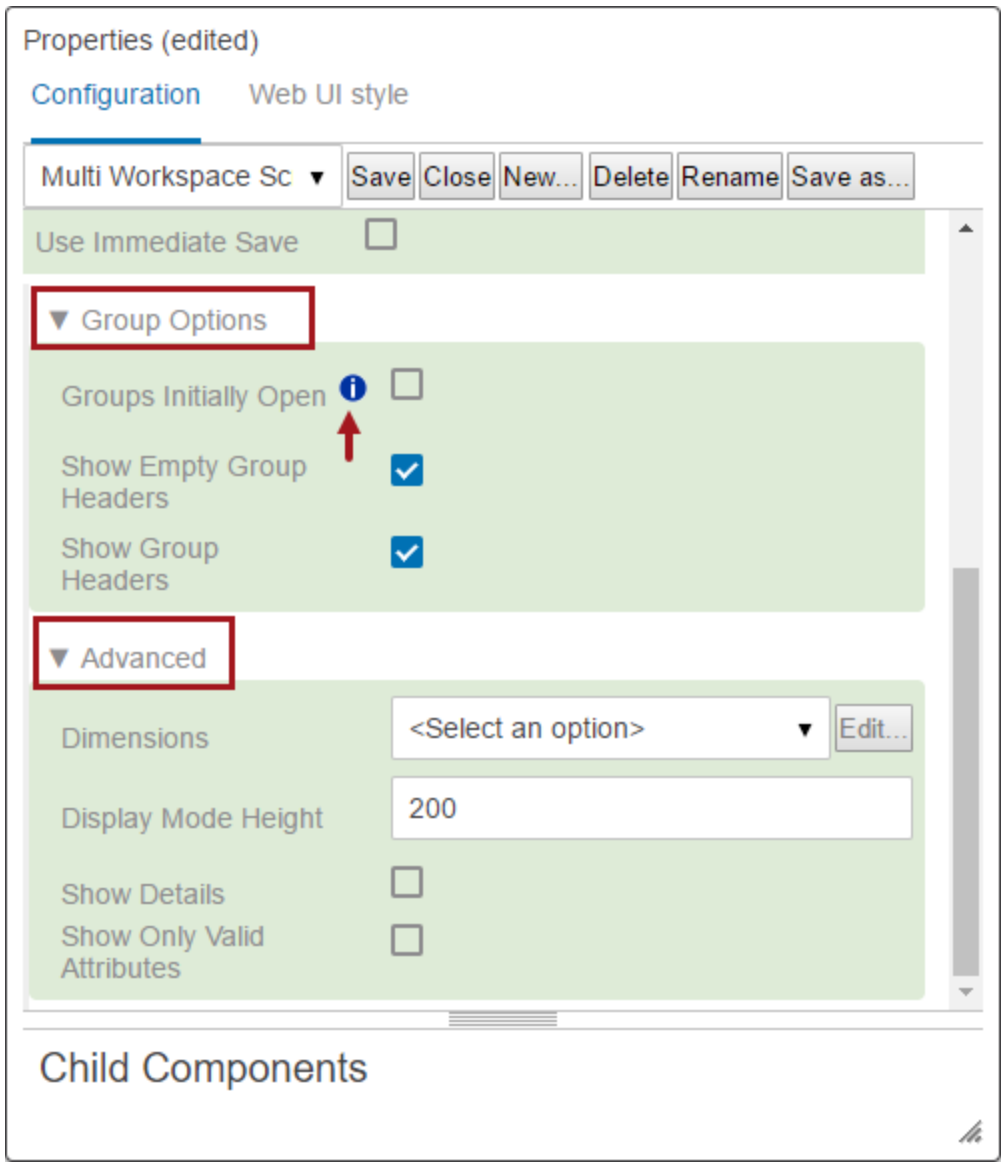
- **HORIZONTAL** will display the added headers as columns.

	Pink Cap	18216 L O	Multi-color	Corn Os	Frosted
Thumbnail •					
ID •	120666	18216	191337	191415	191416
Object Type •	Item	Item	Item	Item	Item
Path	Primary Product	Primary Product	Primary Product	Primary Product	Primary Product
Title •	Pink Cap	18216 L O	Pink Flashlight	Corn Os	Frosted Flakes
Status flag •	Normal flag	Error	Normal flag	Normal flag	Error

Number of items : 14

4. Enable **Use Immediate Save** if the edits made by a user should be saved as soon as the cursor leaves the cell or leave disabled if the user will be required to manually click the save button after editing. For details, see the **Auto-Save in the Web UI** topic.
5. Display additional optional parameter settings by clicking the **Group Options** heading and/or the **Advanced** heading. Make selections as desired. Each parameter features help text, accessible by clicking the info icon to the right of each parameter name.

   For more information on the parameters under Group Options and the Advanced headings, see the **Configuring Multi Language Editor Properties** section of the **Configuring a Multi Language Screen** topic.



6. Click **Save**.
7. Click **Close**.

Note: The Advanced > Show Details and Show Only Valid Attributes parameters are not applicable to the Multi Workspace Screen and enabling / disabling has no impact.

Configuring Headers for the Multi Workspace Editor

To display specific information within the Multi Workspace Screen, an admin user must add and configure Headers within the Multi Workspace Editor Properties. If left blank then only the ID and Title (Main / Approved) headers will display. It is common to configure attribute value and attribute value group components within the Headers, Additional information can be found in the **Attribute Value Component** documentation, and the **Attribute Value Group Component** documentation.

1. Go to the Multi Workspace Editor Properties > Headers > click **Add**.
2. The 'Add Component' dialog displays. Click a component in the dialog to display a description of the component.
3. Make a selection, click **Add** to close the dialog and return to the Multi Workspace Editor Properties.
4. Add, edit, and organize any additional headers.
5. Click **Save**.
6. Click **Close**.

For an example on how to use the screen once configured, see the **Multi Workspace Screen** topic.

Node Details Screen

The Node Details screen type / component is a top-level component. It is used as a 'base' and configured to display other components (e.g., Node Editor, Multi-Reference Editor).

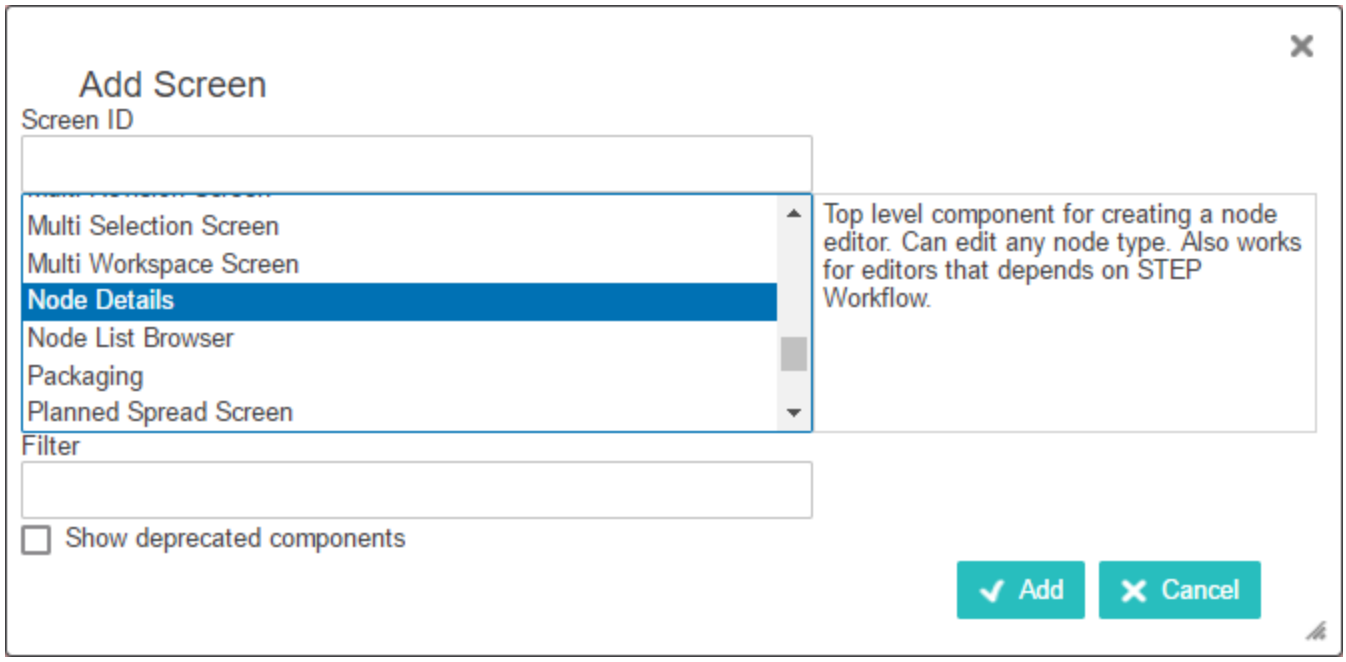
Prerequisites

It is expected that anyone configuring the Node Details component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Setup and User Guide** documentation.

Adding a New Node Details Screen

Steps for creating a new screen using the Node Details component are below.

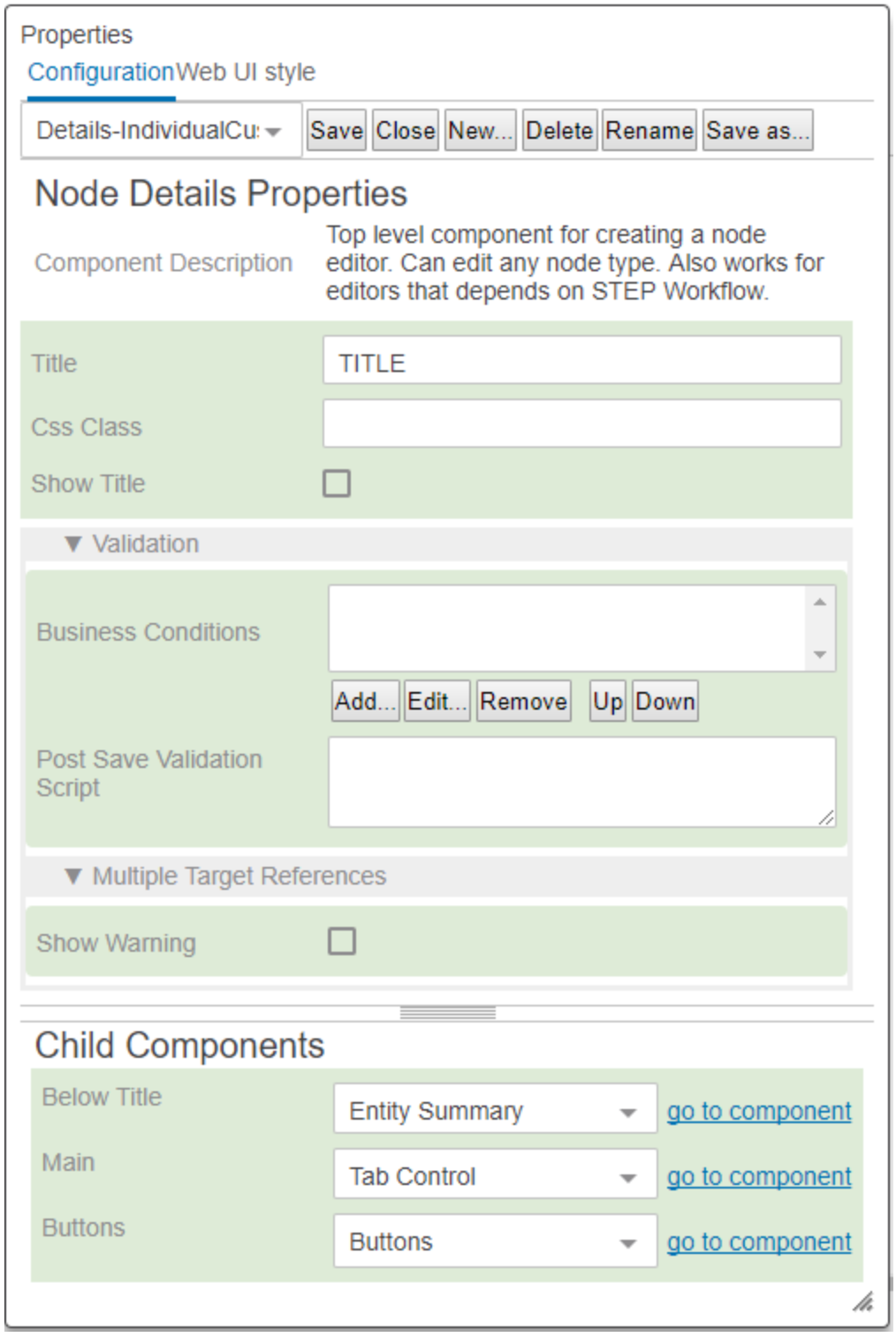
Steps for creating a new screen are outlined in the **Design Mode Basics** topic in the **Web User Interfaces** / **Web UI Setup and User Guide** documentation. Select 'Node Details' as the screen type (shown in the screenshot below).



After it has been added either close the designer and configure the screen at a later time, or continue on with the Node Details configuration.

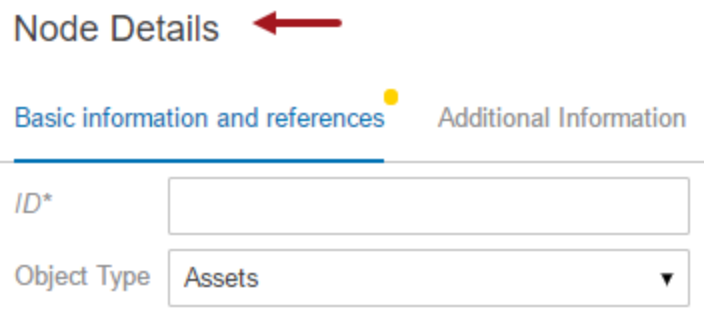
Configuring Node Details Properties

Each parameter should be configured as needed. To guide you in your set up, help text is available for each parameter and is accessible by clicking the info icon to the right of each parameter name (displays upon mouse over).



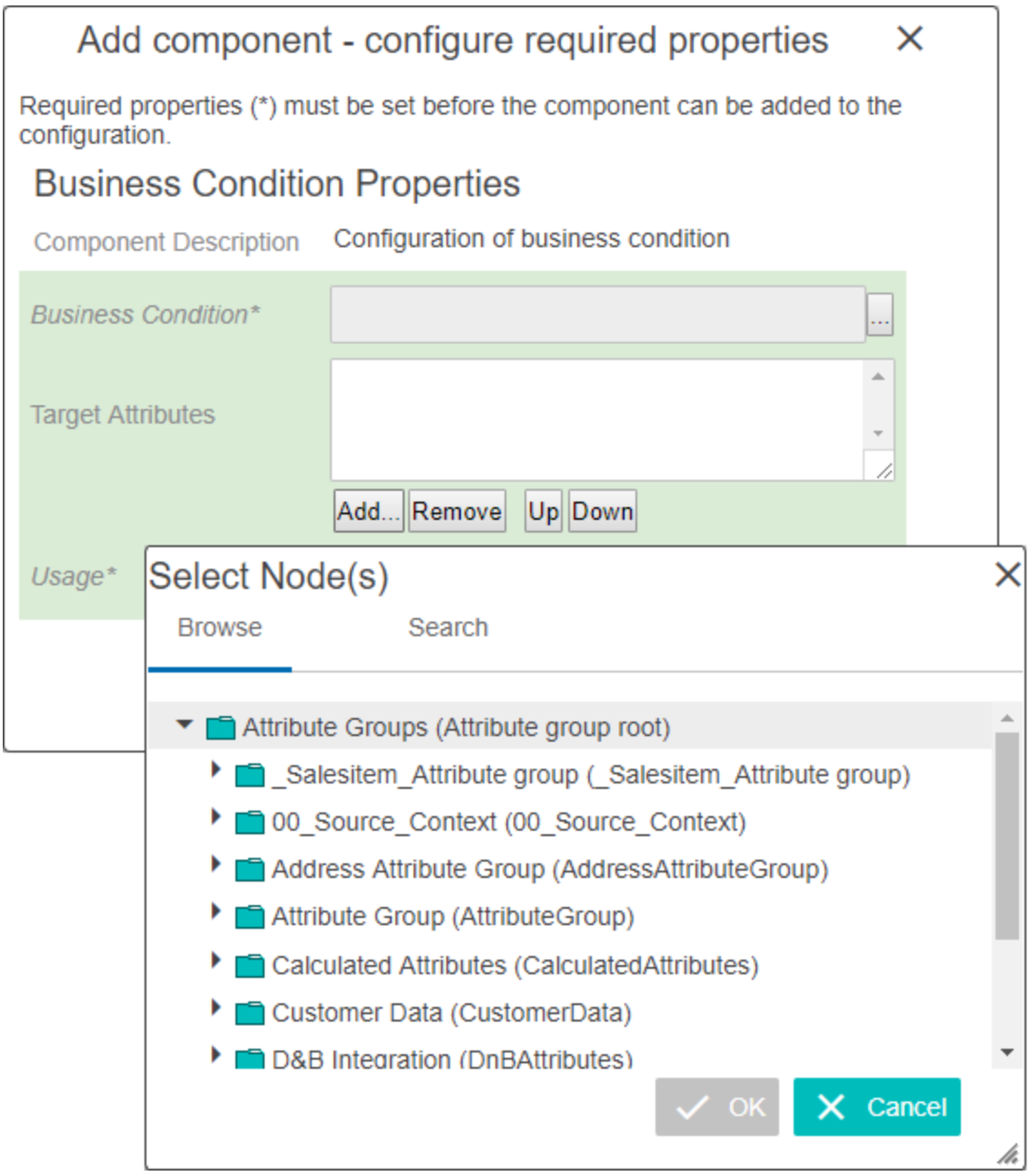
Main Components

1. If a title should display, determine if the default title should remain, or if a custom title is necessary. The default title will display as 'Node Details' on the screen in the top left corner (an example is shown below).

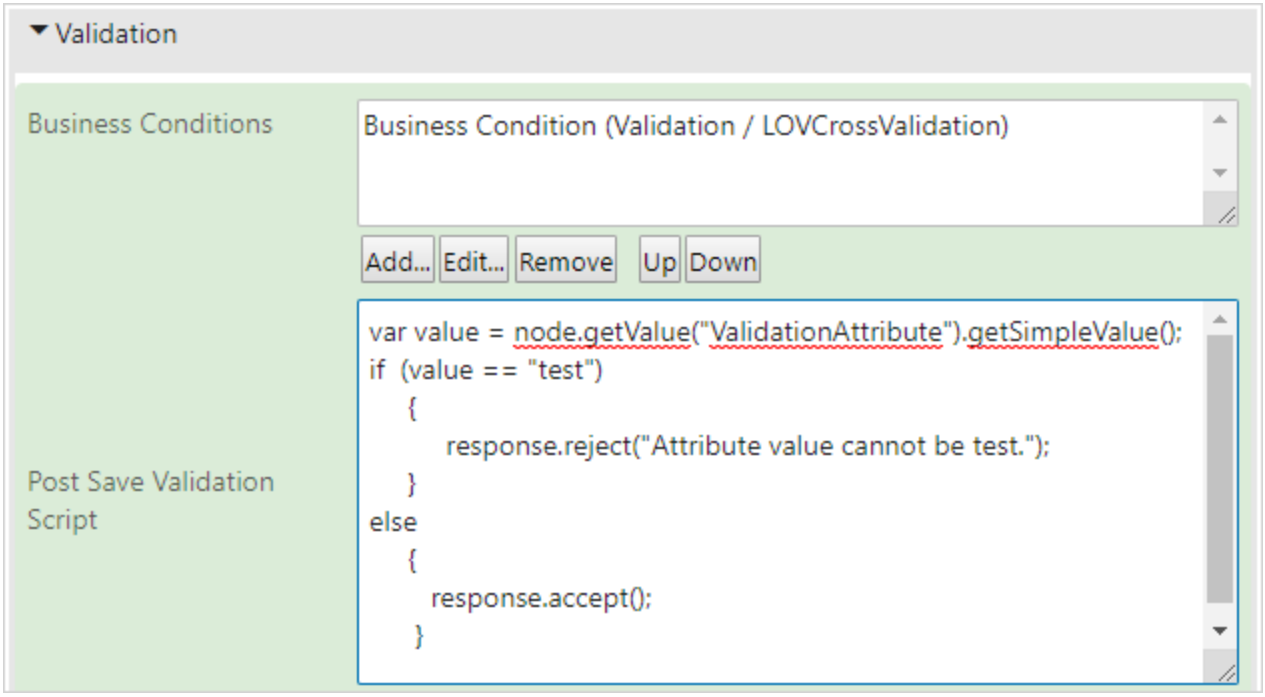


Important: Before entering a custom title, it is important to know the title parameter offers i18n key functionality. Presence of an i18n key indicates that the field can be included in extraction for external translation, and that a value has not been manually populated. Once a value has been manually populated within the designer, it is no longer available for extraction, unless the manual value is removed and the configuration saved, closed, and then reopened. Customers planning to pursue or utilize Web UI translations should not overwrite i18n values manually in the designer, and should instead populate texts within the Web UI locales files on the application server. For more information, see the **Localization** topic within the **Administration Portal** documentation.

2. Determine if you want to display the title. Leave the Show Title parameter enabled if the Node Details Screen should display the title. Disable the parameter to hide the title and its associated white space
3. Click on **Validation** to expand the following optional parameters.
    - **Business Conditions**: The Business Conditions field tests against values updated in the database. To add a business condition, click **Add...** to select an existing business condition to be executed to validate attribute values being edited on the node. Multiple business conditions can be added, but all must succeed for the process to continue. For more information about business conditions, see the **Business Conditions** topic in the **Business Rules** documentation.



- **Post Save Validation Script**: The Post Save Validation Script tests values once the 'Save' button has been selected. To add a Post Save Validation Script, enter a JavaScript expression for performing a post-save validation of a node. If the validation fails, users will not be allowed to save the changed values. The following example will verify if a selected field has the value of 'test.'



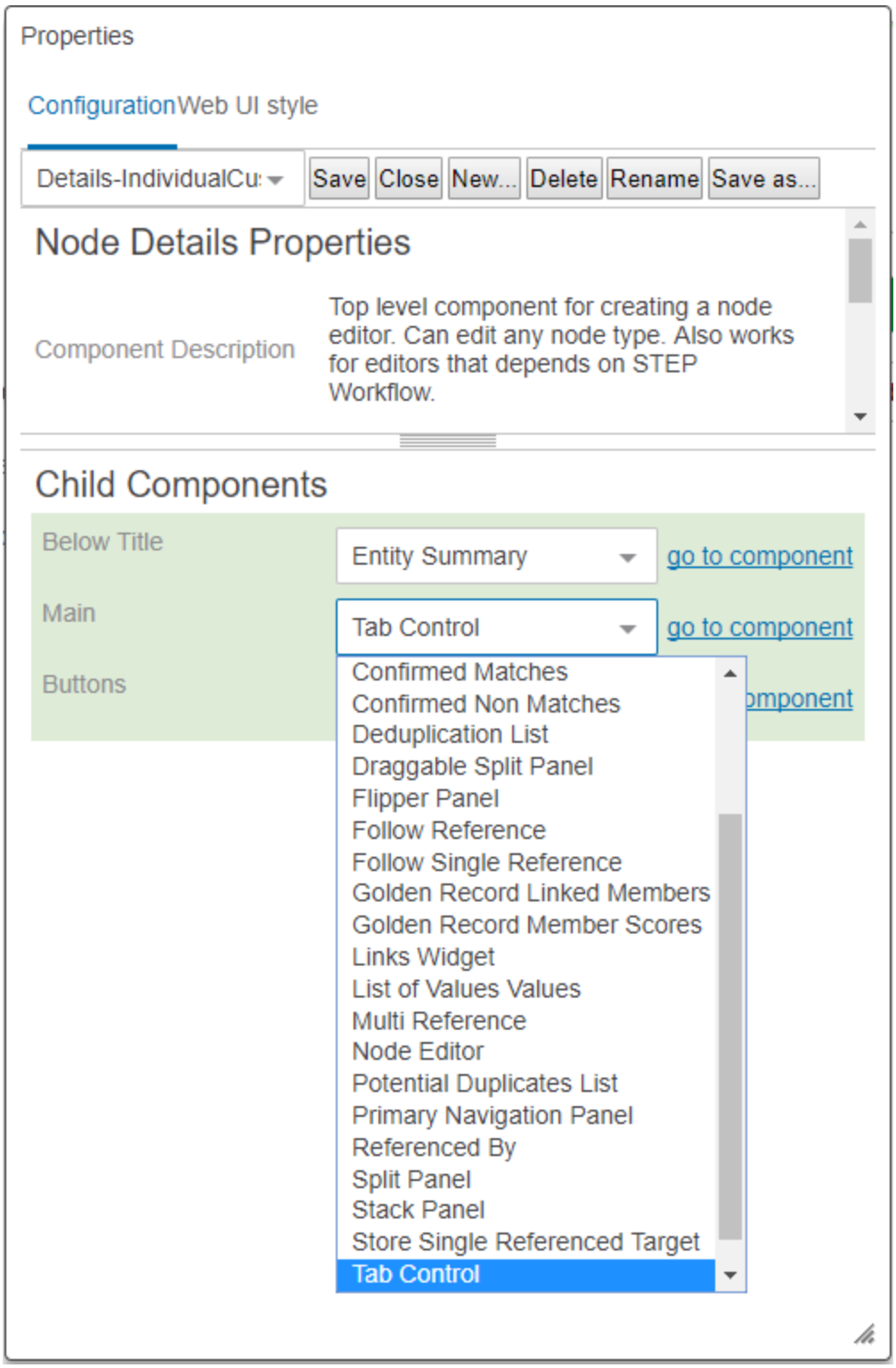
Once a value is entered into the field on the Node Details screen and saved, if the value is 'test' then an error will display alerting the user of this validation failure:

Note: This validation is run only on newly entered values. Existing values in the database are not validated.

4. Click on **Multiple Target References** to display the **Show Warning** parameter (disabled by default). When Show Warning is enabled / checked, a warning will display to end users when a shared object is edited and then saved, either through an actual Save action or implied save (e.g., Submit Action or Approve Action). For more details, see the **Shared Data Handling** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Child Components

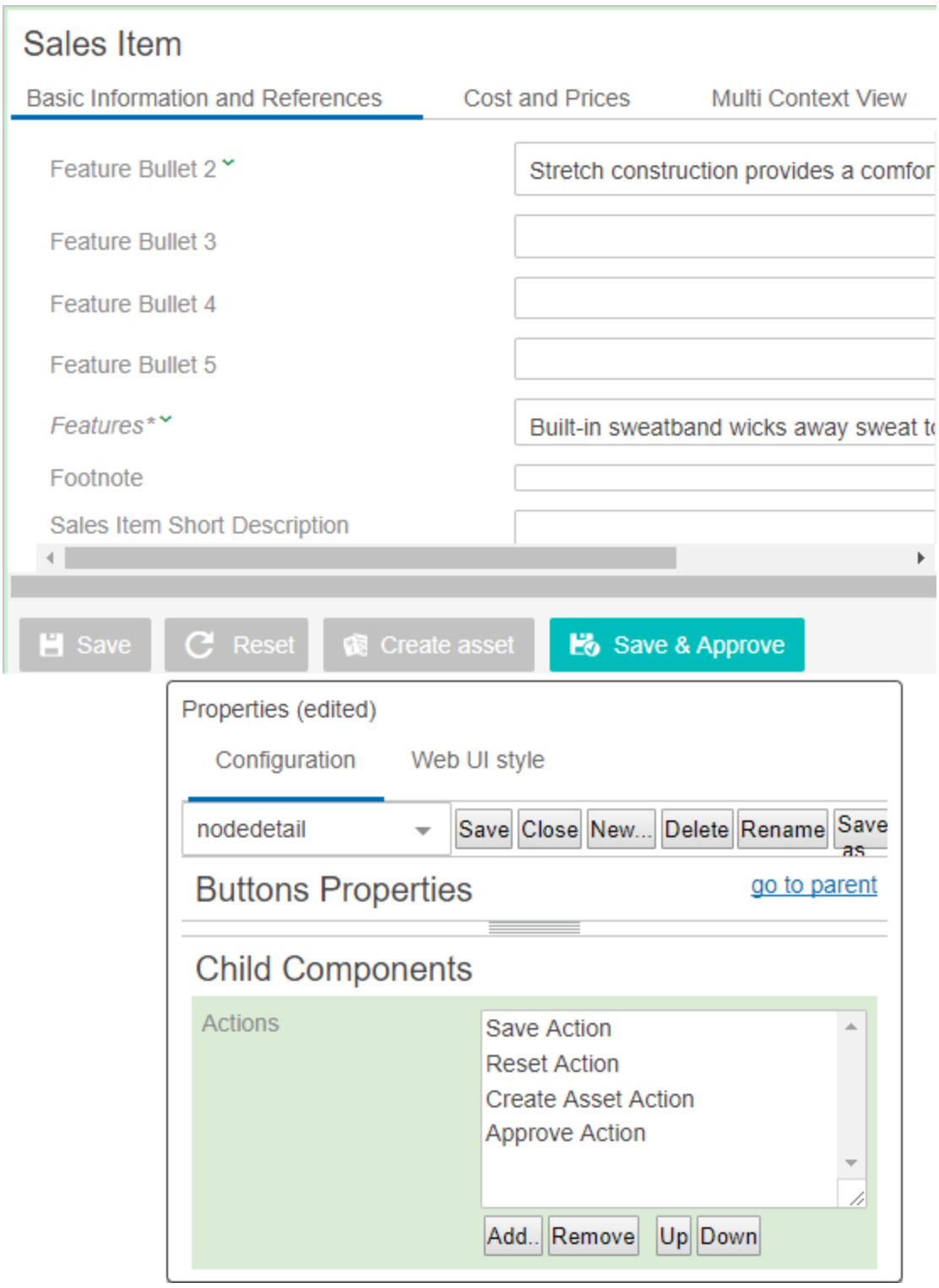
1. From the dropdown menu for the **Main** parameter, choose a component. For example, you can add a Node Editor. Or, add a Tab Control component and configure different components and/or screens to display on different tabs all on a single Node Details screen. Additional configuration will be required depending on the selected component.



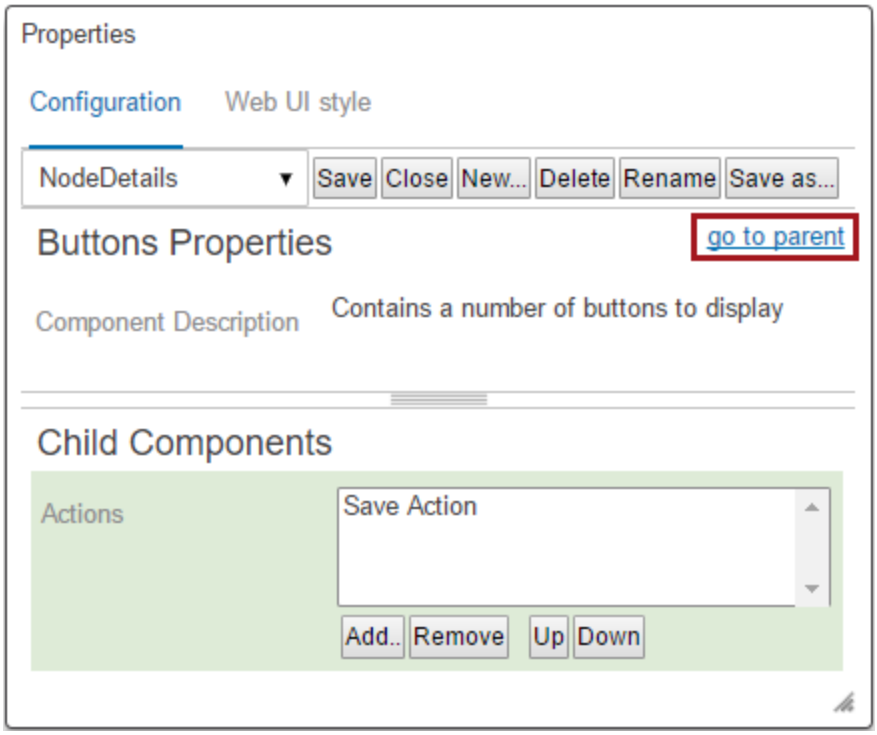
2. Select **Buttons** from the Buttons parameter dropdown, then click **go to component**.
3. On **Buttons Properties**, click the Add button below the **Actions** field, then select a component from the 'Add component' list and click **Add**. Additional configuration may be required depending on which action is selected.

Important: An example is the **Save Action** button—if you are placing a Node Editor on a Node Details screen, a Save button must be configured so that when object data is edited, it can be saved before the user navigates to another screen.

4. Repeat the previous step as needed to add additional actions. The action buttons will display in the order they are listed in the Actions value field. Re-organize by using the Up and Down buttons.



5. When all actions are added, click **go to parent** to navigate back to Node Details Properties.



6. If desired, set up the Below Title parameter by selecting **Breadcrumb**, **Collection Summary**, or **Entity Summary** from the dropdown. Once a selection is made, click **go to component** to configure the child component further.

   For more information on the Below Title parameter options, see the **Below Title Component** section of the **Web User Interfaces / Web UI Setup and User Guide** documentation.

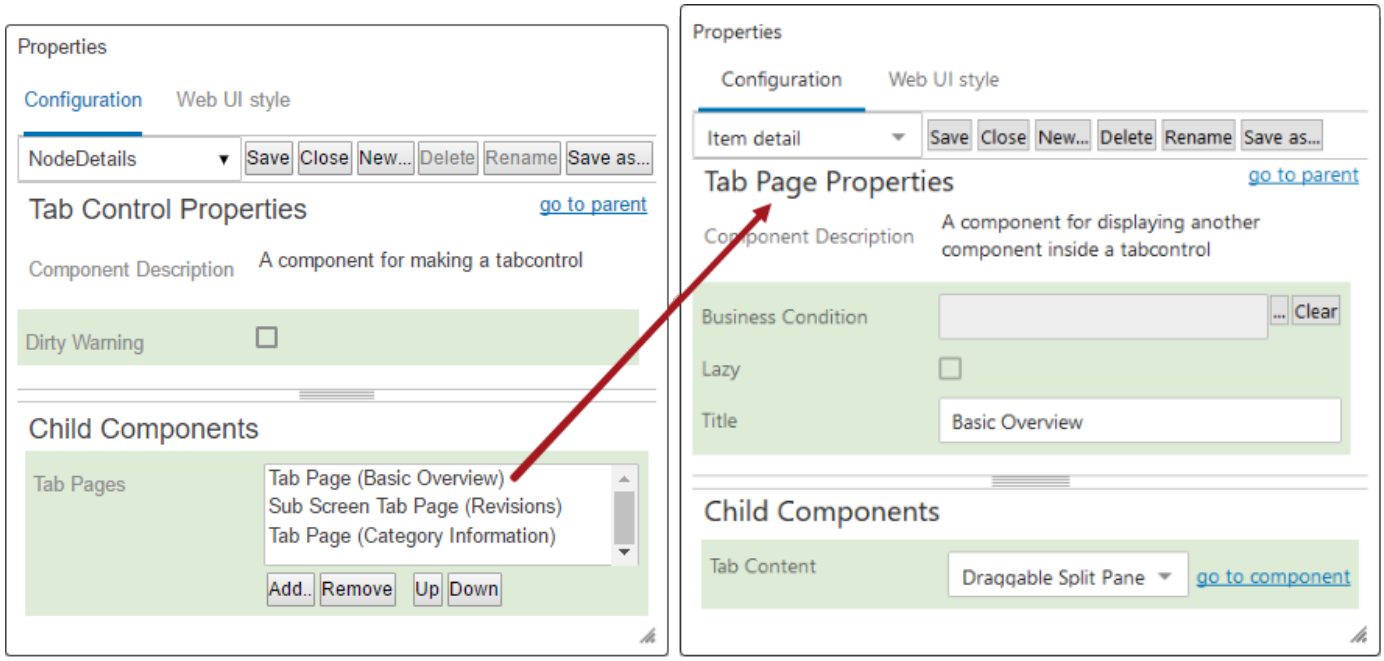
7. Click the **Save** button in the designer. Additional configuration can be performed on this Node Details screen, as desired. Additionally, multiple Node Details screens can be created and used for different objects / purposes.
8. From the designer dropdown, select ---[MAIN]--- to configure the **Mappings** parameter. It is important to remember this step so you can set up the condition / results screen combinations that allow end users to view / use the Node Details screen(s). See **Main Properties** in the **Using a Web UI** documentation for step-by-step instructions.

Example Node Details Screens

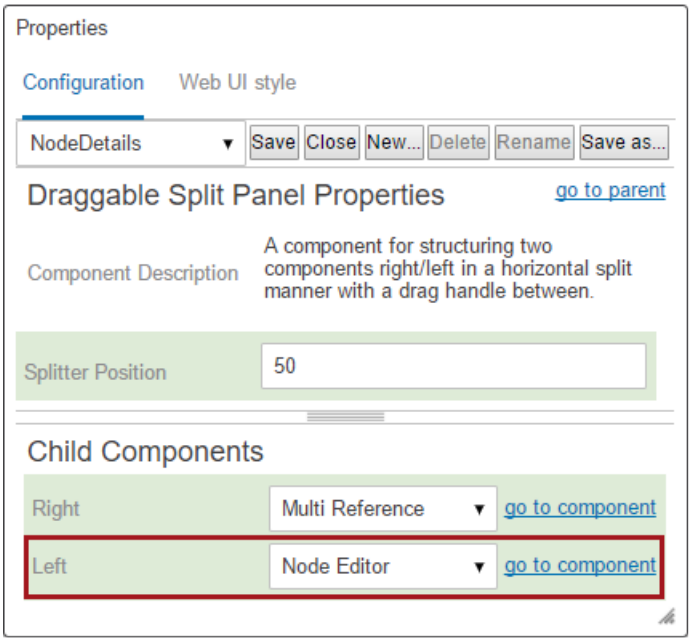
In the simple example below, a Node Details screen type has been used to create a new screen that has a 'Node Details' screen ID.

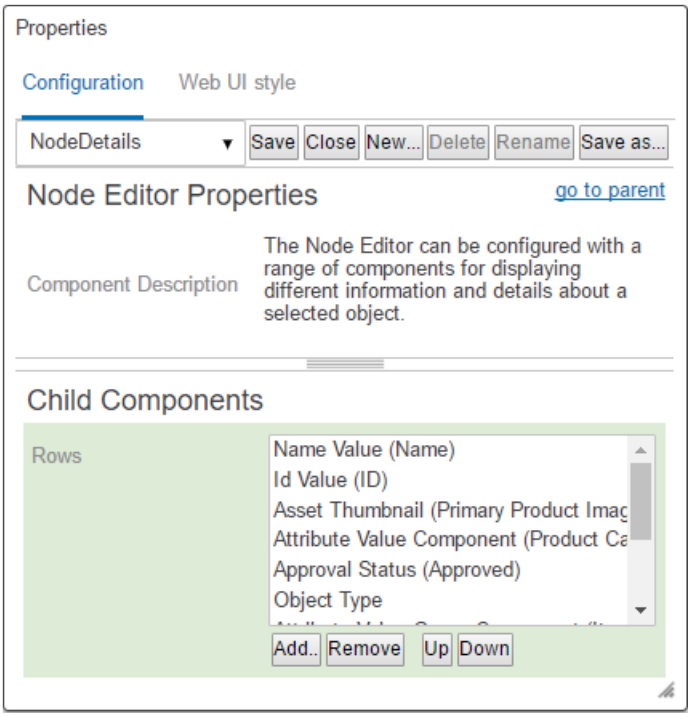
Note: The Node Details screen ID is used to simplify the example. The screen ID should have a descriptive name that better describes the purpose / usage of the screen and is easily identifiable.

- **Node Details Properties** is configured as follows: Child Components > Main > **Tab Control** (as seen in the screenshot under 'Child Components,' Step 1 of the 'Configuring Node Details Properties' section of this topic). For more information, see the **Tab Pages** topic in the **Node Details Component** section of the **Web User Interface / Web UI Setup and User Guide** documentation.
- **Tab Control Properties** has Child Components > **Tab Pages** configured with Tab Page (Basic Information and references), Sub Screen Tab Page (Revisions), and Tab Page (Category Information) components.



- The Node Editor is a child component of a Draggable Split Panel component.





- The attributes (i.e., Name, ID, Primary Product Image) shown below are configured to display within the **Node Editor** component. Attribute Value and Attribute Value Group components are added within the Child Components section of the Node Editor Properties. They can be added and removed using the buttons below the **Rows** field, and the attribute values will display on screen based on how they are ordered within the field. They can be re-ordered using the Up and Down buttons. For more information, see the **Node Editor Component** documentation in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Node Details

Primary Product Hierarchy › Products › Apparel › Head Wear › Hats and Caps › Hats and Caps Items › Blue Cap

Basic Overview | Revisions | Category Information

Name: Blue Cap

ID: 120170

Primary Product Image:

Product Category: Classification 1 root | Index Words | Acme Party Supplies | H | Ha | All-Occasion Hats | Blue Cap

Approved: Last approved 5/5/17 2:08 PM

Object Type: Item

Brand Name:

Edit in Rich Text

Brand Owner:

Edit in Rich Text

Country of Origin:

Base Unit of Measure:

Product Name: The blue cap

Edit in Rich Text

Short Item Description:

Edit in Rich Text

Long Item Description: Rumor has it this comfortable gray woolen cap will soon be your favorite! Available in 15 colors, it is easy to accessorize. Though

Select all | Clear filter | Add Reference

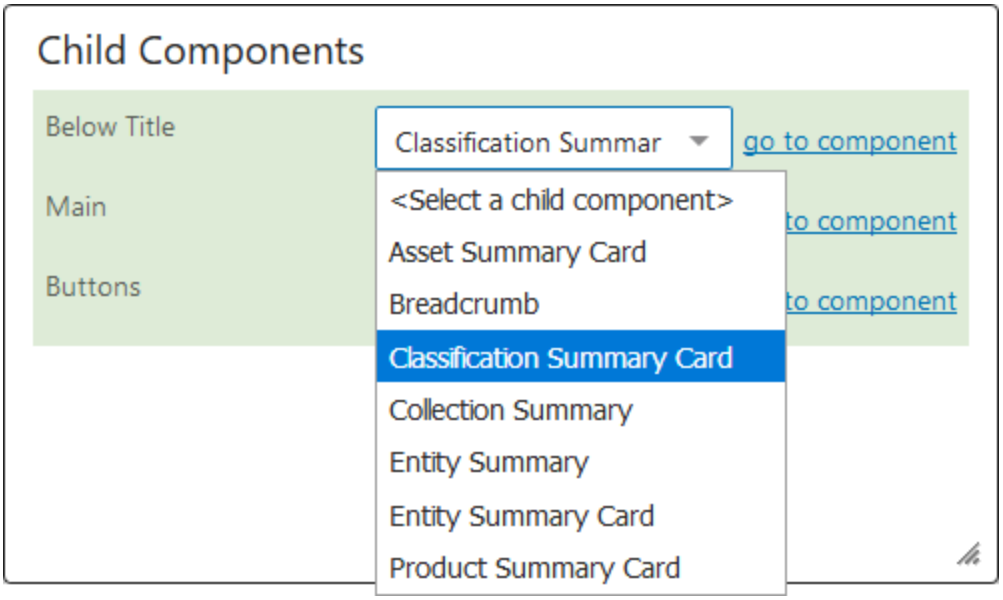
	ID	Name	Object Type	Reference type
Blue cap	107625	Blue cap	Product Image	Primary Product Image
Sleepwear	123941	Sleepwear	MerchandisingCla	Merchandising Link
All-Occasion Hats	179765	All-Occasion Hats	Index	(stibo.IndexWord)
Red Pumps	20695	Red Pumps	Item	Bill of Materials

Number of items : 4

Below Title Component

The Below Title child component (accessible on Node Details screens) displays pertinent information about an object below the title of the node in question. This component can be used to display a breadcrumb describing where in the hierarchy the object resides, or it can be configured to provide a visually accessible grouping of pertinent information below the title for objects of either the product, asset, classification, or entity super type.

All options available for the Below Title component are described below, along with configuration instructions.



Prerequisites

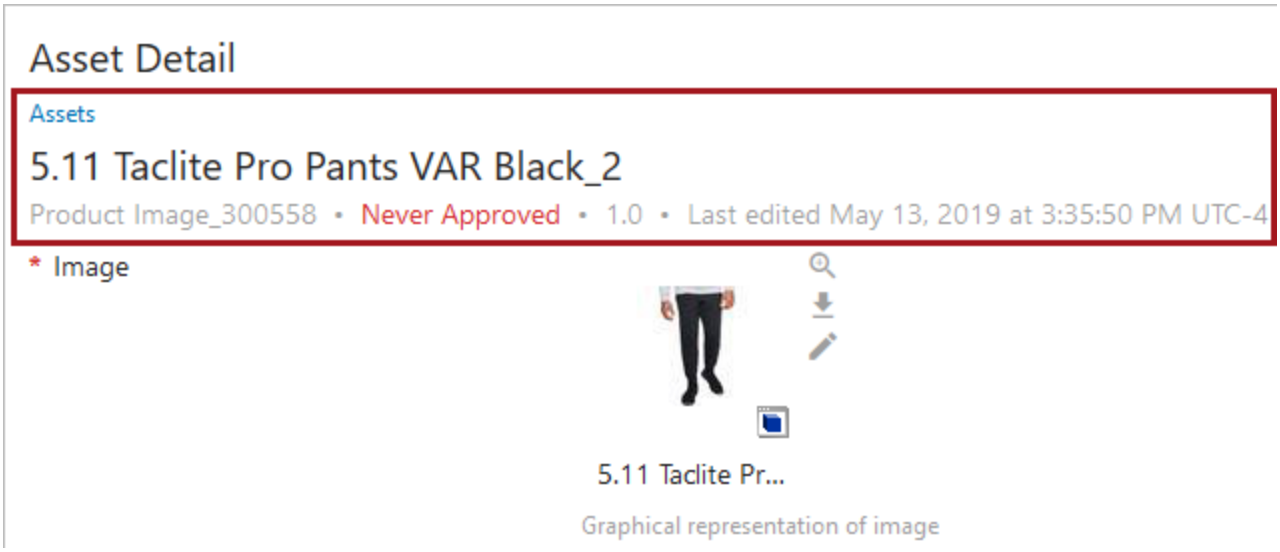
It is expected that anyone configuring these components is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

For details on the functionality and configuration of the options, see the following topics:

- Asset Summary Card
- Breadcrumb
- Classification Summary Card
- Collection Summary
- Entity Summary
- Entity Summary Card
- Product Summary Card

Below Title Asset Summary Card

The Asset Summary Card child component on the Below Title component provides users with a collection of asset information that displays just below the screen title on a Node Details screen.



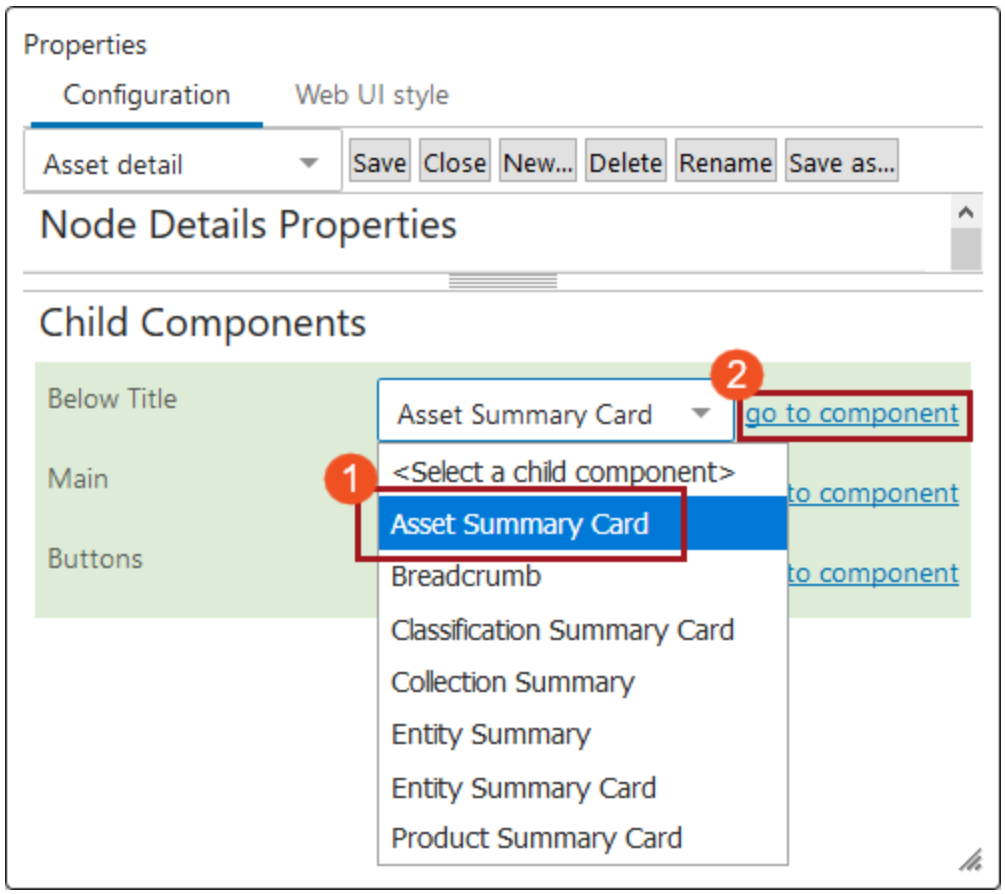
The Asset Summary Card can be configured to show either a pre-selected grouping of asset information, or a series of data points configured by the user. When the user selects the 'Description Card' option (an example of which is displayed in the screenshot above), the Asset Summary Card will display the following information: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status (shown in red text above), revision number, and information related to the most recent update to the asset. When the 'Attribute Card' option is selected, users may tailor the card to display different values.

For details on the Below Title component, see the **Below Title Component** topic.

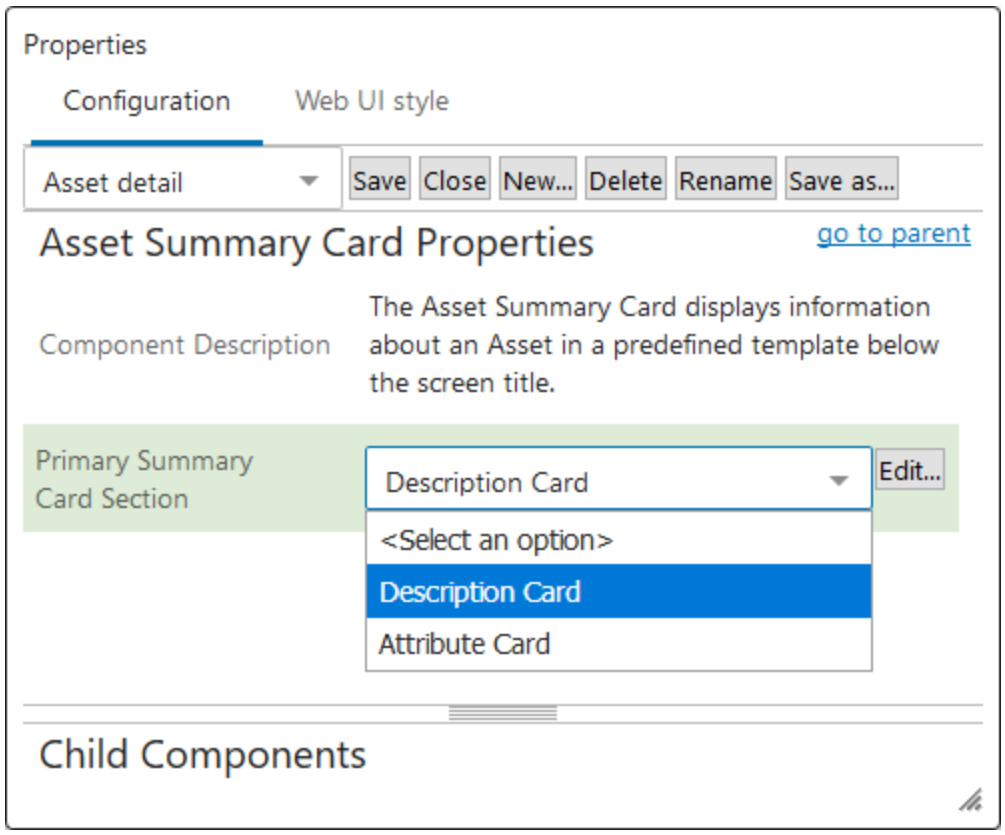
Configuring the Asset Summary Card

To configure display of the Asset Summary Card, follow the instructions described below.

1. Access the designer on the Node Details screen mapped to the relevant Asset object type. Under 'Child Components', select the 'Asset Summary Card' from the 'Below Title' dropdown. Then click 'go to component'.

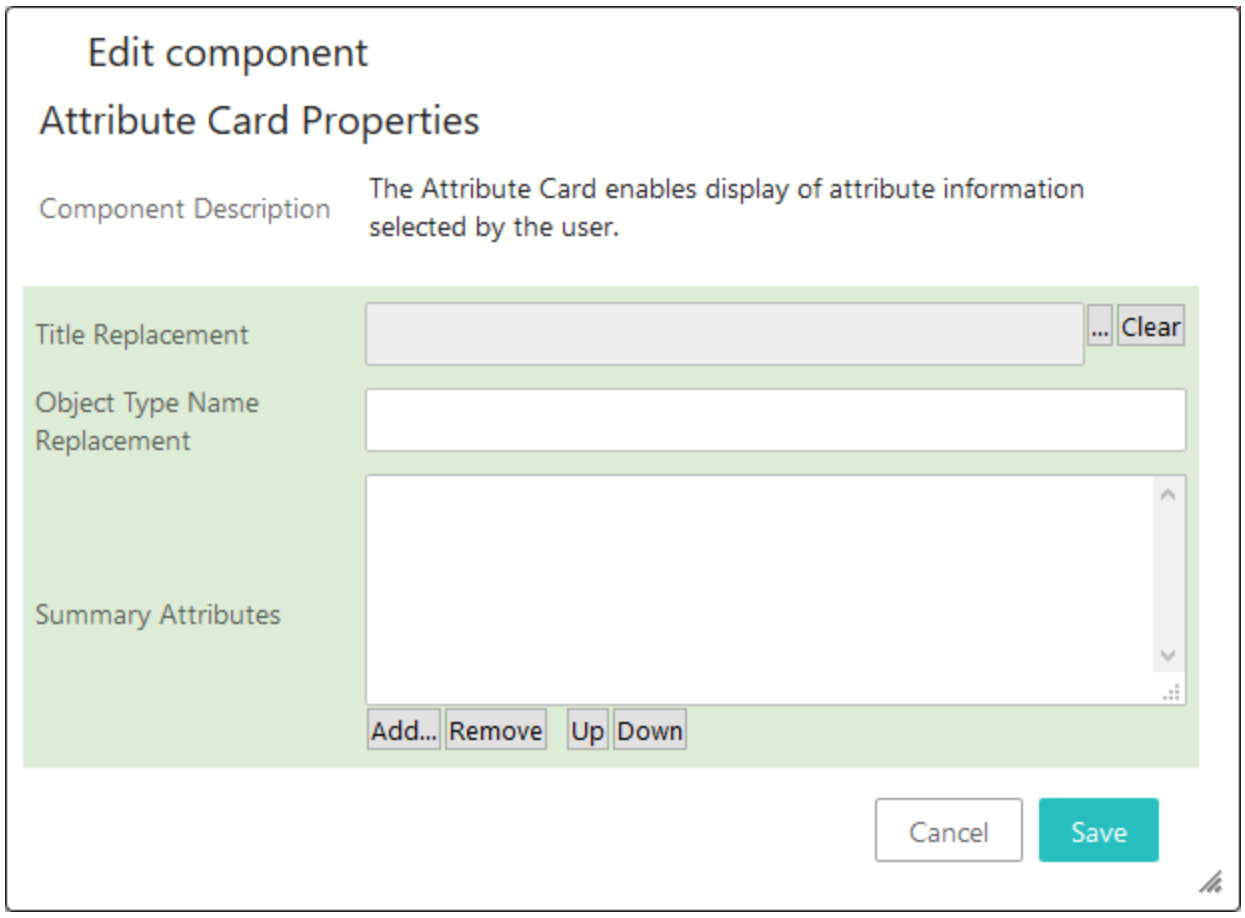


2. In the 'Asset Summary Card Properties' screen in the designer, select one of two options from the 'Primary Summary Card Section': 'Description Card' or 'Attribute Card'.



- **Description Card** - When selected, this option will display the following information in the Summary Card section of the screen: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status (shown in red text above), revision number, and information related to the most recent update to the asset. No further configuration is required with this option. Once selected, save the configuration and close the designer to activate the Summary Card on the screen.
- **Attribute Card** - When selected, users may configure which data points to display in the card. To do this configuration, first select the 'Attribute Card' option, and then click the 'Edit...' button to the right of the dropdown.

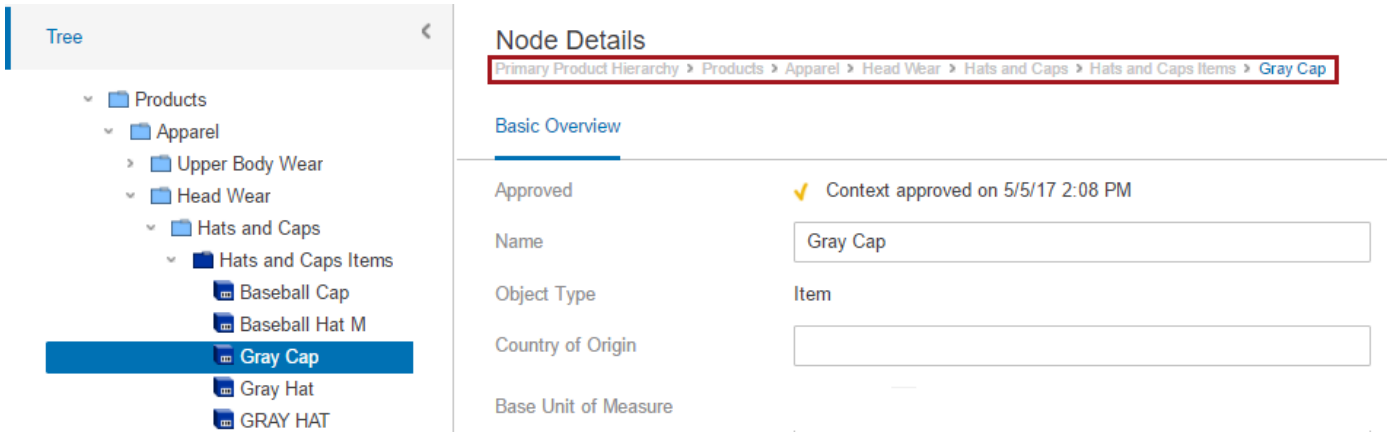
3. To configure the 'Attribute Card' option, users may add values to the fields that display in the 'Attribute Card Properties' pop-up.



- **Title Replacement** - When the ... button (located to the right of the field) is clicked, a Node Picker displays that enables users to select an attribute whose value can display in place of the asset's name. If no attribute is selected, the asset name will display. If no value has been set for the asset's name, the ID will display. It should be noted that if a multi-valued attribute with multiple values is selected to display in place of the object's name value, then all attribute values for that multi-valued attribute will display separated by the text, '<multipsep/>'.
- **Object Type Name Replacement** - Text added to this field will display in place of the asset's object type name. In both cases, the value displays in capital letters.
- **Summary Attributes** - The attribute values for the attributes selected in this field will display in the Summary Card section of the configured Node Details screen. When users click the 'Add...' button, a Node Picker pop-up will display showing the available attributes. Users may select an unlimited number of attributes, though only one per 'Add...' action. It is important to note that the selected attributes must be both valid for and linked to the asset object type in order for the values to display.

Below Title Breadcrumb

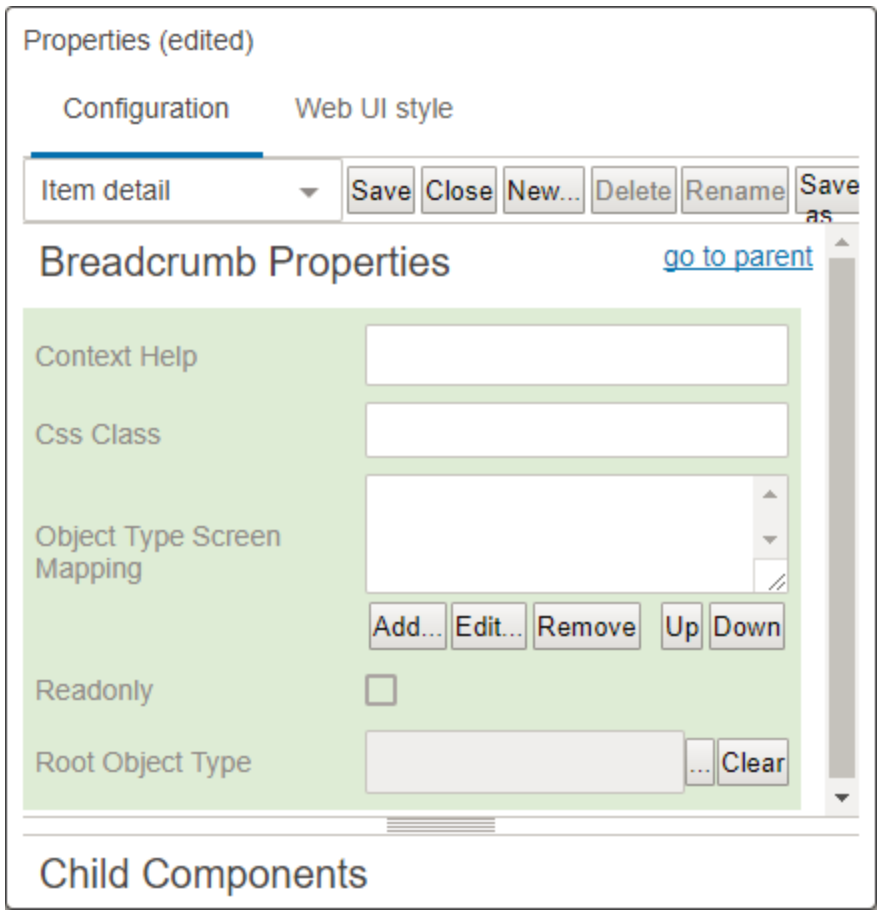
The Breadcrumb child component on the Below Title component describes where in the hierarchy the object resides. A breadcrumb is also available in the 'Description Card' option on the Summary Card components, but in the event only a breadcrumb should display under the title, the Breadcrumb option is optimal. Once configured, a breadcrumb describing the hierarchy path from the current node up to the nearest node of the specified root type will display. Each breadcrumb node is clickable unless the **Readonly** parameter is selected.



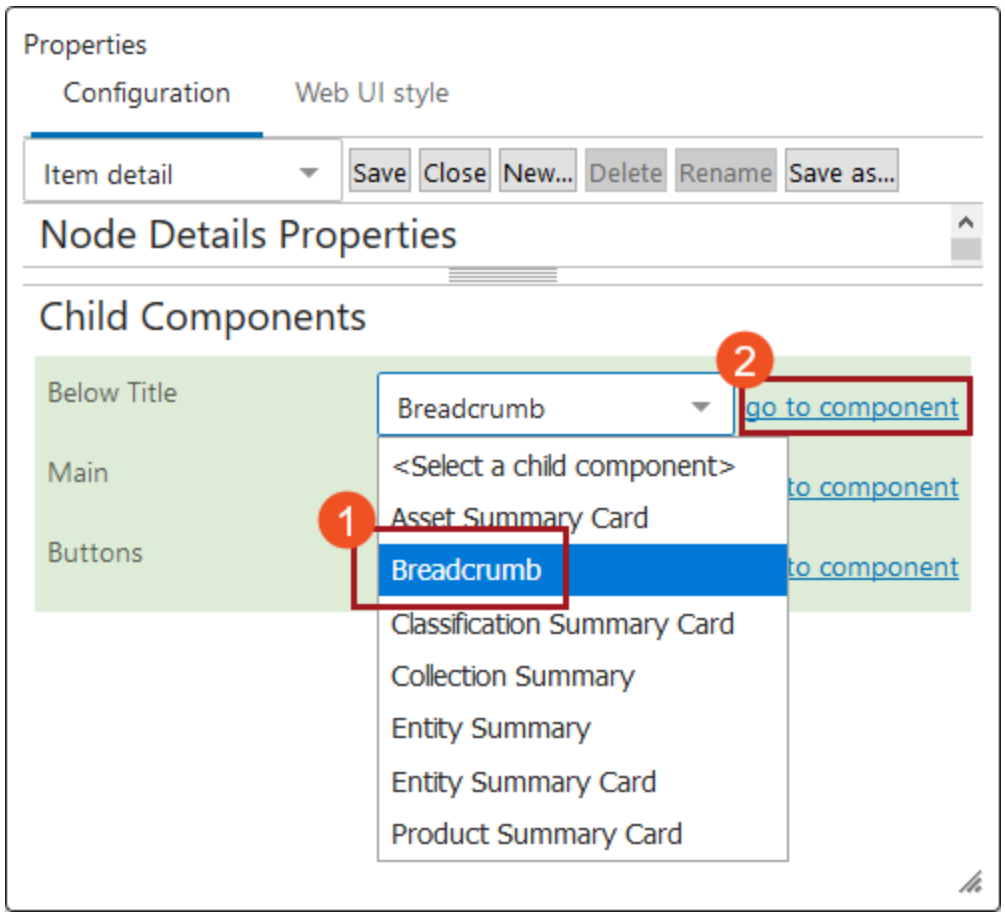
For details on the Below Title component, see the **Below Title Component** topic.

Configuring Breadcrumb Properties

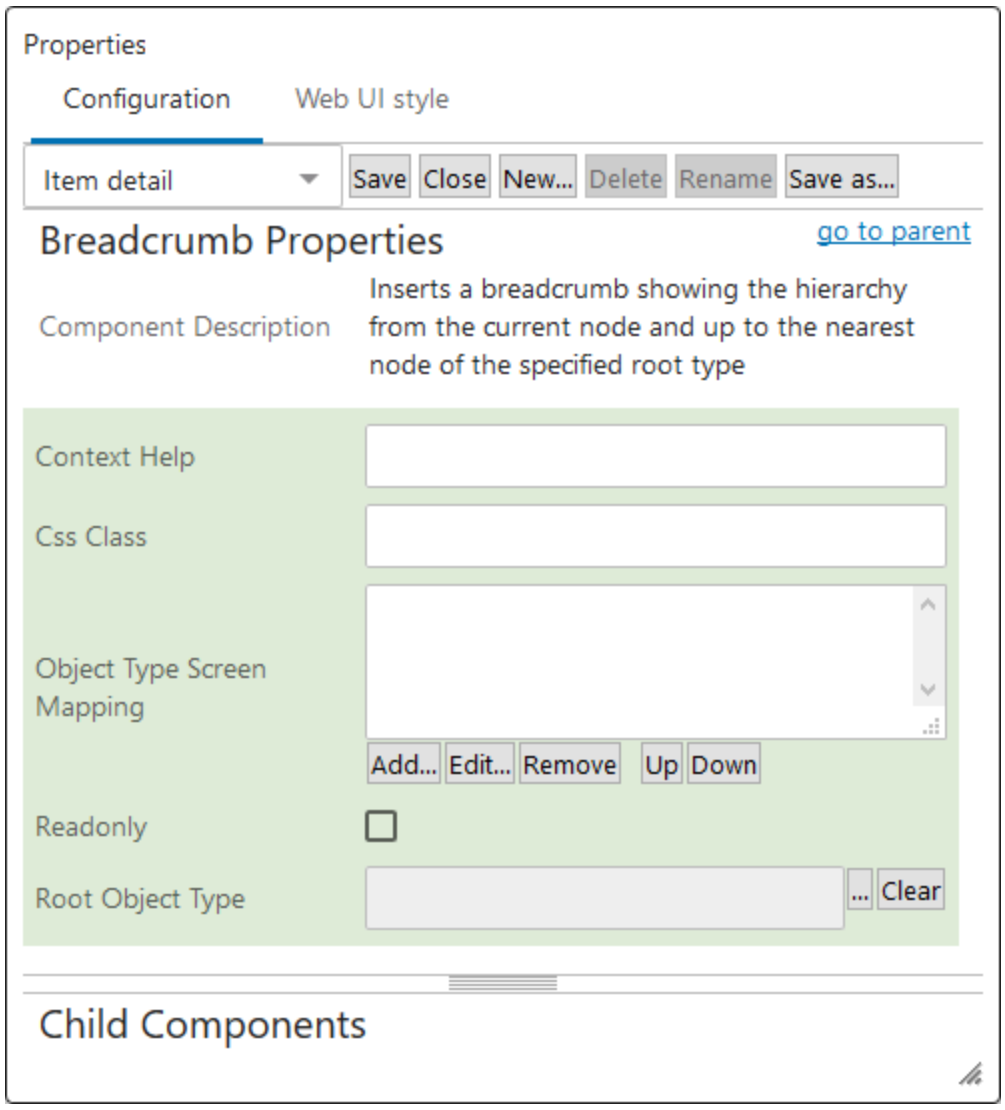
To configure display of the Breadcrumb component, follow the instructions described below.



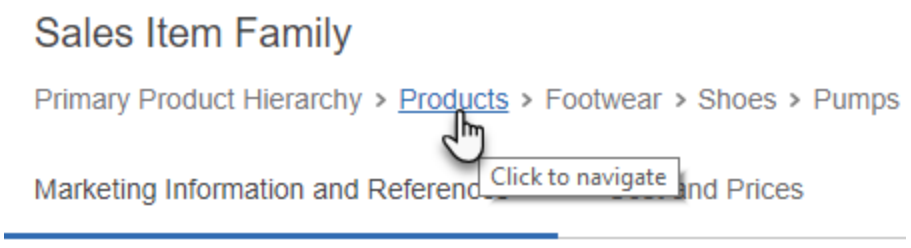
1. Access the designer on the Node Details screen mapped to the relevant Asset object type. Under 'Child Components', select the 'Breadcrumb' option from the 'Below Title' dropdown. Then click 'go to component'.



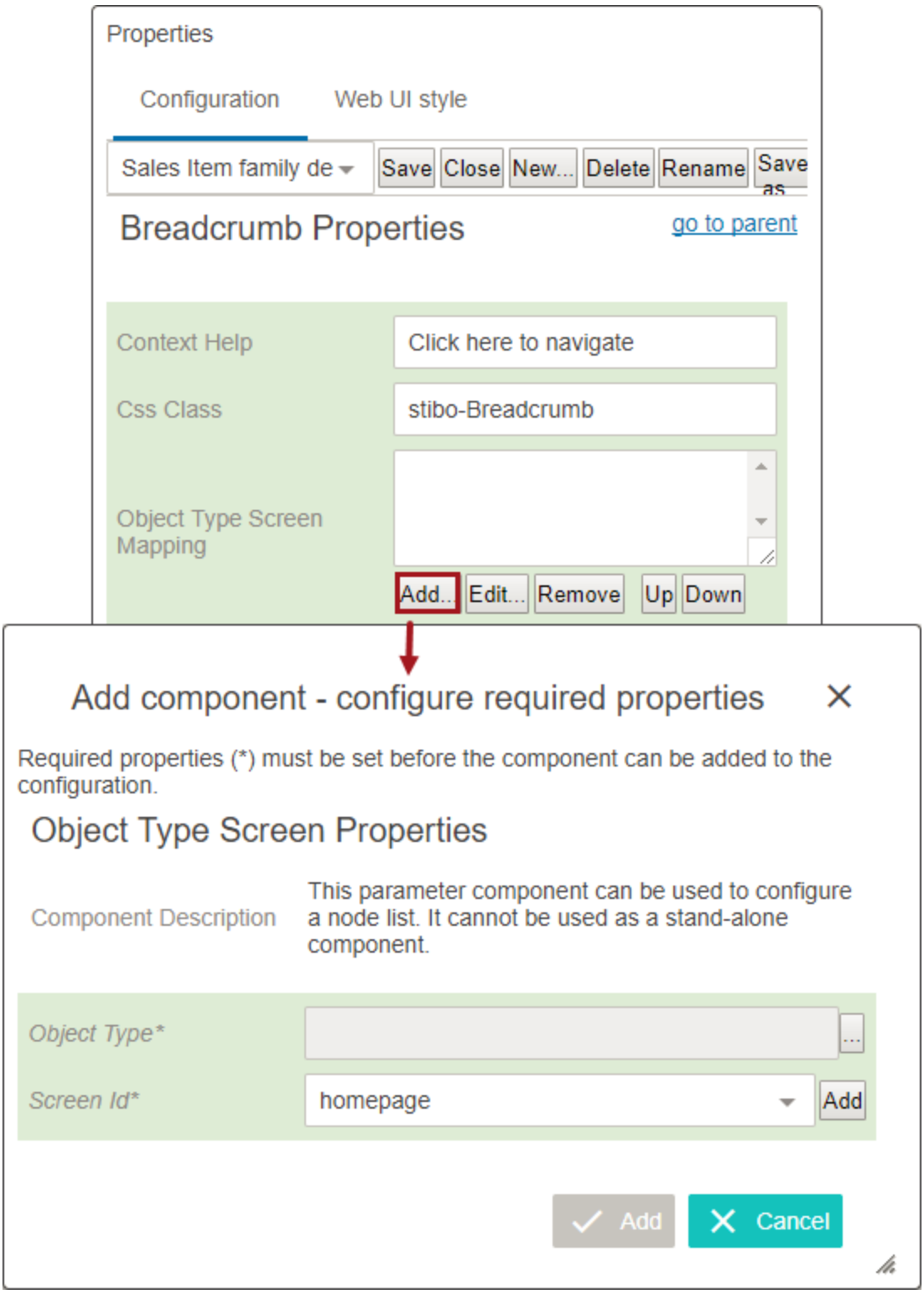
2. Populate the configuration parameters for the component. Each component is listed and described below.



- **Context Help**- Text added in this field displays when the cursor is placed over any element in the breadcrumb navigation path. In the screenshot below, the **Context Help** field has been populated with the text 'Click to navigate'.



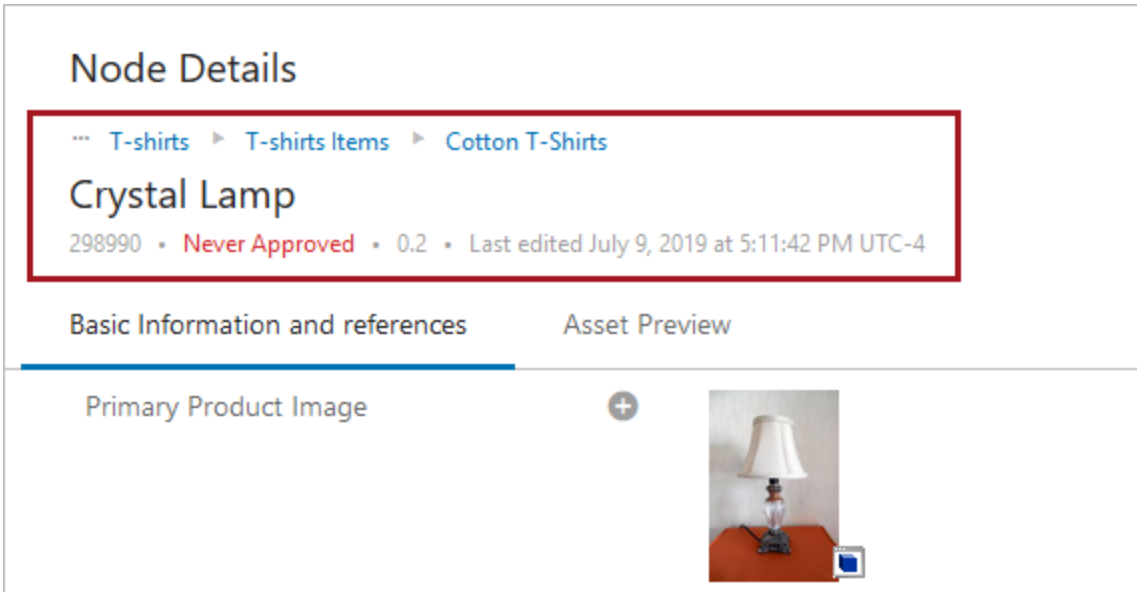
- **Css Class**- Enter the name of a CSS style to be set as the primary style for the component.
- **Object Type Screen Mapping**- This field is an optional screen to map. When the Add button is clicked, an Object Type Screen Properties popup displays. In this window, the Object Type and Screen ID must be selected.



- **Read Only**- When checked, the elements that make up the breadcrumb navigation path will not be hyperlinked.
- **Root Object Type**- By defining the Root Object Type, the breadcrumb will display the navigation path from the current node back to the nearest node of the root object type specified in this field.

Below Title Classification Summary Card

The Classification Summary Card child component on the Below Title component provides users with a collection of asset information that displays just below the screen title on a Node Details screen.



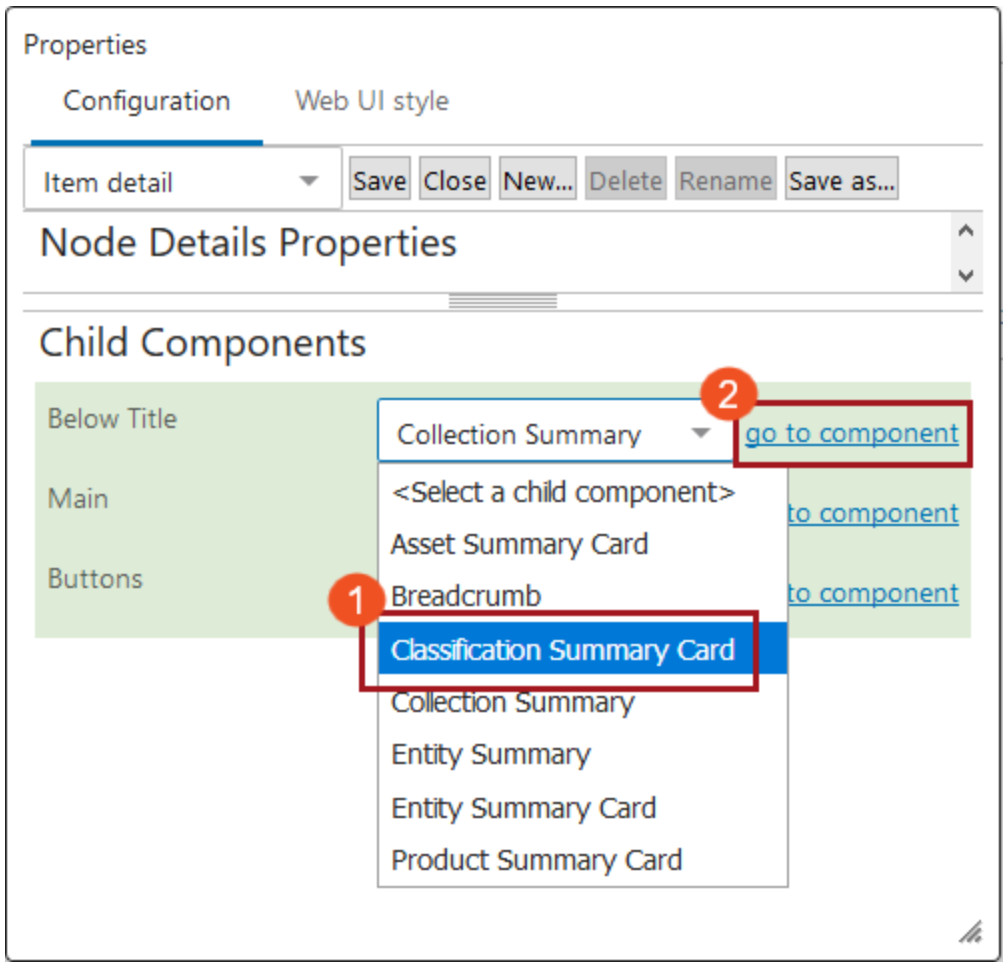
The Classification Summary Card can be configured to show on a Classification-type object type either a pre-selected grouping of information, or a series of data points configured by the user. When the user selects the 'Description Card' option (an example of which is displayed in the screenshot above), the Classification Summary Card will display the following information: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status (shown in red text above), revision number, and information related to the most recent update to the classification object. When the 'Attribute Card' option is selected, users may tailor the card to display different values.

For details on the Below Title component, see the **Below Title Component** topic.

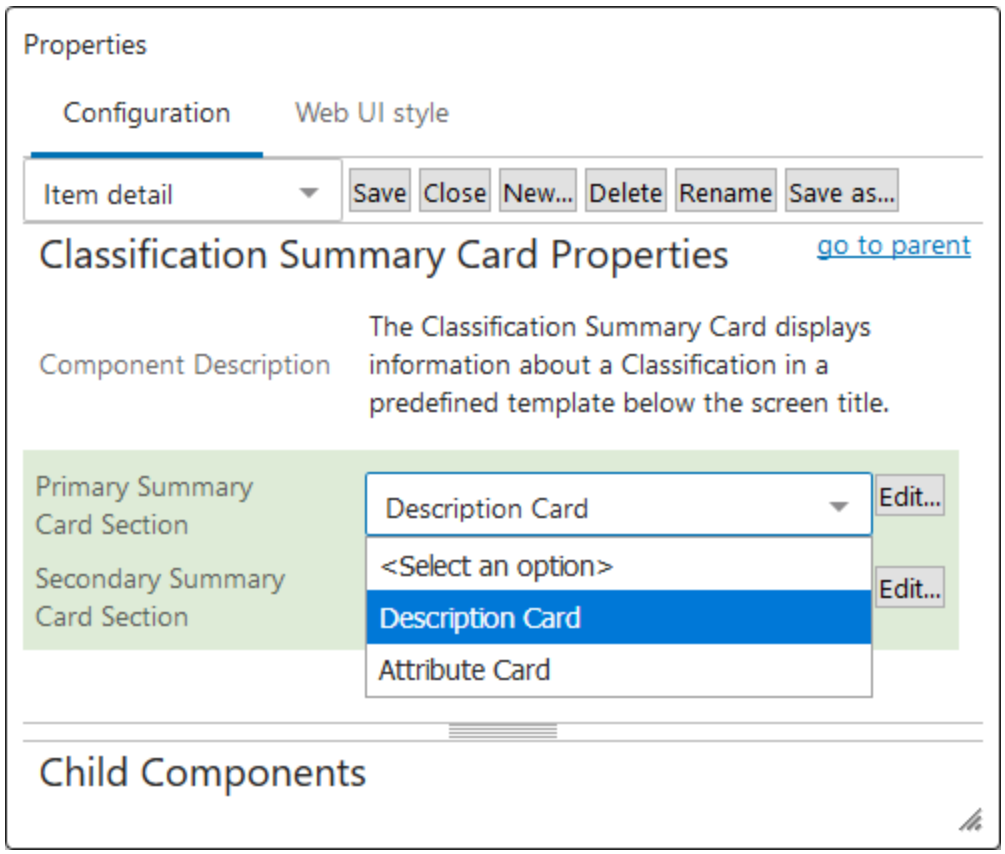
Configuring the Classification Summary Card

To configure display of the Classification Summary Card, follow the instructions described below.

1. Access the designer on the Node Details screen mapped to the relevant Classification object type. Under 'Child Components', select the 'Classification Summary Card' from the 'Below Title' dropdown. Then click 'go to component'.

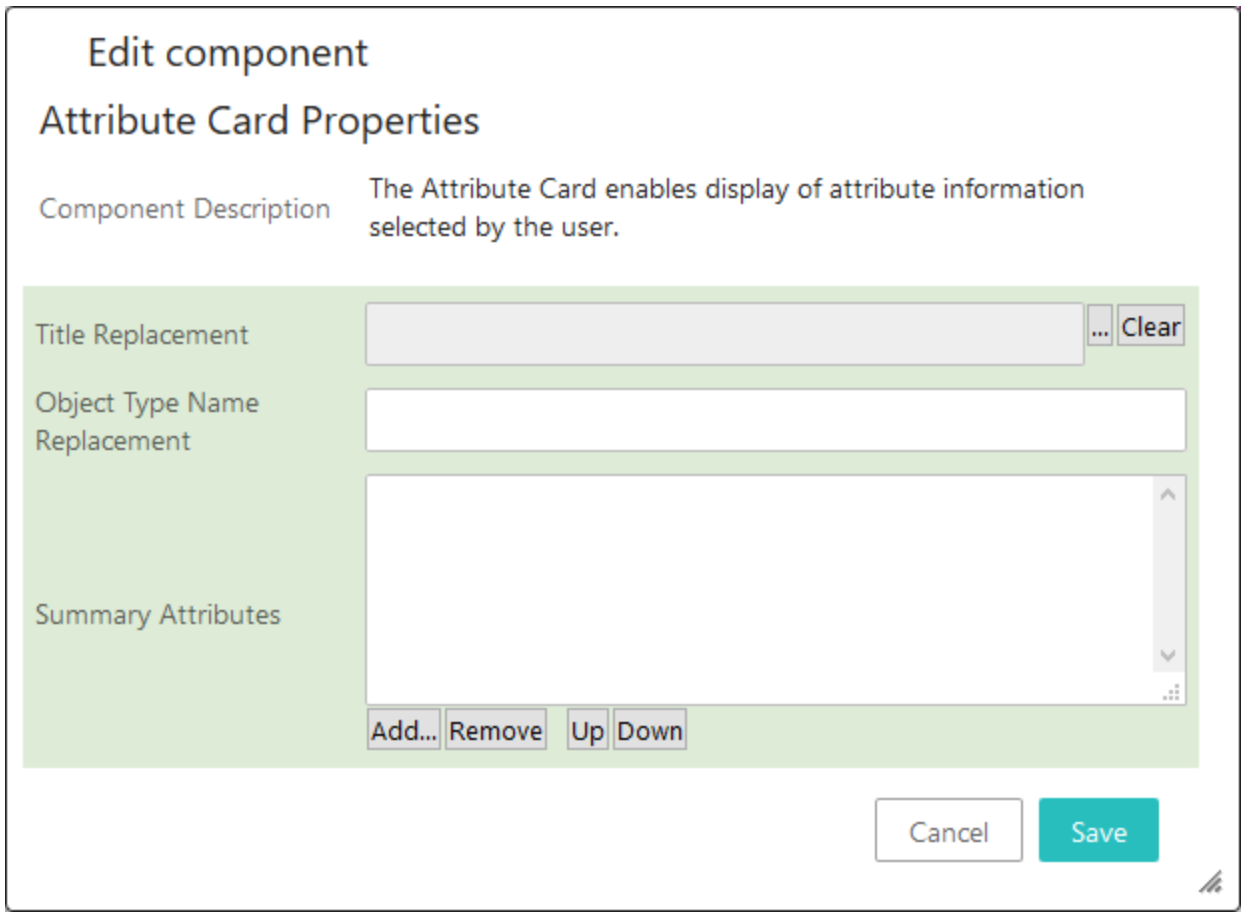


2. In the 'Classification Summary Card Properties' screen in the designer, select one of two options from the 'Primary Summary Card Section': 'Description Card' or 'Attribute Card'.



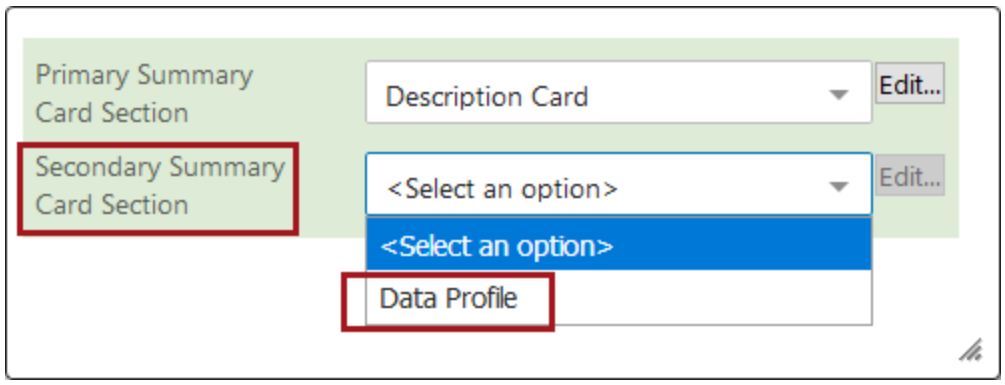
- **Description Card** - When selected, this option will display the following information in the Summary Card section of the screen: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status (shown in red text above), revision number, and information related to the most recent update to the asset. No further configuration is required with this option. Once selected, save the configuration and close the designer to activate the Summary Card on the screen.
- **Attribute Card** - When selected, users may configure which data points to display in the card. To do this configuration, first select the 'Attribute Card' option, and then click the 'Edit...' button to the right of the dropdown.

3. To configure the 'Attribute Card' option, users may add values to the fields that display in the 'Attribute Card Properties' pop-up.



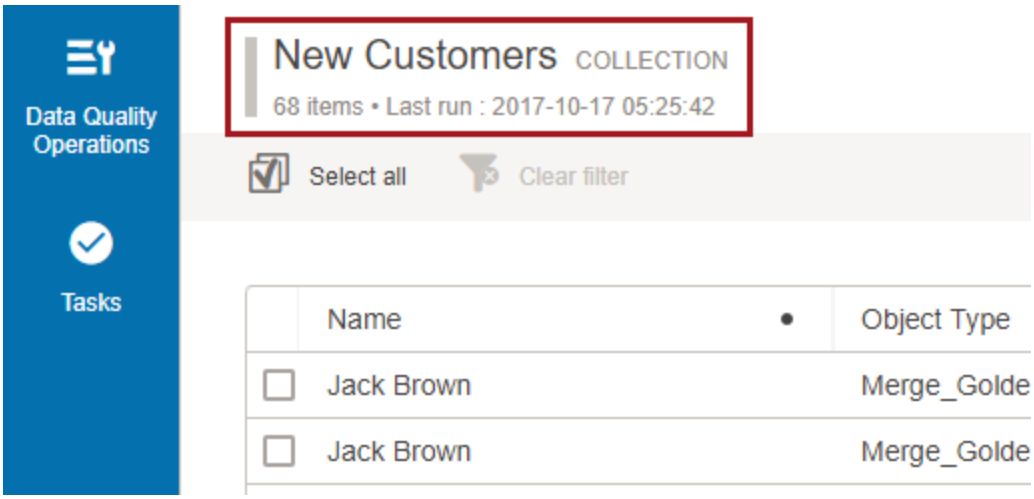
- **Title Replacement** - When the ... button (located to the right of the field) is clicked, a Node Picker displays that enables users to select an attribute whose value can display in place of the classification object's name. If no attribute is selected, the classification object name will display. If no value has been set for the classification object's name, the ID will display. It should be noted that if a multi-valued attribute with multiple values is selected to display in place of the object's name value, then all attribute values for that multi-valued attribute will display in order, separated by the text, '<multipsep/>'.
- **Object Type Name Replacement** - Text added to this field will display in place of the classification object's object type name. In both cases, the value displays in capital letters.
- **Summary Attributes** - The attribute values for the attributes selected in this field will display in the Summary Card section of the configured Node Details screen. When users click the 'Add...' button, a Node Picker pop-up will display showing the available attributes. Users may select an unlimited number of attributes, though only one per 'Add...' action. It is important to note that the selected attributes must be both valid for and linked to the classification object type in order for the values to display.

4. If data profiling has been enabled on the classification object, users may opt to add a 'Profile Findings' counter to the Summary Card that displays a number relevant to the data profiling configuration. To add the counter, select 'Data Profile' from the 'Secondary Summary Card Section' dropdown.


Primary Summary Card Section
Description Card
Edit...
Secondary Summary Card Section
<Select an option>
Edit...
<Select an option>
Data Profile

Below Title Collection Summary

The Collection Summary child component on the Below Title component displays the most important information about a collection in a brief summary at the top of a Node Details or Collection Content screen.



For details on the Below Title component, see the **Below Title Component** topic.

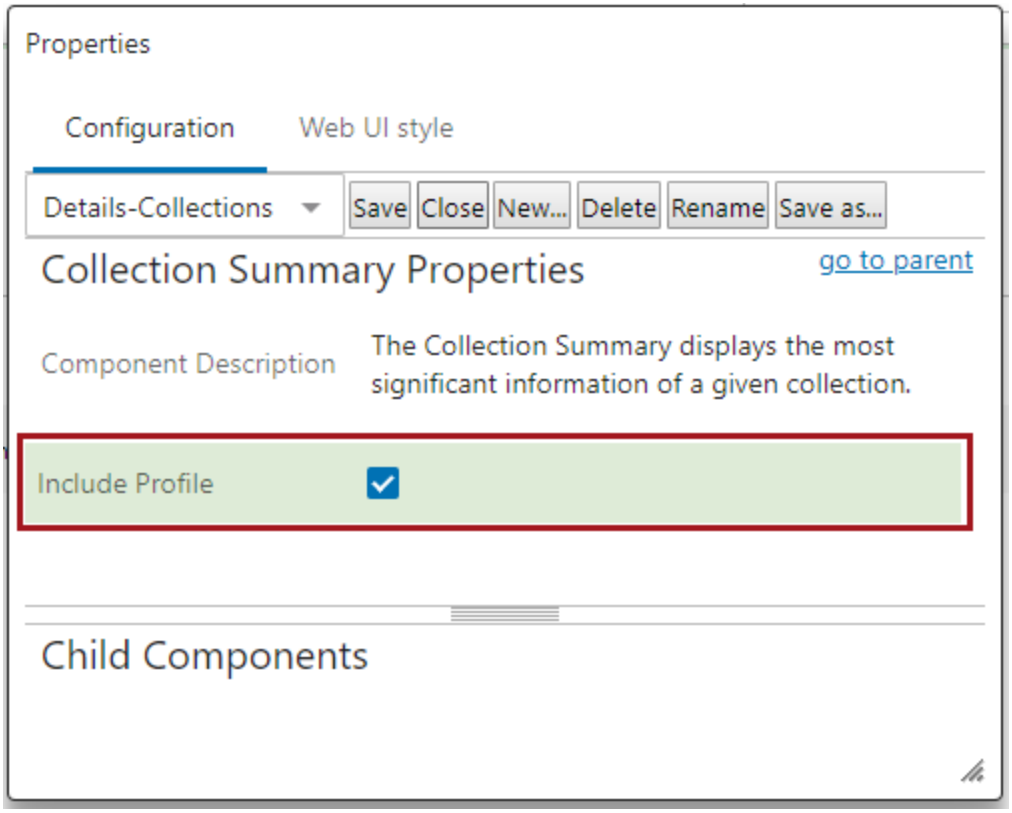
Configuring the Collection Summary

To add a Collection Summary to a screen, navigate to the relevant screen properties in **[Main]** and select 'Collection Summary' from the **Below Title** dropdown menu.

The Collection Summary component automatically displays:

- The name of the collection node
- The number of items in the collection
- The last time the collection was updated

Additionally, this component can be configured with a link to the collection's data profile. To activate this feature, enter design mode and check the box for the **Include Profile** parameter.



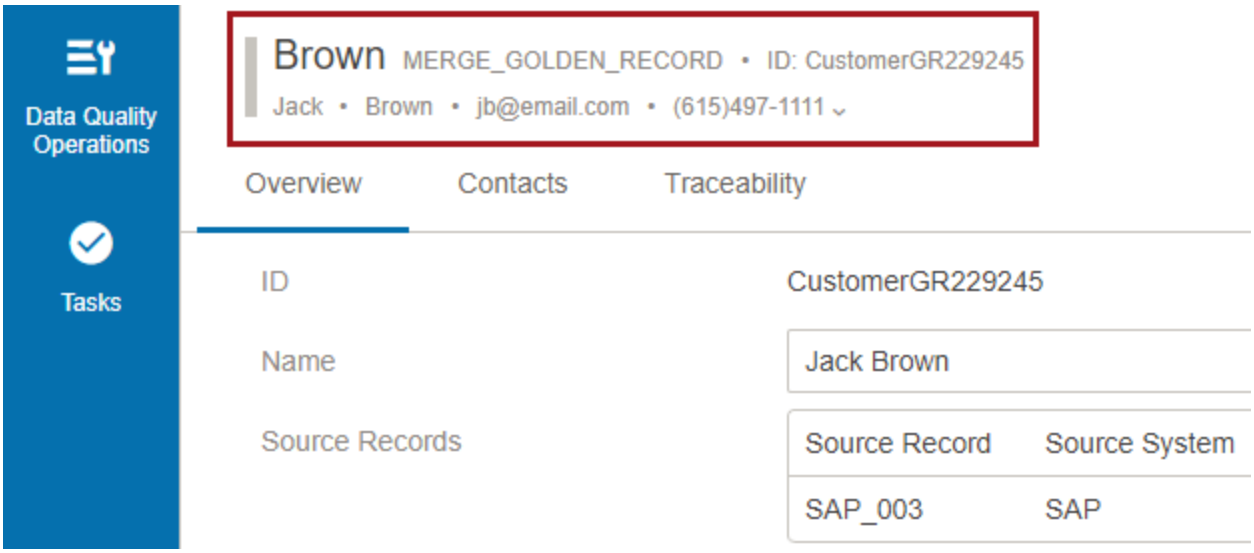
When **Include Profile** is enabled, and a data profile has been generated on the currently selected collection, a link to the collection's profile will appear in the summary component that displays the number of **Profile Findings**.

For more information on profiling in Web UI, see the **Data Profiling in Web UI** section of the **Data Profiling** documentation.

Note: It is recommended to use this summary in lieu of a traditional screen title. To do this, uncheck the **Show Title** parameter for the applicable Node Details / Collection Content screen.

Below Title Entity Summary

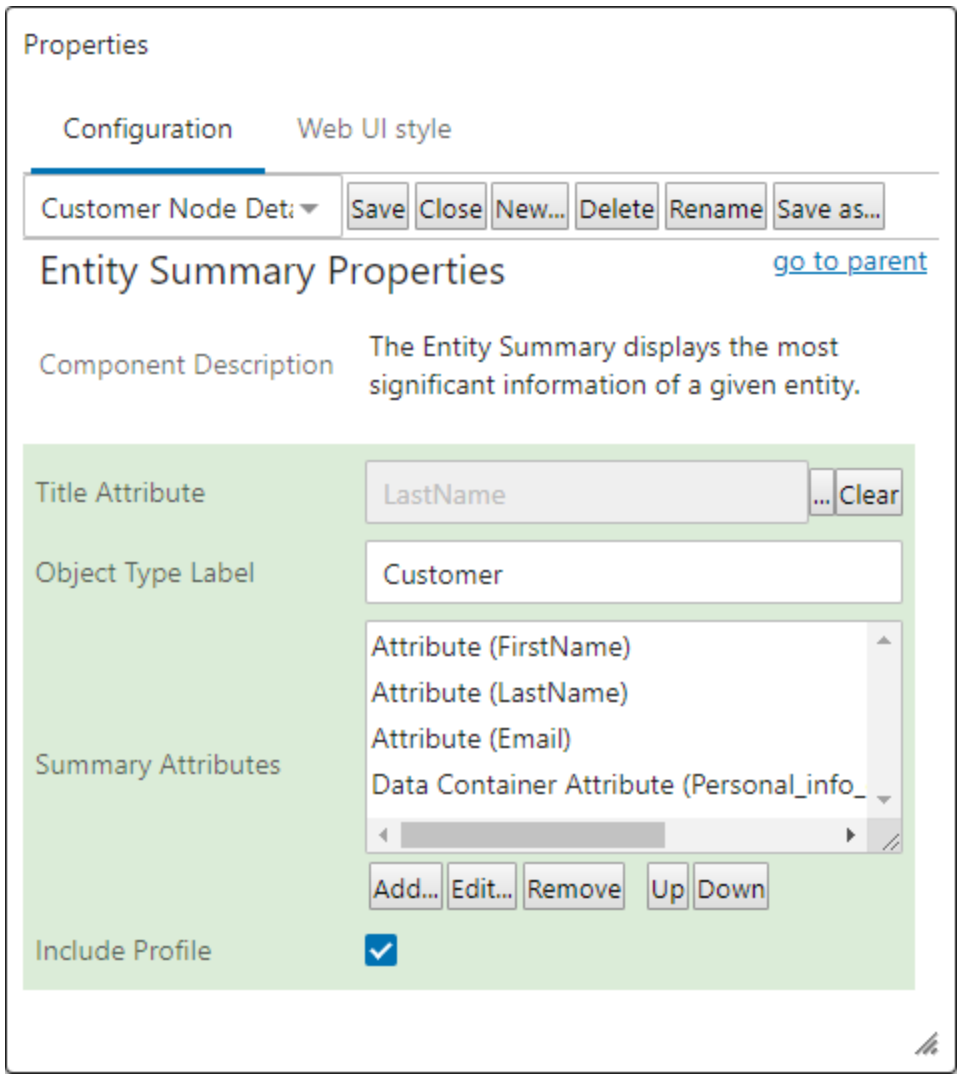
The Entity Summary child component on the Below Title component can be configured to display relevant attributes and data container attributes for an entity in a brief summary at the top of a Node Details screen.



For details on the Below Title component, see the **Below Title Component** topic.

Configuring the Entity Summary Component

To configure the Entity Summary component, navigate to the relevant screen properties in **[Main]** and select 'Entity Summary' from the **Below Title** dropdown menu, then click **go to component**.



1. In the **Title Attribute** parameter, click the ellipsis button (...) and browse or search for an attribute to use as the entity's name. This name is displayed in large, bold letters at the beginning of the summary.

Note: If no value is provided, the entity's STEP Name will be used instead, and if no STEP Name is available the STEP ID will be used.

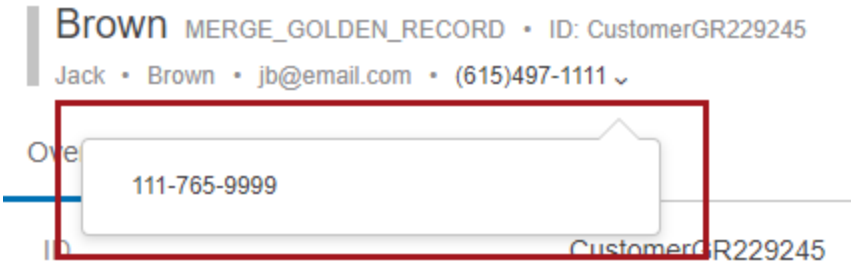
2. In the **Object Type Label** parameter, enter a name for the entity object type. This name overrides the original name of the entity's object type and displays it in capital letters after the entity name.
3. In the **Summary Attributes** parameter, click **Add** to add attributes and data container attributes to the summary.

   If 'Attribute' is selected from the **Add Component** dialog, browse or search for a specific attribute to add to the summary.

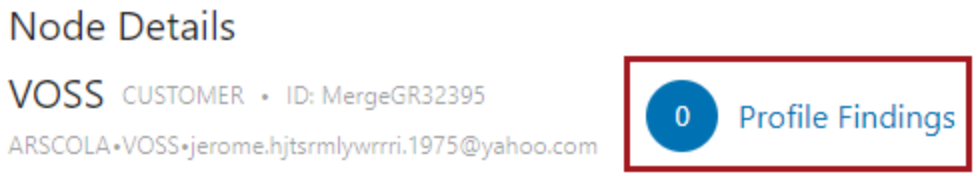
   If 'Data Container Attribute' is selected from the **Add Component** dialog, browse or search for the relevant attribute and the data container in which it resides.

These attributes display on the second line of the summary, in the order they appear in the **Summary Attributes** parameter.

If multiple values are present, such as in the case of a multi-instance data container, a dropdown is provided for the attribute that displays the additional values.



4. Check the box for **Include Profile** parameter if you want to include a link to the entity's profile in the summary card. When **Include Profile** is enabled, and a data profile has been generated on the currently selected entity, a link to the entity's profile will appear in the summary component that displays the number of **Profile Findings**.

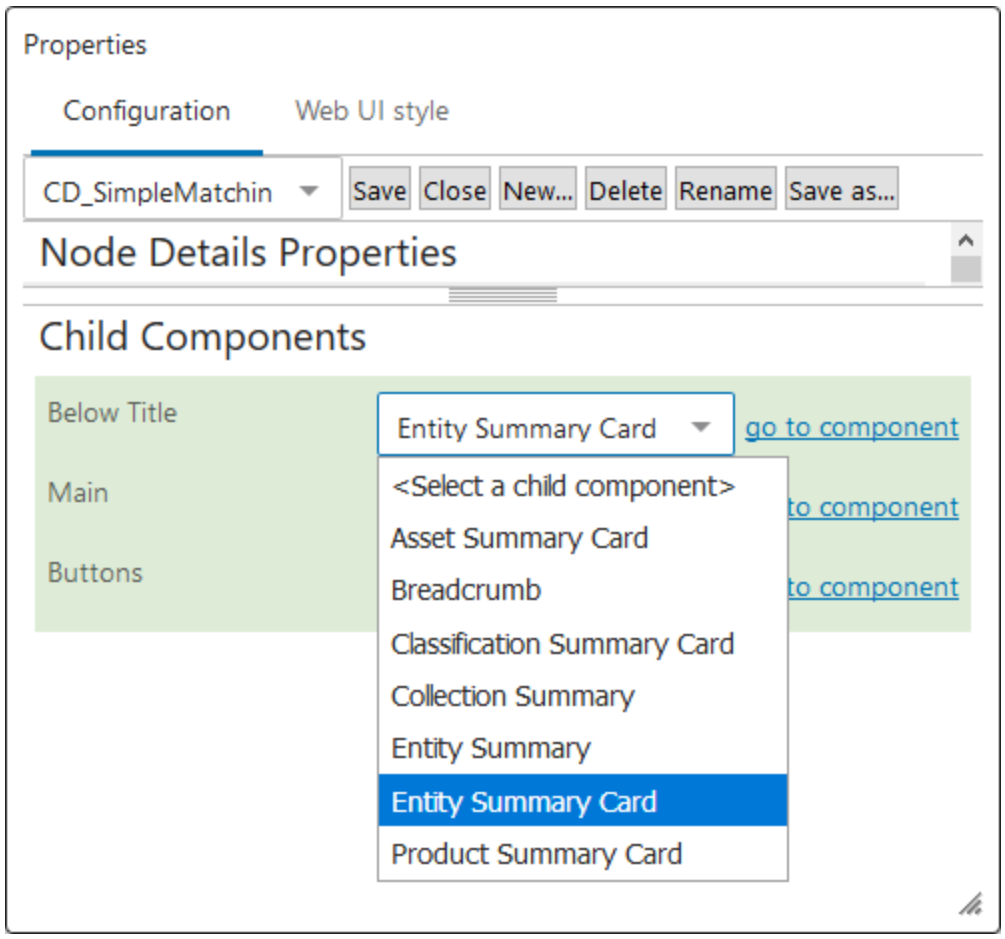


For more information on profiling in Web UI, see the **Data Profiling in Web UI** section of the **Data Profiling** documentation.

Note: It is recommended to use this summary in lieu of a traditional screen title. To do this, uncheck the **Show Title** parameter of the applicable Node Details screen.

Entity Summary Card

The Entity Summary Card provides users with a collection of entity information that displays just below the screen title on a Node Details screen.

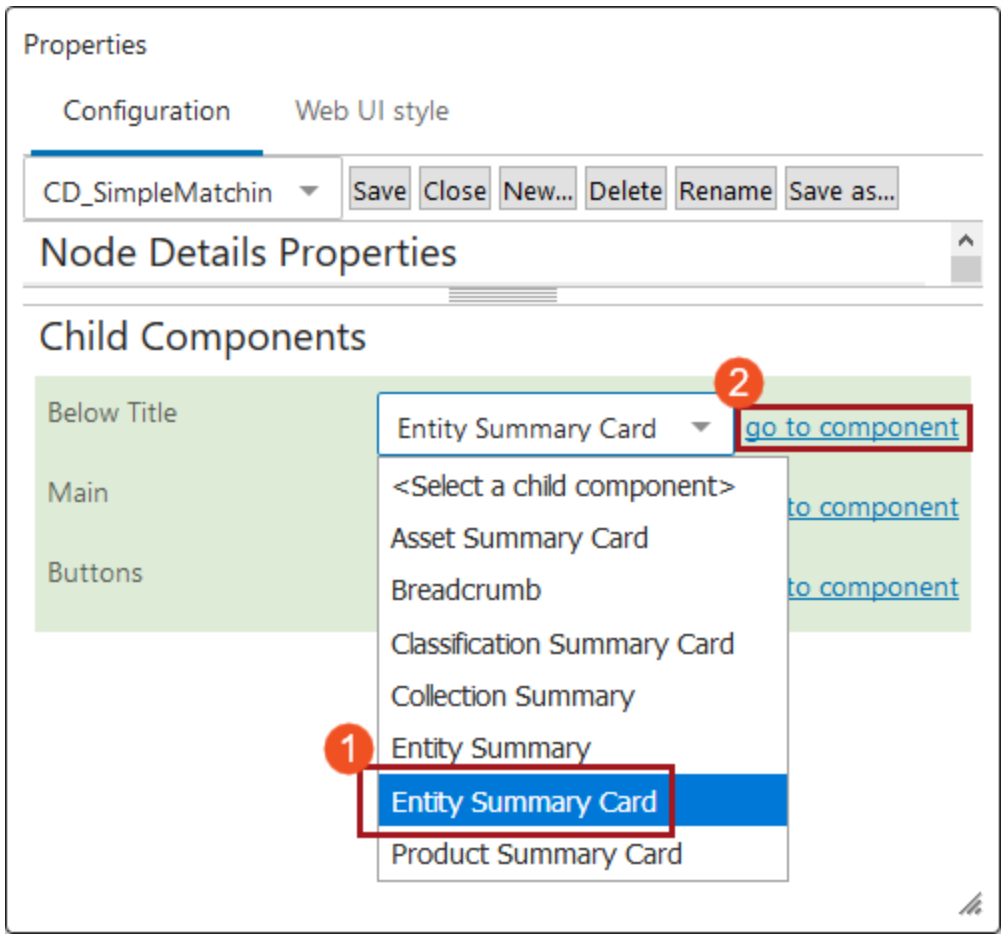


The Entity Summary Card can be configured to show either a pre-selected grouping of entity information, or a series of data points configured by the user. When the user selects the 'Description Card' option (an example of which is displayed in the screenshot above), the Entity Summary Card will display the following information: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status if applicable (shown in red text above), revision number, and information related to the most recent update to the entity. When the 'Attribute Card' option is selected, users may tailor the card to display different values.

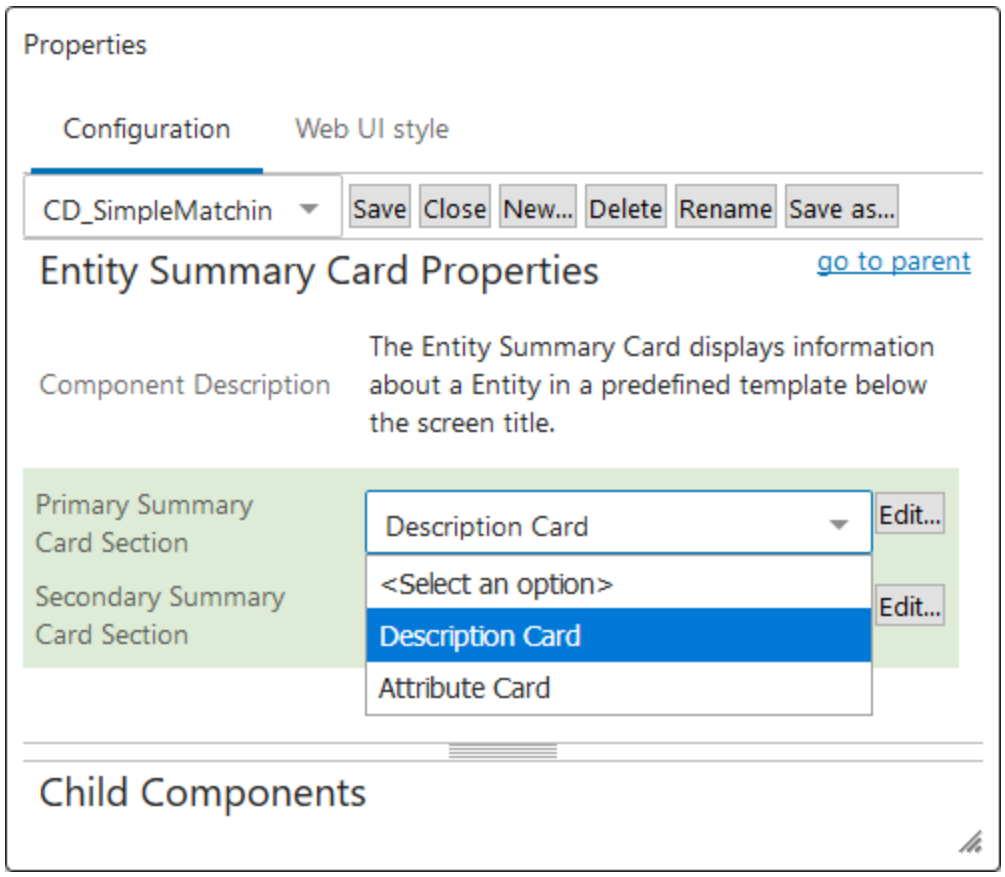
Configuring the Entity Summary Card

To configure display of the Entity Summary Card, follow the instructions described below.

1. Access the designer on the Node Details screen mapped to the relevant entity object type. Under 'Child Components', select the 'Entity Summary Card' from the 'Below Title' dropdown. Then click 'go to component'.

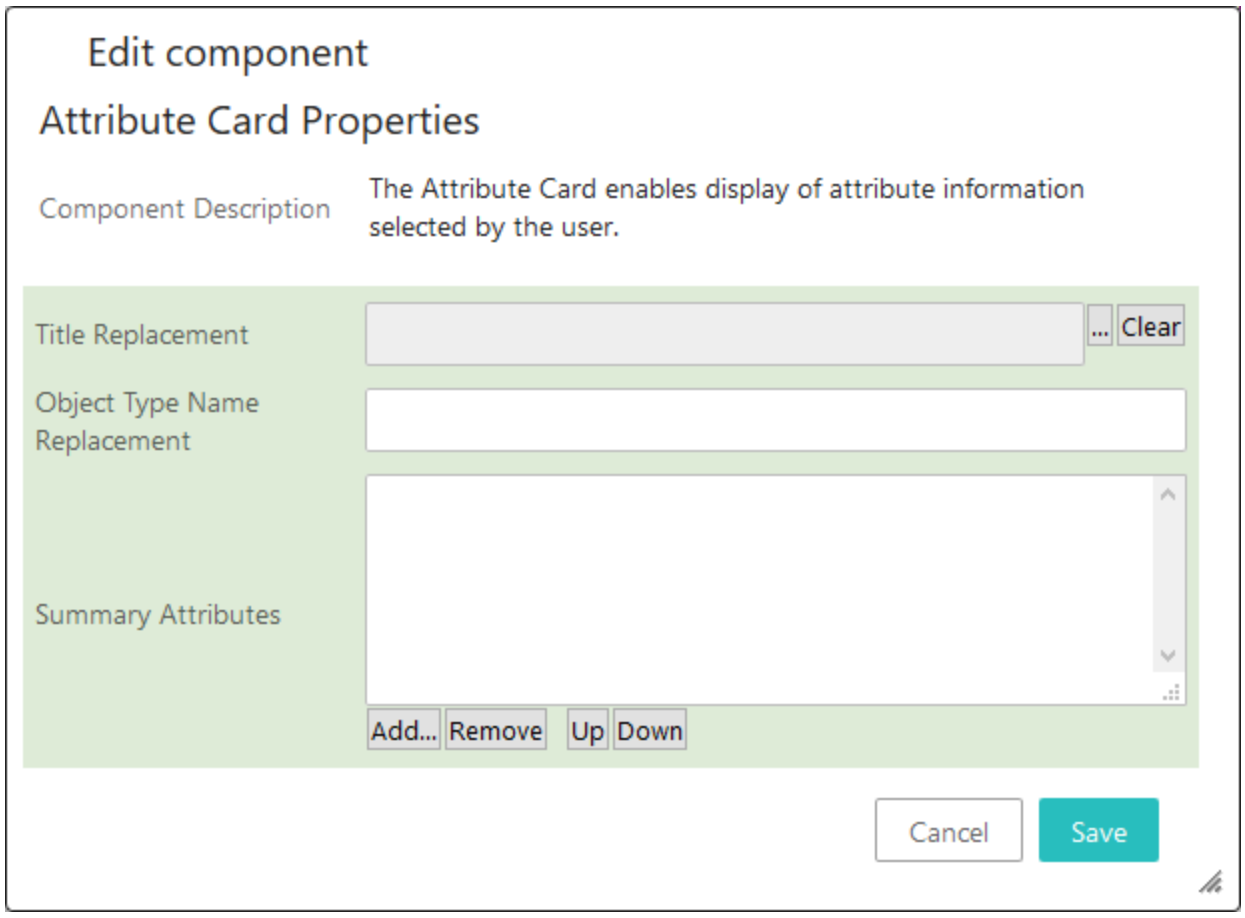


2. In the 'Entity Summary Card Properties' screen in the designer, select one of two options from the 'Primary Summary Card Section': 'Description Card' or 'Attribute Card'.



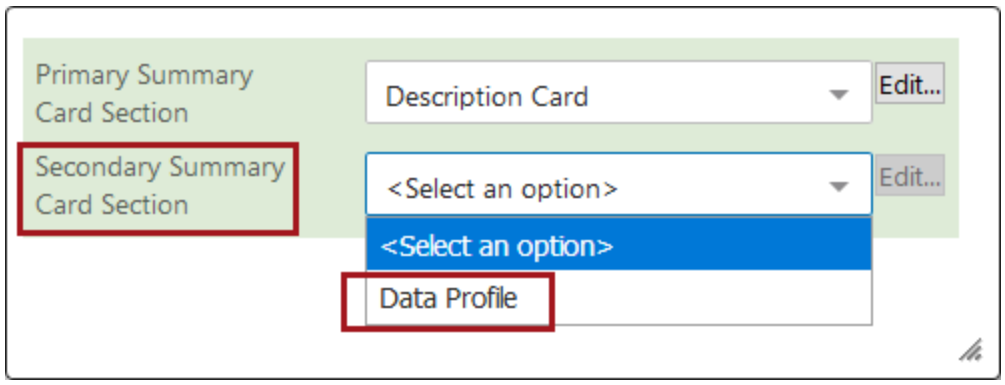
- **Description Card** - When selected, this option will display the following information in the Summary Card section of the screen: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status, if applicable (shown in red text above), revision number, and information related to the most recent update to the entity. No further configuration is required with this option. Once selected, save the configuration and close the designer to activate the Summary Card on the screen.
- **Attribute Card** - When selected, users may configure which data points to display in the card. To do this configuration, first select the 'Attribute Card' option, and then click the 'Edit...' button to the right of the dropdown.

3. To configure the 'Attribute Card' option, users may add values to the fields that display in the 'Attribute Card Properties' pop-up.



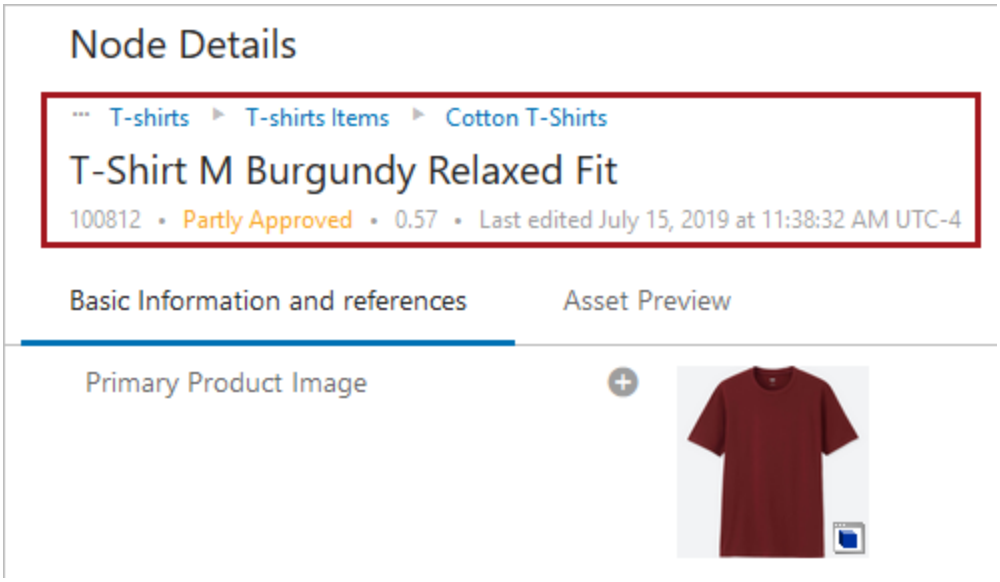
- **Title Replacement** - When the ... button (located to the right of the field) is clicked, a Node Picker displays that enables users to select an attribute whose value can display in place of the entity's name. If no attribute is selected, the entity name will display. If no value has been set for the entity's name, the ID will display. It should be noted that if a multi-valued attribute with multiple values is selected to display in place of the object's name value, then all attribute values for that multi-valued attribute will display separated by the text, '<multipsep/>'.
- **Object Type Name Replacement** - Text added to this field will display in place of the entity's object type name. In both cases, the value displays in capital letters.
- **Summary Attributes** - The attribute values for the attributes selected in this field will display in the Summary Card section of the configured Node Details screen. When users click the 'Add...' button, a Node Picker pop-up will display showing the available attributes. Users may select an unlimited number of attributes, though only one per 'Add...' action. It is important to note that the selected attributes must be both valid for and linked to the entity object type in order for the values to display.

4. If data profiling has been enabled on the entity object, users may opt to add a 'Profile Findings' counter to the Summary Card that displays a number relevant to the data profiling configuration. To add the counter, select 'Data Profile' from the 'Secondary Summary Card Section' dropdown.



Product Summary Card

The Product Summary Card provides users with a collection of product information that displays just below the screen title on a Node Details screen.

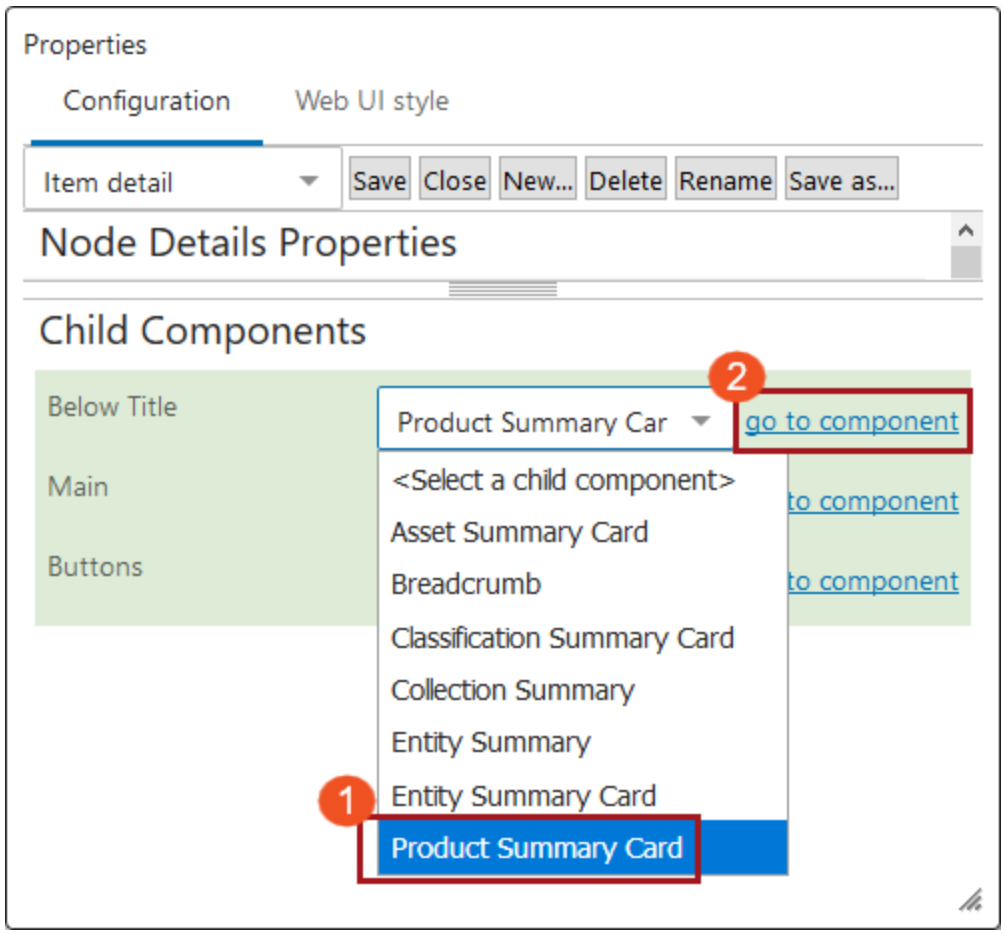


The Product Summary Card can be configured to show either a pre-selected grouping of product information, or a series of data points configured by the user. When the user selects the 'Description Card' option (an example of which is displayed in the screenshot above), the Product Summary Card will display the following information: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status (shown in red text above), revision number, and information related to the most recent update to the product. When the 'Attribute Card' option is selected, users may tailor the card to display different values.

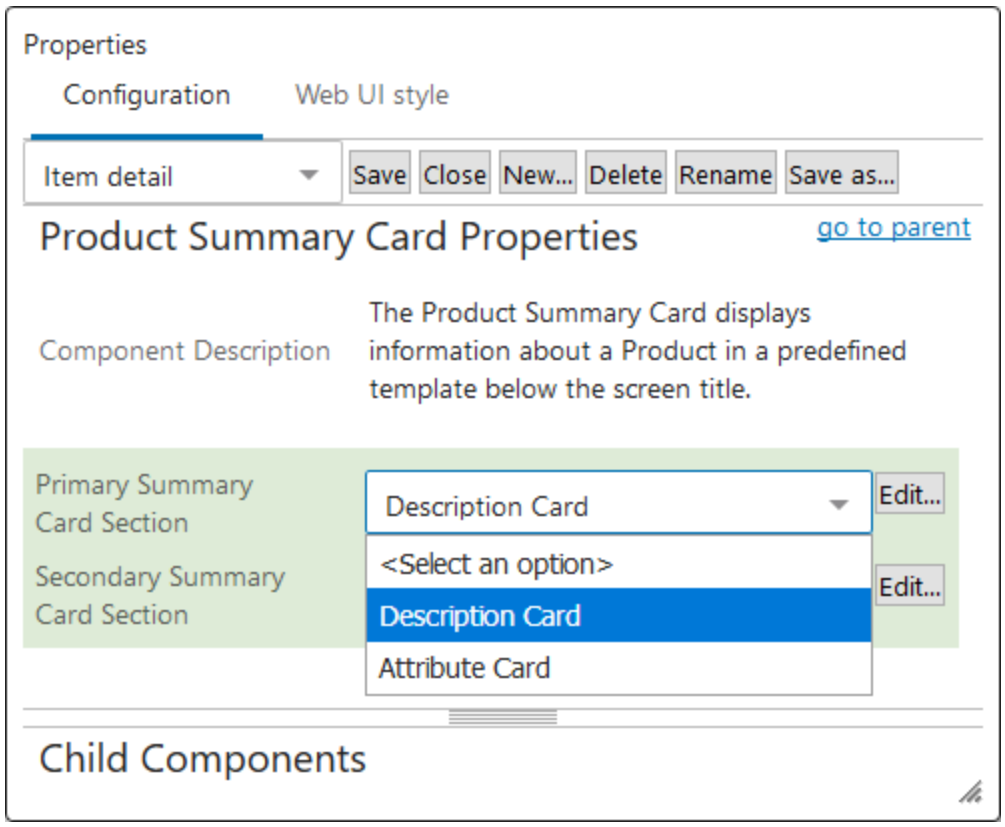
Configuring the Product Summary Card

To configure display of the Product Summary Card, follow the instructions described below.

1. Access the designer on the Node Details screen mapped to the relevant product object type. Under 'Child Components', select the 'Product Summary Card' from the 'Below Title' dropdown. Then click 'go to component'.

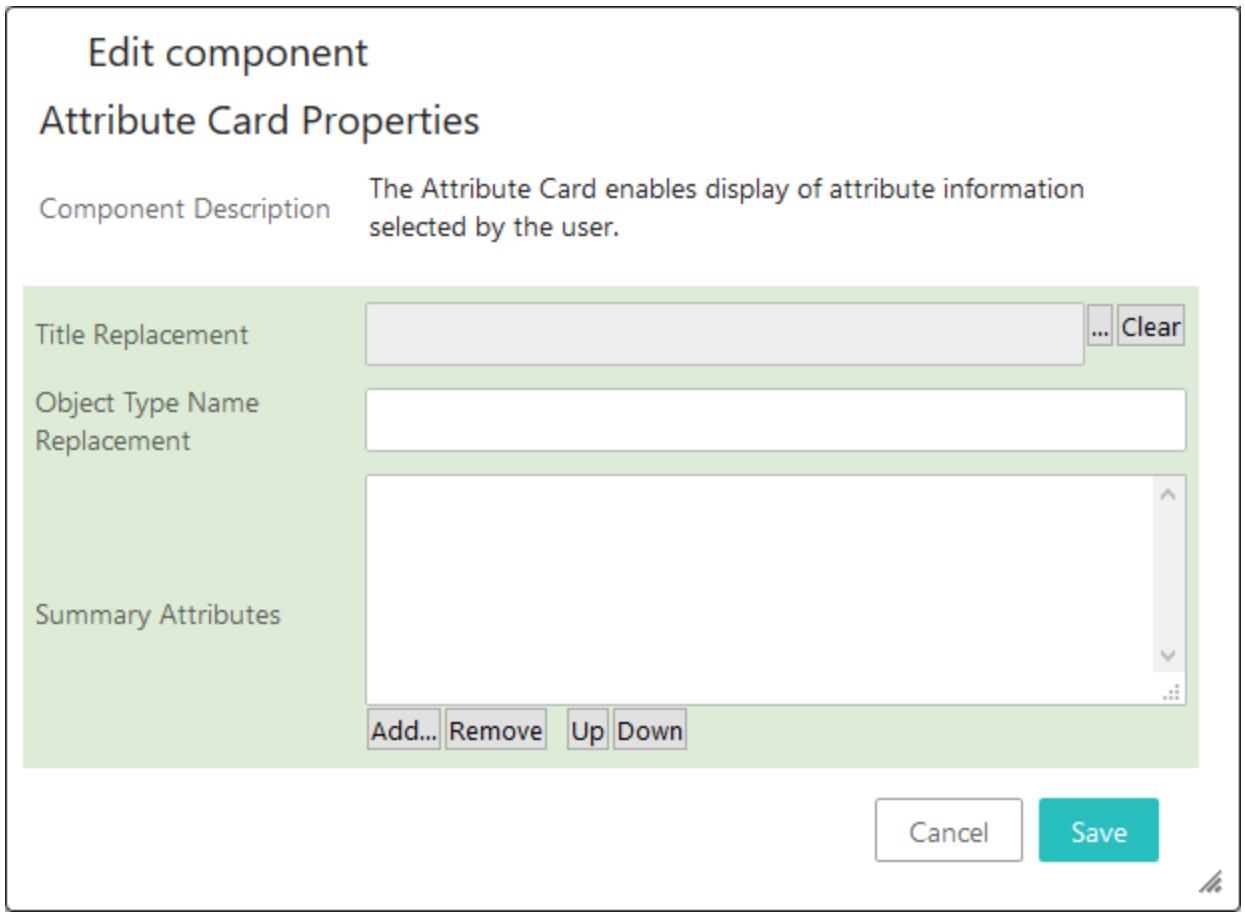


2. In the 'Product Summary Card Properties' screen in the designer, select one of two options from the 'Primary Summary Card Section': 'Description Card' or 'Attribute Card'.



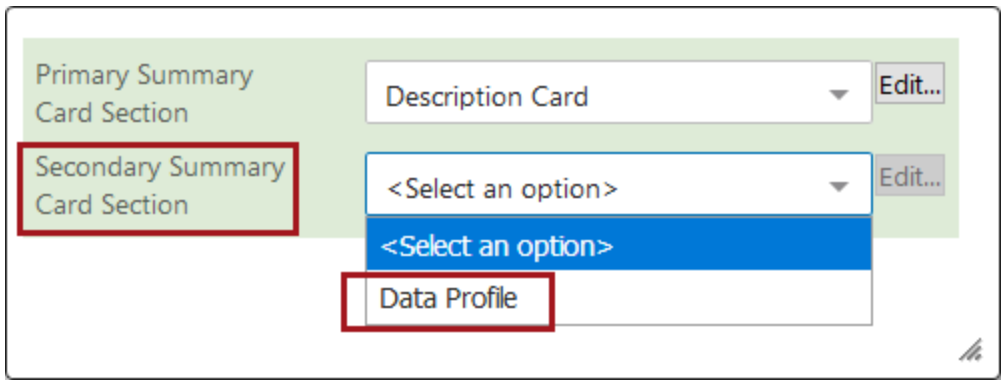
- **Description Card** - When selected, this option will display the following information in the Summary Card section of the screen: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status (shown in red text above), revision number, and information related to the most recent update to the product. No further configuration is required with this option. Once selected, save the configuration and close the designer to activate the Summary Card on the screen.
- **Attribute Card** - When selected, users may configure which data points to display in the card. To do this configuration, first select the 'Attribute Card' option, and then click the 'Edit...' button to the right of the dropdown.

3. To configure the 'Attribute Card' option, users may add values to the fields that display in the 'Attribute Card Properties' pop-up.



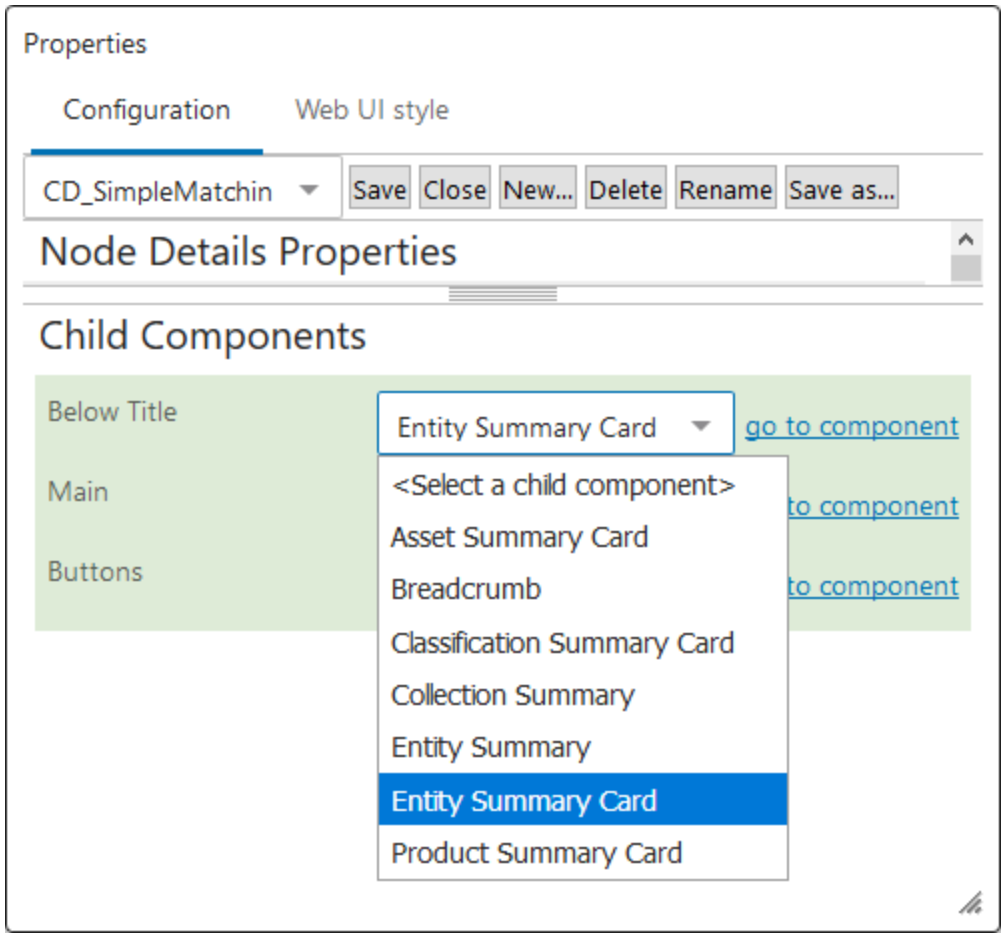
- **Title Replacement** - When the ... button (located to the right of the field) is clicked, a Node Picker displays that enables users to select an attribute whose value can display in place of the product's name. If no attribute is selected, the product name will display. If no value has been set for the product's name, the ID will display. It should be noted that if a multi-valued attribute with multiple values is selected to display in place of the object's name value, then all attribute values for that multi-valued attribute will display separated by the text, '<multipsep/>'.
- **Object Type Name Replacement** - Text added to this field will display in place of the product's object type name. In both cases, the value displays in capital letters.
- **Summary Attributes** - The attribute values for the attributes selected in this field will display in the Summary Card section of the configured Node Details screen. When users click the 'Add...' button, a Node Picker pop-up will display showing the available attributes. Users may select an unlimited number of attributes, though only one per 'Add...' action. It is important to note that the selected attributes must be both valid for and linked to the product object type in order for the values to display.

4. If data profiling has been enabled on the product object, users may opt to add a 'Profile Findings' counter to the Summary Card that displays a number relevant to the data profiling configuration. To add the counter, select 'Data Profile' from the 'Secondary Summary Card Section' dropdown.


Primary Summary Card Section
Description Card
Edit...
Secondary Summary Card Section
<Select an option>
Edit...
<Select an option>
Data Profile

Below Title Entity Summary Card

The Entity Summary Card child component on the Below Title component provides users with a collection of entity information that displays just below the screen title on a Node Details screen.



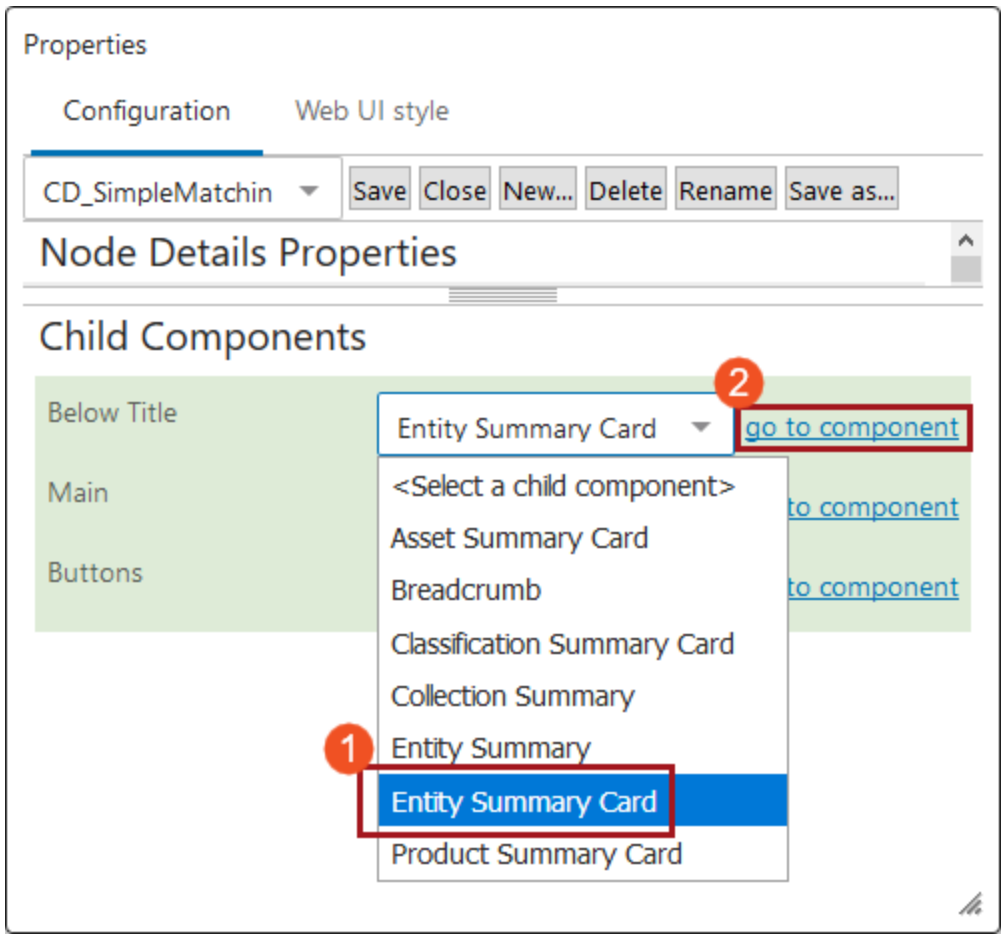
The Entity Summary Card can be configured to show either a pre-selected grouping of entity information, or a series of data points configured by the user. When the user selects the 'Description Card' option (an example of which is displayed in the screenshot above), the Entity Summary Card will display the following information: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status if applicable (shown in red text above), revision number, and information related to the most recent update to the entity. When the 'Attribute Card' option is selected, users may tailor the card to display different values.

For details on the Below Title component, see the **Below Title Component** topic.

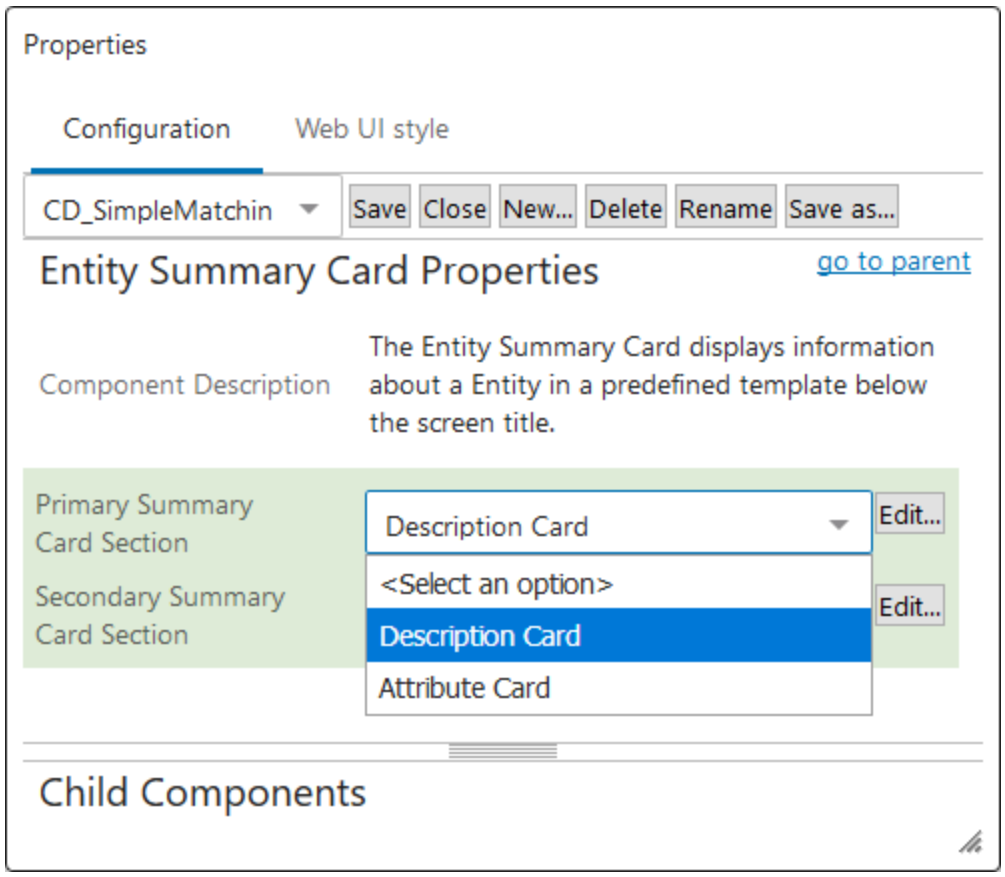
Configuring the Entity Summary Card

To configure display of the Entity Summary Card, follow the instructions described below.

1. Access the designer on the Node Details screen mapped to the relevant entity object type. Under 'Child Components', select the 'Entity Summary Card' from the 'Below Title' dropdown. Then click 'go to component'.

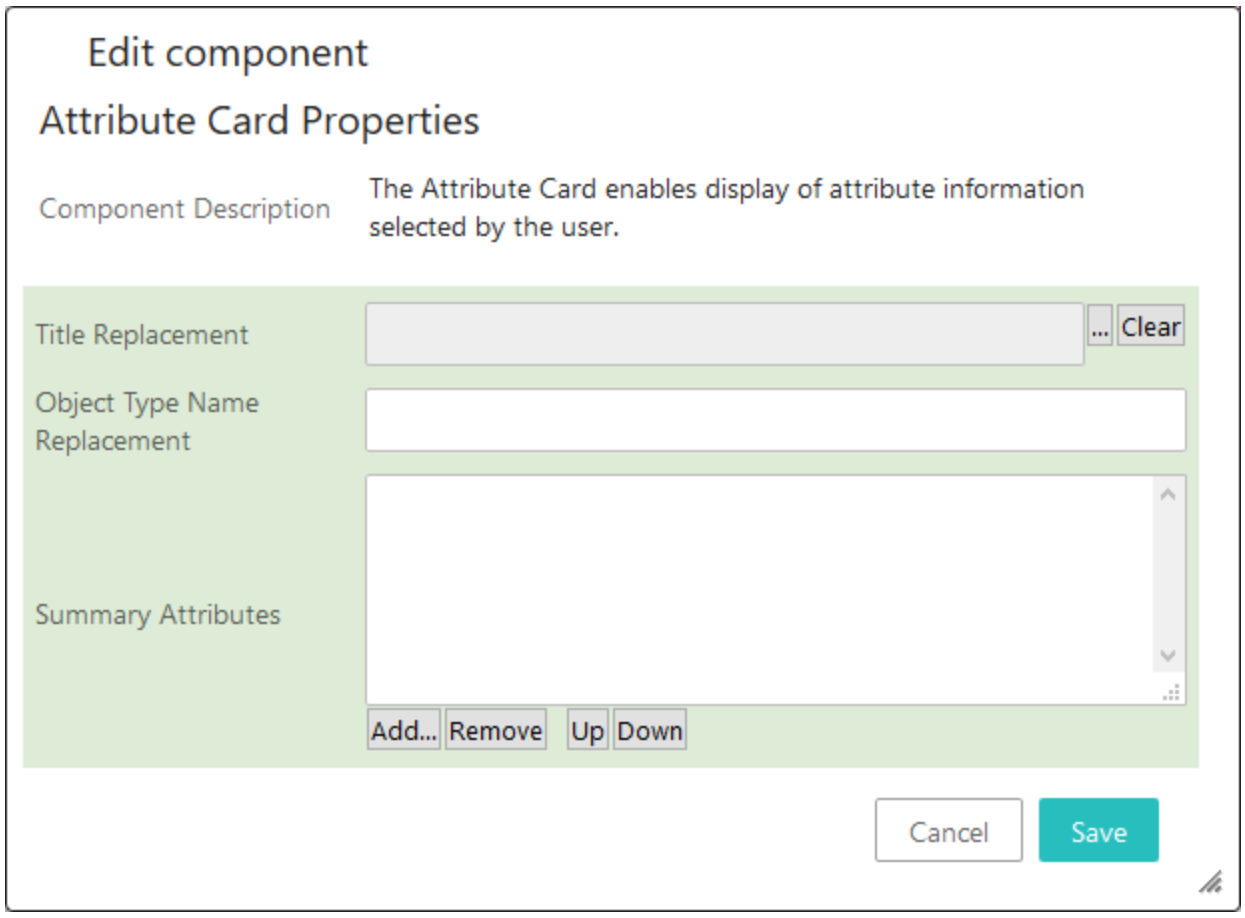


2. In the 'Entity Summary Card Properties' screen in the designer, select one of two options from the 'Primary Summary Card Section': 'Description Card' or 'Attribute Card'.



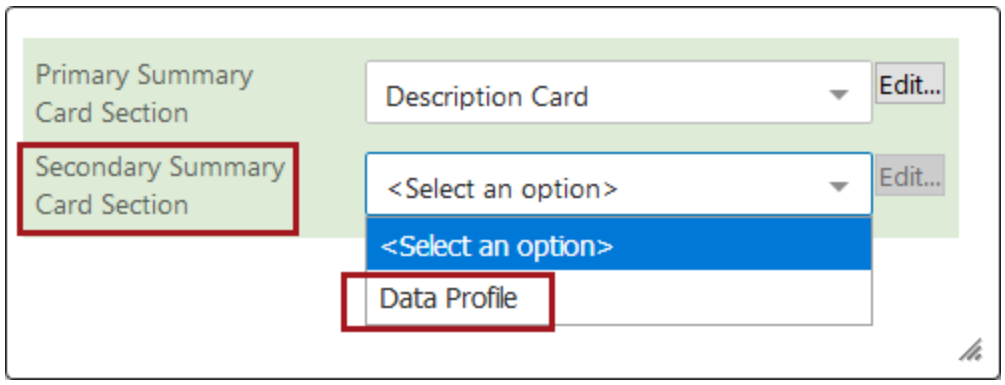
- **Description Card** - When selected, this option will display the following information in the Summary Card section of the screen: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status, if applicable (shown in red text above), revision number, and information related to the most recent update to the entity. No further configuration is required with this option. Once selected, save the configuration and close the designer to activate the Summary Card on the screen.
- **Attribute Card** - When selected, users may configure which data points to display in the card. To do this configuration, first select the 'Attribute Card' option, and then click the 'Edit...' button to the right of the dropdown.

3. To configure the 'Attribute Card' option, users may add values to the fields that display in the 'Attribute Card Properties' pop-up.



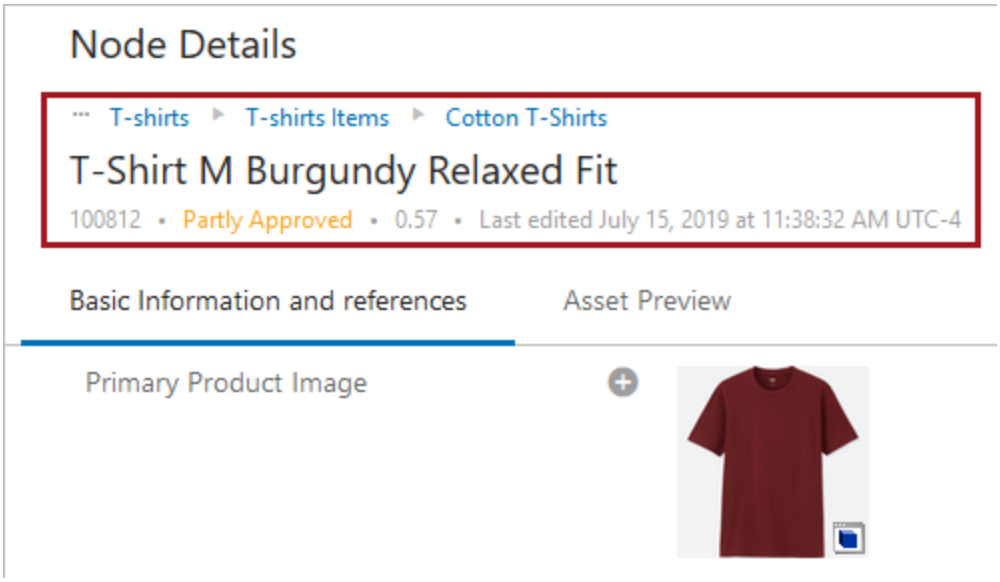
- **Title Replacement** - When the ... button (located to the right of the field) is clicked, a Node Picker displays that enables users to select an attribute whose value can display in place of the entity's name. If no attribute is selected, the entity name will display. If no value has been set for the entity's name, the ID will display. It should be noted that if a multi-valued attribute with multiple values is selected to display in place of the object's name value, then all attribute values for that multi-valued attribute will display separated by the text, '<multipsep/>'.
- **Object Type Name Replacement** - Text added to this field will display in place of the entity's object type name. In both cases, the value displays in capital letters.
- **Summary Attributes** - The attribute values for the attributes selected in this field will display in the Summary Card section of the configured Node Details screen. When users click the 'Add...' button, a Node Picker pop-up will display showing the available attributes. Users may select an unlimited number of attributes, though only one per 'Add...' action. It is important to note that the selected attributes must be both valid for and linked to the entity object type in order for the values to display.

4. If data profiling has been enabled on the entity object, users may opt to add a 'Profile Findings' counter to the Summary Card that displays a number relevant to the data profiling configuration. To add the counter, select 'Data Profile' from the 'Secondary Summary Card Section' dropdown.


Primary Summary Card Section
Description Card
Edit...
Secondary Summary Card Section
<Select an option>
Edit...
<Select an option>
Data Profile

Below Title Product Summary Card

The Product Summary Card child component on the Below Title component provides users with a collection of product information that displays just below the screen title on a Node Details screen.



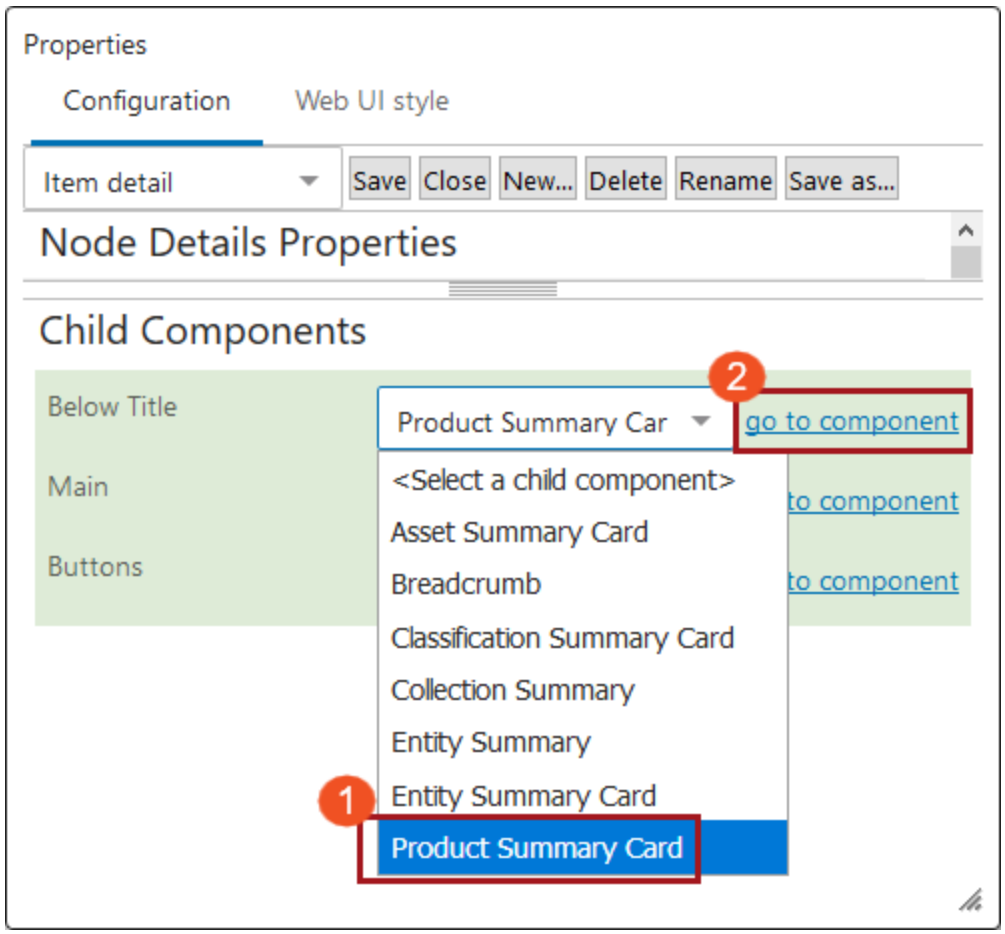
The Product Summary Card can be configured to show either a pre-selected grouping of product information, or a series of data points configured by the user. When the user selects the 'Description Card' option (an example of which is displayed in the screenshot above), the Product Summary Card will display the following information: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status (shown in red text above), revision number, and information related to the most recent update to the product. When the 'Attribute Card' option is selected, users may tailor the card to display different values.

For details on the Below Title component, see the **Below Title Component** topic.

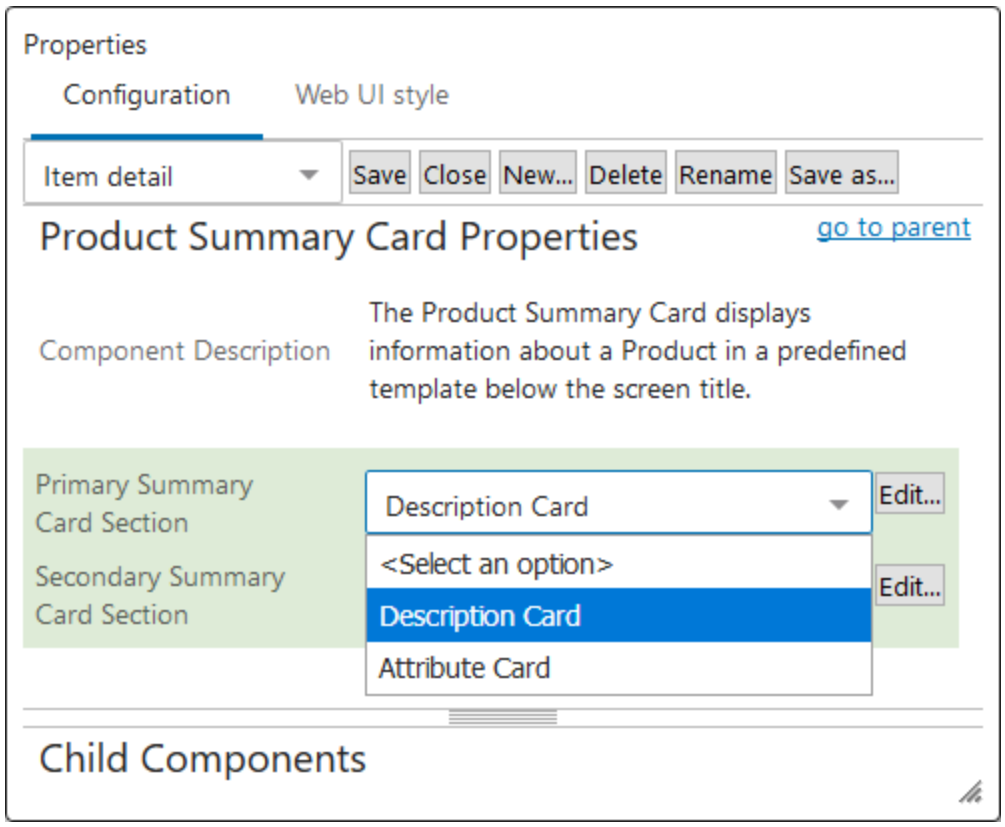
Configuring the Product Summary Card

To configure display of the Product Summary Card, follow the instructions described below.

1. Access the designer on the Node Details screen mapped to the relevant product object type. Under 'Child Components', select the 'Product Summary Card' from the 'Below Title' dropdown. Then click 'go to component'.

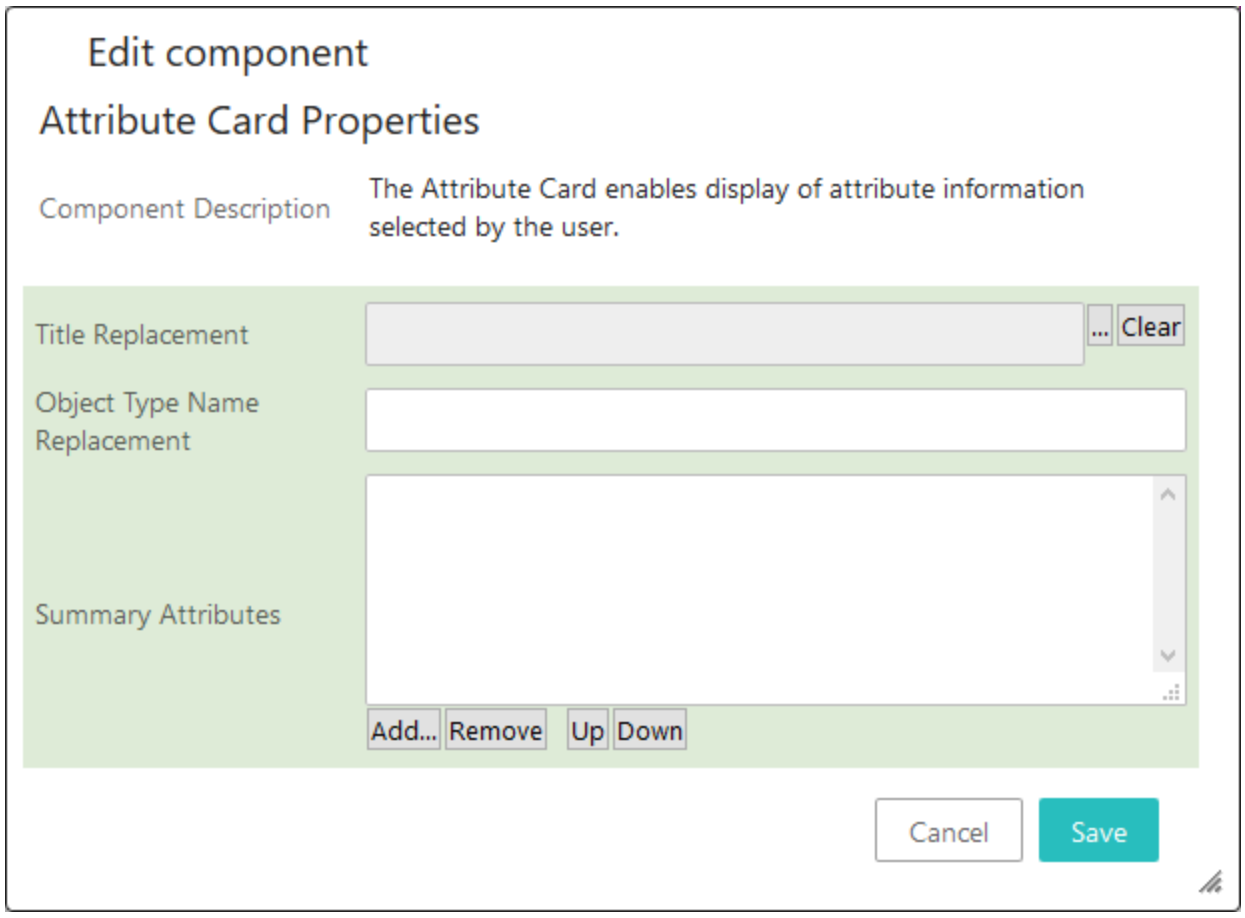


2. In the 'Product Summary Card Properties' screen in the designer, select one of two options from the 'Primary Summary Card Section': 'Description Card' or 'Attribute Card'.



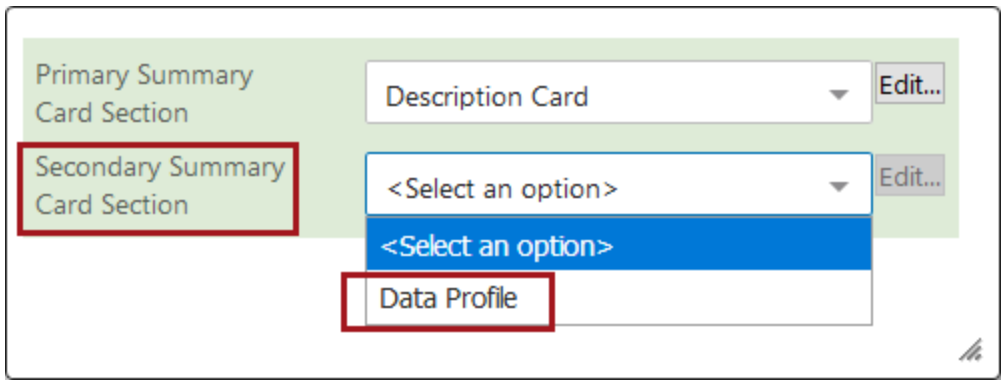
- **Description Card** - When selected, this option will display the following information in the Summary Card section of the screen: a breadcrumb (shown in blue text in the screenshot above), name, ID, approval status (shown in red text above), revision number, and information related to the most recent update to the product. No further configuration is required with this option. Once selected, save the configuration and close the designer to activate the Summary Card on the screen.
- **Attribute Card** - When selected, users may configure which data points to display in the card. To do this configuration, first select the 'Attribute Card' option, and then click the 'Edit...' button to the right of the dropdown.

3. To configure the 'Attribute Card' option, users may add values to the fields that display in the 'Attribute Card Properties' pop-up.



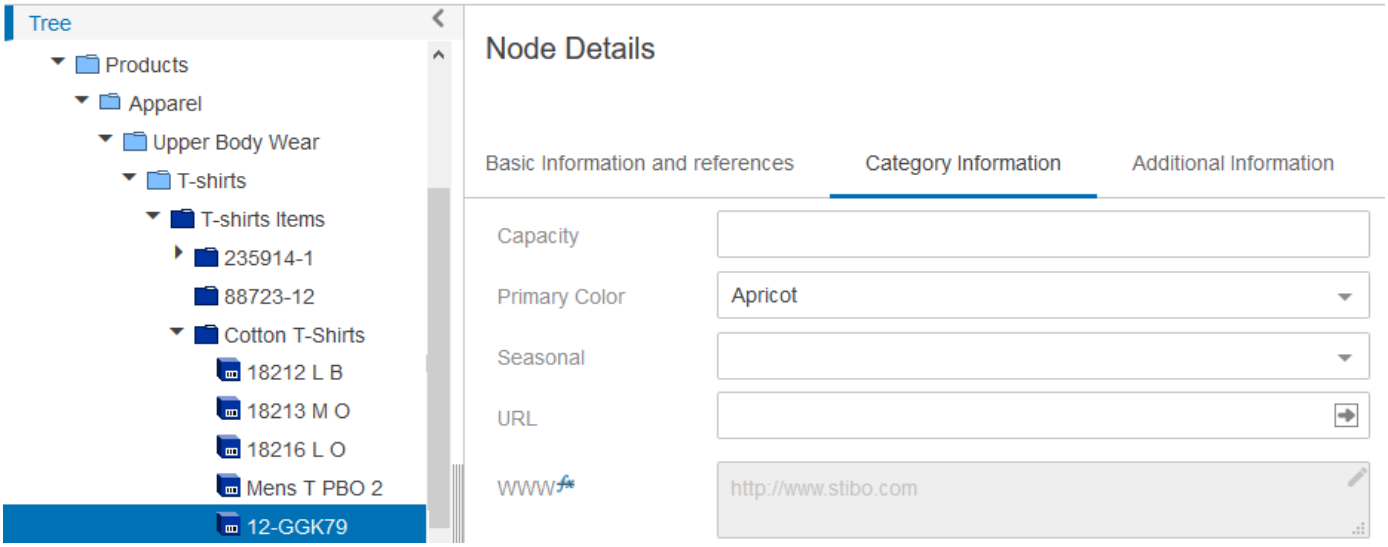
- **Title Replacement** - When the ... button (located to the right of the field) is clicked, a Node Picker displays that enables users to select an attribute whose value can display in place of the product's name. If no attribute is selected, the product name will display. If no value has been set for the product's name, the ID will display. It should be noted that if a multi-valued attribute with multiple values is selected to display in place of the object's name value, then all attribute values for that multi-valued attribute will display separated by the text, '<multipsep/>'.
- **Object Type Name Replacement** - Text added to this field will display in place of the product's object type name. In both cases, the value displays in capital letters.
- **Summary Attributes** - The attribute values for the attributes selected in this field will display in the Summary Card section of the configured Node Details screen. When users click the 'Add...' button, a Node Picker pop-up will display showing the available attributes. Users may select an unlimited number of attributes, though only one per 'Add...' action. It is important to note that the selected attributes must be both valid for and linked to the product object type in order for the values to display.

4. If data profiling has been enabled on the product object, users may opt to add a 'Profile Findings' counter to the Summary Card that displays a number relevant to the data profiling configuration. To add the counter, select 'Data Profile' from the 'Secondary Summary Card Section' dropdown.


Primary Summary Card Section
Description Card
Edit...
Secondary Summary Card Section
<Select an option>
Edit...
<Select an option>
Data Profile

Tab Pages

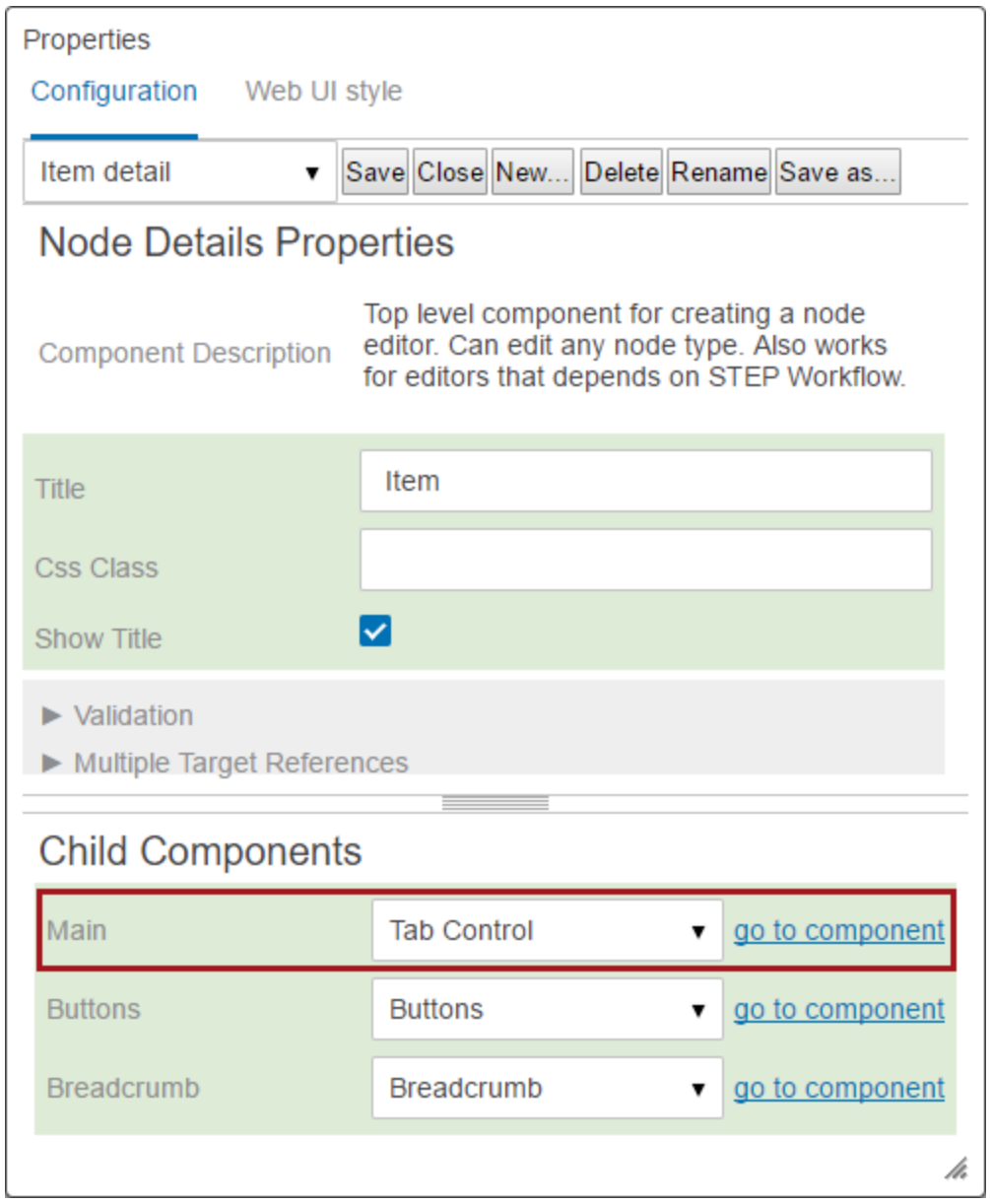
When viewing objects in Web UI, it is often helpful to have tab pages configured so that users can access all relevant information in a single screen, while also sectioning it into meaningful groupings that provide a user-friendly and more efficient work stream.



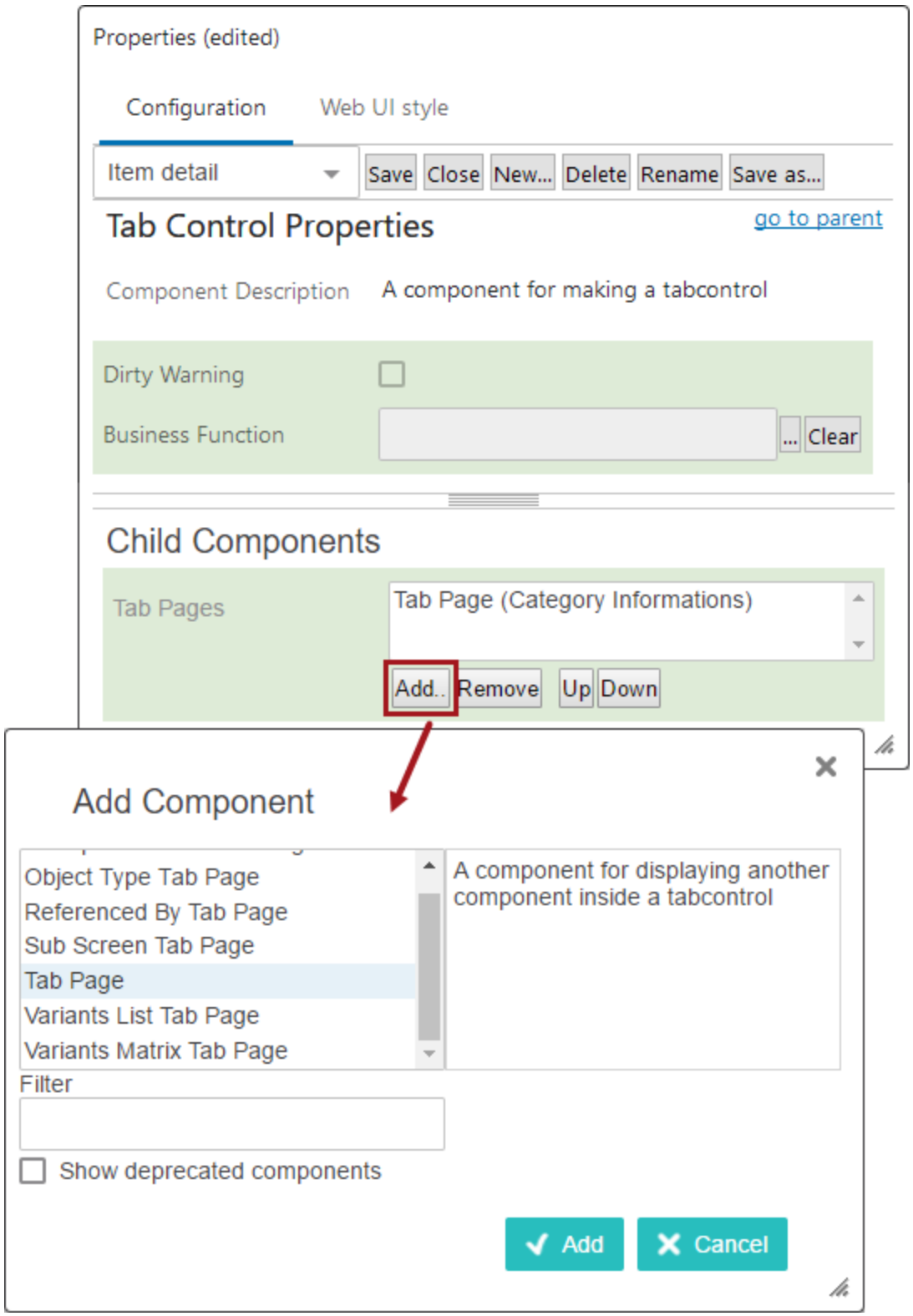
Adding Tab Pages

To add tab pages, a **Node Details** screen must be configured.

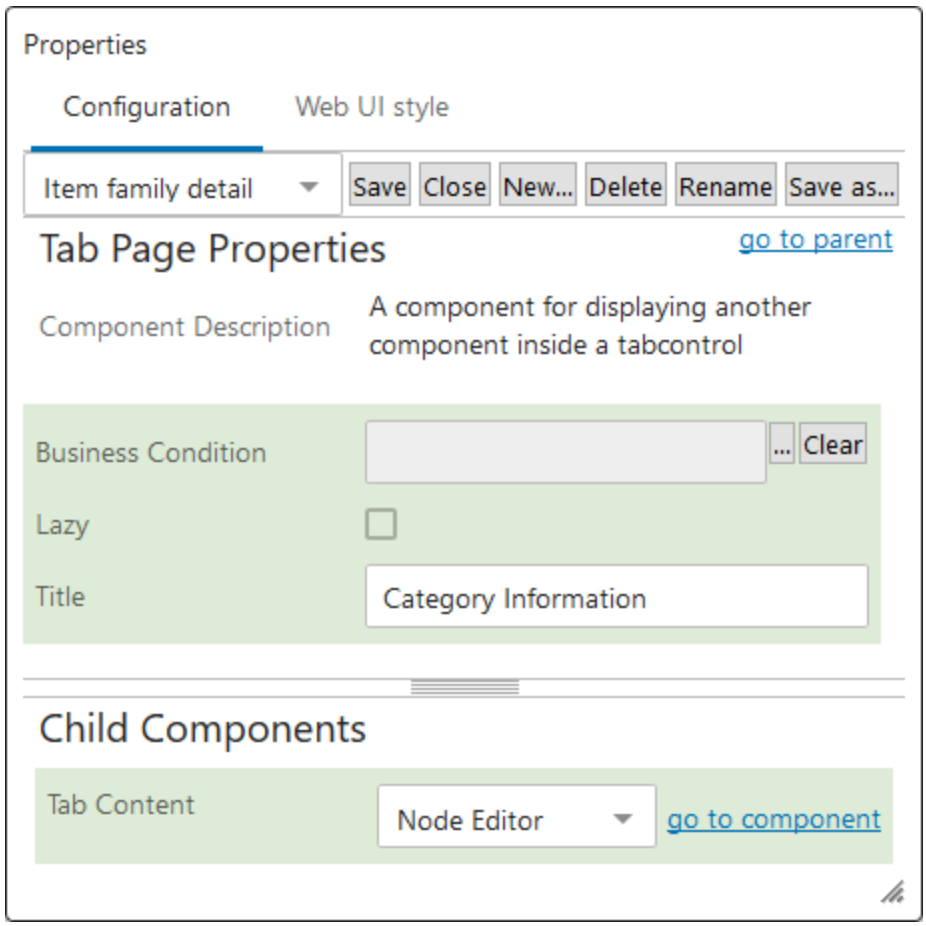
1. Open an existing **Node Details** screen type, or create a new one. Select **Tab Control** for the **Main** parameter under Child Components. Click the **go to component** link.



2. On **Tab Control Properties**, add a **Tab Page** to the **Tab Pages** parameter in Child Components. Double click on **Tab Page** once it is added.



3. On the **Tab Page Properties** screen in the designer, there are three parameters:



- **Business Condition** - Select a preconfigured business condition that determines whether the tab will display. If the condition returns true, the tab displays. If it returns false, the tab does not display. The business condition is evaluated when a screen is saved or refreshed.

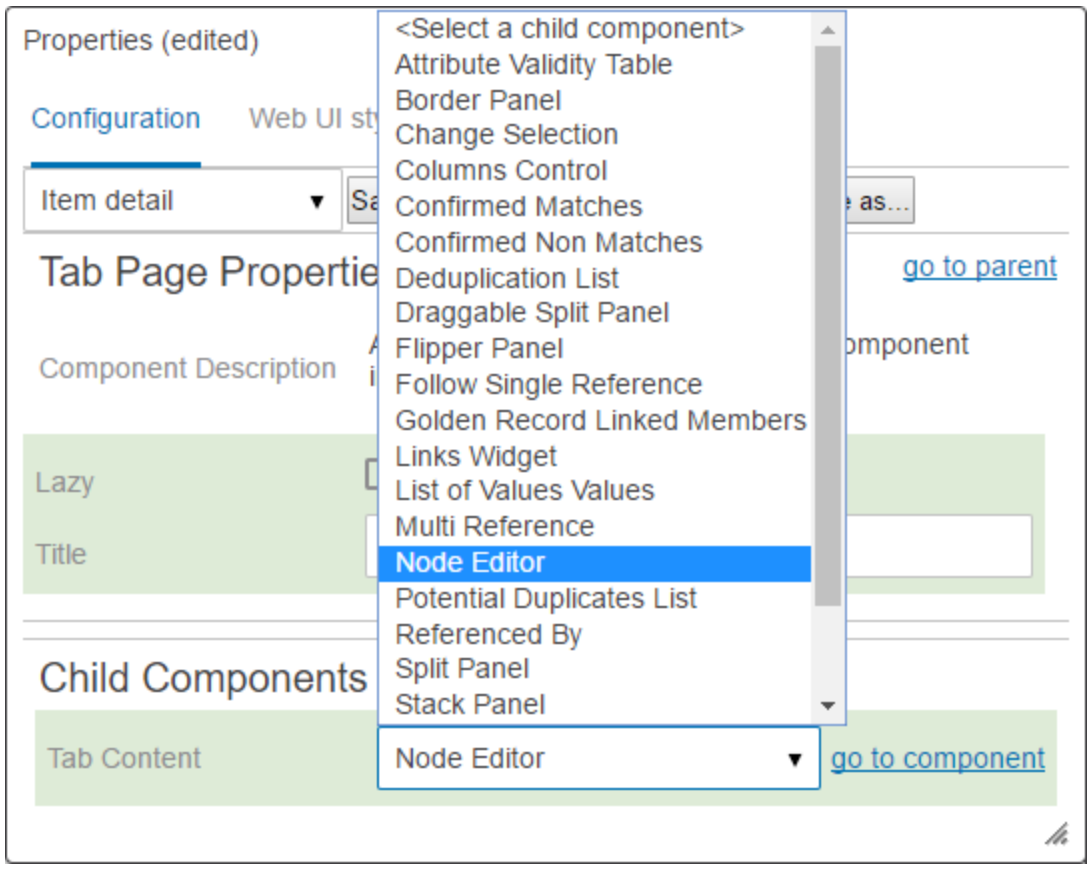
  The most common application for this feature is to use the 'Attribute Value Comparison' type business condition. This business condition can be used to determine display of a tab page based on whether an attribute value on a given attribute meets the configured business condition. For example, if a business condition is written to state that the condition is only met if the value for the attribute 'HAZMAT' is equal to 'Yes', and this business condition is selected for a configured tab page with HAZMAT-related attributes, then that tab will only display if the value for the attribute 'HAZMAT' is 'Yes'.

  Important: Admin users should take care not to hide tabs configured as default tabs because errors are likely to result. If using both the 'Business Function' feature to determine default tabs in tandem with the 'Business Condition' parameter to determine display of tabs, admin users should thoroughly test the combinations to ensure the configuration does not result in end users being unable to access data. To avoid these issues, admin users can use the 'Reference other Business Condition'-type business condition. This allows users to configure their tabs so the default tab condition references the show / hide condition and then, based on that evaluation, determines which default tab to display.

For more information on configuring Attribute Value Comparison-type business conditions, see the **Business Condition Attribute Value Comparison** topic in the Business Rules documentation.

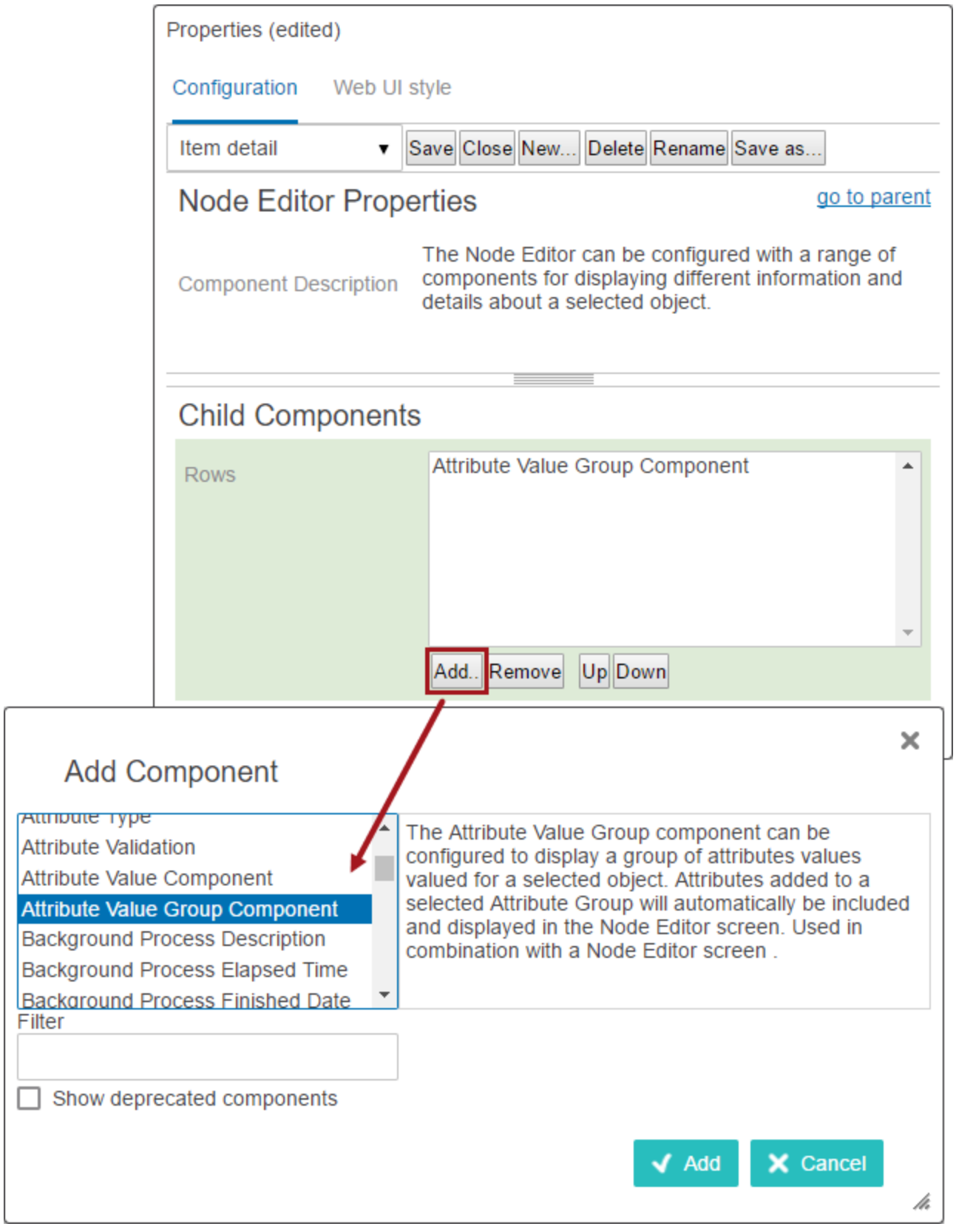
- **Lazy** - Check this box to take advantage of lazy loading functionality, if / when applicable. Components will be 'lazy' loaded from STEP and rendered only when needed (i.e., when a tab is selected). This can reduce screen load time (e.g., a Node Details screen configured to display multiple Tab Pages) since only the needed components are loaded and visible to the user. It is important to note that any components that are not loaded yet due to lazy loading will not be able to be evaluated as part of a set of mandatory / invalid components in combination with the Save and the Submit buttons.
- **Title**- Enter a title that will display as the tab page name.

4. Under Child Components, add the desired component(s) to the **Tab Content** parameter. In many cases, this will be a Node Editor, and that example will be followed in the next steps. However, any component can be used and the proper selection is determined only by the layout the designer wishes to provide for the end user. If more than one component should be accessible on a single tab, oftentimes a Draggable Split Panel component will be added in this step, with individual components subsequently being added as children to the Split Panel. Regardless of the component selected, click the **go to component** link after it has been added to configure the child component.



5. As mentioned above, any component could have been selected in the previous step, but this example will continue using a Node Editor. On the **Node Editor**, add the desired child components to the **Rows** parameter.

Depending on the component selected in the previous step, differing child components may be available, and any number of them can be selected to build the appropriate interface for the end user. It is likely that each selected child component will require additional configuration, which users are prompted to complete as the components are added.


Properties (edited)
Configuration
Web UI style
Item detail
Save
Close
New...
Delete
Rename
Save as...
Node Editor Properties
go to parent
Component Description
The Node Editor can be configured with a range of components for displaying different information and details about a selected object.
Child Components
Rows
Attribute Value Group Component
Add..
Remove
Up
Down
Add Component
Attribute Validation
Attribute Value Component
Attribute Value Group Component
Background Process Description
Background Process Elapsed Time
Background Process Finished Date
The Attribute Value Group component can be configured to display a group of attributes values valued for a selected object. Attributes added to a selected Attribute Group will automatically be included and displayed in the Node Editor screen. Used in combination with a Node Editor screen .
Filter
Show deprecated components
Add
Cancel

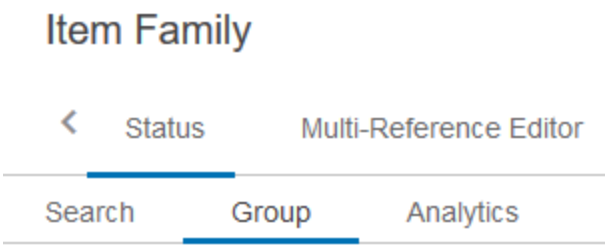
6. The above steps can be repeated as needed to add additional tabs. To do this, click on the **go to parent** link in each properties window until the **Tab Control Properties** are shown again. From there, steps 2-5 can be repeated as many times as needed to complete the configuration.

Configuring secondary tabs

Users may add additional sets of tabs to organize their Web UI screens.

To create a secondary set of tabs, users must first add a new tab to the primary set of tabs on a Node Details screen. When selecting the child component for that tab, select **Tab Control** and then **go to component**. Then follow steps 2-6, described above, to configure the new row of tabs. Multiple tab rows may be added, but use caution when configuring more than two rows, as usability can be negatively impacted by an expansive display of tabs.

When complete, your Web UI tabs may resemble this configuration:

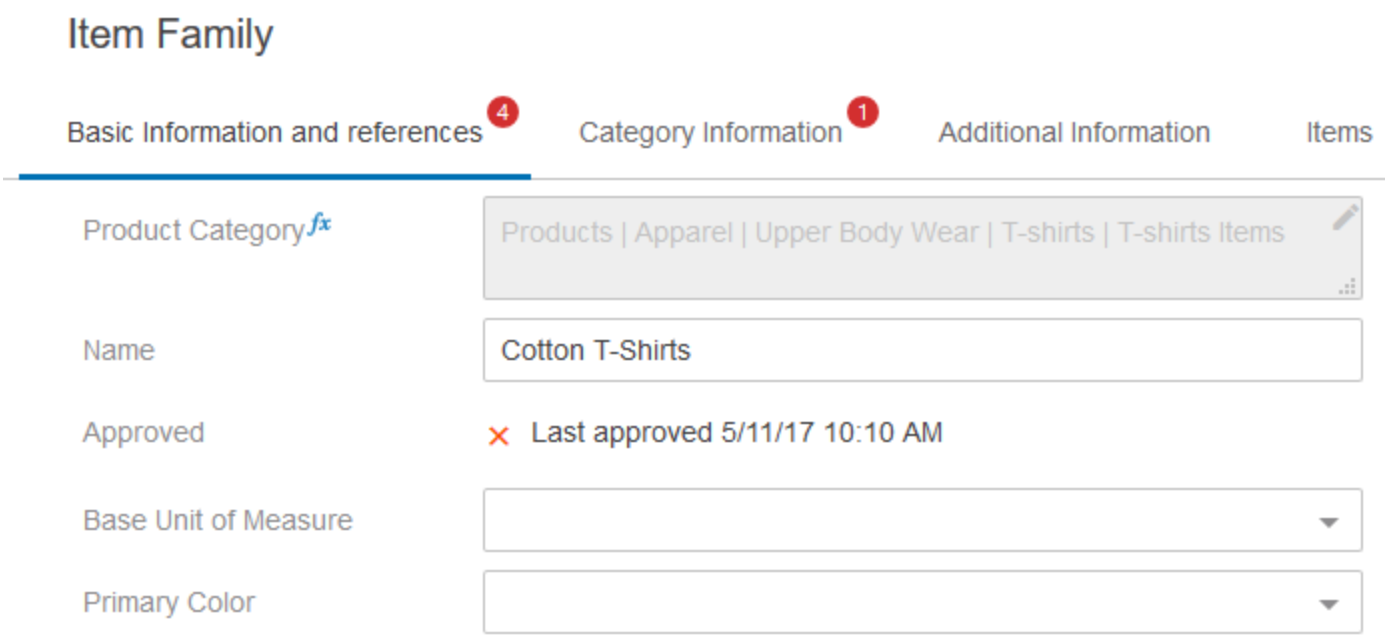


Note: To configure certain tab pages or secondary tabs to open as default when objects are clicked on during different circumstances, see the **Designating a Default Tab** topic in this documentation.

Tab Page Data Error Indicator

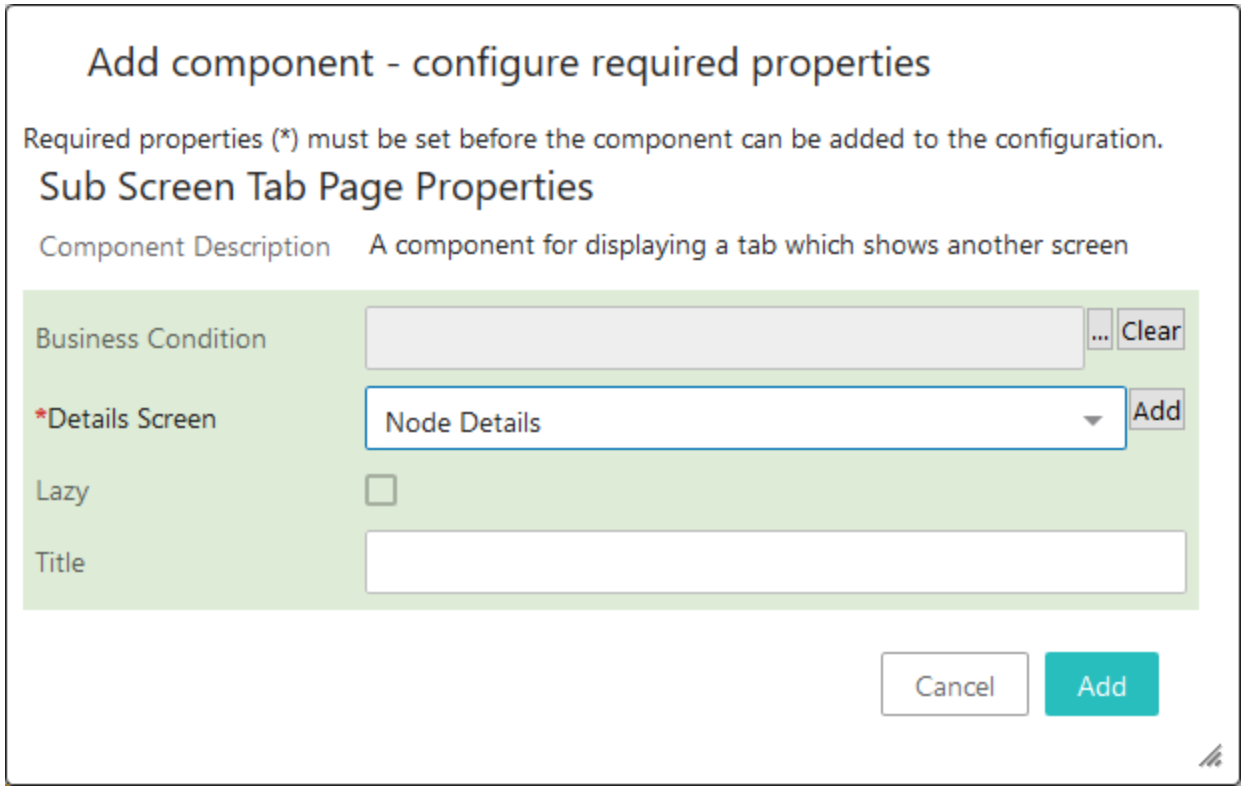
When using tab pages, if there is any type of error that impacts the data displayed on a tab (e.g., a validation error or missing mandatory value), a red circle containing a white-colored number value displays to the right of the tab name. The red circle serves as a simple visual notification that attention is required on one or multiple tab pages, and the number inside the circle refers to the number of detected errors on the tab. No configuration is needed to turn on this feature.

In the screenshot below, the 'Basic Information and references' tab and 'Category Information' tabs display with a red circle because errors have been detected in those tabs: four in 'Basic Information and references' and one in 'Category Information'.



Adding Sub Screen Tab Pages

Sub Screen Tab Pages can also be added as child components under Tab Control Properties. Instead of configuring components to display on the tab, you select a screen to display. No additional mapping is required since the end user will see the screen as a tab option when clicking on the Node Details screen.



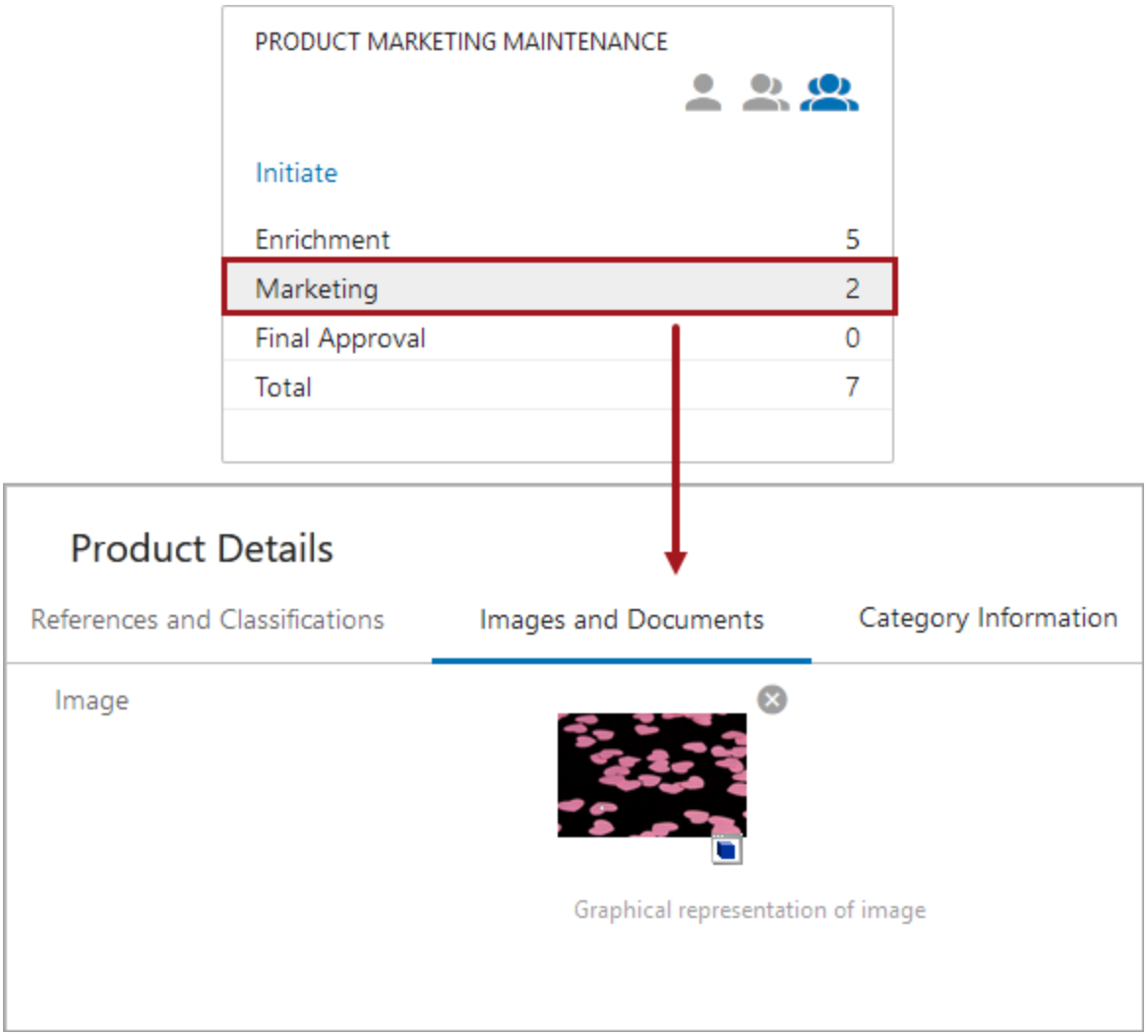
The functionality of the parameters for Sub Screen Tab Pages is identical to those described in step three of this topic in the **Adding Tab Pages** section.

Note: To configure certain sub tab pages to open as default when objects are clicked on during different circumstances, see the **Designation a Default Tab** topic in this documentation.

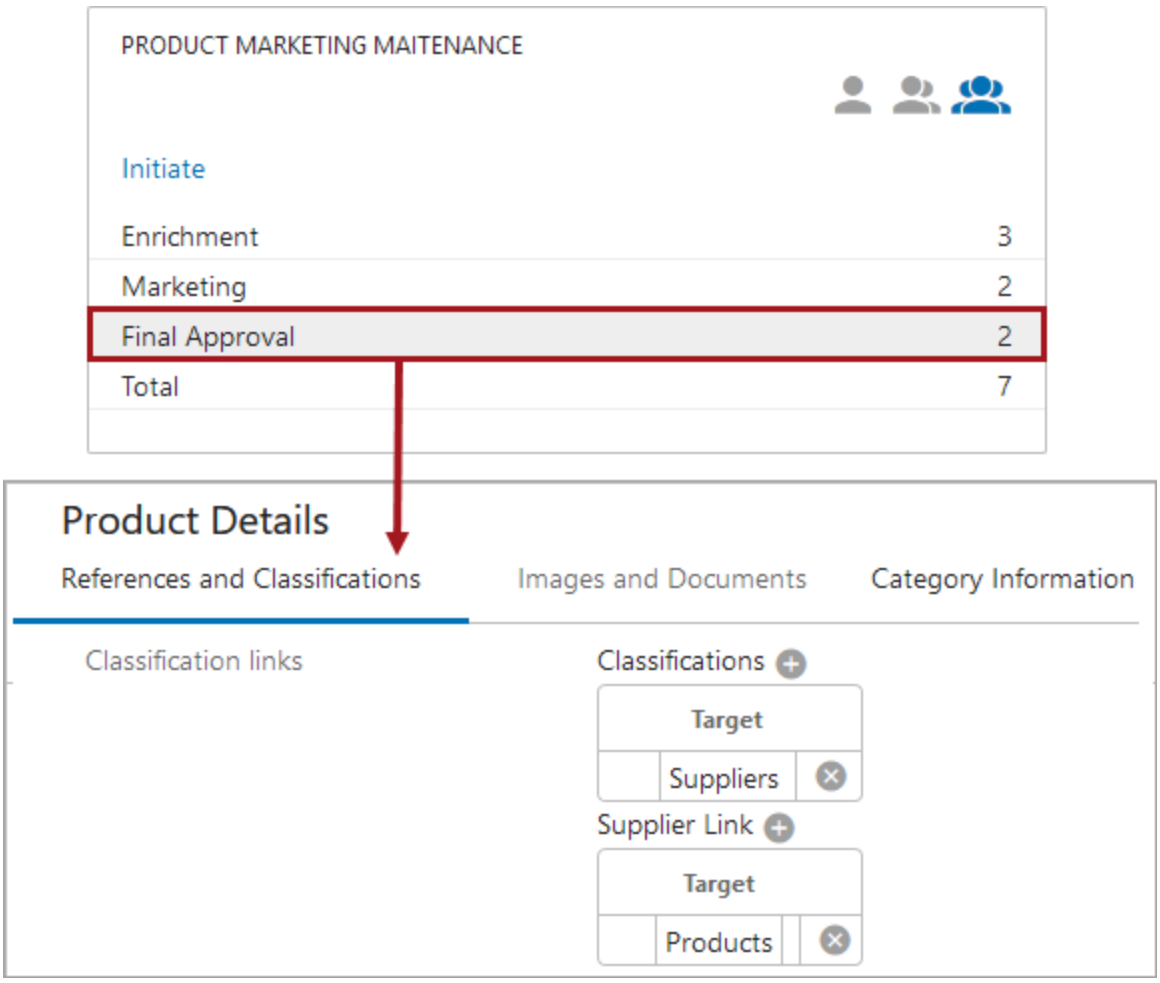
Designating a Default Tab

It is common for an object in Web UI to have many different types of tab pages, each holding relevant grouped information, but not all of these may be relevant for a particular task. It is possible to configure different default tab pages to display for an object using business functions. These business functions can use workflow and state IDs to determine which tabs to display, and/or they can use attribute values to determine what tabs to display. This enables users to immediately see the tab with the most relevant information to their task and cuts out additional navigation steps.

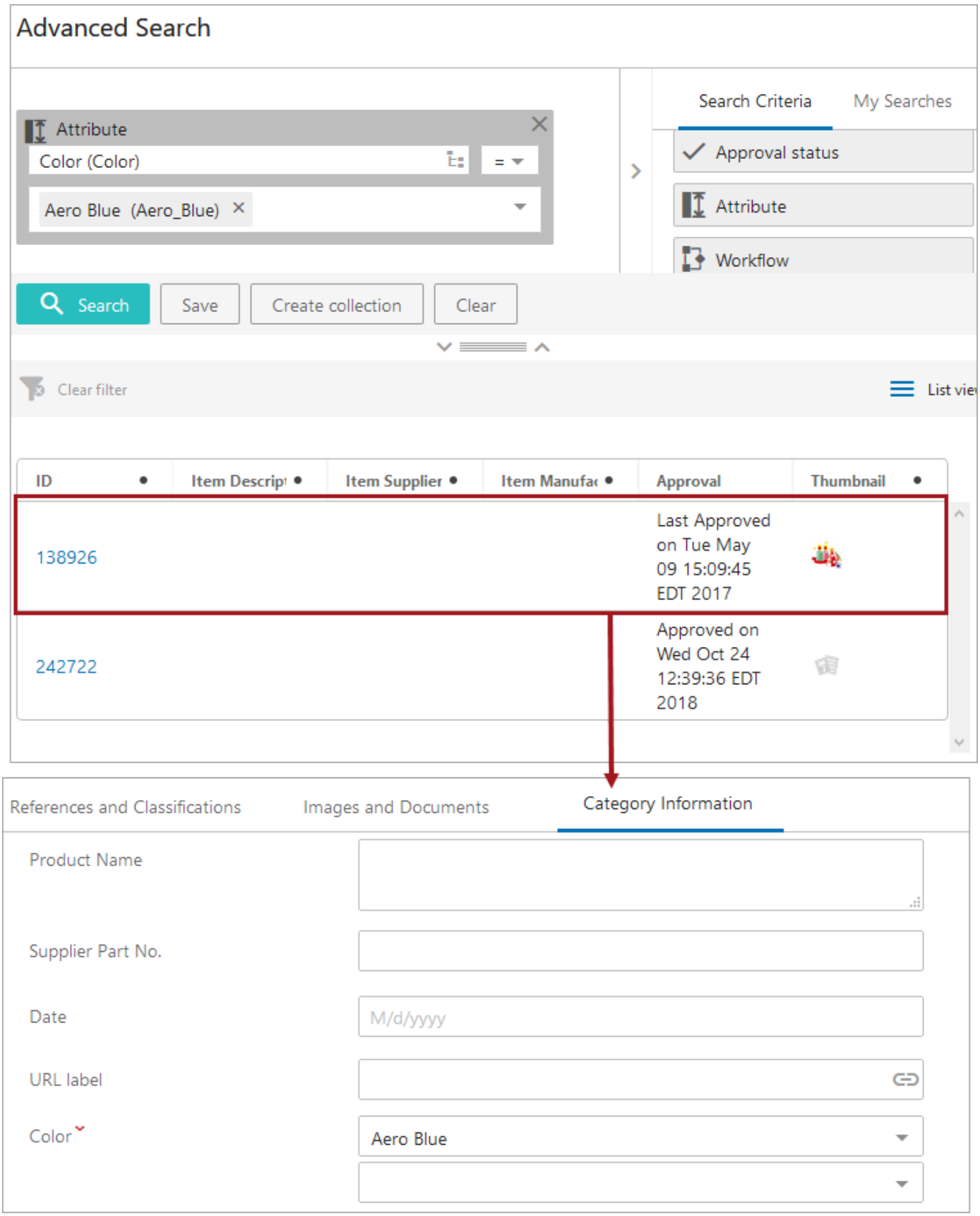
For example, a user working in a particular workflow selects an object in the second state of the workflow. The second tab is most relevant for this state's needed task, which is ensuring that the image associated with the object is suitable for marketing purposes, so this tab is configured to be the default tab to open.



The next user, working in the same workflow, selects an object in the final state. Objects selected in this state have been configured to display the first tab page allowing this user to complete their assigned task, which differs from the first user.



Alternatively, a third user not working in any workflow, needs to update an object that happens to have an attribute value of 'Aero Blue' for the color. The business function has been configured to return the third tab for any object that has an attribute value of 'Aero Blue.' In this case, the user uses an Advanced Search to find the object, and upon clicking the object, is brought to the third tab.


Advanced Search
Attribute
Color (Color)
=
Aero Blue (Aero_Blue)
Search Criteria
My Searches
Approval status
Attribute
Workflow
Search
Save
Create collection
Clear
Clear filter
List vie
ID
Item Descript
Item Supplier
Item Manufac
Approval
Thumbnail
138926
Last Approved on Tue May 09 15:09:45 EDT 2017
242722
Approved on Wed Oct 24 12:39:36 EDT 2018
References and Classifications
Images and Documents
Category Information
Product Name
Supplier Part No.
Date
M/d/yyyy
URL label
Color
Aero Blue

To configure default tab pages based on workflow and state IDs and/or an attribute value, setup needs to happen in workbench and in Web UI.

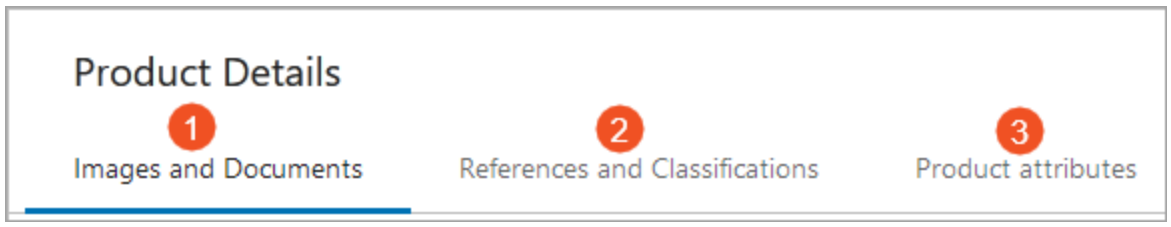
Prerequisites

It is assumed that the user is familiar with basic designer Web UI functionality. Additionally, it is assumed that the user knows about business functions and how to create them, as well as how to configure a Node Details Screen and tab pages. See the **Business Functions** topic in the **Business Rules** documentation, for more on business functions, the **Node Details Screen** topic in this documentation for more on a Node Details Screen, and the **Tab Pages** topic in this documentation for more on how to create tab pages.

Default Tab Page Setup

Creating default tab pages requires both a business function and set up in the Web UI designer.

1. Create a business function in workbench that defines what tab pages will open for objects with different attribute values, and/or in different states in the desired workflows. Each tab page is represented by a number (counting from the left most tab to the right most tab). For example, if there are three tab pages called: Images and Documents, References and Classifications, and Product attributes, then Images and Documents would be represented by '1,' References and Classifications by '2,' and Product attributes by '3.'

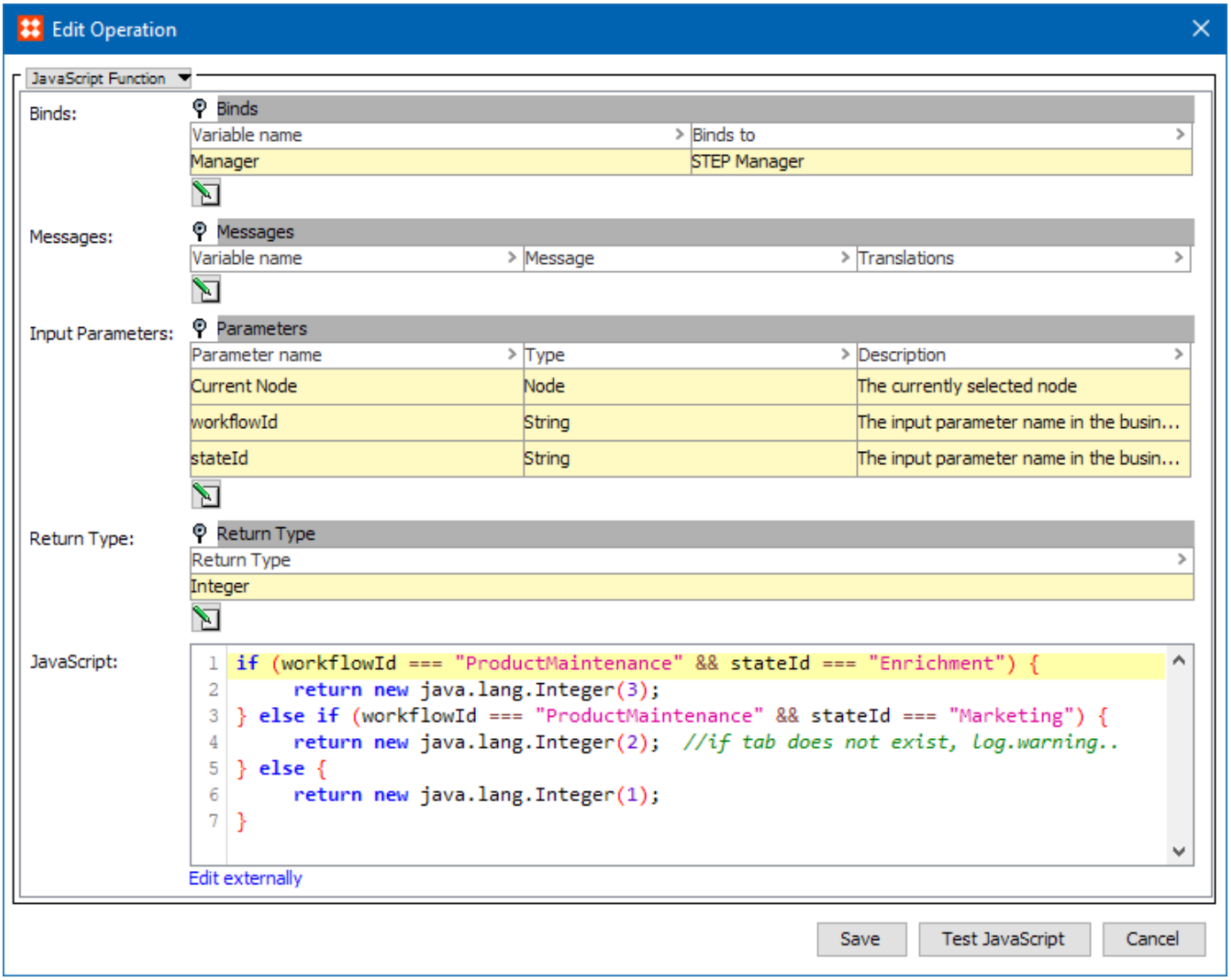


Important: When using default tabs, rearrange tabs with caution. If the tabs themselves are rearranged in the Web UI, the business functions will still work, but the user might not receive the expected tab. Ex: A business function calls for objects with attribute value PINK to always open the first tab, and it is assumed that the 'Images and Documents' tab is in position '1.' However, a changed occurred, and the 'Images and Documents' tab is now moved to position '2.' The business function is still configured to open to the first tab, which is no longer the expected tab for the user. If tab positions move, business functions may need to be adjusted.

Note: If a scenario is not defined, or a number that represents a tab page is entered into the business function that does not exist, ex: 400, then the last tab a user was on will automatically display. Additionally, a warning message displays in the admin logs when a tab number returned by a business function does not exist.

For more on business functions and how to create them, see the **Business Functions** topic in the **Business Rules** documentation.

An example business function is shown below:



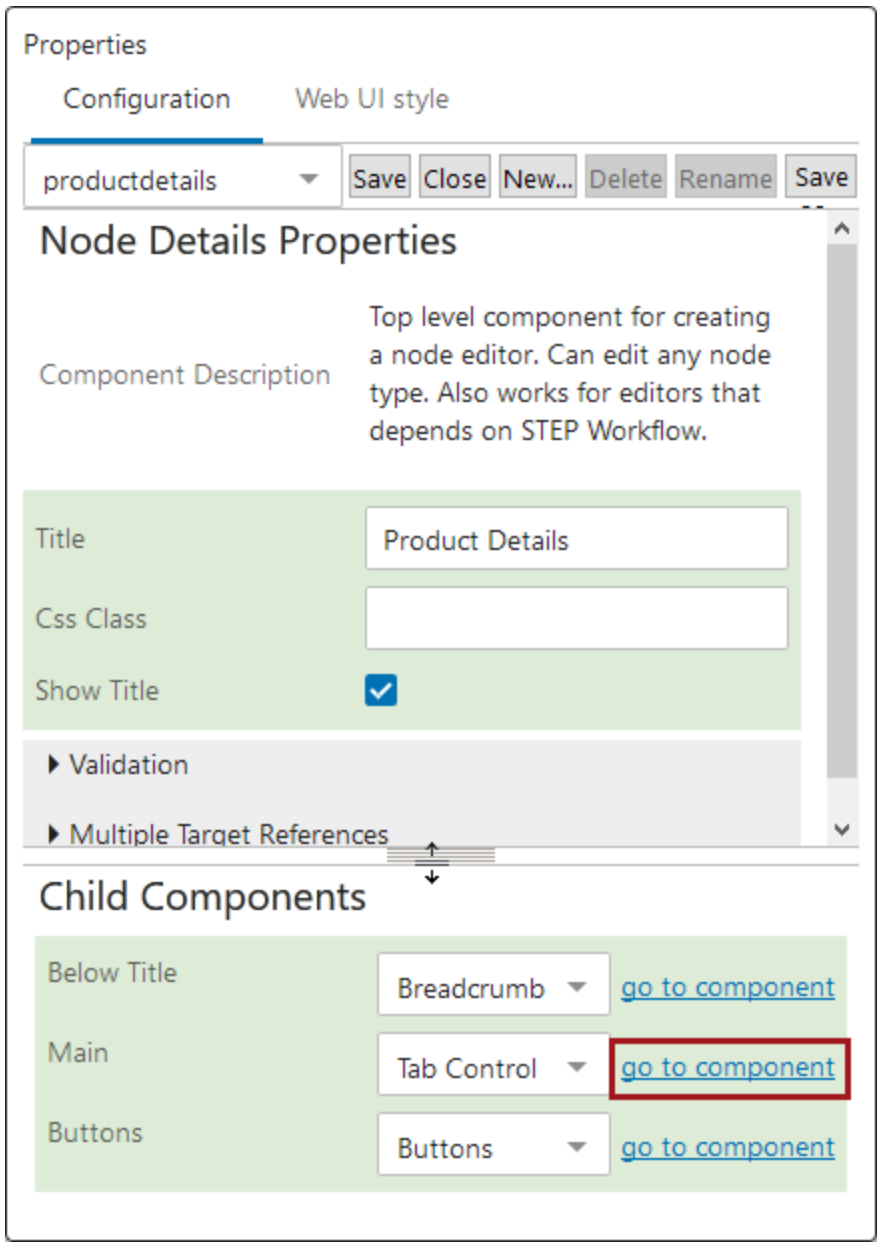
While the actual business function may differ, it is important that the following settings remain as pictured above:

- **Input Parameters**: while the names for 'Current Node,' 'stateId,' and 'workflowId' may differ, the Type MUST be entered exactly as seen pictured above.
- **Return Type**: This MUST be set as an Integer.

Note: Even if no workflows are being used, the Input Parameters still must be entered in the business function as pictured above.

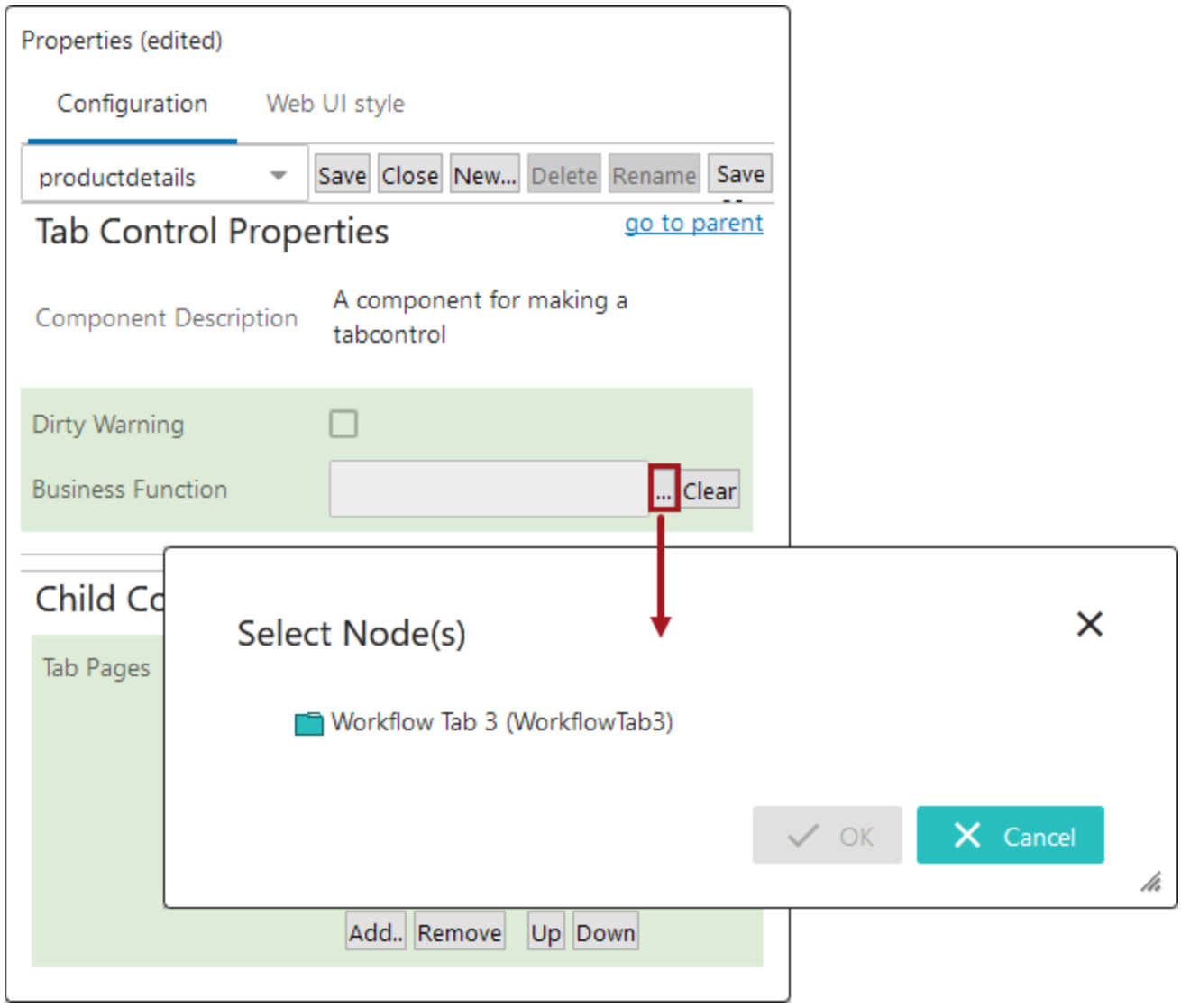
---

3. Once the business function has been created, navigate to the desired Web UI and enter into design mode.
4. In design mode, navigate to the Node Details Screen that opens when an object is selected. Go to Child Components > Main > Tab Control > click on **go to component**.

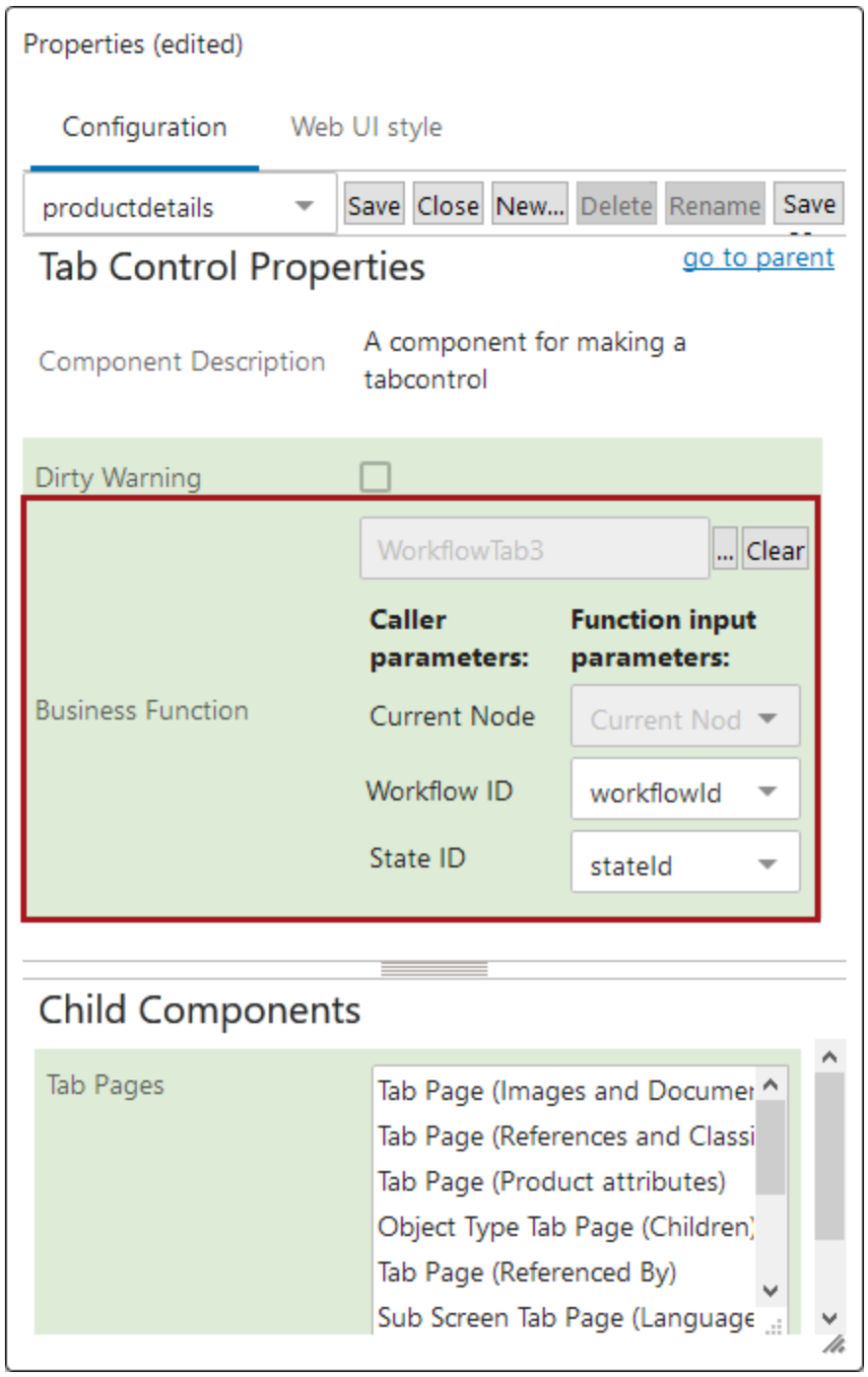


For more information on Node Details Screens, see the **Node Details Screen** topic in this documentation.

5. In Tab Control Properties, next to the Business Function parameter, click the ellipsis button (...) to select a business function.



6. The **Current Node** will automatically be set and is unable to be edited. Make sure that the correct **Workflow ID** and **State ID** are selected from the dropdown menu.



Note: If the business function is ever changed or updated in workbench, the function needs to be cleared out of the designer in Web UI and then re-selected and set again. The business function will not work as expected if this is not done.

7. Click **Save** and close the designer. Any tab pages defined in the business function are now set in Web UI as default tabs.

Note: Additional options with respect to navigation through workflows in the Web UI are available using the Business Action with Web UI Bind component. This component, configurable as either a toolbar action (on Node Lists) or a standard action (on Node Details screens), enables screen forwarding in workflows, for example, regardless of where the object is accessed or in which workflow state it resides. For more information on the Business Rule with Web UI component, see the **Business Action with Web UI Bind** component topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Important: If using the 'Business Function' feature to determine default tabs in tandem with the 'Business Condition' parameter to determine display of tabs, admin users should thoroughly test the combinations to ensure the configuration does not result in end users being unable to access data. To avoid these issues, admin users can use the 'Reference other Business Condition'-type business condition when determining the display of tabs. This allows users to configure their tabs so the default tab condition references the show / hide condition and then, based on that evaluation, determines which default tab to display. For more information on configuring Attribute Value Comparison-type business conditions, see the **Business Condition Attribute Value Comparison** topic in the Business Rules documentation.

Node Editor Component

A Node Editor component is used to display different information and details about a selected object. A Node Editor can be added as a child component of other components such as Node Details, Split Panel, Tab Page, and Draggable Split Panel.

As the Node Editor name suggests, most of the information / values displayed is editable data. However, if the end user should be restricted in regards to changing data, components (where applicable) can be made read only during configuration.

Prerequisites

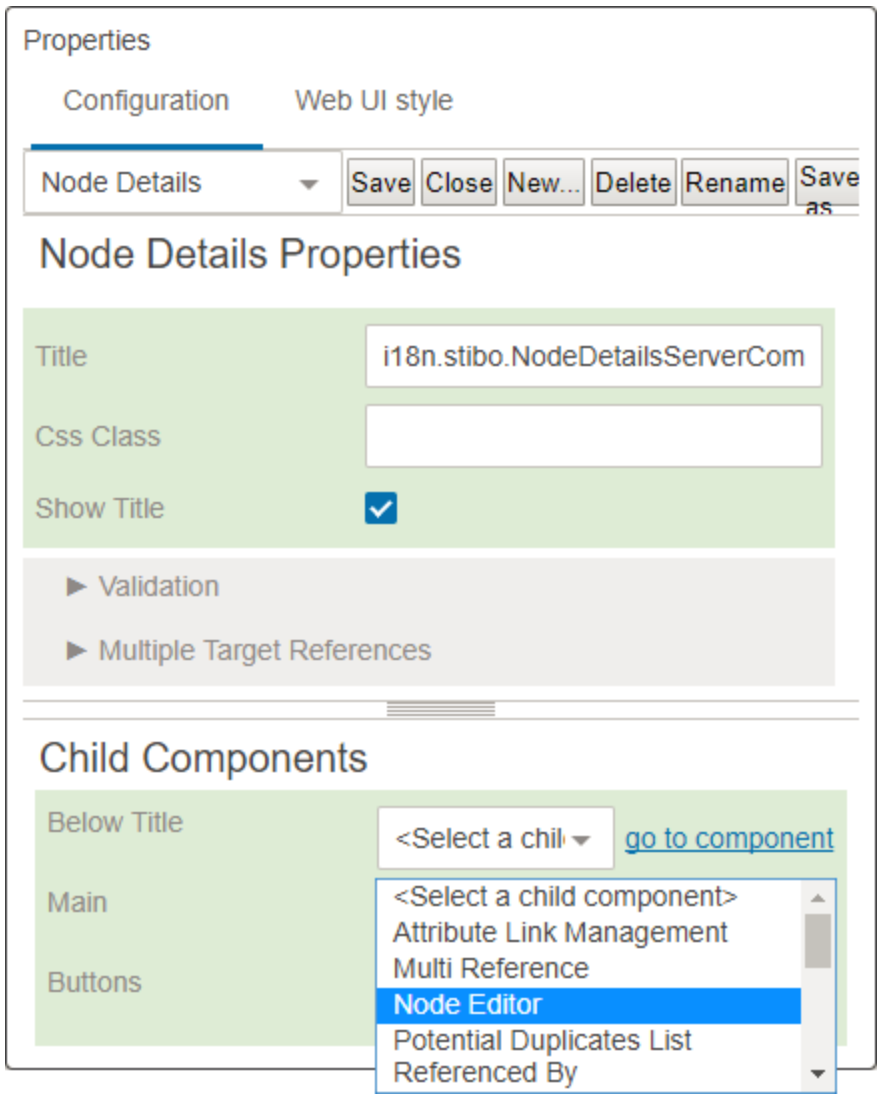
It is expected that anyone configuring the Node Editor component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuring Node Editor Properties

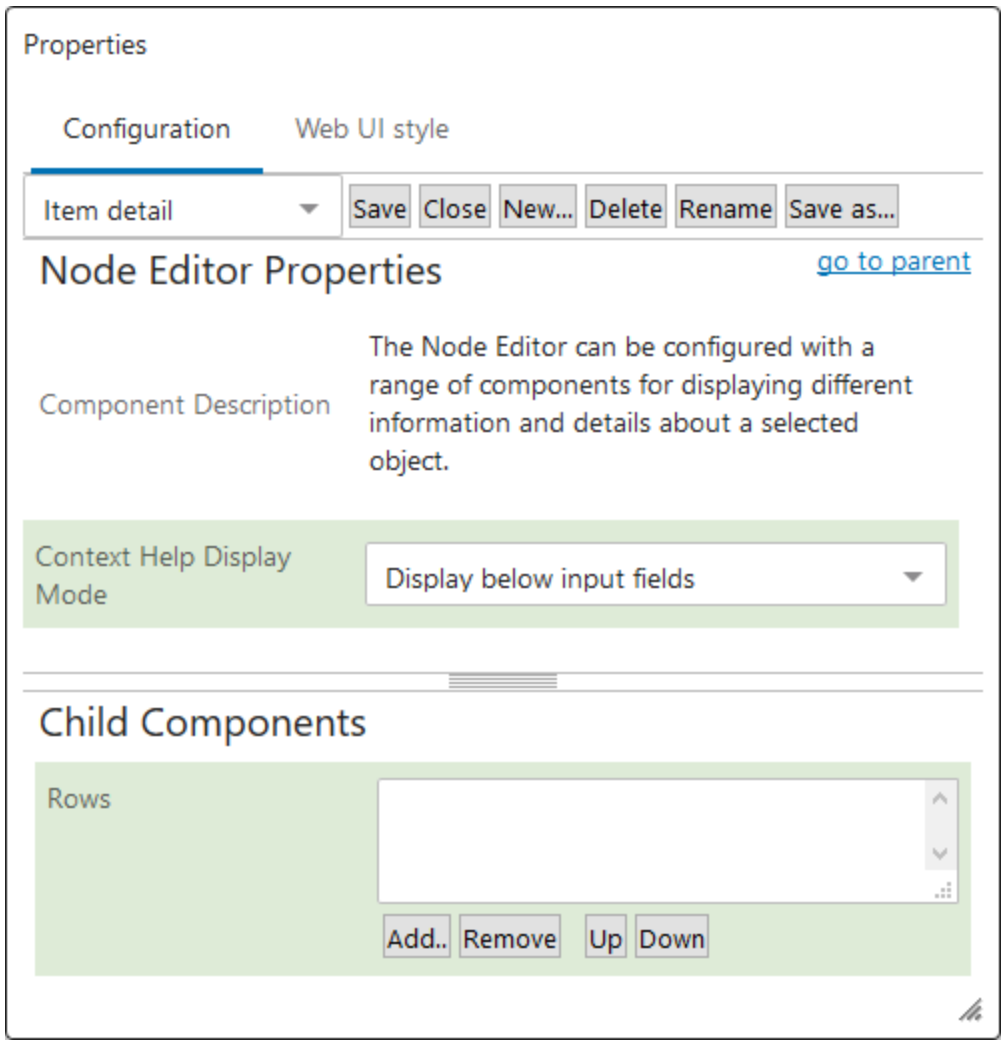
The Node Editor Properties consists of a **Rows** child component, which allows for the selection of various components to be used to display needed information.

The example below shows a configuration of a Node Editor Screen on a Node Details:

1. Select a Node Details screen if it already exist, if not then create it new. Navigate to the child components section of the Node Details screen and under the Main field, select Node Editor from the dropdown.

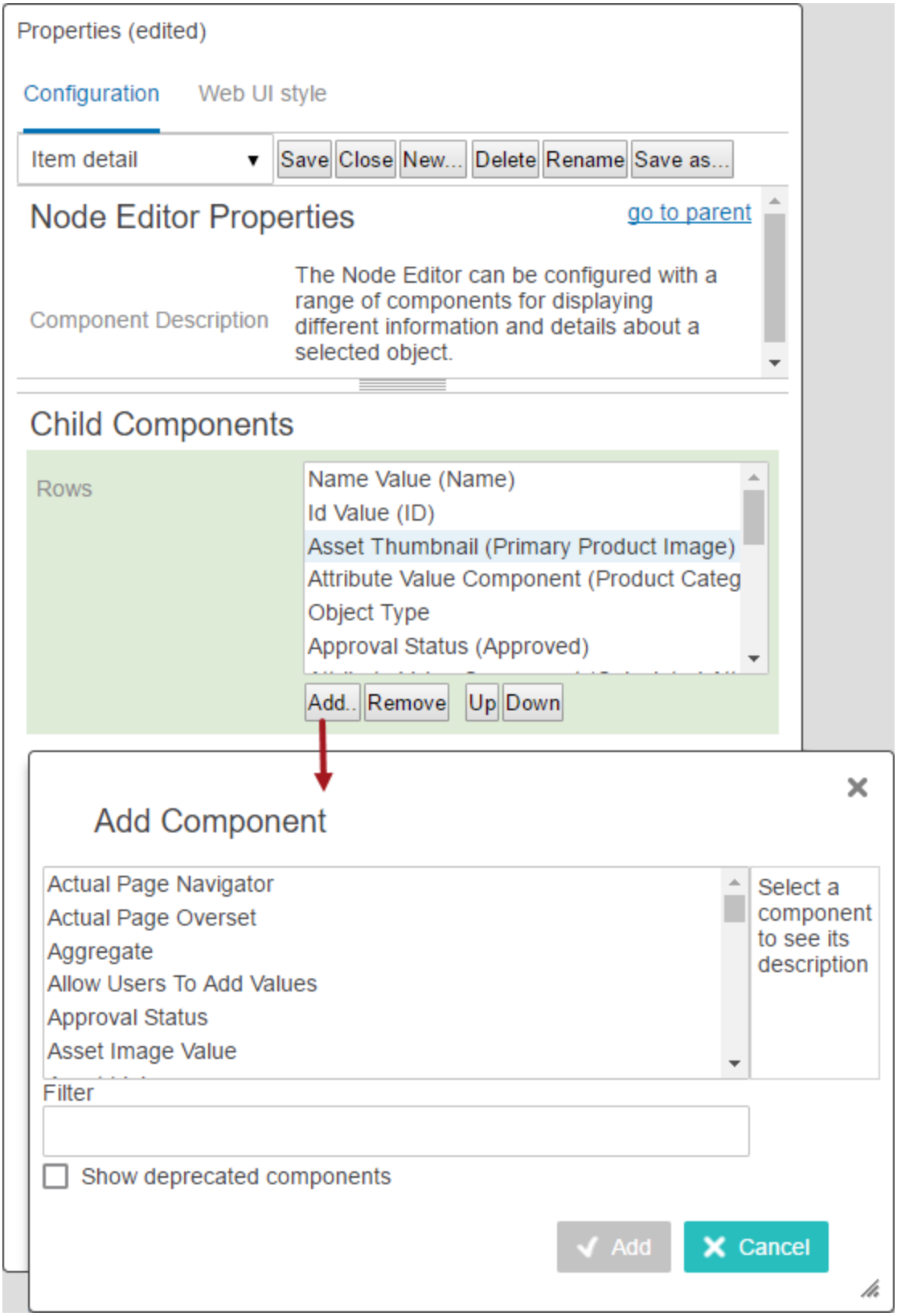


2. Click on 'go to component' next to Node Editor to display the Node Editor Properties.
3. On Node Editor Properties, define how user-configured help text should display in the Node Editor by making a selection from the 'Context Help Display Mode' dropdown. By selecting 'Display below input fields', all configured help text will display beneath the input field for that attribute at all times. By selecting 'Click icon to display', configured help text will display for an attribute when a user clicks on the information icon to the right of the input field ( ).
4. Under 'Child Components', click the **Add** button under the 'Rows' field, and make a selection from within the 'Add component' dialog. Clicking on the component name displays a description of the component.



Note: Two main components used for displaying and editing attribute values are Attribute Value and Attribute Value Group. When displaying different types of objects of the same object type that have different valid attributes, a useful feature of these two components is that invalid attributes will be automatically hidden and not displayed on screen.

5. Once a selection is made, click **Add**.
6. Configure the added component, if applicable. As an example, adding an Attribute Value Component automatically brings up an additional properties screen with a required Attribute parameter. If you are adding Name Value or Id Value components, no additional configuration is needed.


Properties (edited)
Configuration
Web UI style
Item detail
Save
Close
New...
Delete
Rename
Save as...
Node Editor Properties
go to parent
Component Description
The Node Editor can be configured with a range of components for displaying different information and details about a selected object.
Child Components
Rows
Name Value (Name)
Id Value (ID)
Asset Thumbnail (Primary Product Image)
Attribute Value Component (Product Categ
Object Type
Approval Status (Approved)
Add..
Remove
Up
Down
Add Component
Actual Page Navigator
Actual Page Overset
Aggregate
Allow Users To Add Values
Approval Status
Asset Image Value
Select a component to see its description
Filter
Show deprecated components
Add
Cancel

7. Components can be added and removed using the buttons below the Rows field, and the components will display on-screen based on how they are ordered within the field. They can be re-ordered using the Up and Down buttons and can be edited by double clicking the component name.
8. Once the configuration is complete, click **Save** in the designer and **Close** to return to normal Web UI operation.

Note: Node Editor Component can be configured under Node Details screen if user likes to display the information without tab control.

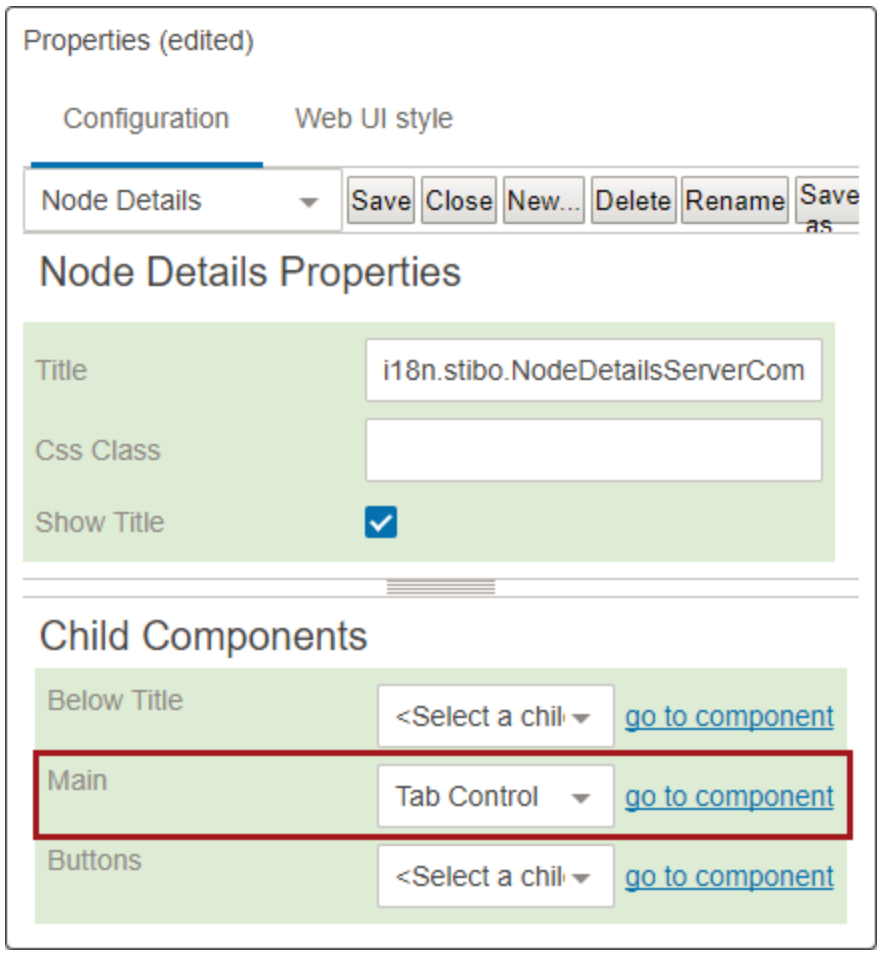
For additional information on using a Node Editor, see the following topics in **Web User Interfaces** / **Using a Web UI**:

- **Node Details Screen**
- **Attribute Value Component**
- **Attribute Value Group Component**

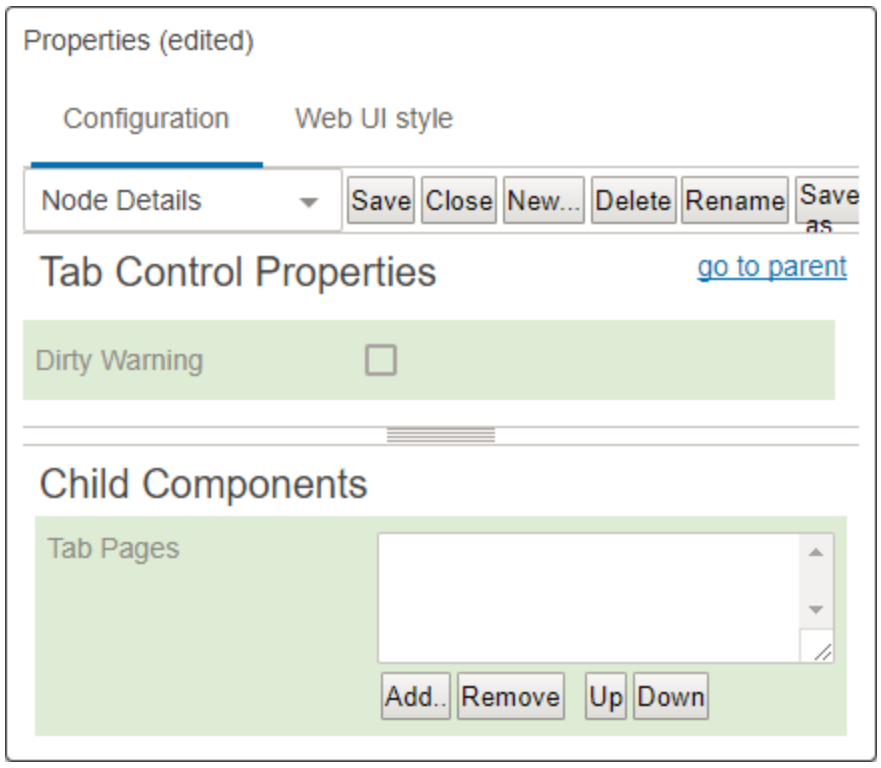
Configuring the Node Editor in a Tab Page

Sometimes it is useful to display a split screen in a tab page, with one side being the Node Editor component. To do so, follow the steps below:

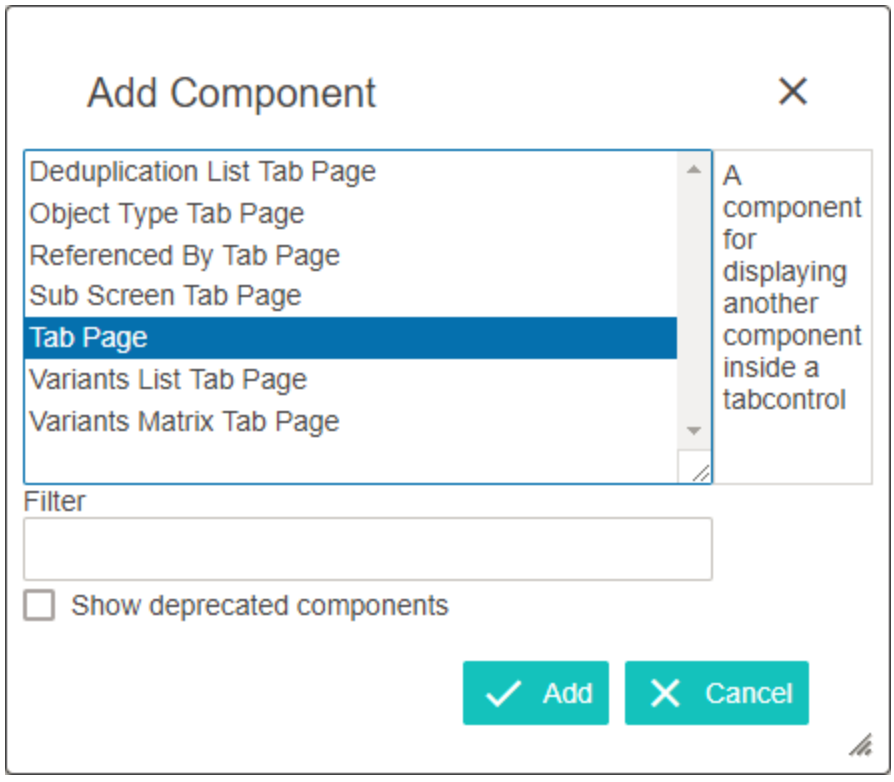
1. Select a Node Details screen if it already exists, if not then create a new one.
2. On the Node Details Properties go to Child Components > Main > select Tab Control > go to components.



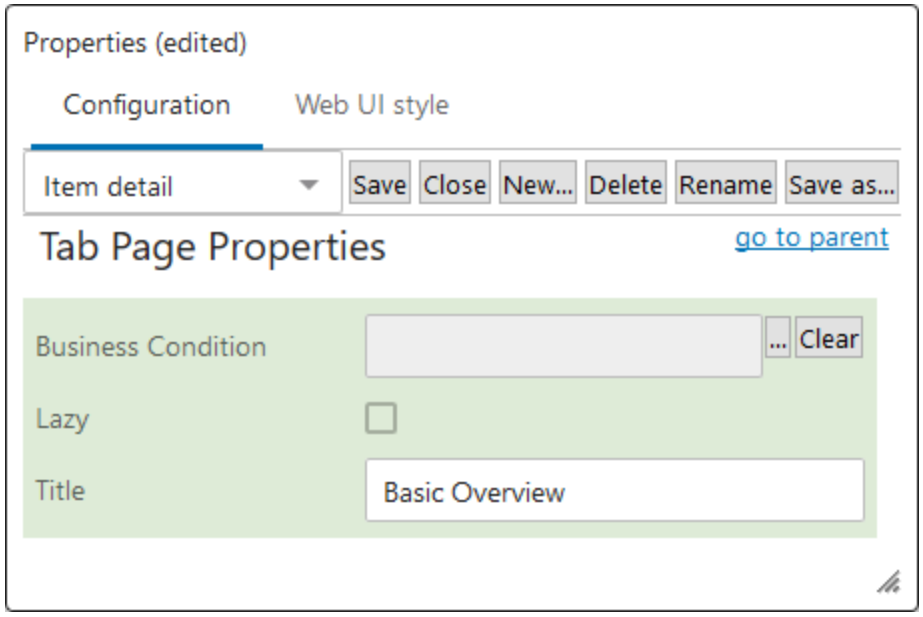
3. On the Tab Control Properties screen under Child Components in the Tab Pages field, click the Add button.



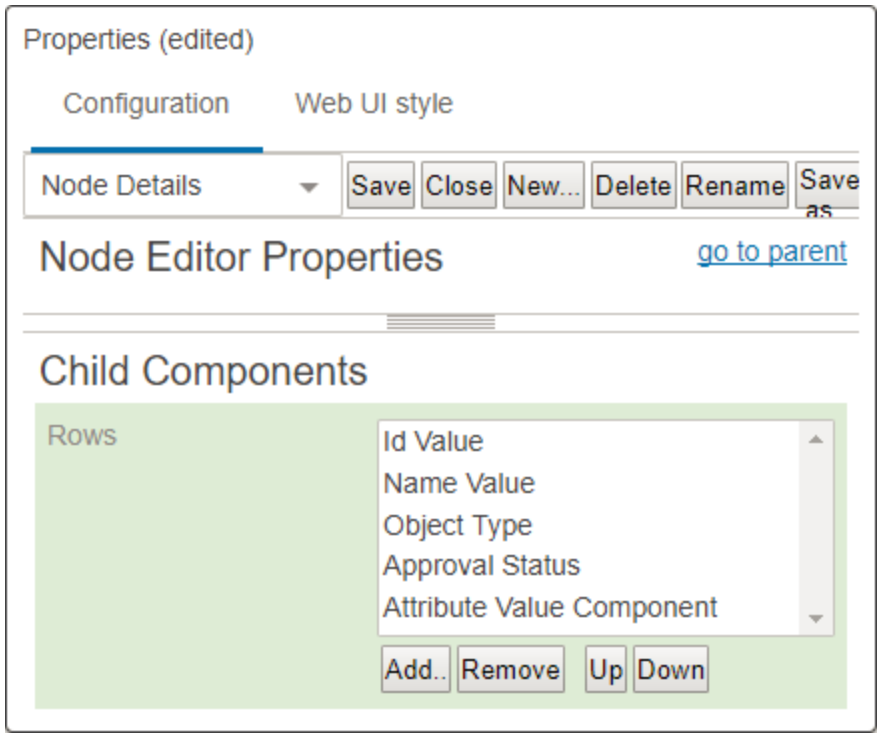
4. Select Tab Page and click on Add.



5. Double click the newly added 'Tab Page', and on the Tab Page Properties go to Child Components > Tab content > select Node Editor from the dropdown menu > go to component.



6. Add any required components to display product information.

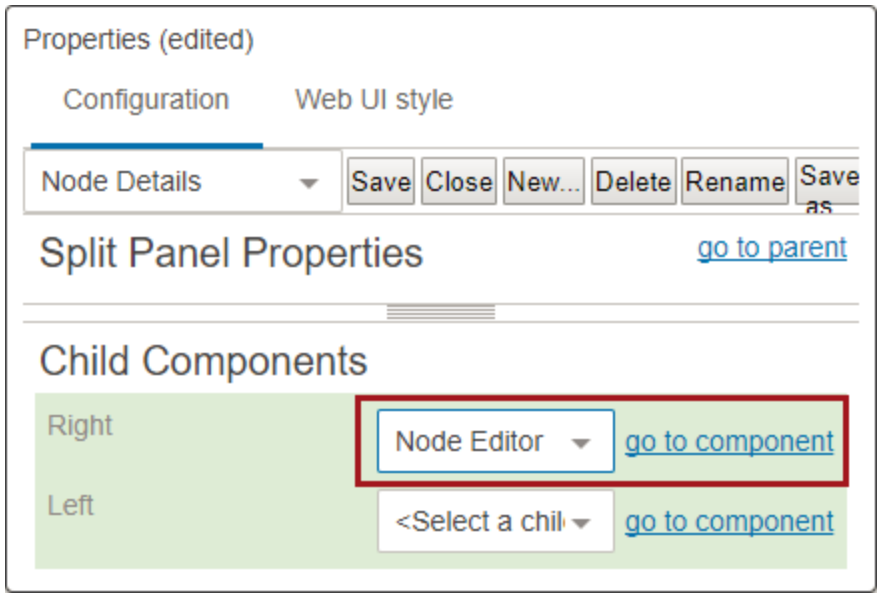


7. Once the configuration is complete, click Save and close the designer.

Note: Tab Page component is available under Tab Control. For more information, see the **Tab Page** topic in the **Web User Interfaces Web User Interfaces / Web UI Setup and User Guide** documentation.

Configuration of Node Editor Screen in a Split Panel

1. Select Node Details screen if already exist, if not create a new Node Details.
2. Select Split Panel option from Main dropdown under Child Component area.
3. On Split Panel Properties, select either the Right or Left field and choose Node Editor from the dropdown. Then click on go to component.



4. Add any needed components needed to display product information.
5. Once the configuration is complete, click Save and close the designer.

Note that the above steps can be used to configure the Node Editor component for a Draggable Split Panel as well, which is available in the Main dropdown under child components area of Node Details Properties.

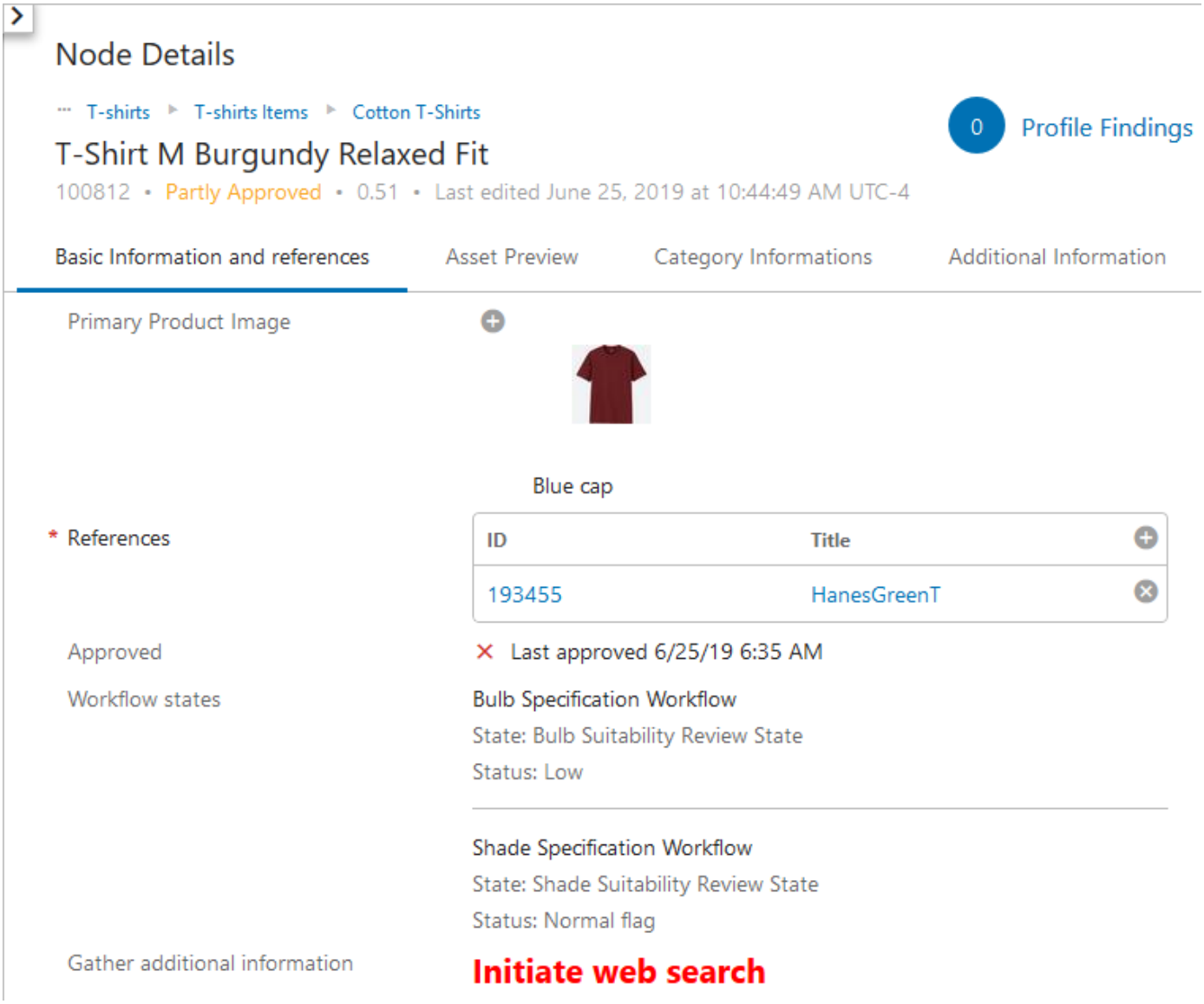
Note: If Node Editor Screen is used in the Right side of the page, users can select Node editor option from Right dropdown. Left side user can select other options, for example References or a Multi reference.

Examples of Configured Node Editor Components

Below are examples of Node Editors that are configured to fit different purposes and screenshots of how they would display to end users.

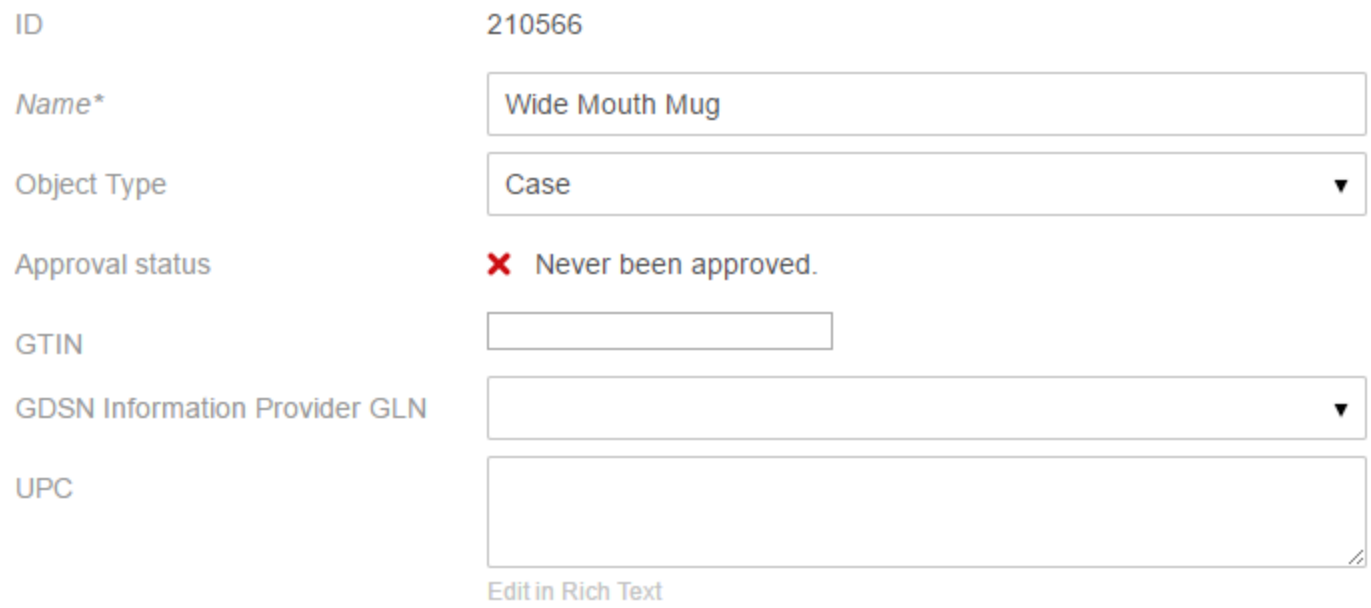
Example 1: A Node Editor configured to display sellable product information. A Summary Card component of the 'Description Card' type has been added at the top of the screen. This displays a breadcrumb (in blue text), and then the name, ID, approval status, version, and information related to when the product was last updated. Data profiling is enabled, resulting in display of the 'Profile Findings' component showing to the left of the

Summary Card. Components added to the Rows field (and shown below, in order from top to bottom) are Referenced Asset Representation (which displays the thumbnail image), References, Approval Status, Workflow States, and HTML Function, which uses a business function to render HTML in the Web UI. In this example, HTML Function enables a web search to gather additional information about the product.



Example 2: A Node Editor configured to display customer address information. The address attributes are configured to display via the Attribute Value Group Component as the only component in the Node Editor Properties > Child Components > Rows field.

Example 3: A Node Editor configured to display GDSN details. Components added to the Rows field (and shown below) are ID, Name, Object Type, Approval Status, and three Attribute Value components.

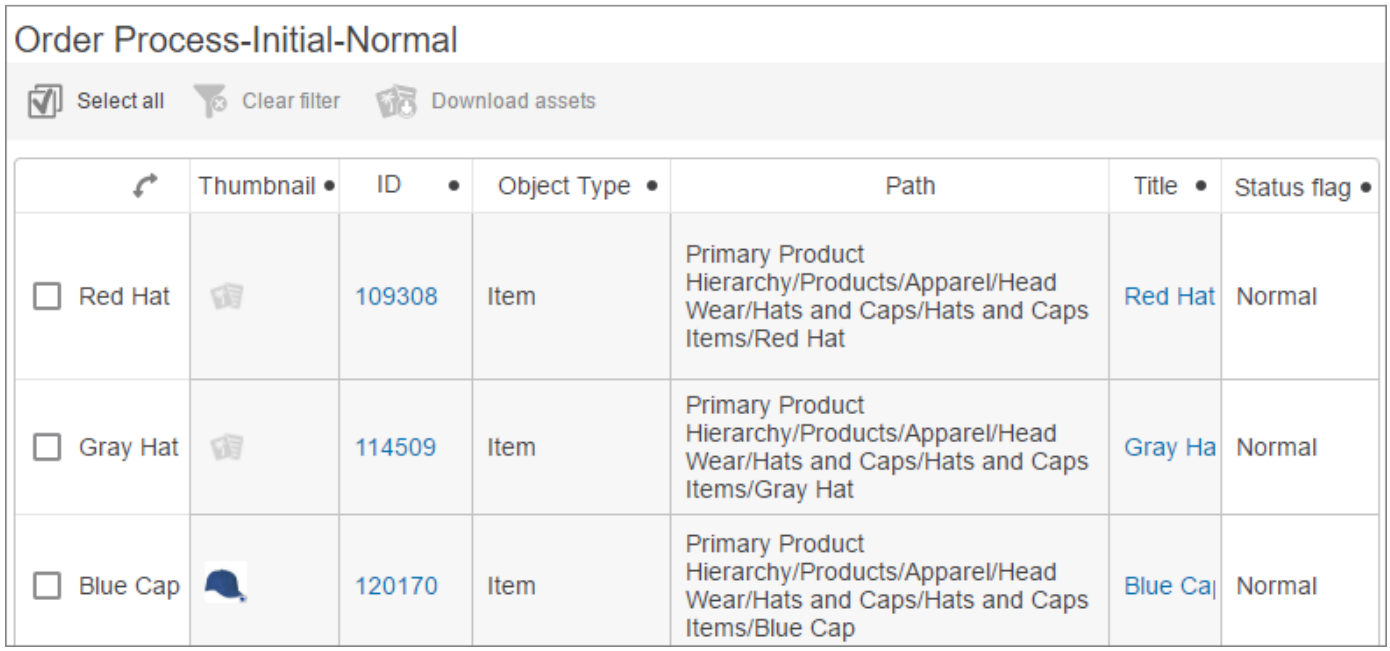


Node List Component

A Node List component displays objects in a table / grid format. The view can be further customized by configuring the data to display via different display modes and adding different action buttons that users can click while working with the object data. The display modes can then be customized with a range of headers, allowing for different information about the listed objects to be displayed. The behavior of many of the various actions can be further configured, also.

A Node List can be added as a child component of various other components including, but not limited to, Multi Reference, Packaging, Task List, Display Children Screen, Collection Content, and Advanced Search.

Below is one example of a Node List (configured as a child component within Task List Properties).



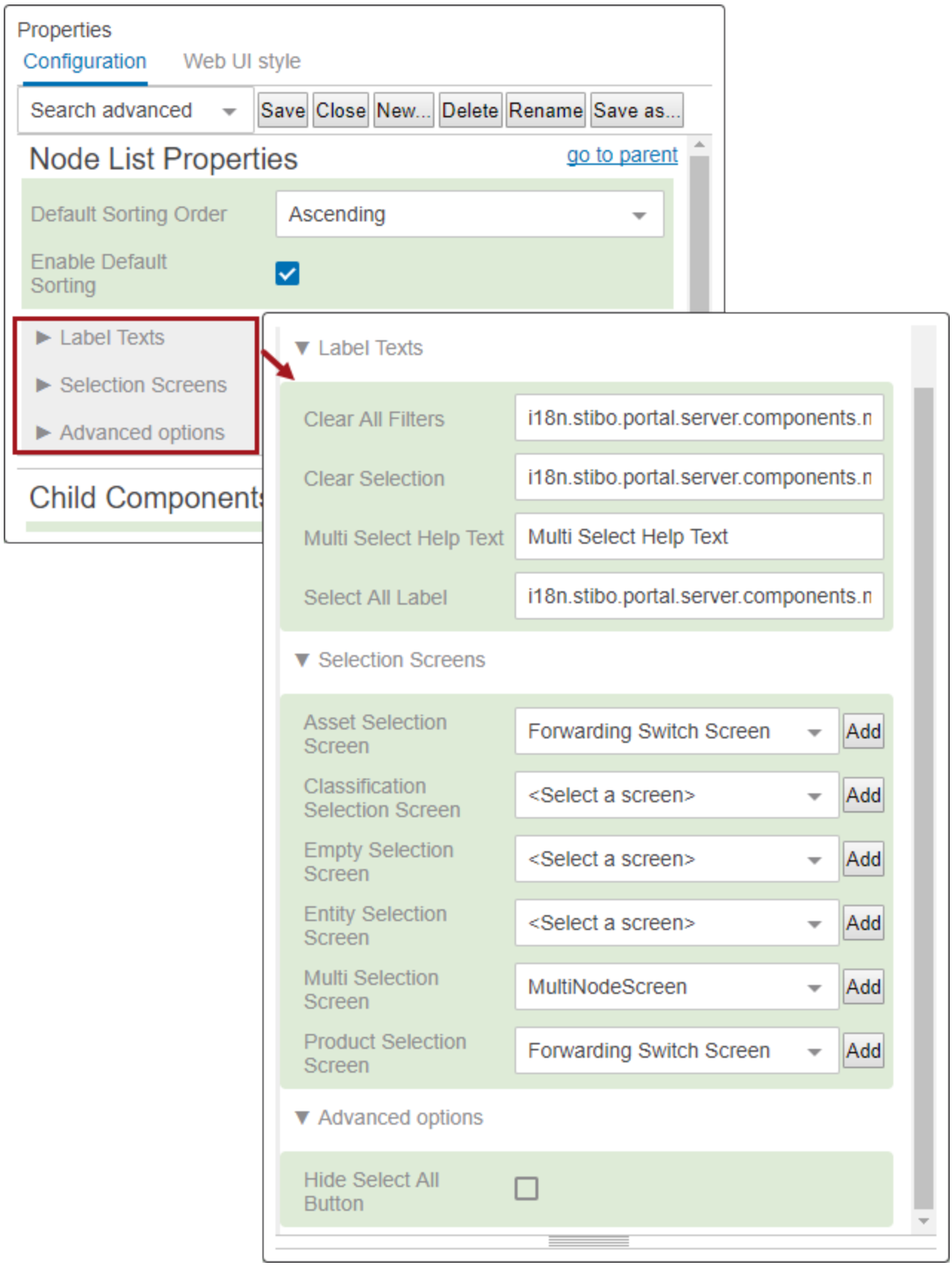
Specific details on setting up this particular Node List can be found in the **Multi Reference Editor** topic in **Using a Web UI**. General Node List configuration instructions can be found below.

Prerequisites

It is expected that anyone configuring the Node List component is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

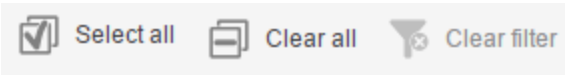
Configuring Node List Master Component Properties

A Node List is highly configurable. Each parameter in Node List Properties features help text, accessible by hovering over and clicking the info icon to the right of each parameter name. The default parameter settings may differ depending on where a Node List is used. The following screenshot shows another example of a Multi Reference Properties Node List.


Properties
Configuration
Web UI style
Search advanced
Save
Close
New...
Delete
Rename
Save as...
Node List Properties
go to parent
Default Sorting Order
Ascending
Enable Default Sorting
Label Texts
Selection Screens
Advanced options
Child Components
Label Texts
Clear All Filters
i18n.stibo.portal.server.components.n
Clear Selection
i18n.stibo.portal.server.components.n
Multi Select Help Text
Multi Select Help Text
Select All Label
i18n.stibo.portal.server.components.n
Selection Screens
Asset Selection Screen
Forwarding Switch Screen
Add
Classification Selection Screen
<Select a screen>
Add
Empty Selection Screen
<Select a screen>
Add
Entity Selection Screen
<Select a screen>
Add
Multi Selection Screen
MultiNodeScreen
Add
Product Selection Screen
Forwarding Switch Screen
Add
Advanced options
Hide Select All Button

Follow these steps to configure the component:

1. Enable or disable **Hide Standard Buttons**, as desired. When enabled, the 'Select all,' 'Clear selection,' and 'Clear all filters' buttons display above the table.



2. The only mandatory parameter is **ID**. A descriptive, unique ID can be given or the standard pre-filled text can be kept. The STEP system uses this ID to recognize which Node List to display.

Note: By enabling the 'Include Labels' parameter, all toolbar actions on the screen will be displayed with a label beneath the icon.

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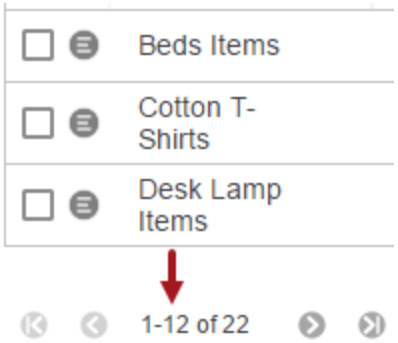
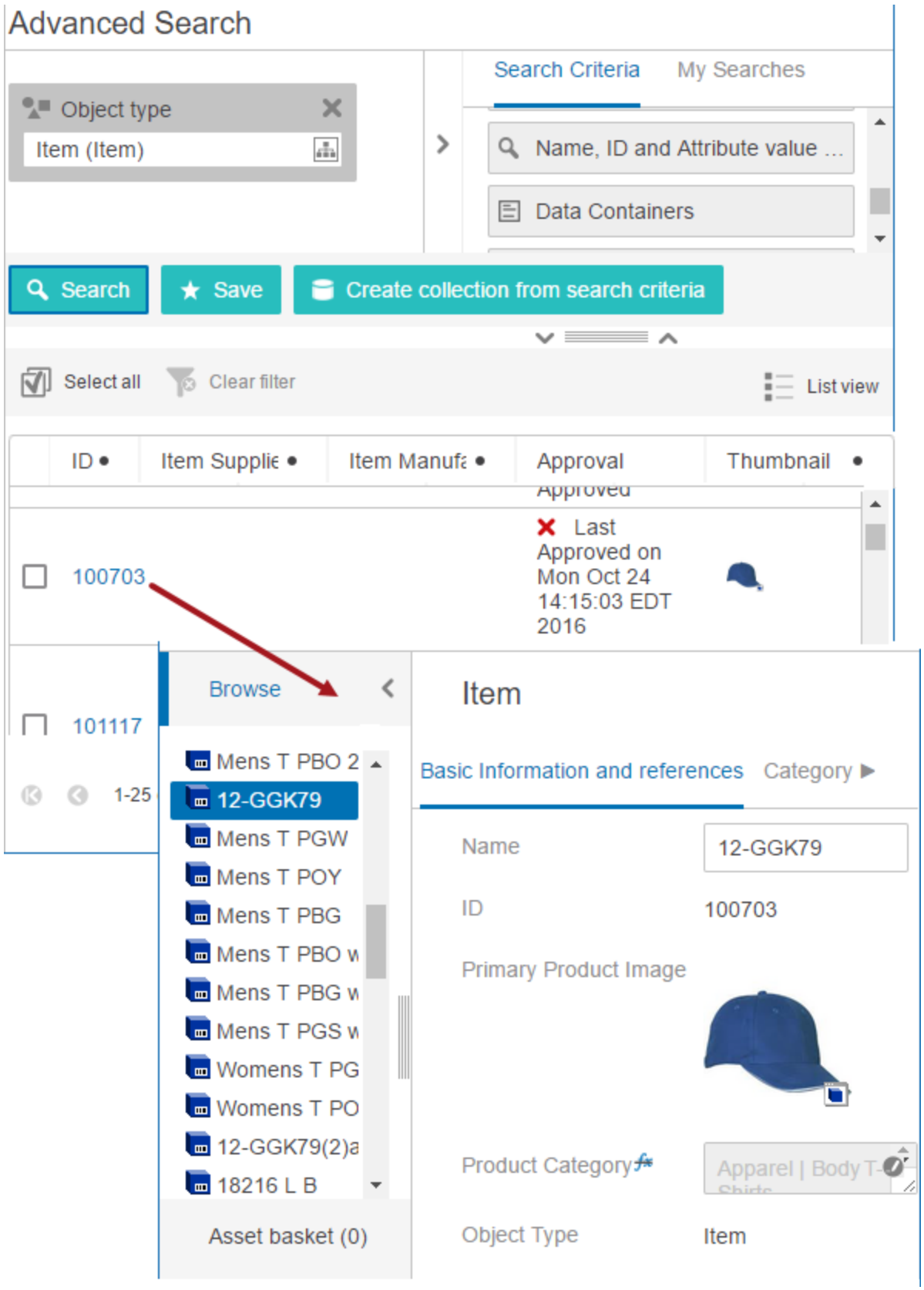
3. Either enable or disable **Lookup Screen Type For Navigation** based on the desired behavior, outlined below:
    - If unchecked, then the object screen selection that is defined under Selection Screens will be used as a target screen (e.g., Asset Selection Screen, Classification Selection Screen, Product Selection Screen, and Entity Selection Screen).
    - If checked, then the screen mappings that are defined in the Main Properties are used when selecting the object from the Node List.
4. When using Table Display Mode (List view), Film Strip Display Mode (Filmstrip view), and Gallery Display Mode (Gallery view), the objects in the table are displayed by page. You can determine the maximum number of objects to show per page. Change the number in the **Page Size** field or use the default (25 objects per page).



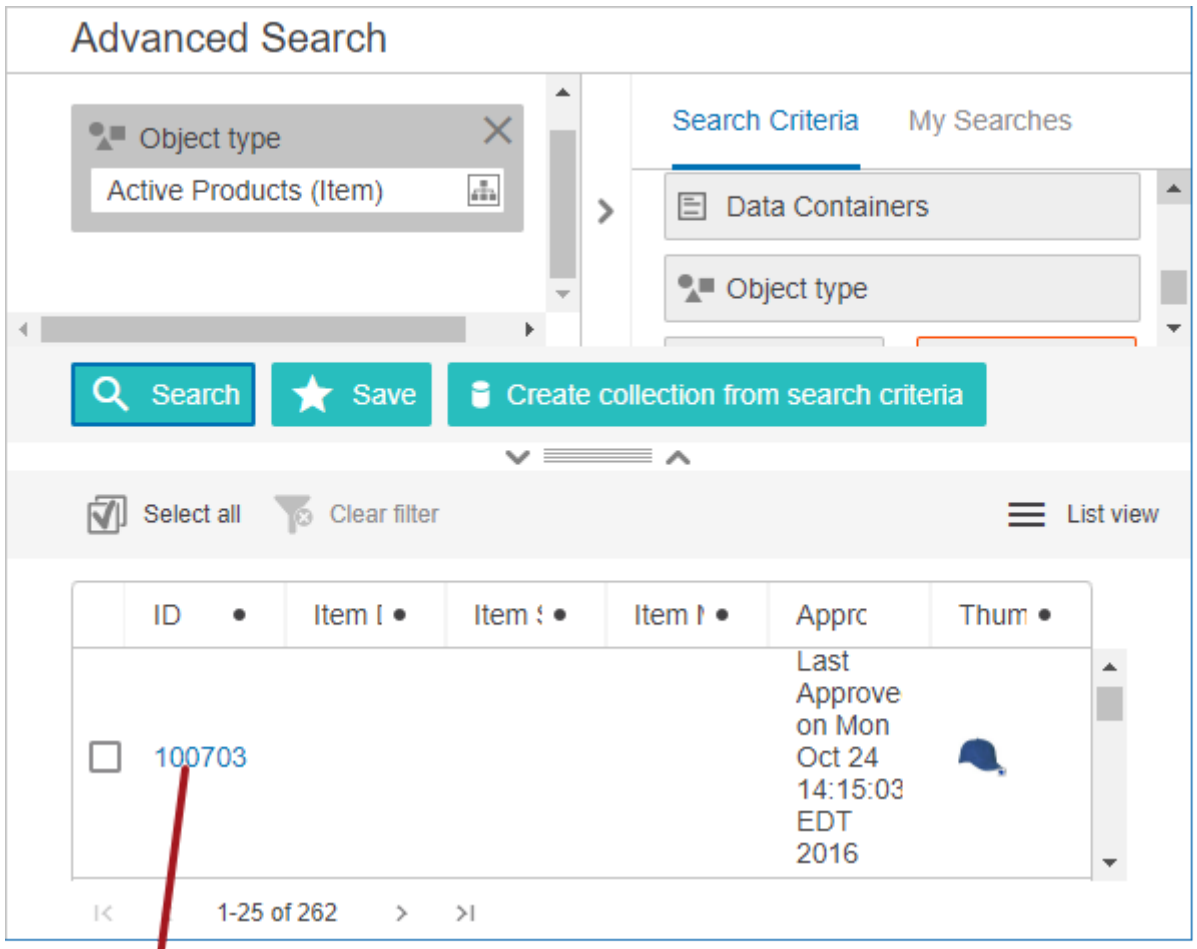
5. Determine how the object data should be displayed when you click on an object ID link in a Node List. You can either view the object details directly on the same screen by enabling the **Use Details Overlay** parameter—or view the object details on a different screen. Both methods use the same screen mappings (dependent on how you have set up the parameters) and display the same information. To better explain, below are two examples, both using the Advanced Search screen type:

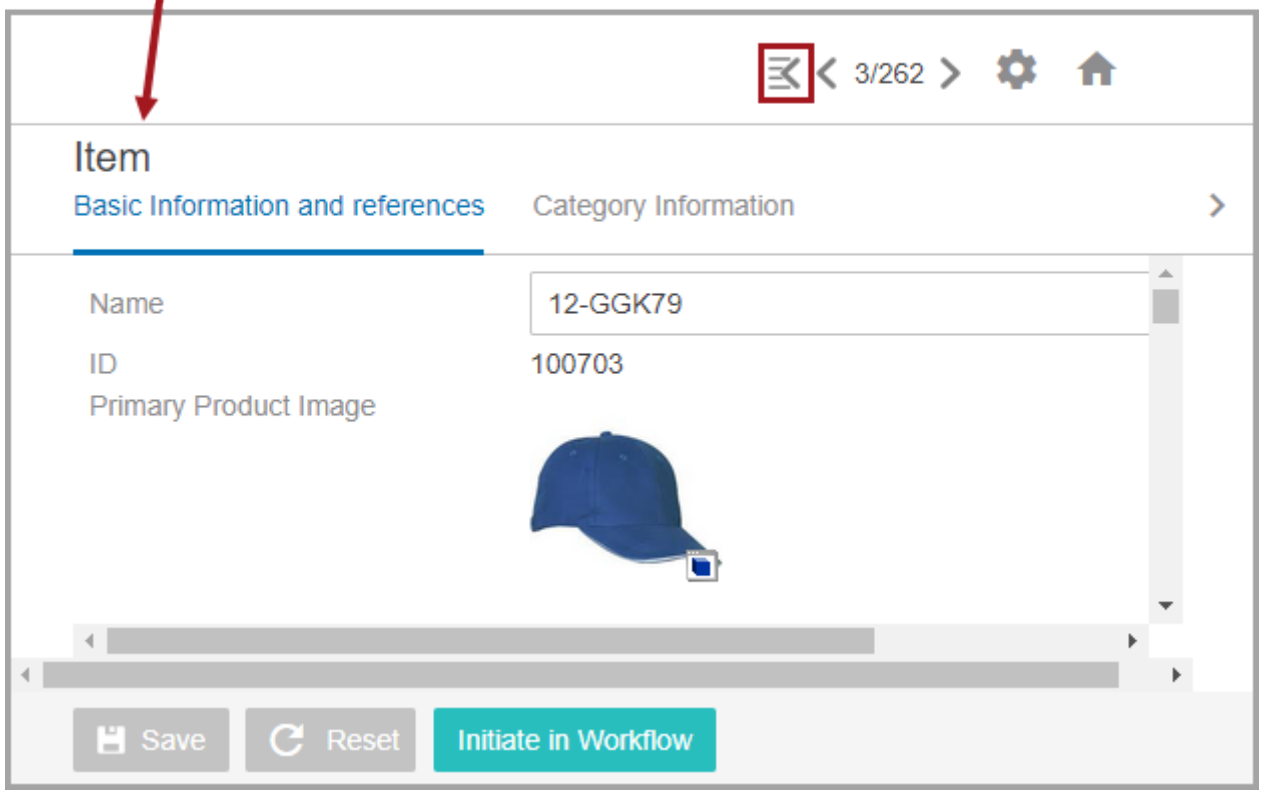
A user runs a search and then clicks on ID 101117 that is shown in the results list, which is a Node List in List view.

- Example 1: **Use Details Overlay** is disabled (unchecked), so the screen navigation takes the user to the Item Details screen.


Advanced Search
Object type
Item (Item)
Search Criteria
My Searches
Name, ID and Attribute value ...
Data Containers
Search
Save
Create collection from search criteria
Select all
Clear filter
List view
ID
Item Supplie
Item Manufa
Approval
Thumbnail
Approved
Last Approved on Mon Oct 24 14:15:03 EDT 2016
100703
101117
1-25
Browse
Mens T PBO 2
12-GGK79
Mens T PGW
Mens T POY
Mens T PBG
Mens T PBO w
Mens T PBG w
Mens T PGS w
Womens T PG
Womens T PO
12-GGK79(2)a
18216 L B
Asset basket (0)
Item
Basic Information and references
Category
Name
12-GGK79
ID
100703
Primary Product Image
Product Category
Apparel | Body T-
Object Type
Item

- Example 2: **Use Details Overlay** is enabled (checked), so the Item Details screen displays as an overlay on the Advanced Search screen. Users can easily return to the results list / Node List by clicking the icon in the upper right corner and can use the arrows to navigate through each Node List item.


Advanced Search
Object type
Active Products (Item)
Search Criteria
My Searches
Data Containers
Object type
Search
Save
Create collection from search criteria
Select all
Clear filter
List view
ID
Item I
Item S
Item N
Apprc
Thum
100703
Last Approve on Mon Oct 24 14:15:03 EDT 2016
1-25 of 262

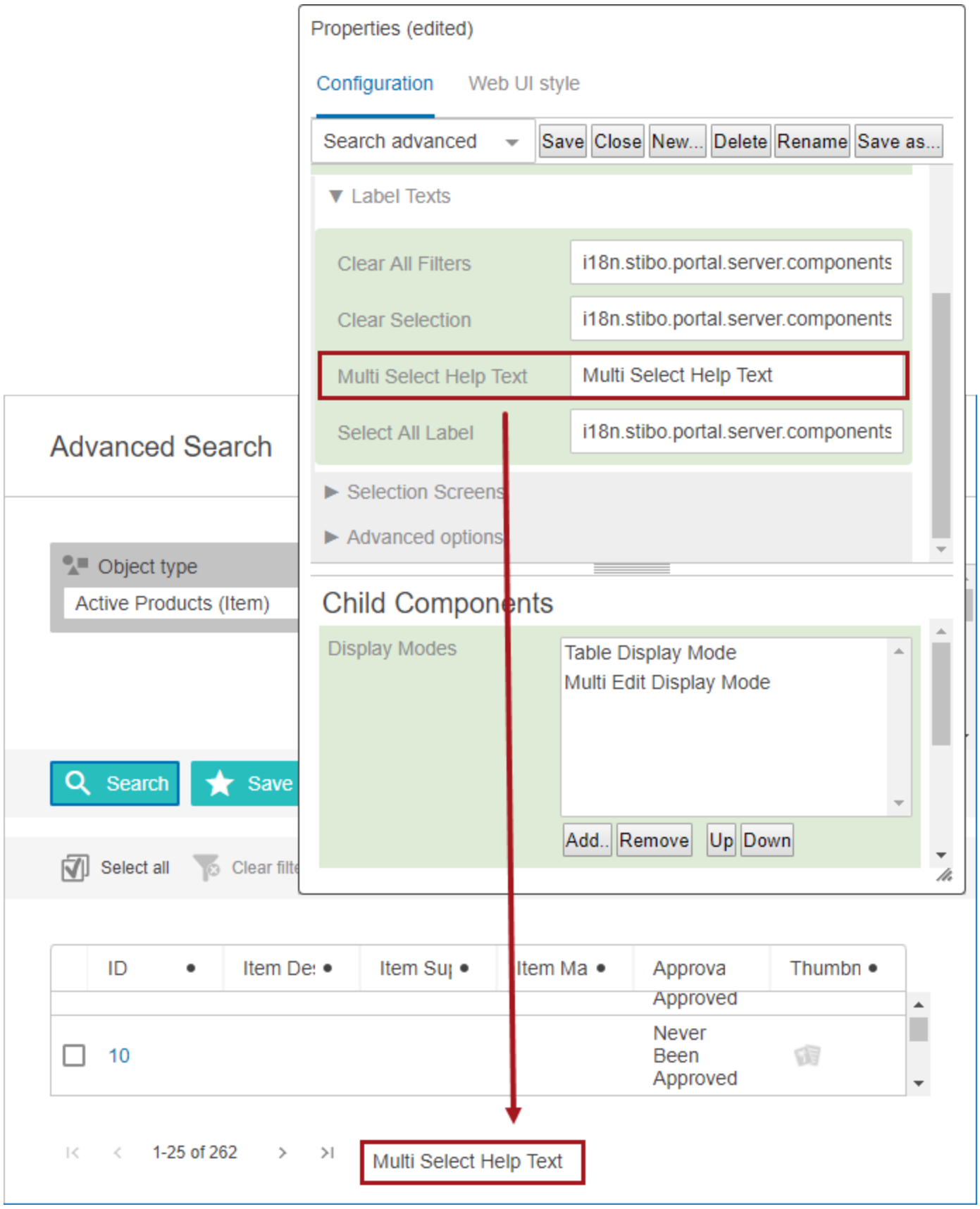

3/262
Item
Basic Information and references
Category Information
Name
12-GGK79
ID
100703
Primary Product Image
Save
Reset
Initiate in Workflow

6. Select a **Default Sorting Order** option (Ascending or Descending), if desired.
7. If a Default Sorting Order is selected, enable **Enable Default Sorting** by checking the box. When enabled, initial table sorting will be performed on the contents of the first column or row (depending on property direction) when applicable, otherwise on ID. If disabled, no initial sorting will be performed.

Note: If Table Sorting is enabled for one of the headers configured within a display mode, then that setting overrides the Node List Enable Default Sorting selection.

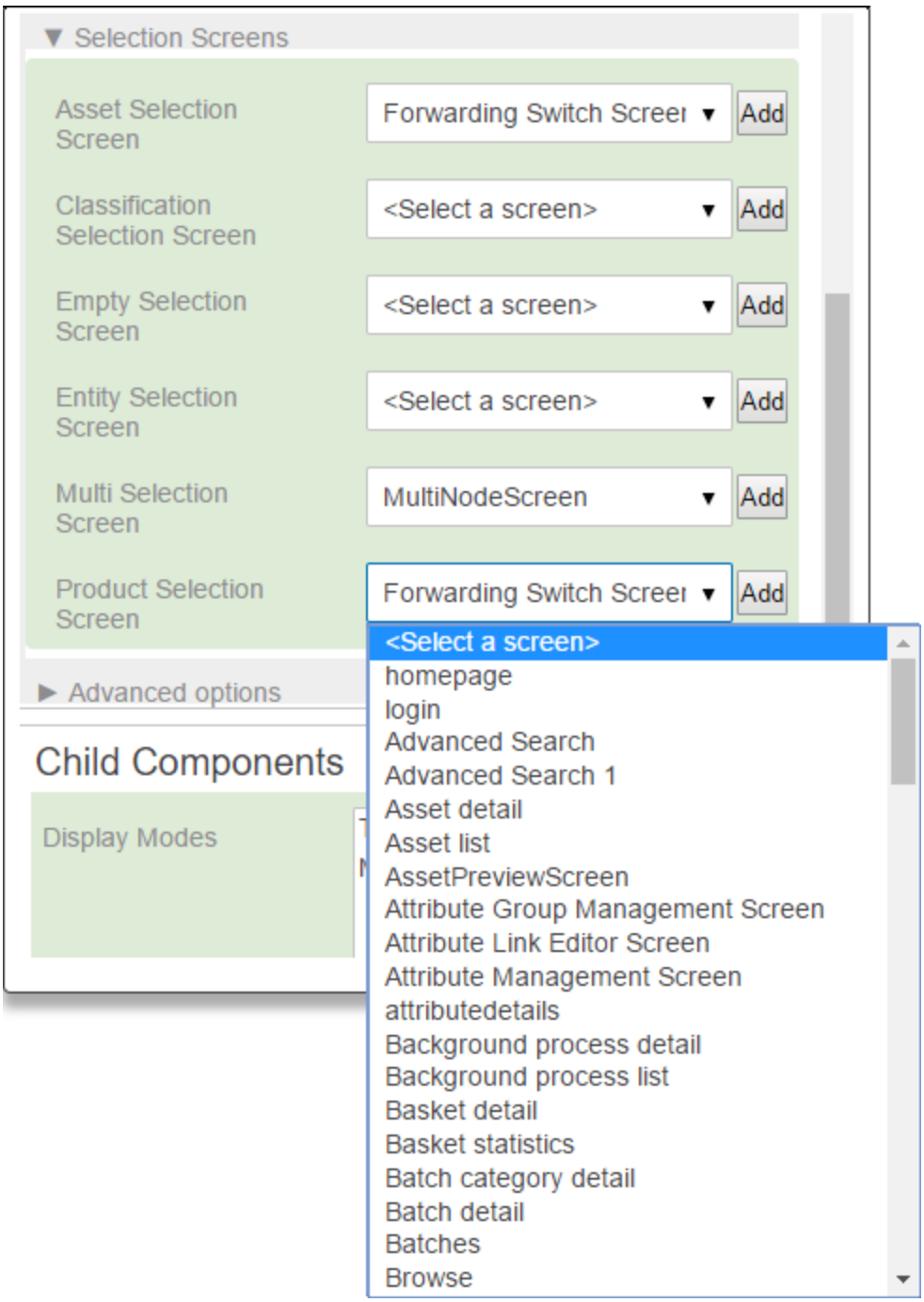
Access additional parameters by clicking on **Label Texts**.

8. Under Label Texts, if desired, change the hover text displayed for one or all of the three standard buttons (described in Step 1) by typing the desired text into the **Clear All Filters**, **Clear Selection**, and/or **Select All Label** parameter fields.
9. To display text / information to a user looking at data in Table Display Mode (List view), Film Strip Display Mode (Filmstrip view), or Gallery Display Mode (Gallery view), add it to the **Multi Select Help Text** parameter. It is blank by default. An example follows.


Properties (edited)
Configuration
Web UI style
Search advanced
Save
Close
New...
Delete
Rename
Save as...
Label Texts
Clear All Filters
i18n.stibo.portal.server.components
Clear Selection
i18n.stibo.portal.server.components
Multi Select Help Text
Multi Select Help Text
Select All Label
i18n.stibo.portal.server.components
Selection Screens
Advanced options
Child Components
Display Modes
Table Display Mode
Multi Edit Display Mode
Add..
Remove
Up
Down
Advanced Search
Object type
Active Products (Item)
Search
Save
Select all
ID
Item De
Item Su
Item Ma
Approva
Thumbn
Approved
10
Never Been Approved
1-25 of 262
Multi Select Help Text

Access additional parameters by clicking on **Selection Screens**.

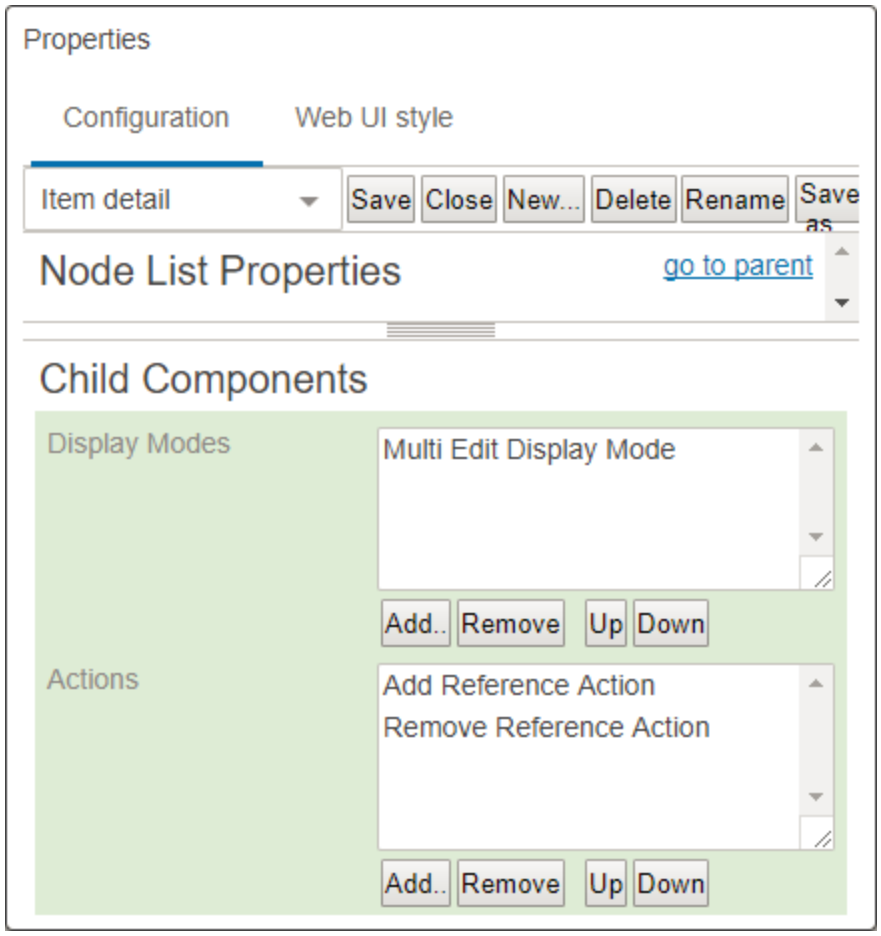
10. Under Selection Screens, if you wish to override the configured Web UI mappings, make selections regarding which screen(s) a user will see after clicking on object links in the table. Using the dropdown for each parameter, select the ID of the screen to display when:
    - **Asset Selection Screen**: A single asset is selected.
    - **Classification Selection Screen**: A single classification is selected.
    - **Empty Selection Screen**: The selection is empty.
    - **Entity Selection Screen**: A single entity is selected.
    - **Multi Selection Screen**: The selection has multiple entries.
    - **Product Selection Screen**: A single product is selected.



Important: If using these screens instead of the Main Properties mappings, you also need to disable the Lookup Screen Type For Navigation parameter, as described earlier in this topic.

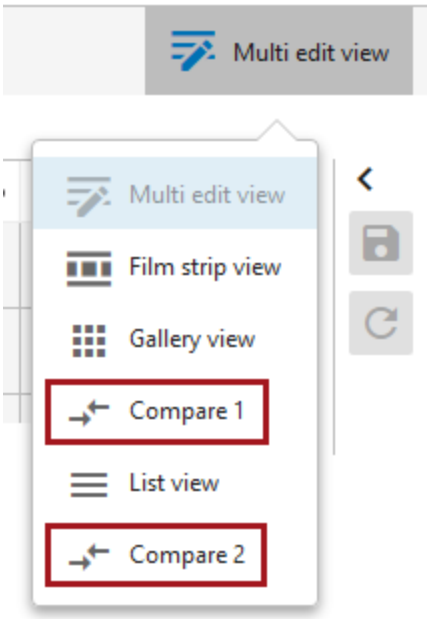
Configuring Node List Child Component Properties

Display Modes and **Actions** are configured in the Child Components section. Each selection corresponds to a button / icon that will display above the data table. Display Modes determine how the entire Node List displays, and actions can be performed on the selected nodes and/or objects. The buttons / icons are enabled when they are applicable for use.



These are basic instructions for configuring each with more detail following the steps.

1. Click the **Add** button under the parameter field.
2. Make a selection in the 'Add component' dialog.
3. Click **Add** again. New selections are added to the bottom of the list and can be re-ordered using the Up and Down buttons. The icons / buttons will display left to right on the screen in the top-to-bottom order shown for the parameter.
4. Repeat steps one through three as needed.
5. Double-click on the display mode title in the field to configure each display mode's properties. Each display mode provides a different view of the configured content, and allows for different configuration options. For example, each display mode can be given a unique name in the 'Title' field, so that multiple view modes of the same type can be differentiated in the view mode selection dropdown located in the Node List toolbar.



The various view modes are defined in the table below.

Icon	Display Mode	Button Hover Text	Description
	Multi Edit	Multi edit view	Configurable table; allows for editing of the objects; Freeze Panes can be enabled on this view
	Table	List view	Configurable list (vertical columns)
	Compare	Compare view	Table with customizable headers; can change table direction and select a title to use for identifying the objects displayed; Freeze Panes can be enabled on this view
	Film Strip	Filmstrip view	A single row of icons / images representing the objects
	Gallery	Gallery view	Grid with icons / images representing the objects; typically used for lists of image assets
	Grid	Grid view	Configurable grid; designate what attribute value is displayed

Icon	Display Mode	Button Hover Text	Description
	Sequencing	Sequence view	Table used for sequencing children of the current object (via the Display Children Screen and Children of Types)

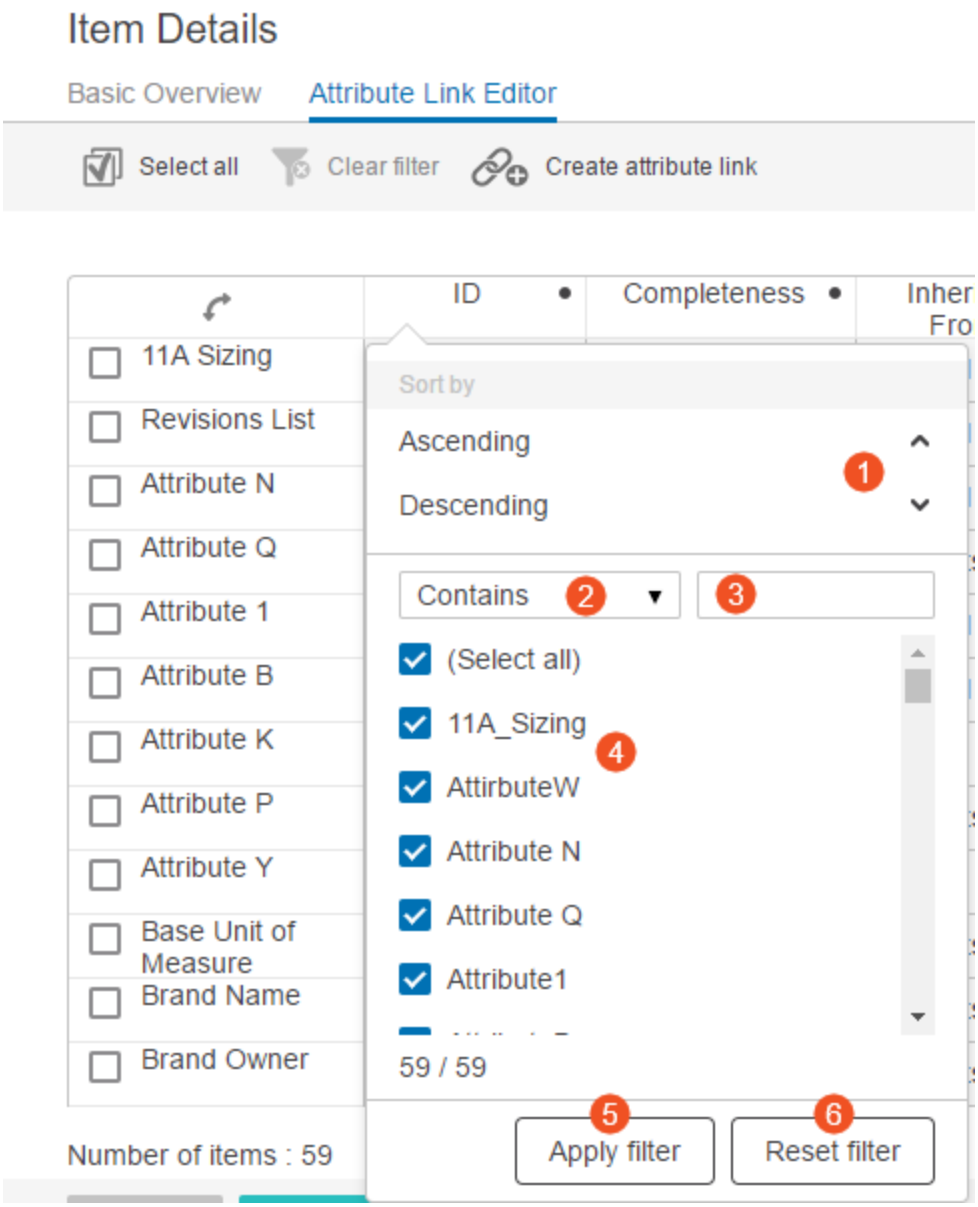
Clicking through the actions in the 'Add component' list will provide more details on what each action does. Also, many actions are explained in detail in applicable topics within the **Using a Web UI** documentation, as they pertain to specific functionality. Actions examples include (but are not limited to) Add Reference Action, Remove a Reference Target, Start Workflow from Grid, and Simple Exporter Action

For the 'Compare,' 'Multi Edit,' 'Sequencing,'and 'Table' display modes, attributes values may be filtered by enabling the 'Enable Filtering' option on the component.

Enable Filtering

When the Enable Filtering option is selected on this component, the ability to filter based on attribute values is enabled.

To apply a filter, click anywhere in a column's header. This brings up the sorting and filtering window highlighted in the screenshot below:



Referencing the numbered elements in the above screenshot to the corresponding numbers in the list below, functionality in the filtering window enables users to:

1. Sort the attributes in either ascending (^) or descending (v) alphabetic order.
2. Filter the linked attributes to show only attributes that:
   - 'Begins with' - The filter value begins with one or a sequence of character.
   - 'Contains' - The filter value contains one or a specific sequence of characters. This value may appear anywhere within a value string.
   - 'Does not contain' - The filter value does not contain one or a specific sequence of characters. This value may appear anywhere within a value string.

- 'Equals' - The filter value matches a precise set of characters.
- 'Wildcard' - This filter value option will display attribute values containing a repeated set of characters that includes known variable characters that can be substituted with an asterisk '*' symbol. Wildcard may be used singularly or multiple times in a filter setting. For more information, see the **Wildcard in Searches** section of the **Searching Functionality** topic of the **Getting Started / User Guide** documentation.

3. With any of the above filtering criteria in place, users may enter their search terms into the **Search** field. As characters are typed into this field, STEP returns a filtered result of attributes culled from the object's full list of attributes. From these, users may select only those attributes they want to display by adding a check beside each.

   The default filter setting is 'Contains.' For the settings 'Begins with,' 'Equals,' and 'Wildcard,' if a user just deselects any value in the search list, then the filter will revert to a 'Contains' filter once it is applied. For the settings 'Begins with,' 'Contains,' 'Equals,' and 'Wildcard,' any values entered that do not meet the filter criteria are removed from the filtered selection. For the setting 'Does not contain,' any values entered that do meet the filter criteria are removed from the filtered selection.

   Note: If you are dealing with multi-valued attributes where more than one value is populated, then All Values for that attribute are considered when creating a filter. Excluding one value by a filter does not mean the attribute will necessarily be removed from the view.

   ---

4. Users may also forgo the filtering and manually select from the full attribute list only those attributes they want to display by adding a check beside each.
5. Apply the configured filter to the attribute link table by clicking the Apply filter button.
6. Quickly clear any work you have done in the filtering window by clicking the 'Reset filter' button. The configuration you have applied remains in this filtering window, even if you clear the filter on the actual attribute link table. To clear all filtering, first clear the filter from the table, and then in the filtering window, click the 'Reset filter' button.

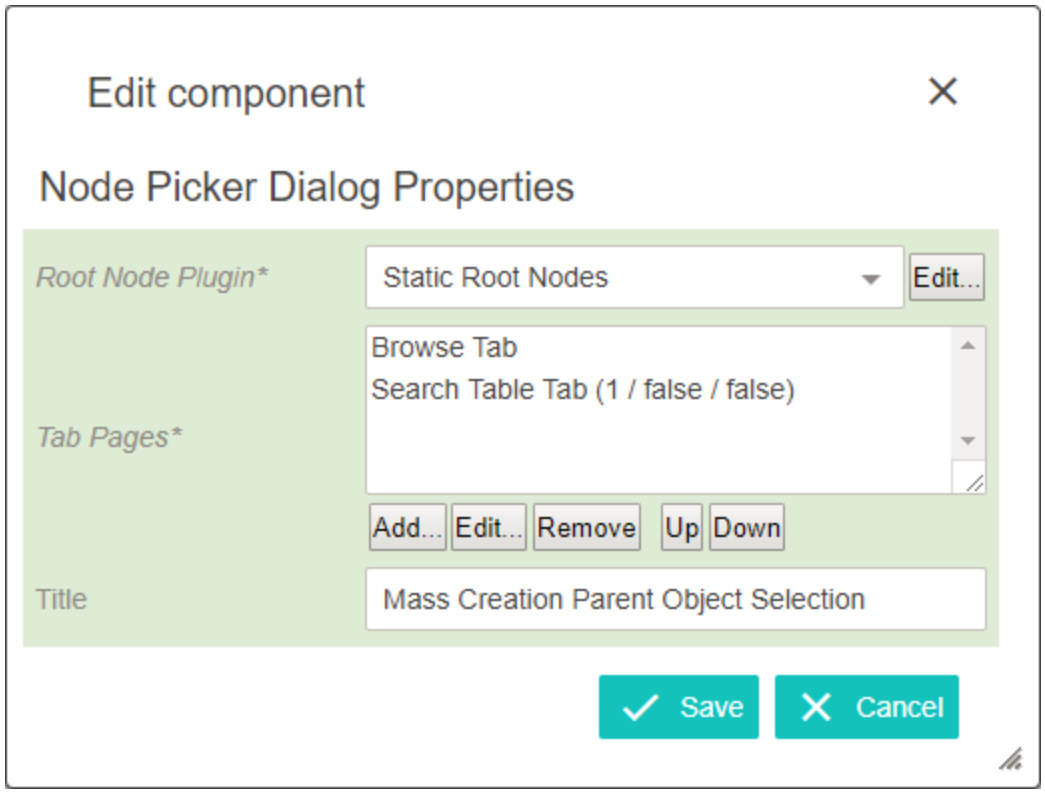
   Note: The sorting and filtering option applied in the attribute link editor screen of a product will be applicable only on the current selection. Once the user navigates to a different selection, sorting and filtering applied on the previous selection will be removed.

For additional information on using a Node List, see the following topics in **Web User Interfaces** / **Using a Web UI**:

- Node Details Screen
- Main Properties
- Multi Reference Editor
- Advanced Search

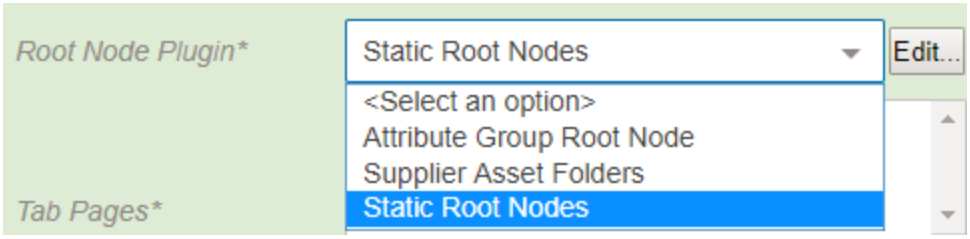
Node Picker Dialog

The Node Picker Dialog parameter is available on some components in Web UI. It allows the admin to define the nodes that are presented for selection in the dialog and also allows the admin to determine how the nodes are selectable.



Root Node Plugin

Allows the designer to limit the nodes presented to the end user.



- **Attribute Group Root Node** displays a parameter to select any number of attribute groups. These will be the only attribute groups displayed to the end user.
- **Supplier Asset Folders** displays only the asset folders for suppliers that the user is a member of.
- **Static Root Nodes** allows selection of any number of nodes in Tree to be displayed to the end user. This allows the admin to restrict the nodes displayed to the end user and can be used to eliminate invalid selections.

Tab Pages

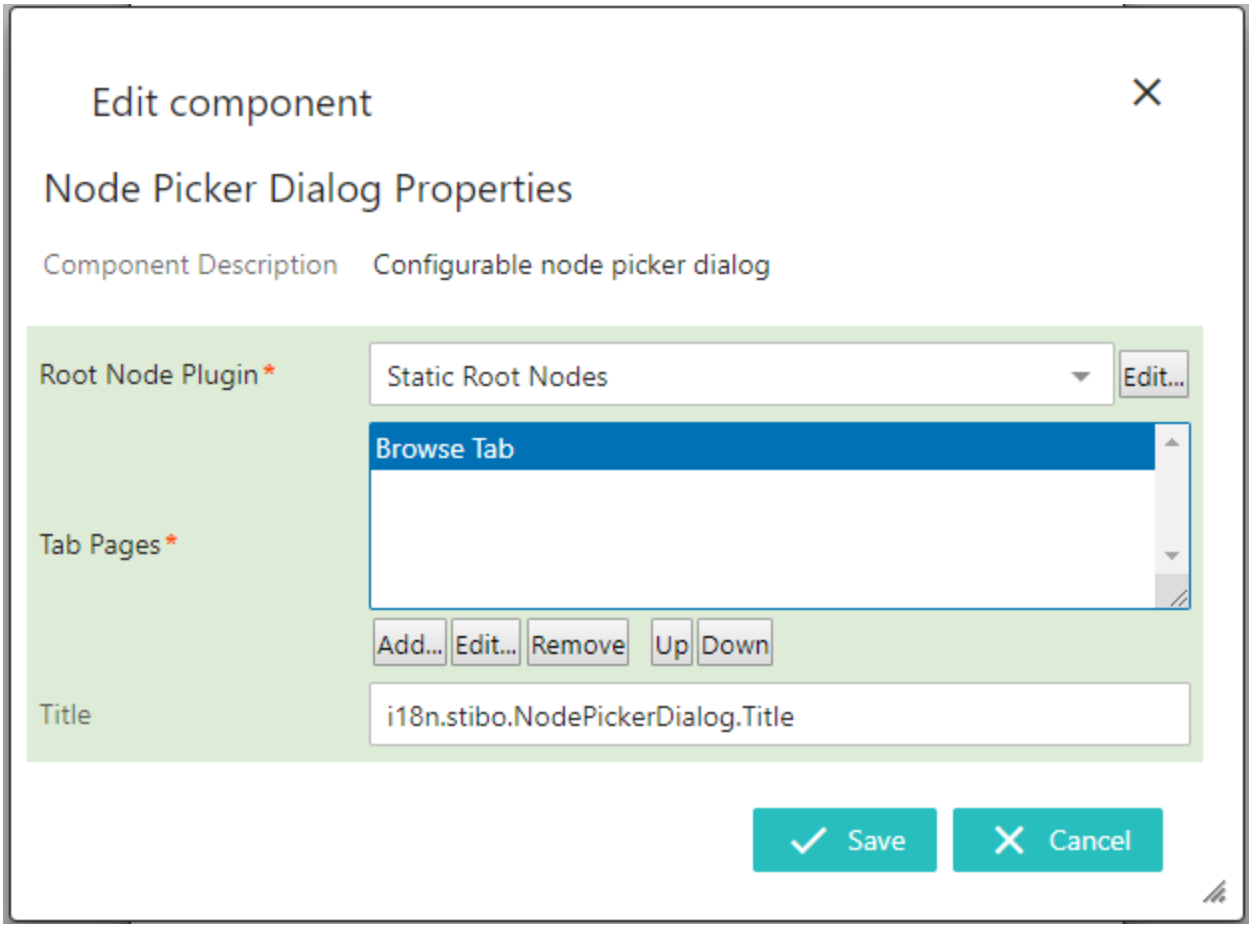
Allows the designer to choose the tabs displayed on the node picker dialog presented to the end user.

- **Browse Tab** allows the Tree to be displayed for node selection. Only the nodes configured via the Root Node Plugin display.

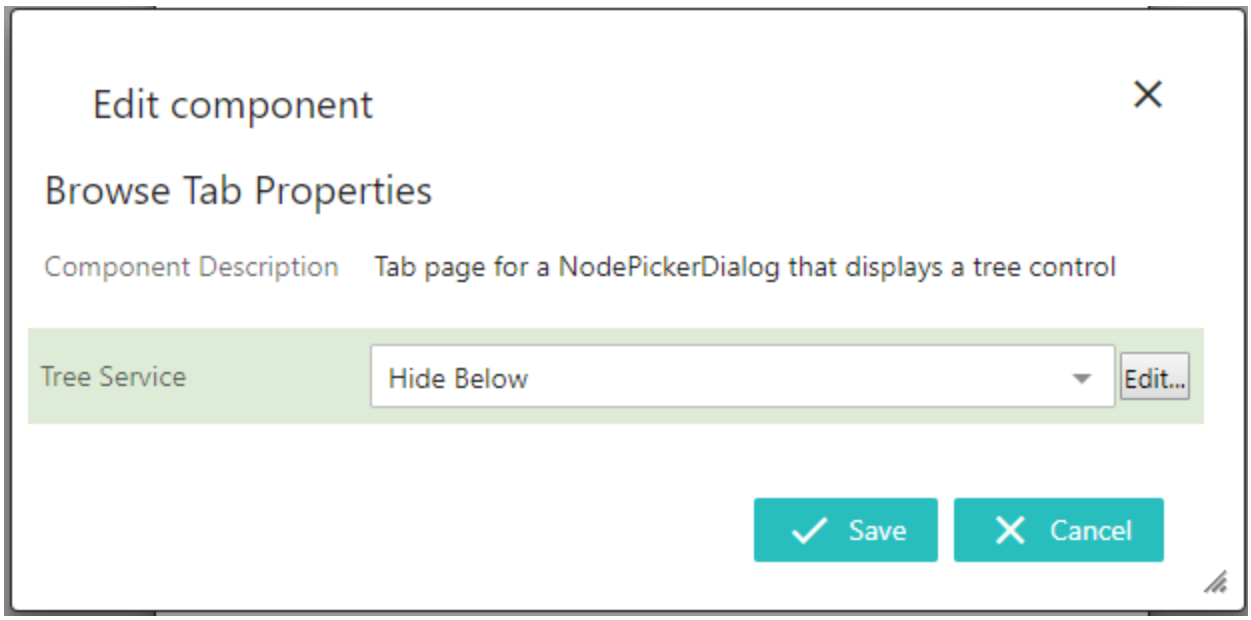
  In the **Tab Pages** parameter, click **Add** and select 'Browse Tab' from the list. Then click **Add**.

  If desired, children of nodes can be hidden from the tree when displayed.

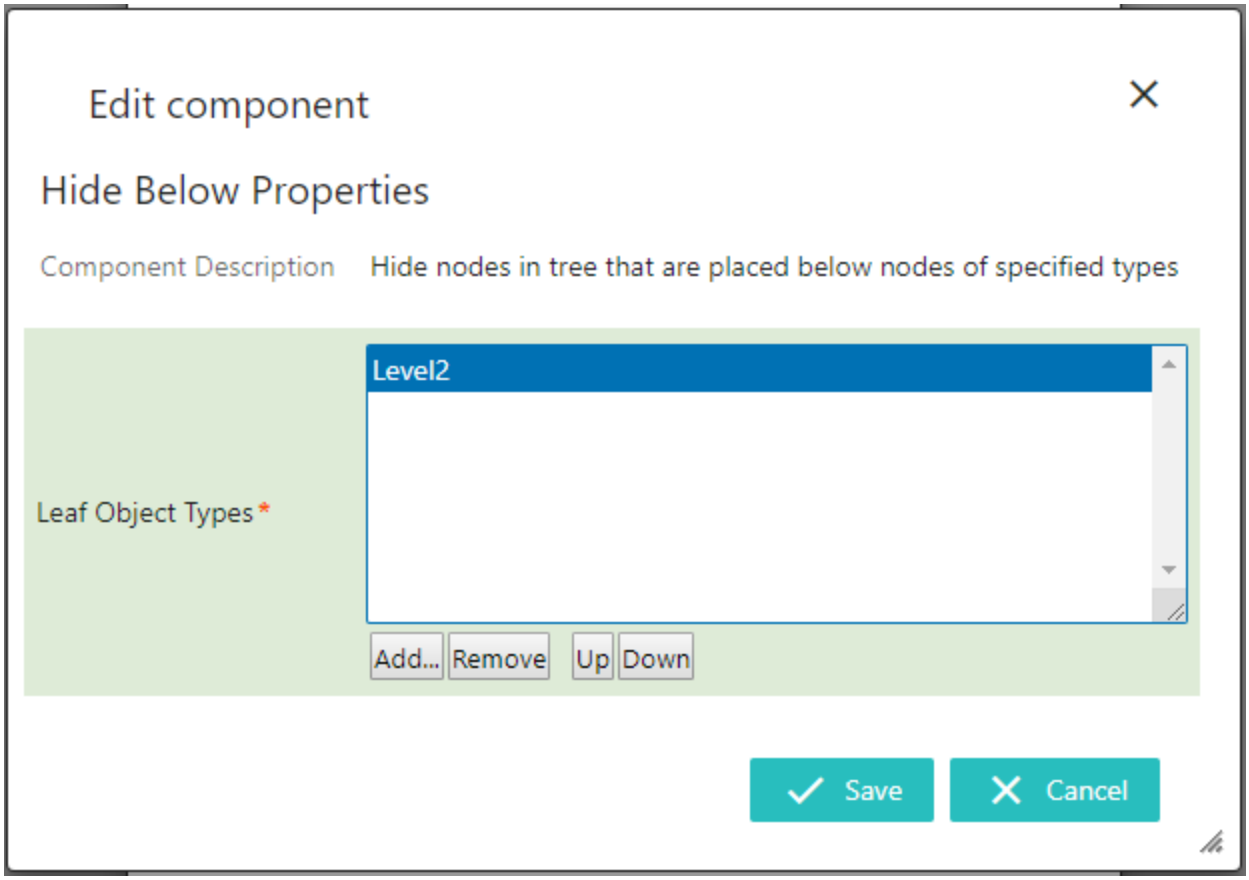
  1. To do so, double click on **Browse Tab**.



  2. In the **Browse Tab Properties** window that appears, select 'Hide Below' from the dropdown.



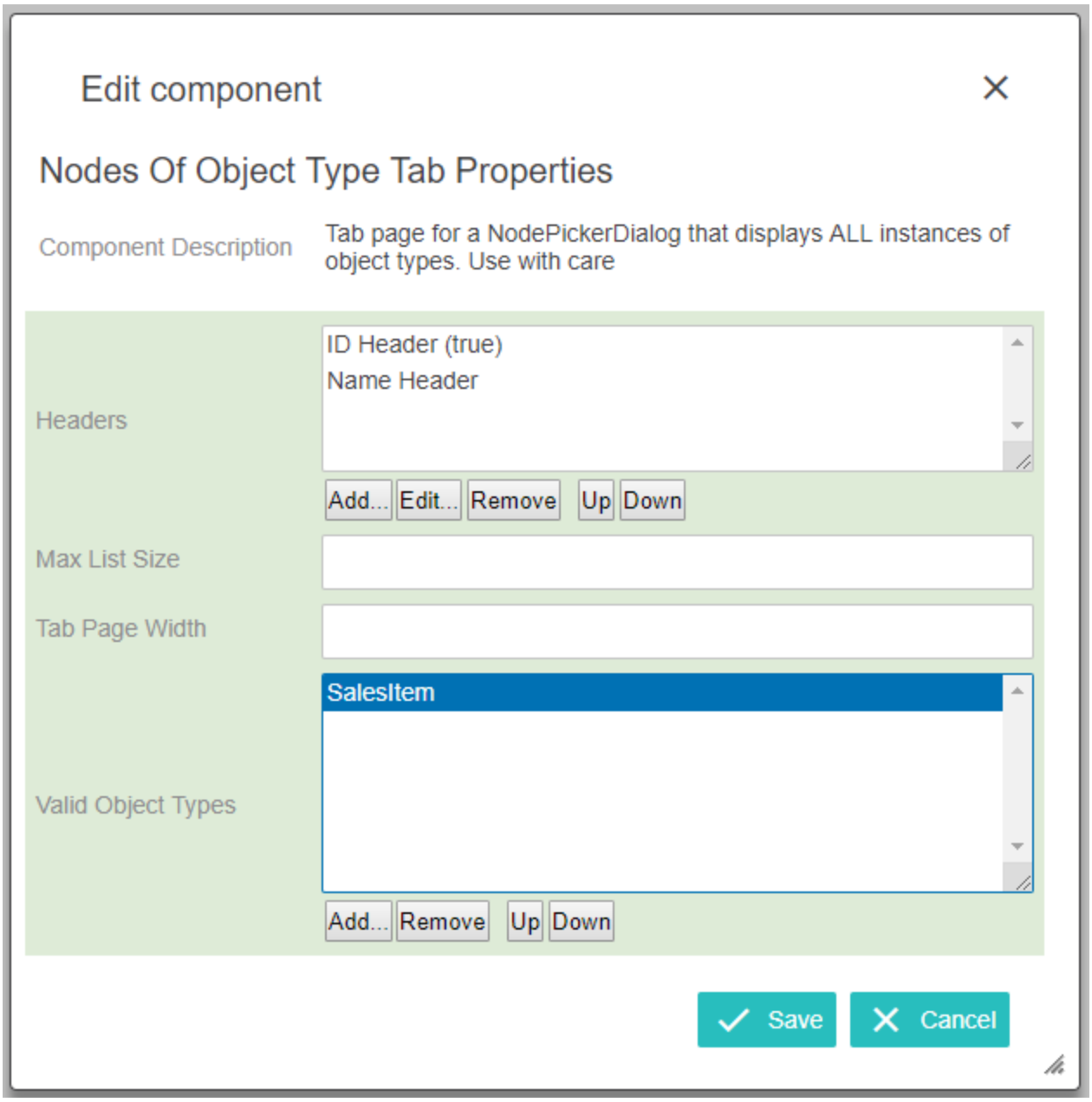
3. Click **Edit** and in the **Hide Below Properties** window that appears, click **Add** and select the object types which should not have their children displayed in the browse tree.



- **Nodes of Object Type Tab** displays all instances of object types found among the configured root nodes.

In the **Tab Pages** parameter, click **Add** and select 'Nodes of Object Type Tab' from the list. Then click **Add**.

A number of optional parameters are available to assist in parsing the node list.

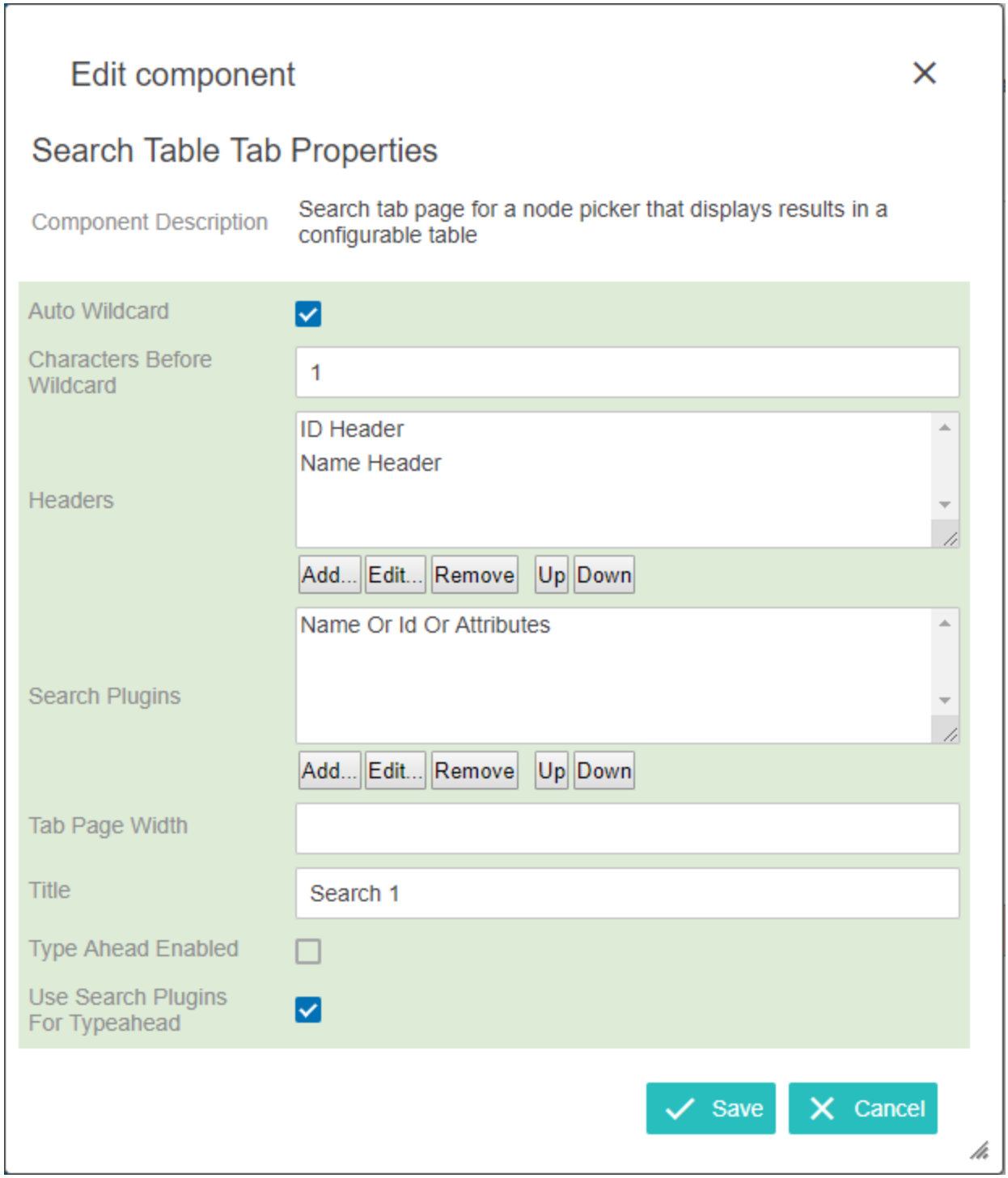


1. **Headers:** This parameter is used to organize the node list with configurable headers. To add a header, click **Add** and select a header component.
2. **Max List Size:** This parameter dictates the maximum nodes that can appear in the list. This list can never exceed '1000'.
3. **Tab Page Width:** This parameter sets a fixed width in pixels on the tab page.

4. **Valid Object Types:** This parameter can be used to specify which object types can populate the list. To add a valid object type, click **Add** and browse or search for the desired object type.

- **Search Table Tab** allows objects to be found via search, and includes options such as configurable wildcards, headers, and typeahead. The Select Node(s) Search functionality returns a maximum of 100 entries.

  In the **Tab Pages** parameter, click **Add** and select 'Search Table Tab' from the list. Then click **Add**.



A number of optional parameters are available.

1. **Auto Wildcard:** If this parameter is enabled, a wildcard is automatically added to the end of any search strings longer the amount specified by the **Characters Before Wildcard** parameter.
2. **Characters Before Wildcard:** Use this parameter to set the minimum number of characters that must come before a wildcard. Setting this to '0' allows you to include a wildcard at the beginning of the search string.
3. **Headers:** This parameter is used to organize the search result list with configurable headers. To add a header, click **Add** and select a header component.
4. **Search Plugins:** This parameter determines which search plugin is used to execute the search. Click **Add** to select the desired search plugin.

   Of the available selections, the **Name Or Id Or Attributes** option allows the text entered in the search field to be compared to the ID, name, or value of one or more attributes selected by the admin. The ability to search in data containers is also controlled on this parameter. For example, this option would allow searching on attribute values, including metadata values.
5. **Tab Page Width:** This parameter sets a fixed width in pixels on the tab page.
6. **Title:** This parameter determines the title of the individual search tab.
7. **Type Ahead Enabled:** If this parameter is enabled, type-ahead can be used in the search field.
8. **Use Search Plugin For Typeahead:** This parameter can be disabled to improve search execution speed. More specifically, disabling it allows the usage of a prefix search via typeahead, which ignores root nodes set on the Below Search plugins, but increases the performance of typeahead searches. This parameter is enabled by default.

Each tab page needs configuration upon selecting it. If any parameters within the tab page are mandatory, then the properties dialog will open automatically upon adding.

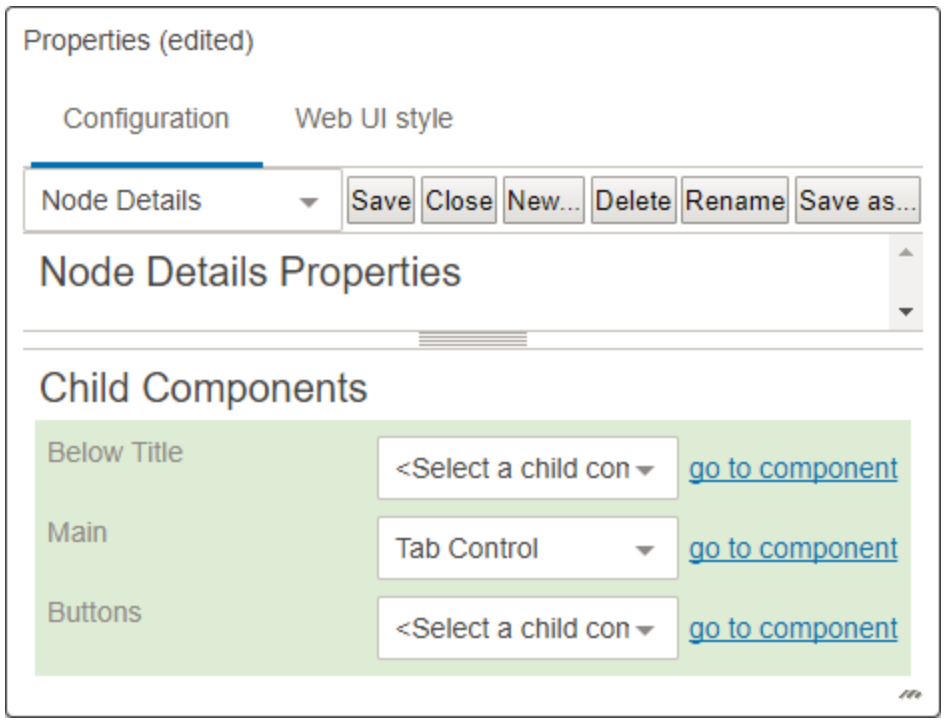
Title

Allows the designer to use custom text as the title of the node picker dialog.

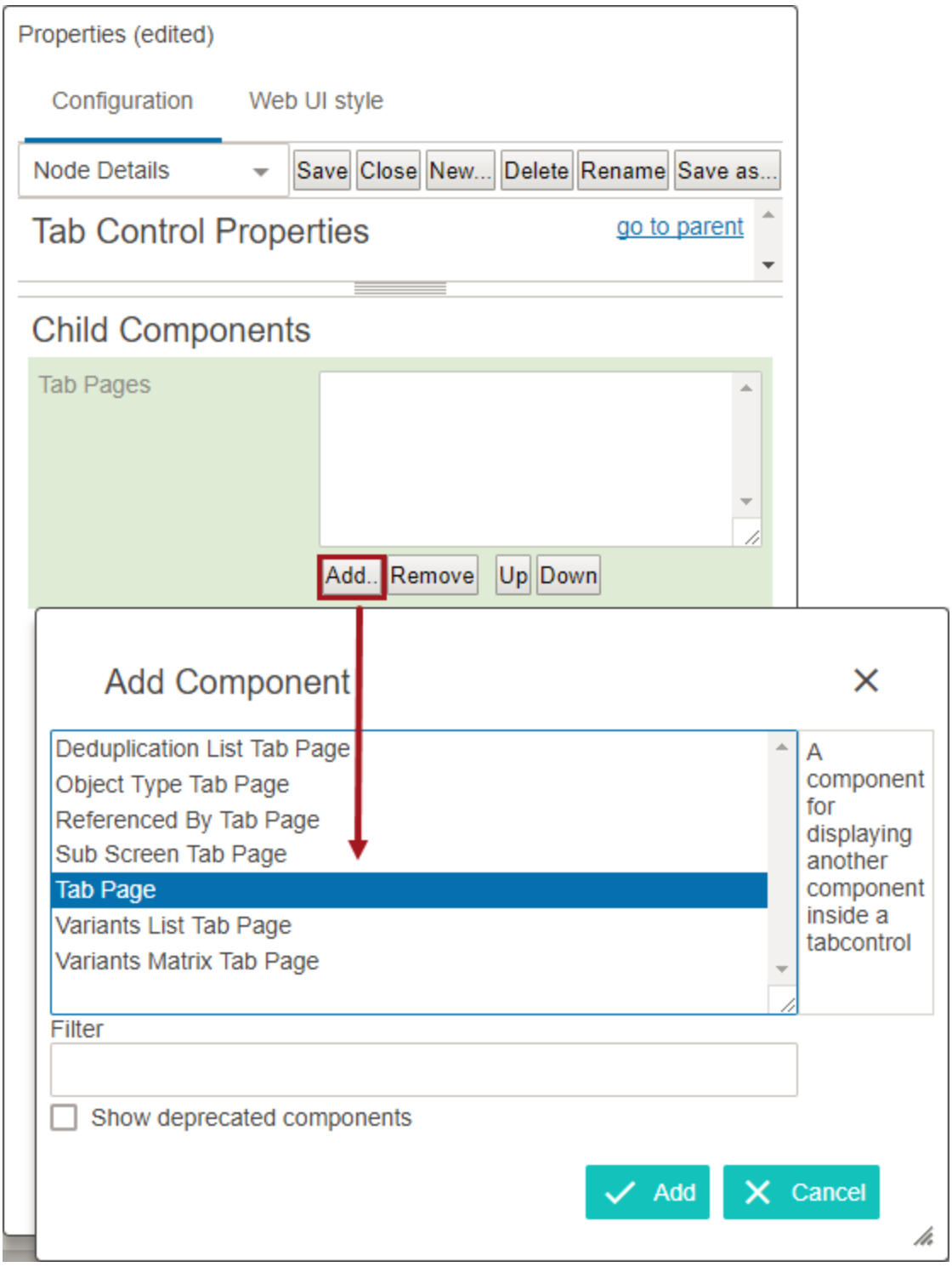
Configuration of Node Picker for References in Node Details

The example below shows a configuration of Node Picker for References in a Node Details screen:

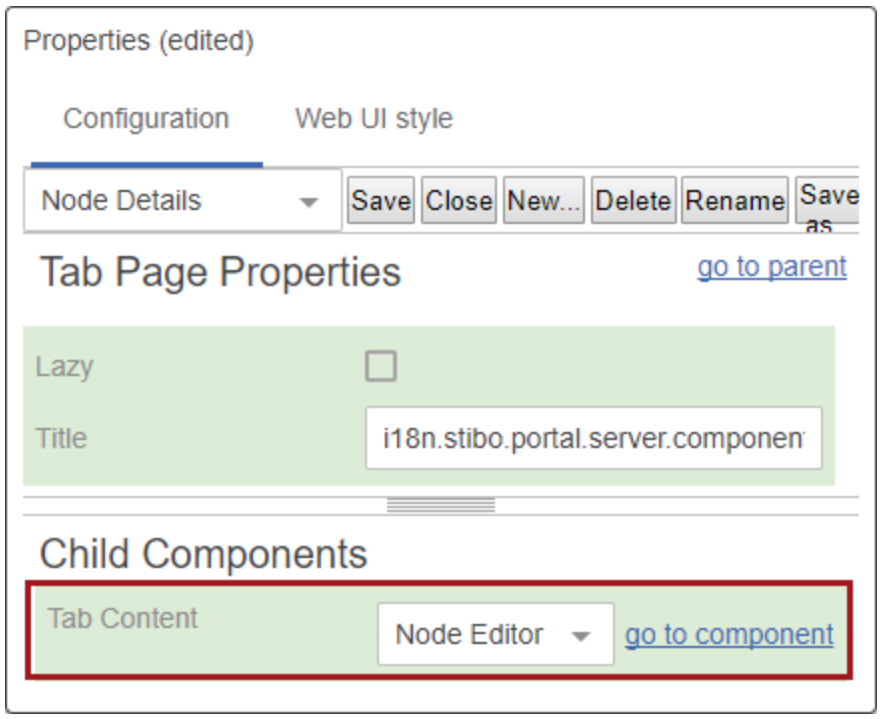
1. Select Node Details screen if already exist, if not create a new one.
2. Under the Child Component area go to > Main > Tab Control > choose **go to component**.



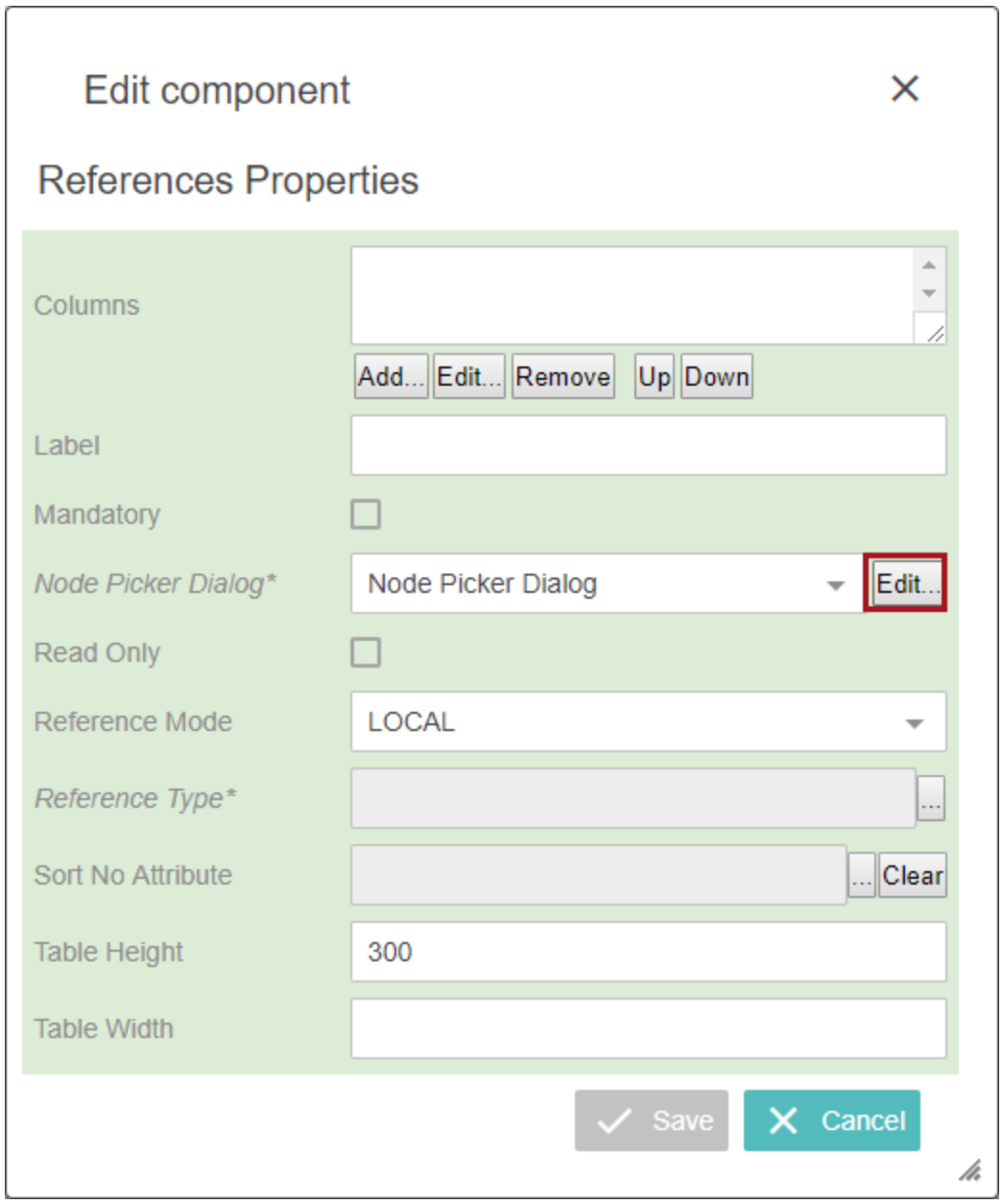
3. On Tab Control Properties, go to Child Components > Tab Pages field > add a new Tab Page by clicking on Add button.



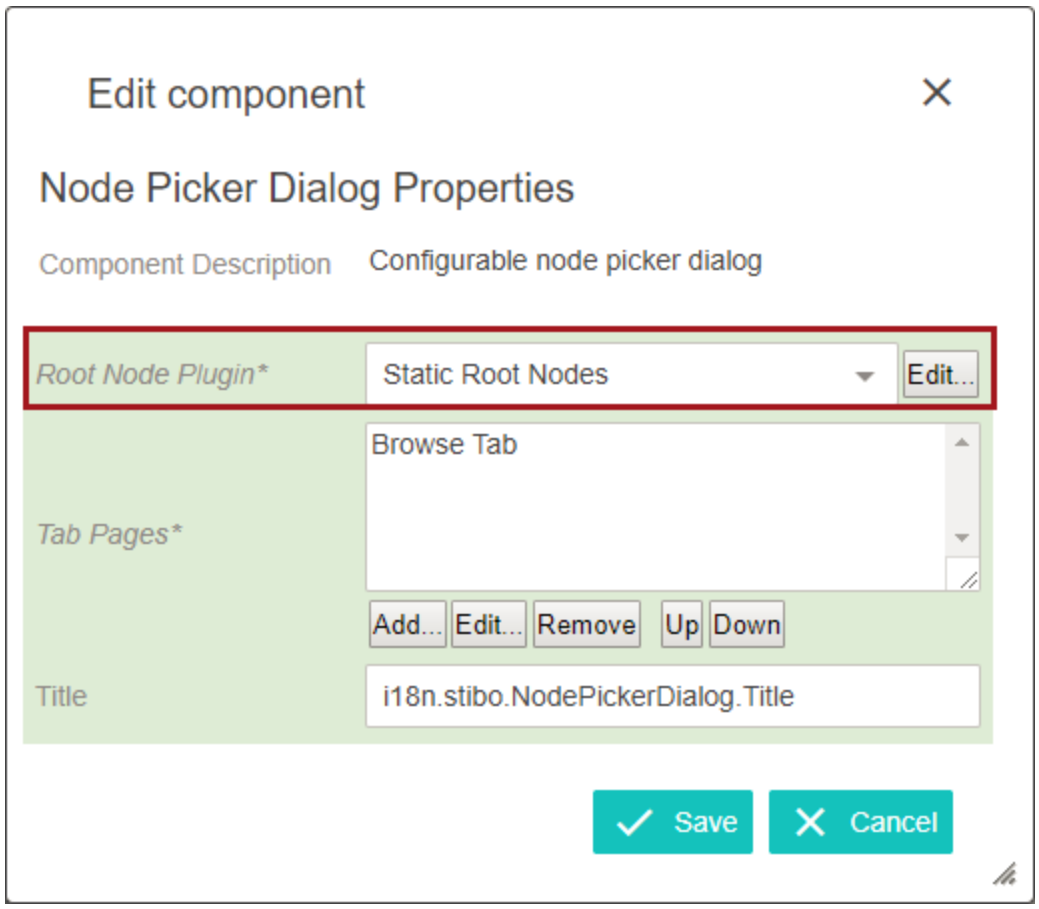
4. Once added, double click on the Tab Page.
5. From the Tab Content dropdown, select the **Node Editor** and then click on **go to component**.



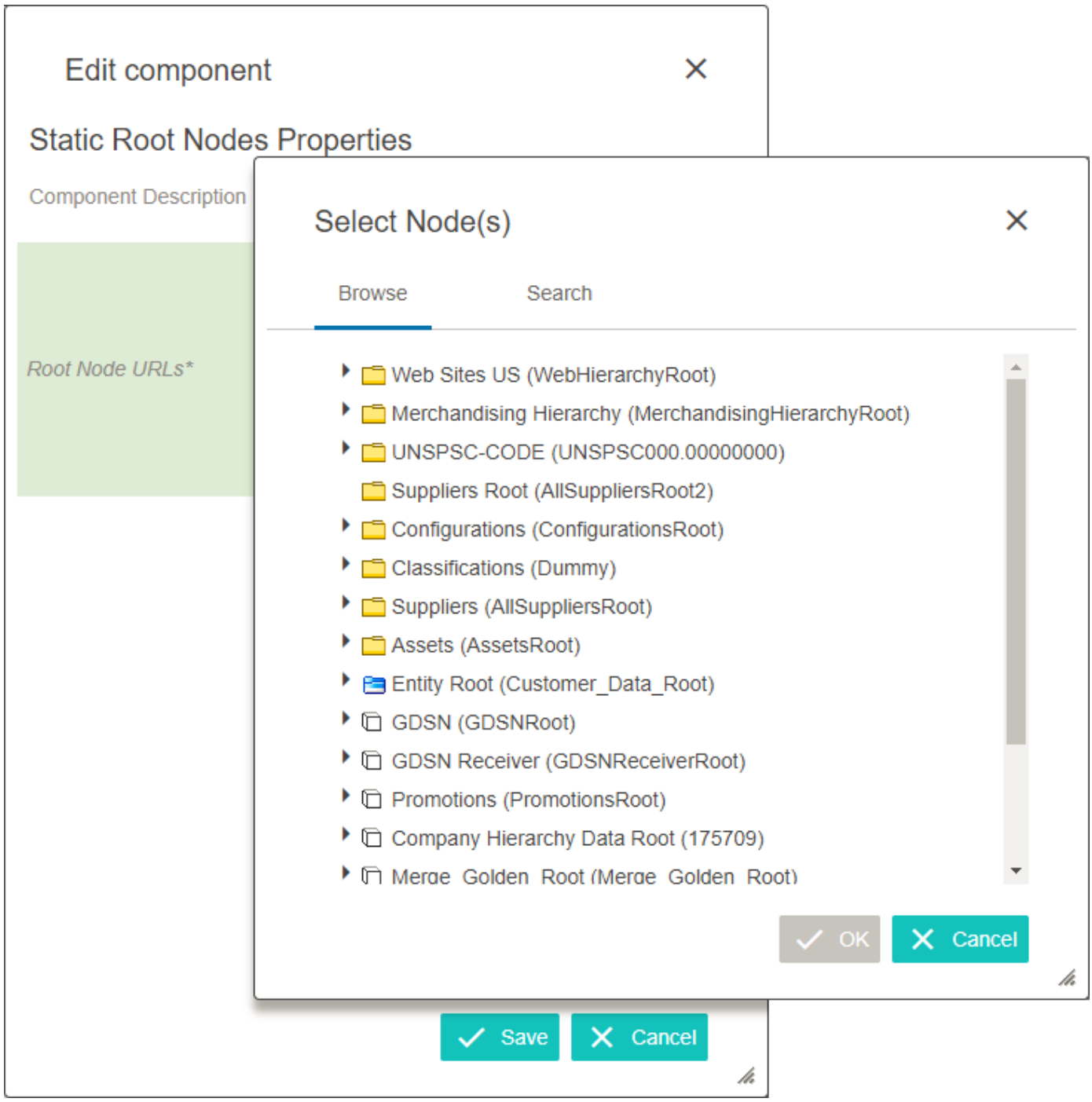
6. On the Tab Page Properties go to Child Components > Rows > add **References**.
7. In the Reference Properties screen, on the Node Picker Dialog field, select the **Edit** button.



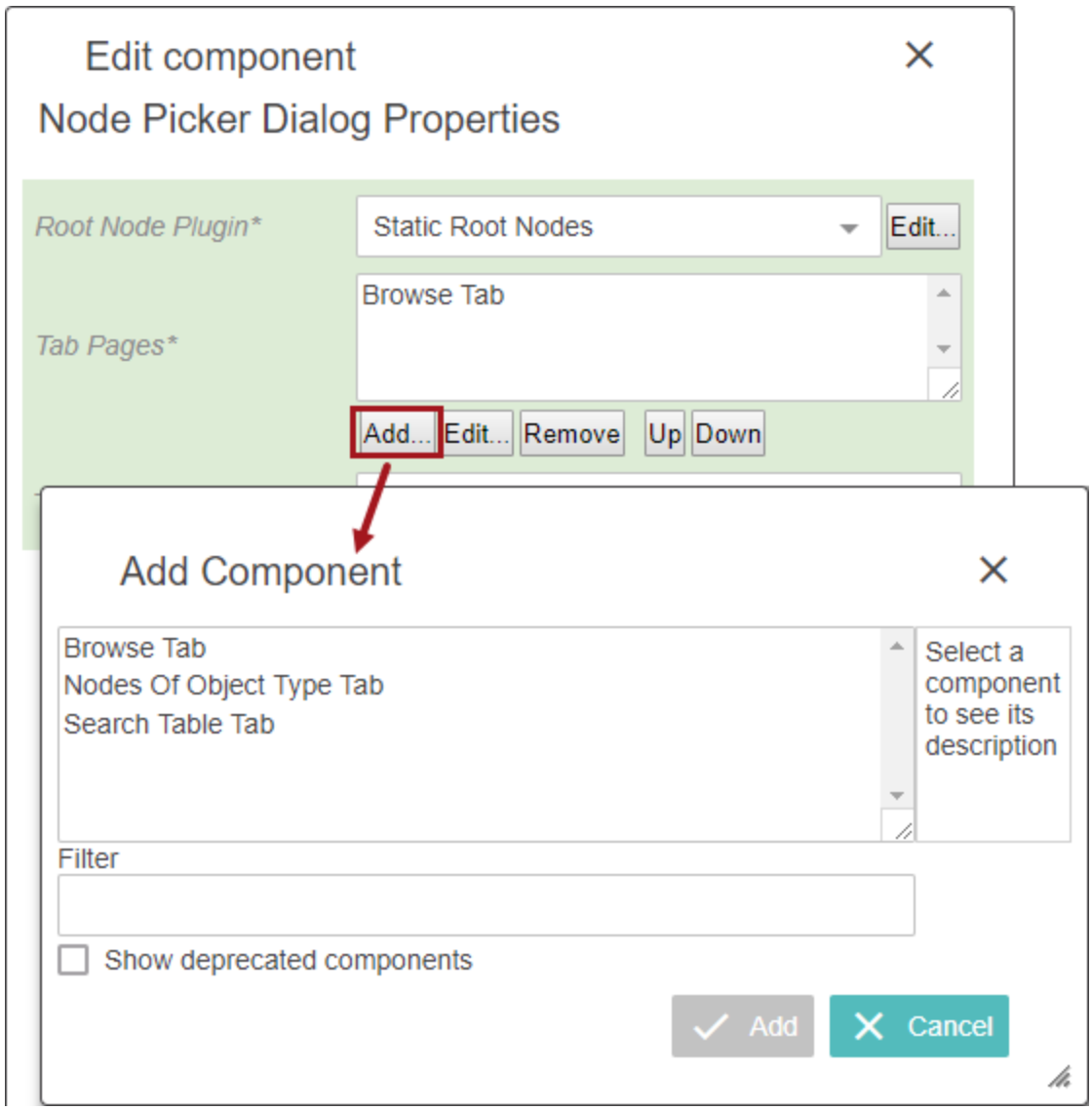
8. On Node Picker Dialog Properties under the Root Node Plugin field, select **Static Root Node** from the dropdown.



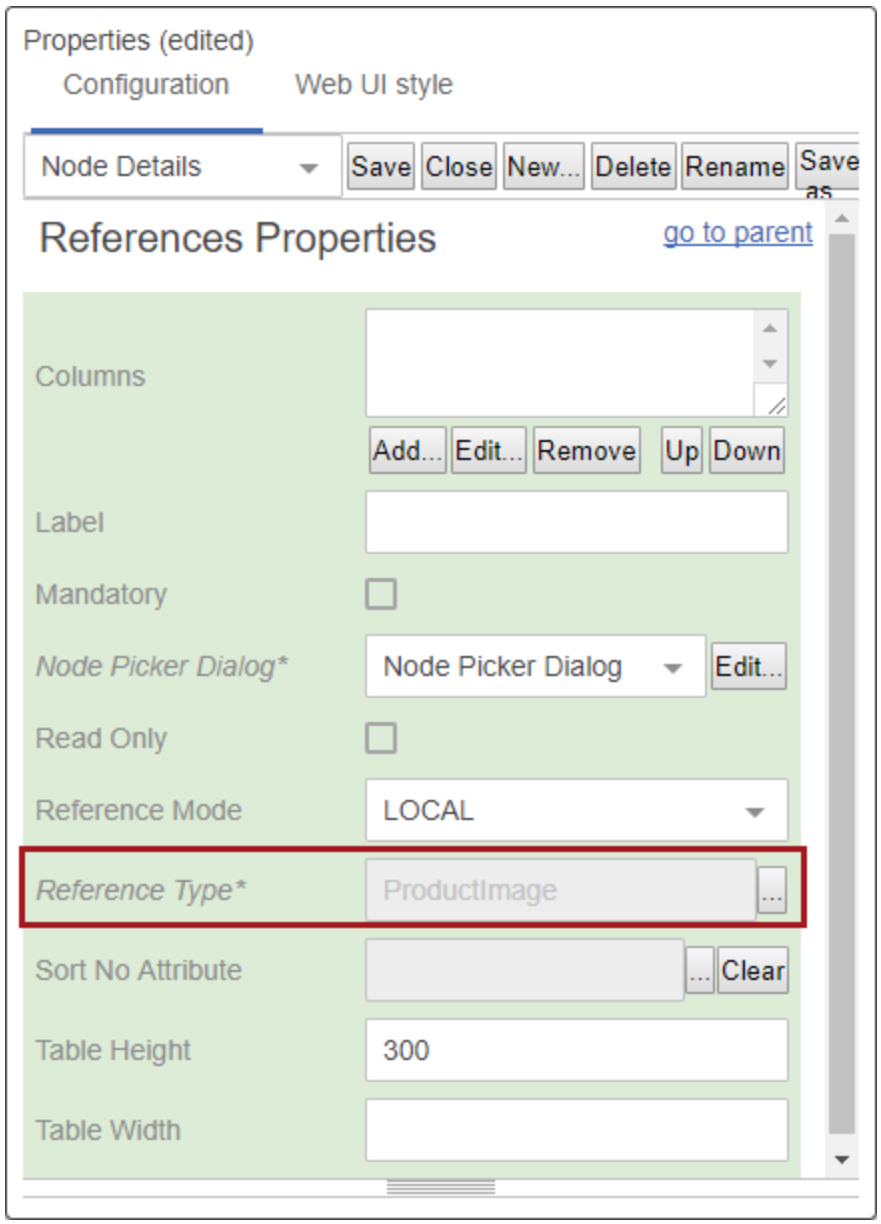
9. Click on the Edit button to configure Static Root Node properties.
10. Add any required root nodes, click OK, and then click the Save button in on Static Root Node Properties.



11. Back on the Node Picker Dialog Properties go to the Tab Pages field and click **Add**.

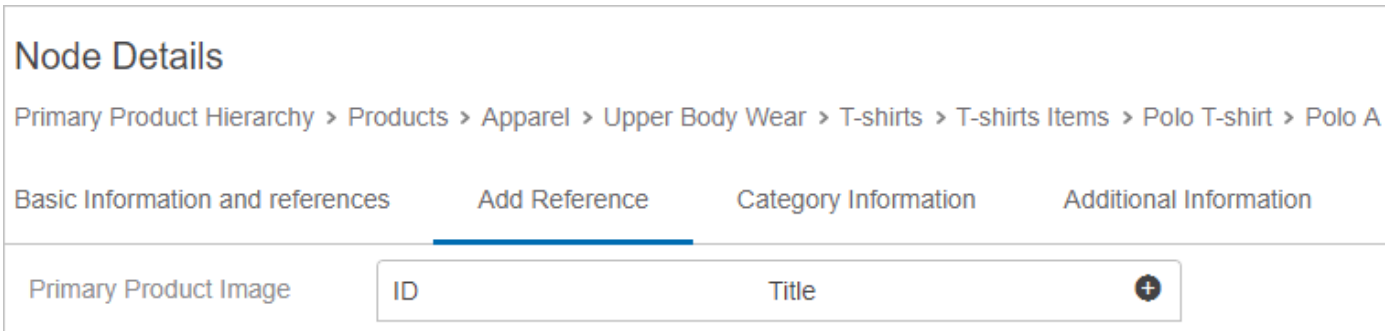


12. Select, add, and configure any required components needed.
13. In the Title Field and a title for the Node Picker.
14. Click save on the Node Picker Dialog Properties and continue filing out the necessary fields on the References Properties, including selecting the Reference Type. Click save when finished.



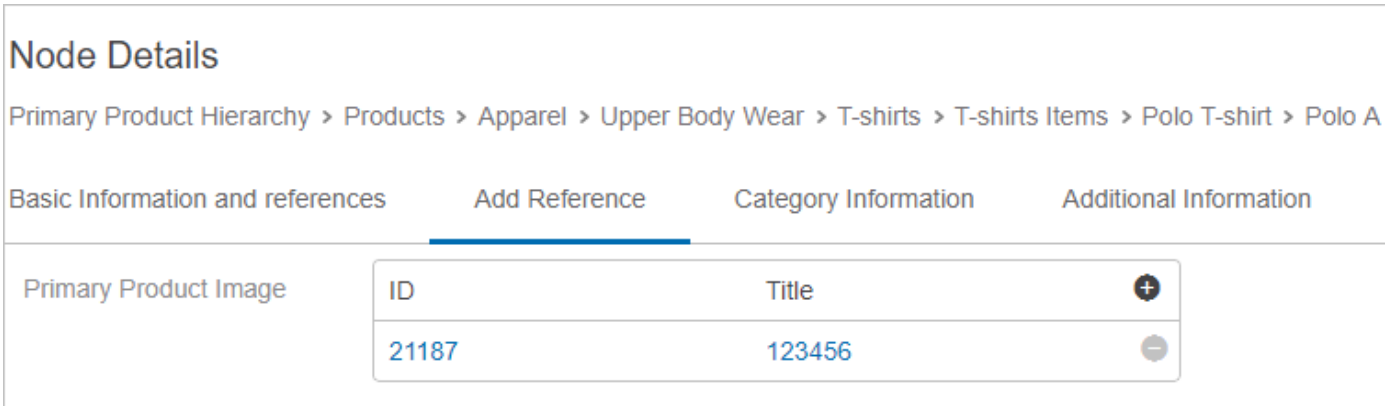
15. Then save and close the Node Details screen.

In the example below, the reference type 'Primary Product Image' is available with the node picker (+) option.



To use this, a user can:

1. Stand on any available product
2. Select the Add Reference tab
3. Click on the (+) icon
4. Select the required image by expanding the node or by searching. Upon clicking OK, their reference is added to the selected product.



Onboarding Multiple Objects Using Web UI Screens

Onboarding multiple objects using Web UI Mass Creation components requires designers to configure a screen and a widget.

Prerequisites

Detailed configuration instructions are provided in separate topics of the Web UI documentation:

- Configuring a Mass Creation Screen
- Mass Creation Widget

Additionally, end users must have the necessary privileges to create and onboard objects in STEP as well as have access to selected parts of the Tree hierarchy (e.g., the product hierarchy). For more information about privileges and user setup, see the **Users and Groups** section and **Adding User Privileges for a Group** section of the **System Setup / Super User Guide** documentation.

Mass Creation Screen

The Mass Creation screen is used to set up multiple Product, Entity, and Classification objects in STEP and initiate them into STEP workflow simultaneously. Using Web UI screens to onboard multiple objects into STEP provides an alternative to using more complex import methods such as Smartsheets.

Mass Creation Widget

The Mass Creation homepage widget should be configured as the entry point to a Mass Creation screen. Admin users can set the static root nodes that limit what an end user has access to when onboarding objects. If a STEP hierarchy is extensive, this is particularly useful if an end user should focus on one product category and not another one.

Multiple widgets and screens can be set up to meet onboarding needs. As an example, multiple users may be onboarding products in different categories, and it would be useful to have multiple widgets set up to direct users to the applicable Mass Creation screen they should use.

For more information on using a configured Mass Creation screen and widget, see the **Using a Mass Creation Screen and Widget** section of the **Web User Interfaces / Using a Web UI** documentation.

Configuring a Mass Creation Screen

The Mass Creation screen is used to set up multiple **Product**, **Entity**, and **Classification** objects in STEP in bulk. the screen can be configured with a set of attributes (group) and, optionally, a business condition to run prior to creation of objects.

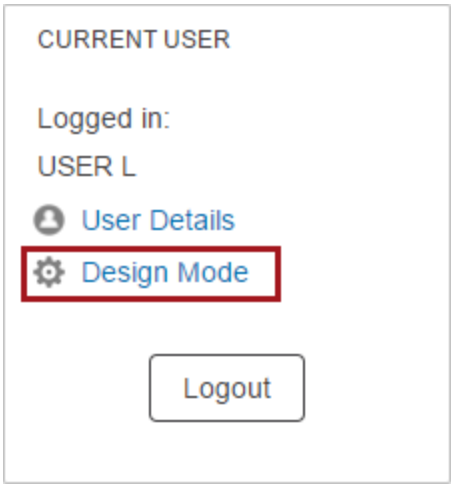
Admin users first need to create a screen using the Mass Creation screen type. Once the screen is created, configuration can begin.

Multiple screens / configurations can be saved to meet a variety of onboarding needs.

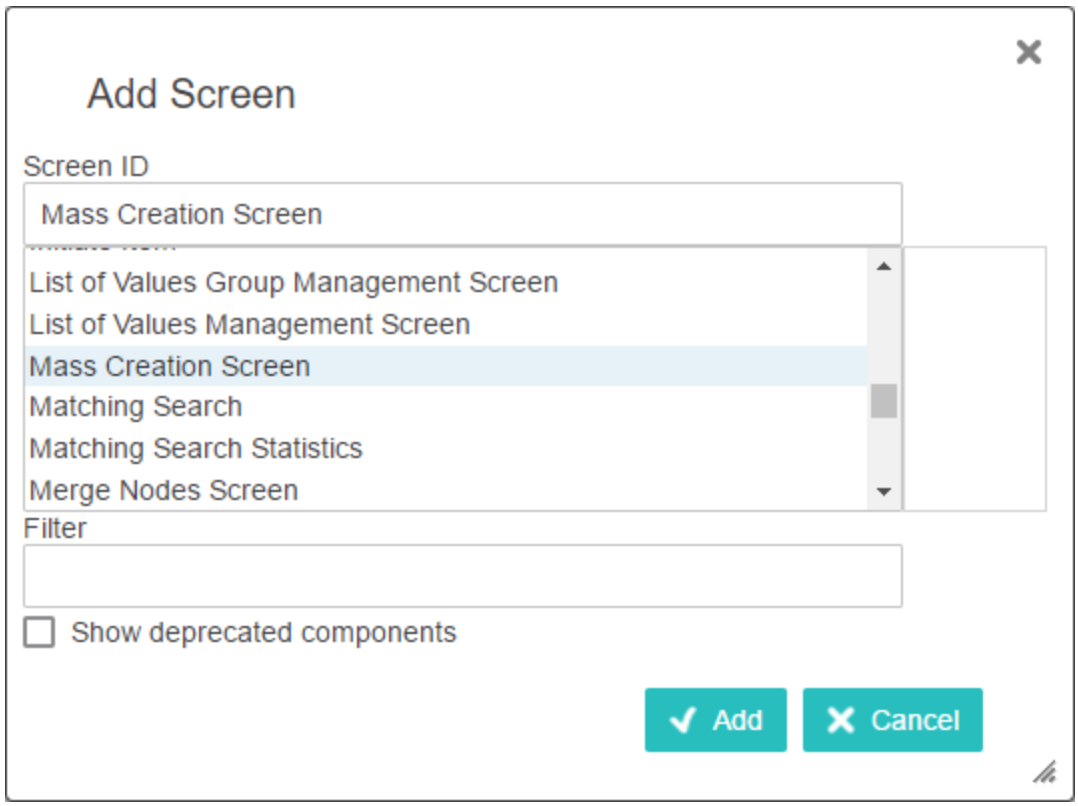
Adding a New Mass Creation Screen

To add a screen using the Mass Creation screen type:

1. Log in to the Web UI. User must have privileges to edit Web UI configurations.
2. Click the design mode launch button found on the Homepage (in the user widget).



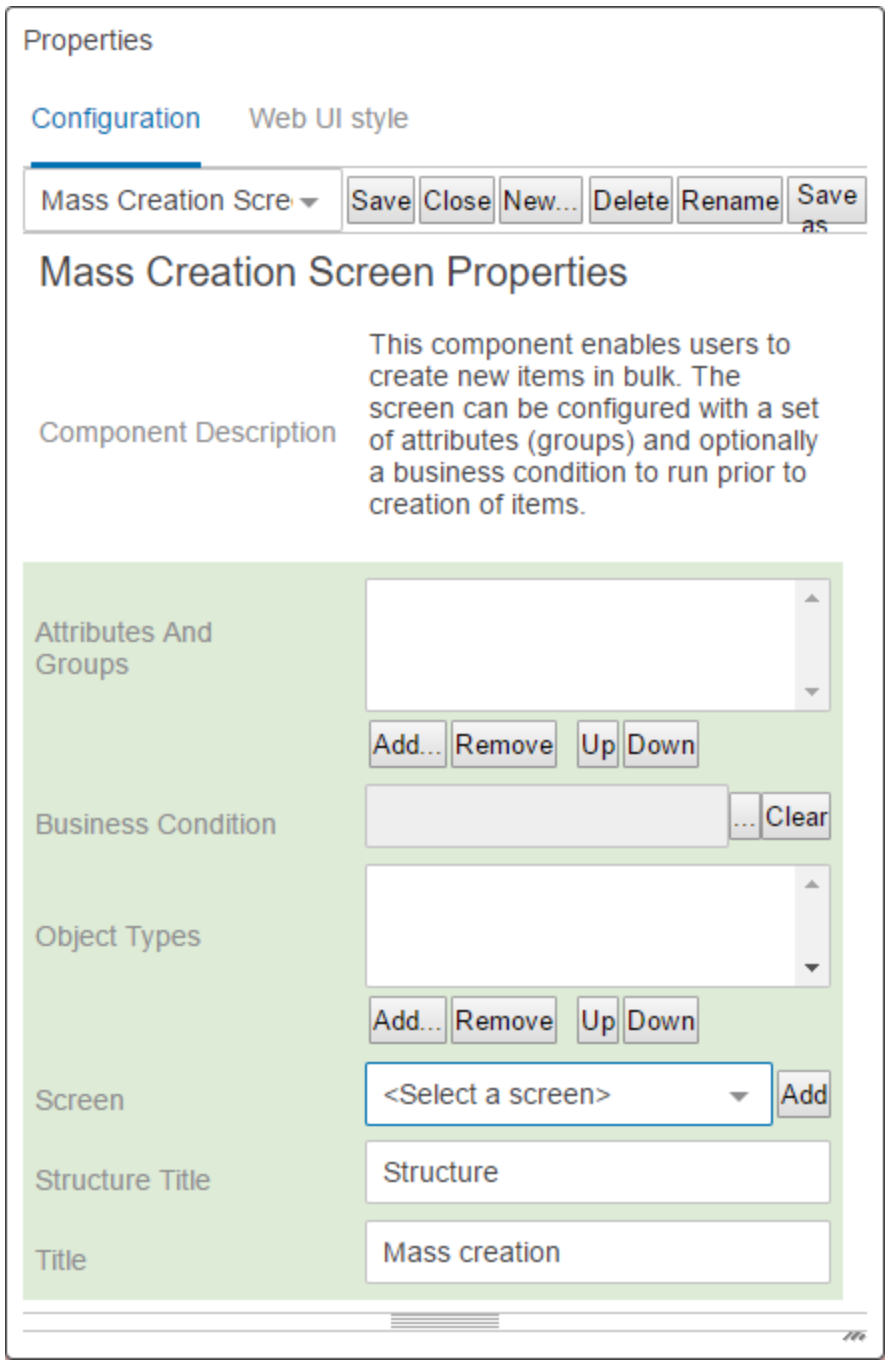
3. Click the **New** button in the action icon row.
4. Choose **Mass Creation Screen** from the screen list and type in a Screen ID. The screen ID should be something easily identifiable as this will be what is shown to anyone trying to access the screen through design mode or who is using the screen as a results screen for a Mass Creation Homepage widget.



5. Click **Add**.
6. Click **Save** in the Designer window. At this point, either close Designer and configure the screen at a later time, or continue on with the **Mass Creation Screen Properties** configuration.

Configuring a Mass Creation Screen

A screenshot of the default properties screen follows. In place of outlining steps a Web UI designer should take to configure the screen properties, the sections directly after the image explain what each parameter does and the options for configuring them. Each parameter should be configured as needed.

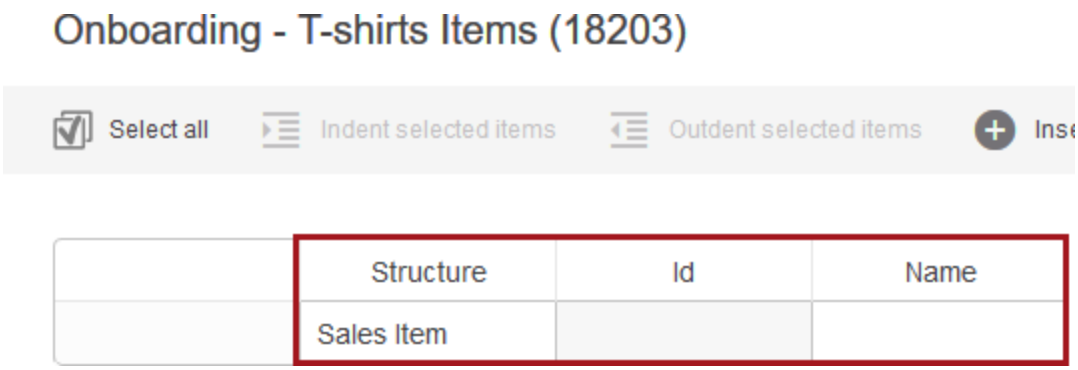


Attributes and Groups

Any attribute groups and/or attributes selected will display as editable columns, if applicable, in the **Mass Creation** screen grid. These can be added, removed, and re-ordered using the buttons under the **Attributes and Groups** field.

Administrators are encouraged to follow recommended practices and put all category-specific attributes into one super attribute value group (e.g., Dimensions). Objects can be further divided into sub-groups (e.g., Height and Width). Any attribute sequencing will need to be done following standard procedures if attribute values should be filled out in a specific order.

There are three default columns that will display automatically, even if the **Attributes and Groups** field is empty. They are **Structure**, **ID**, and **Name**. See the example below.

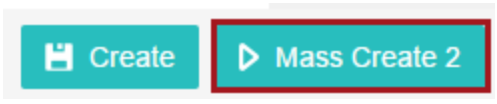


Business Condition

To apply a business condition, within **Mass Creation Screen Properties**, click the ellipsis button (...) to the right of the Business Condition field to browse / search and select one. The business condition ID displays within the properties field. Click the ellipsis button (...) to select a different business condition , and click the Clear button to the right of the ellipses button to remove an existing condition.

A business condition may be selected and used for validating object data. An end user can run a business condition validation on all rows at any time by clicking the business condition button. Also, if only a subset of the data should be tested, a user can select certain rows prior to clicking the business condition button. The business condition also runs and validates the data automatically when the Create button is clicked.

The business condition button appears to the right of the Create (shown by default) button within the user interface. The business condition name is shown on the button, and the button only displays if a business condition is selected.



For more information about Business Conditions, see **Business Conditions** in the **Business Rules** documentation.

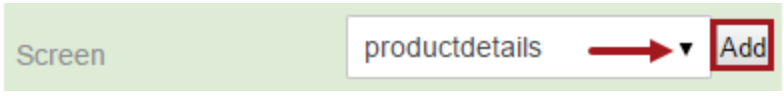
Object Types

Product, **Entity**, and **Classification** object types can be added, removed, and re-ordered using the Add, Remove, Up, and Down buttons under the **Object Types** field. The configured list will serve as the object type or types available for the user when creating new objects.

Note: Assets cannot be created using a Mass Creation screen.

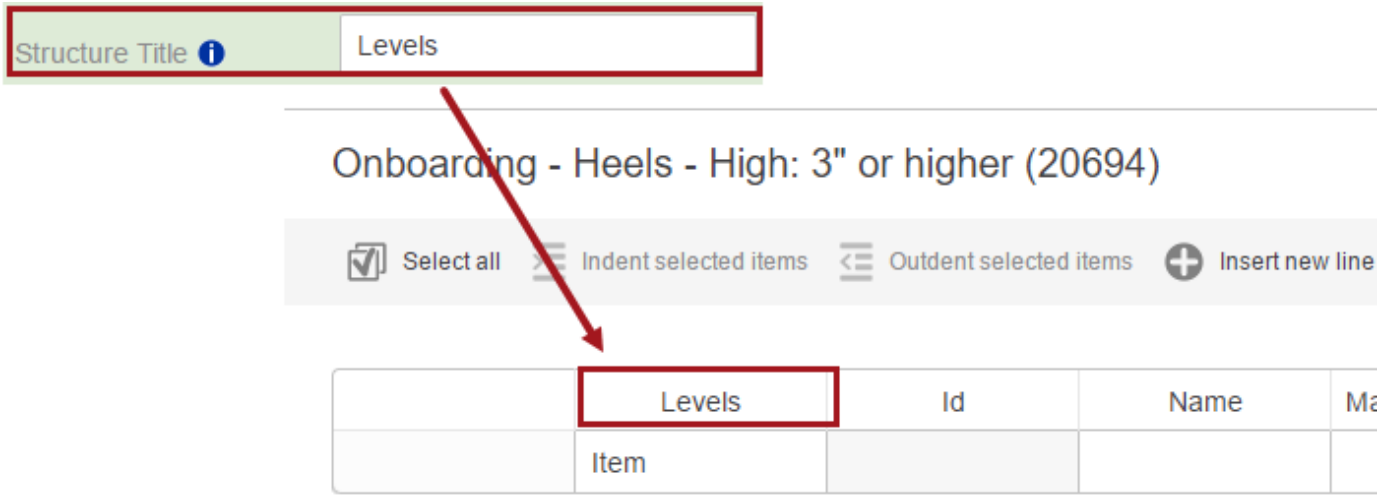
Screen

Using the Screen dropdown list, select the screen that users will be forwarded to once they create and successfully save objects in STEP. If the desired screen does not already exist, there is an Add button to the right of the dropdown.



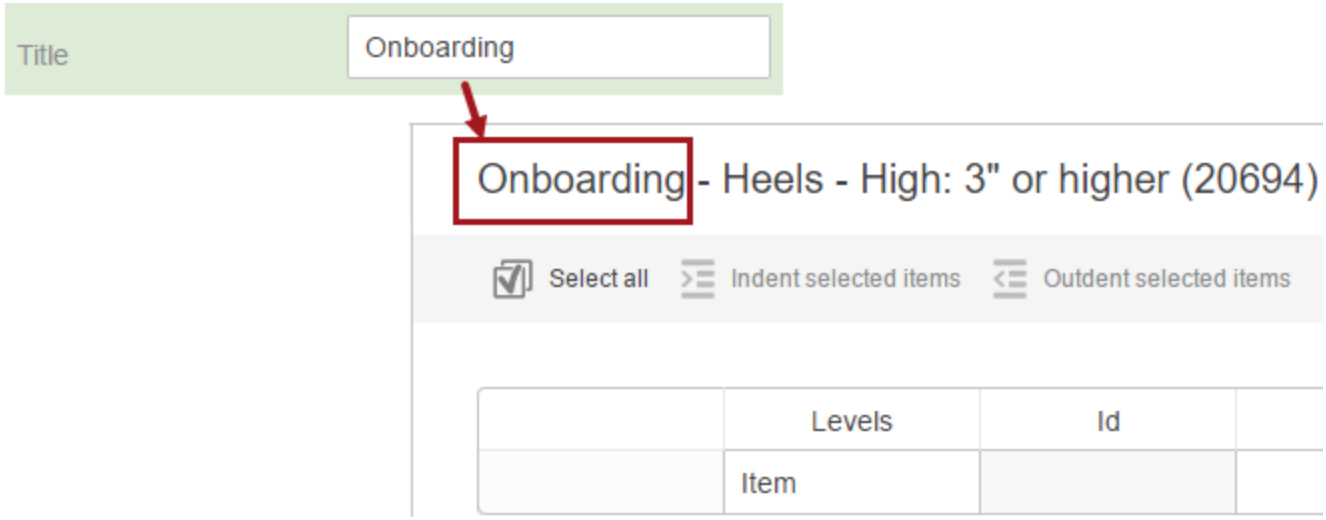
If adding a new screen, pick a screen type, and give it a descriptive Screen ID as described in the **Adding a New Mass Creation Screen** section of this topic. Once **Add** is clicked within the 'Add screen' dialog, the newly created Screen ID will auto-populate in the Screen field. Using standard processes, configuration can be done on the newly created screen once the **Mass Creation Screen Properties** are saved.

Structure Title



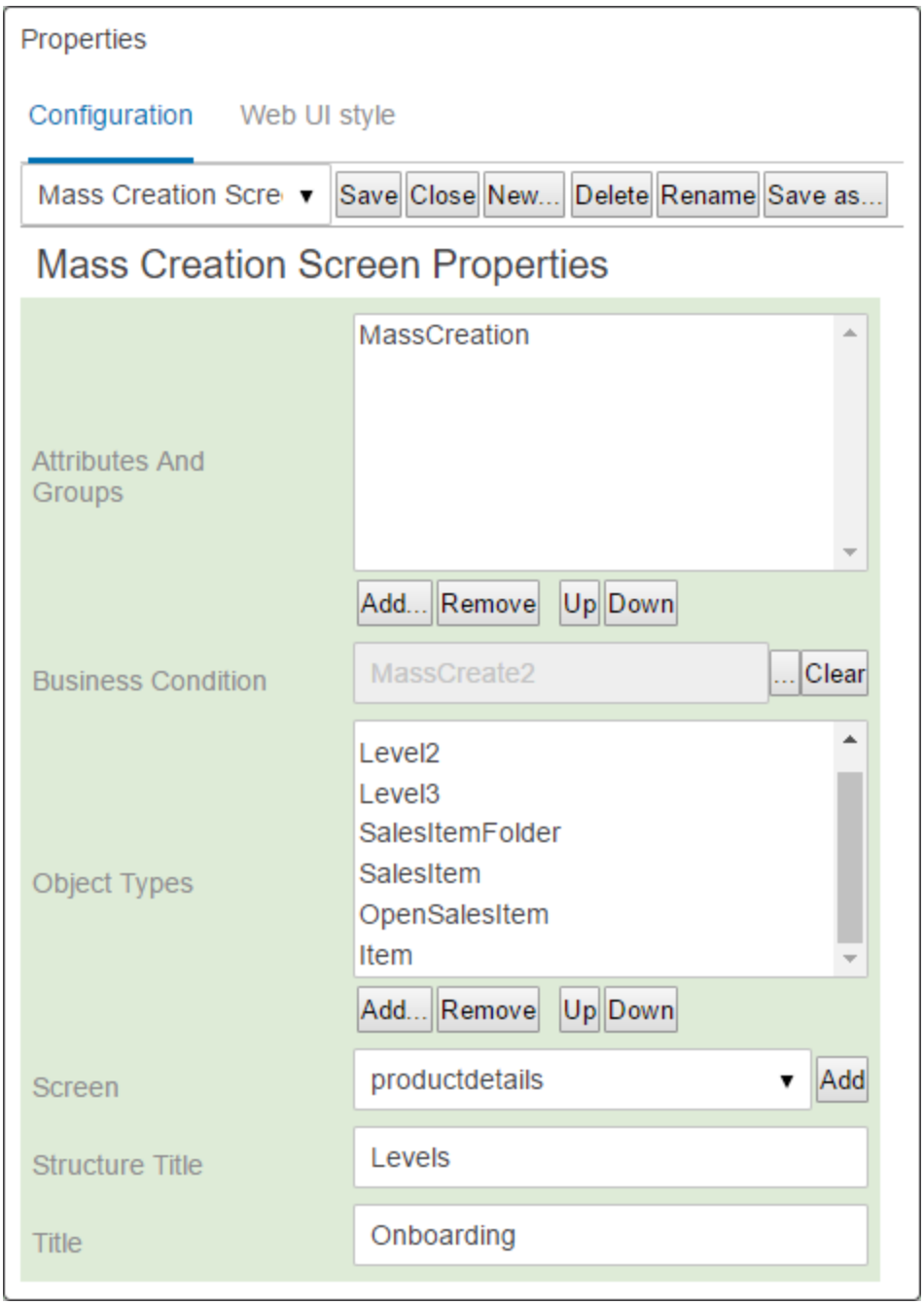
The object hierarchy Structure column, displayed by default, can be renamed to something more meaningful to the end user.

Title



'Mass creation' is the default title given to a new Mass Creation screen and is displayed at the top of the screen above the action buttons. Edit the **Title** field, if desired, to something more descriptive. The title is especially important if using multiple Mass Creation screens to onboard different object categories or object types.

Below is an example of the **Mass Creation Screen Properties**, fully configured:



After parameter selections have been made, click **Save** at the top of the Designer window. Close the window or select --[HOMEPAGE]-- to continue on and configure the Mass Creation widget. For more information, see the **Mass Creation Widget** section of the **Web User Interfaces / Using a Web UI** documentation.

For more information about using the Mass Creation components, see the **Using a Mass Creation Screen and Widget** section of the **Web User Interfaces / Using a Web UI** documentation.

Using a Mass Creation Screen and Widget

Users can create objects, create object hierarchies, and initiate objects into workflows all on one dedicated Mass Creation screen—and get to that screen using a Mass Creation homepage widget. Multiple Mass Creation screens and Mass Creation widgets can be configured and saved to meet different onboarding needs.

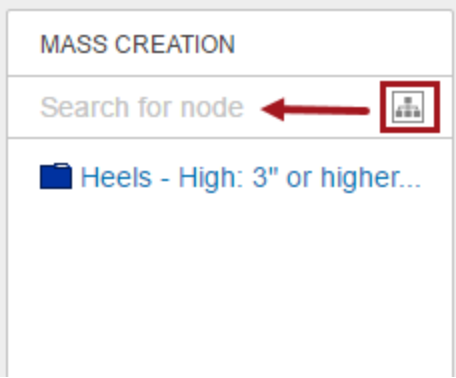
Steps to Multiple Object Creation

For simplicity, these steps and images are provided using the final property configurations shown in the **Configuring a Mass Creation Screen** and **Mass Creation Widget** documentation.

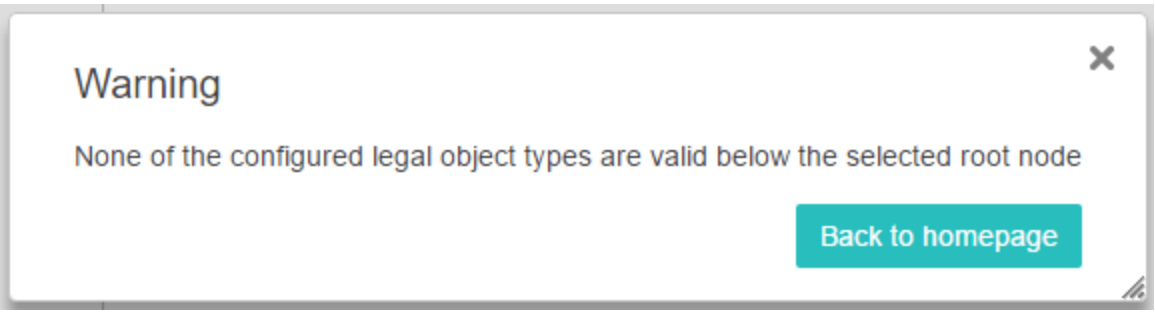
Important: A maximum of 500 objects can be created per Mass Creation screen session.

All create actions must occur in a single session without navigating away from the Mass Creation screen. Incomplete data cannot be saved in Web UI for a later submission. Also, only one super type at a time can be loaded per Mass Creation screen session (e.g., all Products or all Classifications—not a mix of both).

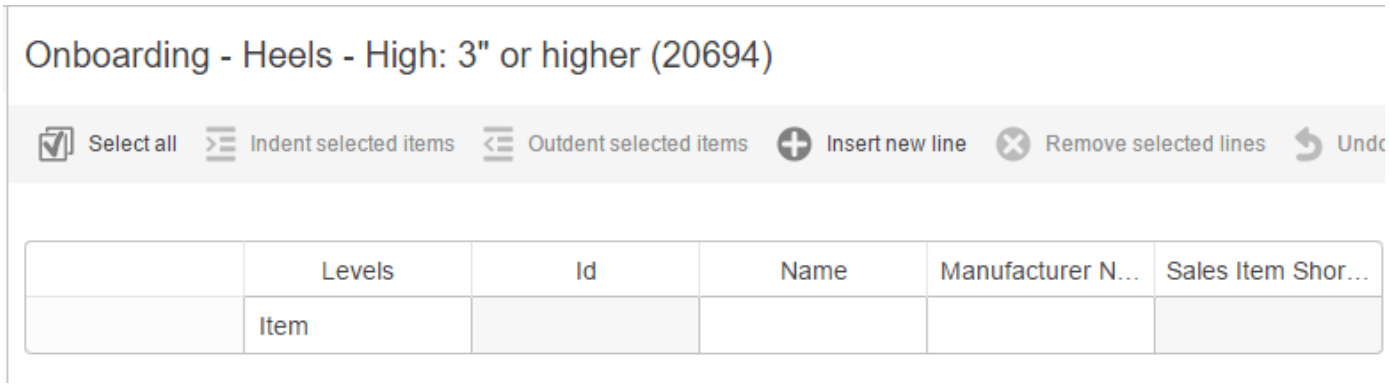
1. Go to the Mass Creation widget on the Web UI homepage.
2. Select a parent object by clicking the node picker and using the configured selection tabs. The widget also has a typeahead search feature (type in the empty area to the left of the node picker icon). The last nine selections / searches are listed on the widget under the **Latest searches** heading. The Mass Creation screen designated as the results screen in the widget configuration will display.



- If a user clicks on the widget node picker and chooses a root node that is not compatible with the Object Types selected during the screen Mass Creation Screen configuration, then the below message will display.



- If there are no issues, then the Mass Creation screen will display.



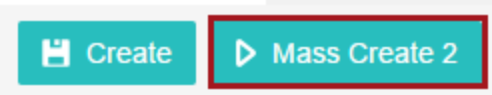
3. Enter and organize the data. *(Up to 500 objects can be created per Mass Creation screen session.)*
   - To begin, enter object data by cutting and pasting data into the table (e.g., from an Excel spreadsheet) or manually entering it.
   - Navigate by tabbing through cells or clicking in cells using a mouse. List of Values (LOV) cells are identifiable by a light gray enter icon that will display once you click or tab into the cell (↵).

Note: Engaging an LOV cell works the same across STEP Web UI components. Standard instructions to engage an LOV are to double-click in the cell. Because behavior between browsers and systems differs, if you are using just your keyboard, press Enter twice when you have tabbed in to an LOV cell; if the LOV does not display automatically, press the Alt key and the down arrow at the same time (or just the down arrow key). Click on a value to make a selection or type two or more letters / digits to identify a selection. If you want to filter through all entries, as an example, that start with 'G,' just type the letter G multiple times to cycle through the options.

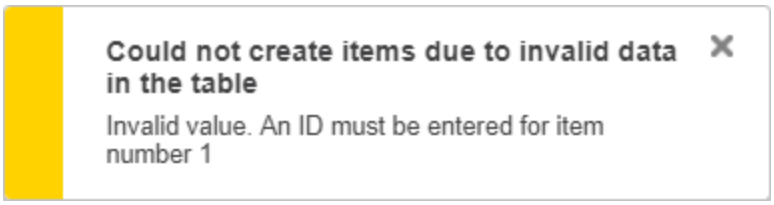
   - Once you enter data in the first available cell and press the Tab key or enter, a data row is created. An empty data row remains at the bottom of the grid for ease and convenience of entering data and adding rows. Only the data in rows marked with numbers will be used to create actual objects.
   - Organize the object hierarchy and create parent / child relationships on the screen using the Structure cell options and the action buttons.
     - Users are limited by the existing object type structure. The structure on the Mass Creation screen is created based on the existing object data model set up and configured to be used.
     - If more than one object type is available for the structure level you are creating, then the cell in the Structure column will change colors and there will be a dropdown of choices available.
     - The action buttons are located on the screen below the title and above the grid. The buttons will become active when it is valid for them to be used. From left to right order, the buttons are:

Icon	Button	Function
	Select all	Highlights / selects all lines of the grid except the last line; can be used if you want to validate data using a business condition any time during the data entry process; only displays if there are no rows selected
	Clear all	Deselects all rows; only displays if a row is selected; the button is only activated when either the Select All option is enabled, or a selection is made manually
	Indent selected items	Creates child objects; highlight row(s) and click the indent button; Structure column will update accordingly
	Outdent selected items	Creates parent objects; highlight row(s) and click the outdent button; Structure column will update accordingly
	Insert new line	Adds a row to the grid above selected entry
	Remove selected lines	Deletes rows from the grid; select at least one row to activate the button User will receive a confirmation message they must confirm; empty row cannot be removed
	Undo latest change	Allows user to undo their last change
	Redo latest change	Allows user to redo a change after undoing it

4. As data is entered, any cells with validation issues will be marked with a yellow indicator icon. These errors (e.g., entered data does not match an LOV value, entered data is not valid for the attribute's validation base type) need to be addressed before the Create button is clicked.
5. If using a business condition, additional validation can be done at any time by clicking the business condition button, which is located to the right of the Create button on the bottom left side of the screen. In the example that follows, the business condition is named Mass Create 2. The business condition automatically runs when a user clicks the Create button. See **Validating Data** below for more information regarding validation responses.



6. When done entering data into the grid and correcting any validation errors, click **Create**.
7. Address any issues, if applicable, that are displayed via an informational pop-up message (see **Validating Data** below). If the business condition validation fails for any reason upon clicking Create, none of the objects nor the object hierarchy structure will be created. For example, the following dialog shows that an ID was not found.

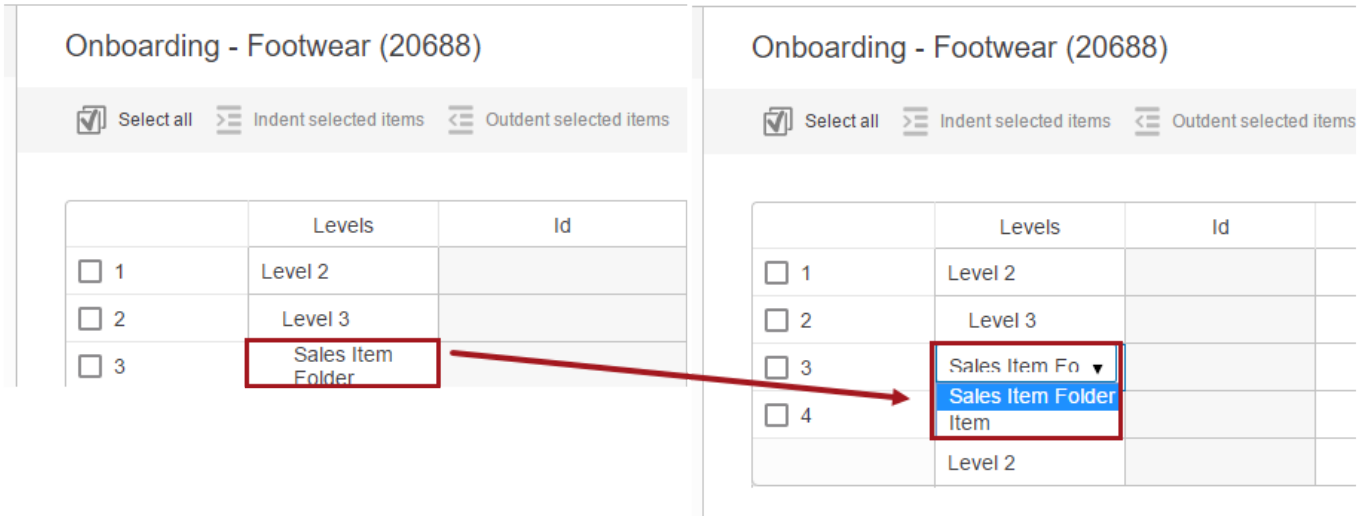


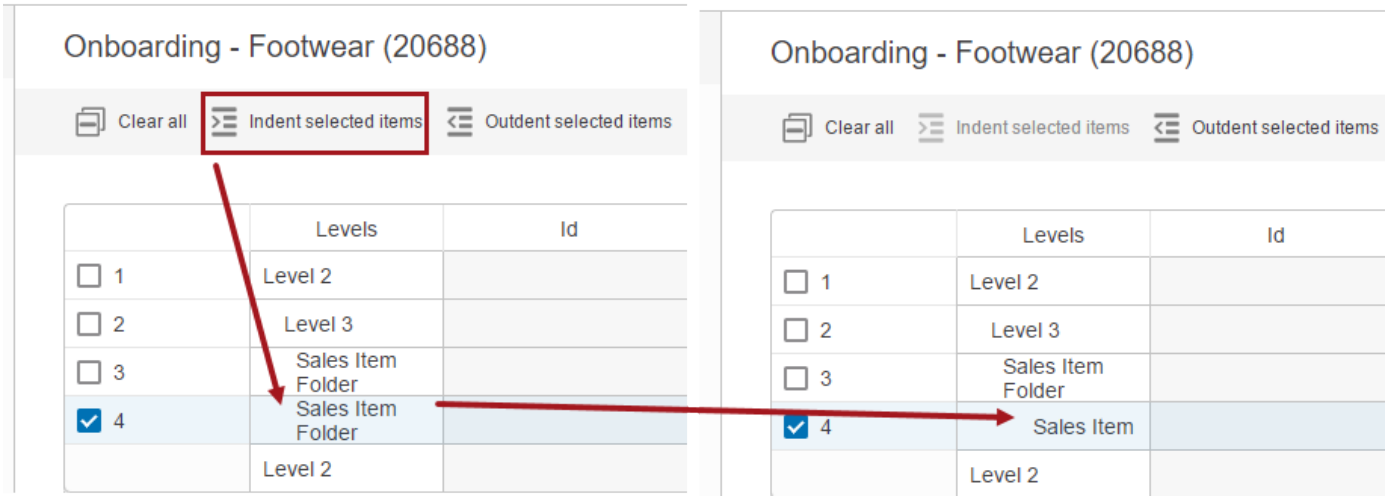
8. When creation is successful, the user will automatically be routed to the screen configured in the Screen parameter of the Mass Creation Screen Properties settings. If applicable, the new objects will automatically be initiated into workflows based on your existing workflow rules. (For more information about workflows and auto-initiation, see the **Auto-Initiation of Tasks in Workflows** topic in the **Workflows** documentation.)

Example

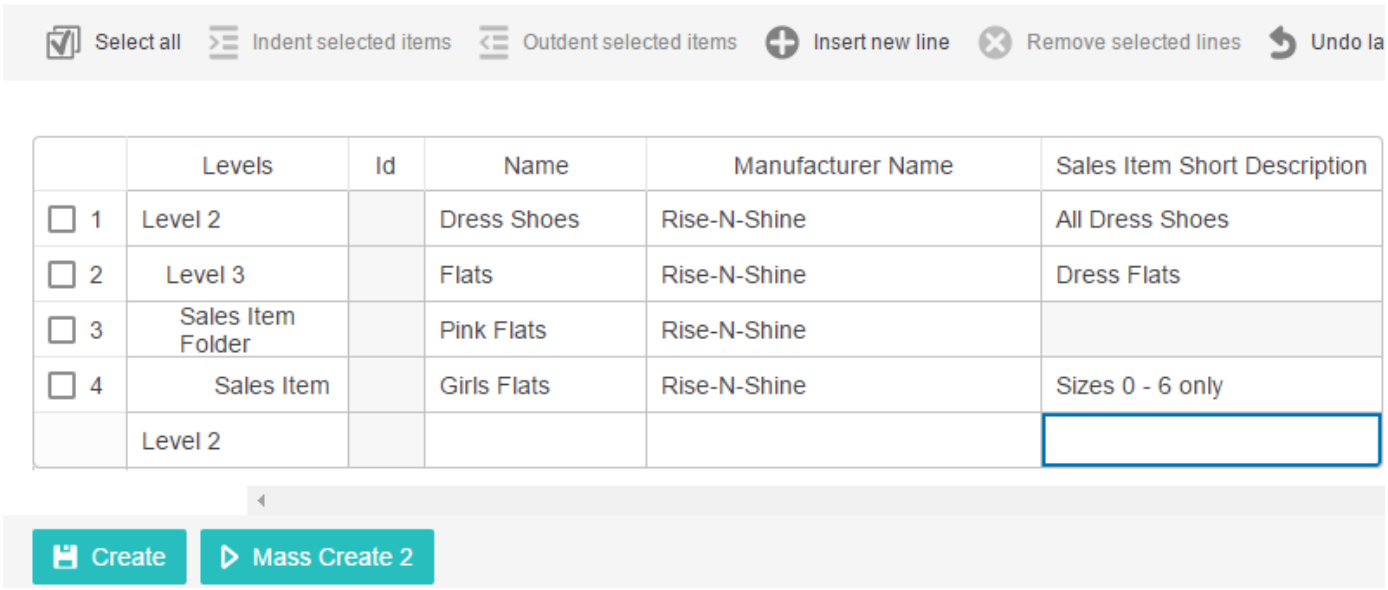
The images that follow show a simple example of objects and an object hierarchy being created.

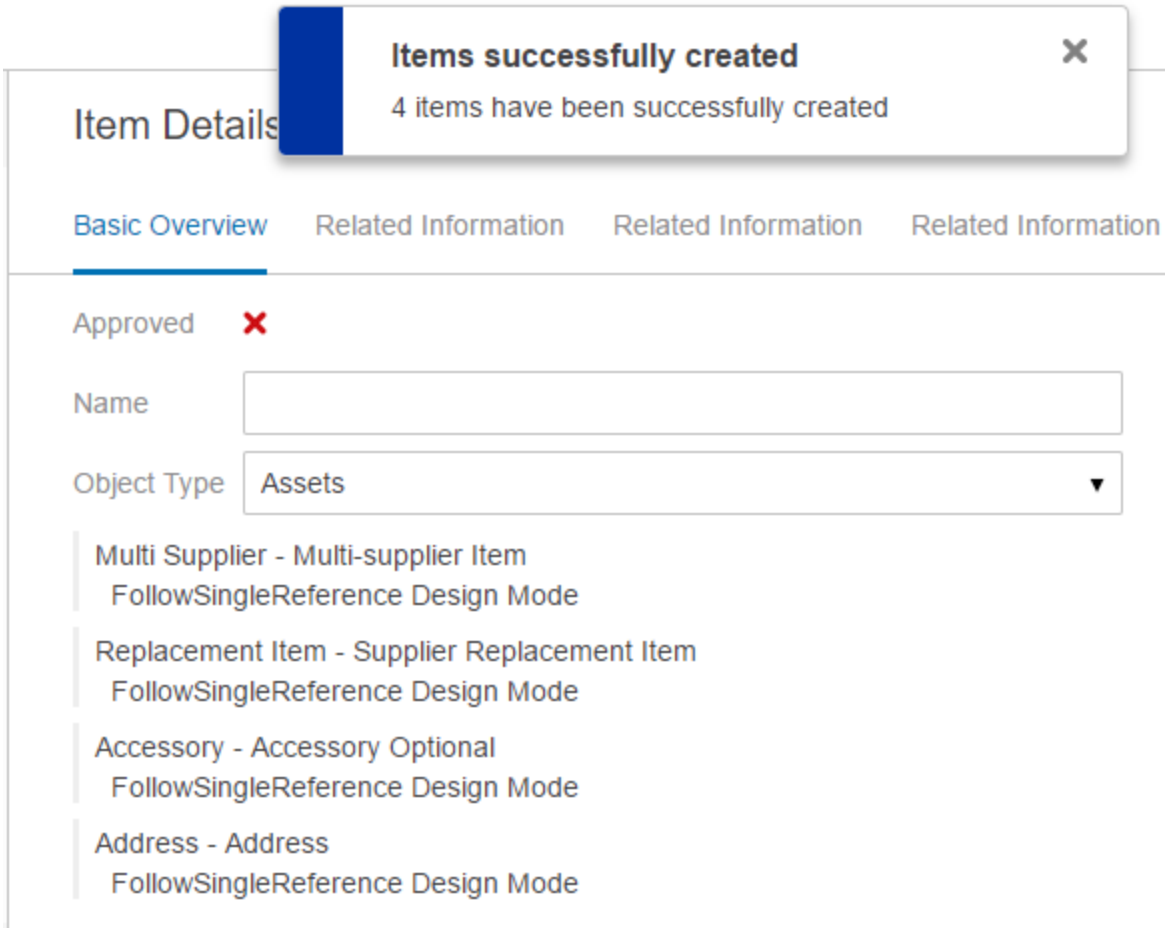
- The object type directly under Level 3 has two options (Sales Item Folder and Item).
- Sales Item Folder or Item is being indented to become a child of Level 3.
- The set of objects passed validation when Create was clicked. The objects / object hierarchy were created and the screen was routed appropriately based on the configured Screen parameter within the Mass Creation Screen Properties.
- The newly created objects are shown in the Web UI Tree.

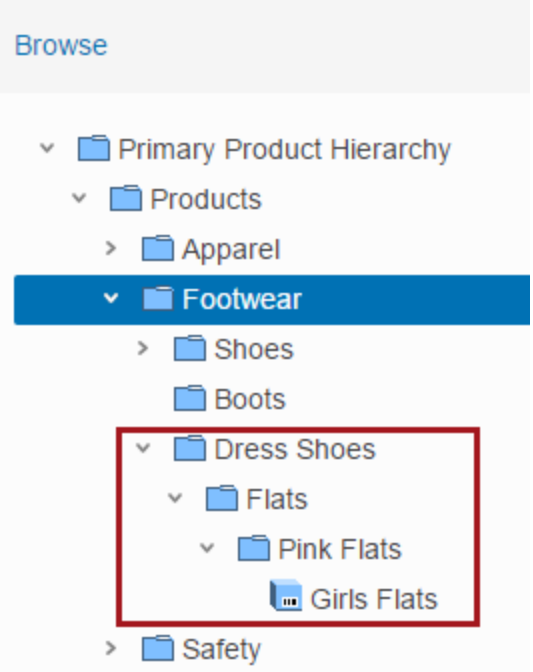

Onboarding - Footwear (20688)
Select all
Indent selected items
Outdent selected items
Levels
Id
1
Level 2
2
Level 3
3
Sales Item Folder
Onboarding - Footwear (20688)
Select all
Indent selected items
Outdent selected items
Levels
Id
1
Level 2
2
Level 3
3
Sales Item Fo
Sales Item Folder
Item
4
Level 2


Onboarding - Footwear (20688)
Clear all
Indent selected items
Outdent selected items
Levels
Id
1
Level 2
2
Level 3
3
Sales Item Folder
4
Sales Item Folder
Level 2
Onboarding - Footwear (20688)
Clear all
Indent selected items
Outdent selected items
Levels
Id
1
Level 2
2
Level 3
3
Sales Item Folder
4
Sales Item
Level 2

Onboarding - Footwear (20688)

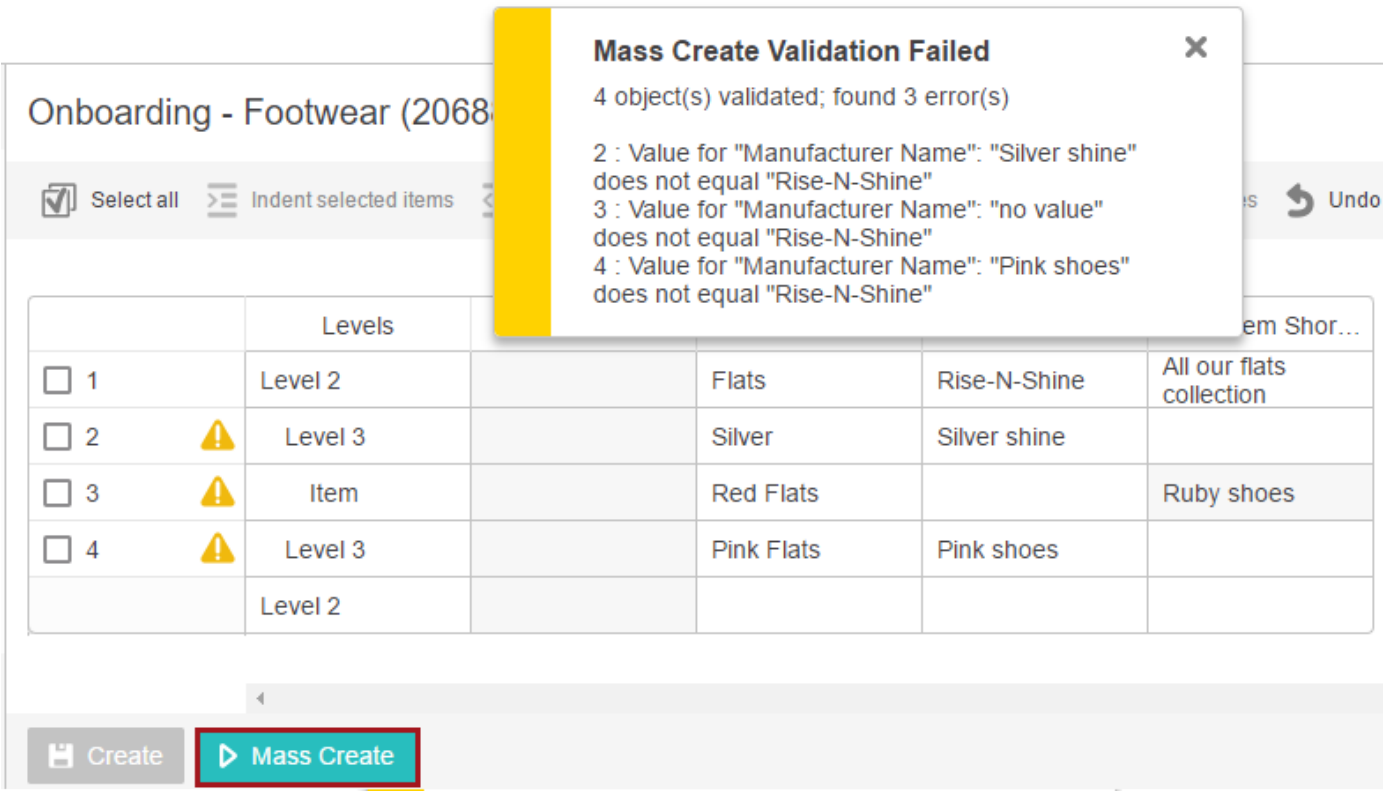




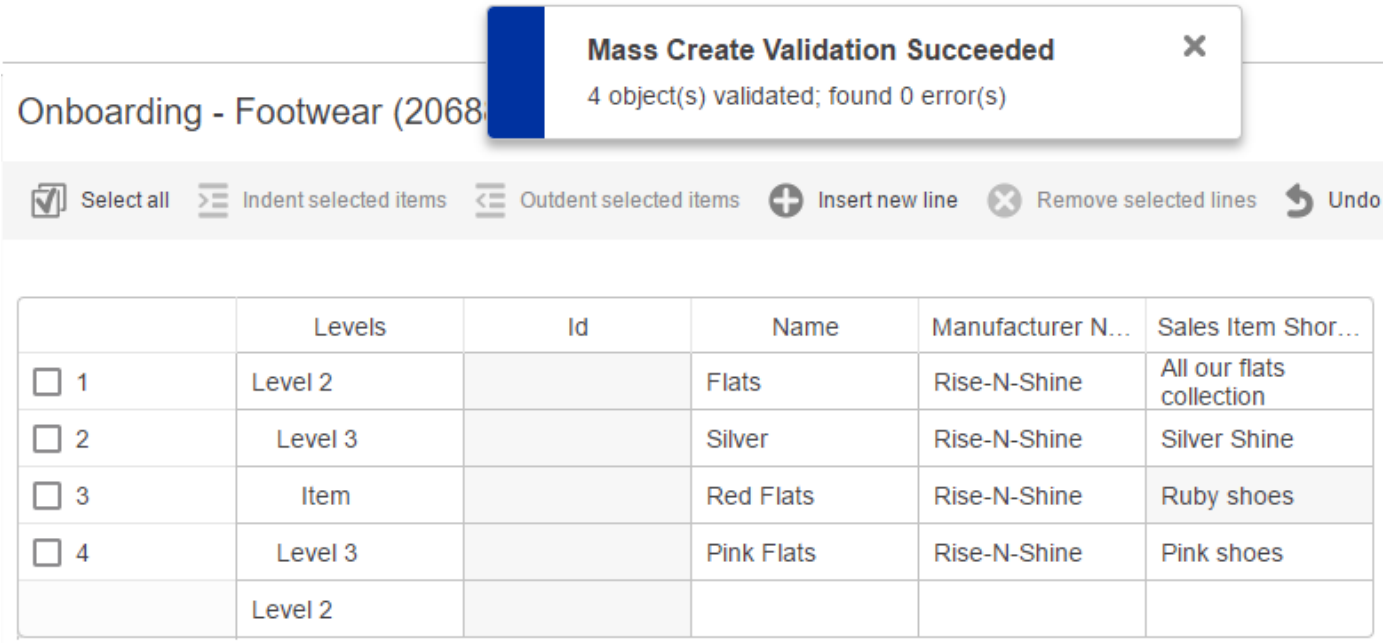


Validating Data

- If there is a **cell-level validation** error, an icon appears in the cell: ⚠
- If a **business condition validation** fails, an icon appears in the row with an error and a validation message appears:



- If a **business condition validation** is successful (pre-Create), a 'Succeeded' validation message appears:



- When the **business condition validation** is done at the time a user clicks Create, no message displays if the validation is successful. A message only appears if the validation fails.

Packaging Hierarchy Editor

The Packaging Hierarchy Editor is a component designed to ease the work with the often comprehensive task of packaging logistics. The Editor is built around an intuitive graphical user interface that visualizes all available packaging hierarchies that a selected item is part of or a packaging object is included in.

The user interface interacts seamlessly with a multi-editor, enabling the user to browse though available packaging hierarchies quickly and see relevant information about an item and packaging objects (e.g., dimensions and weight). In addition to displaying information, the multi-editor also allows for the maintaining of attribute links and attribute values on packaging objects. Users are also able to add new levels to build on existing packaging hierarchies and to unlink removed levels.

For information about setting up and using the Packaging Hierarchy Editor, see the following sections in the **Web User Interfaces / Web UI Setup and User Guide** documentation:

- Configuring the Packaging Component in STEP Workbench
- Setting Up Packaging Hierarchy Editor in Web UI
- Using the Packaging Hierarchy Editor

Configuring the Packaging Component in STEP Workbench

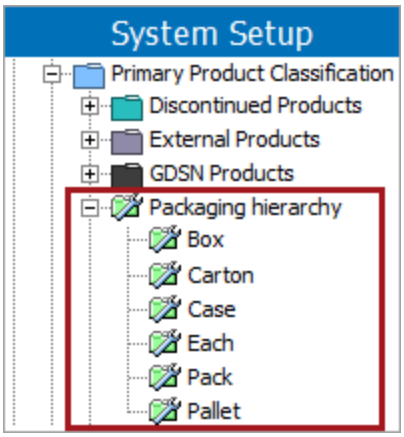
When setting up a packaging hierarchy editor in Web UI, and when sending product packaging information to Product Data Syndication (PDS), configuration must be performed in workbench. Below are the steps required for data structure and workbench setup.

1. Create object types for packaging objects
2. Create references between the packaging objects
3. Create quantity attribute
4. Set up the Packaging Component Model

Note: To access the Packaging component model, the 'packaging' component must be activated on your system in addition to the normal update procedures. Contact your Stibo representative for details.

Create object types for packaging objects

The first step when configuring the STEP Workbench is to create the packaging object types that are going to be used. These packaging objects represent the different packaging types making up the packaging hierarchies (e.g., box, case, and pallet). The packaging object types should be created under Object Types & Structures under System Setup. Once the desired folder is found, right-click on it to create a New Object Type.



Important: All packaging object types created should be configured to have automatically generated IDs, which is achieved by setting the ID Pattern parameter to **[id]**.

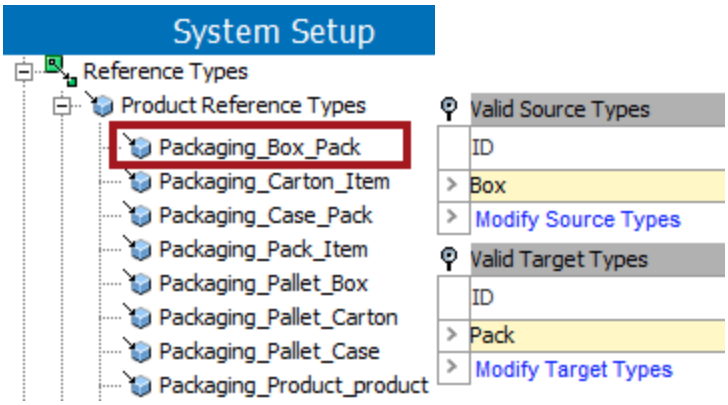
Description

Name	Value
ID	Box
Name	Box
Last Edited by	2014-12-05 10:25:00 by STEPSYS
Name Pattern	
ID Pattern	[id]
Manually Sorted	No
Enable Profiling	No
InDesign Template Allowed	No
Quark Template Allowed	No
Icon	
Dimension Dependencies	
Offers	

Create references between the packaging objects

In order to create the level structure of the packaging hierarchy, after creating the needed packaging objects, the objects should be linked to each other. This is done by creating product references between the packaging objects (System Setup > Reference Types > Product Reference Types).

Since the direction of the references between the packaging objects decides the packaging hierarchy structure, it is crucial that the reference source is the higher level packaging object and the reference target is the lower level object type. For example, Pallet-to-Box, and Box-to-Pack.



Create quantity attribute

A description attribute valid for all configured references between packaging types is required. This attribute should be set up to contain the quantity of the next lower level package quantity and will be used in the component model configuration, which is explained in the next section. In the examples going forward, this attribute is named 'Qty of Next Lower Package.'

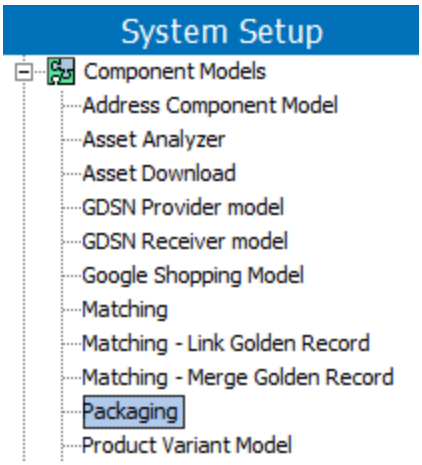
Note: This quantity attribute should be a single-valued attribute. If it is a multi-valued attribute, end users may run into errors within the Web UI Packaging Hierarchy Editor (Number Of Items calculations and Node List editing).

Packaging Hierarchy References

Reference Type	Source	Qty Of Next Lower Package
Case To Child		
Pack To Child		
Pallet To Child		

Set up the Component Model

When all previously mentioned steps have been completed and the data structures have been defined, it is possible to set up the component model configuration. The component model for the packaging hierarchy is found under Component Models on the System Setup tab.



Important: In order to set up the component model properly, it is important the that packaging hierarchy object types contain the item (product), which represents the lowest level in the packaging hierarchy.

Component Model Configuration

Name	Value	Description
Packaging object types	Pack Pallet Case Item	List of product object types that are used in the Packaging Component Model
Quantity of the next lower level package	Qty Of Next Lower Package	Description attribute containing the quantity of the next lower level packages
Packaging reference types	Pack To Child Case To Child Pallet To Child	Reference types that relates a packaging object to its child packaging object

Edit

The configuration of the Packaging Component Model consists of three sections:

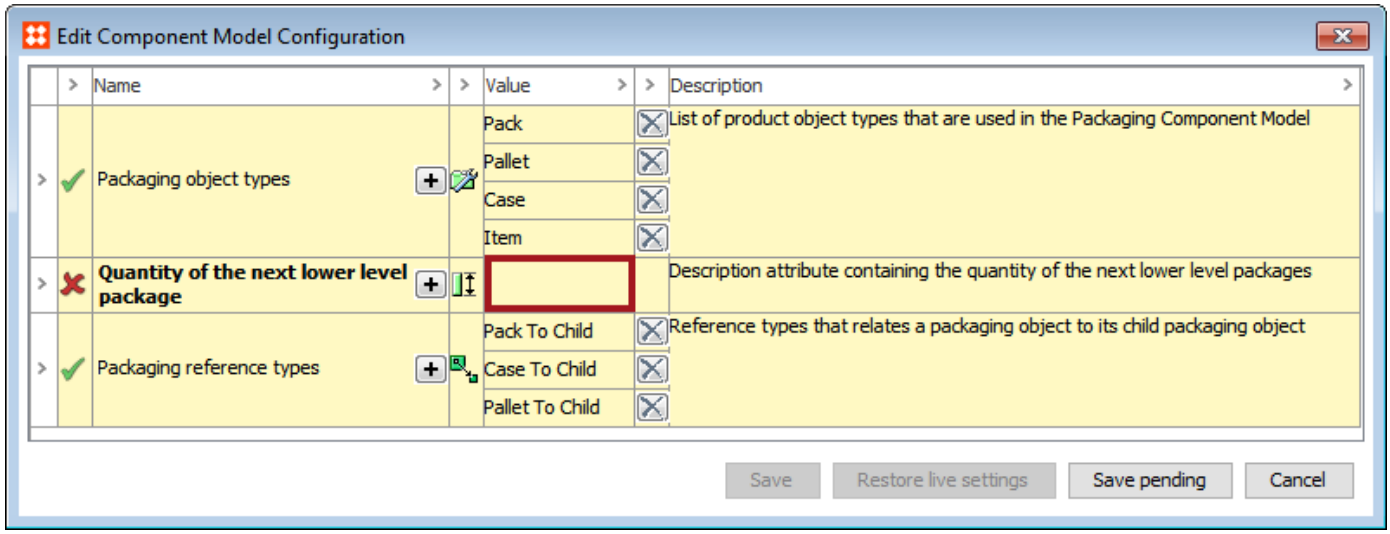
- **Packaging object types** should contain all object types used in the packaging hierarchy.
- **Quantity of the next lower level package** should point to the quantity attribute created as part of the setup.
- **Packaging reference types** should include all reference types that are used in the packaging hierarchy structure.

Click the Edit link to display the Edit Component Model Configuration dialog and allow editing of the packaging component model configuration.

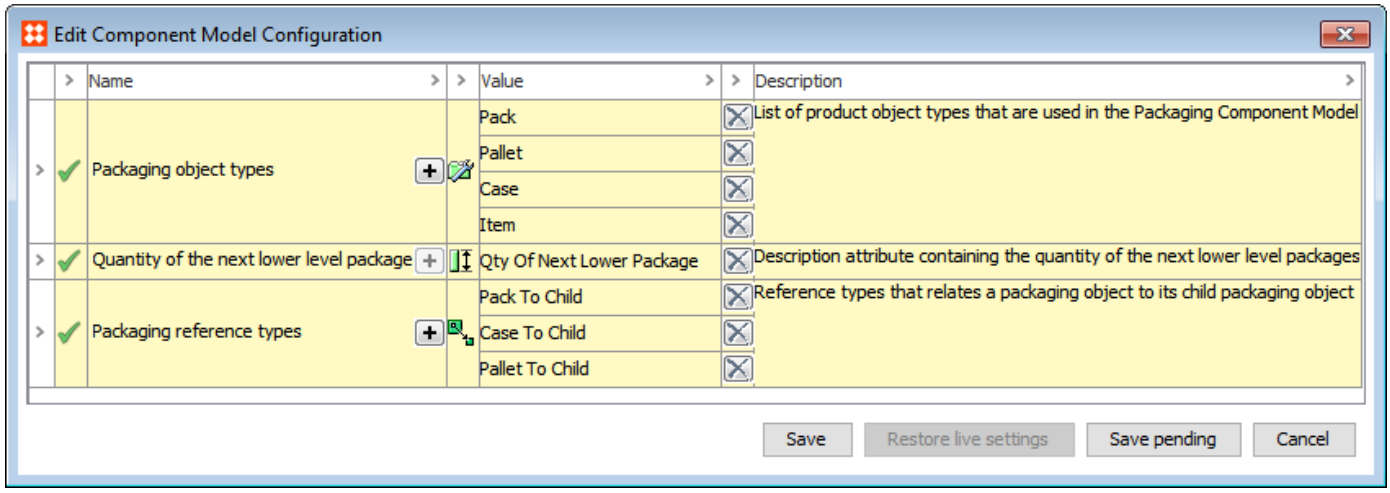
- Double-click the edit button (+) to make value additions.
- Click the delete button (X) to remove values.
- Click the **Save** button to retain your changes.

As changes are made, the first column is updated with ✓ to indicate that the section is verified, or ✗ to indicate that the section cannot be verified against the other sections.

For example, as shown below, when no 'Quantity of the next lower level package' attribute has been selected, the component is not verified and can only the **Save pending** button is available.



Supplying the missing data then displays a verified indicator. When all sections are verified, as shown below, click the **Save** button, and the component model is ready to use.



To use the Packaging Hierarchy Editor in Web UI, continue with the **Setting Up Packaging Hierarchy Editor in Web UI** section in the **Web User Interfaces** documentation. For information about using a packaging hierarchy, see the **Using the Packaging Hierarchy Editor** section in the **Web User Interfaces** documentation.

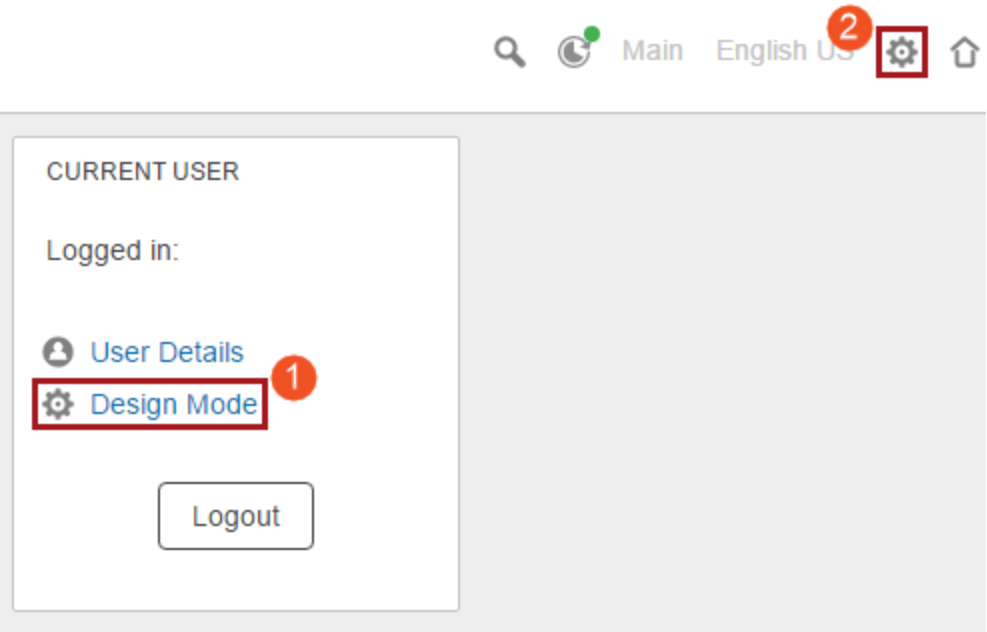
To send the packaging hierarchy data to Product Data Syndication (PDS), see the **PDS Outbound Integration Endpoint Configuration** topic in the **Data Integration** documentation.

Setting Up Packaging Hierarchy Editor in Web UI

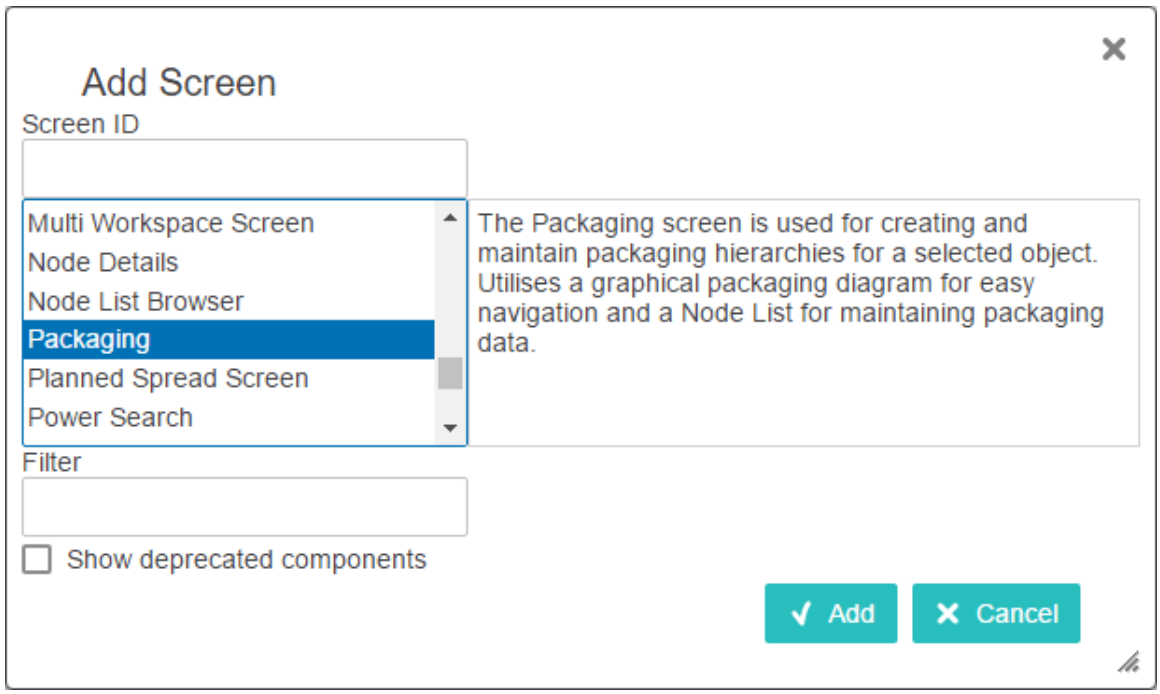
Prior to setting up the Packaging Hierarchy Editor in Web UI, make sure the STEP Workbench setup has been completed. For more information, see the **Configuring the Packaging Component in STEP Workbench** section in the **Web User Interfaces Web User Interfaces / Web UI Setup and User Guide** documentation.

Create a new screen

1. Log in to the Web UI. User must have privileges to edit Web UI configurations.
2. Click the design mode launch button found on the homepage (in the user widget) or from the corner bar, if configured, on any other Web UI page.



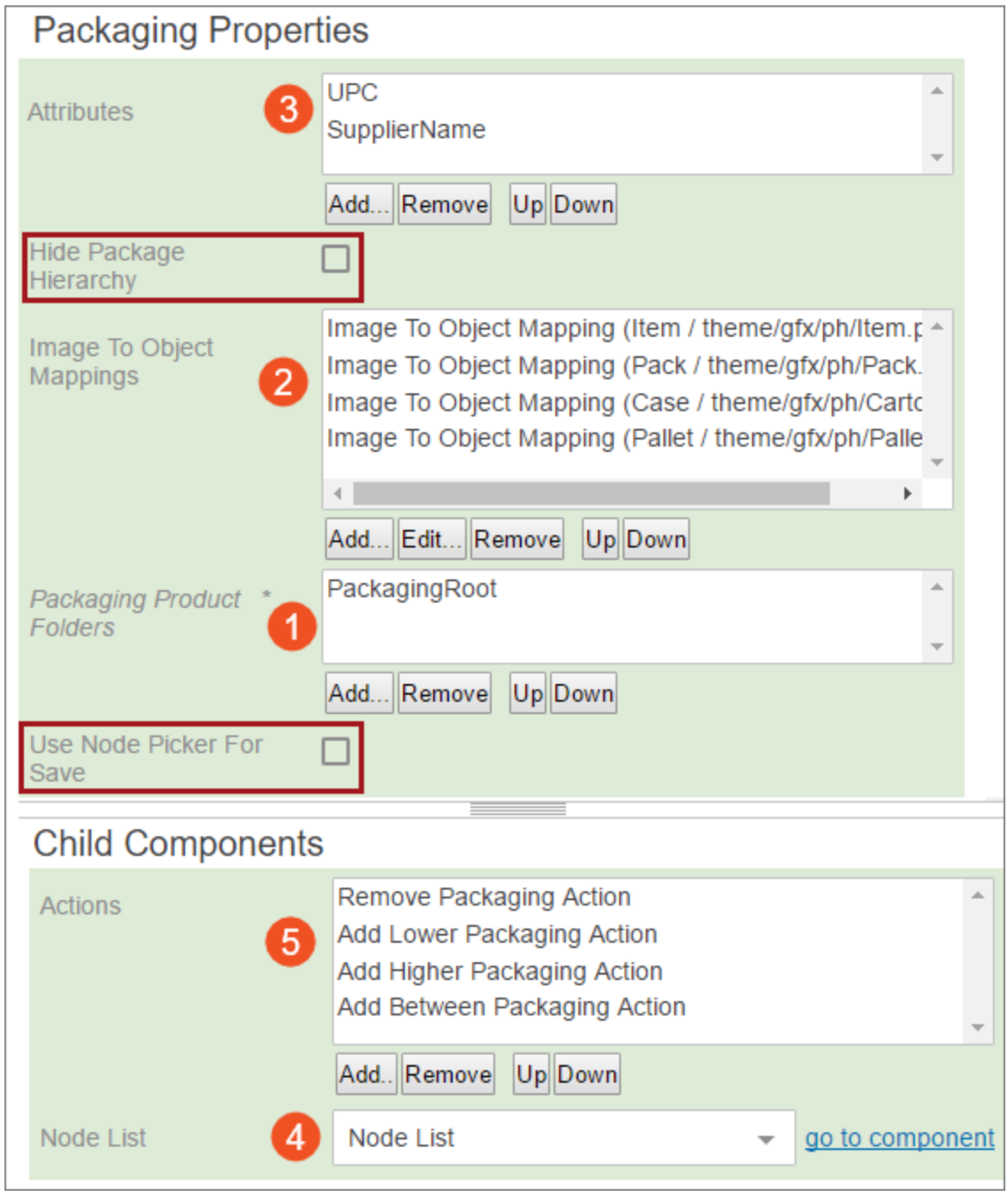
3. To create a new screen, click New and select Packaging to add the Packaging Hierarchy screen. Also, type in a Screen ID. This should be something users can easily identify, if needed, from the list of screens.



Configure the Packaging Hierarchy Editor Screen

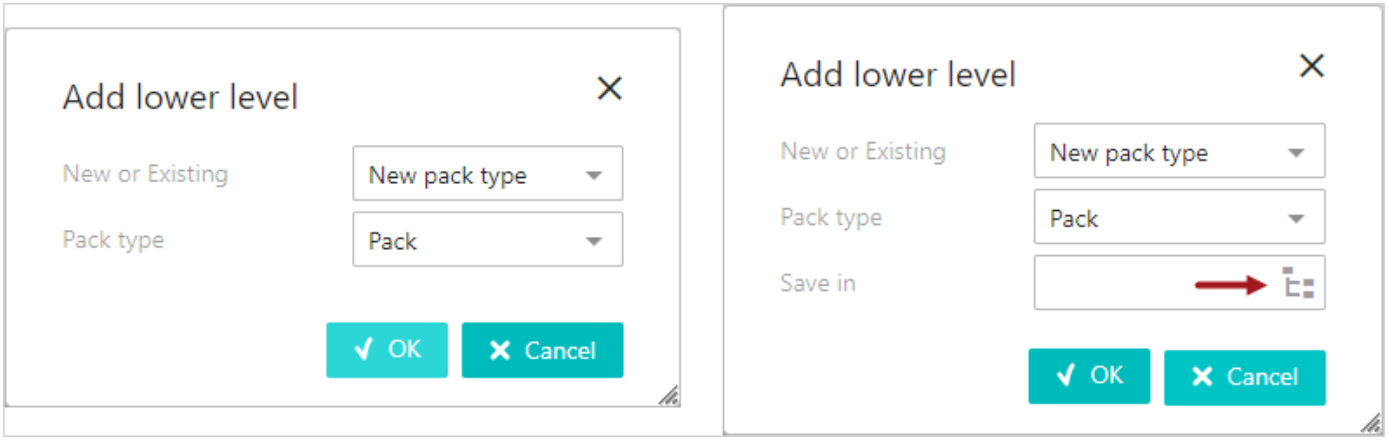
There is a basic default configuration as part of the STEP system, however, some additional setup is required.

If still in the designer mode after creating a new screen, go to the following step. Otherwise, log in to Web UI and enter design mode before continuing. Bring up the Packaging Properties for the Packaging Hierarchy Screen ID.



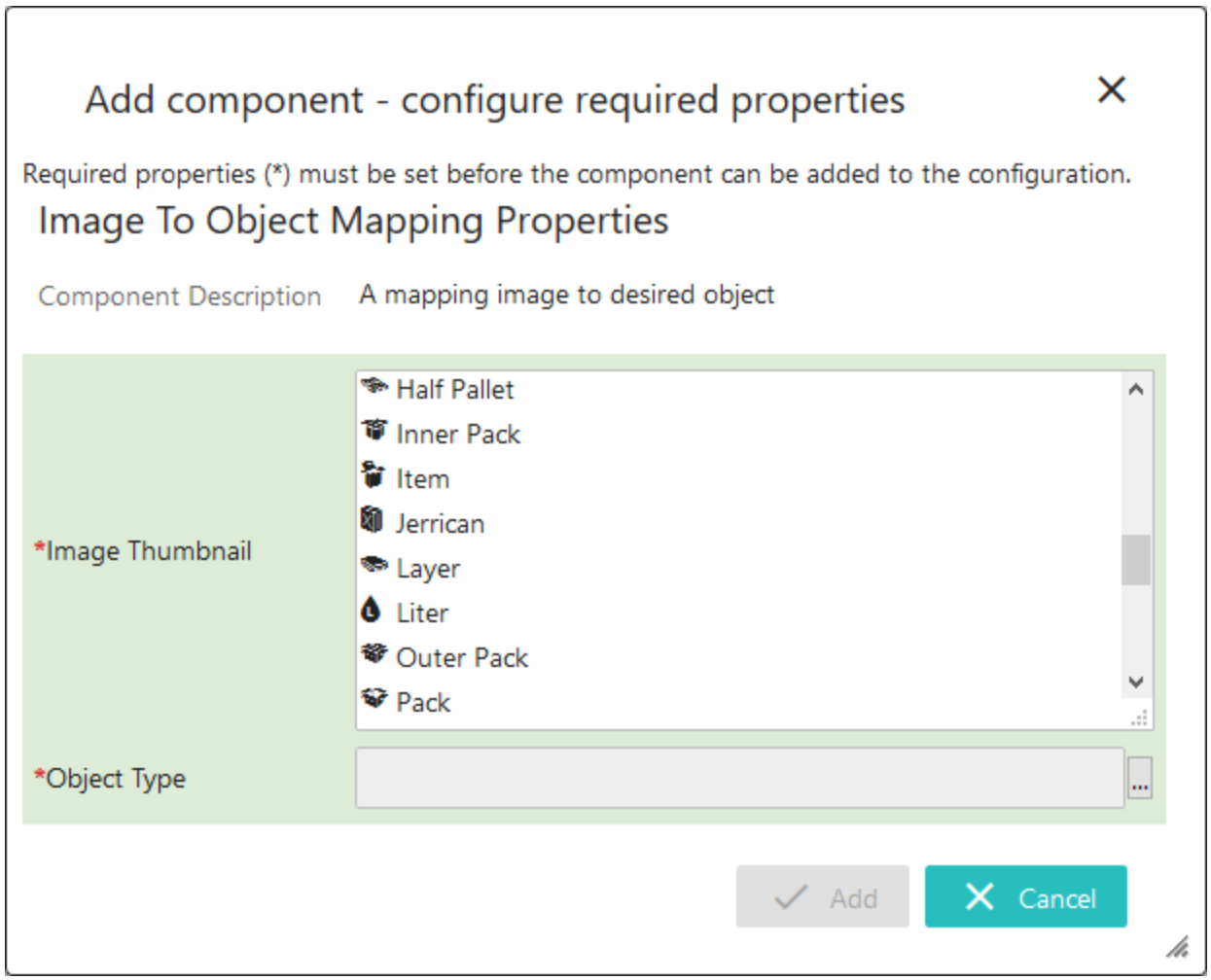
1. Configure the **Packaging Product Folders** parameter to designate the folder or folders where the packaging objects are / will be saved. Folders need to be set up prior to using this Add functionality.

   If users should only pick from the configured designated Packaging Product Folders when saving a packaging object, choose to disable / uncheck the **Use Node Picker for Save** parameter. *(If the Node Picker option is enabled / checked, users will be given a node chooser dialog to pick any folder available See the example screenshots that follow.)*



2. Configuring **Image To Object Mappings** will connect a predefined icon to a specific packaging object type. These icons are used as representations of the specific packaging types in the Packaging Hierarchy Editor and help distinguish between the available packaging types. On the ' Image to Object Mapping' parameter, click the 'Add' button beneath the field. Select an icon type in the 'Image Thumbnail' field.

   For the 'Object Type' field, click the ellipsis button (...) to the right of the field. Using the Node Picker window that displays and select from the Node Picker select an Object Type to connect to the icon.



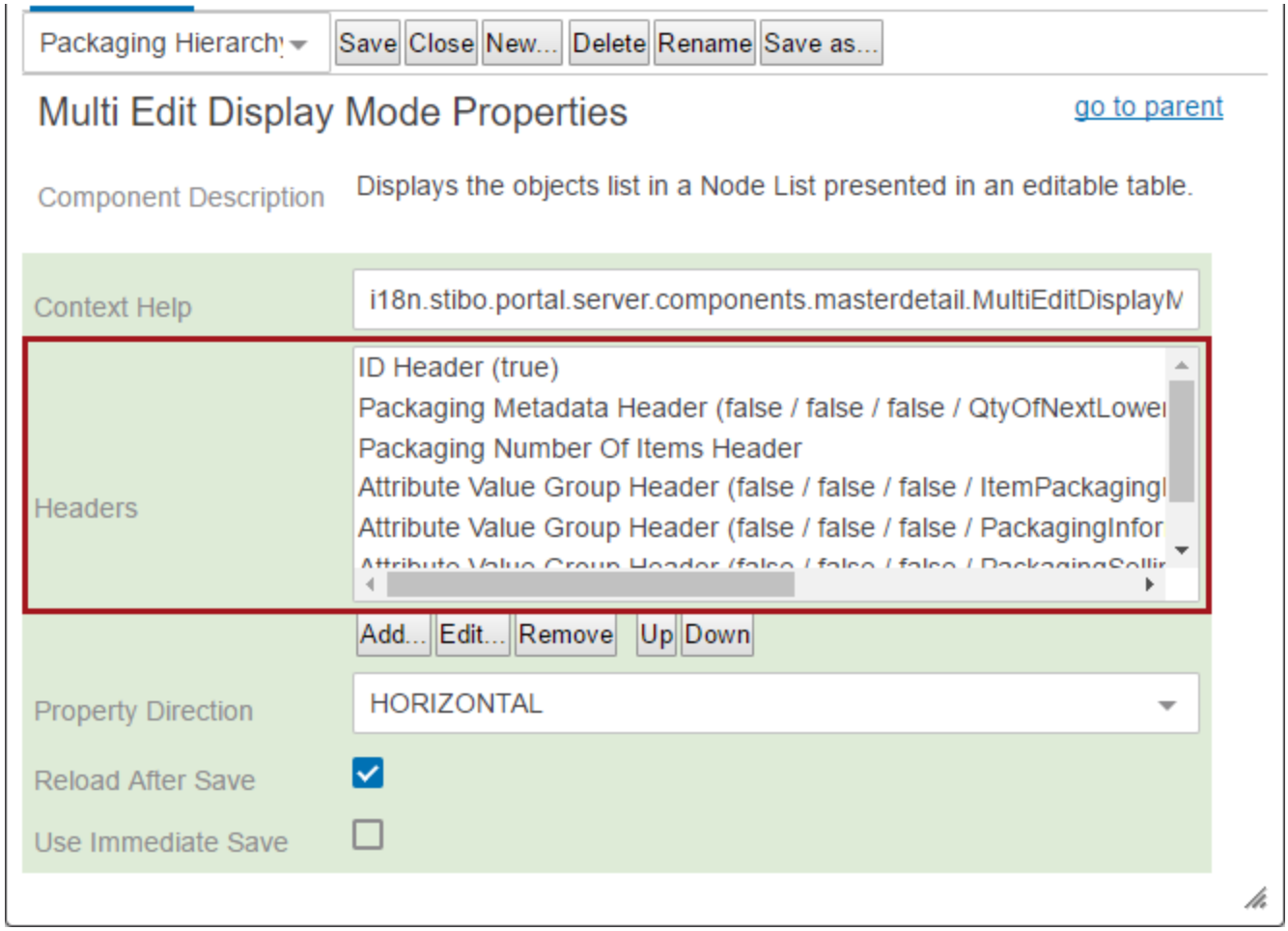
3. If desired, up to two **Attributes** can be configured to show on the graphical elements along with the packaging icon. This makes it possible to display valuable information directly in the diagram, allowing users to quickly get a visual overview of the available Packaging Hierarchies for the selected product.

   Example of an icon that includes the packaging type icon and two attribute values:

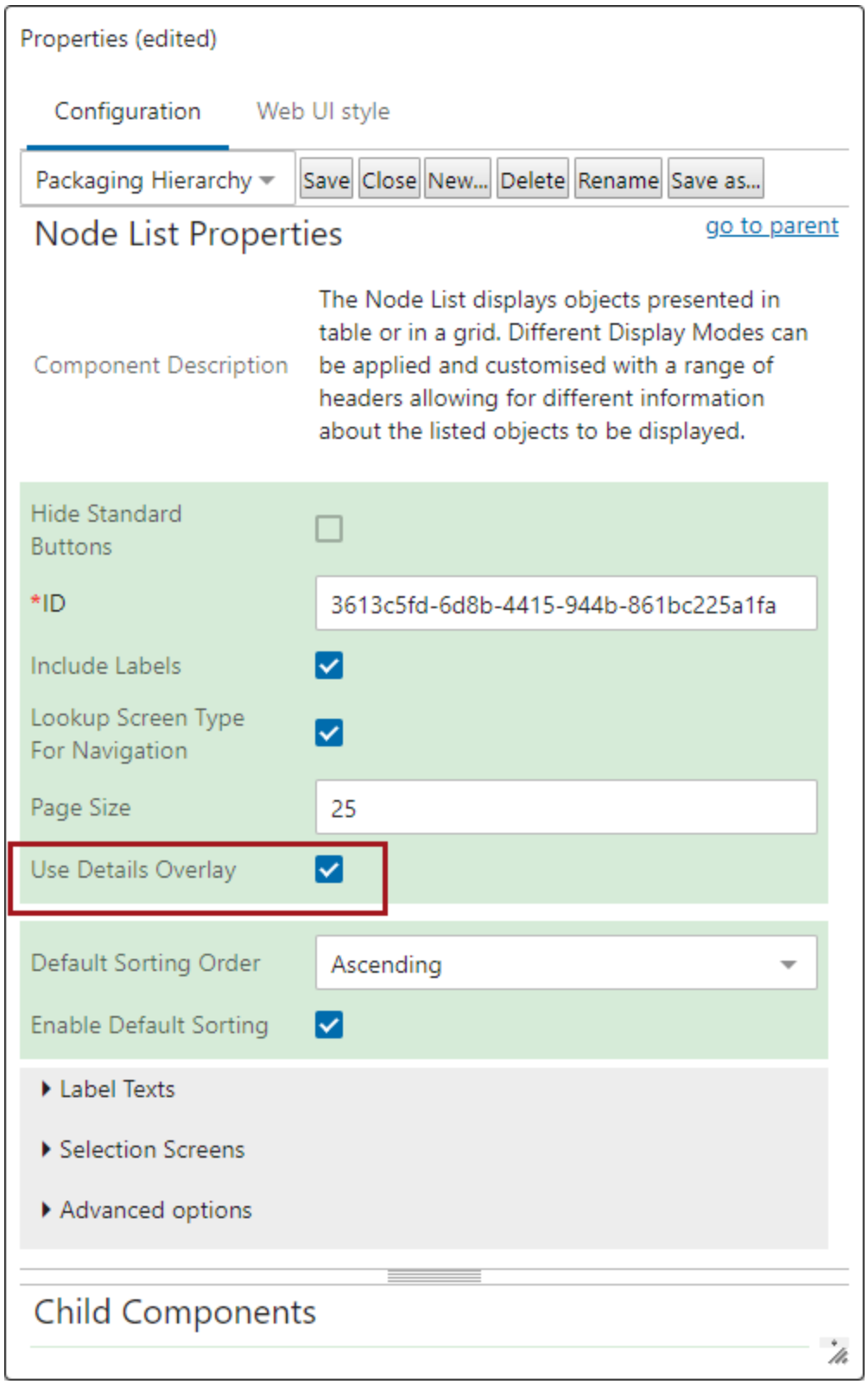
Note: More than two attributes can be added in the Attributes parameter value field on the Packaging Properties screen. However, only the first two attributes will display on the icon.

Hide Package Hierarchy can be enabled to remove the graphical user interface from display. This may be useful for simple hierarchies where end users do not need to see the graphics and just want to work within the Node List itself.

4. When setting up the Packaging Hierarchy Editor Child Components, It is possible to configure the **Node List** component like any other Web UI Node List. For more information, see the **Node List Component** topic in this documentation. However, by default, Multi Edit Display Mode is set as the display mode. The Multi Edit Display Mode is pre-populated with four attribute headers: Name, ID, the quantity attribute used in the Component Model Configuration, and Number Of Items (determined by hierarchy structure and the quantity attribute).

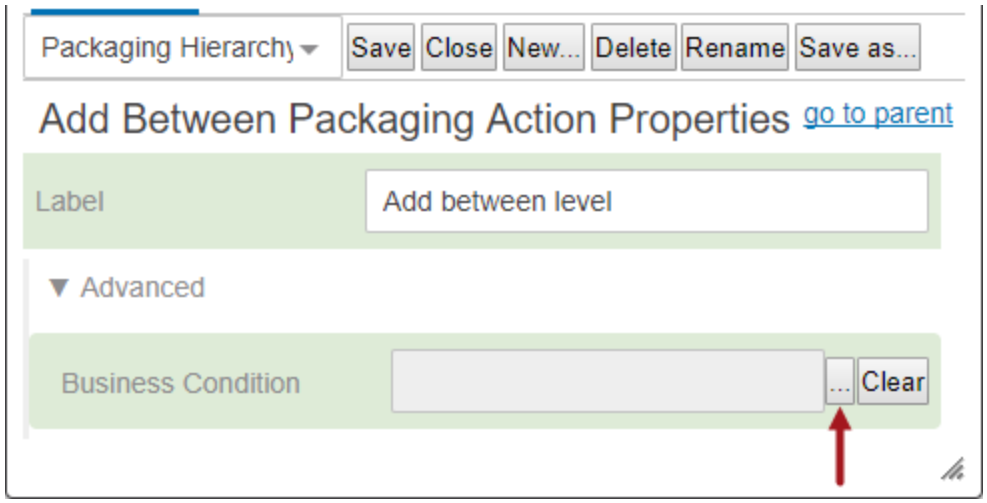


5. Under the Node List properties, select the Use Details Overlay so that when a user selects any item on the node list, the packaging list details will display as an overlay. Users can easily return to the results list / Node List by clicking the icon in the upper right corner and can use the arrows to navigate through each Node List item.


Properties (edited)
Configuration
Web UI style
Packaging Hierarchy
Save
Close
New...
Delete
Rename
Save as...
Node List Properties
go to parent
Component Description
The Node List displays objects presented in table or in a grid. Different Display Modes can be applied and customised with a range of headers allowing for different information about the listed objects to be displayed.
Hide Standard Buttons
*ID
3613c5fd-6d8b-4415-944b-861bc225a1fa
Include Labels
Lookup Screen Type For Navigation
Page Size
25
Use Details Overlay
Default Sorting Order
Ascending
Enable Default Sorting
Label Texts
Selection Screens
Advanced options
Child Components

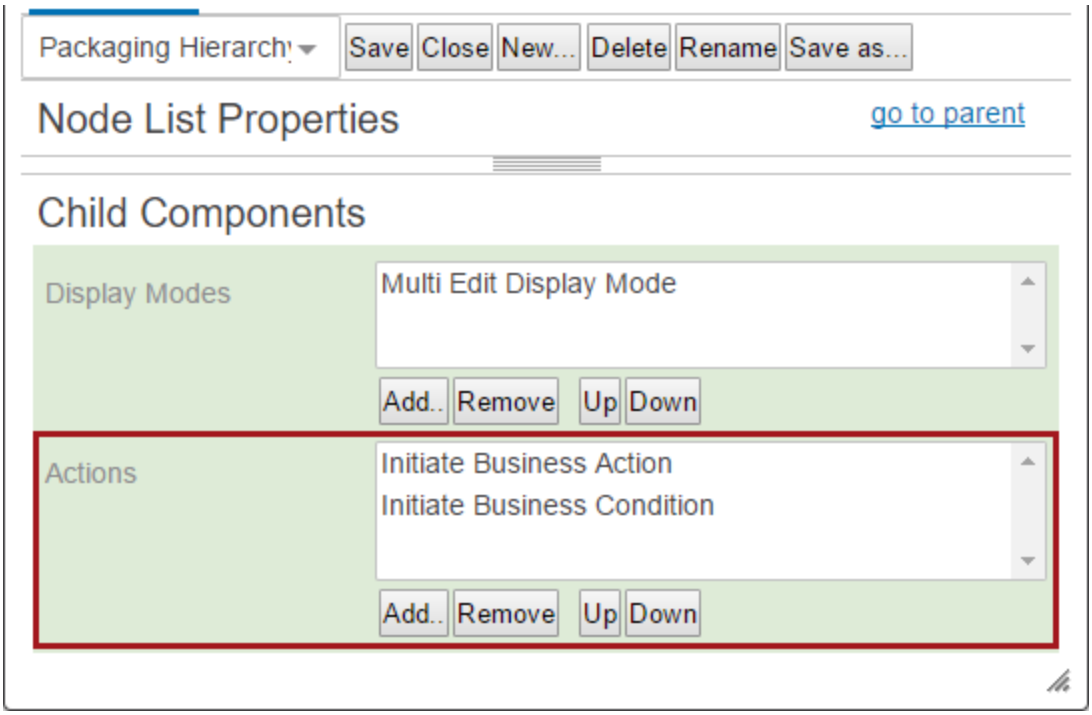
6. Also under Child Components, users can set up the following Packaging Hierarchy **Actions** using the Add button: Add Lower Packaging Action, Add Higher Packaging Action, Add Between Packaging Action and Remove Packaging Action.

   Also, a **Business Condition** can be added to each action. This option can be found under the Advanced section of each Action Properties screen.



Validation of packaging hierarchy

It is possible to run a business rule / business condition to validate the entire Packaging Hierarchy. Business rules and conditions can be added using the Actions component on the Node List Properties accessed from the Packaging Properties screen.



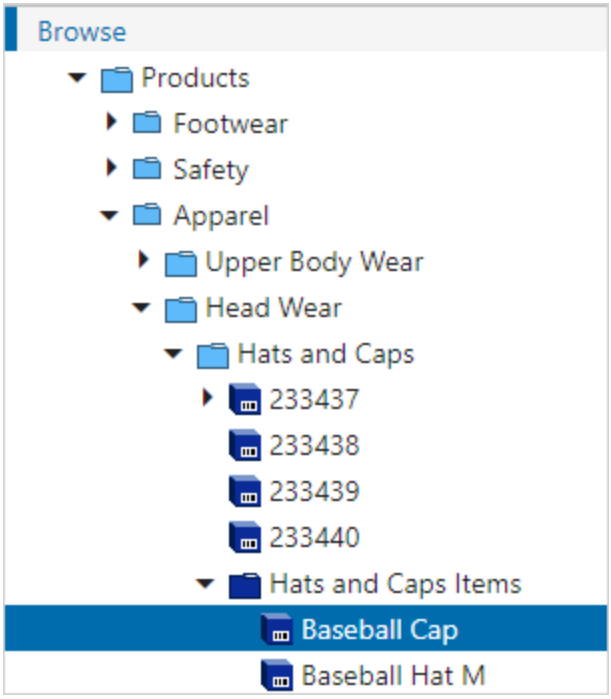
For additional information about using packaging hierarchy, see the **Using the Packaging Hierarchy Editor** section in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Using the Packaging Hierarchy Editor

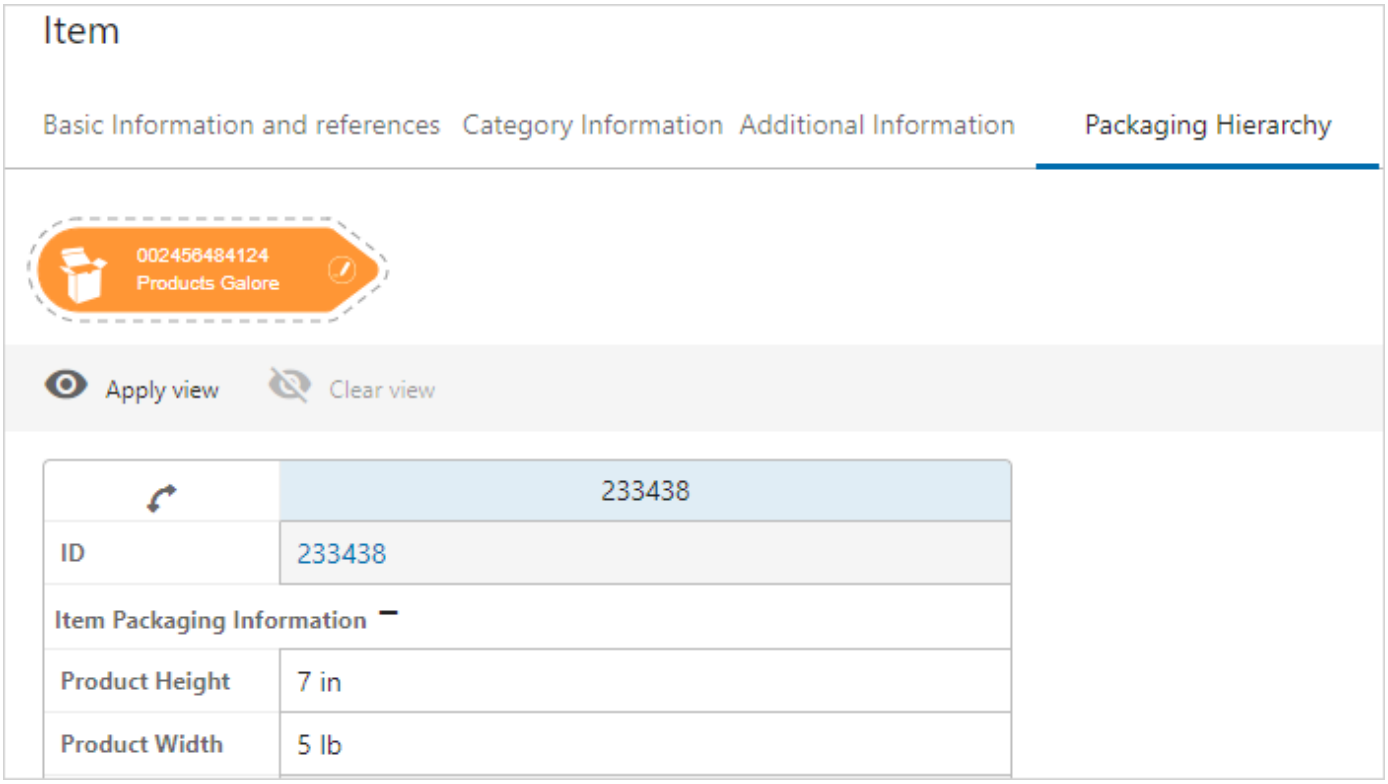
When the Packaging Hierarchy Editor has been configured to display in Web UI, it is possible to view and edit packaging hierarchies. When set up and used correctly, the Packaging Hierarchy Editor looks similar to the following screenshot:

Opening the Packaging Hierarchy Editor can be done by selecting an object or a packaging type from the Tree or from on a product details screen.

For the Packaging Hierarchy Editor to display, the packaging hierarchy for a selected object type needs to be configured in the Component Model. For more information about the Component Model configuration, see the **Configuring the Packaging Component in STEP Workbench** section in the **Web User Interfaces** documentation.

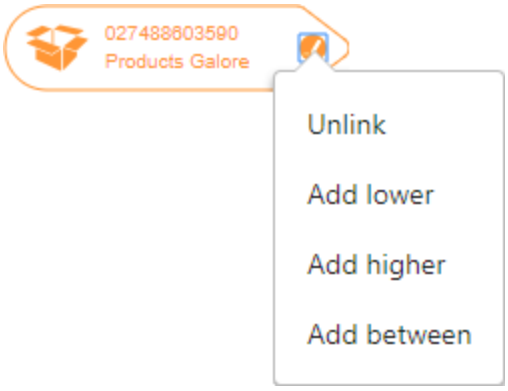


When configured properly the Packaging Hierarchy Editor will display the packaging hierarchy for a selected item or packaging type. If the selected item is not included in a packaging hierarchy, only the selected item will be represented in the Editor as shown below and the table will only have one column:



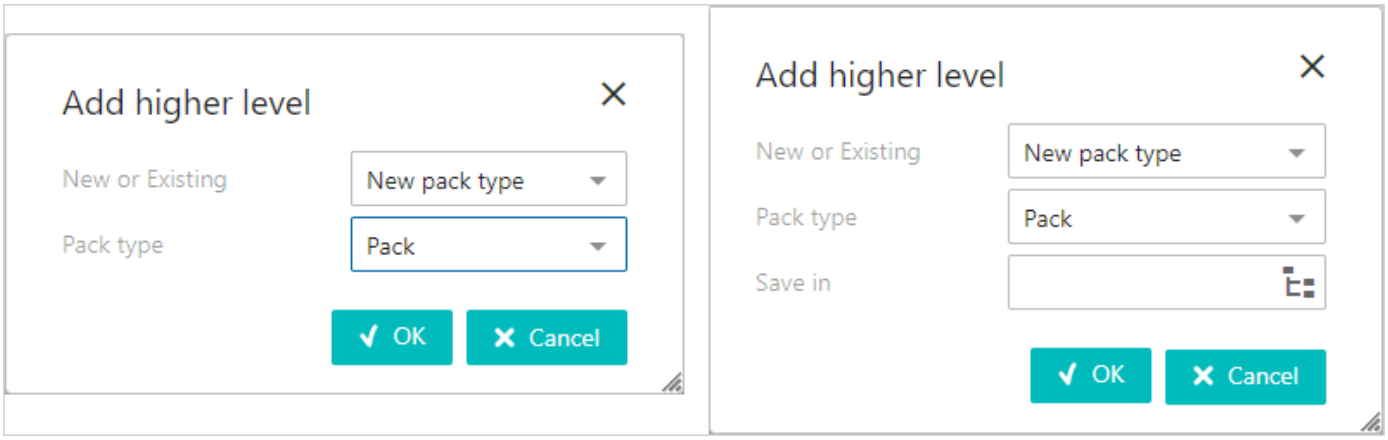
Create or modify a packaging hierarchy

1. To create a packaging hierarchy for the selected item or to create an additional hierarchy for the item, the user can click on the edit button on the right side of the icon and select the configured actions. In the example, available actions are: Add lower level, Add higher level, Add between level, or Unlink.
   - When adding levels to a hierarchy, it is best to build the hierarchy upward (e.g., from item to pallet).
   - To use the 'Add level between' feature, the user must be on an orange icon.
   - The lower, higher, and between levels may show differently on an end user's screen depending on what titles these options were configured with.



4. When adding a level, a dialog box with the available packaging types will appear. It is only possible to select the valid packaging types that have been set up in the workbench and in accordance with the references between the packaging types. If a new pack type is chosen, then it is possible to select the Packaging Product Folders folder / folders by using 'Save in' (either by dropdown selection or Node Picker - depending on the configuration set up for Packaging Properties).

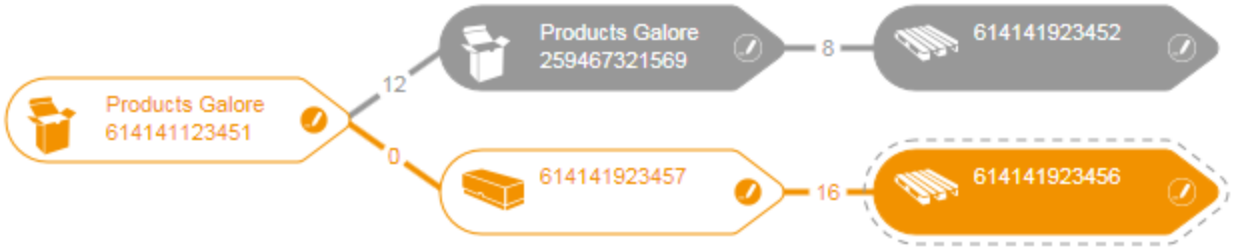
   If only one folder is configured for the Packaging Product Folders parameter and the Packaging Properties Node Picker option is disabled, the new packaging type will automatically be saved in the designated folder. The 'Save in' option will not display.



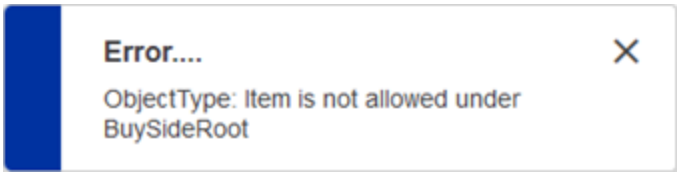
Note: It is also possible to create new actions for maintaining the Packaging Hierarchy Editor by using the Extension API for full control of the behavior and logic that applies when adding and removing a level to the Packaging Hierarchy. For more information on the Extension API, click the **STEP API Documentation** button on the STEP Start Page.

3. After clicking the OK button, the new level is added to the graphic as well as adding a new level to the packaging hierarchy for the selected item.

4. Using the 'Add higher level' feature, it is possible to create various types of hierarchy structures. The image below shows an item for which two packaging hierarchies are available:

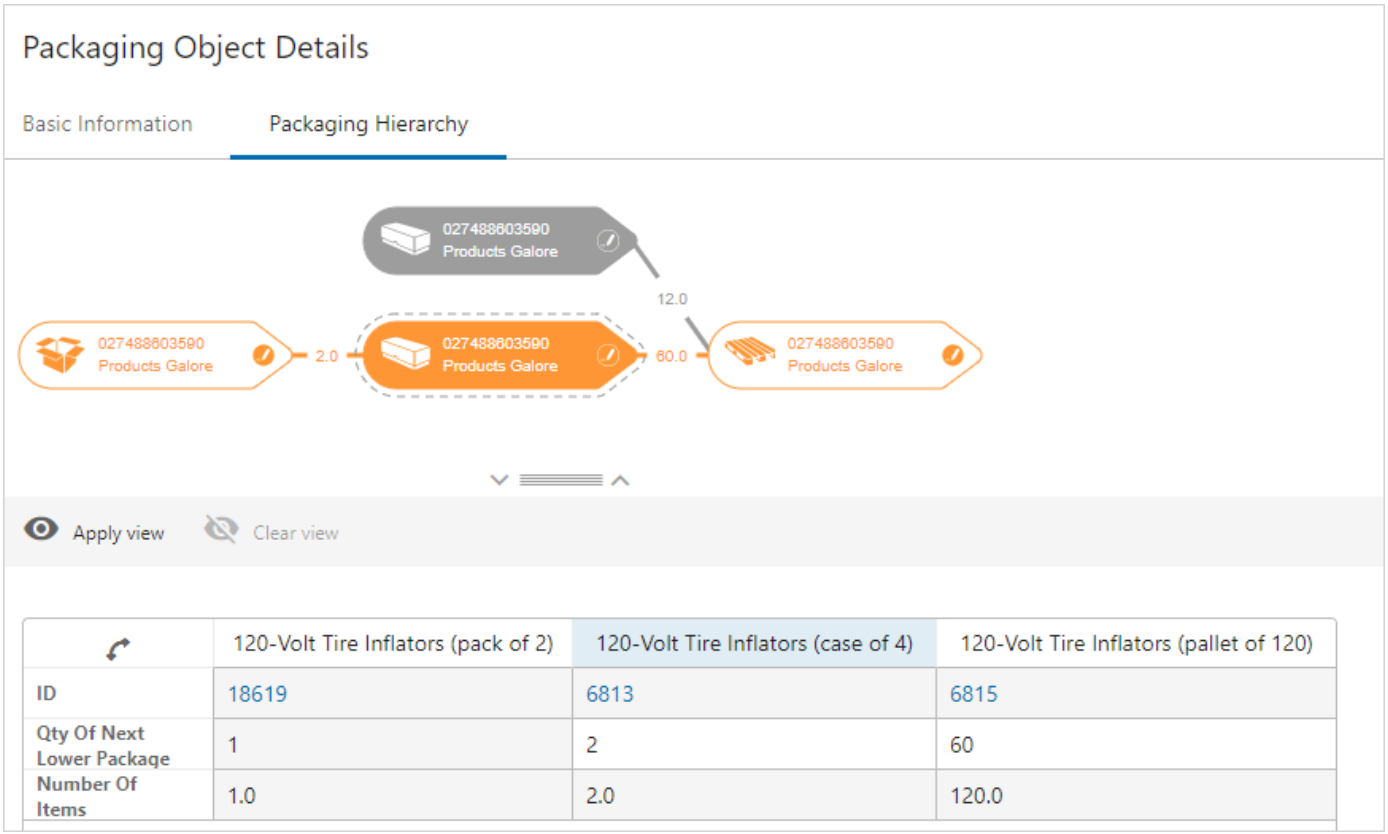


In this example, using the 'Add higher level' feature, a 'Pallet' object is added. Similarly, a 'Case' or 'Pack' object can be added using the 'Add lower level' feature. To insert between the 'Pallet' and 'Pack' objects, use the 'Add between level' feature to add a 'Case' object. Attempting to add an object without validity results in the following error:



Removing objects is possible via the 'Unlink' feature. This includes conformation before unlinking with an 'Unlink from hierarchy' dialog. Click OK to unlink, or Cancel to leave the hierarchy unchanged.

To select a particular packaging type in the hierarchy, click on the icon in the graphic and the selected packaging type will be highlighted in both the graphical view and in the table.



	120-Volt Tire Inflators (pack of 2)	120-Volt Tire Inflators (case of 4)	120-Volt Tire Inflators (pallet of 120)
ID	18619	6813	6815
Qty Of Next Lower Package	1	2	60
Number Of Items	1.0	2.0	120.0

To edit the quantity (of next lower level package) attribute, click on the associated cell in the row / column. It will then be possible to change any existing value or enter a new value for that cell. Remember to save any changes. Any updated or added values will be changed in the graphical view and Number Of Items will recalculate based on the new quantity.

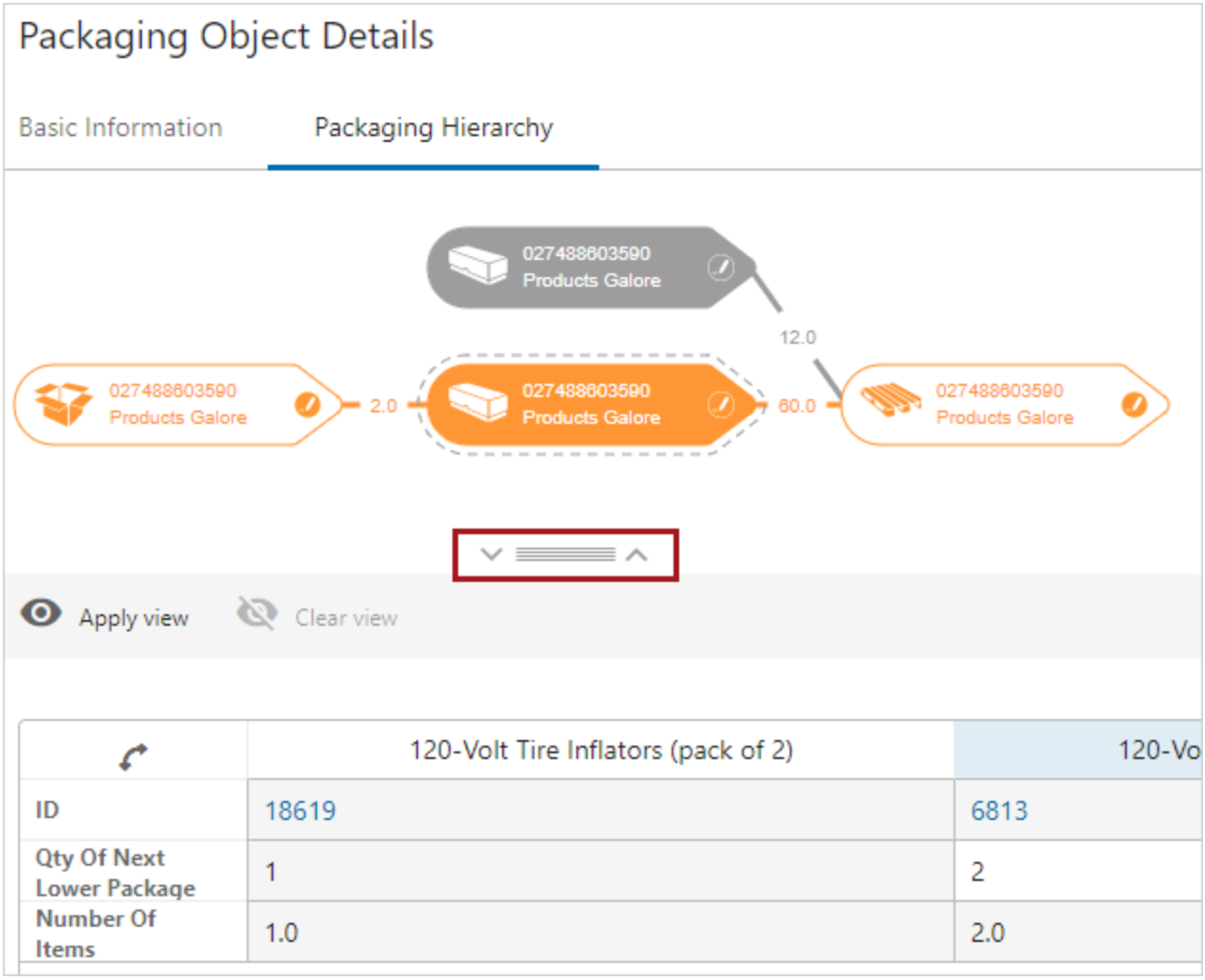
	120-Volt Tire Inflators (case of 10)	120-Volt Tire Inflators (pallet of 120)
ID	6812	6815
Qty Of Next Lower Package	1	12
Number Of Items	1.0	12.0

Note: Number Of Items is a system-calculated number based on the quantity attribute and the hierarchy. Users cannot edit these values.

Collapsible splitter feature

The individual panels on the Packaging Hierarchy Editor screen are collapsible and expandable through the use of a collapsible splitter feature.

When the screen is configured with a horizontal split panel, a drag handle splits up the panels / components on the screen. The drag handle displays a down arrowhead to the left and an up arrowhead to the right.



Clicking the up arrowhead removes the main component (graphical user interface) from display, allowing more screen space to focus on the Node List. This is useful if the user wants to focus on entering data in the table and no longer needs to see the packaging diagram to do so but doesn't want to hide the graphical user interface through the Packing Properties settings.

Clicking the down arrowhead returns the hidden component back to the screen display.

Similarly, if the user first clicks the down arrowhead, the child component is hidden from display so the user can focus on the packaging diagram.

For information about setting up the Packaging Hierarchy Editor, see the **Configuring Packaging Hierarchy Editor in STEP Workbench** and the **Setting Up Packaging Hierarchy Editor in Web UI** sections in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

Parameterized Business Actions in Web UI

The option to configure and associate a business action with a number of referenced parameters allows users to provide their own values when running a business action in the Web UI. This not only gives the users a better sense of control, as the changes entailed by running a business action become much more apparent, but also provides a more dynamic and useable setup. A single business action can be reused for a variety of similar tasks without the need for reconfiguration.

Parameterized Business Action functionality is only supported for JavaScript business actions in Web UI. The workbench 'Time & Test Business Rule' functionality does not support parameterized business actions.

Using a parameterized business action in Web UI requires the following setup:

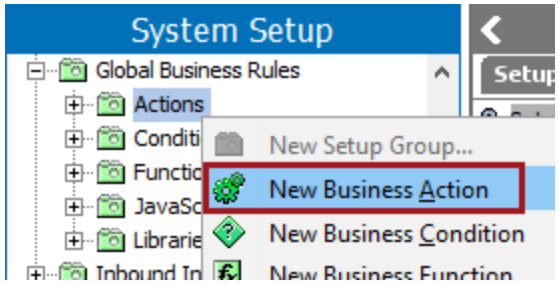
1. Create a JavaScript business action in STEP Workbench
2. Create a Bulk Update Configuration (with the business action) in STEP Workbench
3. Configure the Bulk Update action in Web UI

Each of these steps is defined in the sections below.

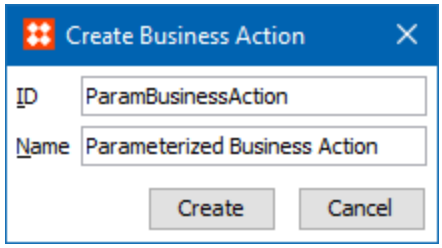
Creating a JavaScript business action in STEP Workbench

A JavaScript business action supplies the necessary parameters to the Web UI user. For more information, see the **Business Rules** documentation.

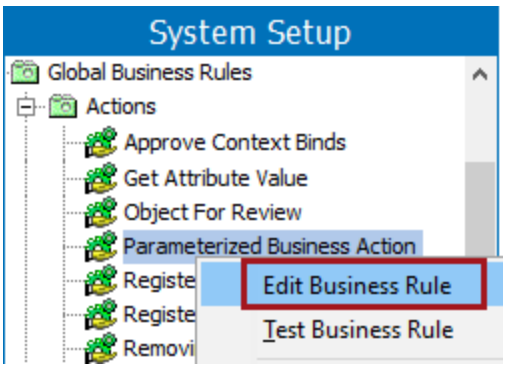
1. In workbench, on System Setup, select the desired business action node, right-click, and select **New Business Action**.



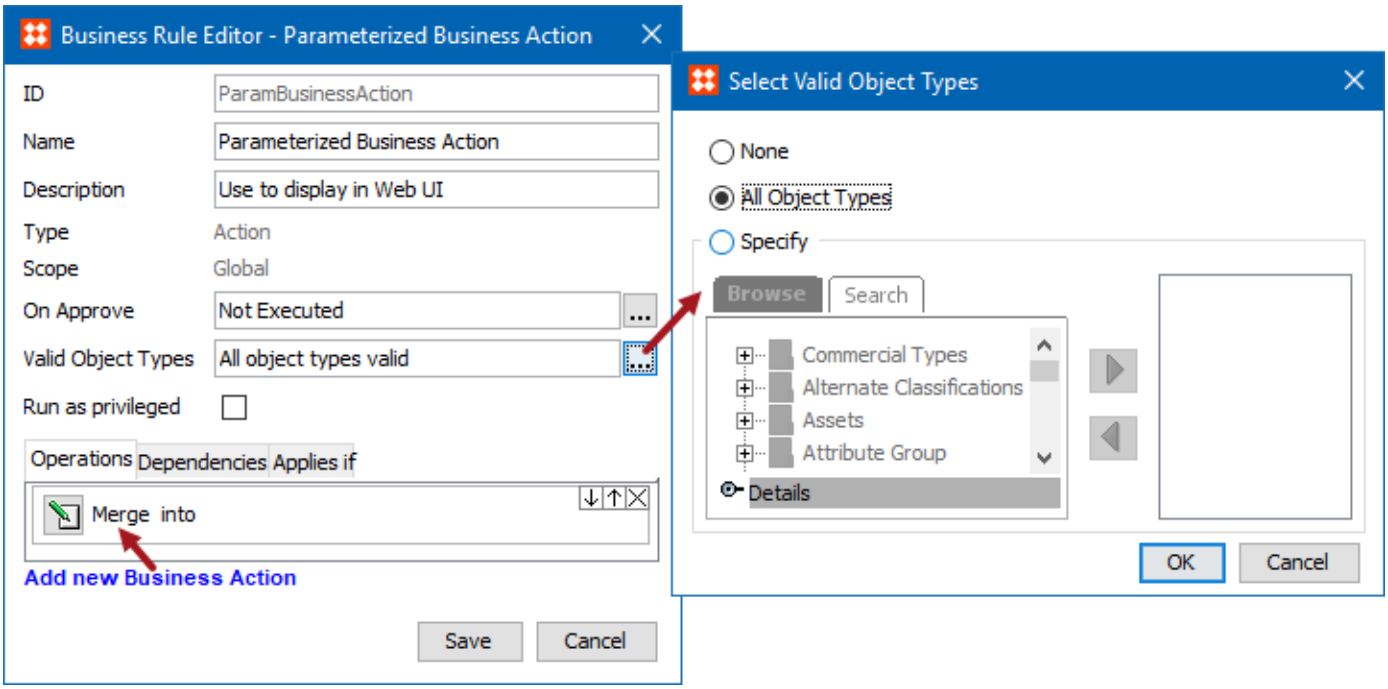
2. Add an ID and a Name, and click the **Create** button. The new action is displayed in the selected node.



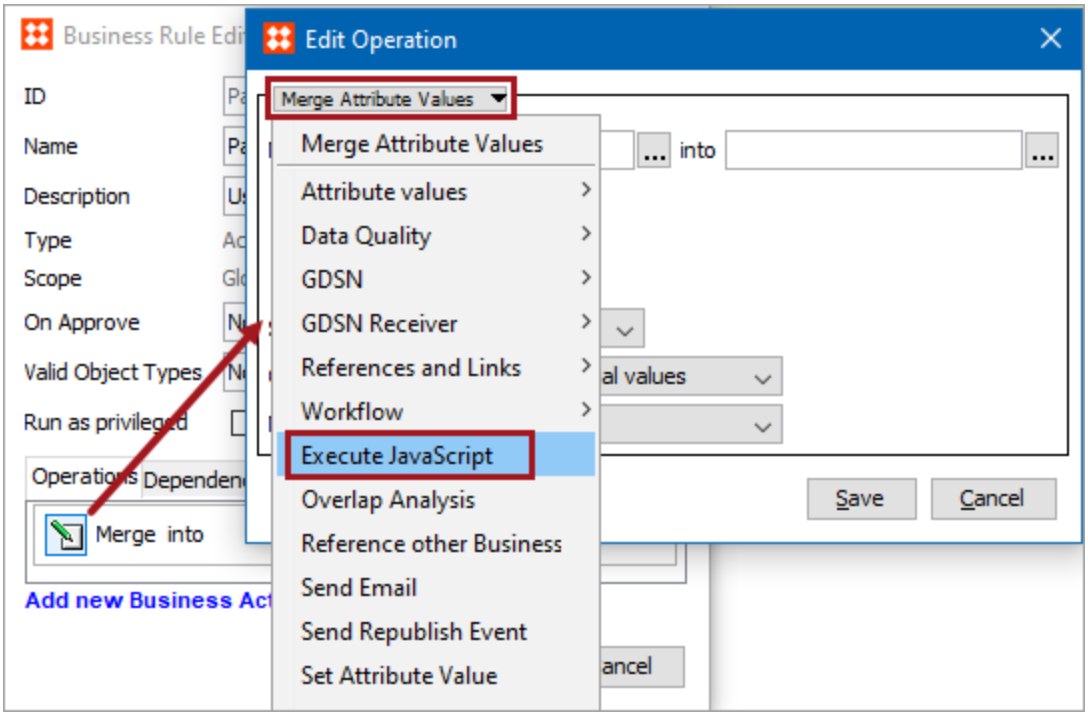
3. Select the new action, right-click, and select **Edit Business Rule**.



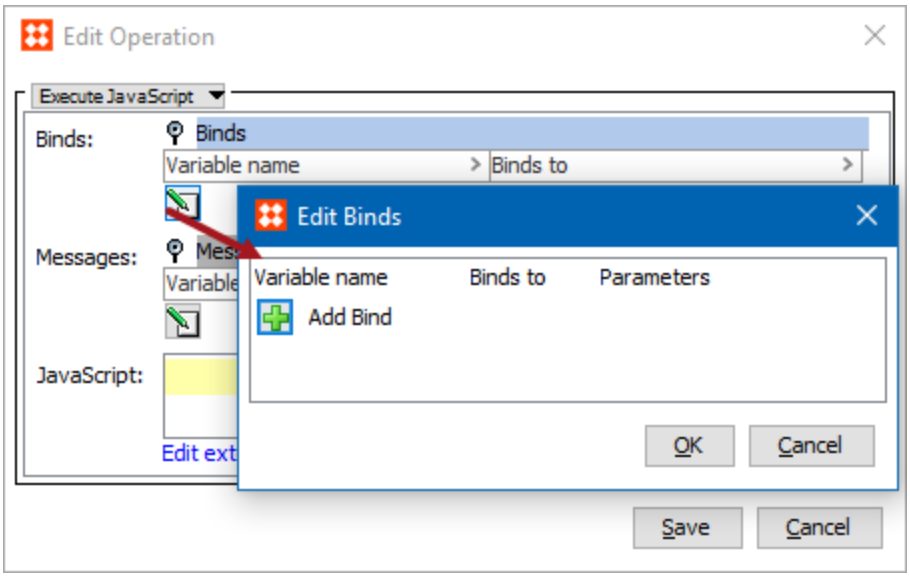
4. On the Business Rule Editor dialog:
   - Click the ellipsis button (...) for the **Valid Object Types** parameter to display the Select Valid Object Types dialog. To activate the business rule, select the All Object Types radio button or the Specify radio button. When specifying object types, select one or more object types using the Browse or Search tab and then click the button to move to the included list. Click **OK** to update the business rule.
   - On the Operations tab, click the **Add new Business Action** link to add the default 'Merge into' operation.



5. Click the operation edit button ( ) to display the Edit Operation dialog, and select 'Execute JavaScript' from the dropdown.



6. Click the edit button ( ) below the Binds flipper to display the 'Edit Binds' dialog.

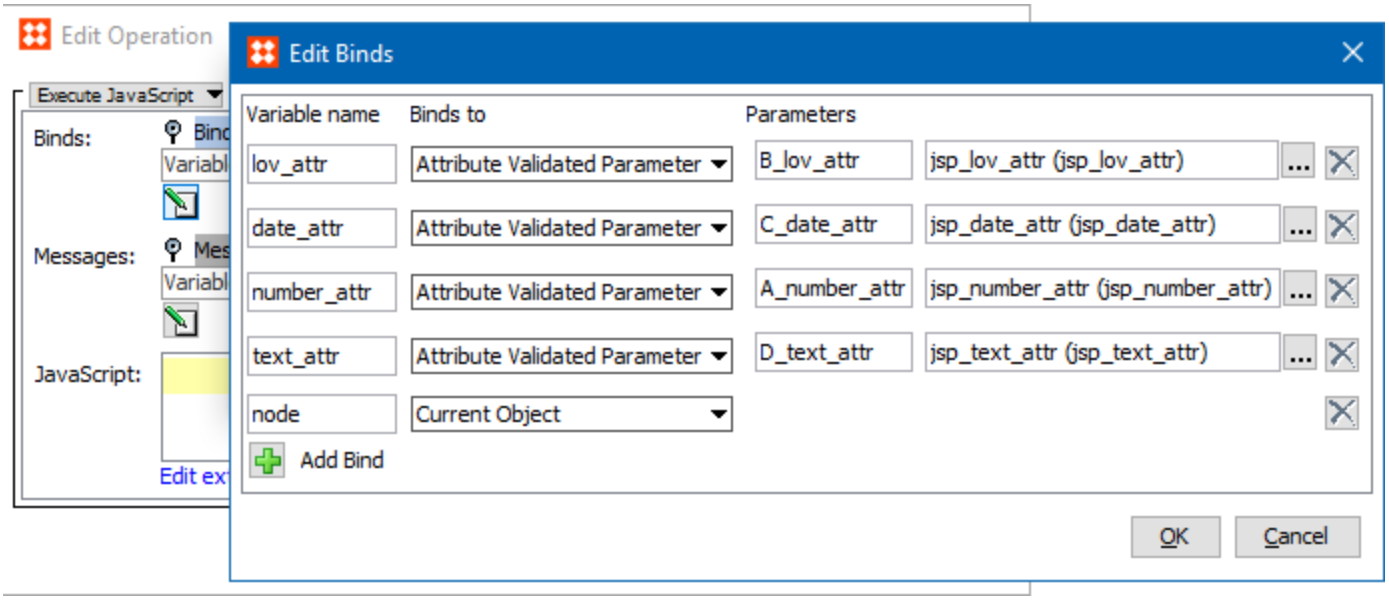


7. Click the **Add Bind** button ( ) to create a bind for each parameter required, as indicated in the following image:

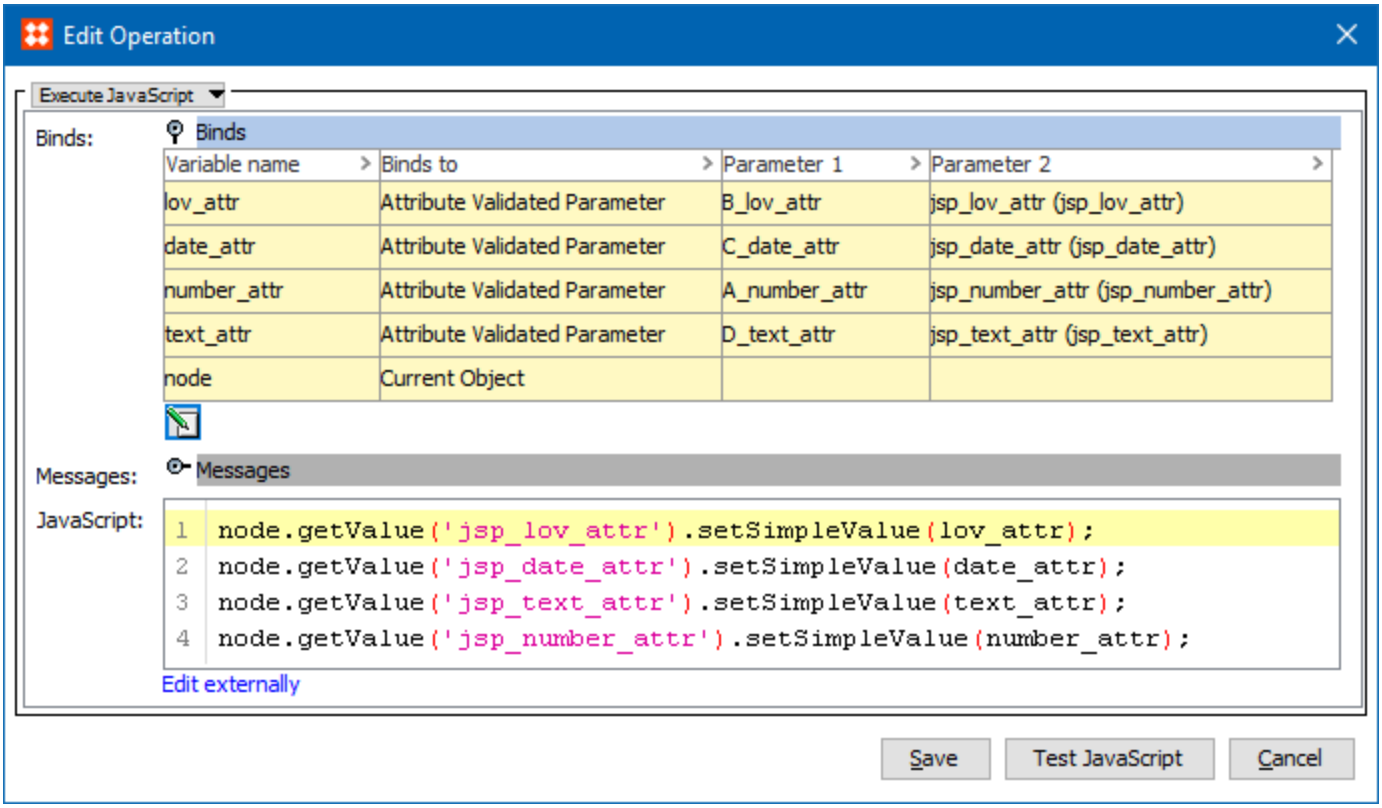
- **Variable name** - Required. Add text used for the name of the parameter to be executed.
- **Binds to** - Required. Use the dropdown to select the bind type. In the example shown below, 'Attribute Validated Parameter' and 'Current Object' are selected.

- **Parameters** - Required for 'Attribute Validated Parameters' binds. In the first text box, enter the external ID of the parameter which will be used when embedding the business action in a bulk update configuration.

  Click the ellipsis button (...) in the second field to display the Select Attribute dialog. Select an attribute and click the Select button to determine the validation base type used to validate the parameter value in the Web UI. If this field is left empty, the value will be validated as text. It is possible to select between the validation base types: Text, Number, Date, or List of Values. For example, the parameter of a business rule that is bound to a date validated attribute will display a date picker, while LOV options will display as a dropdown.



8. Click **OK** to display the binds in the Edit Operation dialog.
9. In the JavaScript parameter, add the JavaScript code that uses the configured binds.



10. Click the Test JavaScript button to verify the JavaScript code. For more information, see the **Testing a Business Rule** topic in the **Business Rules** documentation.
11. Click the **Save** button to add the configured operation to the business rule.

Creating a Bulk Update configuration in STEP Workbench

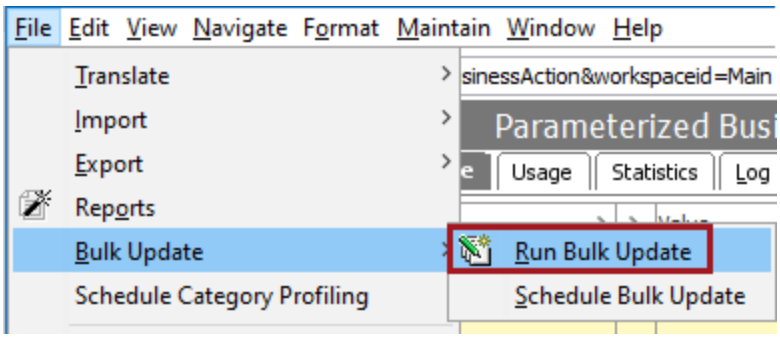
Once configured, the business action must be embedded into a bulk update configuration to work as a parameterized business action in the Web UI. For more details, see the **Bulk Updates** documentation.

Prerequisites

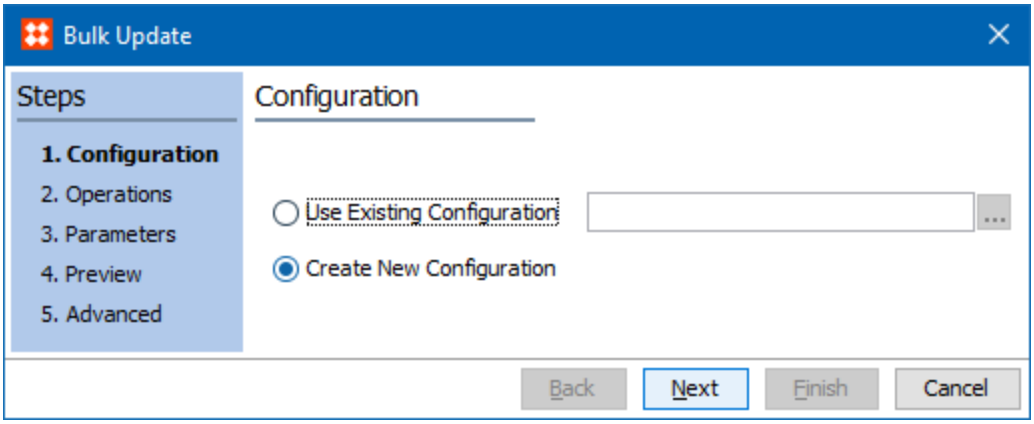
- Performing bulk updates requires the user to have privileges to maintain bulk updates, view classifications, view attributes, and create collections.
- For ease of maintenance and troubleshooting, a single business action should be used in each bulk update configuration.

Configuration

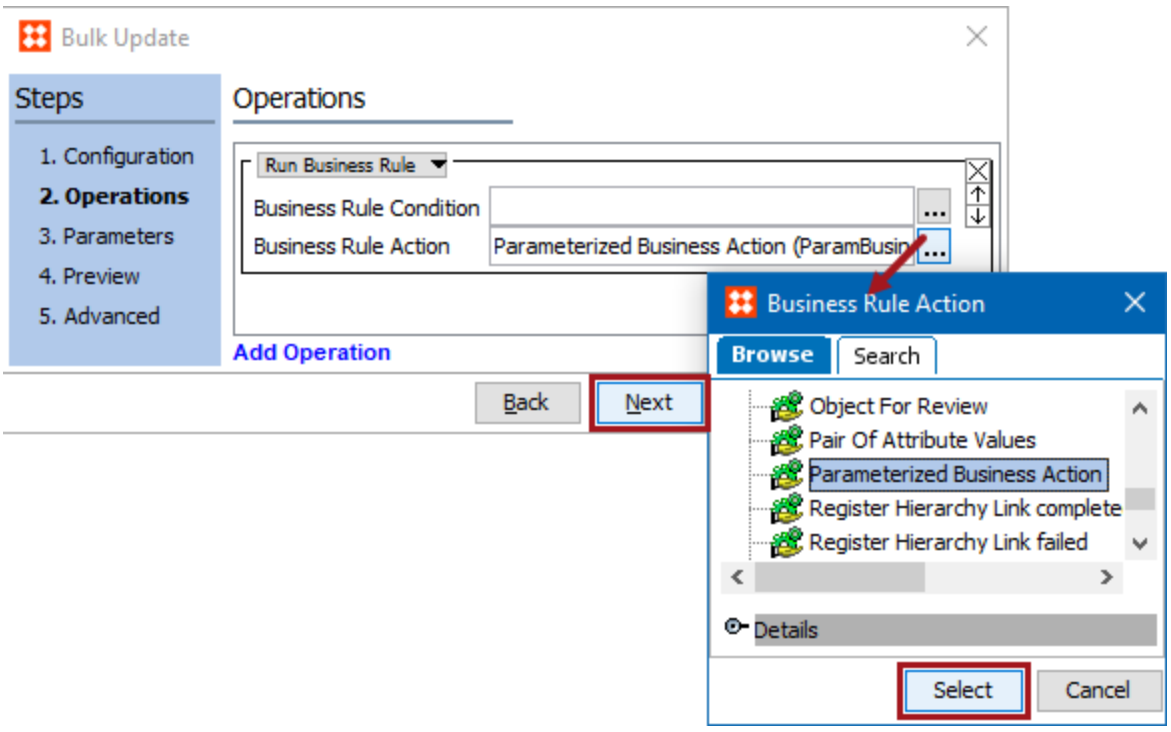
1. In workbench, from the File menu, select Bulk Update > Run Bulk Update.



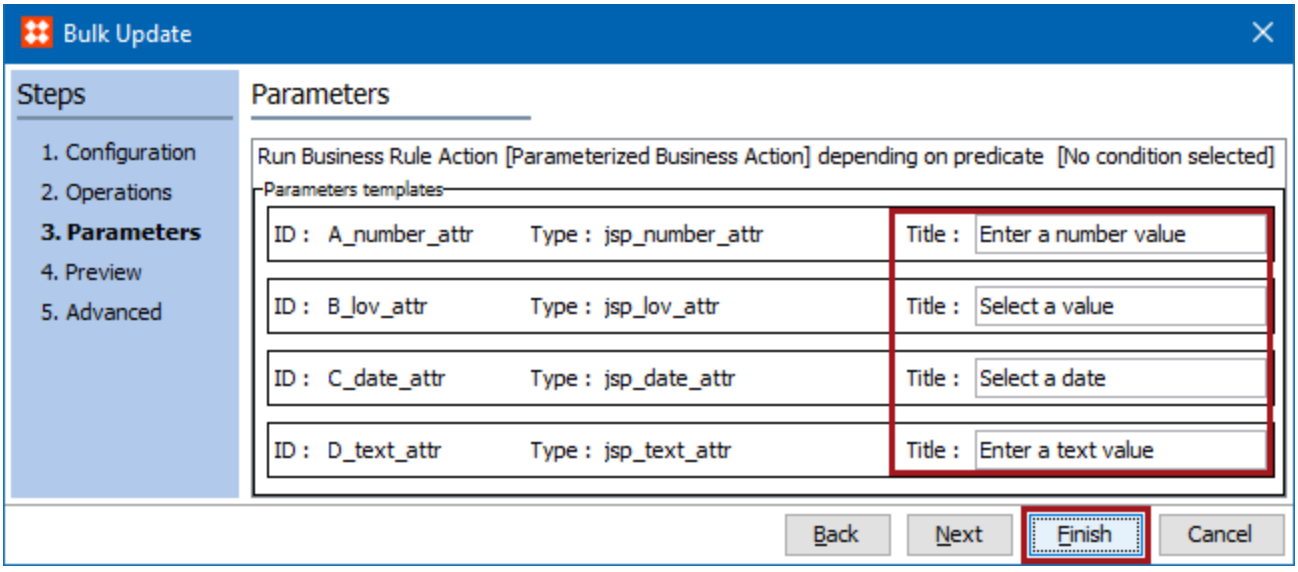
2. On the Configuration step, click the required radio button:
   - Select 'Create New Configuration' to create a new bulk update configuration, or select 'Use Existing Configuration' to modify an existing radio button.
   - Click the **Next** button.



3. On the Operations step:
   - Select 'Run Business Rule' from the dropdown.
   - On the Business Rule Action parameter, click the ellipsis button (...) to display the Business Rule Action dialog. Select the business rule created above.
   - Click the **Next** button.

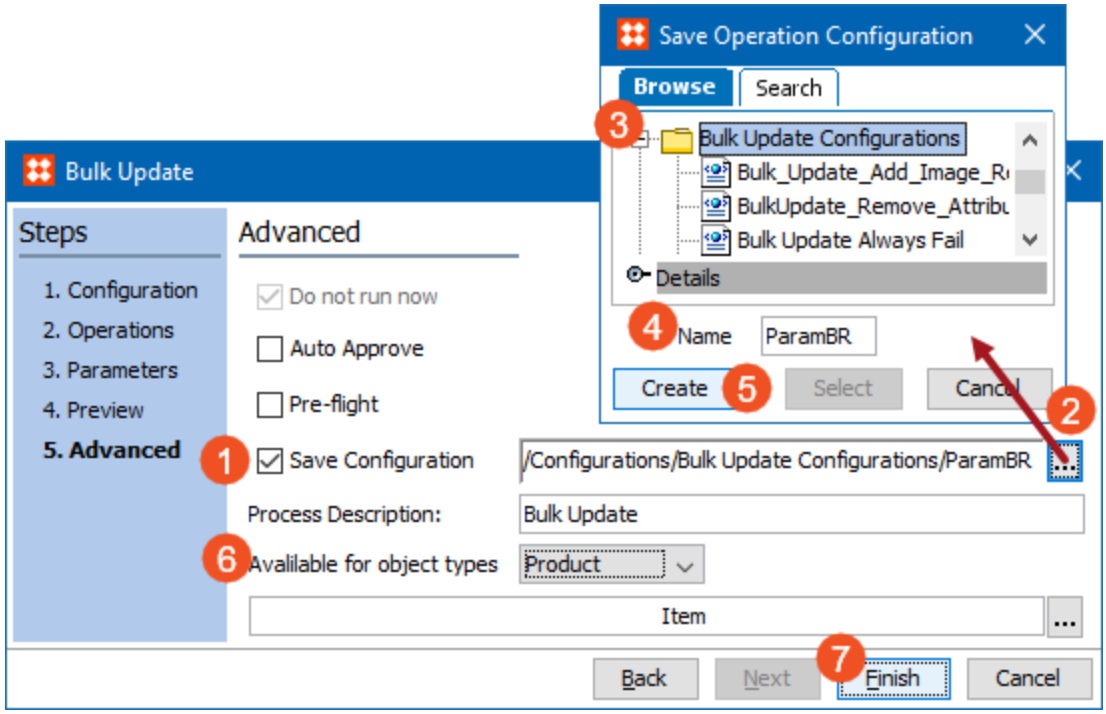


4. On the Parameters step, enter a title for each of the configured parameters. The title displays as a label in the Web UI dialog when running the bulk update configuration, as shown in the **Make the Bulk Update action available in Web UI** section below.



Once configured, the parameters created in the JavaScript business action, and included in a bulk update configuration, are displayed in a bulk update dialog and allow the user to supply the values. This is demonstrated in the **Make the Bulk Update action available in Web UI** section below.

5. Click the **Next** button two times to display the Advanced step.
6. On the Advanced step:
   - Check the **Save Configuration** parameter checkbox.
   - Click the ellipsis button (...) to display the Save Operation Configuration dialog.
   - Select a Tree location to save the configuration.
   - Enter a name for the configuration.
   - Click the **Create** button.
   - On 'Available for object types,' select the appropriate object type(s) from the dropdown. Click the ellipsis button (...) to specify individual object types if necessary. For example, in the image below, only products with an object type of 'Item' are available for the bulk update with the parameterized business action.
   - Click the **Finish** button.

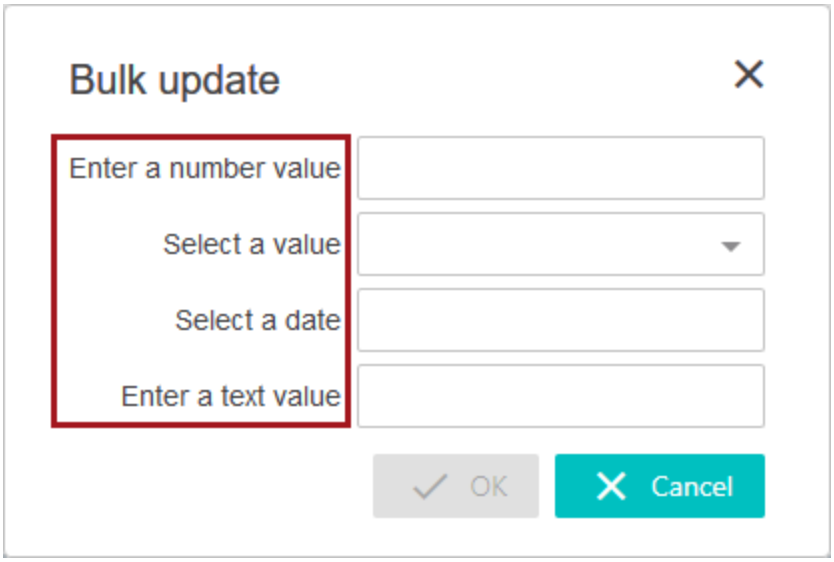


Configuring the Bulk Update action in Web UI

The parameters created in the JavaScript business action, and included in a bulk update configuration, can be displayed in the Web UI on a bulk update dialog.

Selecting an object displays the configured bulk update action button. Clicking the action button displays the 'Bulk update' dialog. Only bulk update configurations applicable for the selected object types are included.

The 'Bulk update' dialog allows a user to supply the parameterized values within Web UI.



Note: When entering text where multiple lines are allowed, Ctrl + Enter adds a new line. Pressing Enter alone closes the dialog.

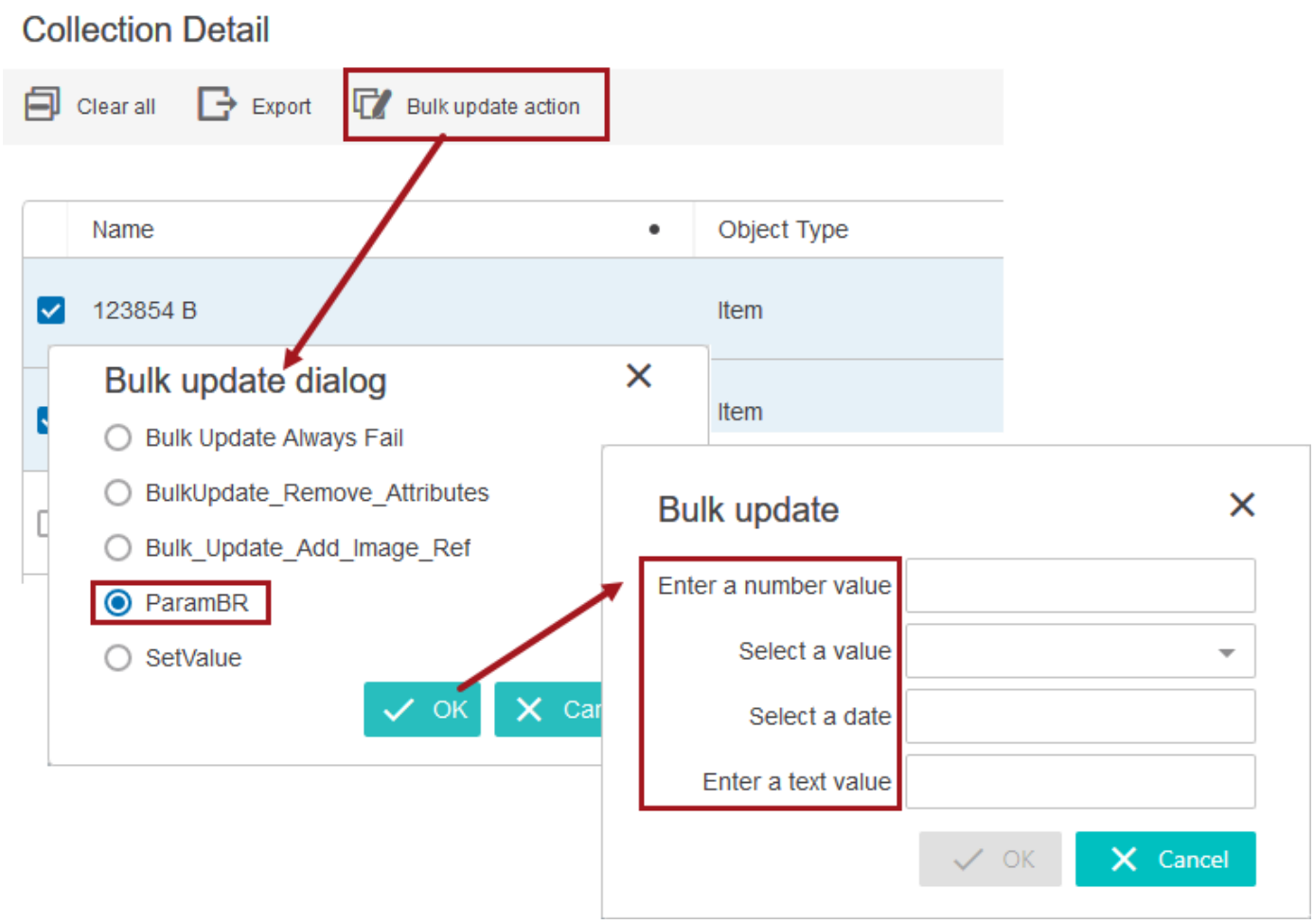
The following components can include an action button to initiate the bulk update and display the bulk update dialog:

1. **Bulk Update List Action** - a toolbar action on a Node List
2. **Bulk Update Template Action** - a toolbar action on a Node List
3. **Run Bulk Update Template Action Button** - a button on a Node Details screen

The setup for each component is defined in the following sections.

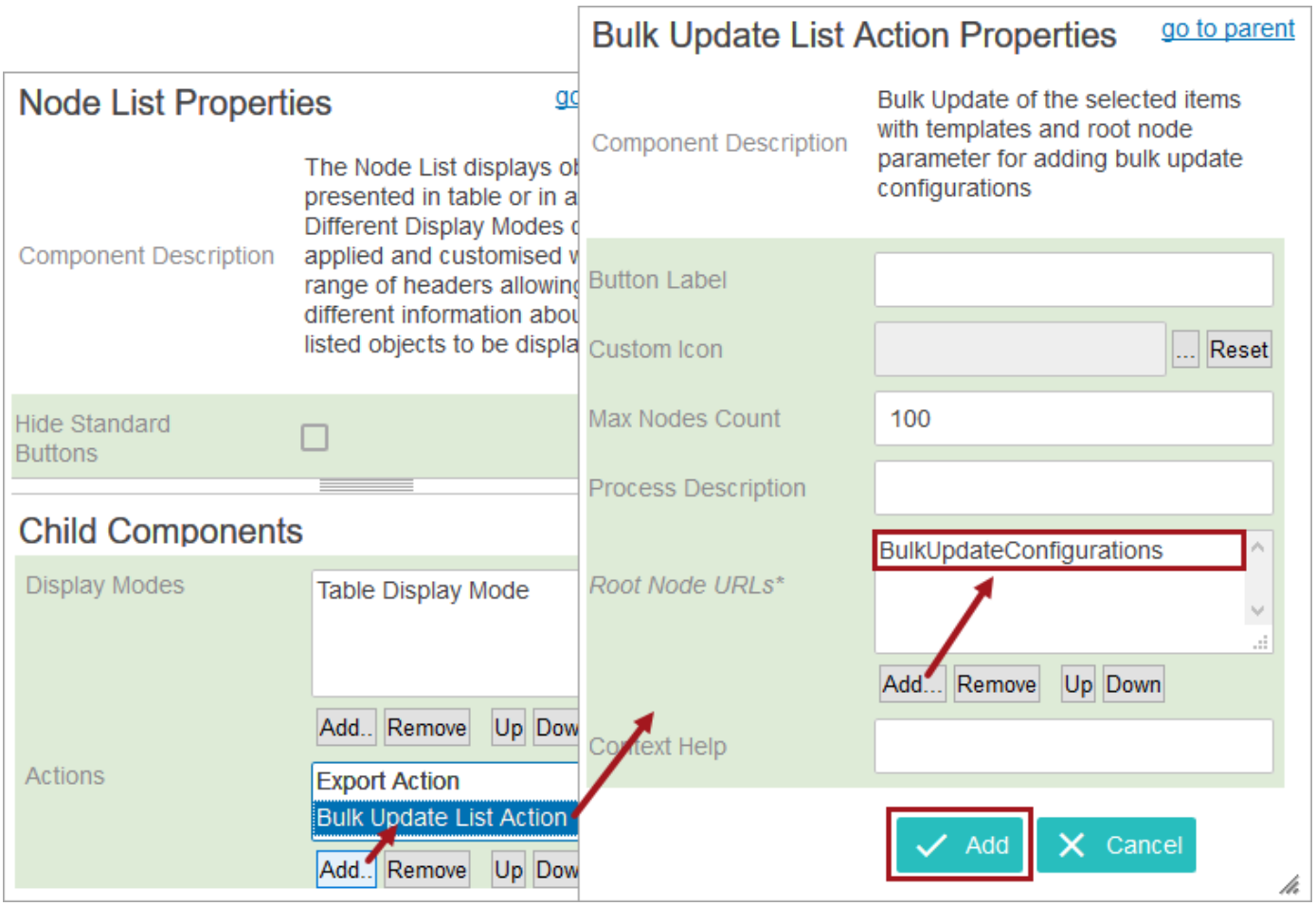
Bulk Update List Action

When objects are selected on the Node List, this setup displays a 'Bulk update action' on the toolbar. Clicking the action displays the 'Bulk update dialog' where a valid bulk update configurations is selected. The 'Bulk update' dialog allows the parameterized values to be added prior to running the bulk update in a background process. **If any of the attributes used as binds for the bulk update parameters are mandatory, then the OK button will be disabled until all these mandatory values are populated.**



Use the following steps to configure the Bulk Update List Action.

1. On a Node List screen, open the designer.
2. In the Child Components section, click **Add...** and select the **Bulk Update List Action**.
3. Double click the Bulk Update List Action to display the Bulk Update List Action Properties dialog.

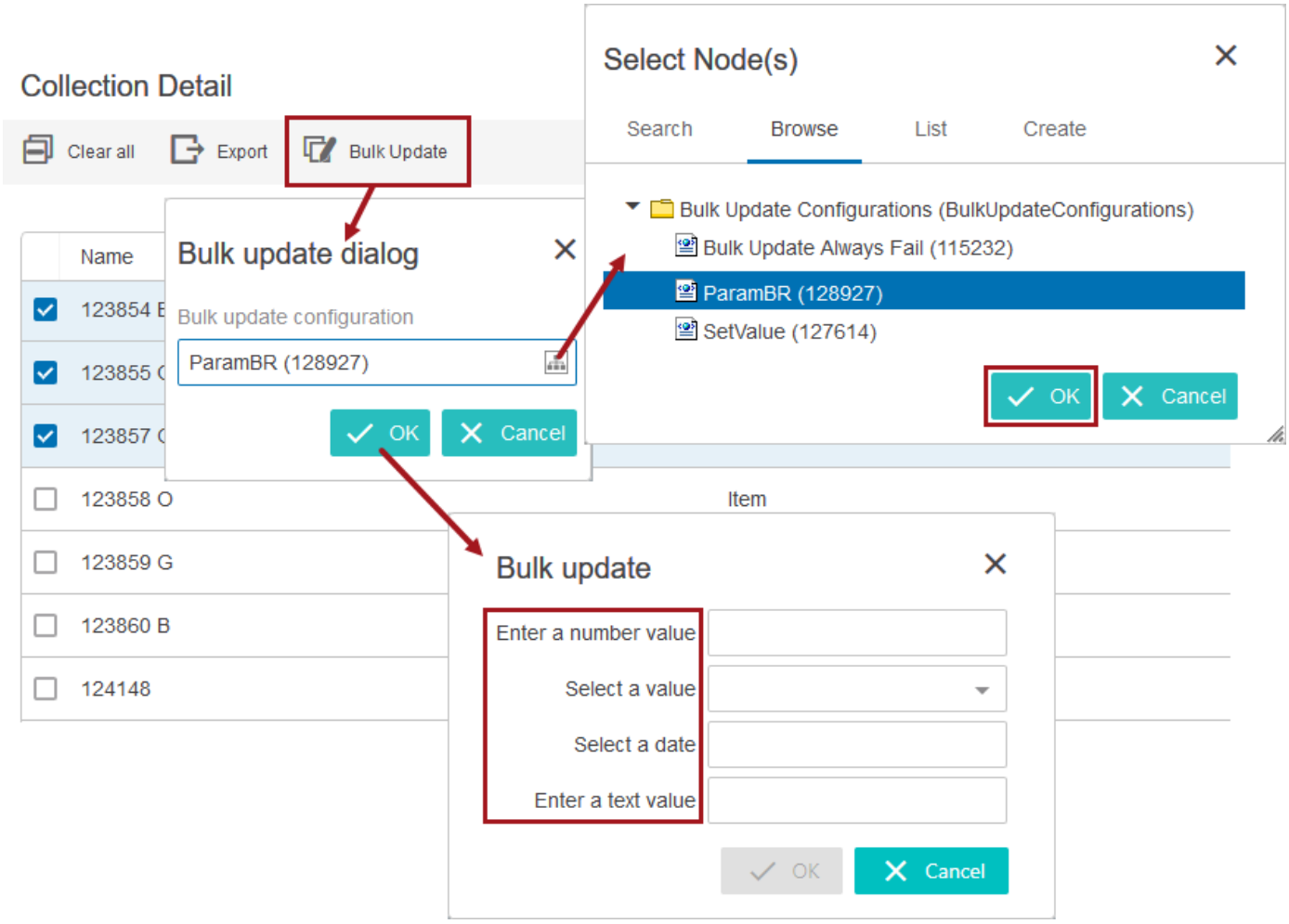


4. For the **Root Node URLs** parameter (required), click **Add...** and select the location of one or more root nodes that house bulk update configurations. All valid bulk update configurations in the nodes are selectable in the bulk update dialog. When more than ten (10) bulk update configurations are available, the list displays a scroll bar.
5. For the **Max Nodes Count** parameter, define the number of allowed objects. When the user selects a greater number of objects than defined, the warning 'Too many nodes are selected, bulk update cannot be performed.' is displayed.
6. Set any other parameters as desired.
7. On the Bulk Update List Action Properties dialog click the **Add** button to display the action on the Node List.
8. On the Node List Properties dialog click the **Save** button and click the **Close** button to exit the designer with the new settings.

Bulk Update Template Action

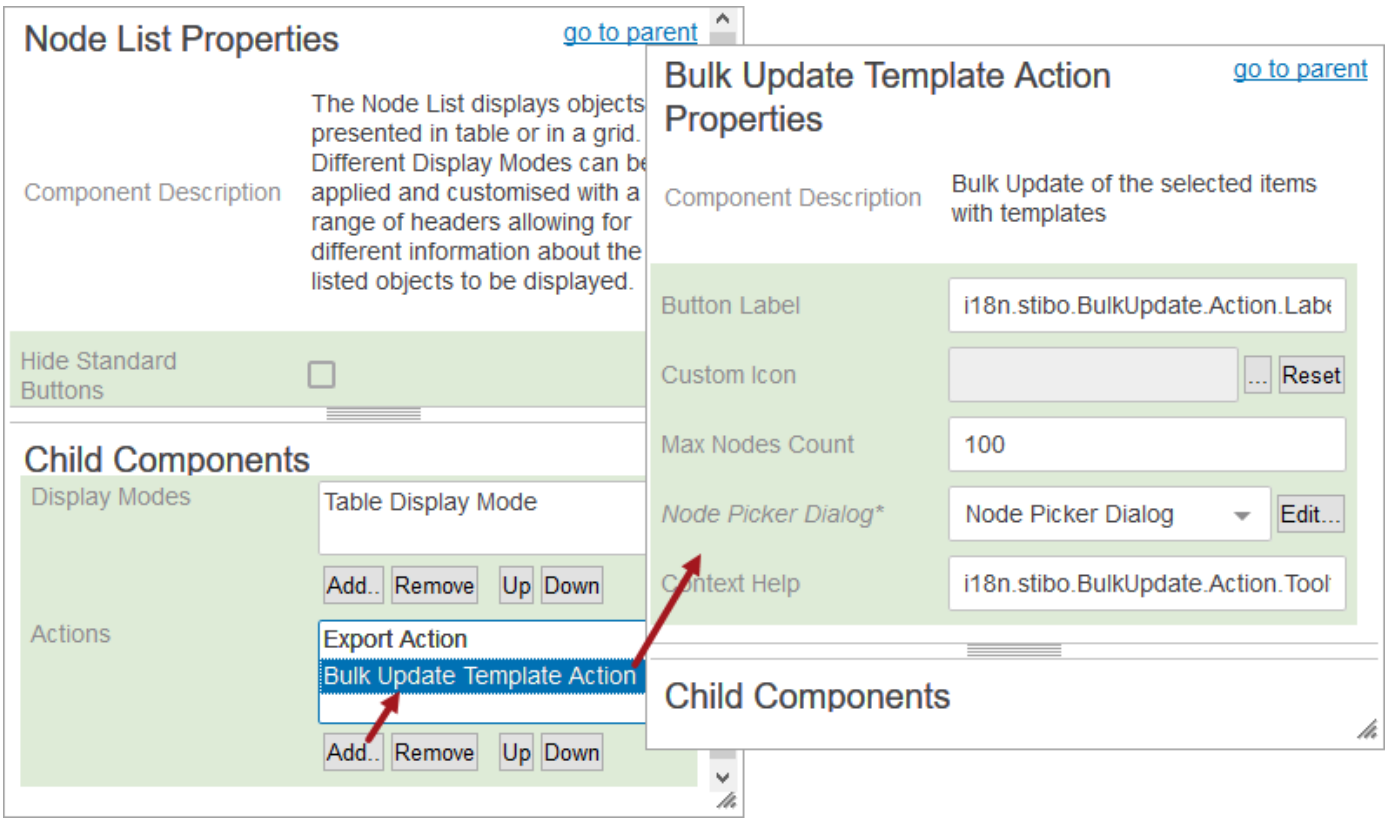
When objects are selected on the Node List, this setup displays a 'Bulk Update' action. Clicking the action displays the 'Bulk update dialog' where a valid bulk update configurations is selected via a Node Picker dialog. The 'Bulk

update' dialog allows the parameterized values to be added prior to running the bulk update in a background process. **If any of the attributes used as binds for the bulk update parameters are mandatory, then the OK button will be disabled until all these mandatory values are populated.**



Use the following steps to configure the Bulk Update Template Action.

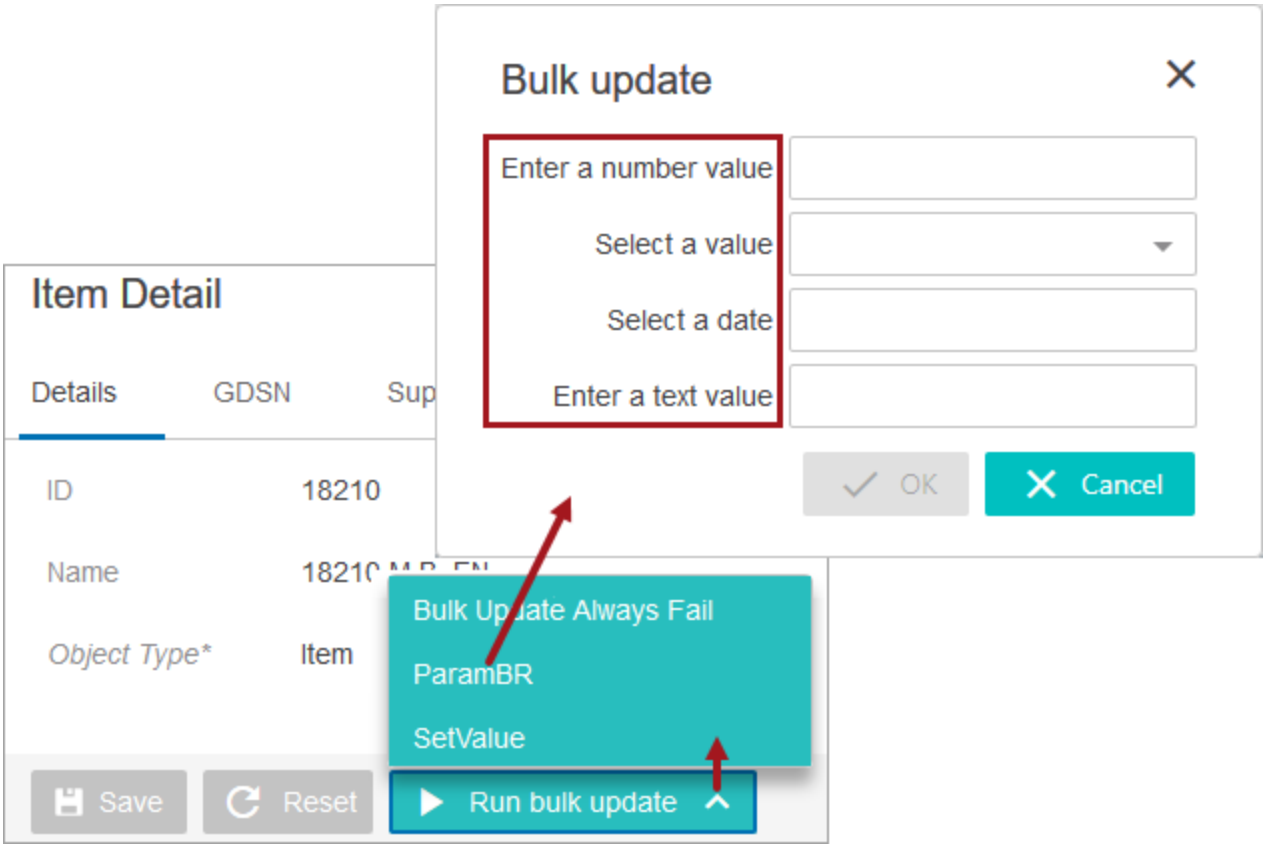
1. On a Node List screen, open the designer.
2. In the Child Components section, click **Add...** and select the **Bulk Update Template Action**.
3. Double click the Bulk Update Template Action to display the Bulk Update Template Action Properties.



4. For the **Max Nodes Count** parameter, define the number of allowed objects. When the user selects a greater number of objects than defined, the warning 'Too many nodes are selected, bulk update cannot be performed.' is displayed.
5. For the **Node Picker Dialog** parameter (required), click **Edit...** and set the properties as defined in the **Node Picker Dialog** topic.
6. Set any other parameters as desired.
7. On the Bulk Update Template Action Properties dialog click the **Save** button and click the **Close** button to exit the designer with the new settings.

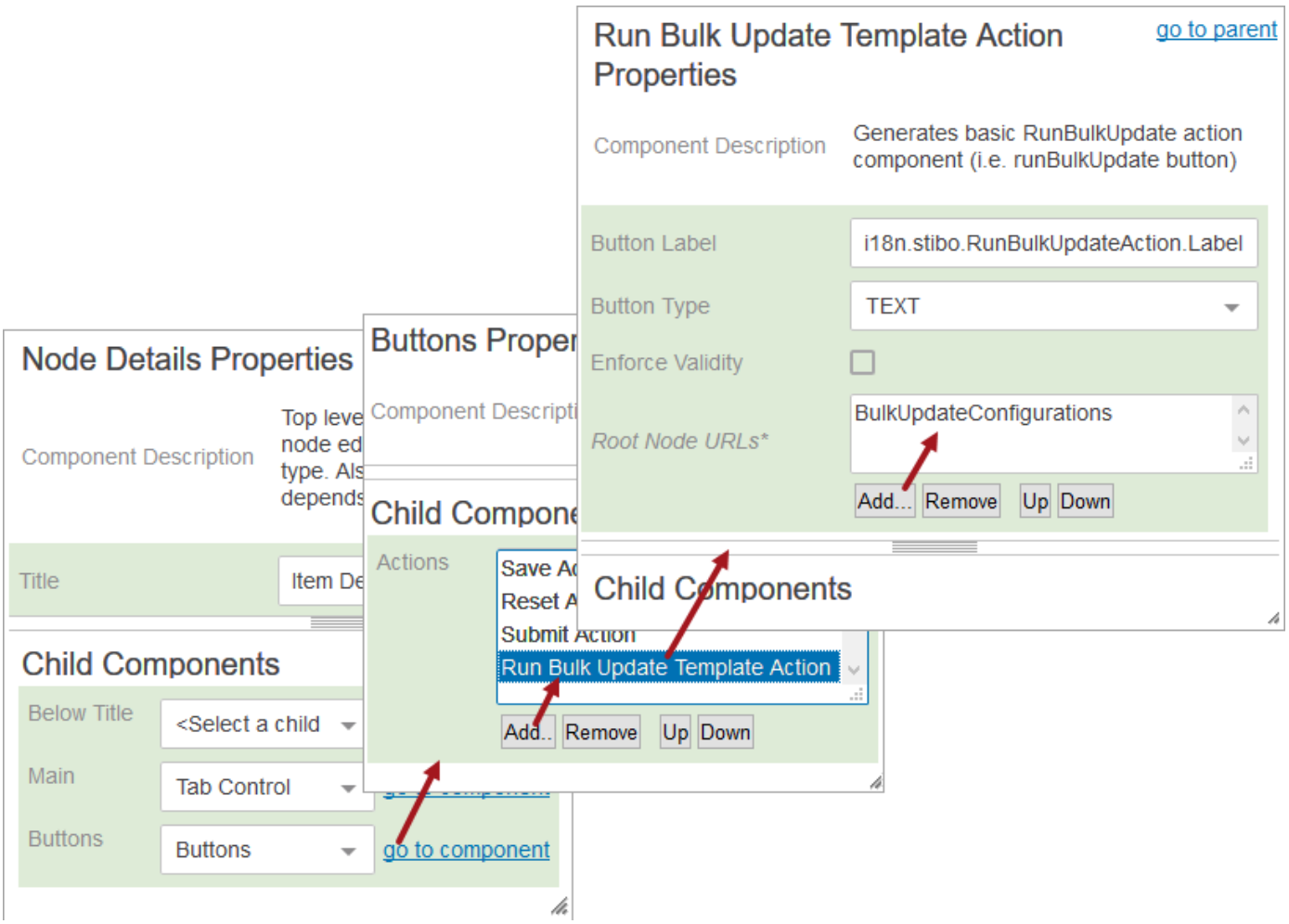
Run Bulk Update Template Action Button

When a valid object is displayed on a Node Detail, this setup displays a 'Run bulk update' button. Clicking the button displays a list of the valid bulk update configurations. Once a configuration is selected, the 'Bulk update' dialog allows the parameterized values to be added prior to running the bulk update in real-time, not in a background process. **If any of the attributes used as binds for the bulk update parameters are mandatory, then the OK button will be disabled until all these mandatory values are populated.**



Use the following steps to configure the Run Bulk Update Template Action button.

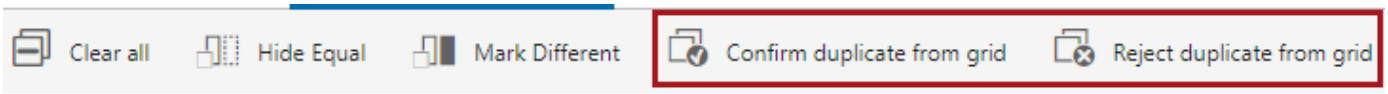
1. On a Node Detail screen, open the designer.
2. In the Child Components section, on the Buttons parameter, select **Buttons** from the dropdown and click the **go to component** link display the Buttons Properties.
3. In the Child Components section, on the Actions parameter, click the **Add..** button and select the **Run Bulk Update Template Action** from the component list and click the **Add** button.
4. Double click the Run Bulk Update Template Action to display the Run Bulk Update Template Action Properties.



5. For the **Root Node URLs** parameter (required), click **Add...** and select the location of one or more root nodes that house bulk update configurations. When more than ten (10) bulk update configurations are valid, the list is replaced by a dialog with radio buttons.
6. Set any other parameters as desired.
7. On the Run Bulk Update Template Action Properties dialog click the **Save** button and click the **Close** button to exit the designer with the new settings.

Potential Duplicates List

When making use of STEP's simple matching capabilities for deduplication, where the matching threshold value is set so that all matches higher than the threshold are seen as potential duplicates, Web UI end users can see a list of potential duplicates so that they can confirm or reject the potential duplicates. This is similar to the functionality offered in the STEP Workbench on the Matching tab for an object that a matching algorithm has been run on.



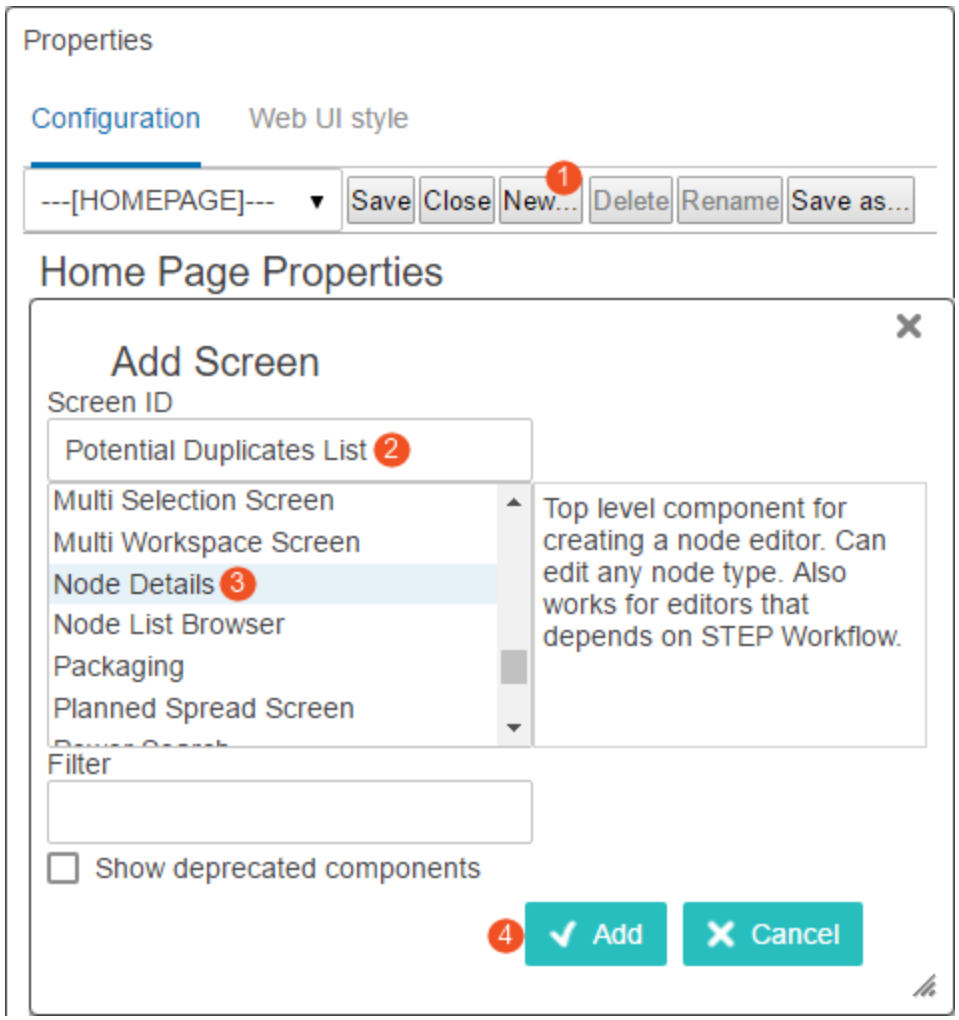
	Score	Matching Algorithm	ID	Object Type
Miles Morales	-	-	CUS_265382	CD_Customer

Note: As the Potential Duplicates List component uses a Matching Score and Algorithm to identify potential duplicates, these must have been previously created in the STEP Workbench. For more information, see the **Matching, Linking, and Merging** documentation.

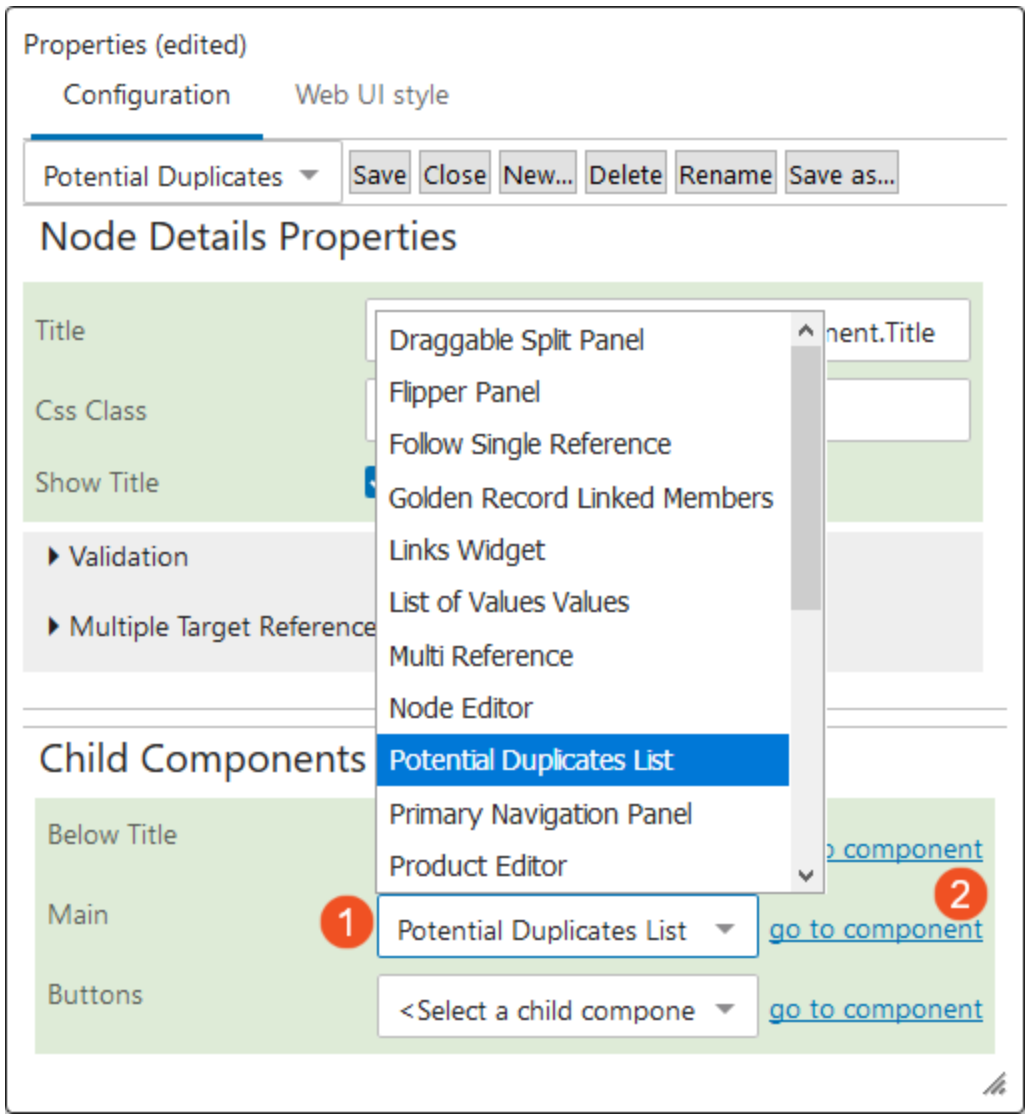
Configuring the Deduplication Table

The Potential Duplicates List component can be added to any Node Details or Tab Control / Tab Page component. The following steps show an example of how to configure the component using a Node Details screen.

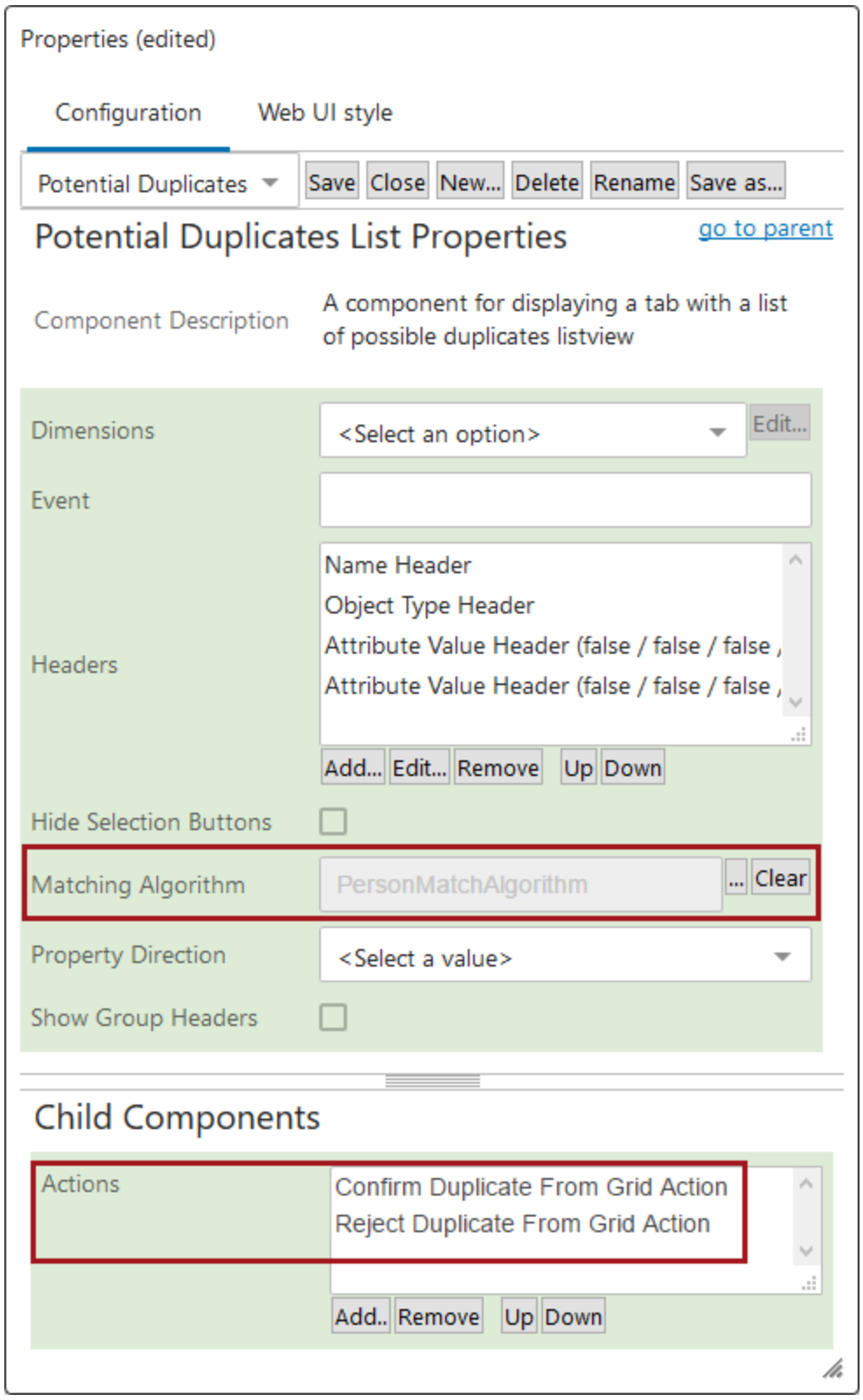
1. In the Web UI designer, create a new screen, assign a screen ID, select the Node Details screen type, and click **Add**.



2. Upon clicking Add, the newly created screen is opened. Go to **Child Components** > **Main** and select **Potential Duplicates List** from the dropdown menu. Then click the **go to component** link.



3. Configure the component following standard table configuration principles. An example is shown below. Specific to the Potential Duplicates list, a Matching Algorithm can be selected which determines how potential duplicates are identified. If no selection is made, results from all relevant algorithms are shown. In addition, the Confirm / Reject actions should be added. Upon completion of the configuration, save and close the Web UI Designer. Note that the Score and Matching Algorithm headers are included as headers in the component by default. Any other headers added will appear after these in the table.



4. The screen must then be mapped to display as needed, per standard Web UI screen mapping capabilities

The 'Hide Equal' and 'Mark Different' actions will automatically appear alongside any other actions configured. For more information, see the **Comparing Data Using Hide Equal and Mark Different** section of the **Web User Interfaces / Using a Web UI** documentation.

Power Search Screen

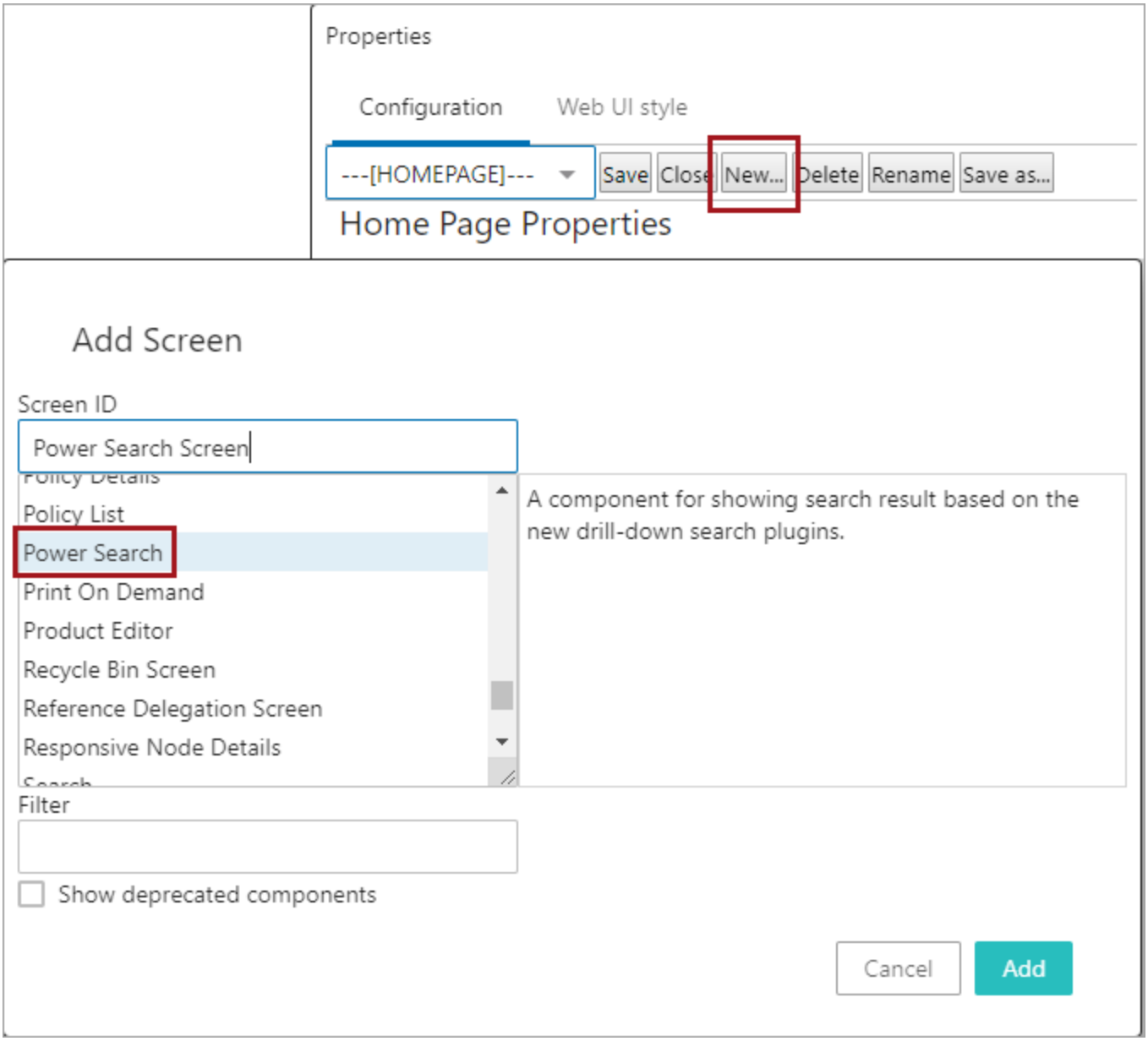
The Power Search Screen allows users to quickly generate search results based on criteria. The Power Search component functions as a stack panel component. For more information, see the **Tree Navigator Component** in the **Web User Interfaces / Web UI Getting Started** documentation.

Prerequisites

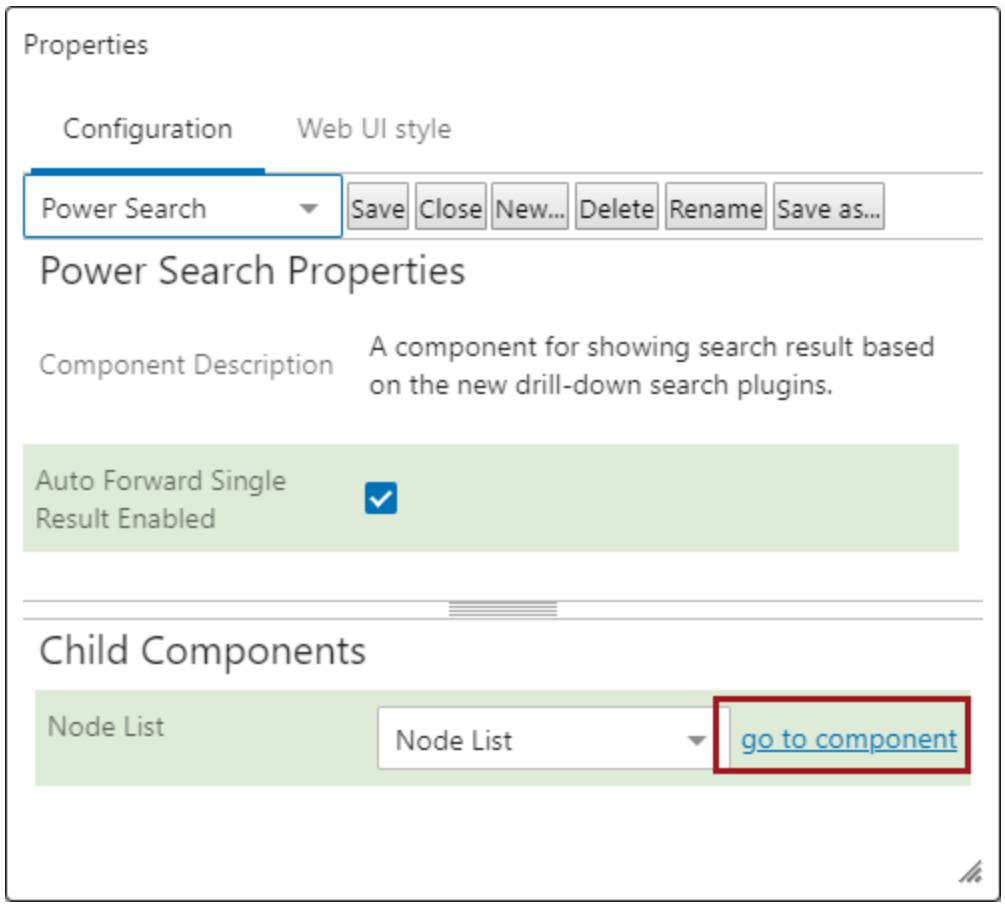
It is expected that anyone configuring the Power Search Screen component is familiar with the Web UI Designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

Configuration

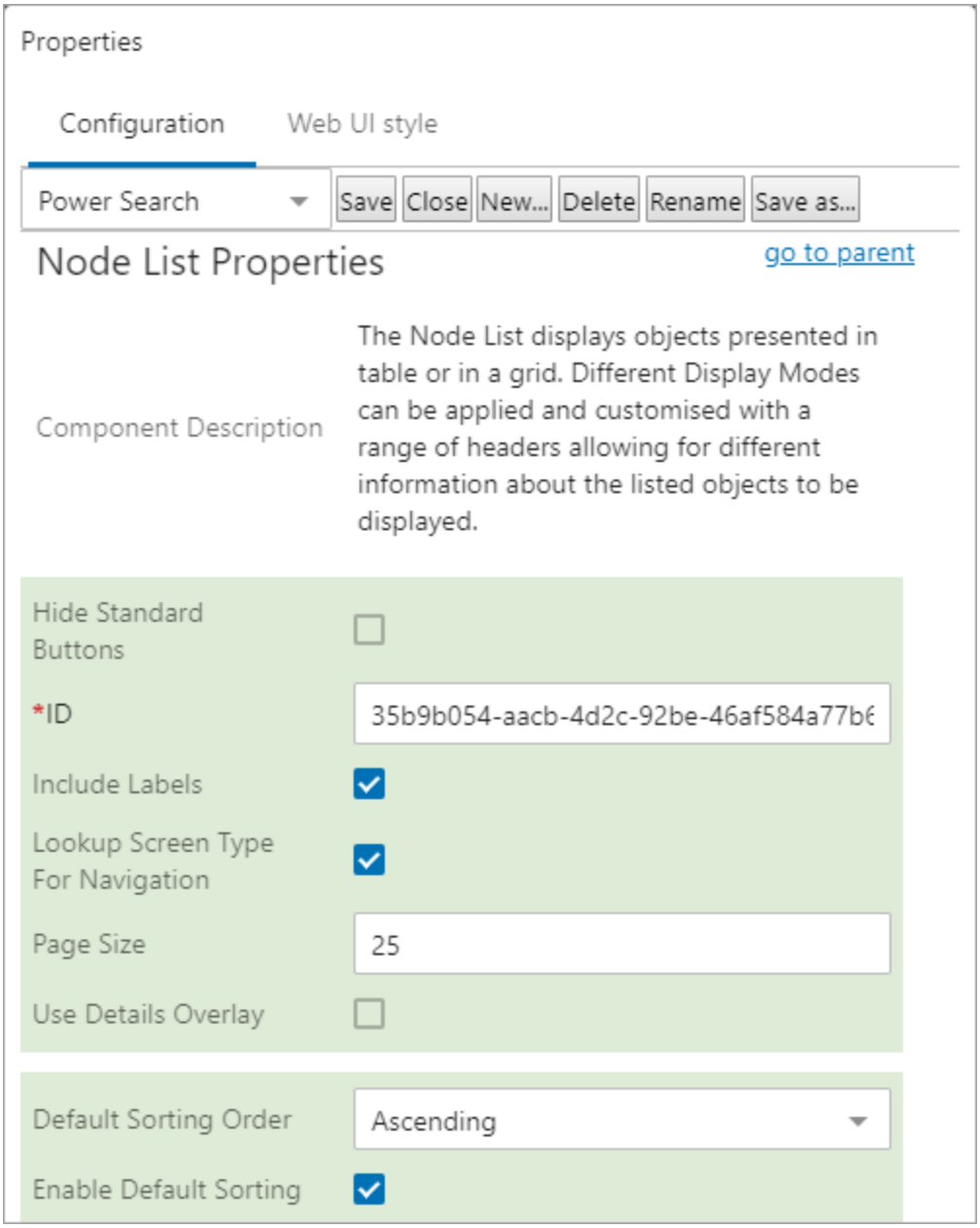
In the Designer, create a new screen by selecting **New**. Select the 'Power Search' option for a new screen, and create a name for the Screen ID. In the example below, the Screen ID is named 'Power Search Screen. Click 'Add.'

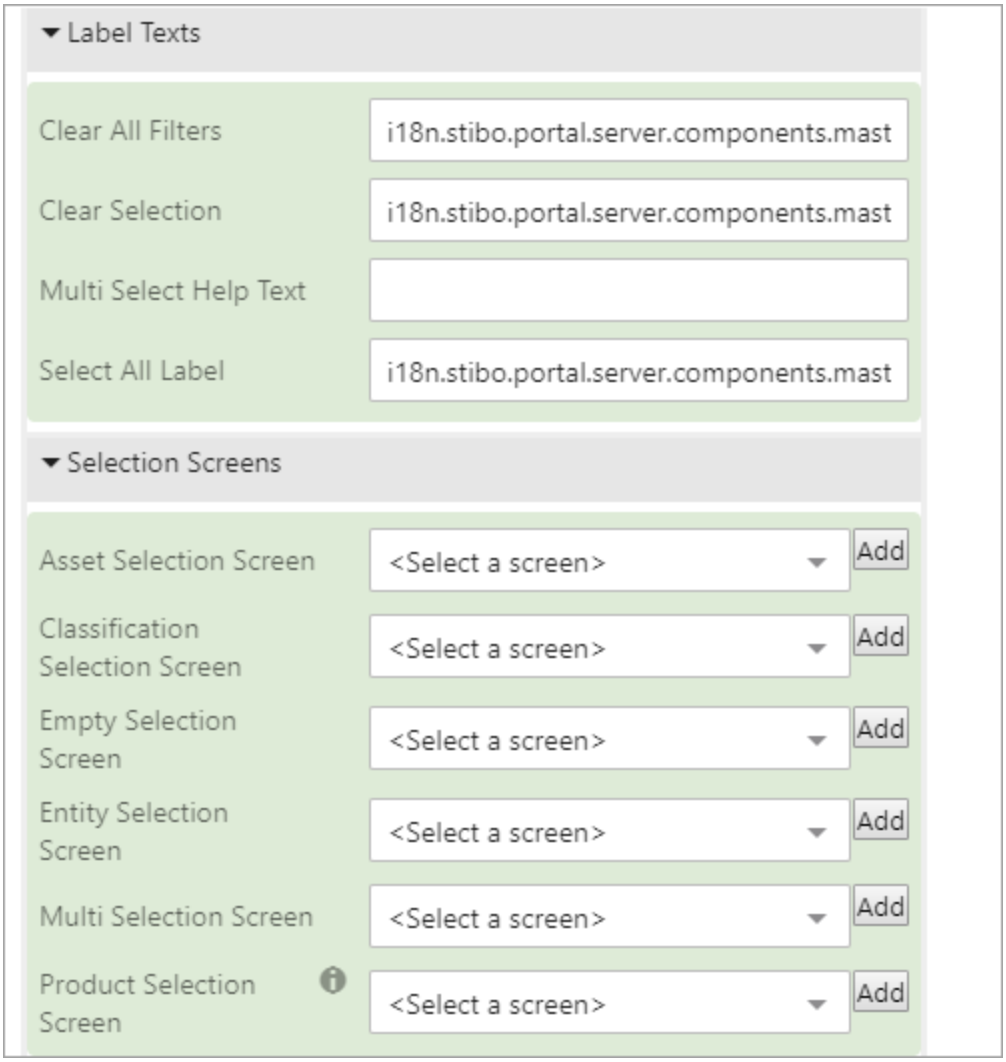


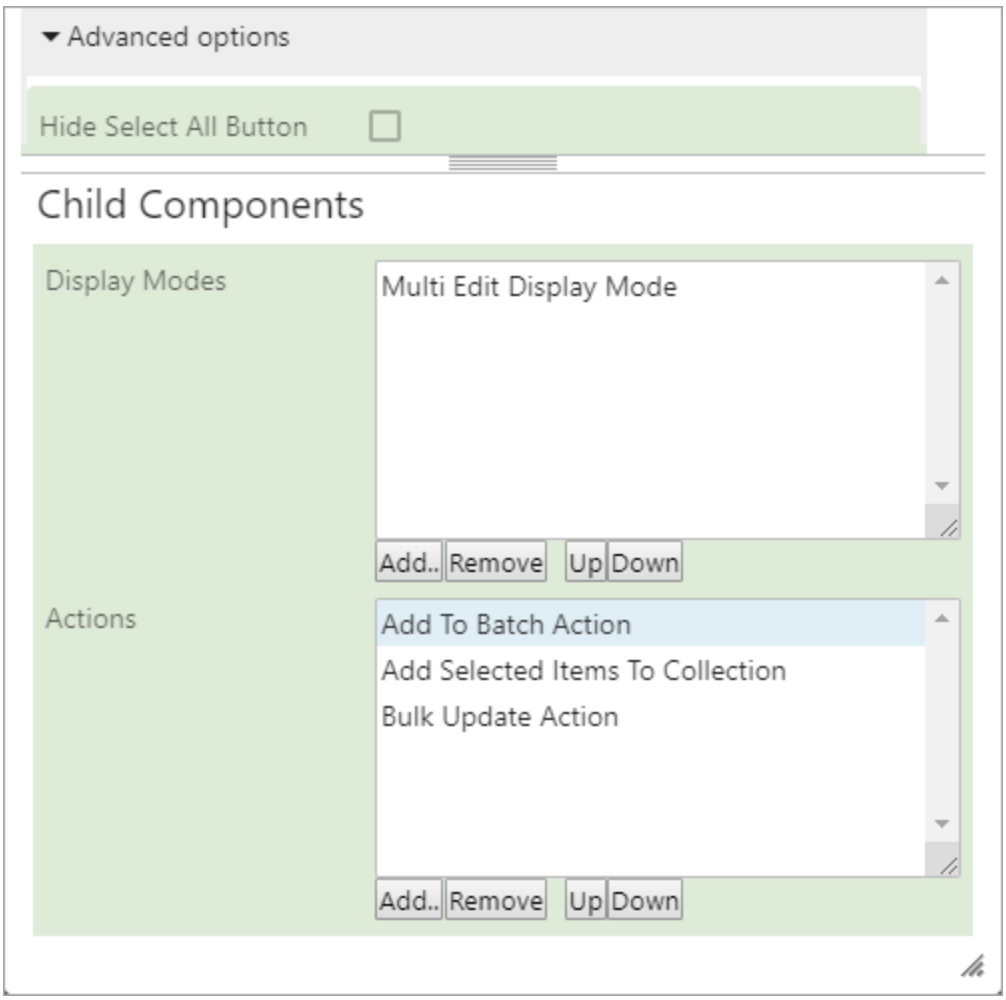
Once this screen is created, in the Power Search Properties, select the 'go to component' link on the Node List option under Child Components.



This opens up the Node List component, which contains several options for configuration.


Properties
Configuration
Web UI style
Power Search
Save
Close
New...
Delete
Rename
Save as...
Node List Properties
go to parent
Component Description
The Node List displays objects presented in table or in a grid. Different Display Modes can be applied and customised with a range of headers allowing for different information about the listed objects to be displayed.
Hide Standard Buttons
*ID
35b9b054-aacb-4d2c-92be-46af584a77b6
Include Labels
Lookup Screen Type For Navigation
Page Size
25
Use Details Overlay
Default Sorting Order
Ascending
Enable Default Sorting

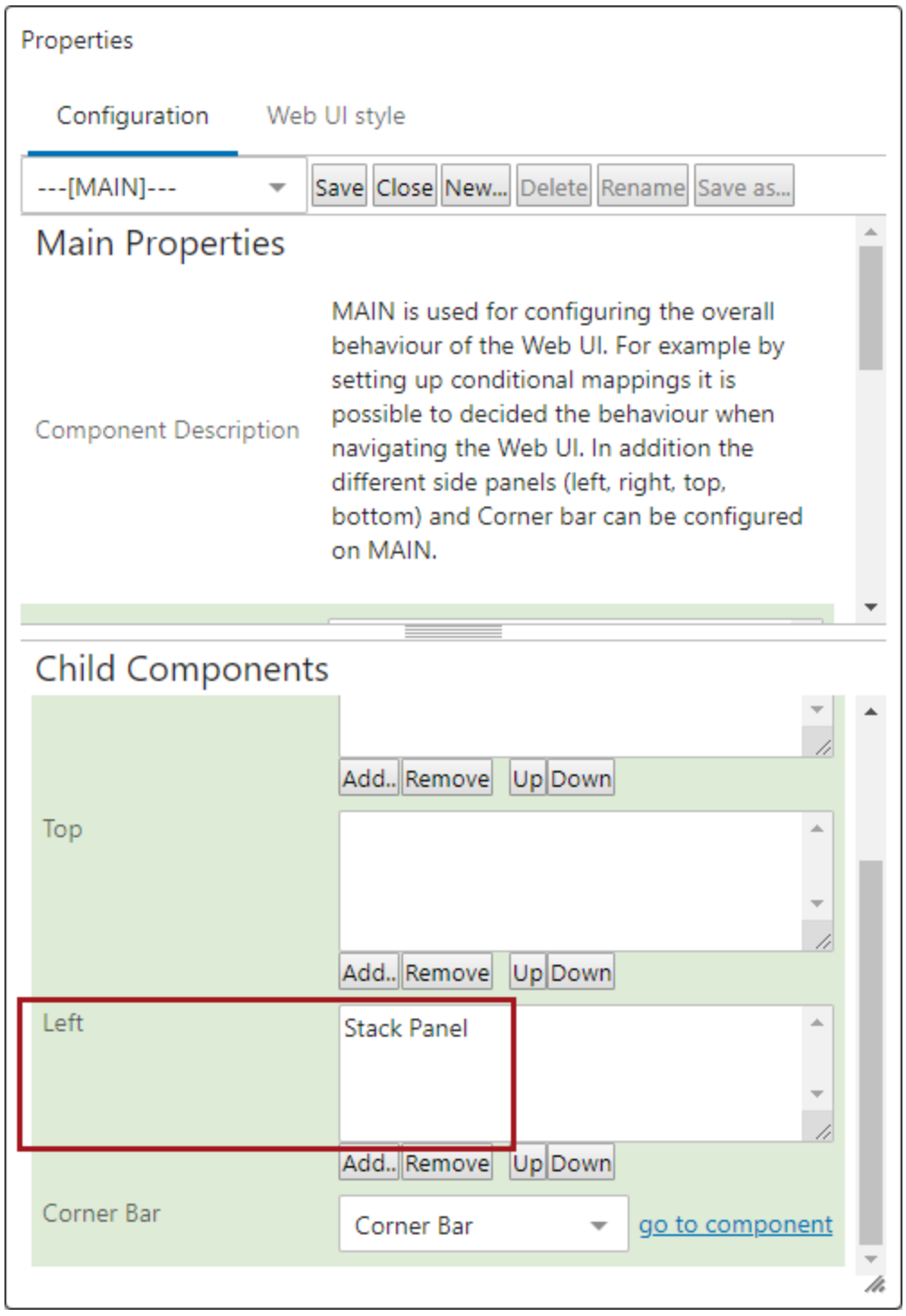

Label Texts
Clear All Filters
i18n.stibo.portal.server.components.mast
Clear Selection
i18n.stibo.portal.server.components.mast
Multi Select Help Text
Select All Label
i18n.stibo.portal.server.components.mast
Selection Screens
Asset Selection Screen
<Select a screen>
Add
Classification Selection Screen
<Select a screen>
Add
Empty Selection Screen
<Select a screen>
Add
Entity Selection Screen
<Select a screen>
Add
Multi Selection Screen
<Select a screen>
Add
Product Selection Screen
<Select a screen>
Add



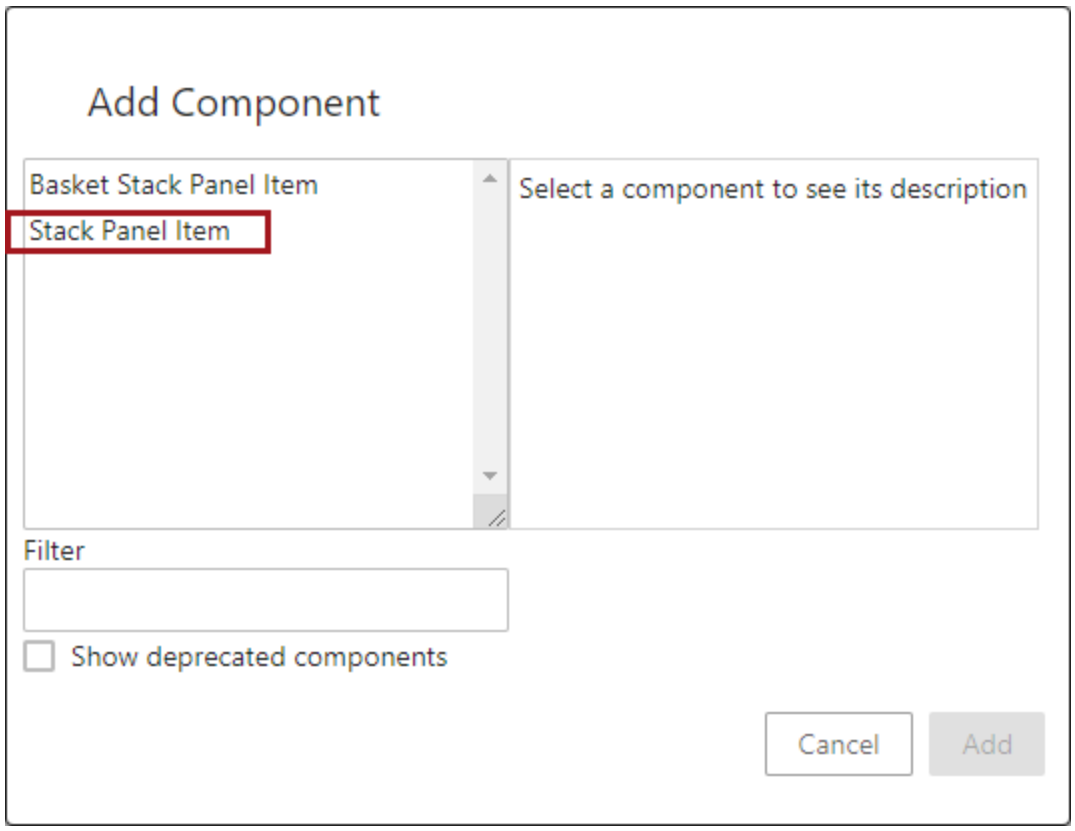
The only required field is the ID field, which is auto-populated to a unique value but may be changed as desired. Every other option will allow expanded functionality of the Power Search component. General Node List configuration instructions can be found in the **Node List Component** topic in **Using a Web UI**

Implementing the Power Search Screen

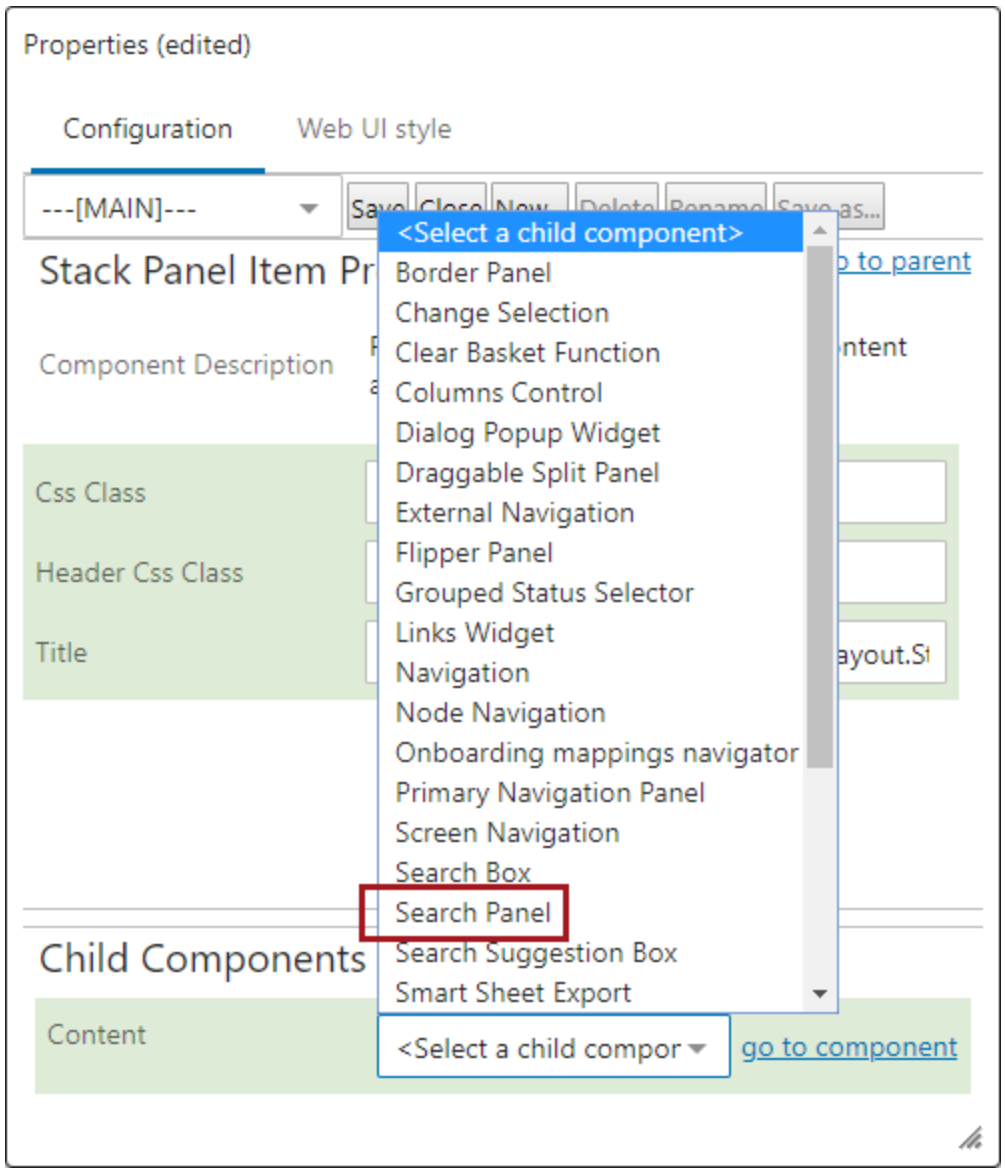
Once the Power Search screen is created, a stack panel needs to be configured for searching. From the **Main Properties** screen, add a 'Stack Panel' to the Left section of the child components. Once added, double-click the StackPanelcomponent.



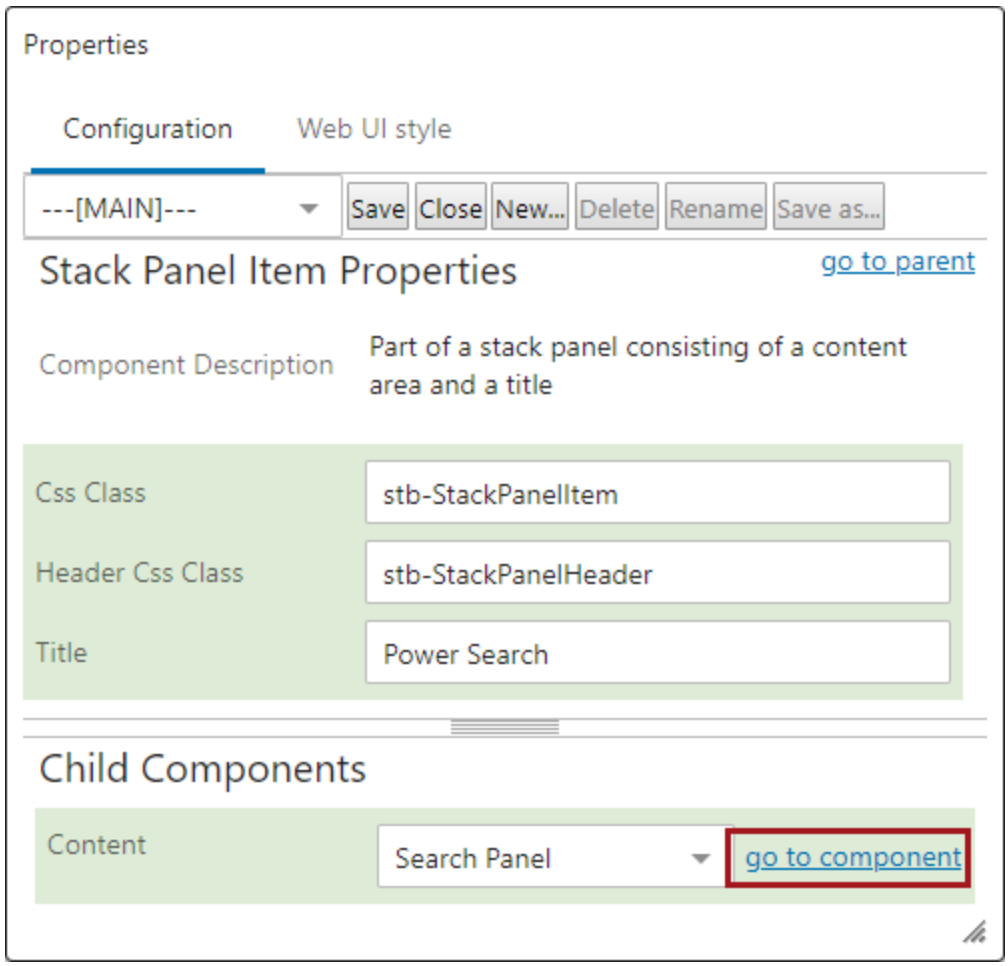
From the Stack Component configuration screen, select 'Add' in the Items field of the Child Components section. Select 'Stack Panel Item' from this dialog.



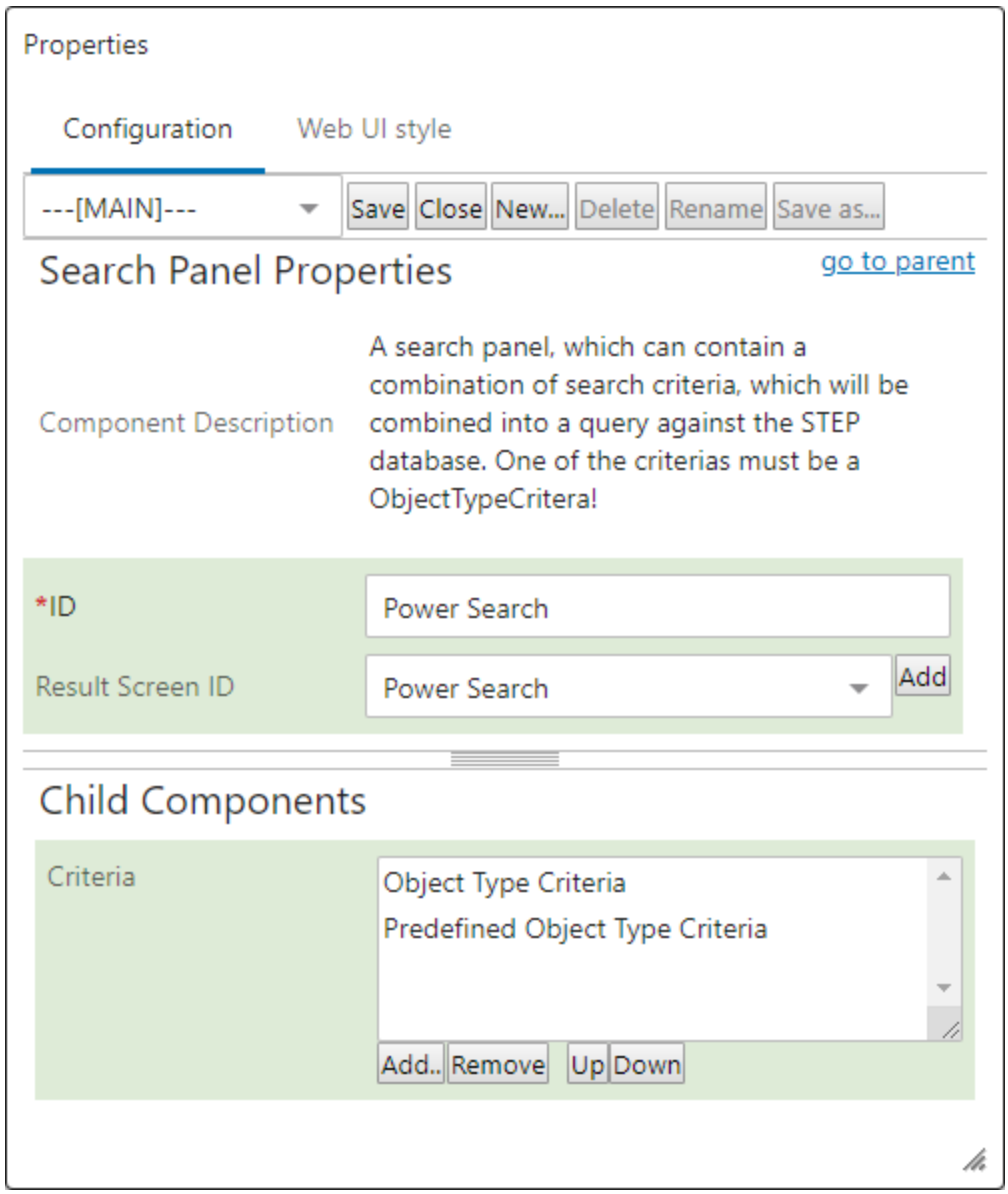
Double-click the Stack Panel Item component to access the configuration. In the Stack Panel Item Properties, select the 'Search Panel' in the Content field dropdown of the Child Component section.



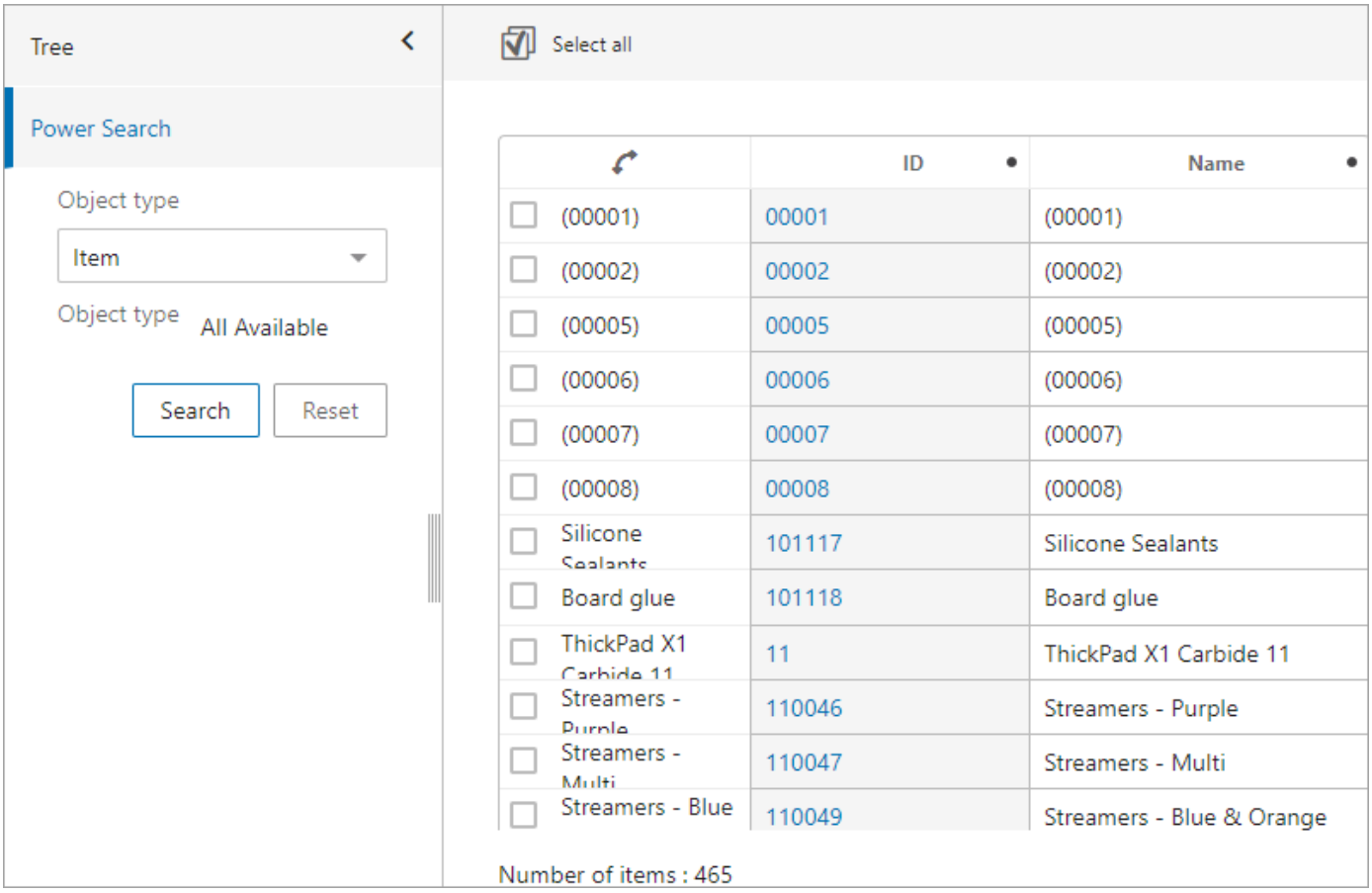
Select 'go to component' next to the Search Panel to configure the search panel.



On the Search Panel component configuration, provide an ID, add the previously created Power Search screen as the Result Screen ID, and add the desired search criteria. When finished configuring as desired, select 'Save' then close the Designer.



From the Web UI homepage, select the 'Power Search' search panel component from the left navigation. In this example, an 'Item' object type is configured. The results will show as follows:



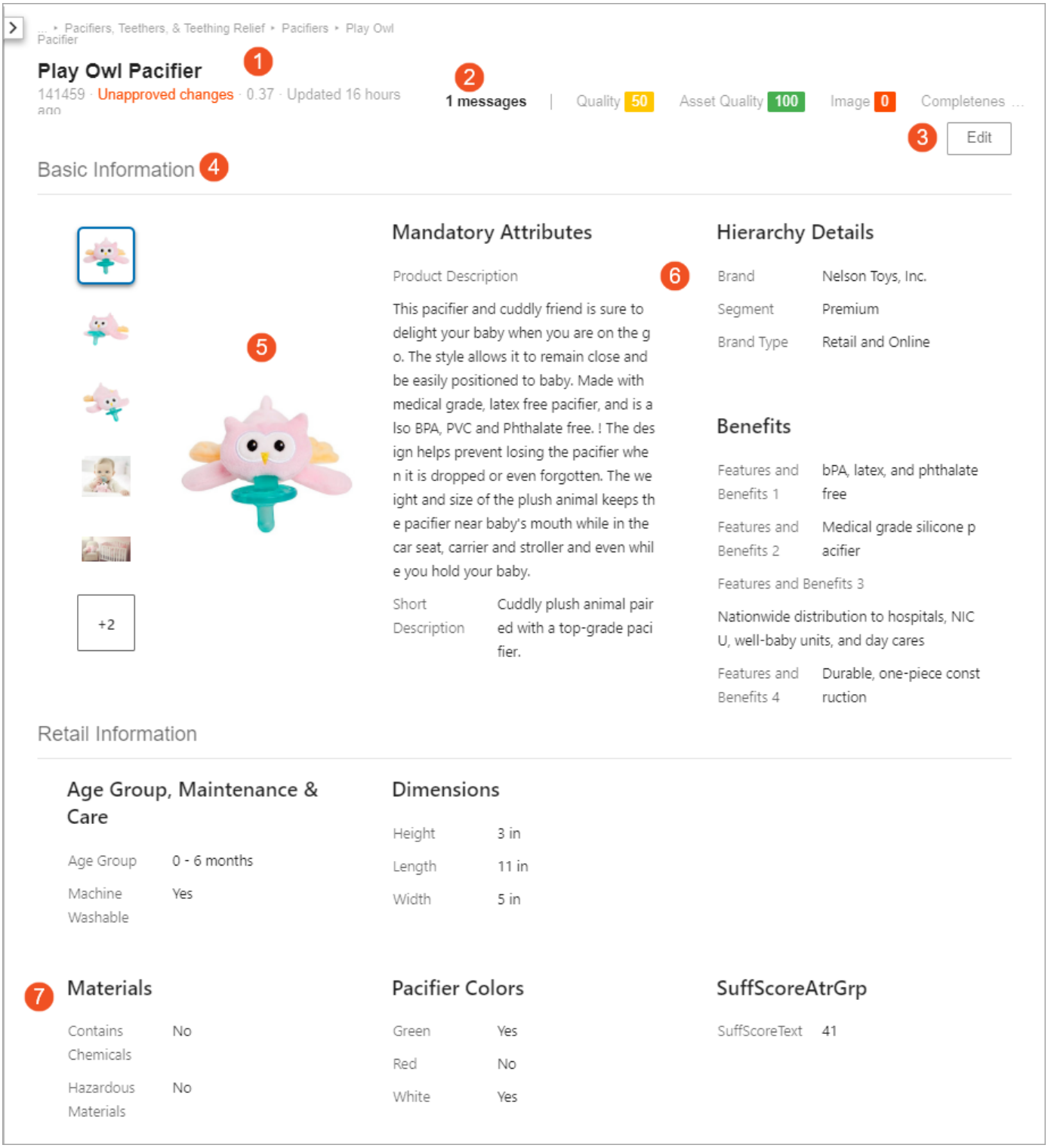
Note: Ensure that no other screen is configured for the object type at a higher order than the Power Search screen in the **Main Properties** screen mappings. For example, if an 'ID and Name' screen is configured to show on Items, that screen will instead show the Power Search results screen. For more information, see the **Mappings** topic in the **Web User Interfaces / Web UI Getting Started** documentation.

Product Editor Screen

The Product Editor screen is optimized for a read-only view of attribute values on objects of the product super type. The Edit view displays all valid editable and read-only attributes, and allows users with edit attribute privileges to modify values. This screen requires minimal Web UI setup and displays product details based on user privileges, the workbench System Setup attribute hierarchy, as well as parameter settings on attribute groups and attributes. This means that the user's view of data in Web UI automatically matches what they see in the workbench.

Responsive resizing functionality ensures this screen can be used successfully on displays of different sizes and resolutions. For information on getting started with the Product Editor, see the **Setting up the Product Editor Screen** topic.

The elements on the screen provide information about the selected product. Each element is identified by the numbers 1-7 in the image and each is described below.



Summary information

The summary information (item 1) is displayed at the top of the Product Editor screen and includes:

- The path including the three nearest ancestors. The full product path is available when hovering over the path. Clicking the path copies the full path to the clipboard, and displays a confirmation message.
- The product name, prominently displayed.
- The product ID (STEP ID), approval status, revision number, and update status in hours. Hovering over the update status shows the day, date, and time of the last update.

To display the summary information on the Product Editor screen, see the **Setting up the Product Editor Screen** topic.

Sufficiency indicators

The sufficiency indicators (item 2) include defined metrics to demonstrate how close a product is to being considered complete. The red and yellow scores identify areas where more work is required, while the green scores indicate a complete sufficiency. Clicking the sufficiency indicator opens the Sufficiency Panel with details for each metric being tracked. For more information, see the **Sufficiency Panel** topic in the **System Setup / Super User Guide**.

Edit access

The Edit button (item 3) is available for users with edit privileges. Clicking the Edit button enables the edit mode and displays all attributes valid for the product. Existing values can be updated and new values can be added to attributes that are blank. For more information, see the **Editing Data on the Product Editor Screen** topic.

Sections and Cards

The 'section' (items 4 and 7) and 'card' (items 5 and 6) visual elements allow product information to be organized in a meaningful way.

'Sections' (item 4) organize sets of product information into categories with related content and allow the grouping of one or more attribute groups and their corresponding values. In the image, the sections are labeled with the 'Basic Information' and 'Retail Information' headers. Section headings are configured via a metadata attribute on an attribute group. Attributes with values but that are in an attribute group without a defined section (item 7) are always displayed in the last section and have no header. For more information, see the **Modifying Sections on the Product Editor Screen** topic.

'Cards' organize the sections by displaying the product images (item 5) or attribute group data (item 6). Attribute groups that are assigned to a section are displayed on an attribute details card when at least one attribute in the group includes a value. The order of the attribute cards is controlled via a metadata attribute on the attribute group. In the image, the cards of the 'Basic Information' section are 'Mandatory Attributes,' 'Hierarchy Details,' and 'Benefits.' For more information, see the **Modifying Cards on the Product Editor Screen** topic.

Product images

If the product being viewed references a primary product image, that image automatically displays as the first card in the first section of the screen (item 5). If the primary product image reference type is single valued, only a single image can be displayed; a multi-valued reference type allows additional referenced images to display in an image carousel as shown above. The set of images is automatically scaled to match the width of cards while also keeping

the aspect ratio of the images. The image card settings cannot be modified.The 'primary product image' reference type is set in the Users & Group system settings as defined in the **Primary Image Type** topic of **System Setup / Super User Guide** documentation.

For more details on images, see the **View all referenced product images** section of the **Modifying Cards on the Product Editor Screen** topic.

Setting up the Product Editor Screen

The Product Editor screen is optimized for a read-only view of attribute values on objects of the product super type. The Edit view displays all valid editable and read-only attributes, and allows users with edit attribute privileges to modify values. This screen requires minimal Web UI setup and displays product details based on user privileges, the workbench System Setup attribute hierarchy, as well as parameter settings on attribute groups and attributes. This means that the user's view of data in Web UI automatically matches what they see in the workbench.

For details on how the screen functions, review the **Product Editor Screen** topic.

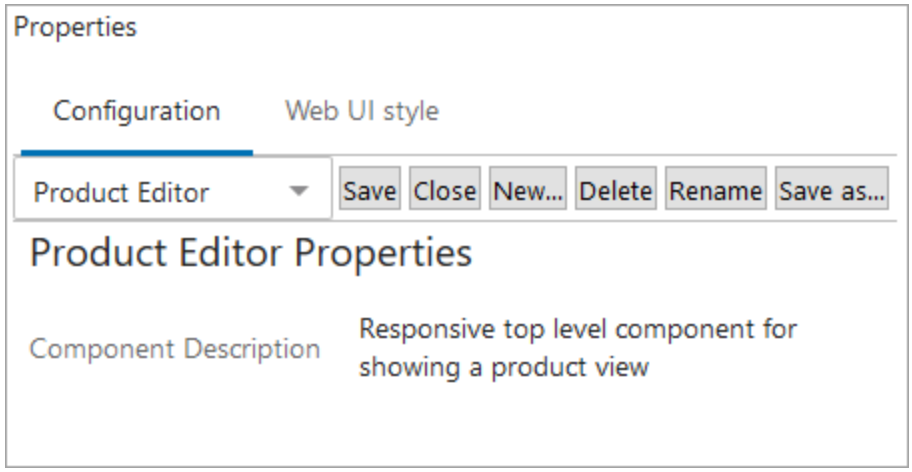
Prerequisites

Anyone setting up the Product Editor screen should be familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** topic.

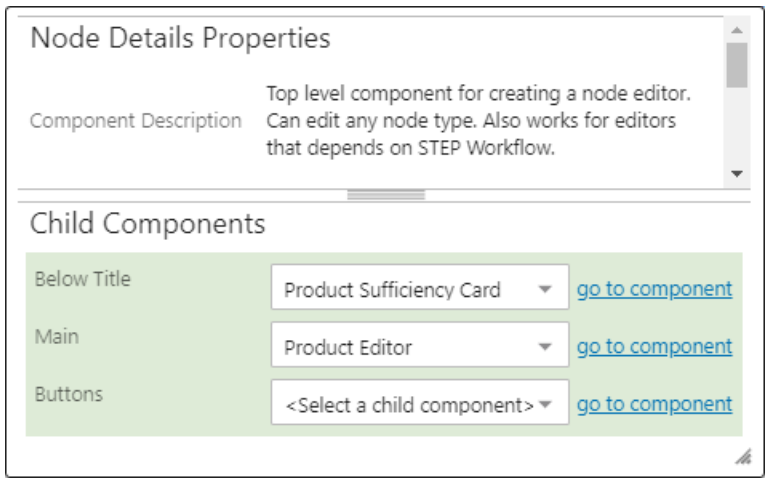
Adding a Product Editor screen

Use the following steps to create a read-only view of product data with the option to edit data.

1. In the Web UI designer, create a new screen of the type 'Product Editor' as defined in the **Design Mode Basics** topic.



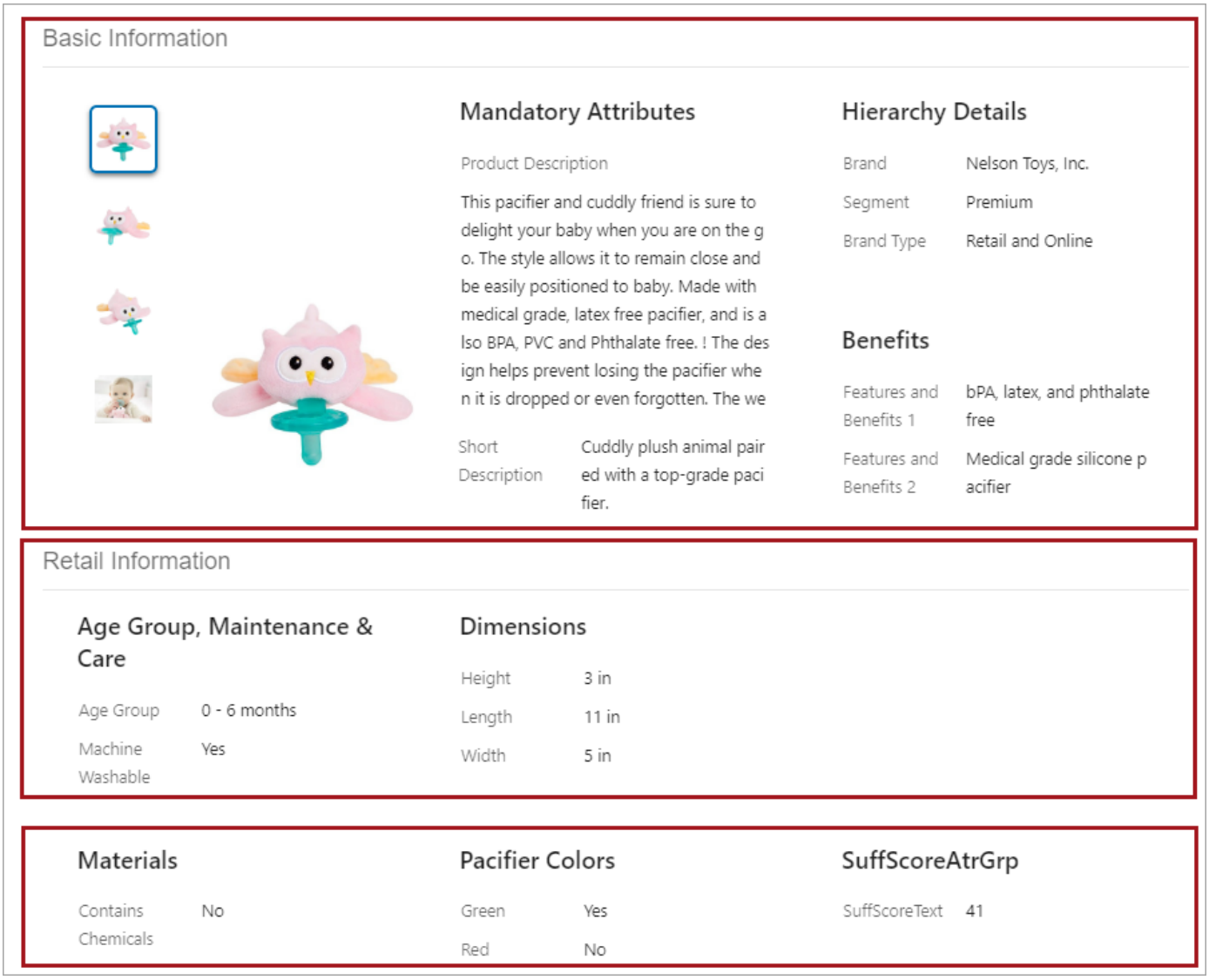
2. Create a Node Details screen as defined in the **Node Details Screen** topic.
   - For the Below Title parameter, select Product Sufficiency Card (which is only valid on a Node Details screen).
   - For the Main parameter, select the Product Editor screen created above.
   - For the Buttons parameter, no selection is necessary. The Edit button is automatically displayed, allowing users with edit privileges access to an editable view.



3. On the ---[MAIN]--- page, update the Mappings parameter to map the new Node Details screen, as defined in the **Mappings** topic.
4. Save and close the designer.
5. Configure the contents of the screen as defined in the following topics:
   - Modifying Sections on the Product Editor Screen
   - Modifying Cards on the Product Editor Screen

Modifying Sections on the Product Editor Screen

As described in the **Product Editor Screen** topic, sections allow the user to view related content about the product, for example, based on the purpose of the data. In the following image, the sections are outlined in red.



The data displayed in a section is controlled in workbench, using parameters accessible in System Setup. The modifications that can be applied to sections include:

- Define a List of Values (LOV) for section label text
- Add a new section to the screen
- Remove a section from the screen
- Change the order of the sections on the screen

Details regarding how users can make modifications to sections are described below.

For information about modifying cards and their contents, see the **Modifying Cards on the Product Details Screen** topic.

Define a List of Values (LOV) for section label text

Creating the LOV as instructed below allows users to add an attribute group card within a section by selecting the section label text from a metadata attribute on the attribute group.

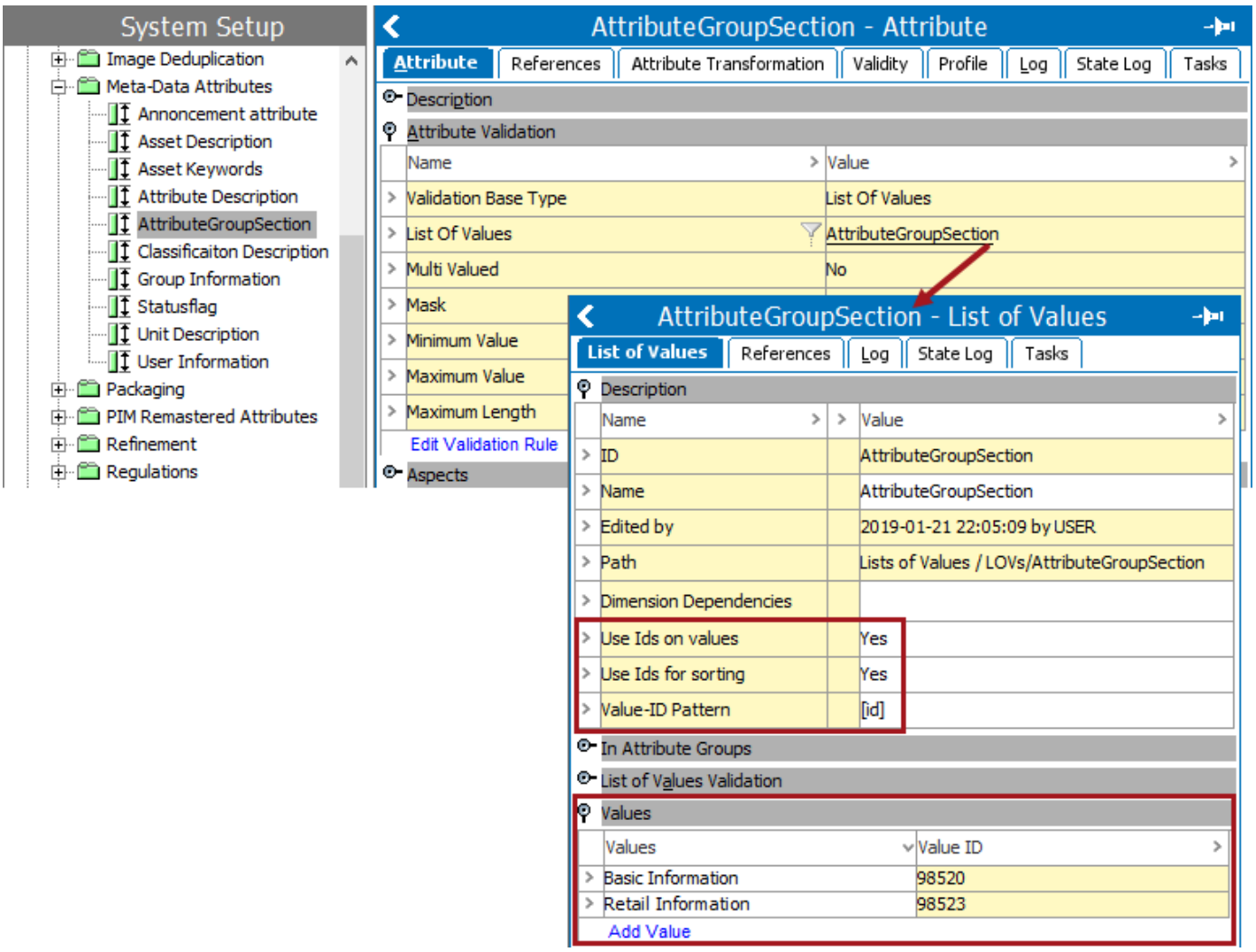
Perform the following steps in workbench, on the System Setup tab.

1. Create an LOV with the following parameter settings.
   - The **ID** parameter must be set to 'AttributeGroupSection'.
   - The **Name** parameter can be set as desired.
   - The **Use Ids on values** parameter is set to Yes.
   - The **Use Ids for sorting** parameter is set to Yes.
   - The **Value-ID Pattern** parameter has a template to create the Value ID.
   - In the **List of Values Validation** flipper, the Validation Base type is set to Text, Integer, Number, or Numeric Text.
   - In the **Values** flipper, the Values column displays text for the desired section labels.

   Important: Enter the text for LOV Values in the same order they are required to display on the screen. The smallest Value ID column value displays as the first section, with the others following in ascending order. For information on reordering sections, see the **Change the order of the sections on the screen** steps below.

2. Create an attribute to use the LOV with the following parameter settings.
   - The **ID** parameter must be set to 'AttributeGroupSection'.
   - The **Name** parameter can be set as desired.
   - The **Type** parameter is set to Description.
   - The **Validation Base Type** parameter is set to List of Values.
   - The **List of Values** parameter is set to the LOV created above.
   - On the Validity tab, open the **Valid for Product Types** flipper, and confirm the object type of the products being viewed is checked.

   The setup required for the LOV and the attribute that uses the LOV is shown in the following image.

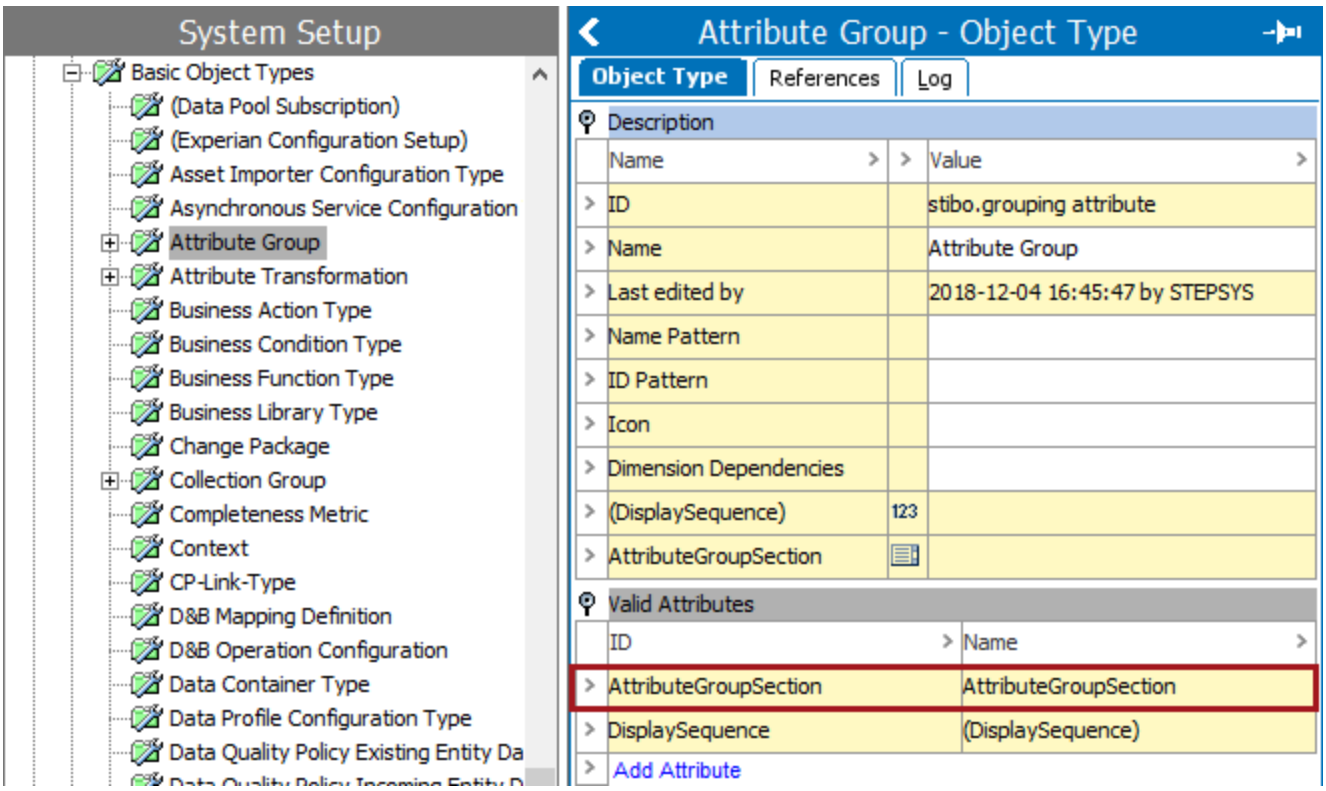


For details on creating an LOV, see the **Creating an LOV** topic in the **System Setup / Super User Guide** documentation.

For details on adding LOV values, see the **Adding Values to an LOV** topic in the **System Setup / Super User Guide** documentation.

For details on creating a description attribute, see the **Creating Attributes** topic in the **System Setup / Super User Guide** documentation.

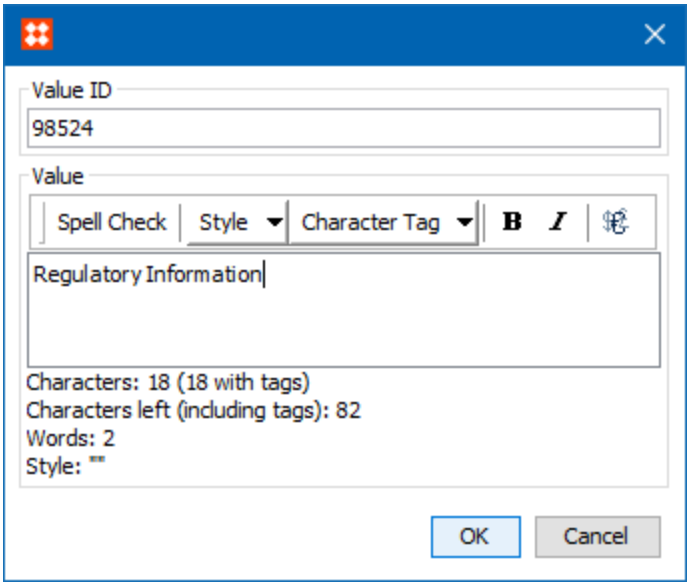
3. Update the Attribute Group object type to display the new attribute, as shown below and defined in the **Attribute Metadata on Attributes** topic in the **System Setup / Super User Guide** documentation.



Add a new section to the screen

Creating a new section is the first step in having it display on the Product Editor screen in Web UI. For the section to display, an attribute group must be configured and assigned to the section, as described below.

1. In workbench, on the System Setup tab, open the LOV created to hold attribute group sections, as described above.
2. In the Values flipper, click the **Add Value** link to display the Value ID editor shown below.



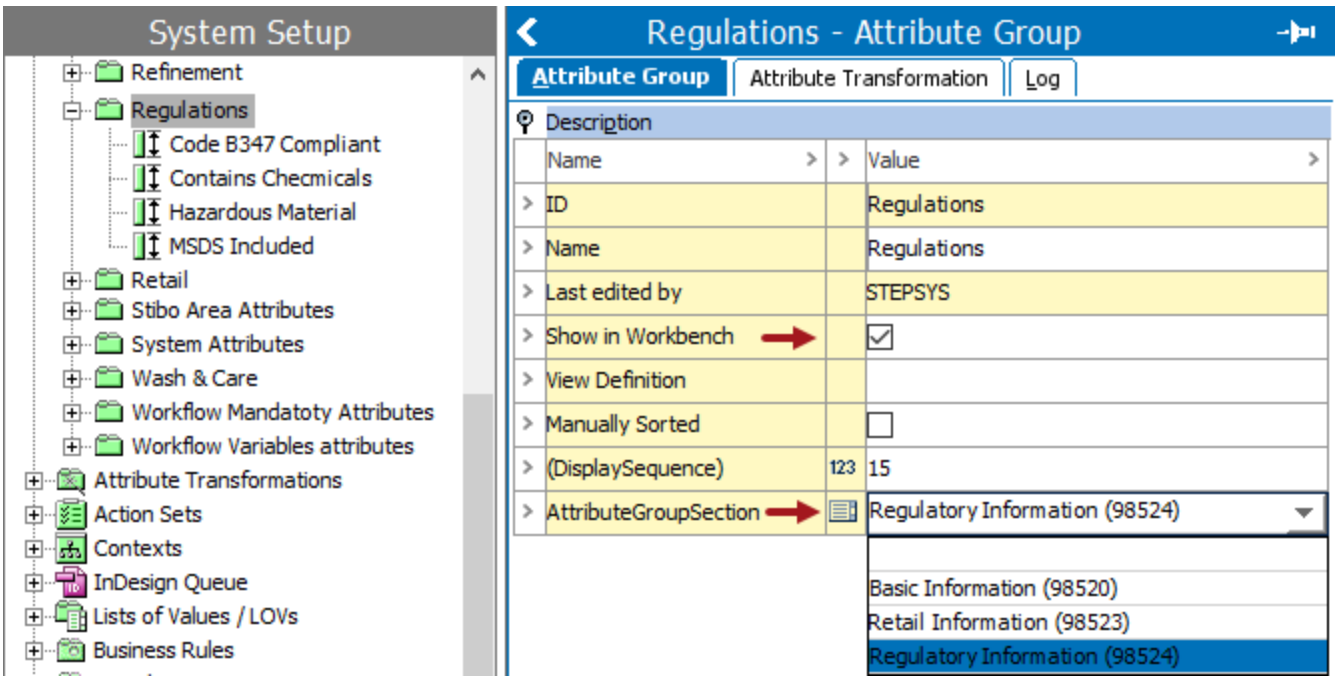
3. Add the new section label text in the Value text box and click the **OK** button. The new value is displayed in the LOV Values flipper.

   Note: A section will not display on the Product Details screen until at least one attribute group is assigned to the section as a card.

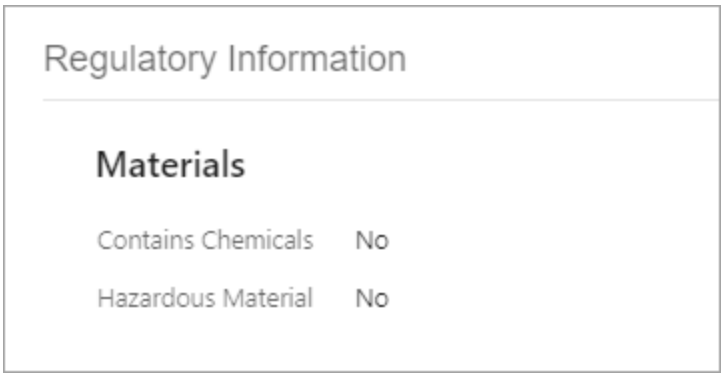
4. Select the attribute group to display in the new section, and set the following parameters:

   - Check the **Show in Workbench** parameter checkbox.
   - On the user-defined 'AttributeGroupSection' parameter, select the required label from the dropdown.

   In the following example, the Sales attribute group has been assigned to the 'Sales Information' section using the 'AttributeGroupSection' metadata attribute.



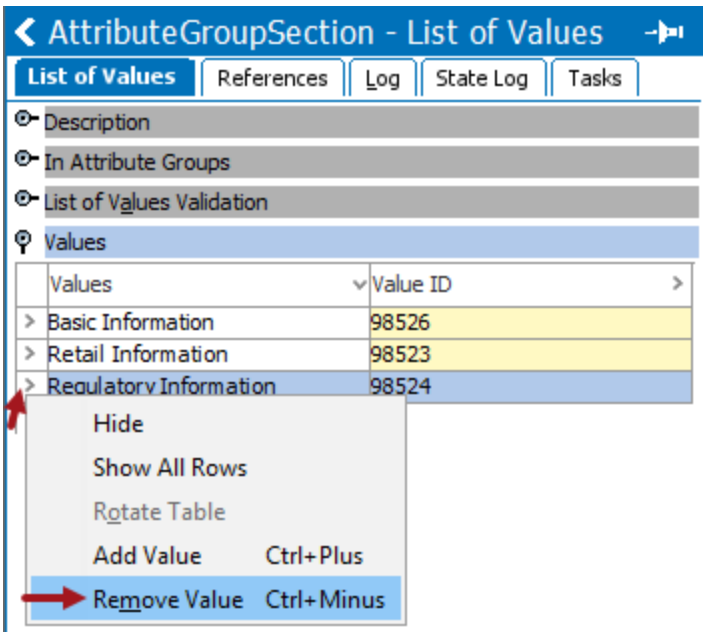
Attributes with values are now displayed in the attribute group card in the new 'Regulatory Information' section on the Product Details screen in Web UI.



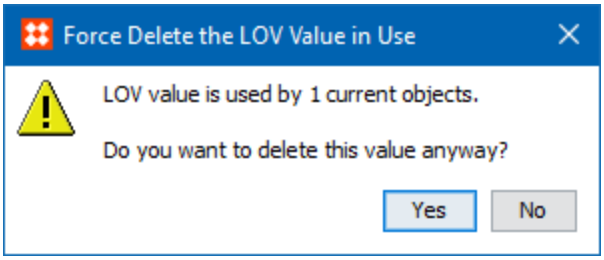
Remove a section from the screen

Removing a section from the LOV that stores the section text prevents users from assigning any information to the section, and also removes is from the Web UI.

1. In workbench, on the System Setup tab, open the attribute group section LOV.
2. On the Values flipper, right-click the first column of the value row that will be removed. Click the **Remove Value** option.



3. If the value is in use, select an option on the 'Force Delete the LOV Value in Use' dialog:



- **Yes** removes the value and sets the attribute groups that used that value to blank.
- **No** leaves the value unchanged.

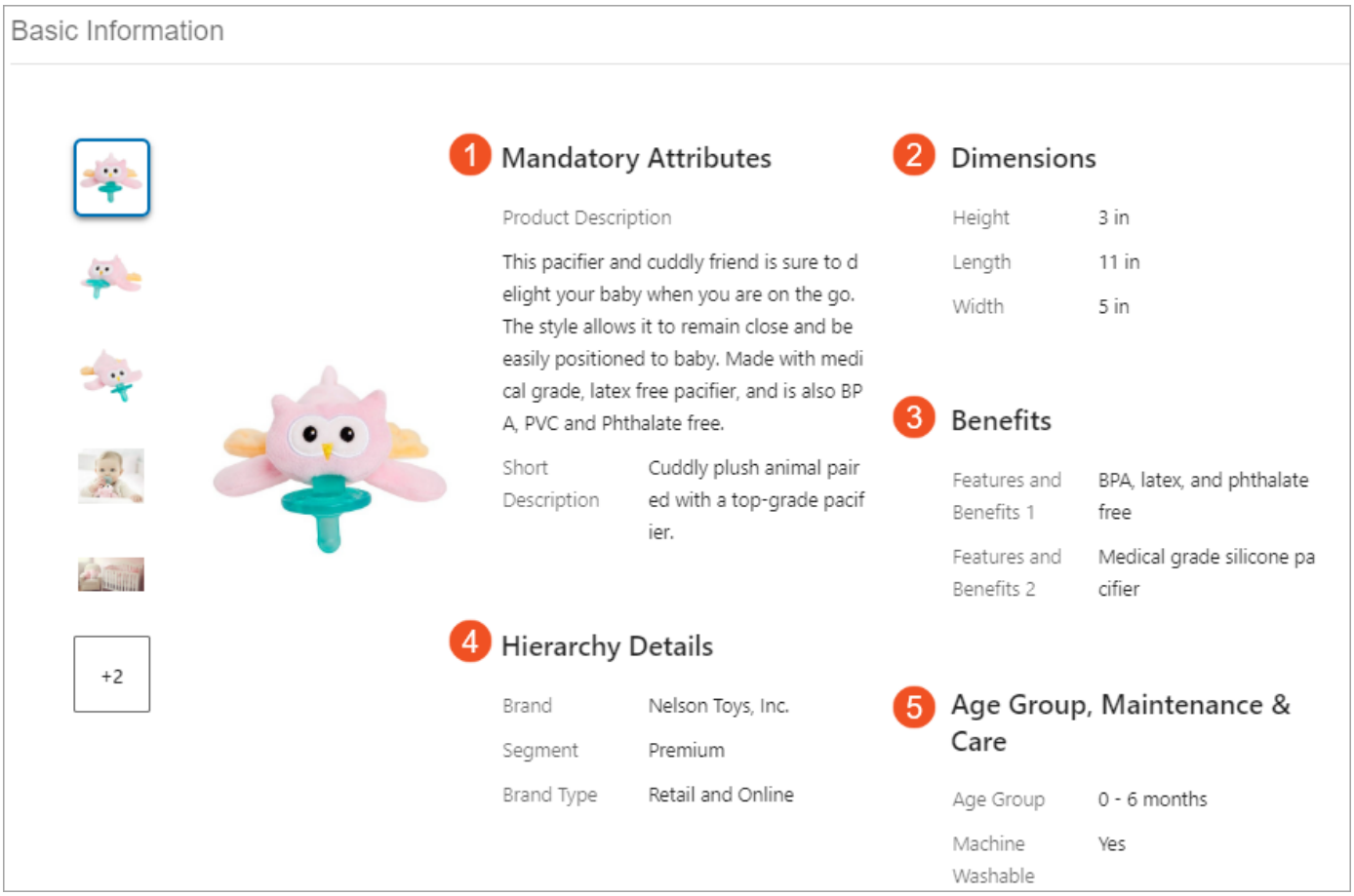
Change the order of the sections on the screen

The order in which the sections are displayed on the Product Editor screen is determined by the value in the Value ID column on the LOV in the Values flipper. The section text with the smallest Value ID is displayed first.

1. In workbench, on the System Setup tab, open the attribute group section LOV.
2. Determine the desired order of the sections.
3. Choose a method to reorder the Value IDs:
   - If no sections have been assigned to attribute groups, first delete the values, and then add them again in the desired order.
   - If sections have been assigned to attribute groups, the process is more involved. First create a set of duplicate values in the desired order, and then merge each of the duplicates. For more information, see the **Merge Values in LOV** option as defined in the **Merging Values in an LOV** topic in the **System Setup / Super User Guide** documentation.

Modifying Cards on the Product Editor Screen

As described in the **Product Editor Screen** topic, cards allow the user to view selected attribute groups, attribute names and their values. In the following image, the cards are numbered.



The data displayed on a card is controlled from workbench, using parameters in System Setup. The available modifications, defined below, include:

- Add an attribute group as a card
- Remove an attribute group card
- Change the order of cards
- Add an attribute to a card
- Remove an attribute from a card
- Change the order of attributes on a card
- View all referenced product images

For information about modifying cards and their contents, see the **Modifying Sections on the Product Editor Screen** topic.

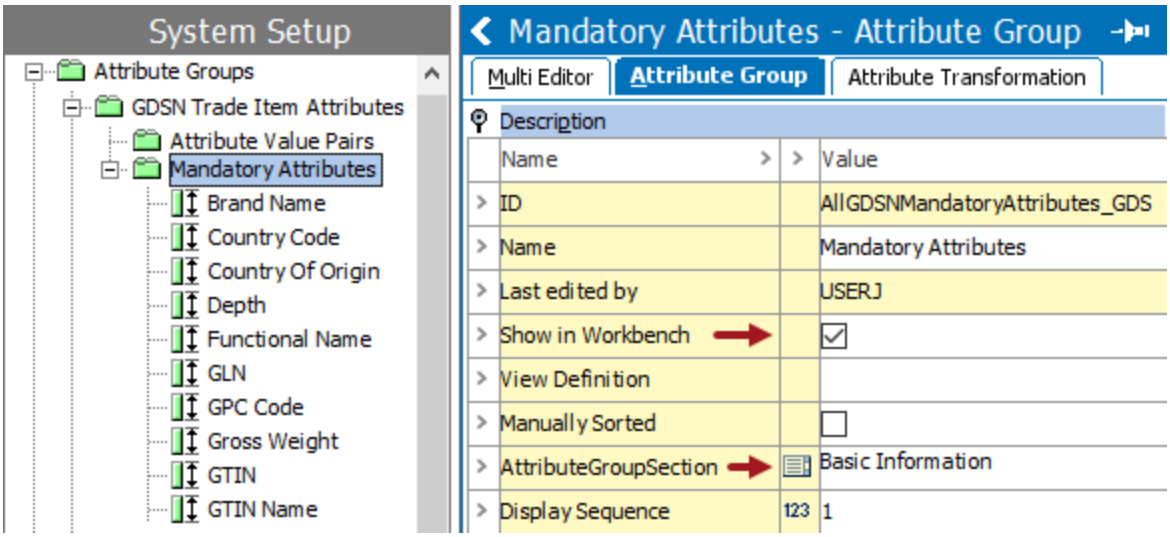
Add an Attribute Group as a Card

An attribute group can be added as a card, but the card only displays when a values exists for at least one attribute in the group. Only attributes with values are displayed in the view mode. All valid attributes are displayed in edit mode.

1. In workbench, on the System Setup tab, open the attribute group editor for the attributes that should be displayed.
2. Check the **Show in Workbench** parameter to display the attribute group as a flipper on the product editor in workbench and as a card in the Product Editor screen in Web UI.
3. On the user-defined 'AttributeGroupSection' parameter, select the desired section from the dropdown. The available options are defined by the LOV described in the **Modifying Sections on the Product Editor Screen** topic.

Note: These steps allow the attribute to immediately show in the product editor, but the card is only displayed in the Web UI when at least one value exists for one attribute in the group.

In the image above, the 'Mandatory Attributes' group is configured for the Basic Information section. The 'Mandatory Attributes' group is displayed as a card.



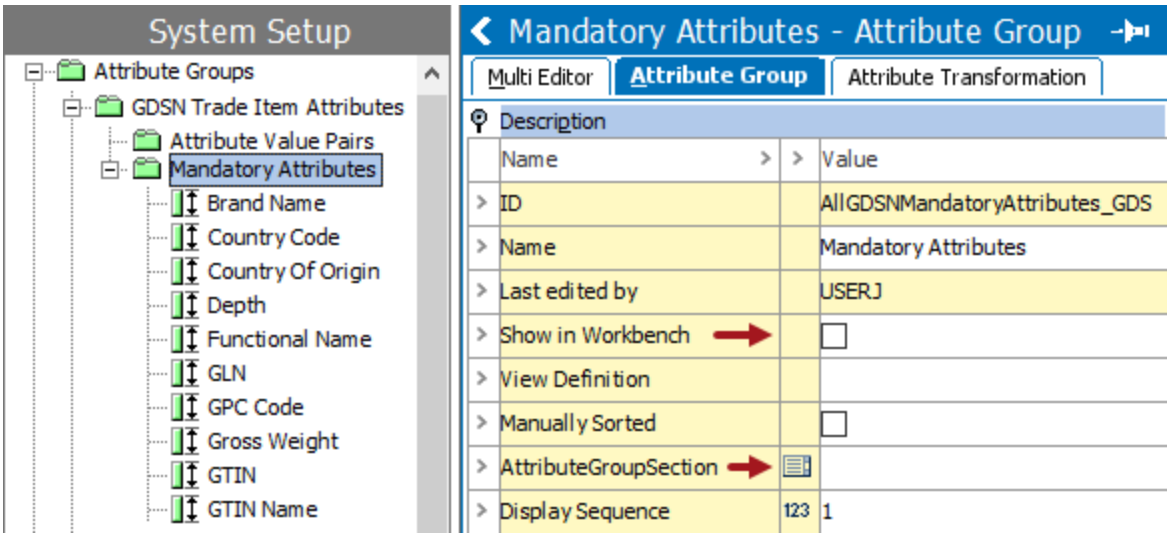
Remove an Attribute Group Card

Removing an attribute group card allows you to no longer display information in the Product Editor screen when it is no longer required.

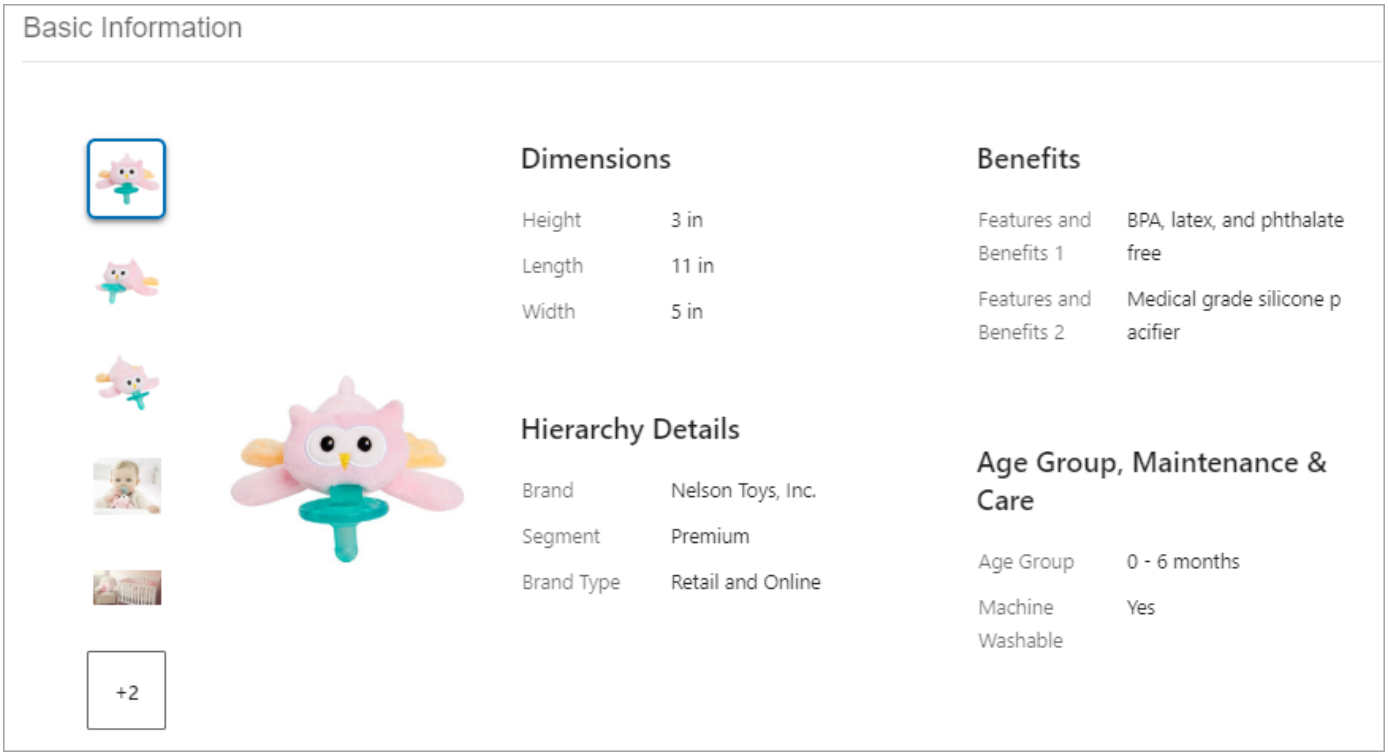
1. In workbench, on the System Setup tab, open the attribute group editor for the attributes that should be removed.
2. Remove the checkmark from the **Show in Workbench** parameter. This removes the card from the Product Editor screen in Web UI, and also removes the flipper for the attribute group on the product in the Tree in

workbench.

In this example, the 'Mandatory Attributes' group is removed from the 'Basic Information' section.



The Product Editor screen 'Mandatory Attributes' section no longer shows the 'Basic Information' attribute group as a card.

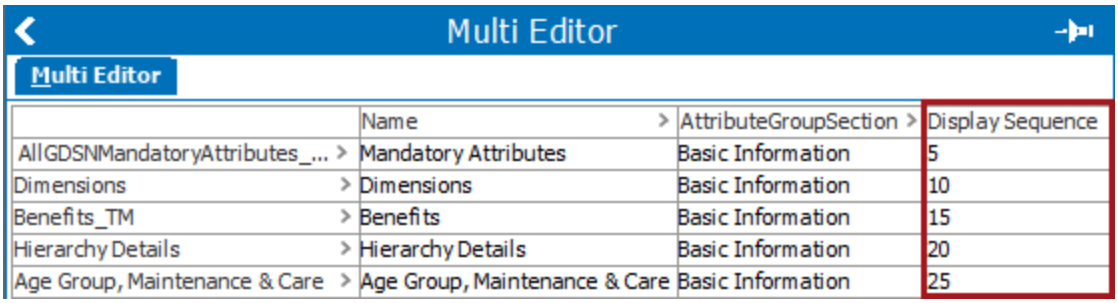


Change the Order of Cards

The display order of cards can be controlled, allowing the most important to be displayed prominently.

1. In workbench, on the System Setup tab, multi-select the attribute groups that should be reordered. This displays the Multi Editor with the metadata attribute values for selected groups.

   Attribute groups can also be modified one at a time, by editing each group individually.



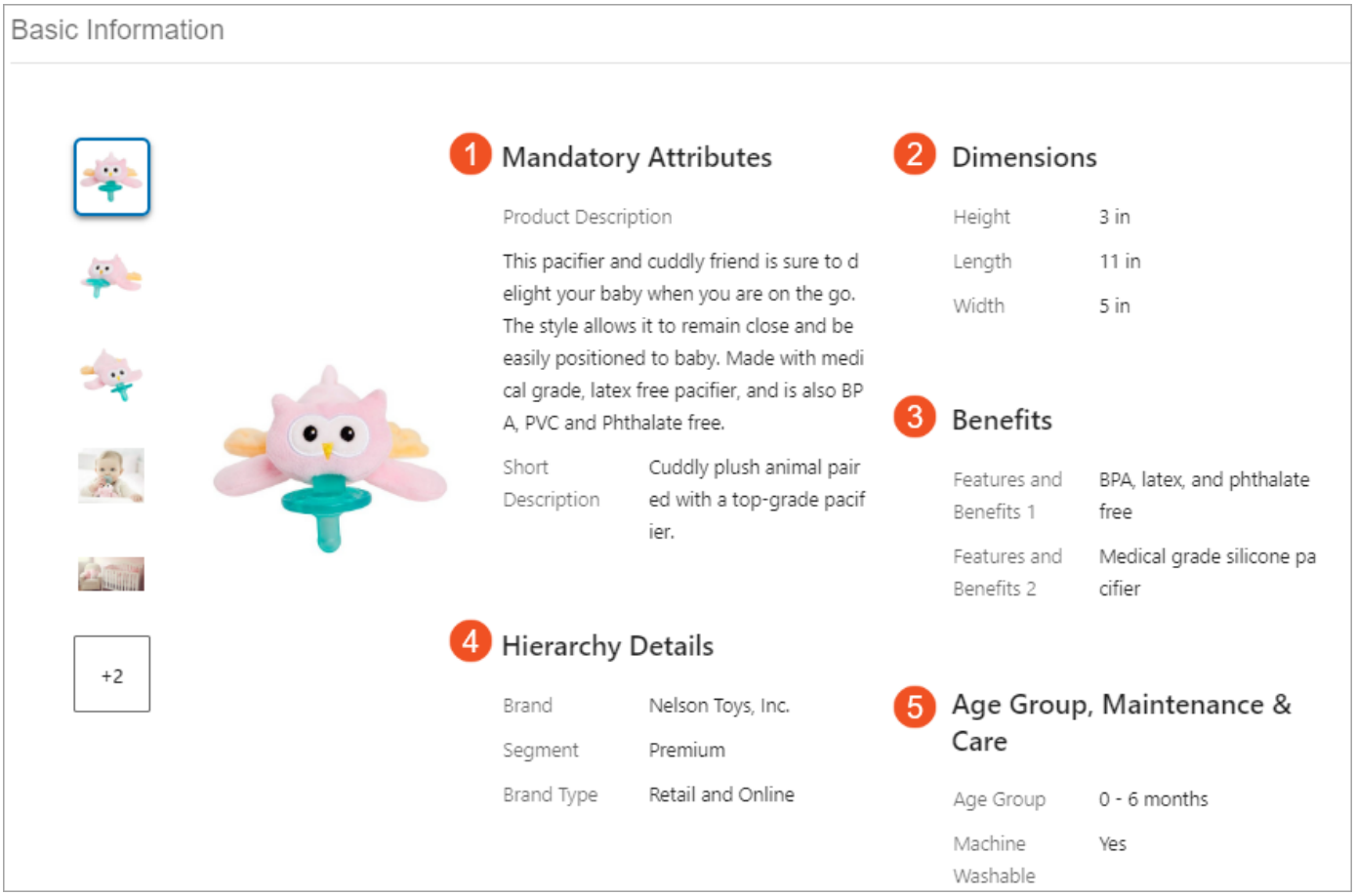
	Name	AttributeGroupSection	Display Sequence
AllGDSNMandatoryAttributes_...	Mandatory Attributes	Basic Information	5
Dimensions	Dimensions	Basic Information	10
Benefits_TM	Benefits	Basic Information	15
Hierarchy Details	Hierarchy Details	Basic Information	20
Age Group, Maintenance & Care	Age Group, Maintenance & Care	Basic Information	25

   On the Multi Editor, the columns and rows displayed can be hidden as needed to make editing easier. For information, see the **Editing Objects in Tree** topic in the **Getting Started / User Guide** documentation.

2. Verify that all attribute groups selected have the same user-defined 'AttributeGroupSection' parameter value.
3. Modify the value for the user-defined display sequence parameter to indicate the order that cards should display. Groups are displayed starting with the top edge of the card with the smallest display sequence value to the largest. Groups that do not include a display sequence value are positioned in alphanumeric order, left to right, after the groups that do have a display sequence value.

   For more information, see the **Display Sequence Attribute** topic in the **System Setup / Super User Guide** documentation.

   In this example, the attribute groups are all assigned to the 'Basic Information' section. The attribute groups 'Mandatory Attributes,' 'Dimensions,' 'Benefits,' 'Hierarchy Details,' and 'Age Group, Maintenance & Care' each have an ascending 'Display Sequence' value. Notice that 'Hierarchy Details' is fourth because the top edge of that card is higher than the top edge of the 'Age Group, Maintenance & Care' card.

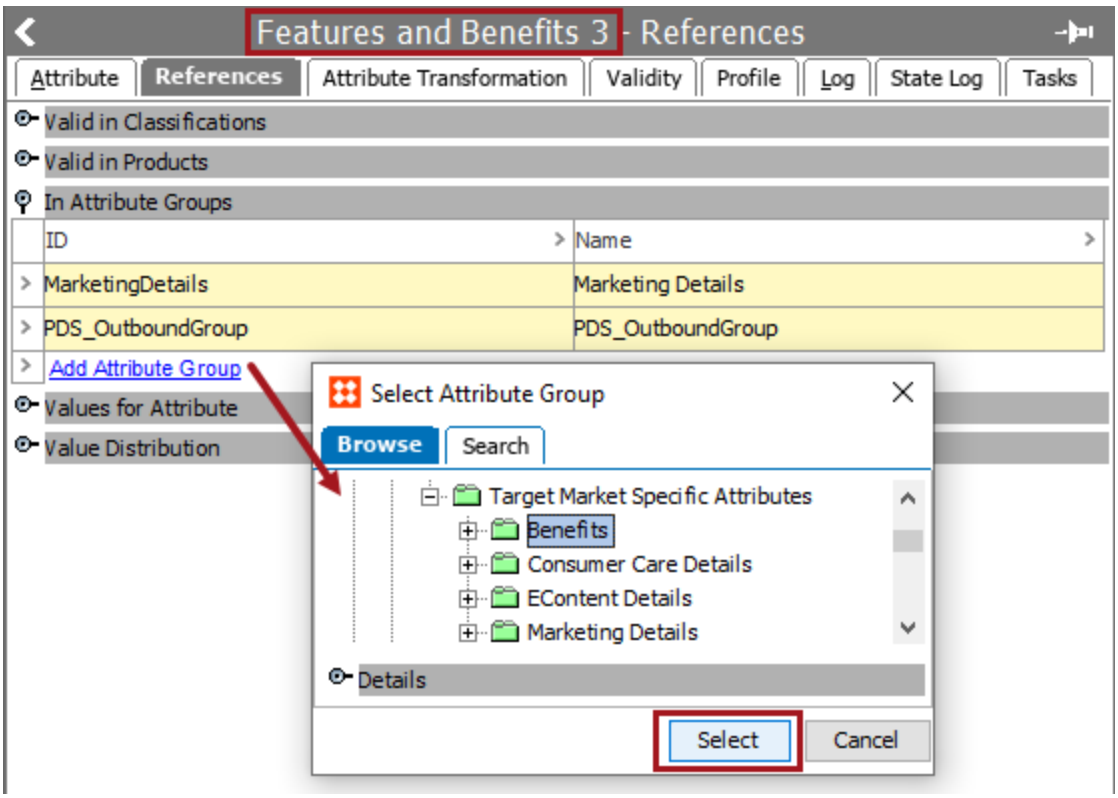


Add an Attribute to a Card

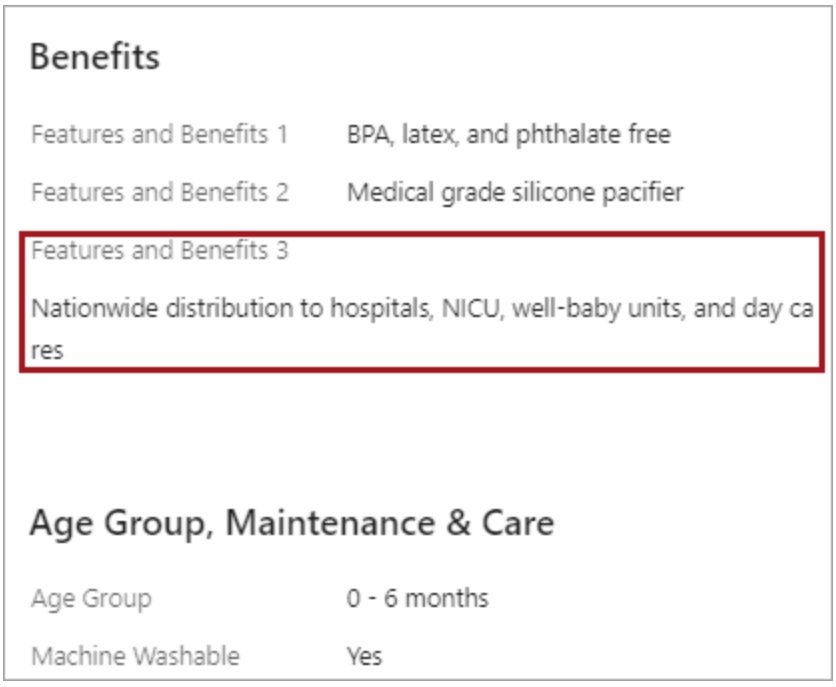
Adding an attribute to a card allows you to view additional information about the product. A value must exist for the attribute before it will be displayed.

1. In workbench, on the System Setup tab, open the editor for the desired attribute.
2. On the References tab, open the **In Attribute Groups** flipper.
3. Click the **Add Attribute Group** link and use the Browse or Search tabs to find the attribute group currently displayed as a card on the Product Editor screen. Select the attribute group and click the **Select** button.

   In this example, the 'Features and Benefits 3' attribute is added to the 'Benefits' attribute group, which is already being displayed as a card in the 'Basic Information' section.



The Product Editor screen 'Benefits' card now includes the 'Features and Benefits 3' attribute.

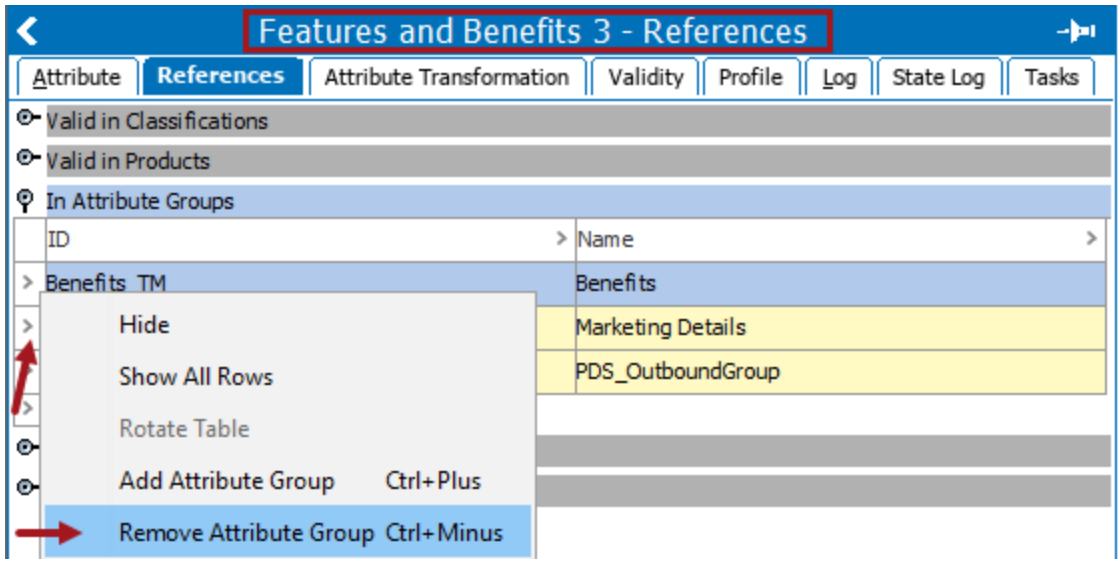


Remove an Attribute from a Card

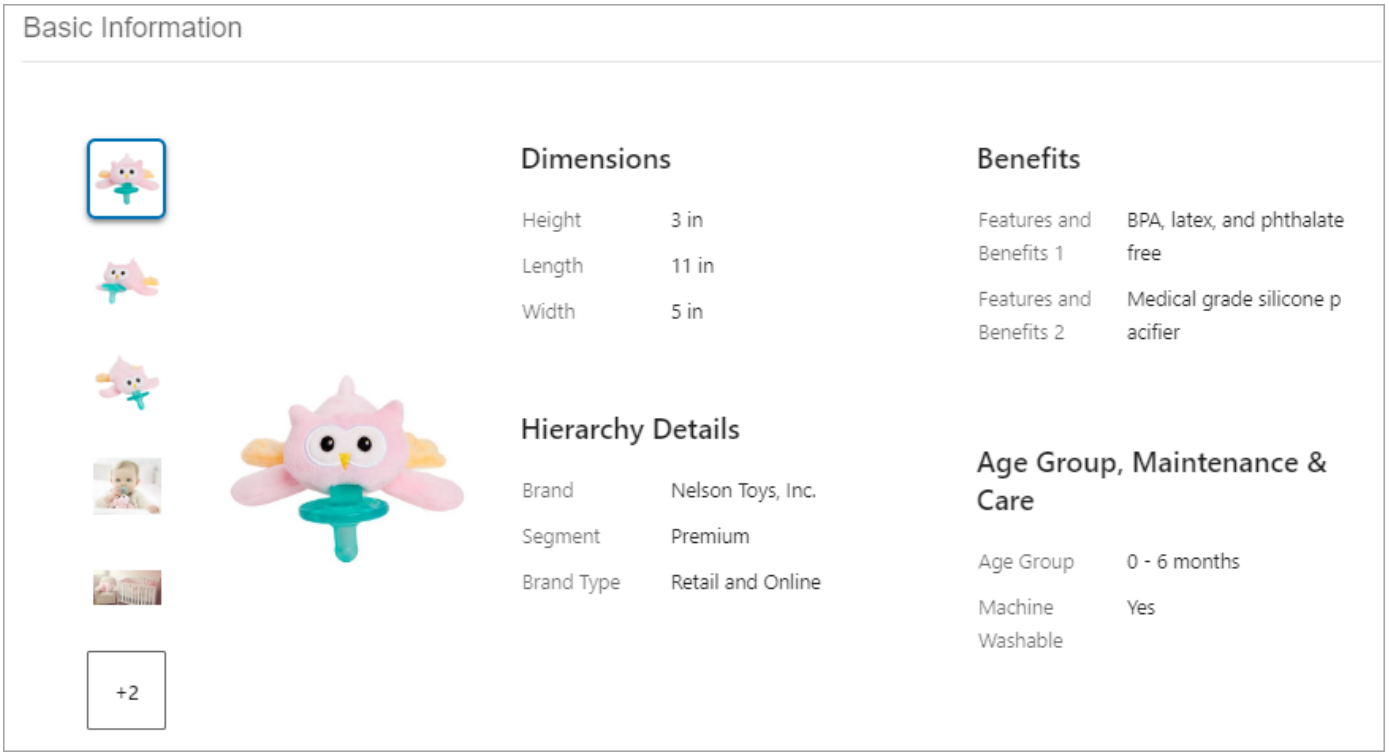
When an attribute is no longer required on the Product Editor screen, it can be removed from view.

1. In workbench, on the System Setup tab, open the editor for the desired attribute.
2. On the References tab, open the **In Attribute Groups** flipper.
3. Right-click the first column of the row of the attribute group, and click the 'Remove Attribute Group' option.

   In this example, the 'Features and Benefits 3' attribute is removed from the 'Benefits' attribute group, which is being displayed as a card in the 'Basic Information' section.



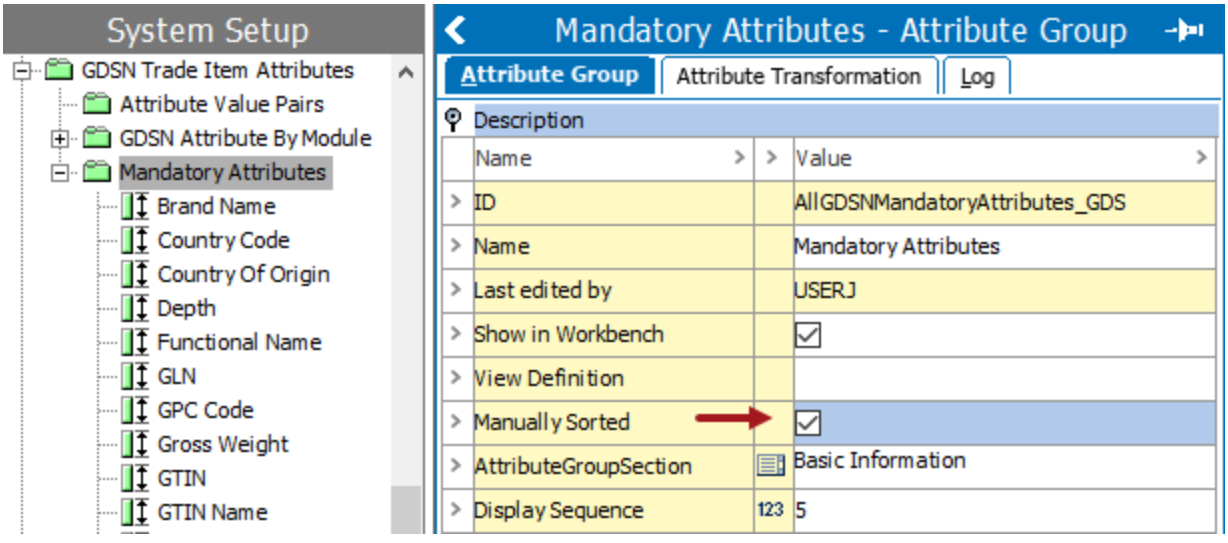
The Product Editor screen 'Benefits ' card now excludes the 'Features and Benefits 3' attribute.



Change the Order of Attributes on a Card

The display order of attributes can be controlled, allowing the most important to be displayed prominently.

1. In workbench, on the System Setup tab, open the attribute group editor.

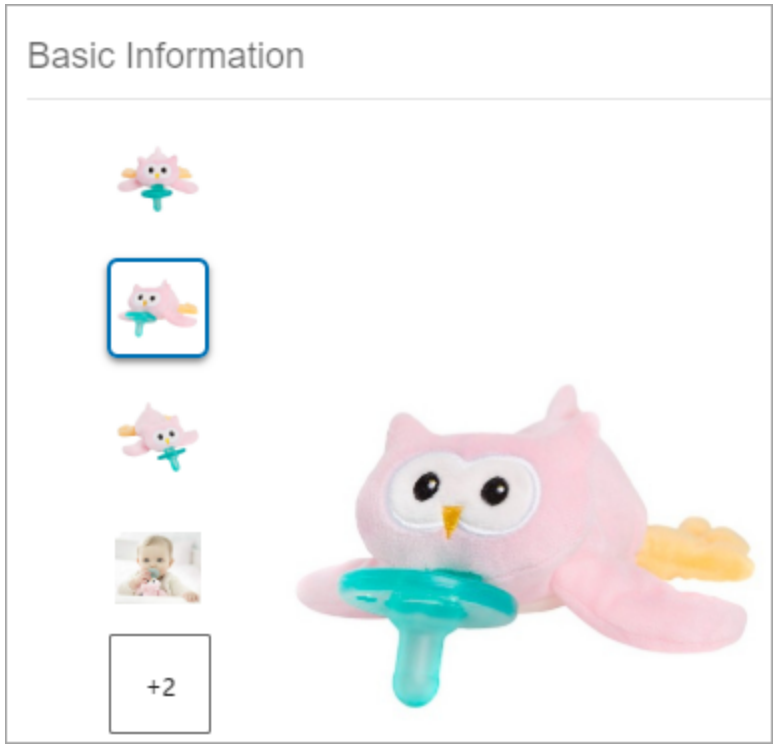


2. Check the **Manually Sorted** parameter to allow the order of the attributes within the group to be changed.

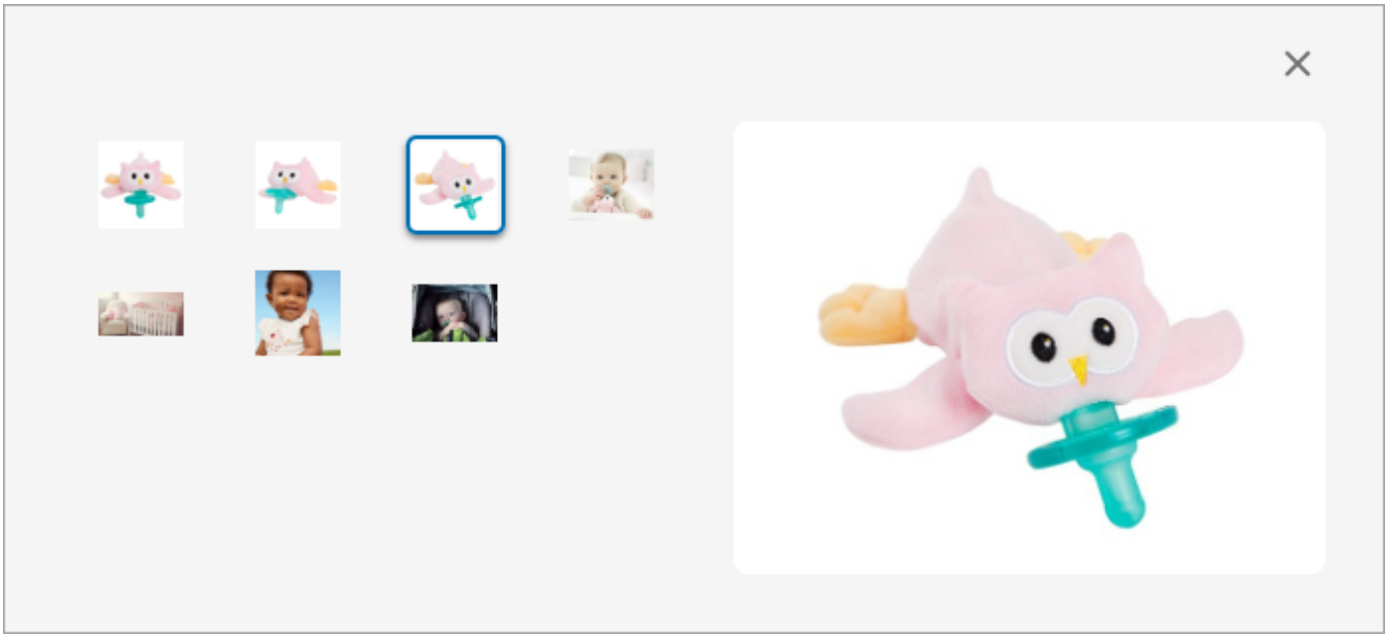
3. Open the attribute group to display the attributes, select an attribute to move, and drag it to the new position within the group. For more information, see the **Manually Sorting in Attribute Groups** section of the **Attribute Groups** topic in the **System Setup / Super User Guide** documentation.
4. Refresh the Product Editor screen in Web UI to see the updated order. This same order is also used on the product editor in the Tree in workbench.

View All Referenced Product Images

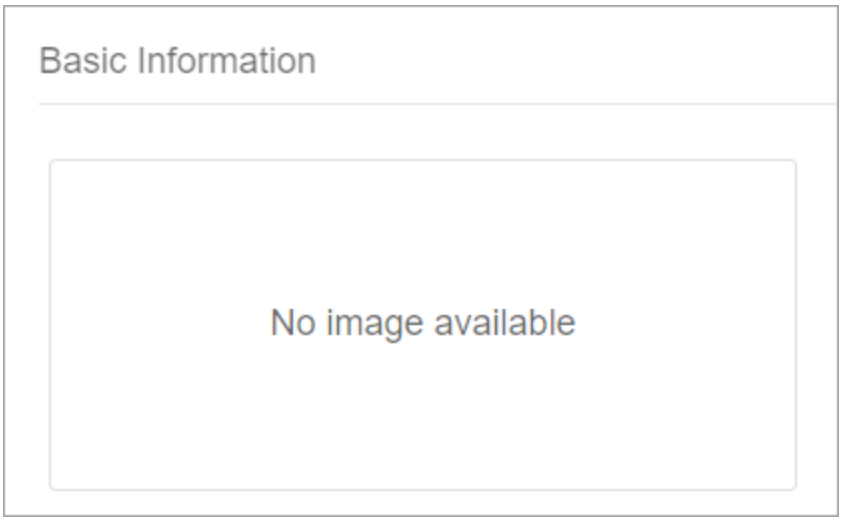
On the first section, when a primary image is referenced by the product, the first card displays the available images. A carousel includes image thumbnails and an indicator of how many additional images are referenced. A blue box indicates the image with focus, which is displayed larger and to the right. Hover over an image to see the asset name. Click the numbered box to show all referenced images on a new screen.



In the example image above, clicking the '+2' thumbnail displays a new page shown below with all images available for review. Click an image to display it larger and to the right. Click the X button to return to the Product Editor screen.



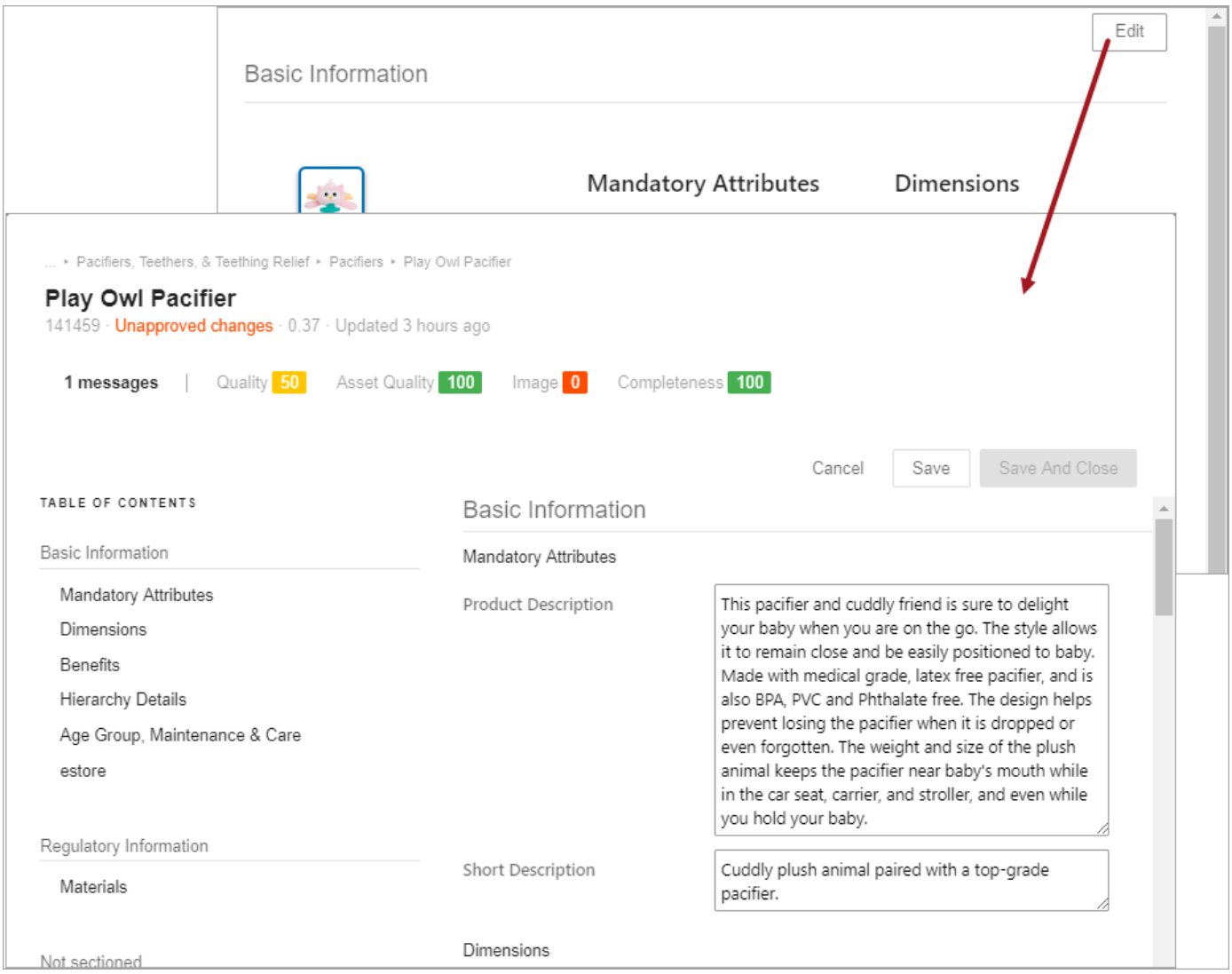
When no primary product image is referenced, the 'No image available' placeholder is displayed.



For more details on images, see the **Product images** section of the **Product Editor Screen** topic.

Editing Data on the Product Editor Screen

While the Product Editor screen is optimized for viewing data, for users who have edit privileges, the Edit version of the screen is optimized for adding and modifying attribute values. Clicking the Edit button on the Product Editor screen displays all valid attributes, includes an editable format for attributes that can be modified, and also displays read-only attributes and values.



The edit view of the screen includes the numbered items shown above:

- The summary information (item 1) and sufficiency panel (item 2) as defined in the **Product Editor Screen** topic.
- Buttons (item 3) to **Cancel** the edit mode, **Save** changes made while remaining in edit mode, and **Save And Close** to save changes and return back to the view mode displaying all enriched attributes.
- A table of contents (item 4) displays links for all valid attribute groups, categorized by their section.

- Valid attributes (item 5) are displayed by section and attribute group. Editable attributes are modified via predefined controls (text box, dropdown for LOVs, radio buttons for single-valued attributes, or checkboxes for multi-valued attributes).

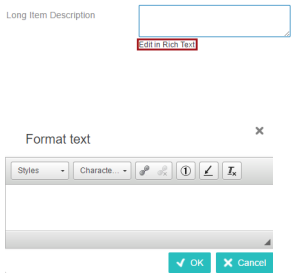
Rich Text Editor

Rich text editing allows users to enter and edit text within a web browser. Attribute value text-editing options include adding character formatting plus options for adding hyperlinks, footnotes, and inline references. Using a Rich Text Editor (RTE) when editing attribute values within a Node Editor eliminates the need for users to be familiar with any special coding and web markup languages such as XML. Another benefit is that users can see what the text will look like immediately within the editor window.

Rich text editing is available for attributes with Text, Text (exclude tags), Numeric Text, and Numeric Text (exclude tags) validation base types. The Rich Text Editor icon displays when RTE is enabled via the Enable Tag Conversion parameter within the Attribute Value properties and the Enable Tag Conversion parameter or Rich Text Editing parameter within the Attribute Value Group component properties.

Rich Text Editor Icon

Users can identify when an attribute value field is using RTE based on the icon in the right side of the field. Click the edit icon to display the 'Format text' dialog.



Once an attribute field has any formatting done to the text, it becomes locked (meaning that you cannot just click in the field to edit it). Clicking the RTE icon is the only way to make additional edits to the text.

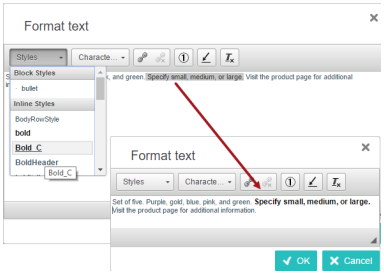
Format Text Options

The options shown in the 'Format text' dialog, and their descriptions, are listed below. The text format options are important since they will apply, if applicable, when fed into other systems (for example, when used as website text or within printed publications).

The headings below correspond with the hover text that displays when you mouse over each of the format dropdowns or icons at the top of the 'Format text' dialog.

Formatting Styles

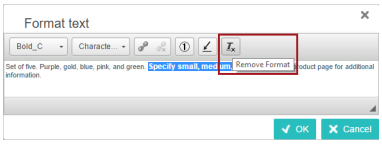
To apply a style, you must first select the text to apply it to. Then make a selection via the **Styles** dropdown.



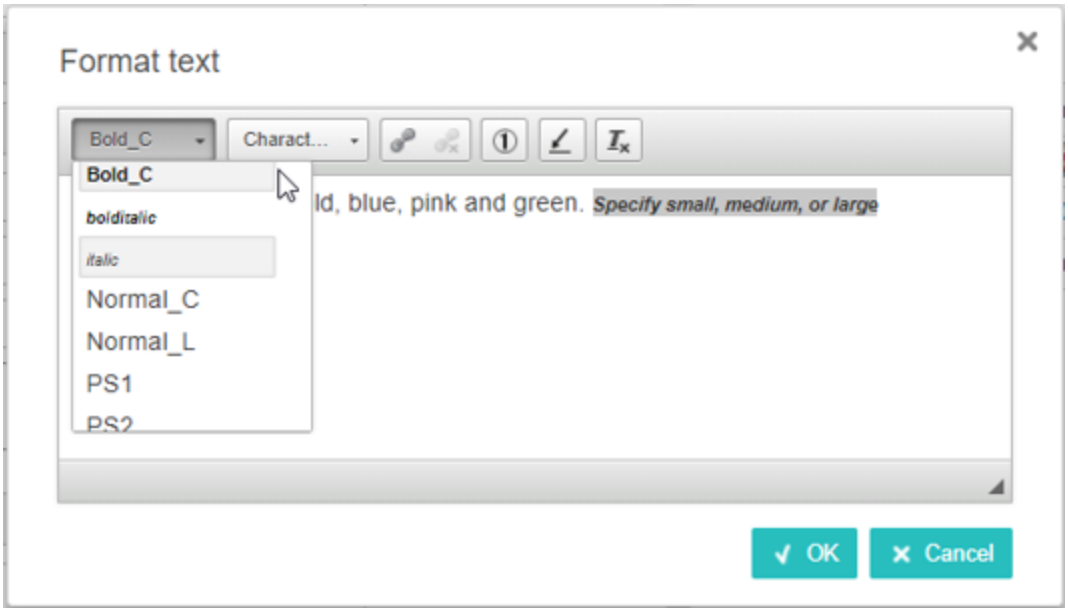
Note that a set of style tags may already exist within your STEP system. Additional styles can be created in the STEP Workbench and will then be available in the **Styles** dropdown list. For more information on style tags, see the **Tags** section of the **System Setup** / **Super User Guide** documentation.

Remove Format

To delete a style and go back to the default text (no style), select the specific word or phrase that has a style applied to it, then click the 'Remove Format' icon. To remove character styles from the entire body of text, select it all before removing the formatting.



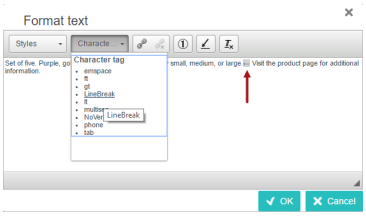
Note: An applied style can be removed by selecting the word or phrase and clicking on the style that has been applied (applied style will be highlighted style italic as shown in below screenshot).



Character tag

To insert a character tag, place your cursor within the text exactly in the spot where you want the character tag to display. Then, click the **Character tag** dropdown and make a selection. Character tags appear with a gray background within the 'Format text' dialog and within the attribute value field.

No special icon is required to delete a character tag. Just delete from the text using standard procedures (Delete or Backspace).

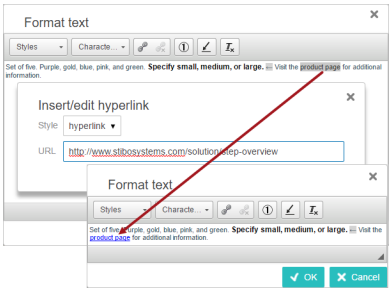


Note that some character tags may already exist. Additional character tags can be created in the STEP Workbench and will also be available in the **Character tag** dropdown list within Web UI. For more information on character tags, see the **Tags** section of the **System Setup** / **Super User Guide** documentation.

Add/edit Hyperlink

Hyperlinks are added to text similar to how styles are applied. Select the text you want to make into a hyperlink, type the URL in the 'Insert / edit hyperlink' dialog, and click OK.

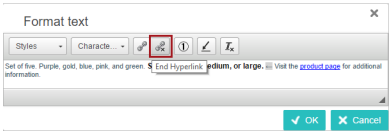
To edit the hyperlink, place your cursor anywhere within the hyperlinked text, and click the 'Add/edit' hyperlink icon. Make any changes within the URL field and click OK.



If the hyperlink tag does not already exist, a hyperlink tag (or tags) can be created and formatting set up in the workbench and will be available in the **Insert/edit hyperlink** > **Style** dropdown list within Web UI. For more information on hyperlink tags, see the **Tags** section of the **System Setup** / **Super User Guide** documentation.

End Hyperlink

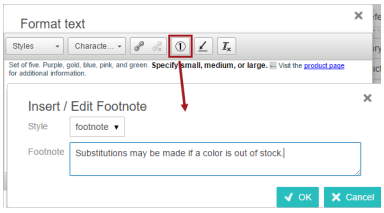
The 'End Hyperlink' icon activates when you click anywhere within hyperlinked text. Click the icon to remove the applicable hyperlink.



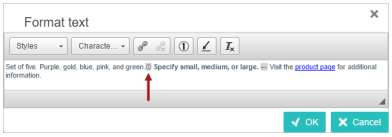
Add/edit Footnote

To insert a footnote into the text, place your cursor where you want the footnote inserted and click the 'Add/edit Footnote' icon.

If the footnote tag does not already exist, one can be created in the workbench and will be available in the **Insert/Edit Footnote** > **Style** dropdown list within Web UI. For more information on how to add a footnote tag, see the **Footnotes** section of the **System Setup** / **Super User Guide** documentation.



To edit a footnote, select the footnote icon that is within the text body, taking care to highlight only the icon. Click the 'Add/edit Footnote' icon, make any changes within the 'Insert/Edit Footnote' dialog that displays, and then click OK.

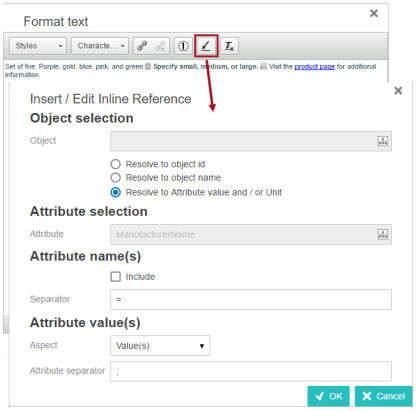


No special icon is required to delete a footnote. Just delete from the text using standard procedures (Delete or Backspace).

Add/edit Inline Reference

Using the RTE, inline references can be embedded in attribute values using Web UI. For an introduction to inline references, see the **Inline References to Attribute Values** section of the **Getting Started / User Guide** documentation.

Place your cursor where you want the inline reference to go—or select the text you want to replace—and click the 'Add/edit Inline Reference' icon.



1. For the **Object** field, click the Node Picker icon ( ) to open the 'Select Node(s)' dialog. Search or browse for the relevant object that holds the attribute value to be referred to, and then click OK.
2. Choose 'Resolve to object ID,' 'Resolve to object name,' or 'Resolve to Attribute value and / or Unit' by clicking the corresponding radio button.

Note: When 'Resolve to Attribute value and / or Unit' is selected, then the other selections within the 'Insert / Edit Inline References' dialog activate and the remaining steps outlined below become valid. If selecting an alternate radio button, then click OK and your steps are complete.

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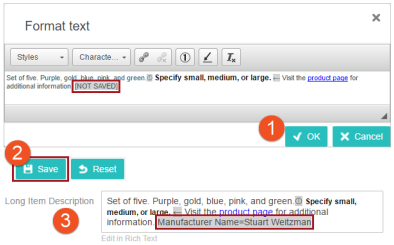
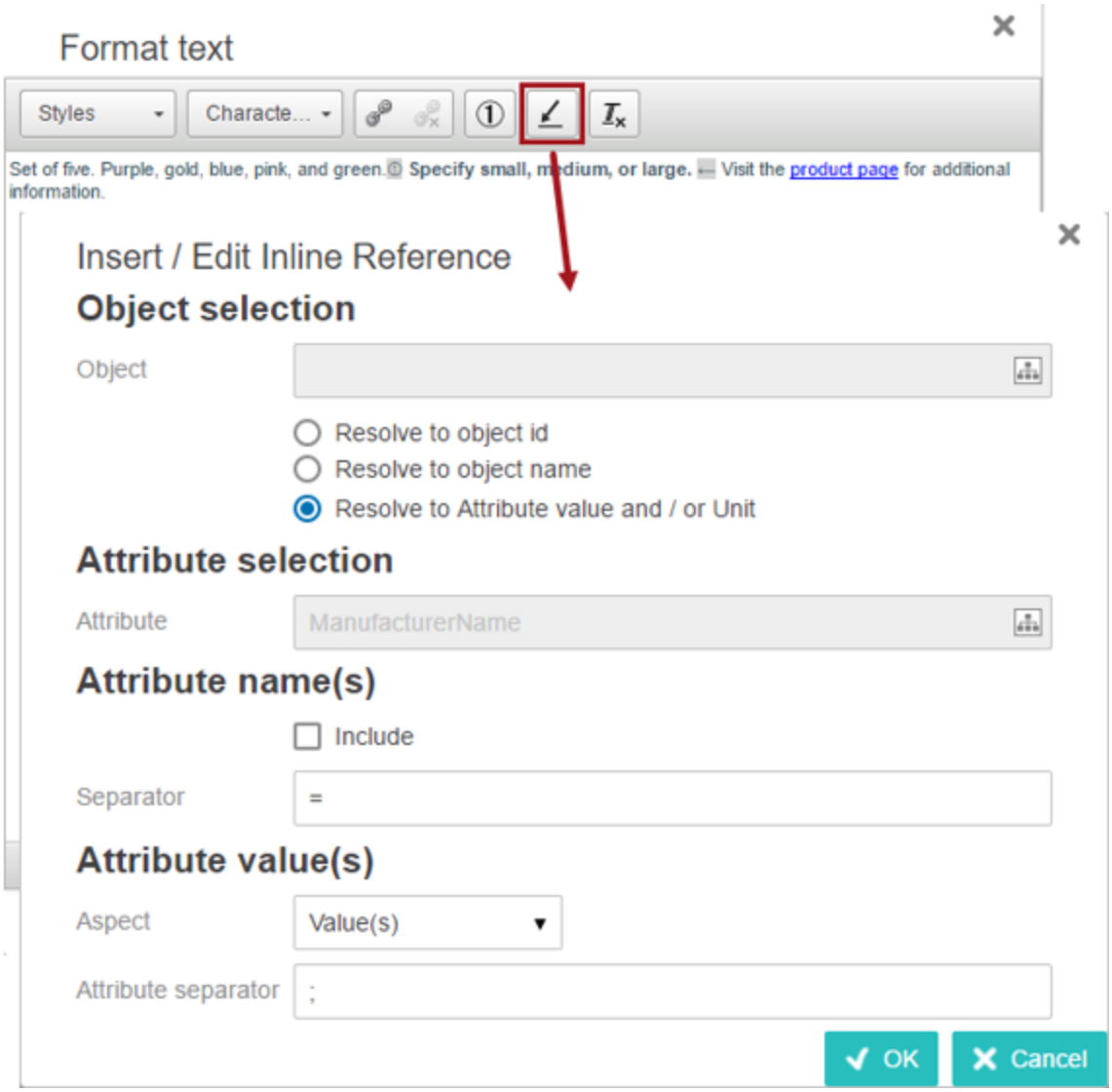
3. For the **Attribute selection** > **Attribute** field, click the Node Picker icon to open the 'Select Node(s)' dialog to search and browse for the relevant attribute (or attribute group) for the inline reference, and then click OK. (Only one attribute or attribute group may be selected.)
4. For **Attribute name(s)**, check the 'Include' check box if the name of the attribute(s) should be included in the inline reference. If including the name, then go on to Step 5. If not, skip to Step 6.
5. In the **Separator** field, type a Separator to be used between the name and value of the attribute. An equals sign (=) is the default.
6. Under **Attribute Value(s)**, use the **Aspect** dropdown to select the relevant value to include for the attribute. You can select between Value(s) and Unit(s), Value(s), and Unit(s).
7. The **Attribute Separator** field is only available if a multi-valued attribute has been selected. If applicable, in the **Attribute Separator** field, type a separator to specify how values should be separated. A semicolon (;) is the default separator.
8. Click **OK**.
9. Once you click OK, the 'Format text' editor will show the inline reference as '[NOT SAVED].' You will need to click OK on the text editor and then save the data before it will display in the value field. The attribute must be valid for the object type, otherwise the inline reference disappears from the value field upon save.



Editing an Inline Reference

Editing an inline reference works the same way as editing a footnote. Select the inline reference text within the editor, taking care to highlight only the applicable text. Click the 'Add/edit Inline Reference' icon, make any changes within the 'Insert/Edit Inline Reference' dialog, and then click OK.



Next, click OK on the text editor dialog, and then click Save (or Save & Approve) on the screen that you are one.

For more information about the attribute components in Web UI, see the **Attribute Value Component** topic and the **Attribute Value Group Component** topic.

Important: After all changes have been made within the text editor, you must click **OK** to save all of the changes. Clicking 'Cancel' or navigating away from the page means that the changes made in the RTE will not be saved or displayed.

Note: When multivalued attribute value is called via Inline Reference in Attribute Value component or Attribute Value Group Component, then multivalued attribute values are displayed with a multi-separator tag with rendering as it works in workbench.

If you experience issues while using the Rich Text Editor in Internet Explorer, use an alternate browser such as Chrome, Firefox, or Safari.

Search Screen

The Search screen allows users to search STEP data via the Elasticsearch search engine, based on criteria options within the Elasticsearch configuration. For details on using the search options, see the **Search Screen Details** topic.

For STEP data to be displayed in the Web UI Search screen, it must meet these conditions:

- The product must be linked into at least one classification that the user is privileged to view.
- The classification must be published to Elasticsearch.
- The user must have the 'View product' and 'View classification' user action privileges applied to a particular classification or its parent.

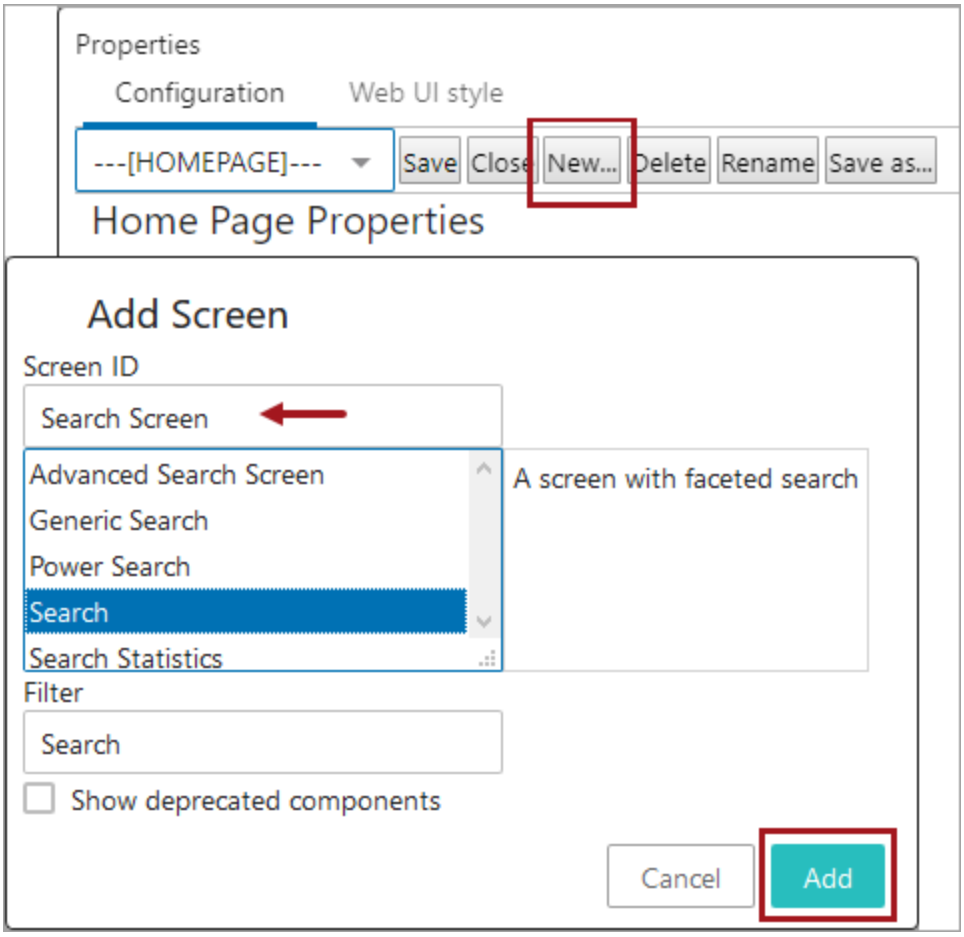
For Elasticsearch results, only user privileges for classifications are respected and are additive. Attribute, object type, and other privileges are not available. For example, a user who has privileges only to Classification A can see the products in that classification. If the same product exists in Classification A and in Classification B, the user can see some of the products from Classification B because of the privileges to Classification A.

Prerequisites

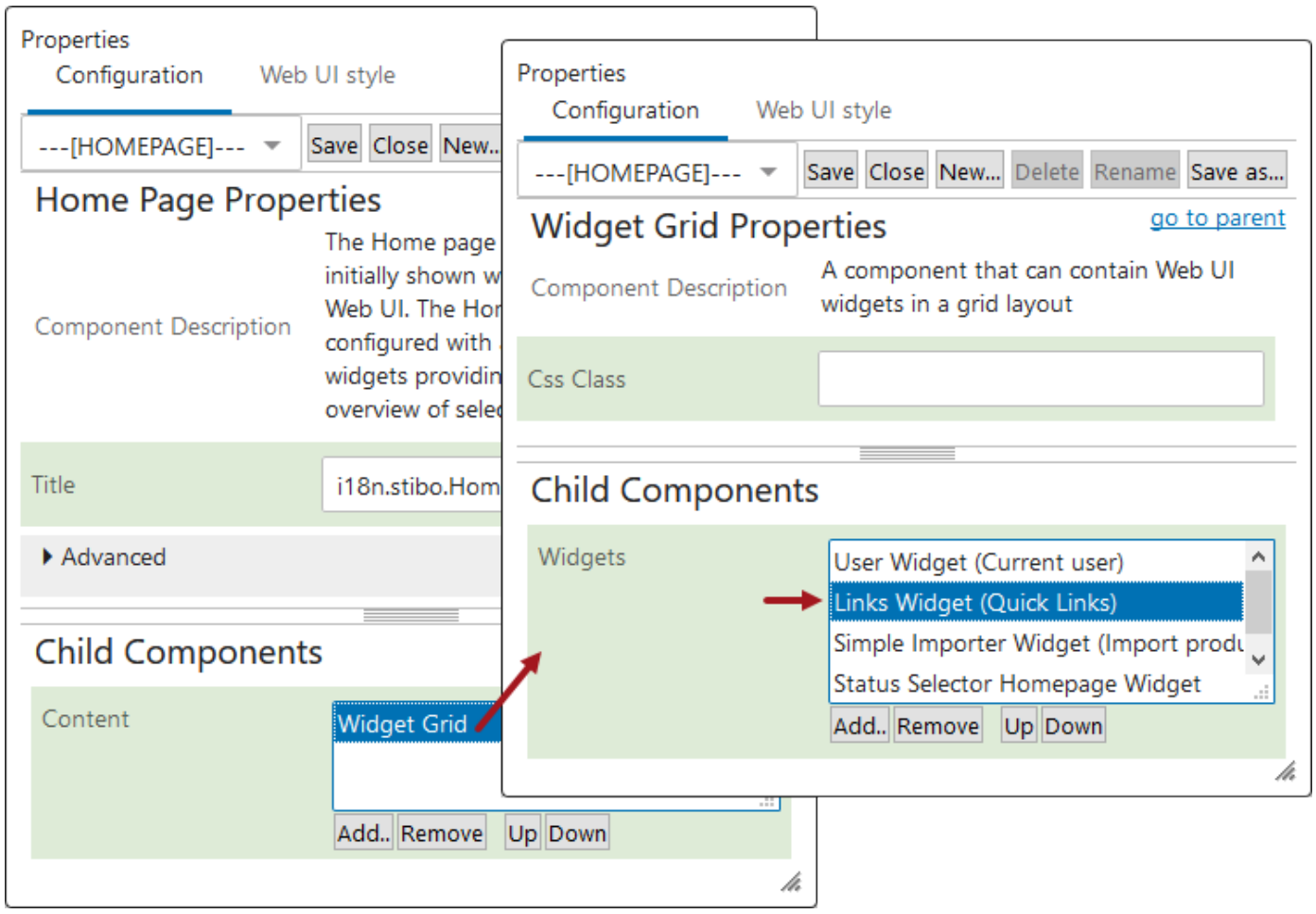
1. Configuring this screen requires Web UI Designer basic concepts and appropriate privileges. For more information, see the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.
2. Install and configure the Elasticsearch search engine, then configure and invoke the event processor as defined in the **Elasticsearch Publishing** topic.
3. Contact your account manager to enable the 'X.Elasticsearch' license on your system.

Configuration

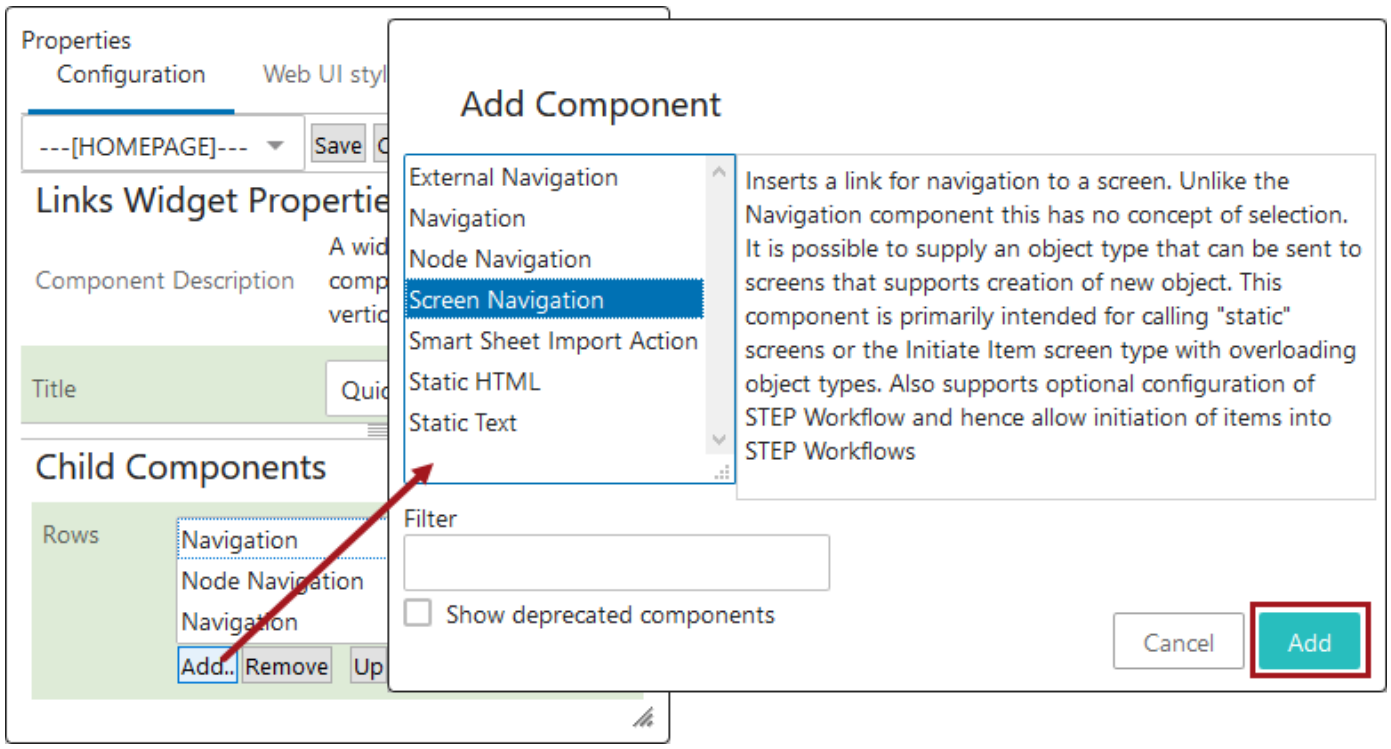
1. In the Designer, create a new screen by selecting **New**. In the 'Add Screen' dialog, type 'Search' in the Filter parameter to limit the list displayed. In the Screen ID parameter create a name, select the **Search** option, and click the **Add** button. In the example below, the Screen ID is named 'Search Screen' and will be selected later.



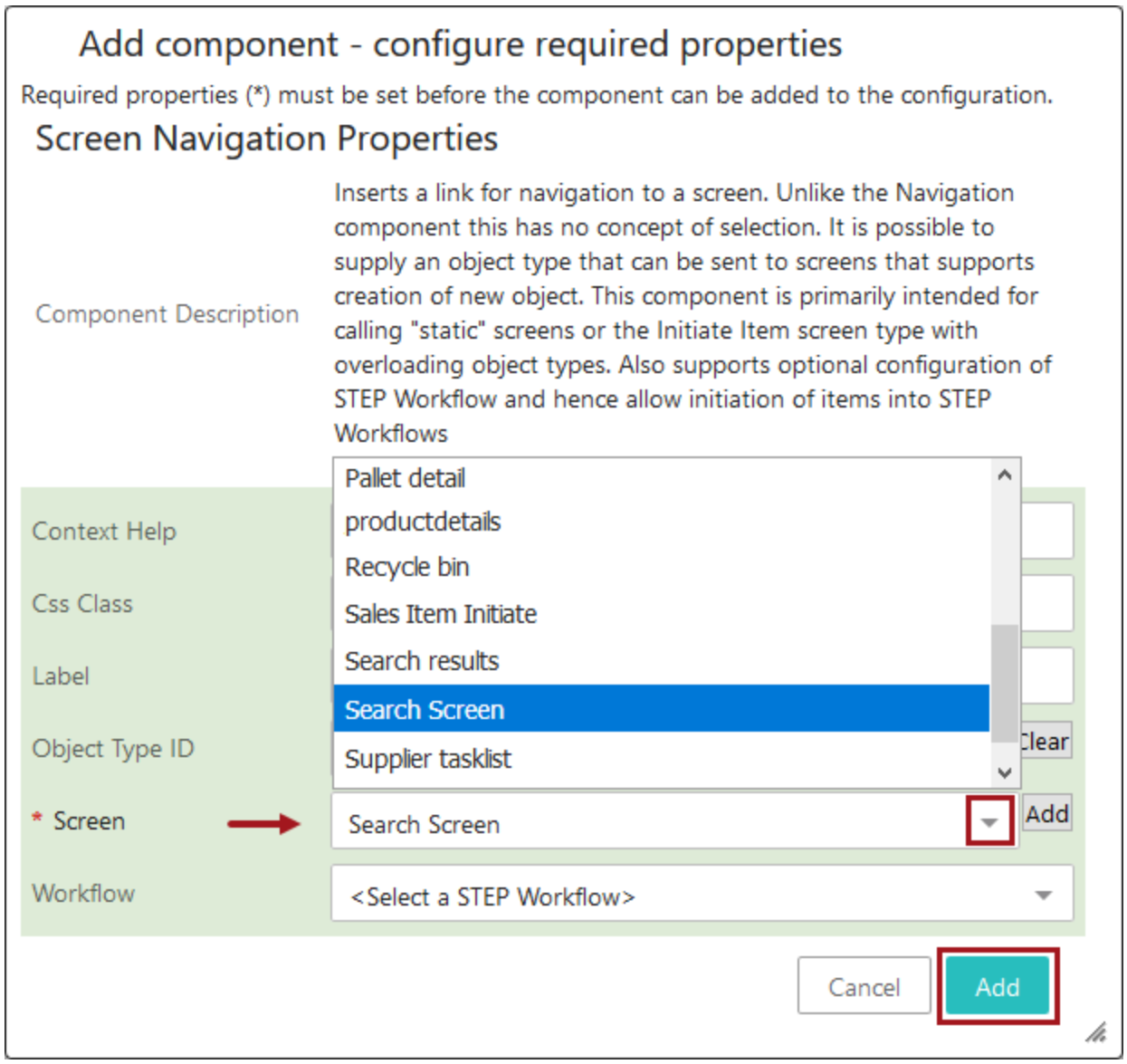
2. From the **Home Page** configuration screen (shown in the image below), in the Child Components section, add a Widget Grid or double-click the Widget Grid that is displayed. For more information, see the **Adding Widgets to a Homepage** topic.
3. On the Widget Grid configuration screen (shown in the image below), in the Child Components section Widgets field, add a Links Widget or double-click the Links Widget that is displayed. For more information, see the **Homepage Widgets** topic.



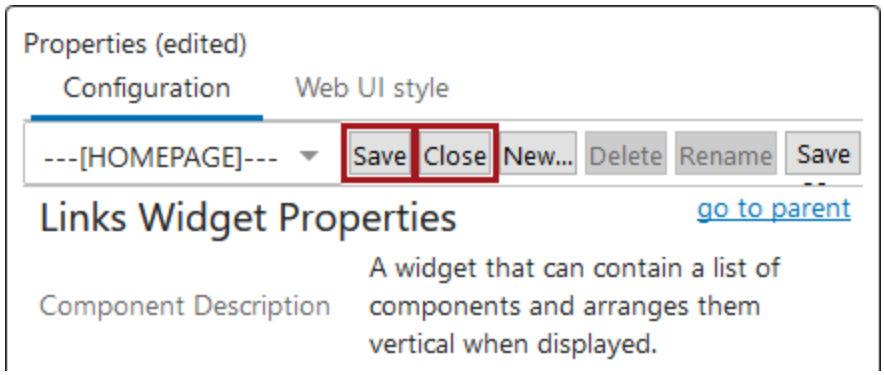
4. On the Links Widget configuration screen (shown in the image below), in the Child Components section Rows field, click the **Add** button to display the Add Component dialog. Select the 'Screen Navigation' component and click the **Add** button.



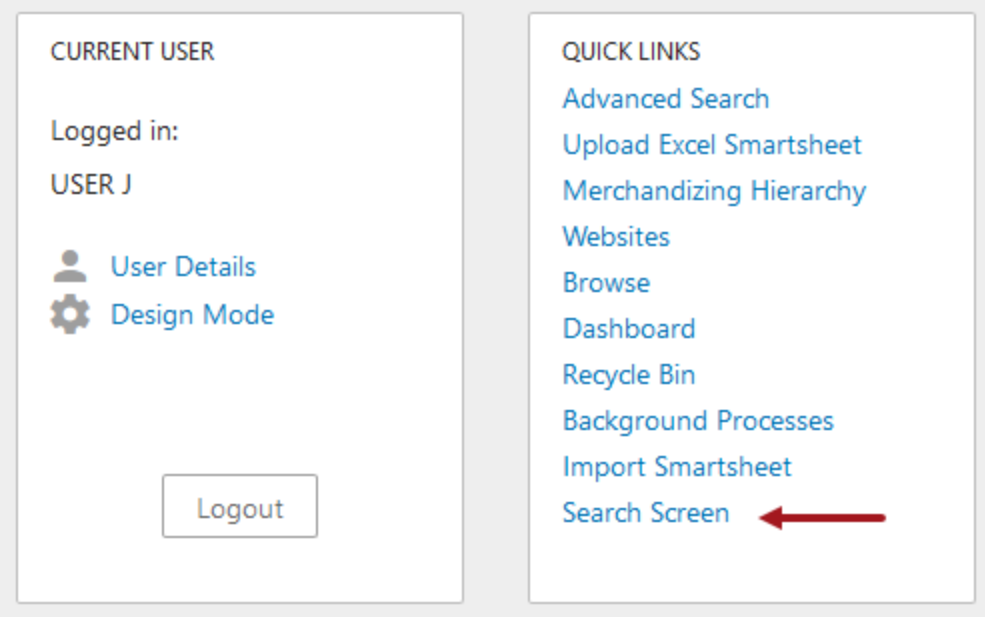
5. On the Screen Navigation configuration screen (shown in the image below), in the Screen parameter select the Search screen created earlier in this process. Make edits to the additional parameters as desired. Click the **Add** button.



6. Click **Save** to confirm all selections and click **Close** to leave the designer.



7. On the homepage, verify the new Search Screen option displayed in the Links widget.

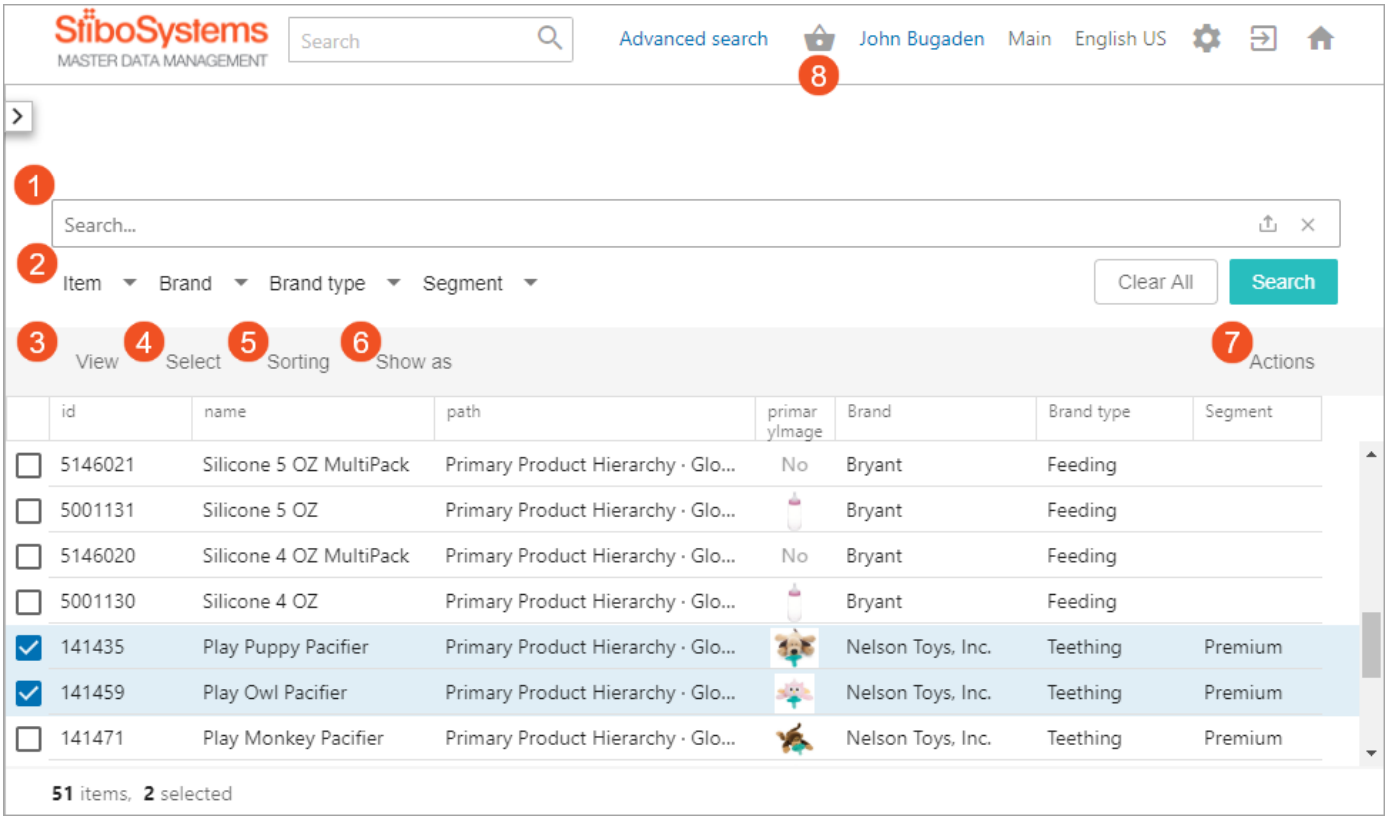


8. Verify or set privileges for users who will access the Search screen:
   - The **View product** and **View classification** user action privileges are required as defined in the **User Actions** topic in **System Setup / Super User Guide** documentation.
   - The Search screen is accessible for users with the privileges outlined in the **Web UI Access Privileges** section of the **Web UI Getting Started** topic.
9. For more information on using the Search screen, see the **Search Screen Details** topic.

Search Screen Details

The Search screen uses the third-party Elasticsearch search engine to provide a number of searches including a search bar with a variety of search types, static facet search operations, personalized views by user, the ability to display results as a table or cards, and a basket for collecting and exporting or publishing search results.

Click a search result to select it as shown below, and then add it to the basket via the Actions menu. The browser Back and Forward buttons allow the user to move backwards and forward through the history of screens previously displayed.

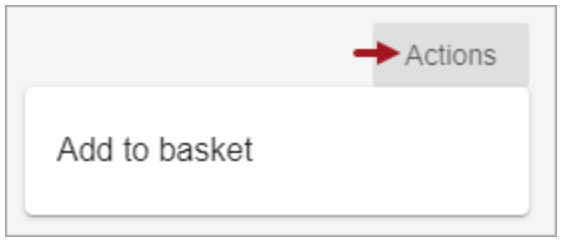


Each option is defined in the following topics:

1. Search Screen Search Bar
2. Search Screen Static Facets
3. Search Screen View
4. Search Screen Select
5. Search Screen Sorting
6. Search Screen Show As
7. Search Screen Actions
8. Search Screen Basket

Search Screen Actions

The Actions menu includes the 'Add to basket' option, which allows the selected items to be included in the basket. Once in the basket, objects can be exported and published. For more information, see the **Search Screen Basket** topic.



Search Screen Basket

The Search screen basket is used to temporarily hold a group of objects for the current user. Objects selected from search results are added via the Actions menu (defined in the **Search Screen Actions** topic) before being published or moved into a collection.

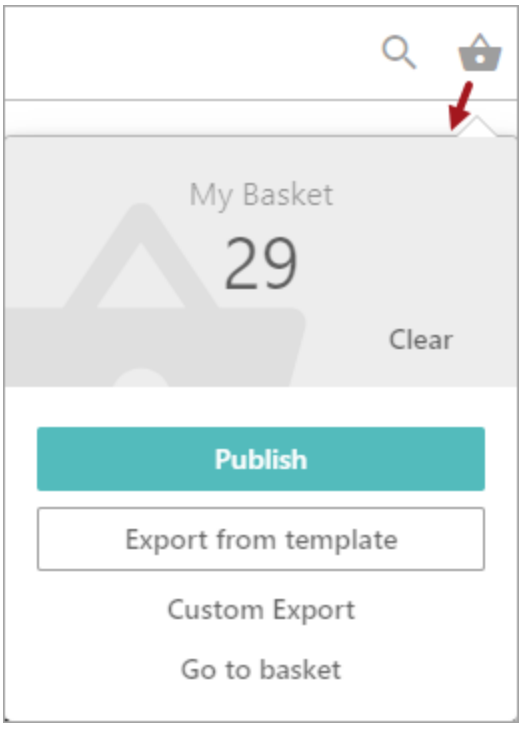
Prerequisites

The basket functionality requires the activation of both the 'data-sufficiency' component and the 'ui-basket' component. For more information on the sufficiency component, see the **Sufficiency Panel** topic in the **System Setup / Super User Guide**. For assistance with the basket component, contact your Stibo Systems account manager or partner manager.

Display the basket button ( ) in the Web UI corner bar, following the steps in the **Corner Bar Component** topic to update the ---[MAIN]--- properties page, add the **Corner Bar Basket** child component to the Corner Bar properties.

Basket Dialog

To display the basket dialog, hover over the basket icon. To close the basket dialog, click an option on the basket or click outside of the basket dialog.



The number of objects in the basket is displayed at the top of the basket dialog. The **Clear** button removes all objects from the basket.

The actions available for the contents of the basket are defined in the sections below.

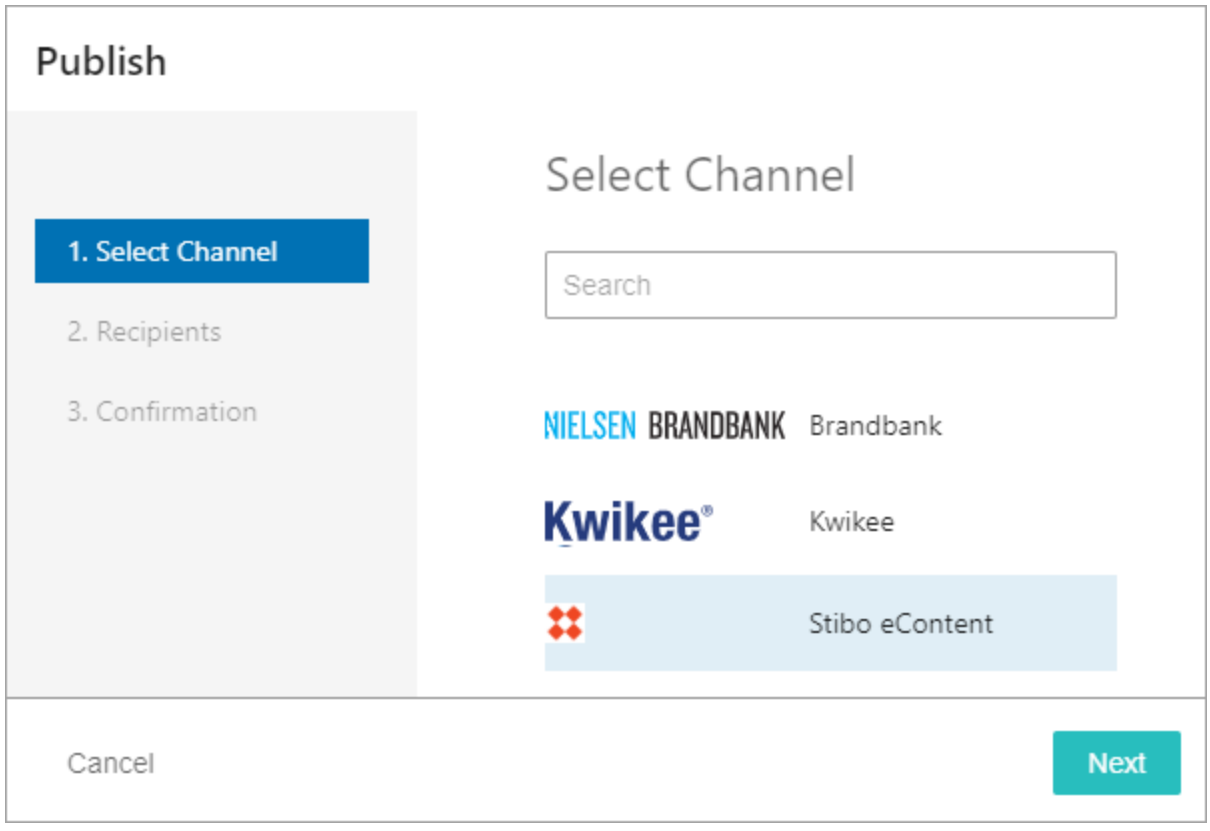
Publish

The 'Publish' option starts a wizard that enables you to send the basket contents to a selected PDS (Product Data Syndication) channel. For more on PDS, see the **Product Data Syndication** topic in the **Data Integration** documentation.

For information on using a sufficiency business condition and two business actions to identify products that meet your data standards and then only publishing those sufficient products to PDS, see the **Publishing Only Sufficient Products to PDS** topic.

1. Complete the one-time setup steps to access the PDS Export Wizard, as defined in the **Setting up the PDS Export Wizard Screen** topic.
2. On the basket dialog, click the **Publish** button to display the Publish dialog.

Note: Click the **Cancel** button on any wizard step to discontinue the publishing process.



3. On the Select Channel step, search for and select a channel from the list and click the **Next** button.
4. When the selected channels are managed by vendors, the optional Recipients step is displayed, supply the required data and click the **Next** button or click the **Back** button to return to the previous step.
5. On the Confirmation step, review the publishing action that will be performed. Click the **Publish** button if you approve of the action, or click the **Back** button to modify previous steps.

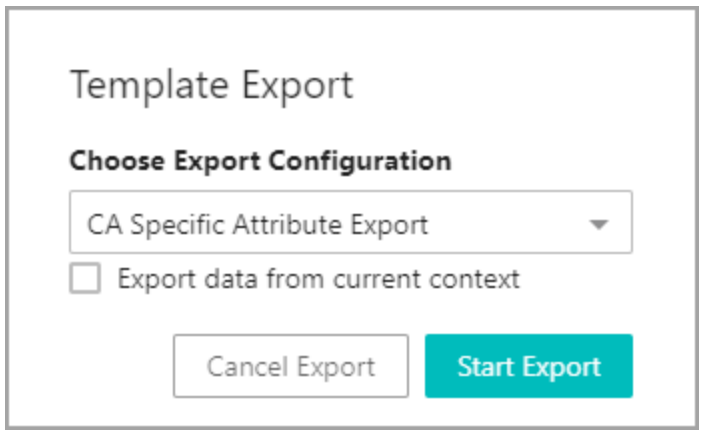
Note: The basket contents are emptied when the publish action is completed.

6. Verify the results of the publishing action:
   - **Success** indicates that all products have been accepted for submission to the channel.
   - **Submitted with errors** indicates that only some products have been accepted for submission to the channel and others failed on a validation level.
   - **Communication error** indicates that there is a problem with the environment setup.

Note: For channels managed by a vendor, when at least one product was accepted for submission to the channel, a link is displayed. Click the link to download an Excel file with submission status information.

Export from template

The 'Export from template' option exports the basket contents using a template previously defined in the workbench. For more information, see the **Export Action** section in the **Action Buttons** topic within the **Web User Interfaces / Web UI Getting Started** documentation.



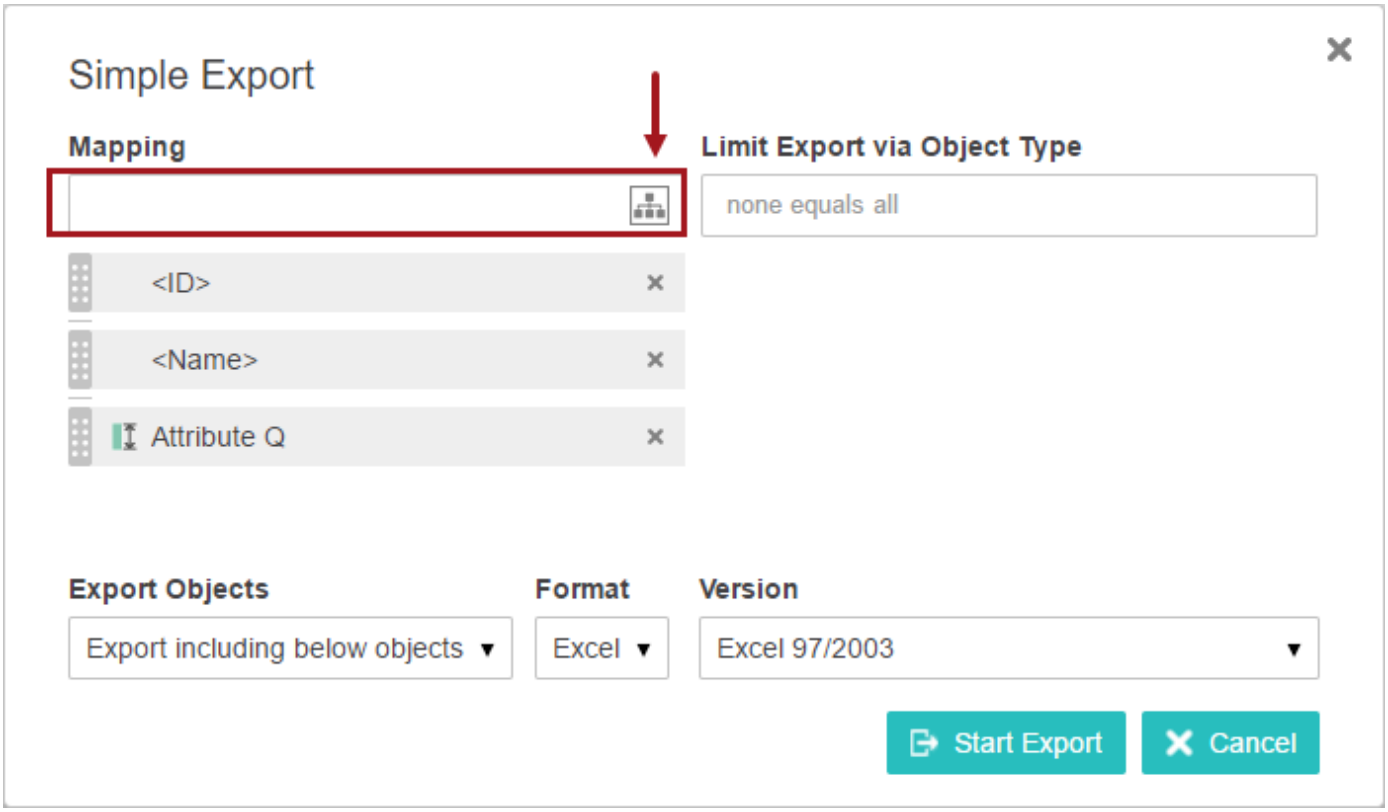
1. On the basket dialog, click the **Export from template** button to display the Template Export dialog.
2. On the Choose Export Configuration parameter, from the dropdown, select an export configuration. All saved export configurations are displayed. For more information, see the **Maintaining a Saved Export Configuration** topic in the **Data Exchange** documentation.
3. On the 'Export data from current context' checkbox, use the following information to determine if the checkbox should be checked.
   - By default, STEPXML and Advanced STEPXML configurations export data from the current Web UI context.
   - By default, non-STEPXML configurations export data from the context saved in the export configuration. To overwrite the configuration context and export data from the current Web UI context, check the 'Export data from current context' parameter.

4. Click the **Start Export** button to start the export background process or click the **Cancel Export** button to terminate the export process.

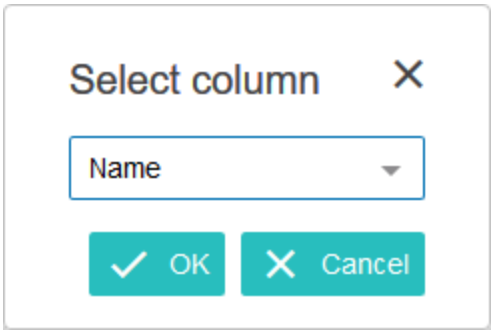
   If configured, the user can track the progress of the export with the Background Process Notification component and/or the Background Process List Screens. For more information, see the **Background Process Notification Component** section of the **Corner Bar Component** documentation within the **Main Properties Overview**, and the **Background Process List Screen** section of the **Using a Web UI** documentation.

Custom Export

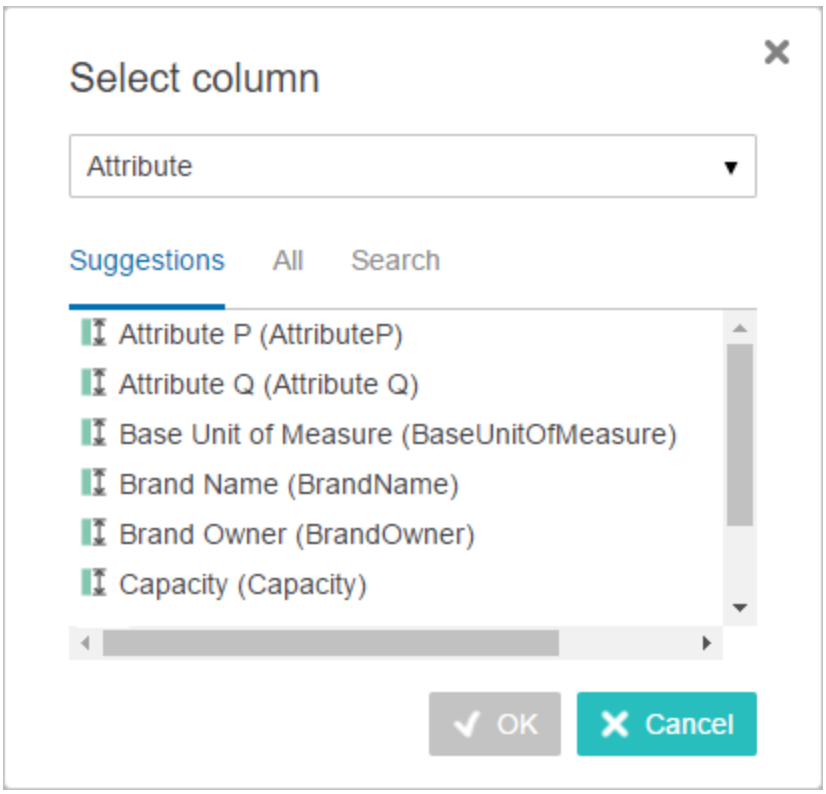
The 'Custom Export' option allows you to display the Simple Export dialog and create an export of the basket contents. No configuration is required for the Simple Export when used from the basket, but it can also be used elsewhere in the Web UI. For more information on configuring the Simple Export in other Web UI screens, see the **Simple Export** topic.



1. For the Mapping parameter, use the typeahead field to search for attributes, keys, references, names, and object types to map to, or use the node picker button ( ) to display the **Select column** dialog.
2. On the Select column dialog, use the dropdown to select the object type for mapping, and display the necessary next steps, based on the selection. ID, Key, Name, Object Type, Attribute, and Reference Type can be mapped from this screen.



For example, when the attribute option is selected, three tabs are displayed to help you find the required attribute. Suggestions are given based on a sample of the objects in the beginning of the selection after navigating between the available tabs. Under the 'All' tab you can browse through all the attributes in the system. Finally, you can search for a given attribute under the 'Search' tab.



3. The added mapping fields can be reordered by holding the button and dragging the field up or down in the list.
4. For **Limit Export via Object Type**, the Exported Objects can be limited further by choosing specific object types to be exclusively exported. A list of all the object types in System Setup are listed. If nothing is added to this parameter, the export is not limited by object type.
5. For **Export Objects**, the user can choose which objects to export:

- Export including below objects
- Export only leaf objects
- Export excluding below objects

6. For **Format**, select an export format: Excel or CSV. If CSV is selected, the user can choose which delimiter to use (if the default configured in the Simple Exporter Action designer is not applicable for the given job).
7. For **Version**, choose an Excel version to be used. It is recommended that the newest supportable version of Excel is used.
8. Click **Start Export**.

Go to basket

The 'Go to basket' option displays the basket contents in a Basket Screen using a Node List view where additional actions can be performed as allowed.

Search Screen Search Bar

No configuration is required for the search bar functionality; however, sometimes operators are required to indicate a particular type of search.

Type your search text into the 'Search...' field, using the operators defined below to indicate the search type desired:

- **ID search** - requires no operator and finds objects by specified ID. When more than one ID is searched, separate each with a comma. Multiple attributes can be considered by the ID search, as defined in the idQueryFields element within the **Elasticsearch Asset Configuration** topic.

  For example, '123456' will return the object(s) with 123456 in any of the attributes configured to be searched as an ID; while '123456, 654321' will return object(s) with the text defined in the idQueryFields element. Searching '123455' will return zero objects if the exact text is not included in any of the fields configured to be searched as an ID.

  Note: You can copy a list of IDs from a table where a single ID is on each row / column, or when each ID is separated by a line break, comma, or tab. Paste the list into the search bar press Enter or click the Search button to display ID search results. For example, tables or lists from Microsoft Office Suite programs.

- **Full-text search** - requires no operator and considers text within the attributes defined in the fulltextAttributesToPublish element within the **Elasticsearch Asset Configuration** topic. When multiple words are searched, any object that contains at least one of the words is displayed.
- **Match phrase search** - requires double quote mark (" and ") operators and finds items that precisely match the typed search value, including the order of the words. With this search no allowance is made for typing mistakes as is allowed when using fuzzy searches (defined below).

  For example, searching "stainless steel" would not return an object with 'steel, stainless' nor would it include an object with only 'stainless' nor only 'steel.'

- **Fuzzy search** - requires no operator and after two correct first characters, it allows for up to two non-matching characters in a search value. Values that are potential matches are displayed.

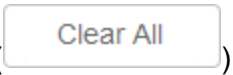
  For example, if the intended search word is 'active' but 'actevi' is typed instead, objects with 'active are still displayed. However, searching 'svtive' (where the first two characters do not match any searched values) will not display results for 'active'.

- **Wildcard search** - the asterisk (*) operator can be used to indicate any number of missing characters, and the question mark (?) operator can be used to indicate a single missing character.

Important: Wildcards are ignored when used as the first character in a search string since it could result in searching every available value, which would cause performance issues. When a wildcard is the first character in a search, a fuzzy search is preformed instead.

For example, searching 'CA_*' returns all objects that have a value that starts with 'CA_' regardless of the text that follows these characters. CA_289 would be returned, but CA-289 would not be included. Additionally, searching 'CA?1' returns only objects that start with CA and end with 1. So 'CA_1' and 'CA-1' would be returned, but 'CA_2' would not be included in the results.

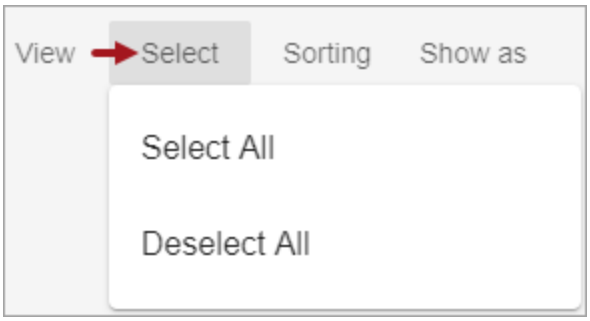
The **upload** button ( ) allows the user to select a TXT file (with a maximum size of 100MB) that includes a list of object IDs to be searched, where each is on a new line. The IDs from the file are displayed in the search bar.

The **delete** button ( ) removes the current search text from the field. The Clear All button (

) also removes the text from the search bar, as well as the selections made on static facets. For more information, see the **Search Screen Static Facets** topic.

Search Screen Select

Select allows you to mark items that will be sent to the Basket, where they can be exported or published to PDS.



- **Select All** - A check mark is added to each search result card, up to the 10,000 item limit.
- **Deselect All** - The check mark is removed from all search result cards.

Search Screen Show As

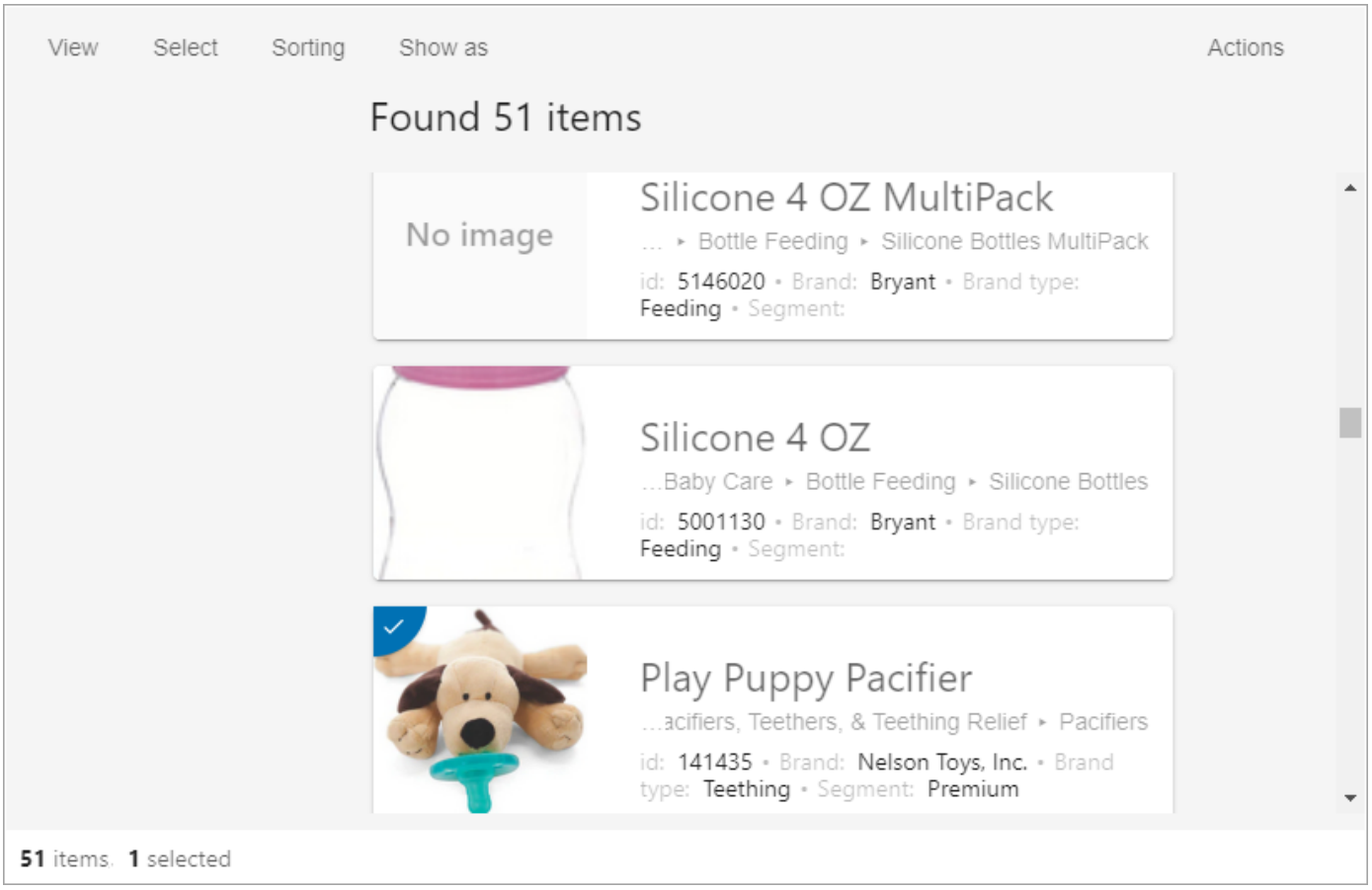
'Show as' allows you to change the display of information using a card layout or a table layout, which is the default view. Both layouts follow the selections made in the 'View' option to determine the information displayed, and the 'Sorting' options determine the order of the data.

Actions and settings are applied to all layouts. This means that changing between layouts retains the view, select, and sorting settings, as well as the actions taken, such as objects added to the basket.

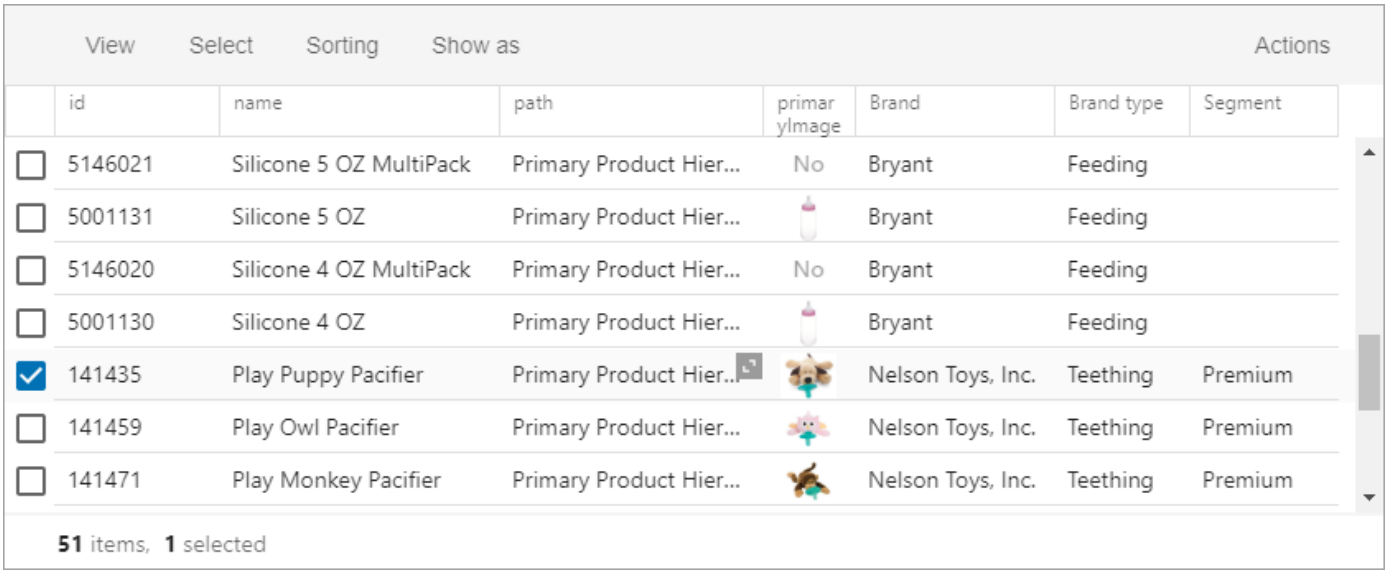
Regardless of the 'Show as' selection, clicking the product name displays the product information on the configured screen. The user can click the browser's Back button to return to the previously displayed layout.

The same settings are used for the following two examples, only the layout of the data is different:

- **Cards** - Cards display product information in a graphical manner, including sizable thumbnails when available.



- **Table** - A row is displayed for each product, including small thumbnails when available.



Columns can be manually resized by dragging the column dividers to display more or less data. The modified column size is respected until the user changes it again, even when leaving and returning to the table view.

When additional data is available for a table cell, hover over the cell to display the 'show details' button ( ). Click the button to display the full contents of the cell. For example, on the selected row in the image above, clicking the 'show details' button for the 'path' column displays the following information:

Search Screen Sorting

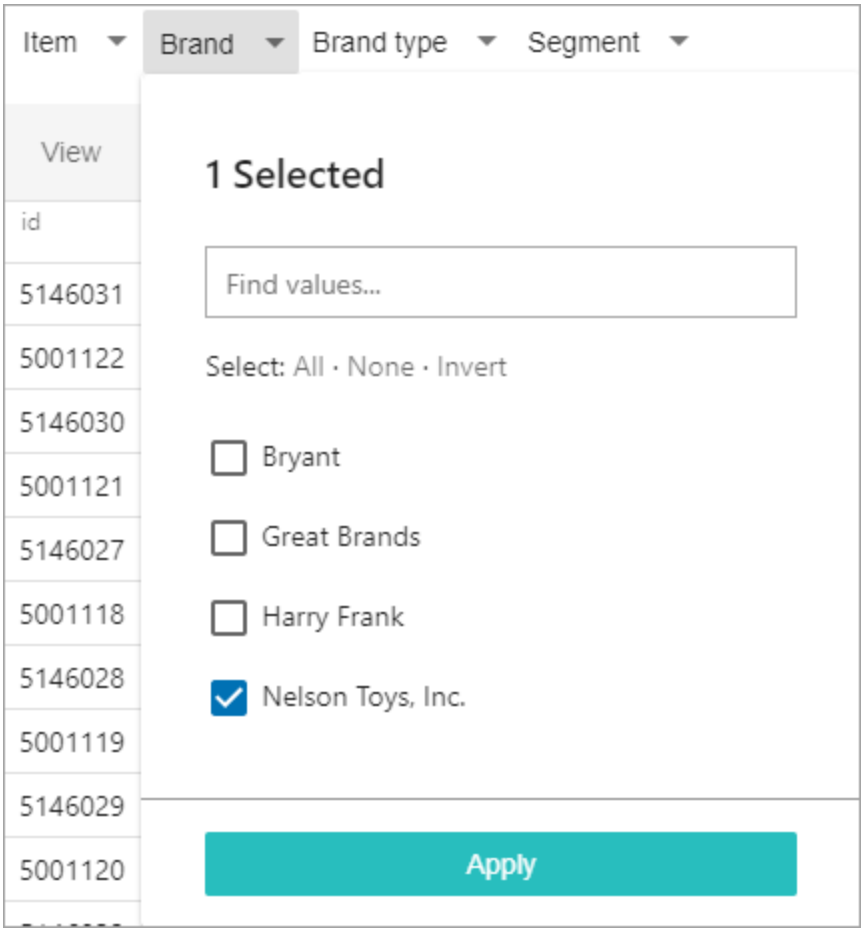
Sorting allows the search results to be rearranged on the Name attribute, either ascending (A-Z) or descending (Z-A).

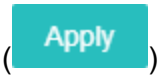
Search Screen Static Facets

Static Facets are configured by an administrator to define the most likely needed filter groups. Consider a set of objects that are divided based on brand, category, style, price, and material. If a static facet is available for each of these 'divisions,' the user can systematically refine the list of objects based on one or more of the available filters.

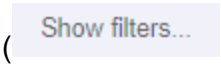
Facets are displayed only when they are valid for the data being displayed. This prevents users from searching values that do not exist. For example, when none of the search results include a value for the Segment facet, the Segment facet is hidden. Additionally, when using the search bar, if the search results in zero records, facets for attribute values are hidden (although facets for dates / date ranges may continue to display).

1. **Static Facets** - The options displayed below the Search Bar enable you to filter the search results. As many static facets can be created as desired. Click a facet to display the available values, as shown in the image below for the 'Brand' facet. By default, 100 values are displayed based on the maxBuckets element. See the setup information described in the **Elasticsearch Asset Configuration** topic.



- **Selected** - A count of the number of items selected and that will be applied to the filter.
- **Find ...** - Type the value you want to use to the filter the search results and update the list of value options. Click the checkbox for the desired value filter. The available values are limited to those that include the text up to the number assigned to the maxBuckets element, which is defined in the **Elasticsearch Asset Configuration** topic.
- **Select** - The **All** option checks all available values, the **None** option removes all check marks, the **Invert** option reverses the check marks for all options.
- **Values** - The unique values available in the searched data for the facet are displayed, up to the number assigned to the maxBuckets option, which is defined in the **Elasticsearch Asset Configuration** topic. Check individual values to include them in the search results.
- **Apply** - Click the **Apply** button (

) to update the displayed search results.

2. **Show filters...** - Indicates that the Search screen size is too narrow to display the static facets. Click the **Show filters** button (

) to show the static facets vertically, in the same way as shown in the 'Show more' option defined below.
3. **Show more... / Show fewer...** - Indicates more or fewer static facets are available. Click the available button to change the static facet display as shown below.

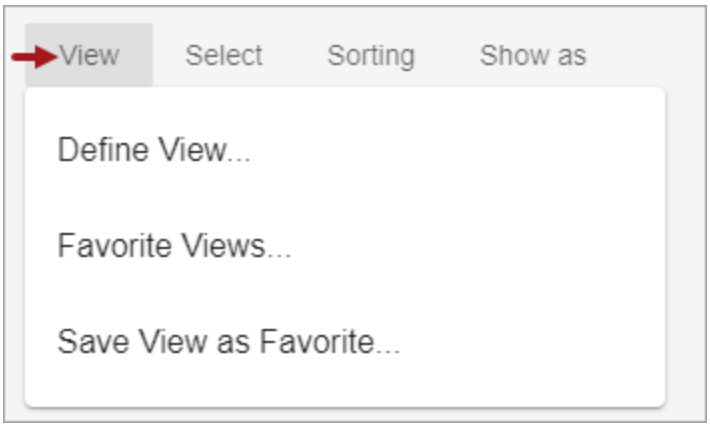
4. **Clear All** - Click the **Clear All** button (

) to remove all settings from static facets and any text in the search bar. See the **Search** button below to update the search results.
5. **Search** - Click the **Search** button (

) to apply the static facet settings and the search bar entries to the search results.

Search Screen View

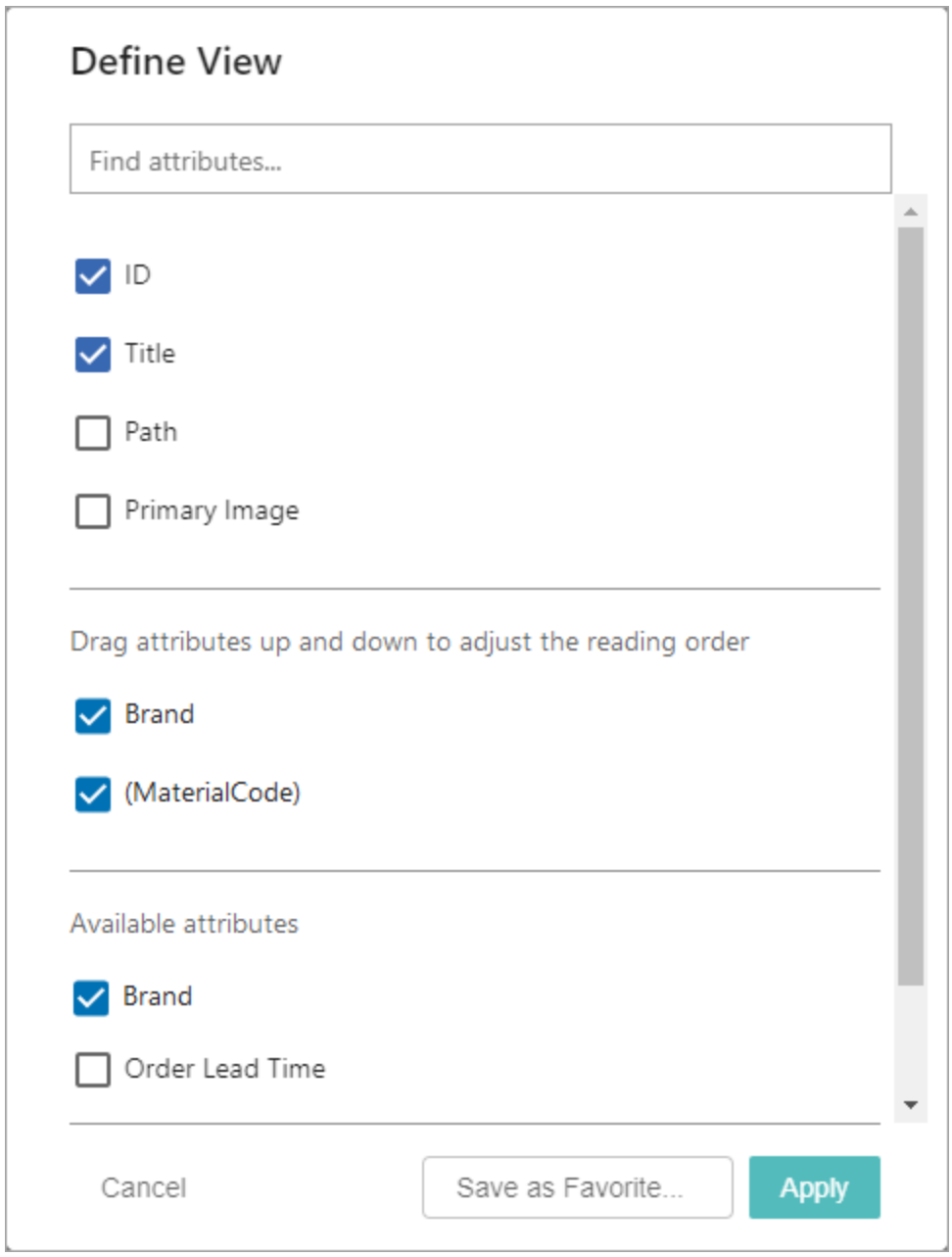
Views allow individual users to include the attributes that are important for their work. Creating a view involves selecting the attributes to be displayed. The View options are displayed after clicking the 'View' link within the search results area.



Each of the View options are defined below.

Define View

Click 'Define View...' to display a dialog with the attributes available for display on a view.



The Define View dialog includes the following:

1. **Find attributes...** - Search for attributes to update their display status on the view. This field uses typeahead and will display attributes that match the text in the 'Available attributes' section.
2. **Standard attributes** - By default, the first set of attributes shown are always displayed in the view.
   - ID, Title, and Path attributes are displayed in the view when checked; the display order cannot be changed.
   - Primary Image attribute is always displayed first on the card and cannot be hidden. When no primary image is available, 'No image' is displayed instead.

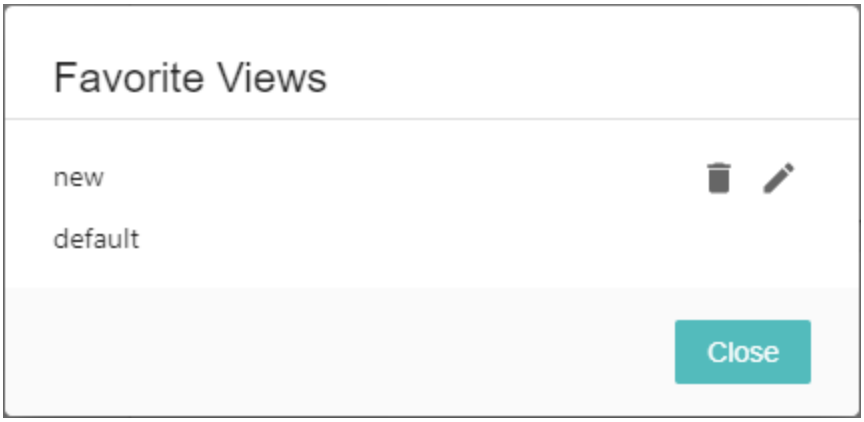
3. **Additional attributes being displayed** - When attributes available for display (based on the Elasticsearch Configuration) have been selected, they display in the second set of attributes. The text 'Drag attributes up and down to adjust the reading order' indicates that these attributes can be rearranged to the desired order. Uncheck an attribute to remove it from this section and also uncheck it in the 'Available attributes' section below.
4. **Available attributes** - Attributes available for display (based on the Elasticsearch Configuration) are listed in the third set.
   - Check an attribute to include it in the 'Additional attributes being displayed' section above.
   - Uncheck an attribute to remove it from the 'Additional attributes being displayed' section above.
5. **Cancel** - Returns to the search results page without making any changes.
6. **Save as Favorite** button - Displays the 'Save View as Favorite' dialog described **Save View as Favorite** section below. Saving a view as a favorite makes it available to the same user again.
7. **Apply** - Display the selected attributes for products included in the search results.

Favorite Views

Click 'Favorite Views...' to display a dialog with the names of saved views. The default view is created automatically.

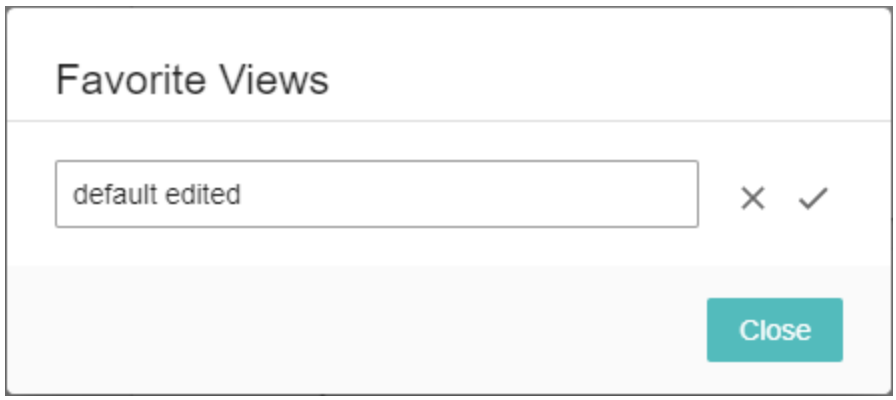
The names of 'Favorite views' must be unique and are saved in the 'favourite-views' Elasticsearch index (which must not be deleted).

Note: To see the attributes assigned to a favorite view, from the View menu, click 'Favorite Views' and select the view you want to investigate, and then click the **Close** button. From the View menu, click 'Define View' to display the selected attributes of the view. Click the **Cancel** button if no changes are made, or click the **Apply** button.



Actions available on this dialog are:

- Click the **Close** button to return to the search results.
- Hover over a favorite view to display the delete button ( ), and click delete to remove it without further confirmation.
- Hover over a favorite view to display the edit button ( ), and click edit to display an edit box for changing the name. In the image below, 'edited' has been added to the 'default' favorite view name.

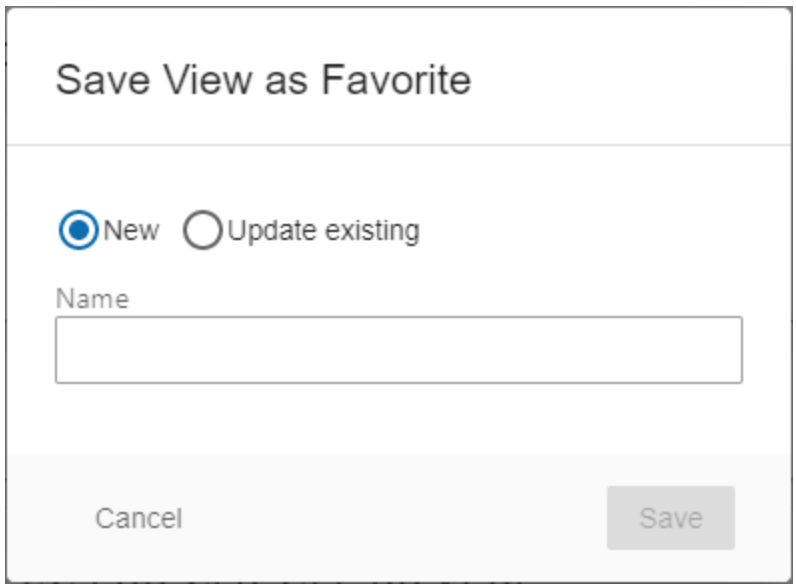


- Click the cancel button ( ) to return to the delete / edit options without the change, or click the save button ( ) to keep the new name and return to the delete / edit options.

Note: To keep edited text, you must click the save button ( ) before clicking the **Close** button.

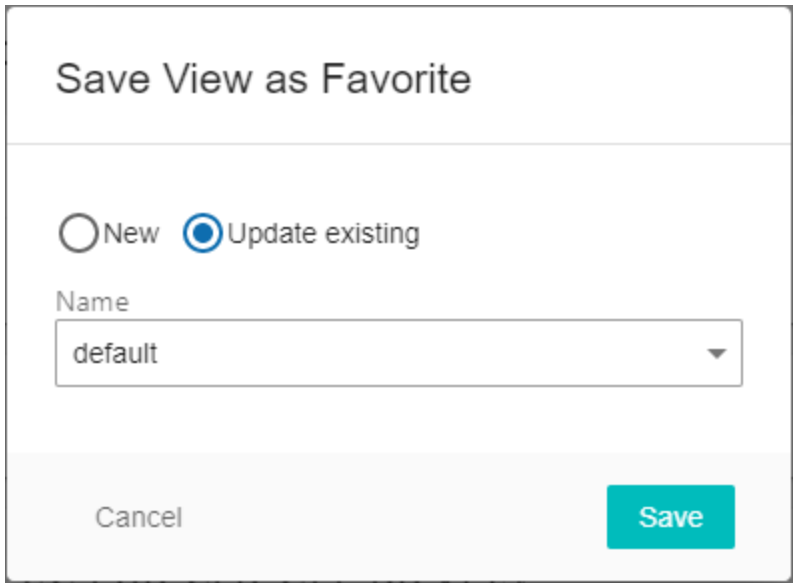
Save View as Favorite

Click 'Save View as Favorite...' to display a dialog to create a new favorite or update an existing favorite.



Actions available on this dialog are:

- Click the **Cancel** button to return to the Define View dialog.
- Click the **New** radio button to add a name for a new favorite view, then click the **Save** button. The Save button is only enabled after text is provided.
- Click the **Update existing** radio button to display a dropdown of the saved favorite views. Select a view from the dropdown and click the **Save** button to modify the settings of the selected view. In the image below, clicking the Save button updates the 'default' favorite view to use the current settings.



Setting up the PDS Export Wizard Screen

The Search screen basket uses the Publish functionality to export data to PDS channels. The PDS Export Wizard screen allows the available channels to be displayed.

For details on how the screen functions, review the **Search Screen Basket** topic.

Prerequisites

Changes to the properties file, outlined below, are implemented when the server is restarted.

1. It is expected that anyone setting up the PDS Export Wizard screen is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** topic.
2. The basket and the publish functionality require the activation of the 'ui-basket' component. Contact your Stibo Systems account manager or partner manager for assistance.
3. When the Publish button will be used to send the basket contents to a selected PDS (Product Data Syndication) channel, access to the PDS server must be provided. PDS server access is granted via the sharedconfig.properties file on the STEP application server using the case-sensitive properties **PDSConnection.ServerURL**, **PDSConnection.UserName**, and **PDSConnection.Password**. Work with your Stibo Systems account manager or partner manager to configure these properties.

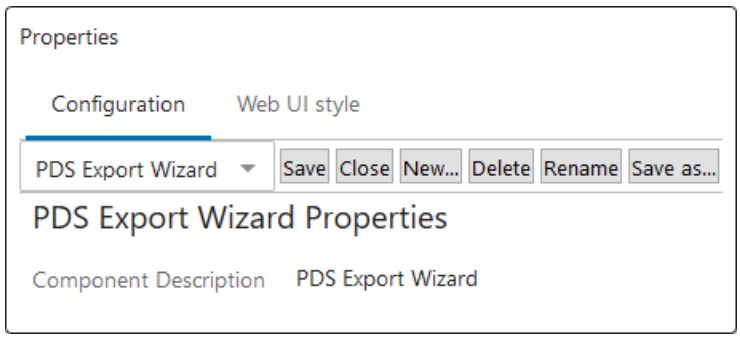
   ```
   PDSConnection.ServerURL=PDS_Server_URL

   PDSConnection.UserName=PDS_User

   PDSConnection.Password=PDS_Password
   ```

   In these examples, 'PDS_Server_URL' is the url of the PDS server, 'PDS_User' is the user name for the PDS server, and 'PDS_Password' is the password for the PDS server.

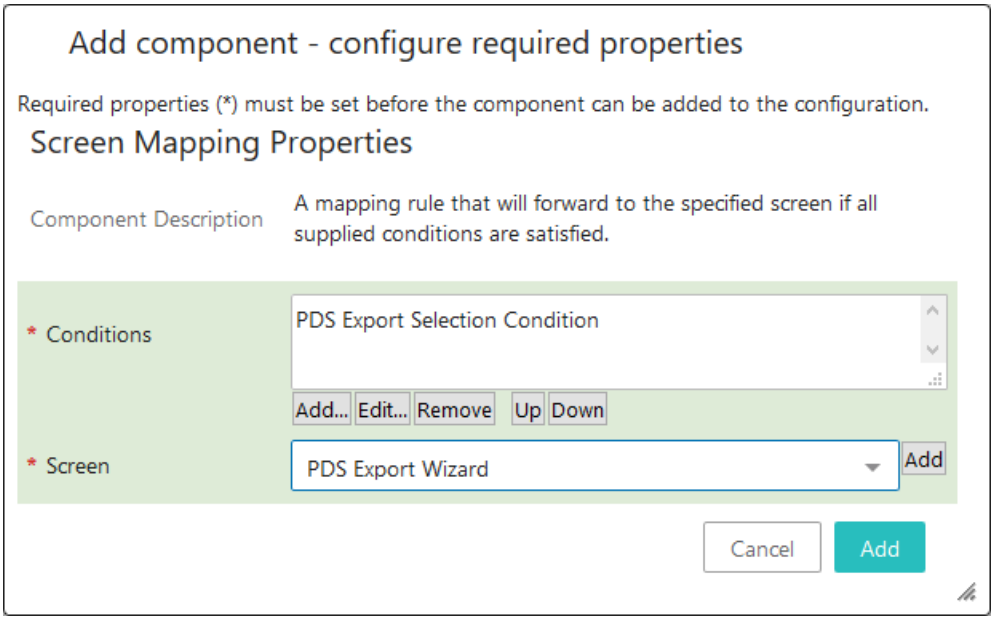
Adding a PDS Export Wizard Screen

Use the following steps to allow PDS channels to be displayed in the Search screen basket.

1. In the Web UI designer, create a new screen of the type 'PDS Export Wizard' as defined in the **Design Mode Basics** topic.



3. On the ---[MAIN]--- page, update the Mappings parameter to map the new PDS Export Wizard screen using the PDS Export Selection Condition, as defined in the **Mappings** topic.



4. Save and close the designer.
5. Export data to a PDS channel as defined in the **Search Screen Basket** topic under the **Publish** section.

Publishing Only Sufficient Products to PDS

Identifying products that meet your data standards and then only publishing those sufficient products requires a sufficiency business condition and two business actions, as defined below. The process involves testing a product with a 'sufficiency condition' where the condition results determine the next action required.

For example, a product that meets the 'sufficiency condition' executes the 'sufficient business action' and is routed to a workflow that results in publication to PDS. An insufficient product executes the 'insufficient business action' and is routed to a different workflow that allows for additional enrichment.

For details on sufficiencies, see the **Sufficiency Panel** topic in the **System Setup / Super User Guide**.

This functionality requires the following add-on components:

- data-sufficiency
- productdatasyndication-integration
- ui-basket

Prerequisites

Changes to the properties file, outlined below, are implemented when the server is restarted.

1. The case-sensitive property **Sufficiency.CheckSufficiencyInCollectionConditionID** defines the sufficiency business condition ID. By default, the ID is set to the 'checkSufficiencyInCollectionCondition' value. To use a different ID, change the sharedconfig.properties file on the STEP application server as follows:

   ```
   Sufficiency.CheckSufficiencyInCollectionConditionID=checkProductSufficiencyCondition
   ```

   In this example, 'checkProductSufficiencyCondition' is the modified ID of the sufficiency business condition.

2. The case-sensitive property **Sufficiency.InsufficientProductInCollectionActionID** defines the business action to execute for an insufficient product. By default, the ID is set to the 'insufficientProductInCollectionAction' value. To use a different ID, change the sharedconfig.properties file on the STEP application server as follows:

   ```
   Sufficiency.InsufficientProductInCollectionActionID=insufficientProductAction
   ```

   In this example, 'insufficientProductAction is the modified ID of the insufficient business action.

3. The case-sensitive property **Sufficiency.SufficientProductInCollectionActionID** defines the business action to execute for a sufficient product. By default, the ID is set to the 'sufficientProductInCollectionAction' value. To use a different ID, change the sharedconfig.properties file on the STEP application server as follows:

   ```
   Sufficiency.InsufficientProductInCollectionActionID=sufficientProductAction
   ```

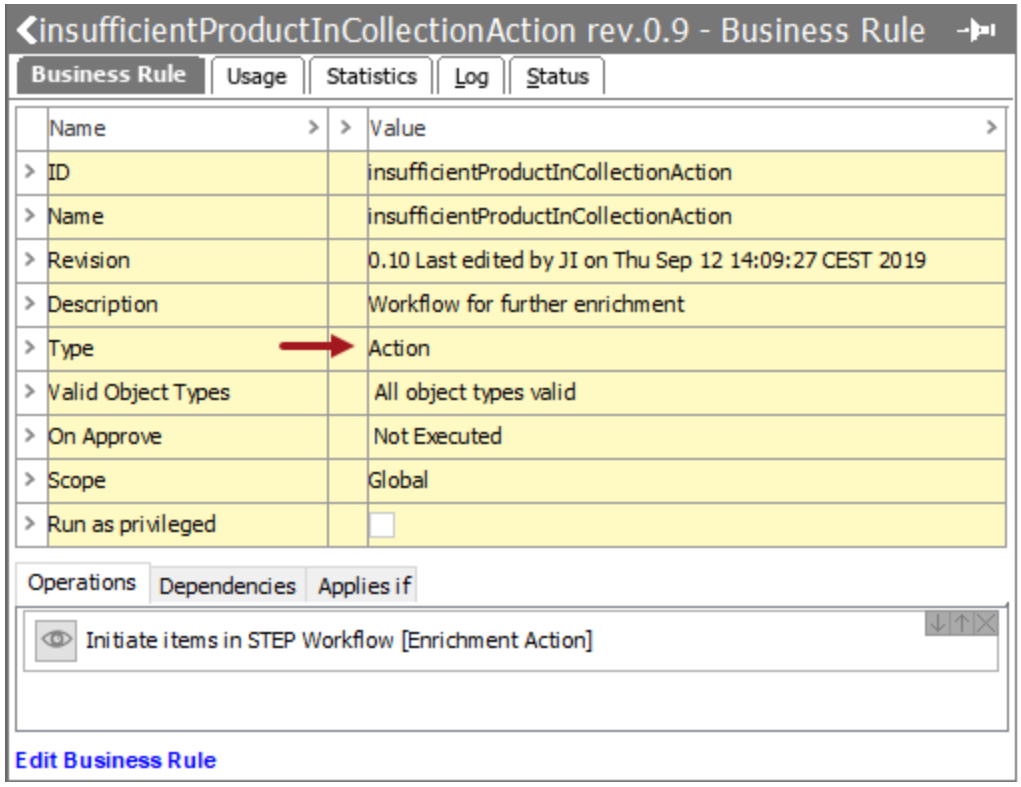
   In this example, 'sufficientProductAction is the modified ID of the sufficient business action.

Create Business Actions

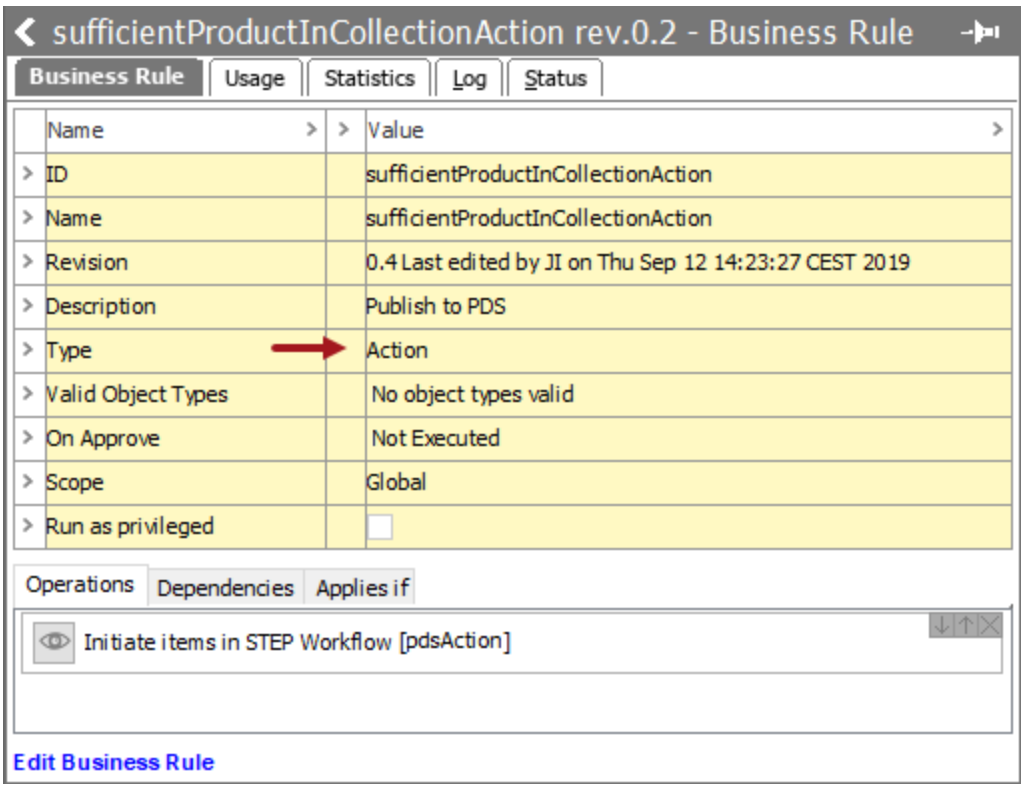
Create two actions, one for insufficient product and another for sufficient products.

For details on creating a business actions, see the **Creating a Business Rule or Library** topic in the **Business Rule** documentation.

1. Create an insufficient business action, using the ID from the sharedconfig.properties **Sufficiency.InsufficientProductInCollectionActionID** file property (defined above).
2. Set the Valid Object Types parameter to include the object types that will ultimately be published to PDS.
3. Edit the action to include the operations required for insufficient products.



4. Create an sufficient business action, using the ID from the sharedconfig.properties **Sufficiency.SufficientProductInCollectionActionID** file property (defined above).
5. Set the Valid Object Types parameter to include the object types that will ultimately be published to PDS.
6. Edit the action to include the operations required for sufficient products.

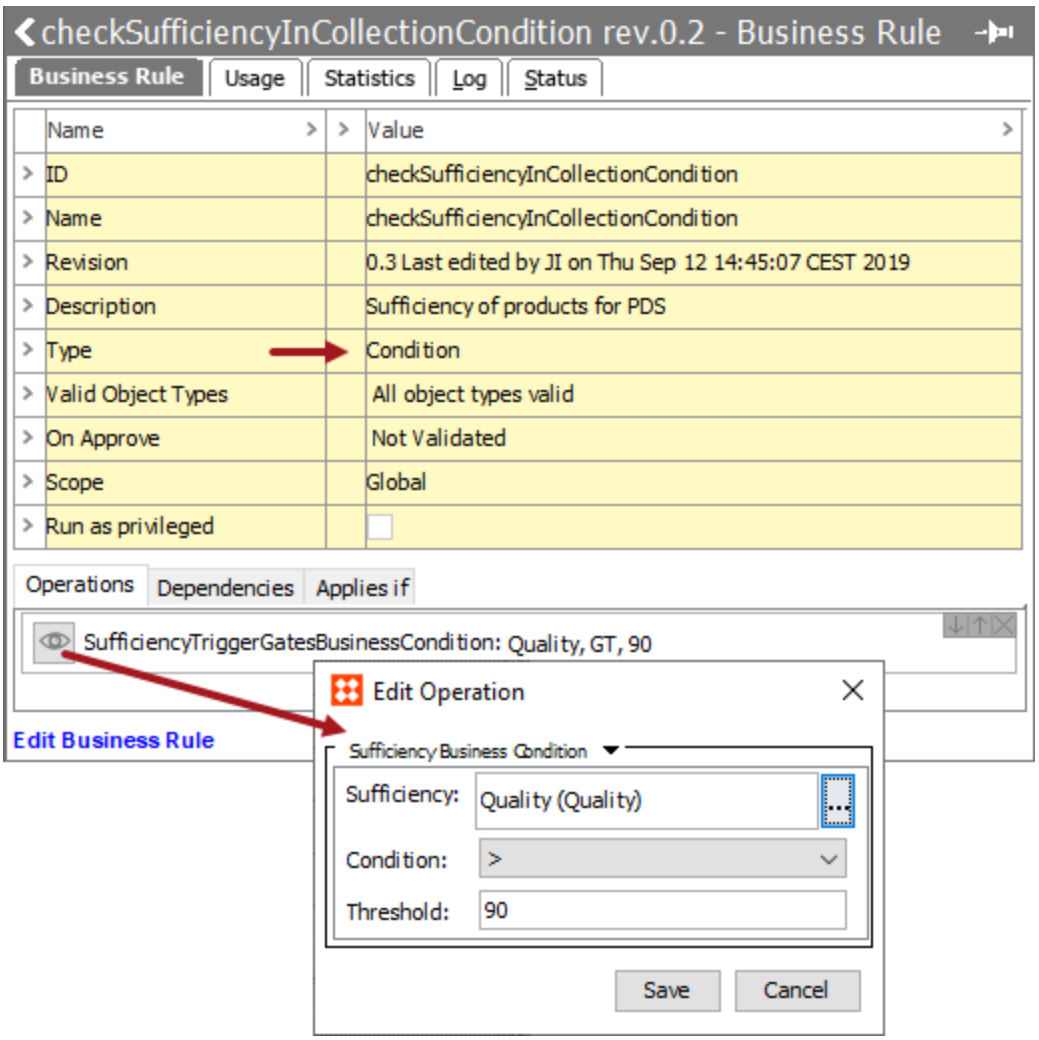


Create a Business Condition

Create a condition to test for the sufficiency of products.

For details on creating a business condition, see the **Creating a Business Rule or Library** topic in the **Business Rule** documentation.

1. Create a new business condition, using the ID from the sharedconfig.properties **Sufficiency.CheckSufficiencyInCollectionConditionID** file property (defined above).
2. Set the Valid Object Types parameter and select the object types that will be published to PDS.
3. Edit the condition to include the actions required for insufficient and sufficient products.


checkSufficiencyInCollectionCondition rev.0.2 - Business Rule
Business Rule
Usage
Statistics
Log
Status
Name
Value
ID
checkSufficiencyInCollectionCondition
Name
checkSufficiencyInCollectionCondition
Revision
0.3 Last edited by JI on Thu Sep 12 14:45:07 CEST 2019
Description
Sufficiency of products for PDS
Type
Condition
Valid Object Types
All object types valid
On Approve
Not Validated
Scope
Global
Run as privileged
Operations
Dependencies
Applies if
SufficiencyTriggerGatesBusinessCondition: Quality, GT, 90
Edit Business Rule
Edit Operation
Sufficiency Business Condition
Sufficiency:
Quality (Quality)
Condition:
>
Threshold:
90
Save
Cancel

Elasticsearch Publishing

The Web UI Search screen offers search functionality that requires STEP data to be published to an Elasticsearch cluster that is accessible from the STEP application servers. For the end user, the Search screen provides search results that can be refined and modified on-the-fly.

Important: Before starting the configuration outlined in this topic, contact your Stibo Systems account manager or partner manager for assistance. Activation and configuration for the Search screen, Elasticsearch, and corresponding components / functionality, should not be done without the assistance of Stibo Systems.

For STEP data to be displayed in the Web UI Search screen, it must meet these conditions:

- The product must be linked into at least one classification that the user is privileged to view.
- The classification must be published to Elasticsearch.
- The user must have the 'View product' and 'View classification' user action privileges applied to a particular classification or its parent.

For Elasticsearch results, only user privileges for classifications are respected and are additive. Attribute, object type, and other privileges are not available. For example, a user who has privileges only to Classification A can see the products in that classification. If the same product exists in Classification A and in Classification B, the user can see some of the products from Classification B because of the privileges to Classification A.

To use Elasticsearch in the Web UI Search screen, complete the following configuration:

1. Perform the one-time setup as defined in the **Initial Setup for Elasticsearch** topic.
2. Run the event processor creation wizard as defined in the **Parameters** section of the **Elasticsearch Indexer Processing Plugin Parameters and Triggers** topic in the **System Setup / Super User Guide** documentation.
3. Invoke the Event Processor running the Elasticsearch Indexer to create the Elasticsearch asset object.
4. Update the default Elasticsearch Asset as defined in the **Elasticsearch Asset Configuration** topic.
5. Configure the event processor event triggering definitions as defined in the **Event Triggers** section of the **Elasticsearch Indexer Processing Plugin Parameters and Triggers** topic within the **System Setup / Super User Guide** documentation.
6. Publish STEP data to Elasticsearch using the Republish action as defined in the **Event-Based OIEP Forward, Rewind, Purge, and Republish** topic of the **Data Exchange** documentation.

For more information on using the Elasticsearch database on the Web UI Search screen, see the **Search Screen** topic.

Initial Setup for Elasticsearch

The following one-time set up is required to prepare STEP for using the Elasticsearch search engine.

Important: Before starting the configuration outlined in this topic, contact your Stibo Systems account manager or partner manager for assistance. Activation and configuration for the Search screen, Elasticsearch, and corresponding components / functionality, should not be done without the assistance of Stibo Systems.

1. Using Elasticsearch with STEP requires an external installation process of Elasticsearch 7.1, knowledge of JSON documents, and the API or other ingestion tool. For more information on Elasticsearch, search the web.
2. Review the Important note above and activate the 'elasticsearch-integration' component.
3. Review the Important note above and activate the 'ui-basket' component.
4. Add the Elasticsearch cluster name and port, separated by a colon (:), in the sharedconfig.properties file on the STEP application server using the case-sensitive **Elasticsearch.Cluster.Nodes** property as shown below:

   ```
   Elasticsearch.Cluster.Nodes=http://elasticsearch:9200
   ```

   In this example, 'http://elasticsearch' is the name of the cluster and '9200' is the port.

5. Define the Elasticsearch user and password in the sharedconfig.properties file on the STEP application server using the case-sensitive **Elasticsearch.User** and **Elasticsearch.Password** properties as shown below:

   ```
   Elasticsearch.User=ESadmin
   ```

   ```
   Elasticsearch.Password=ESpassword
   ```

   In these examples, 'ESadmin' is the user name and 'ESpassword' is the password.

6. In the sharedconfig.properties file on the STEP application server, the case-sensitive **Elasticsearch.Query.CacheRetentionTime** property determines the number of seconds it takes for changes to the ElasticsearchJSONConfiguration asset to be reflected in the Web UI. The default setting is 600 seconds (10 minutes), which is optimized for performance. Modify this setting in the sharedconfig.properties file on the STEP application server to change the frequency of updates.

   ```
   Elasticsearch.Query.CacheRetentionTime=600
   ```

   In this example, the default has not been changed.

7. In the sharedconfig.properties file on the STEP application server, the case-sensitive **Elasticsearch.NumberOfReplicas** and **Elasticsearch.NumberOfShards** properties make it possible to configure the replicas (default 1) and shards (default 2) to be used for the indexes created by STEP. Work with your Stibo Systems account manager or partner manager to configure these properties to match the Elasticsearch setup.

Elasticsearch Asset Configuration

The parts of the Elasticsearch configuration specific to your data model are maintained in a JSON document stored as an asset in STEP. This asset is created when the Event Processor running the Elasticsearch Indexer is invoked for the first time. Some information is always published to Elasticsearch when an event for a node is being handled, for example, ID, name, object type, sufficiency scores, IDs of classifications that a product is linked into, and the names of ancestor nodes. However, the JSON configuration allows you to specify additional data that should be included in the Elasticsearch document.

Changes made to the Elasticsearch asset are reflected in the Web UI Search screen based on the setting of the Elasticsearch.Query.CacheRetentionTime property, as discussed in the **Initial Setup for Elasticsearch** topic.

Important: Before starting the configuration outlined in this topic, contact your Stibo Systems account manager or partner manager for assistance. Activation and configuration for the Search screen, Elasticsearch, and corresponding components / functionality, should not be done without the assistance of Stibo Systems.

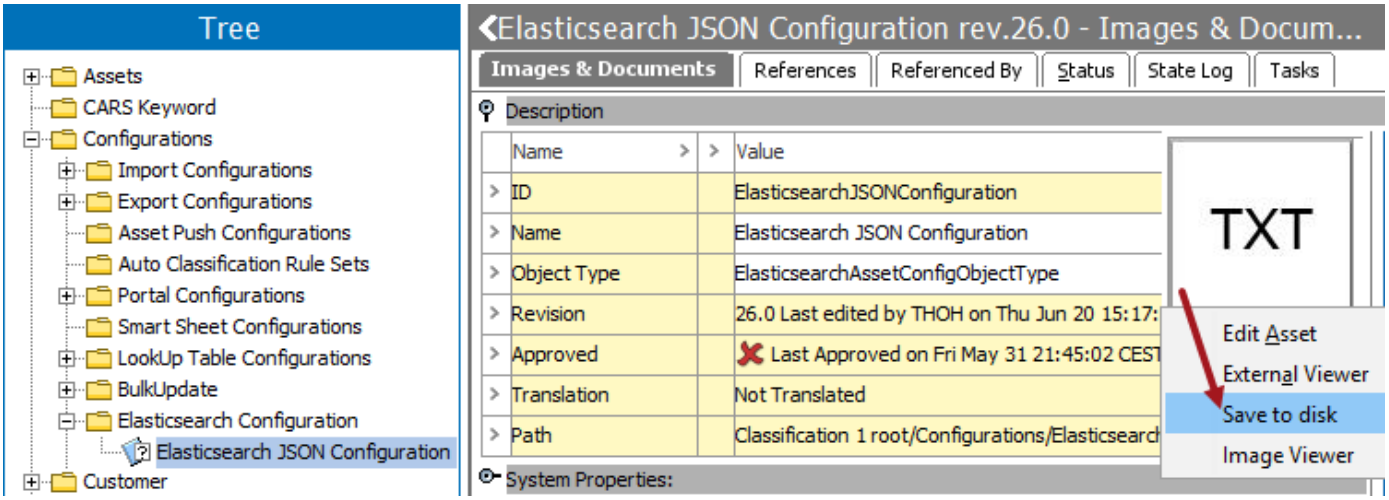
This topic includes the following sections:

- **Edit the JSON Asset** - modify the JSON asset and apply those changes to the Search screen.
- **Configure Data for Publishing** - define the data available to the Elasticsearch search engine.
- **Configure Data for Searching** - define the data available when searching for products in the Search screen.
- **Default JSON Template** - standard configuration of the JSON asset.

Edit the JSON Asset

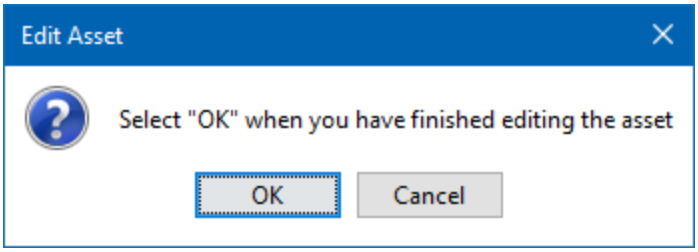
Use the steps below to edit the Elasticsearch asset as outlined in the following sections.

1. In workbench, search for the asset with 'ElasticsearchJSONConfiguration' as the ID, or from Tree, open the Configurations node and select it from the Elasticsearch Configuration folder.
2. Right-click the asset image and choose the 'Save to disk' option.



The default asset includes the JSON template shown in the **JSON Template** section below.

3. Edit the asset using an external viewer that supports JSON syntax highlighting.
4. Validate the JSON syntax and correct any errors identified.
5. Back in the workbench, right-click the asset image again and choose the **Edit asset** option. The 'Edit Asset' dialog displays in workbench, and the JSON displays in a text editor.
6. Copy the validated JSON and paste it into the text editor, save the file, and close the file.
7. In workbench, click **OK** on the Edit Asset dialog.



The ElasticsearchJSONConfiguration asset now includes the modifications made for your data model.

8. Verify the changes made to the ElasticsearchJSONConfiguration as follows:
   - For changes made to the Search element, wait for the defined CacheRetentionTime to elapse (as defined in the **Initial Setup for Elasticsearch** topic).
   - For changes made to the publishing element, publish and/or republish the data (as defined in the **Elasticsearch Indexer Processing Plugin Parameters and Triggers** topic).

Configure Data for Publishing

In the configuration steps, the term **data specification** refers to a variety of data that will be included in the Elasticsearch database. The additional data is defined in the 'publishing' section of the JSON configuration by adding values for the following properties:

- **suggestionAttributesToPublish** - the data specifications that should display typeahead suggestions in the Web UI Search screen search bar. Although part of the default template, this functionality is not yet available.
- **fulltextAttributesToPublish** - the data specifications to be considered when performing a full-text search using the Web UI Search screen search bar. Since the values of these attributes are included in the Elasticsearch JSON documents, the values can be found, but there is no relationship between the ID and the value.
- **attributesToPublish** - the data specifications to be available to display viewable attributes in saved Favorite Views, to define a staticFacets definition, and to define a data specification used for querying IDs. Since there is a relationship between the data specification and the value, these data specifications can be used for static facets in the Web UI Search screen.

Adding the following data specifications for "suggestionAttributesToPublish", "fulltextAttributesToPublish", or "attributesToPublish" determines how search matches the documents / objects on the Web UI Search screen.

The available data specifications for publishing are defined in the sections below.

Attribute values on the node for which an event is being handled

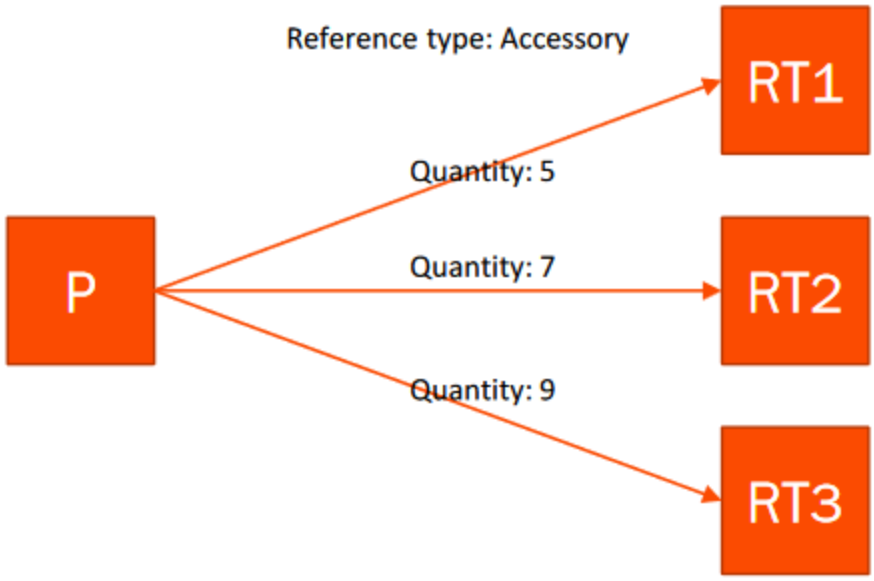
To publish values for attributes on the node for which an event is being handled, attribute IDs can be added to the configuration. Notice that inherited data is automatically included which means that it may be relevant to configure the event processor event triggering definitions to ensure that nodes are republished when the ancestor nodes owning the data are modified. For more information, see the **Event Triggers** section of the **Elasticsearch Indexer Processing Plugin Parameters and Triggers** topic.

Attribute values on outgoing references / links

To have values on outgoing references / links included, use the format "[Link type ID]|[Attribute ID]". A different separator than the default pipe (|) may be used. The separator is defined by the "pathSplitter" property in the JSON configuration. Also, a token may be used to indicate that the specification is for outgoing references links. This is only required if the "outgoingLinkSplitter" property is changed from its default empty value in the JSON configuration. Had the property been set to e.g. "outgoingLinks", the format would be "outgoingLinks|[Link type ID]|[Attribute ID]". This functionality also works for inherited references / links and for this case, and it may be relevant to configure the event processor event triggering definitions to ensure that nodes are republished when the references / links are modified.

Consider metadata on the reference type being returned when searching, as illustrated below using the following objects:

- P is the node being published
- RT1, RT2, RT3 are the reference target nodes



This option is only supported for outgoing references and is only for a single level.

Configuration Syntax: {LinkTypeID}|*{AttributeID}*

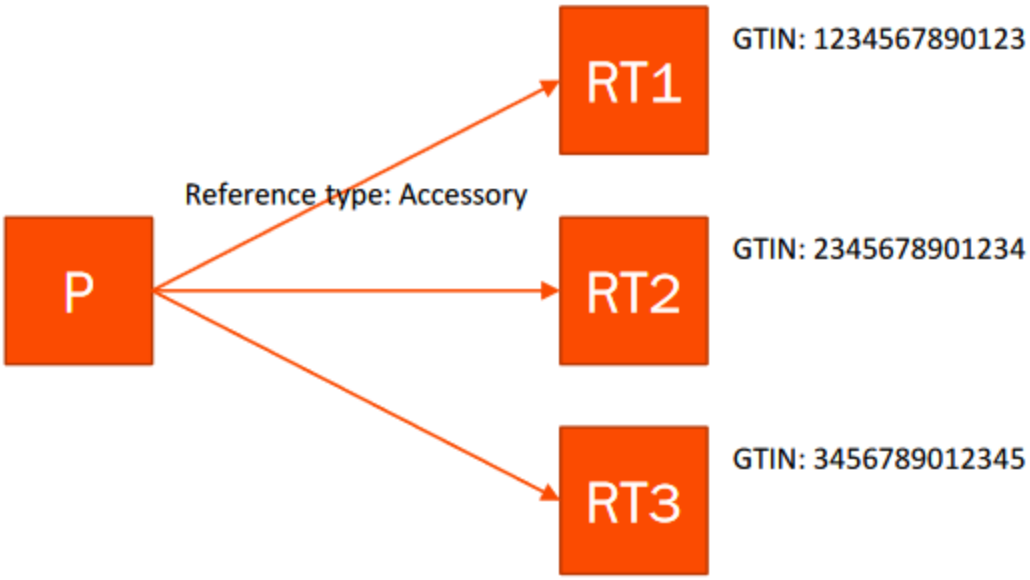
Example: Accessory|Quantity

Attribute values on reference / link targets

To have values on reference / link targets included, use the format "[Link type ID]|target|[Attribute ID]". As with metadata on the references, the "pathSplitter" may be changed and an "outgoingLinkSplitter" token (default: "target") may be used. If this feature is used, it may be relevant to configure the event processor event triggering definitions to ensure that nodes are republished when target nodes are modified, and also if the references / links are inherited, when the nodes owning the references / links are modified.

Consider that the target of a reference includes an attribute that is returned when searching, as illustrated below using the following objects:

- P is the node being published
- RT1, RT2, RT3 are the reference target nodes with values to be aggregated



This option is only supported for outgoing references / classification product links, and is only for a single level. Use this option for stable reference data (the GTIN in this illustration), where it is assumed that the values on reference targets / classifications do not change. The node for which the Elasticsearch document includes aggregated data (P in this illustration) will not automatically be republished if the values on the reference targets / classifications change.

Configuration Syntax: {LinkTypeID}|target|*{AttributeID}*

Example: Accessory|target|GTIN

Attribute values on incoming references / links

To have values on outgoing references / links included, use the format "incomingLinks|[Link type ID]|[Attribute ID]". The "pathSplitter" may be changed and the token used for indicating that the specification is for incoming references / links may also be changed using the "incomingLinkSplitter" property in the JSON configuration. If this option is used, it may be relevant to configure the event processor event triggering definitions to ensure that nodes are republished when the references / links are modified.

Attribute values on nodes with references / links to the node being handled

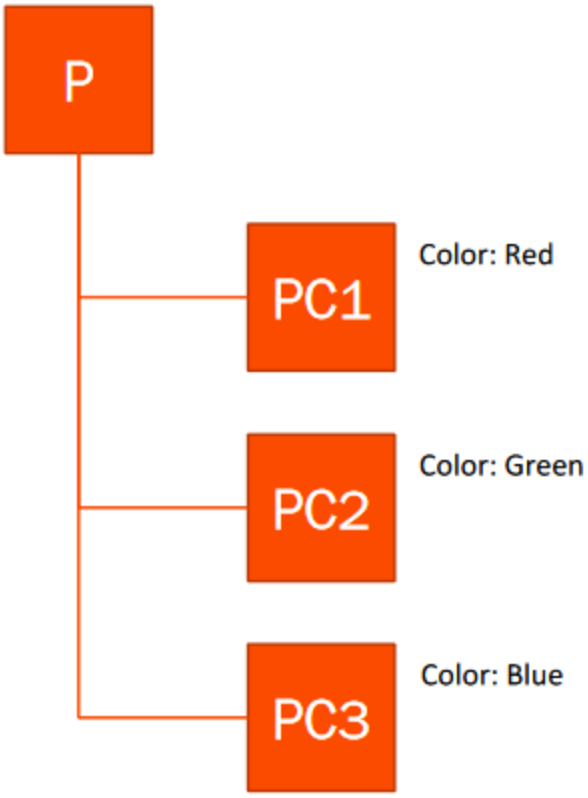
To have values from nodes with references / links to the node being handled included, use the format "incomingLinks|[Link type ID]|source|[Attribute ID]". As with metadata on incoming links, the format may differ if the "pathSplitter" and "incomingLinkSplitter" properties are modified. Further, a different "sourceSplitter" may be used (default: "source"). If this option is used, it may be relevant to configure the event processor event triggering definitions to ensure that nodes are republished when the nodes owning the references / links are modified.

Attribute values on children nodes

To have values from immediate children objects included, use the format "child|[Attribute ID]". Again, a different "pathSplitter" may be used and the token used to indicate that values should be taken from children objects can be changed via the "childSplitter" property (default: "child"). If this option is used, it may be relevant to configure the event processor event triggering definitions to ensure that nodes are republished when children nodes are modified.

Consider returning values on variant objects when searching, as illustrated below using the following objects:

- P is the node being published
- PC1, PC2, PC3 are node children with values to be aggregated



P will not automatically be republished when values on children change, new children are added, or children are removed.

Configuration Syntax: {child}|*{AttributeID}*

Example: child|Color

Configure Data for Searching

The data that should be available for searching in the Web UI Search screen is defined in the "search" section of the JSON document by adding values for the following properties:

- **indexName** - the prefix that is used on the index name identifiers in Elasticsearch. This name must also be typed into the event processor, as defined in the **Parameters** section of the **Elasticsearch Indexer Processing Plugin Parameters and Triggers** topic in the **Systems Setup / Super User Guide** documentation.
- **maxBuckets** - the maximum number of facet values displayed within a static facet. Using the preferred maximum of 100 means that not all values will display within a facet for an attribute that has more than 100 unique values.
- **staticFacets** - the data specifications that will be displayed as static facets in the Web UI Search screen. Static facets are filters that allow users to refine the search. "staticFacets" data specifications should also be included in the "attributesToPublish" section defined above. These data specification definitions are mapped directly to the path of the Elasticsearch schema field.

  When using node aspects (for example, object type or path) no prefix is required. However, as shown in the following **JSON Template Example**, the **values.** prefix is required for all data specifications that are included in the publishing element "attributesToPublish" defined above. The **values.** prefix indicates that the data specifications are stored below the "values" JSON array in the Elasticsearch schema and provides the full path required for the Elasticsearch field.

- **idQueryFields** - the data specifications to consider when searching for an ID in the Web UI Search screen. For example, this could be the name, ID, values.GTIN data specifications. These data specification definitions are mapped directly to the path of the Elasticsearch schema field.

  As with staticFacets, the **values.** prefix is required for all data specifications that are included in the publishing element "attributesToPublish" defined below. The **values.** prefix indicates that the data specifications are stored below the "values" JSON array in the Elasticsearch schema and provides the full path required for the Elasticsearch field.

Default JSON Template

```
{
  "search": {
    "clusterName": "elasticsearch",
    "indexName": "MY_INDEX_PREFIX",
    "maxBuckets": 100,
    "staticFacets": [],
    "idQueryFields": []
  },
  "publishing": {
    "batchSize": 100,
    "suggestionAttributesToPublish": [],
    "fulltextAttributesToPublish": [],
```

```
    "attributesToPublish": [],
    "useLanguageAnalyzers": true,
    "pathSplitter": "|",
    "sourceSplitter": "source",
    "targetSplitter": "target",
    "outgoingLinkSplitter": "",
    "incomingLinkSplitter": "incominglinks",
    "childSplitter": "child"
  }
}
```

JSON Template Example

For example, the following is a valid configuration based on the template:

```
{
"search": {
"clusterName": "elasticsearch",
"indexName": "step",
"maxBuckets": 999,
"idQueryFields": [
"name",
"values.CompleteProductCode",
"id",
"values.GTIN"
],
"staticFacets": [
"objectType",
"values.child|Country",
"values.Brand",
"values.SubBrand",
"values.Category",
"values.Segment",
"values.Brandtype",
"values.child|DistributionStatus",
"values.incominglinks|CustData_to_GTIN|source|CustomerName",
"values.child|PackageSize",
"values.sufficiencyScores.Quality",
"sufficiencyScores.Completeness"
]
},
"publishing": {
"batchSize": 100,
"suggestionAttributesToPublish": [],
"fulltextAttributesToPublish": [
"Brand",
"Brandtype",
"child|Country",
"incominglinks|CustData_to_GTIN|source|CustomerName",
"GTIN",
```

```
"id",
"name",
"Segment",
"SubBrand",
"values.child|ProductDescription"
],
"attributesToPublish": [
"Brand",
"Brandtype",
"Category",
"child|Country",
"child|DistributionStatus",
"child|ItemCountInCase",
"child|MaterialCode",
"child|OrderLeadTime",
"child|PackageSize",
"child|ProductDescription",
"incominglinks|CustData_to_GTIN|source|CustomerName",
"incominglinks|CustData_to_GTIN|source|CustomerID",
"CompleteProductCode",
"GTIN",
"Segment",
"SubBrand"
],
"useLanguageAnalyzers": true,
"pathSplitter": "|",
"targetSplitter": "target",
"sourceSplitter": "source",
"childSplitter": "child"
}
}
```

Shared Data Handling

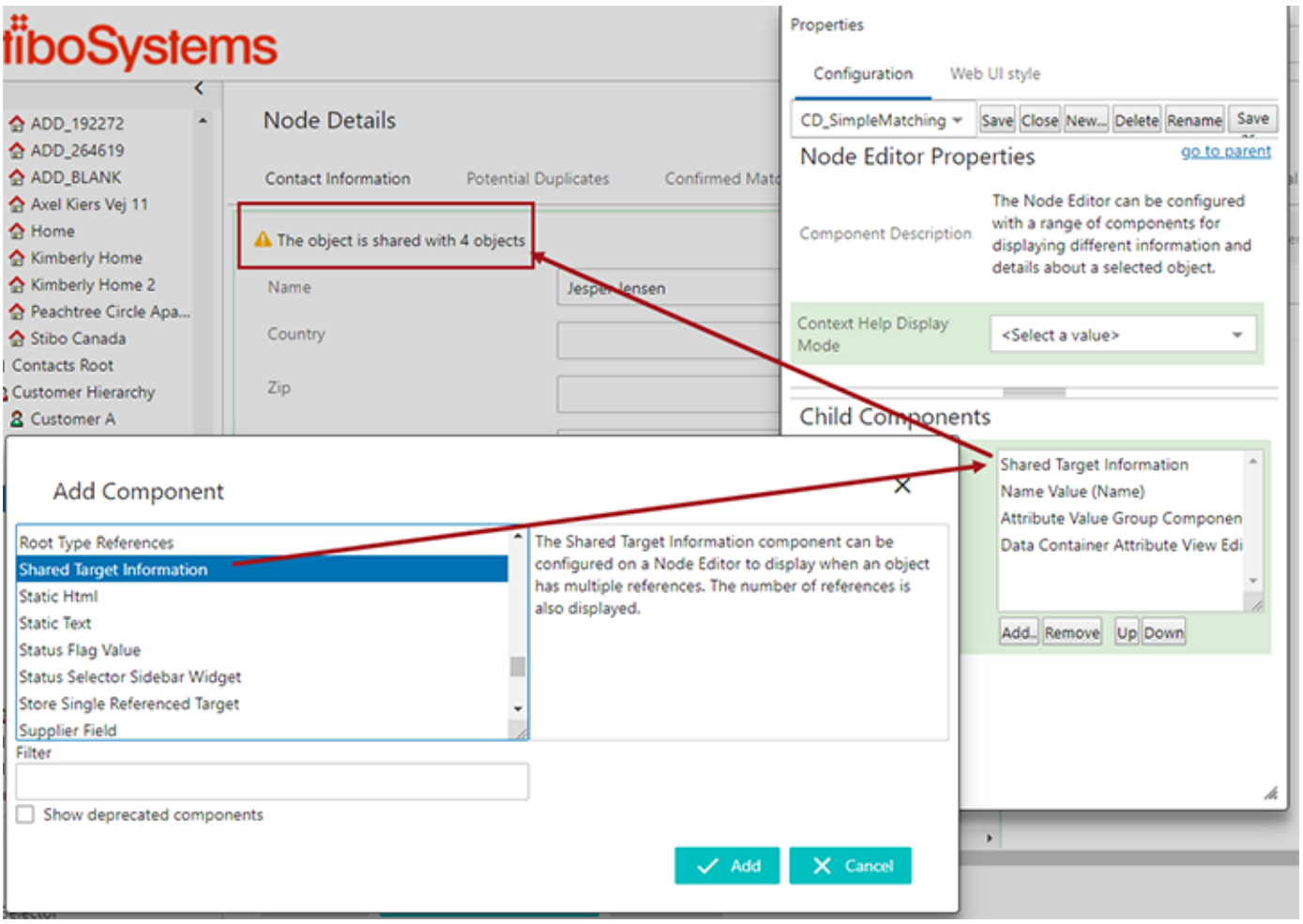
Users must be careful when working with shared data in order to maintain data integrity and safeguard data from inadvertent changes. This becomes particularly relevant when objects are referenced by more than one other object. In this case, changes to that target object have the potential to impact every source object referencing it. In order to better assist users in working with shared data, there are various Web UI features to improve the way shared data is identified and handled.

These features include, but are not limited to, a visual indicator that can be configured to display for shared objects shown on a Node Editor screen, a warning that can be presented to users when attempting to save changes to a shared object, and the ability to clone a reference target.

Shared Target Information on Node Editor

The Shared Target Information component can be added to a Node Editor to provide a visual indicator that an object is referenced by two or more objects. The total number of those referencing (source) objects is also displayed. These all combine to serve as a notice to the user that updating data, if allowed, will impact more than the selected object.

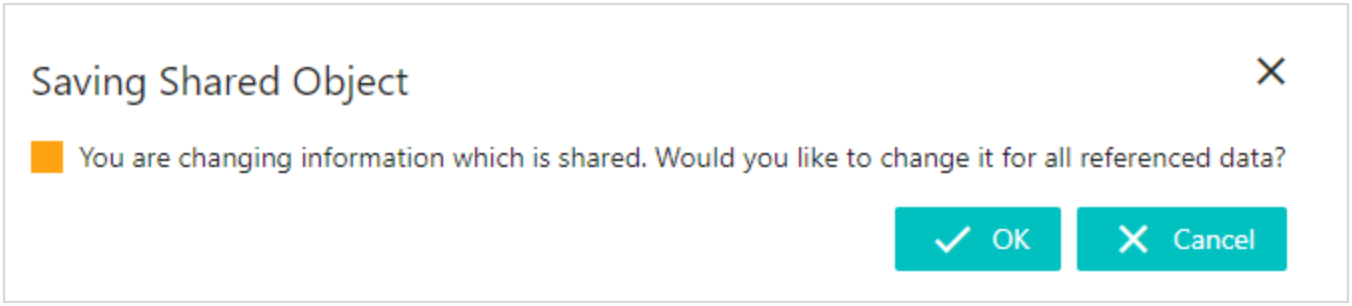
The Shared Target Information component is available to add as a child component within Node Editors (Child Components > Rows), following the same process that is used to add other components like Name Value, ID Value, Attribute Value, and Attribute Value Group.



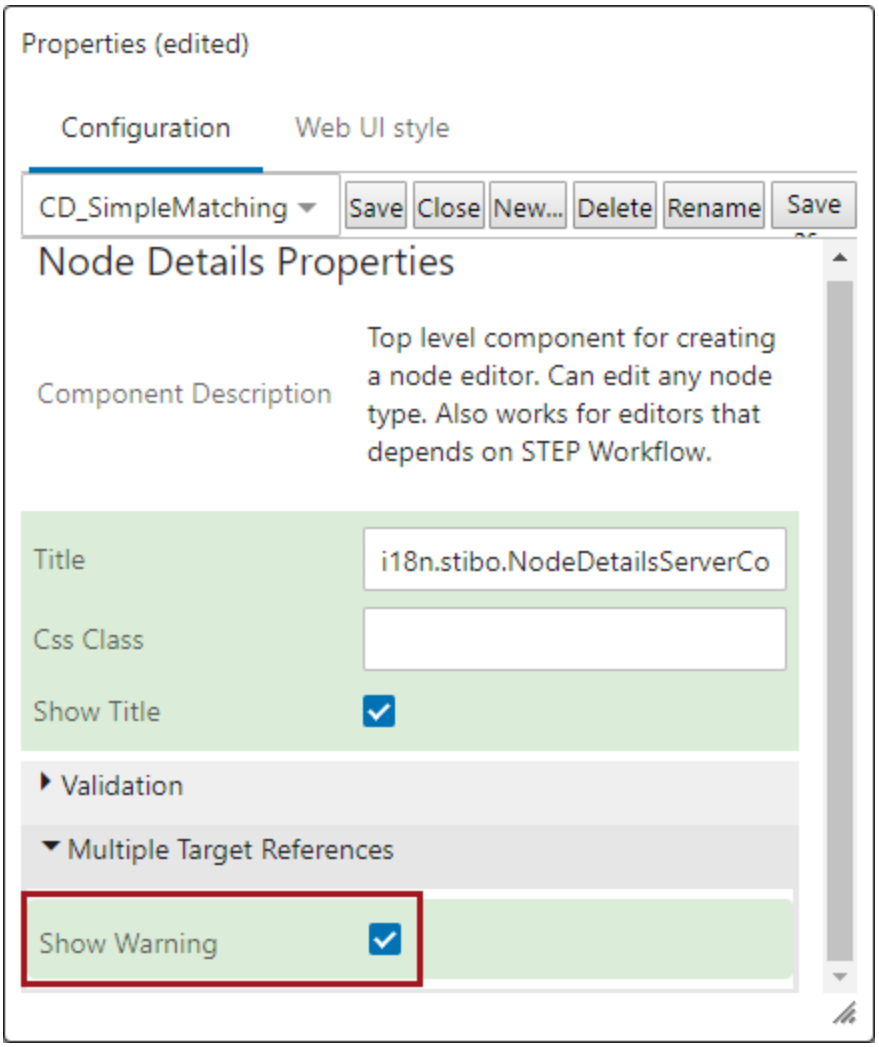
Similar visual indicators for shared objects are the ID Shared Target Header component (**Multi Reference Editor**) and the Follow Single Reference component (**Node Editor Component**) in this documentation.

Shared Object Save Warning

When a shared object is edited and then saved, either through an actual Save action or implied save (e.g., Submit Action or Approve Action), an additional layer of protection (a warning message) can be added by an admin user. An end user will be presented with a 'Are you sure?' dialog letting them know that the object that they have edited and are saving is a shared object and any changes could have implications for other objects. The user must actively confirm that this is acceptable before the object can be saved successfully. The user may also choose to cancel out of the warning and decide not to save the changes.



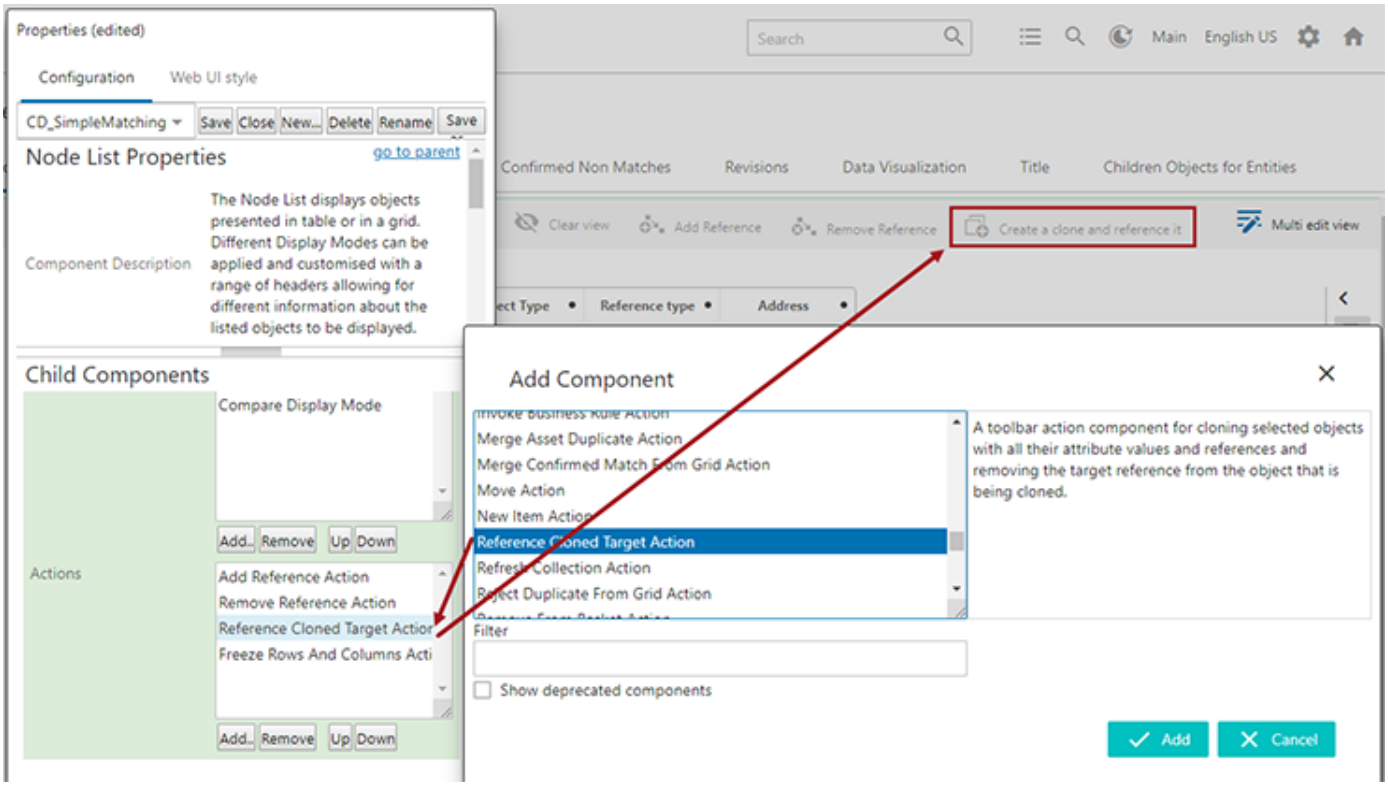
To activate the warning, it must be enabled on the Node Details configuration. The Show Warning parameter is accessed under the Multiple Target References parameter group. When Show Warning is enabled (checked), the warning will display to end users upon save. If disabled (which is the default), no warning will be shown and changes will save as they have previously.



Reference Cloned Target Action

The Reference Cloned Target Action allows a user to select an existing reference target and duplicate / clone it, creating a new object that includes the original attribute values and references. This is particularly useful in making sure a user does not inadvertently edit shared data that could have implications to other objects with the same reference. When a user needs to make changes to data that is shared (e.g., the object is referenced by multiple objects), they can clone the existing object and freely edit the data on the clone, without fear of impacting the other objects with references to the original object.

Note that users can only clone one object at a time, and objects being cloned must use auto-generated IDs.



The Reference Cloned Target Action is exclusive to the Multi Reference Editor. Information about how to add action buttons and an example of what it looks like to clone a reference is shown in the **Multi Reference Editor** section of the **Web User Interfaces / Using a Web UI** documentation.

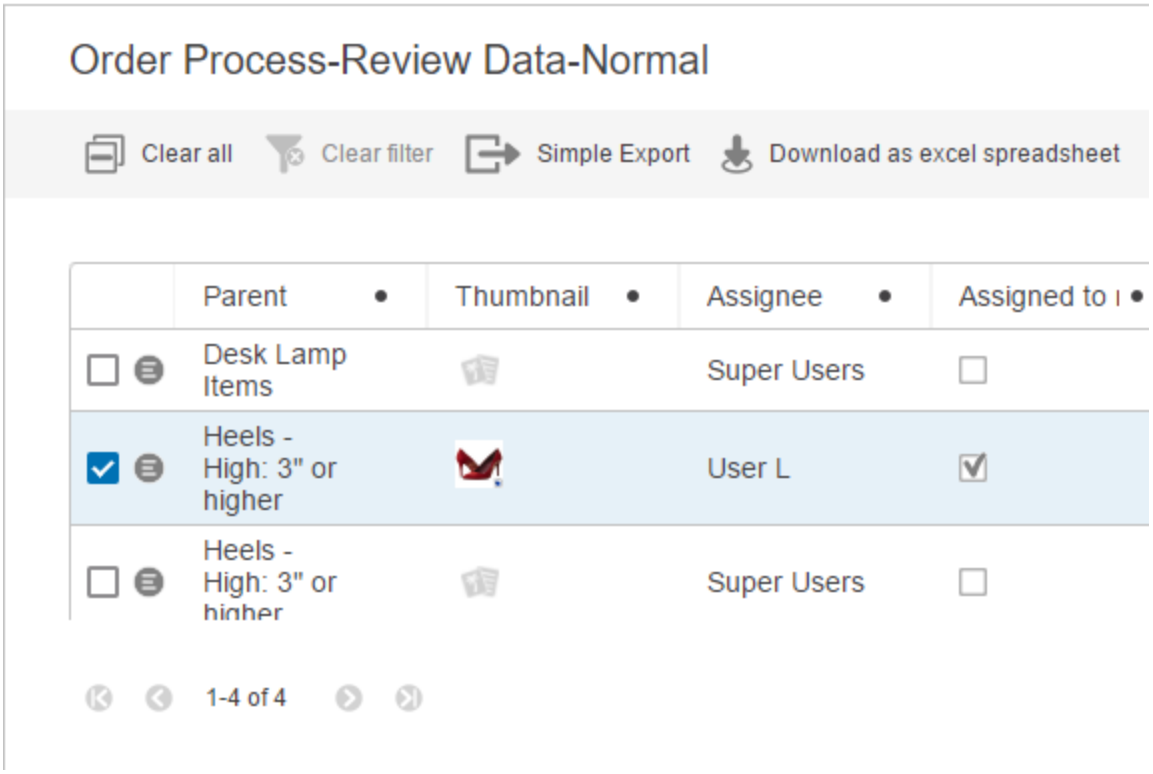
Simple Export

With simple export, it is easy to export any selection of products, entities, and classifications. Users may export one node type at a time. And supported export formats are Excel or CSV.

To begin using the simple export functionality, the action for this has to be applied to toolbars on relevant screens.

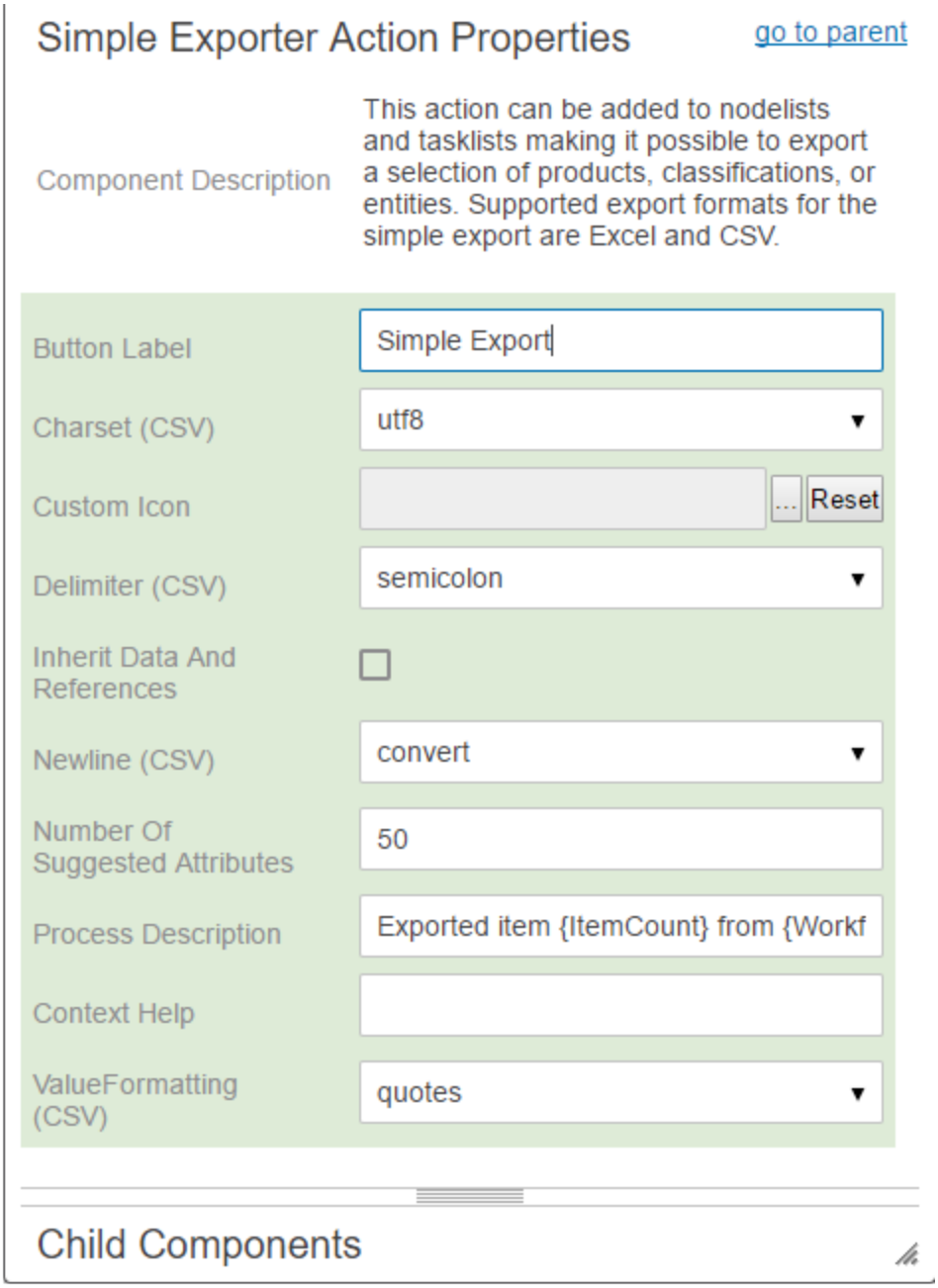
Adding a Simple Export Action to toolbar

In the designer an action called 'Simple Exporter Action' can now be added to a toolbar on a given screen of the type Node List or Task List:



Configuring the Simple Exporter Action

When configuring it is possible to change the default settings shown in the screenshot below:



Button Label: Entered text is displayed on the button. When no text is entered, the default 'Export action' is displayed. This is only valid if the 'Include Label' parameter on the parent Node List properties is checked.

Charset (CSV): Choose the character set that should be used from the dropdown list.

Custom Icon: An icon can be selected from those that exist in workbench. Adding a custom icon overrides the default icon displayed in the user interface. The recommended size of the icons in pixels is 20 (high) x 35 (wide). The recommended color of an icon is jewel-toned, deep colors that fade well for the disabled state. Click the **Reset** button to restore the default icon.

Delimiter (CSV): A default can be set from the dropdown list, but the end user can overwrite this setting when doing an actual export.

Inherited Data And References: If selected, the Export Manager extracts values for products that have inherited values from products at a higher level in the hierarchy. When not checked , the export with not include any inherited data or references on the exported object(s).

Newline (CSV): Select whether you want to keep carriage return (new line) or convert to a space instead. The latter is recommended. If you keep the carriage returns, you may experience issues with the data integrity.

Number Of Suggested Attributes: When mapping the attributes, this allows the number of suggestions can be changed.

Process Description: Template for process description text.

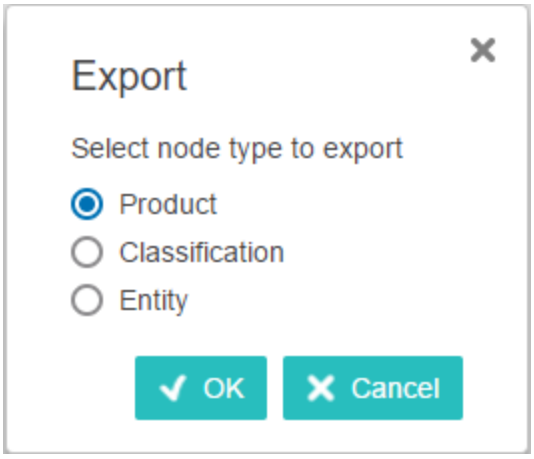
Context Help: Text displayed when hovering over the object.

Value Formatting (CSV): Select either to export all values in quotes or without quotes.

Using the Simple Export Action

When the portal user has not picked a selection of objects to be exported, the icon will not be enabled and will be grayed out.

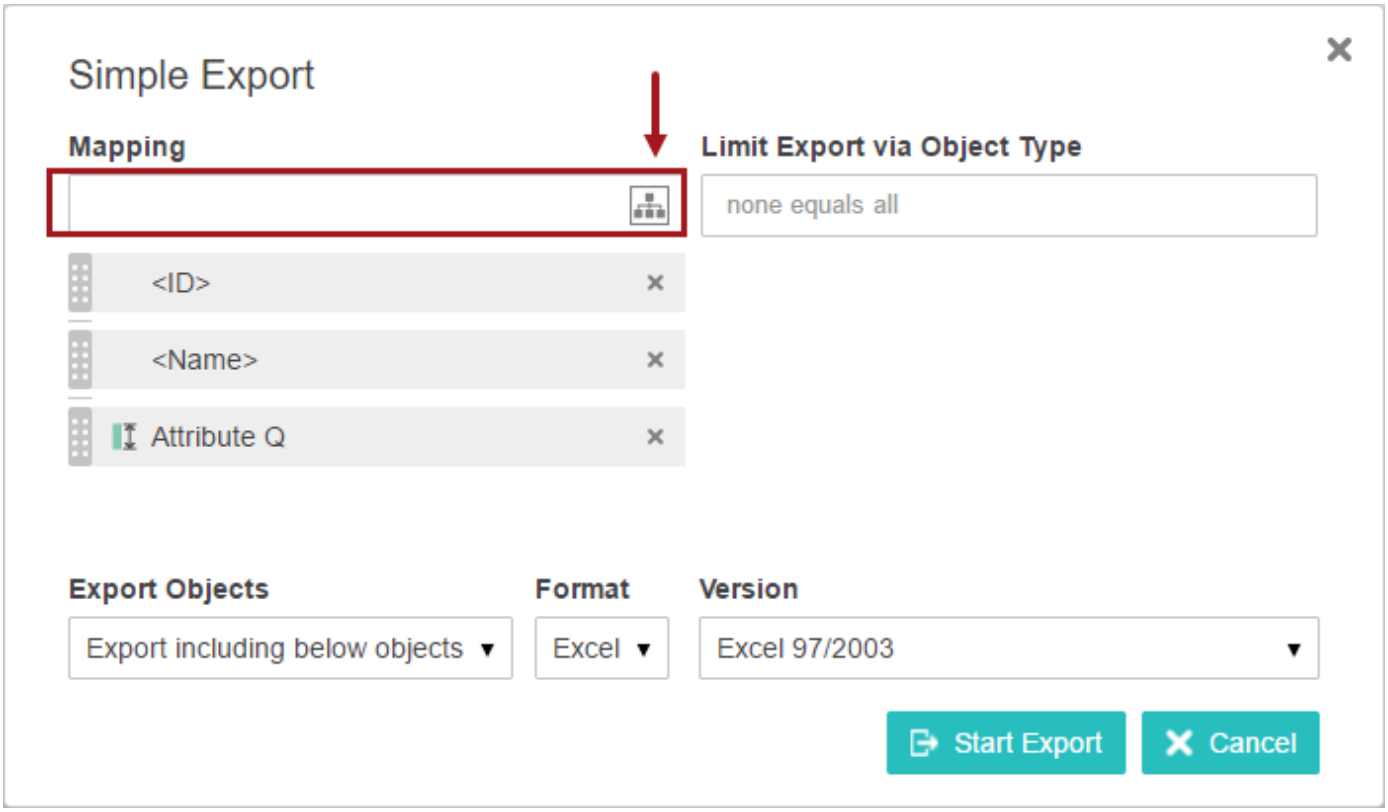
If the selection consists of more than one node type, the user is asked to decide which node type to export:



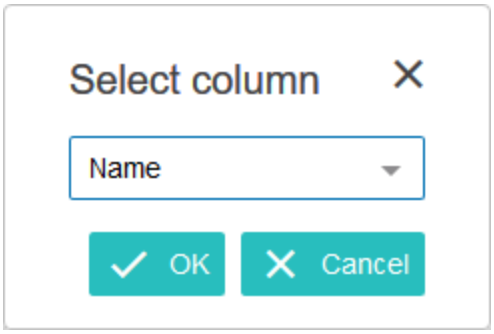
If the selection is limited to less than one hundred objects, this choice is only presented when objects of different node types are present in the selection.

Mapping

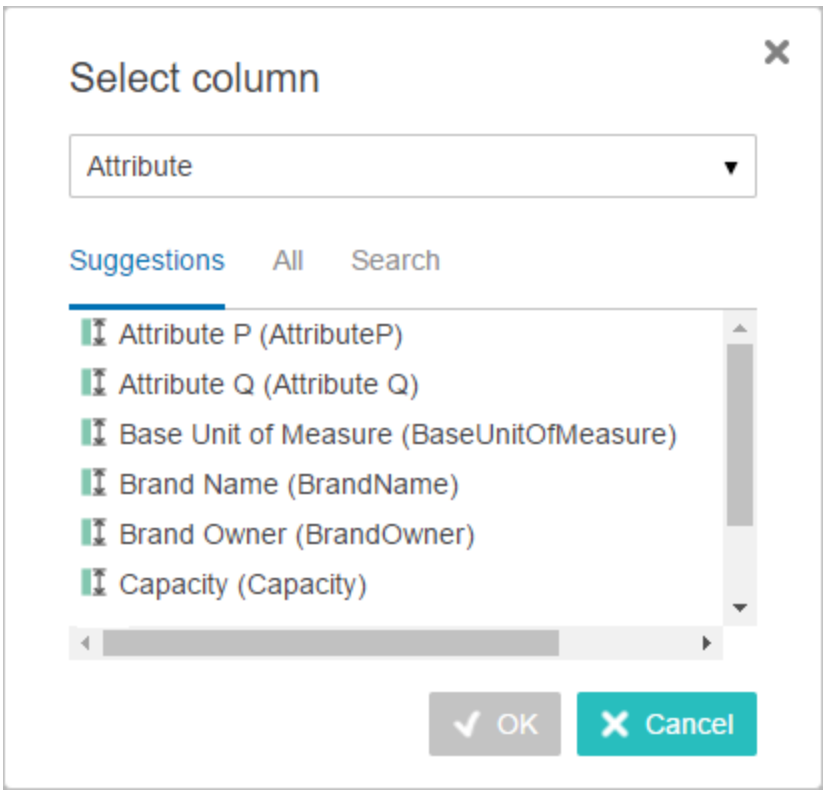
On the Simple Export mapping screen (shown below), the ID is pre-selected for inclusion.



1. For the Mapping parameter, use the typeahead field to search for attributes, keys, references, names, and object types to map to, or use the node picker button ( ) to display the **Select column** dialog.
2. On the Select column dialog, use the dropdown to select the object type for mapping, and display the necessary next steps, based on the selection. ID, Key, Name, Object Type, Attribute, and Reference Type can be mapped from this screen.



For example, when the attribute option is selected, three tabs are displayed to help you find the required attribute. Suggestions are given based on a sample of the objects in the beginning of the selection after navigating between the available tabs. Under the 'All' tab you can browse through all the attributes in the system. Finally, you can search for a given attribute under the 'Search' tab.



3. The added mapping fields can be reordered by holding the button and dragging the field up or down in the list.
4. For **Limit Export via Object Type**, the Exported Objects can be limited further by choosing specific object types to be exclusively exported. A list of all the object types in System Setup are listed. If nothing is added to this parameter, the export is not limited by object type.
5. For **Export Objects**, the user can choose which objects to export:
   - Export including below objects
   - Export only leaf objects
   - Export excluding below objects
6. For **Format**, select an export format: Excel or CSV. If CSV is selected, the user can choose which delimiter to use (if the default configured in the Simple Exporter Action designer is not applicable for the given job).
7. For **Version**, choose an Excel version to be used. It is recommended that the newest supportable version of Excel is used.
8. Click **Start Export**.

Simple Importer Widget

A Simple Importer Widget allows Web UI users of all skill levels to reliably initiate an import on demand from the Homepage screen. Administrators have many options to allow their users to easily and accurately create and/or update products, entities, and classifications; and their attribute values, reference types, and object type by dragging and dropping a CSV or Excel valid import file onto the respective Web UI Homepage widget.

More than one Simple Importer Widget can be added to the Homepage, allowing users easy access to many on-demand imports.

Who can create / update what

The user's ability to create or update objects is limited to only the attribute values, and reference types valid for the object type(s) they have permission to access. Unique keys can also be implemented to ensure a user has uniquely identified an object before being allowed to start an import. Additionally, the Simple Importer Widget does not allow a user to map to an attribute that is not valid for the specified object type. In other words, attributes may appear as mapping selections, but when selected, if they are not valid for the object type being handled by the import, then the user will not be able to start the import. This restriction makes this widget ideal when a user with limited STEP access needs to create or update data for only those objects they have permission to access.

Auto Map or Pre-configure

Administrators can configure the Simple Importer Widget to allow users to map data on the fly or to use preexisting import configurations as a starter template. If both options are desired, then a separate widget must be configured for each.

When an administrator chooses to allow users to map data on the fly, the user is assisted with the STEP Auto Map feature that compares data in the input file's header row with the IDs / names of the attributes in STEP. When a match is found, the column is automatically mapped to the corresponding object attributes. For more information about Auto Map, see the **Inbound Map Data - Auto Map** topic within the **Data Mapping** documentation.

When an administrator chooses to use pre-configured import configurations, they allow for more advanced on demand import functionality (i.e., business rules). This is useful for frequently-used imports where the parameters and options are always (or nearly always) the same. However, when a Simple Importer Widget is configured to use a saved import configuration, the Auto Map feature is disabled.

Topics in this guide

- Valid File Types
- Import File Considerations
- Using Simple Importer Widget
- Create Objects Using Simple Importer Widget
- Update Objects Using Simple Importer Widget
- Import Preview and Mapping
- Configuring Simple Importer
- Unique Keys and the Simple Importer Widget

Valid File Types

The valid file types are Excel Workbook (.xlsx), Excel 2003 to 2010, and CSV. It is recommended that users use the newest, supportable version of Excel.

For more information, see the **CSV Format** topic and/or the **Excel Format** topic within the **Data Exchange** documentation. Also, for more information on supported versions of Excel, see the current **Platform and Software Support** documentation in the **System Release and Patch Notes**.

Import File Considerations

If the import file contains:

- data that does not need to be imported into STEP, then the mapping field column needs to be blank, or unmapped, so that STEP will ignore the data.
- column header labels '<ID>' or '<Name>', then the preview will display with the ID and/or object Name as auto mapped. For more information, see the **Predefined Header Text** section of the **Inbound Map Data - Auto Map** topic within the **Inbound Map Data Options** documentation.
- column header labels that should be used as the new object ID, either because the import file does not contain an '<ID>' column or because the column labeled as '<ID>' is not ideal to be used as the STEP ID, then the user can manually map new object IDs to a preferred import file column. For more information, see the **Mapping ID** topic of the **Import Preview and Mapping** section of this guide.
- column header labels that match STEP attribute IDs / names, then the import preview will display with those columns auto mapped. For more information, see the **Mapping Attribute** topic of the **Import Preview and Mapping** section of this guide.
- column header labels that do not match the STEP attribute ID / name, but the data needs to be imported, then the user can manually map those columns. For more information, see the **Mapping Attribute** topic of the **Import Preview and Mapping** section of this guide.
- reference types, then the user will need to manually map the reference types to the import file column, because auto mapping of reference types is not supported. However, once manually mapped, the standard parent/child inheritance will automatically occur. For more information see the **Mapping Reference Type** topic of the **Import Preview and Mapping** section of this guide.
- data not valid for the attribute type (for example, a text value in a numeric attribute, or an invalid LOV value), then the user will be visually warned and can choose to edit the data prior to importing, or ignore. For more information, see the **Check Attribute Data Validity** topic of the **Import Preview and Mapping** section of this guide.
- column(s) with attribute values required for a unique key, then the 'Unique key - mapped by Attribute' feature can be used to properly create and/or update objects. For more information, see the **Using Unique Key Mapped by Attribute** topic within the **Unique Keys and the Simple Importer Widget** section of this guide.
- a column with each object's unique key, then the objects can be updated using the mapping to 'Unique key' feature. For more information, see the **Using Unique Key to Update Objects in Web UI** topic within the **Unique Keys and the Simple Importer Widget** section of this guide.

Smartsheets in Web UI

Smartsheets can be imported and exported directly from the Supplier Web UI. Before the required Web UI components can be configured, however, a Smartsheet template must have already been created, as well as data export and import configurations.

For more information, see the **Smartsheet Data and Template Configurations** and **Smartsheet Import Configurations** sections of the documentation.

Note: In order to configure Smartsheet components in the Supplier Web UI, the user must be a member of a Supplier Web UI user group.

Three components are available for handling Smartsheets in the Supplier Web UI:

- **Smartsheet Export Widget -** Used to download Smartsheet template files. For more information, see the **Smartsheet Export Widget** section of the **Web User Interfaces** documentation.
- **Smartsheet Export Action -** Used to export data from products in a workflow so that it can be edited in a Smartsheet. For more information, see the **Smartsheet Export Action** section of the **Web User Interfaces** documentation.
- **Smartsheet Import Action -** Used to import modified or newly created product data into STEP. For more information, see the **Smartsheet Import Action** section of the **Web User Interfaces** documentation.

Smartsheet Export Action

The Smartsheet Export Action is used alongside the Smartsheet Import Action to maintain product data. Specifically, this action allows users to download Smartsheet maintenance files from products in a workflow. Once the product data has been updated in the sheet, you can import the changes into STEP via the Smartsheet Import Action.

For more information, see the **Smartsheet Import Action** section of the **Web User Interfaces** documentation.

This action can be configured on a Task List screen, and is available for products moving through a workflow.

Prerequisites

It is expected that anyone configuring the Smartsheet Export Action is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section.

To access the Smartsheet Export action, the user must be a member of a supplier group. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuration

The only mandatory parameter for this action button is **Narrowed Export Configurations**, which determines which Smartsheet export configurations are available for selection.

Note: All messages, titles, or labels in this configuration are displayed from the translation i18n keys which resides on the server.

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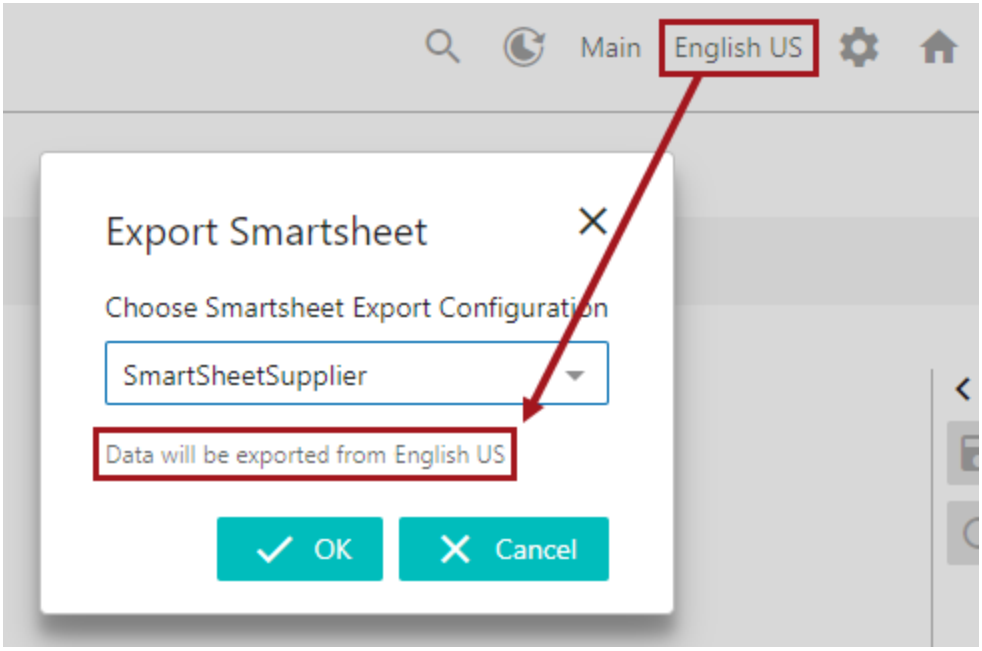
1. In the **Button label** parameter, enter a label for the action button.
2. In the **Cancel Download Button Text** parameter, enter the displayed text for the cancel button.
3. In the **Custom Icon** parameter, click the ellipsis button (...) and select an icon to use for the action button.
4. In the **Dialog Title** parameter, enter a title for the export dialog.
5. In the **Enable All In State Export** parameter, check the box to add a radio button to the export dialog, allowing for the export of all products in the current workflow state.

6. In the **Narrowed Export Configurations** parameter, click **Add...** and select which export configurations should be made available to the end user. This must be a data export configuration, not a template configuration.
7. In the **No Export Configuration Message** parameter, enter a message to display when no configurations can be found.
8. In the **No Selection Message** parameter, enter a message to display when no configuration has been selected.
9. In the **Process Description** parameter, enter a template for the process description.
10. In the **Selection Header** parameter, enter a header for the export dialog.
11. In the **Start Download Button Text** parameter, enter text that should be displayed for the download button.
12. In the **Context Help** parameter, enter text to display for the action button tooltip.
13. Select the **Use Current Context** parameter to export data from the context in which the user is currently working. When the export process is initiated, the 'Export Smartsheet' dialog will display a message that the data will be exported from the current context (e.g., 'Data will be exported from English US').



Note: This feature is not compatible with cross-context exports. If an export is attempted using a Smartsheet export configuration that has been configured to use a cross-context export, an error message will display, and the export will not occur.

Smartsheet Export Widget

The Smartsheet Export widget is used alongside the Smartsheet Import Action to initiate new products into STEP. Specifically, this widget allows users to download Smartsheet template files. Template files are empty Smartsheets that can be used to on-board new products. Once products have been added to the sheet, you can import them into STEP via the Smartsheet Import Action.

For more information, see the **Smartsheet Import Action** topic in the **Web User Interfaces** documentation.

To use this widget, a Smartsheet template must be specified in the export configuration.

Prerequisites

It is expected that anyone configuring the Smartsheet Export Widget is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section.

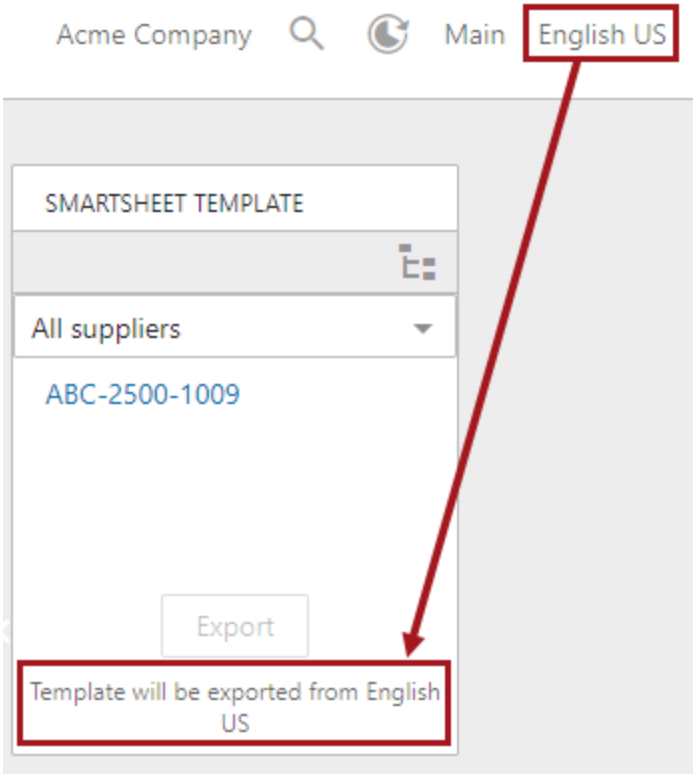
To access the Smartsheet Export widget, the user must be a member of a supplier group. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuration

A number of configuration options are available for this widget, including options to redirect the end-user to a Background Process screen, export a template with multiple categories, configure the node picker, etc. It also has two mandatory parameters: **Export Configuration** and **Valid Object Type**.

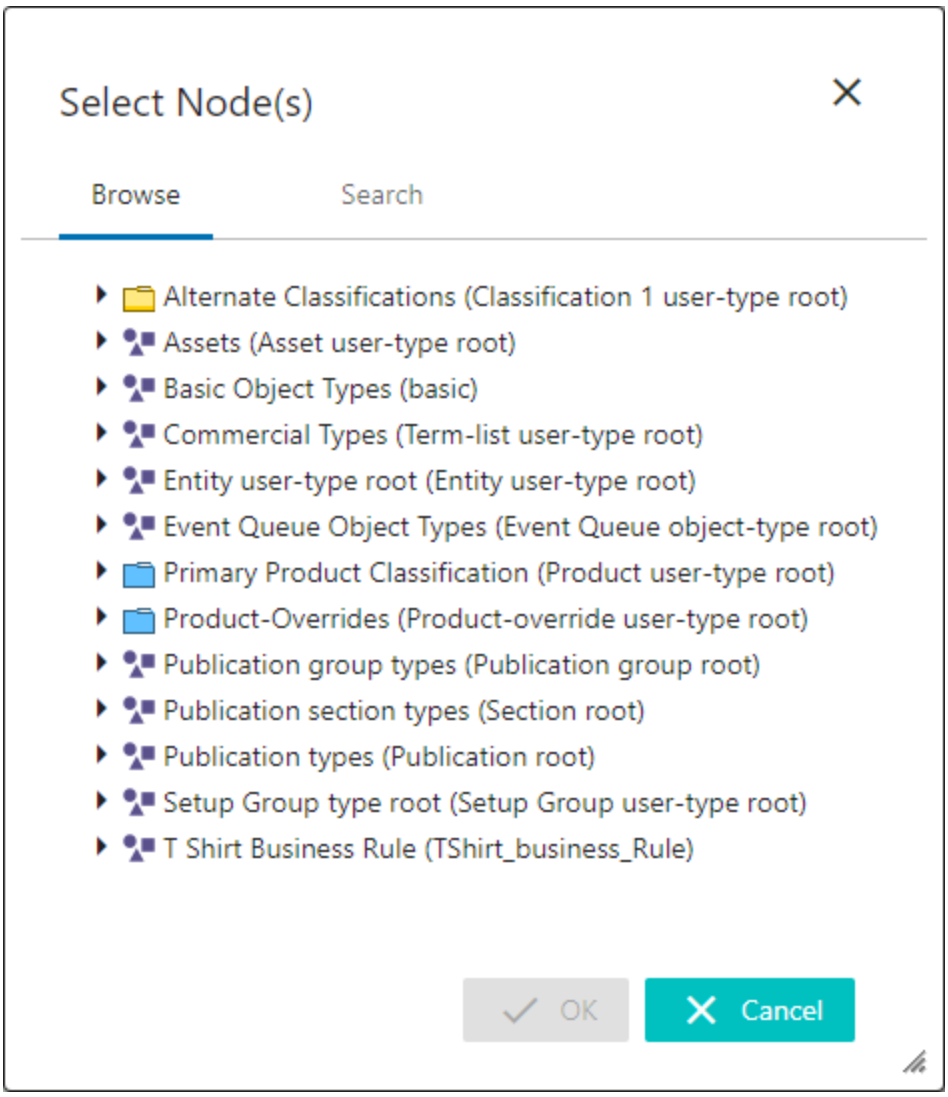
1. In the **Export Configuration** parameter, click the ellipsis button (...) to **Browse** or **Search** for the relevant export template configuration. This is a required property and must have a value.
2. In the **Multiple Categories** parameter, check the box to allow users to export template Smartsheets with multiple product categories. When browsing via the node selector, use CTRL+click to select multiple categories for export.
3. In the **Node Picker** parameter, configure the node selections available to the user.
4. In the **Redirect to Background Process Screen** parameter, check the box to direct the user to a background process screen upon export.
5. Select the **Use Current Context** parameter to export the Smartsheet template from the context in which the user is currently working. Dimension-dependent headers (e.g., language-specific attribute names) will display

in the sheet, and the widget itself will display a message that the template will be exported from the current context (e.g., 'Template will be exported from Germany German').



Note: This feature is not compatible with cross-context exports. If an export is attempted using a Smartsheet export configuration that has been configured to use a cross-context export, an error message will display, and the export will not occur.

6. In the **Valid Object Types** parameter, click **Add**, select the object types that should be valid for the template, then click **OK**. Users can only select objects that match one of these object types for the export. This is a required property and must have a value.

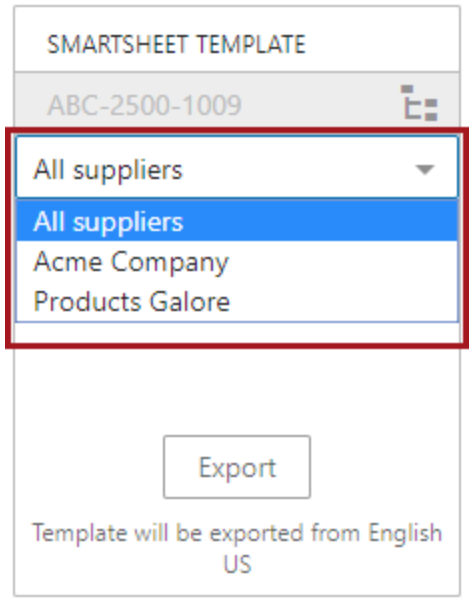


Exporting the Smartsheet Template

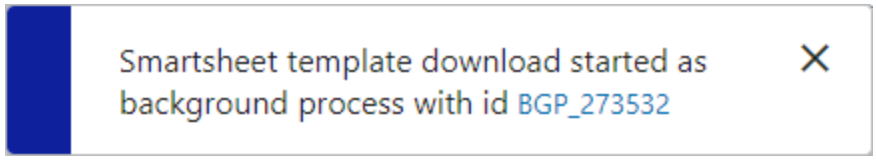
To export the template Smartsheet using the Smartsheet Export Widget, follow these steps.

Note: The process may be slightly different depending on factors such as the configuration of the widget and whether the user is in more than one Supplier user group.

1. Click on the Node Picker icon in the upper right corner of the widget, then browse to or search for the product that you would like to use for the template in the **Select Node(s)** dialog.
2. If you are a user who belongs to more than one supplier group, select the relevant supplier group from the dropdown list on the widget.



3. Click **Export** to export the sheet.
4. A 'download started' message displays that includes a hyperlink to the background process (BGP), e.g., BGP-273532.

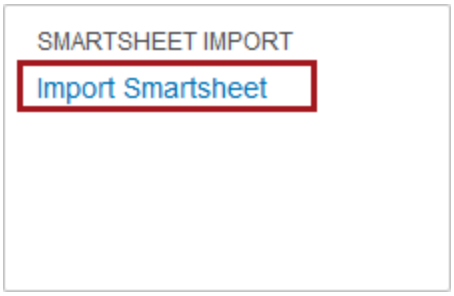


5. Click this link to monitor the BGP and retrieve the exported template Smartsheet.

Smartsheet Import Action

The Smartsheet Import Action is used alongside the Smartsheet Export widget and Smartsheet Export Action to import product data into STEP. Smartsheet Import Action shows a dialog and does not require the user to select a import configuration.

For more information, see the **Smartsheet Export Widget** and **Smartsheet Export Action** sections of the documentation.



This component can be configured on the Links Widget.

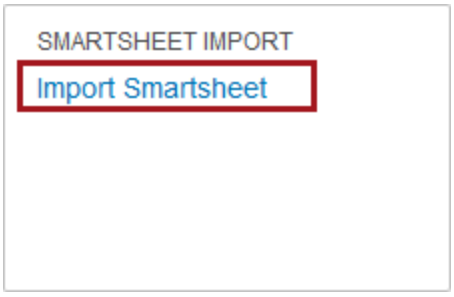
Prerequisites

It is expected that anyone configuring the Smartsheet Import Action is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section.

To access the Smartsheet Export widget, the user must be a member of a supplier group. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Configuration

As the bulk of the import logic is tied to the Smartsheet itself, there is only one truly relevant parameter, **Fallback Import Configuration**.



Note: All messages, titles, or labels in this configuration are displayed from the translation i18n keys which resides on the server.

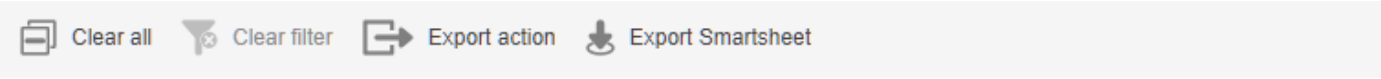
1. In the **Action Title** parameter, enter a name for the action.
2. In the **Cancel Import Button Text** parameter, enter the displayed text for the cancel button.
3. In the **Dialog Title** parameter, enter a title for the import dialog.
4. In the **Fallback Import Configuration** parameter, click the ellipsis button (...) and select an existing import configuration to apply to all Smartsheet imports where no import configuration was specified in the export configuration.
5. In the **Process Description** parameter, enter a template for the process description.
6. In the **Solution Header** parameter, enter a label for the select file prompt.
7. In the **Start Import Button Text** parameter, enter the text that should appear for the start import button.

Sorting Smartsheets in Web UI

Because Smartsheets are used to import data into STEP, they are very restrictive in the way that they can be maintained and formatted outside of STEP. These restrictions are done to maintain the integrity of the Smartsheet so that it can be imported back into STEP correctly. One of the restrictions of a Smartsheet is the inability to sort data from within the Smartsheet. Sorting by columns for a Smartsheet must be done from within the Web UI and exported by the column sorted on the on below compatible sortable headers.

This section explains how to sort and export a Smartsheet from the Web UI.

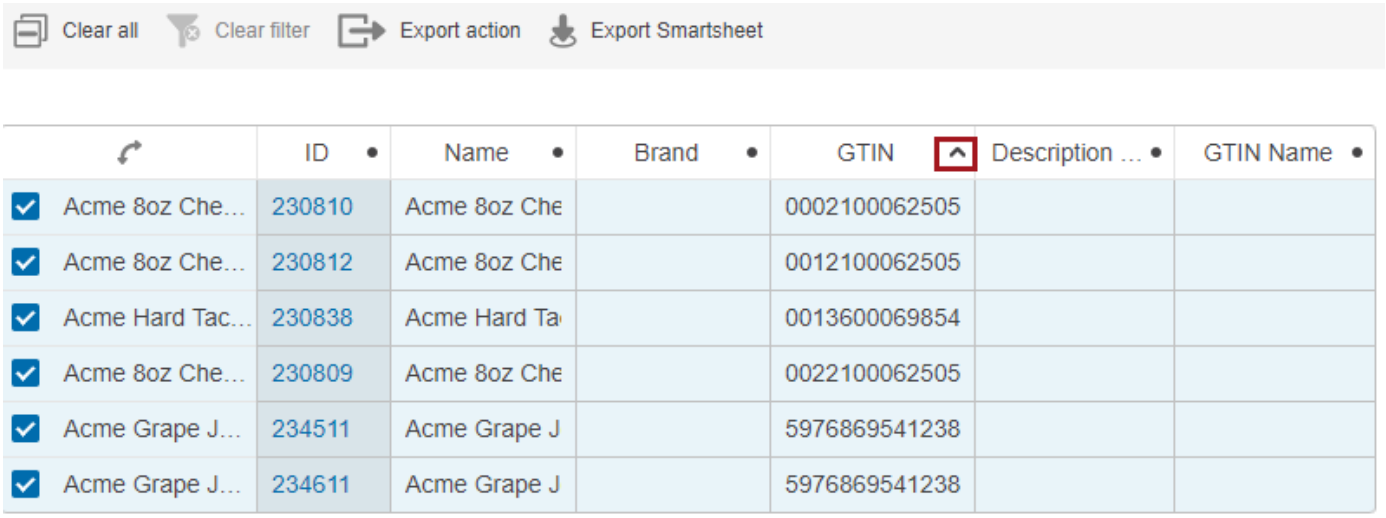
In the Web UI, select the objects that are to be exported. This is usually done from the Tree or in a Workflow from a tasklist.



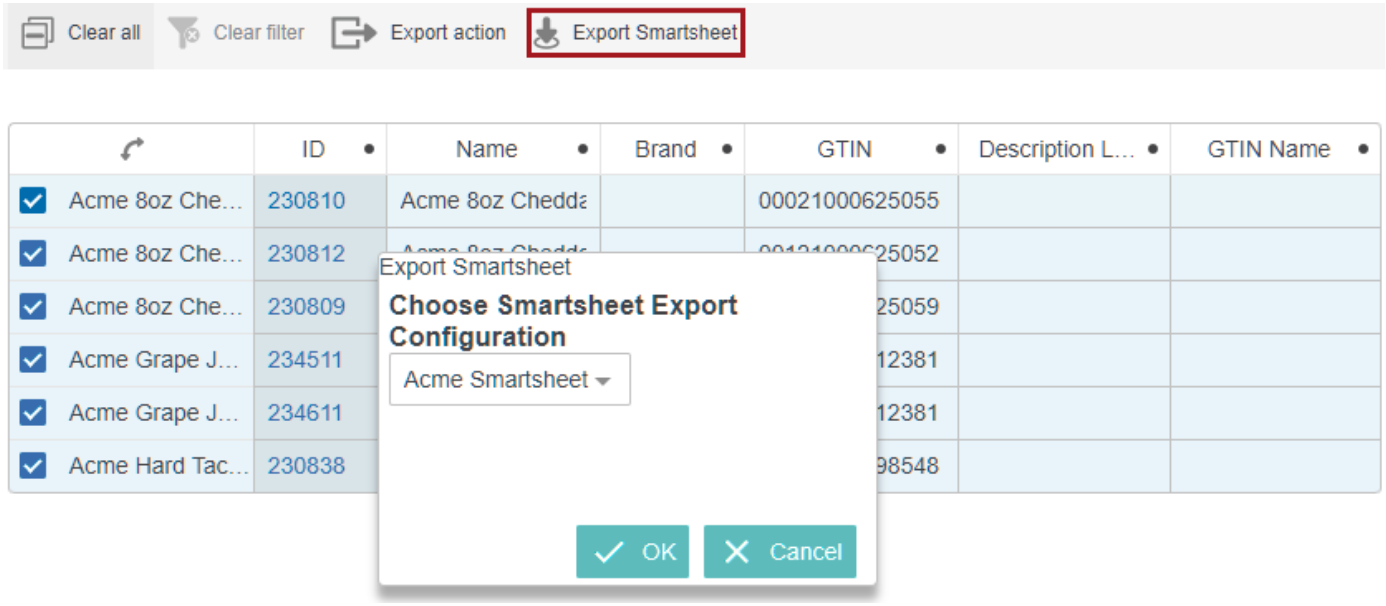
	ID	Name	Brand	GTIN	Description ...	GTIN Name
Acme 8oz Che...	230810	Acme 8oz Ched		000210006250		
Acme 8oz Che...	230812	Acme 8oz Ched		001210006250		
Acme 8oz Che...	230809	Acme 8oz Ched		002210006250		
Acme Grape J...	234511	Acme Grape Je		597686954123		
Acme Grape J...	234611	Acme Grape Je		597686954123		
Acme Hard Tac...	230838	Acme Hard Tac		001360006985		

Select the sorting function at the top of the column that you want the Smartsheet data sorted in as shown in the image below. Sorting can go in ascending or descending order. Smartsheets can be sorted on IDs, titles, attribute group headers, attributes, and references. The four reference types supported are Product-to-Product, Product-to-Asset, Product-to-Classification, and Product-to-Entity.

Note: If a multi-level Smartsheet is exported, only the top level nodes will reflect the sorting order, and the lower level nodes will be sorted by the object IDs.



Export the Smartsheet using the 'Export Smartsheet' action. A dialog box will appear for the user to select the Smartsheet configuration.



Once exported, the Smartsheet will be sorted by the column that was selected in the Web UI. Sorting a Smartsheet will not affect the user's ability to use the filter feature if 'Allow Auto-Filter in Workbook' was enabled in the Smartsheet configuration.

10	* <Name>	<ID>	Brand	GTIN	GTIN Name	Description Long
11	Acme 8oz Cheddar Che	230809		00221000625059		
12	Acme 8oz Cheddar Che	230810		00021000625055		
13	Acme 8oz Cheddar Che	230812		00121000625052		
14	Acme Hard Taco Shells	230838		00136000698548		
15	Acme Grape Jelly cs	234511		59768695412381		
16	Acme Grape Jelly pl	234611		59768695412381		

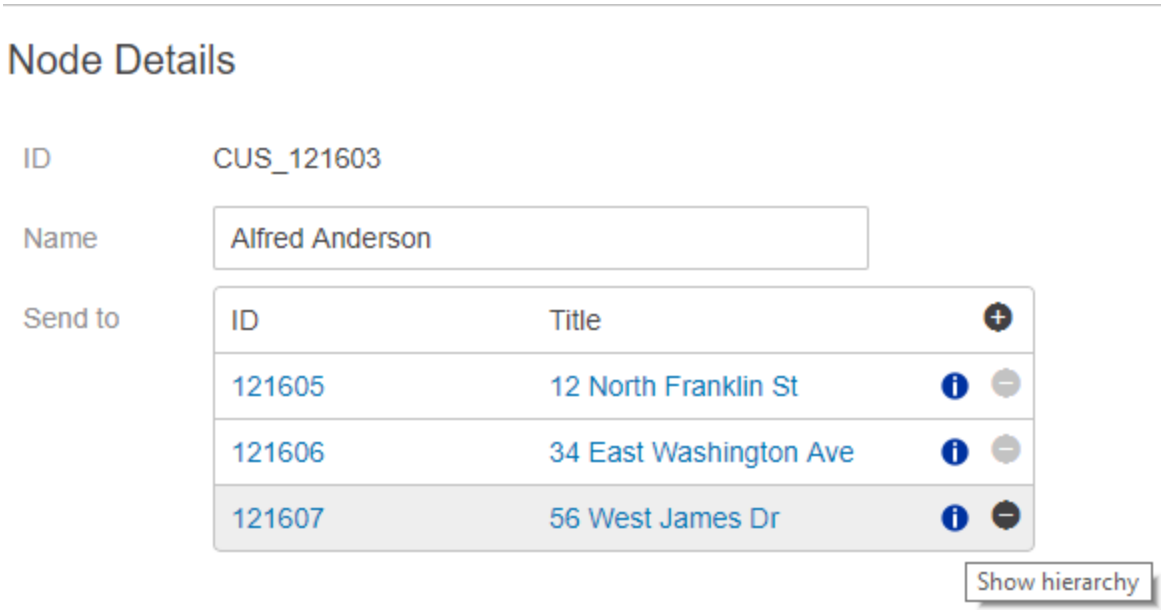
To restore legacy Smartsheet export functionality, add the following property to the sharedconfig.properties file:SmartsheetConverter.SmartSheetWebUISortOrder=false

For additional information about using a Smartsheet, see the **Using A Smartsheet** section of the **Excel Smartsheet Format**.

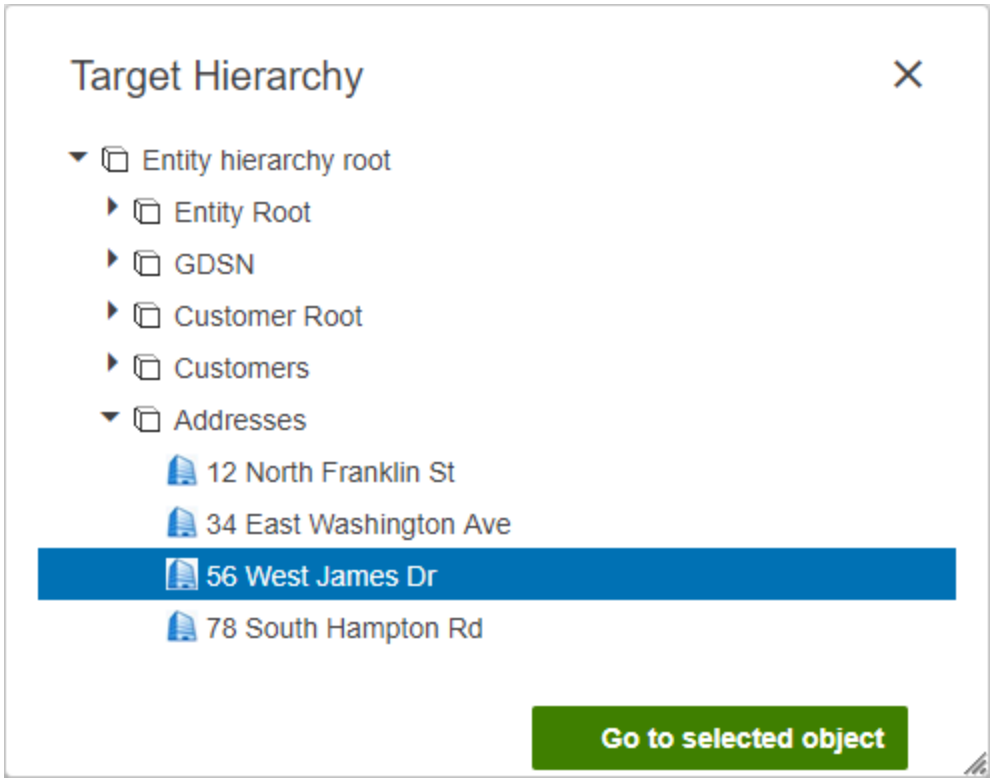
Target Hierarchy Column

Objects' references to hierarchies can be shown in tree views in the STEP Web UI, thereby allowing users to view the position in the hierarchy and expand their view upwards and downwards to get an overview of alternative relationships of the objects in question.

This functionality is especially useful when a user must, for example, model and view customer data in which an organization is, or can be, related to multiple organizational hierarchies. This feature is also deployed to display a product's position in various web hierarchies.



The screenshot above shows an example in which the Target Hierarchy Column component is used to display references in a dialog (see below) to a hierarchy:



Users may also go directly to the object selected in the dialog by first highlighting the object and clicking the 'Goto Selected Object' button.

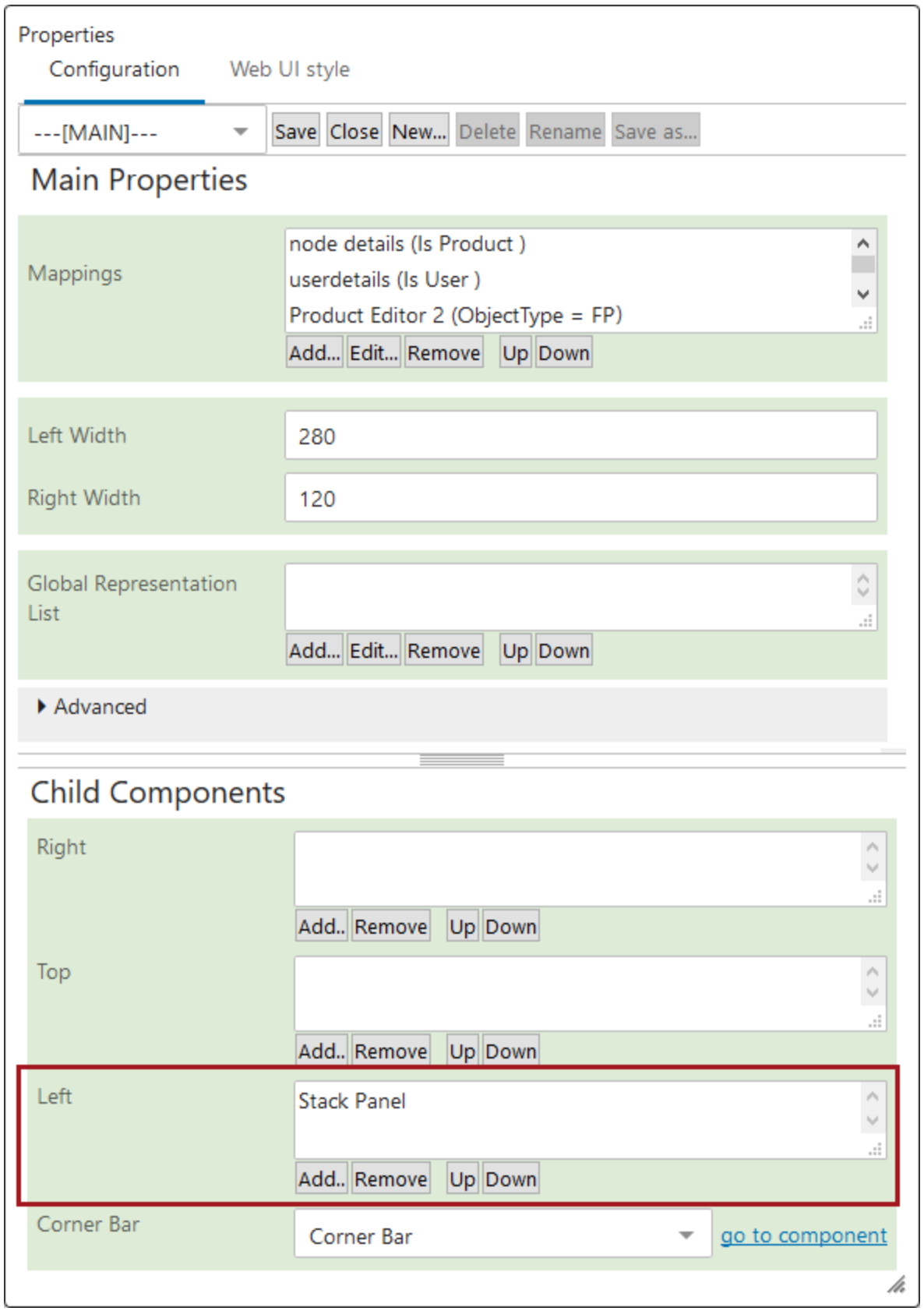
Tree Navigator Component

A **Tree Navigator Component** is a customizable component that provides a navigable hierarchical display of the objects in STEP and is similar to the Tree tab within the workbench. It can be configured to display these components:

- Classifications
- Entities
- Products
- Publications
- Collections
- Attribute Groups
- List of Values (LOVs)

A Tree Navigator Component is ultimately configured through the Main Properties > Stack Panel (under Child Components) > Stack Panel Items.

Note that all steps provided in this topic assume the Web UI designer is in design mode and on the **---[MAIN]---** screen prior to starting the configuration process. A full description of how to configure and access the Main Properties screen can be found in the **Main Properties** section of the **Web User Interfaces** / **Using a Web UI** documentation.

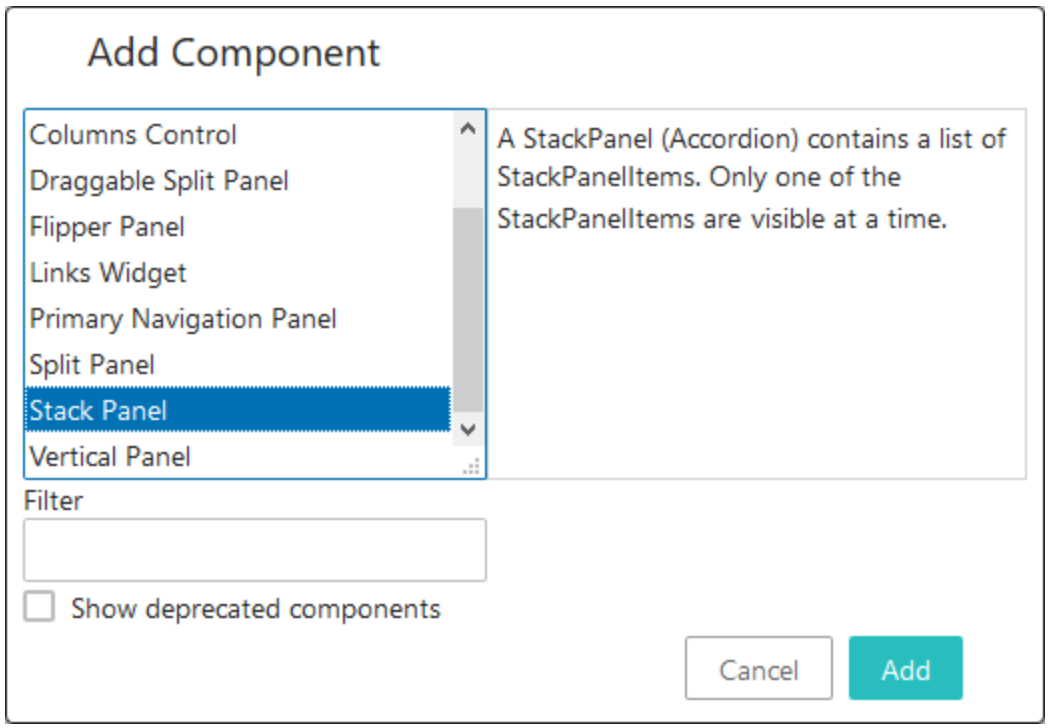

Properties
Configuration
Web UI style
---[MAIN]---
Save
Close
New...
Delete
Rename
Save as...
Main Properties
Mappings
node details (Is Product)
userdetails (Is User)
Product Editor 2 (ObjectType = FP)
Add...
Edit...
Remove
Up
Down
Left Width
280
Right Width
120
Global Representation List
Add...
Edit...
Remove
Up
Down
Advanced
Child Components
Right
Add..
Remove
Up
Down
Top
Add..
Remove
Up
Down
Left
Stack Panel
Add..
Remove
Up
Down
Corner Bar
Corner Bar
go to component

Configuring the Child Components

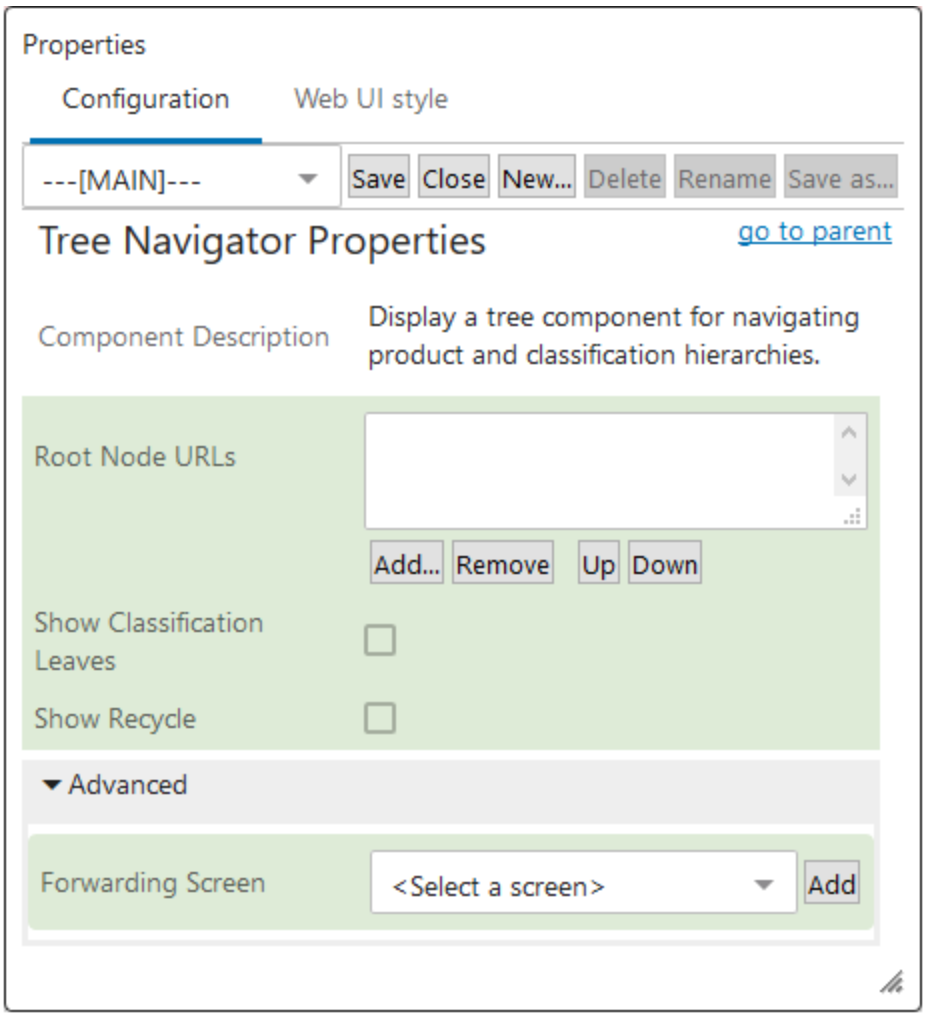
The appearance of the tree navigator varies dependent on the left or right option selected.

To add / configure a component to the Left or Right options, follow these steps:

1. Click **Add** under the applicable component value field in Main Properties.
2. Make a selection in the 'Add component' dialog. For example, a Vertical Panel arranges components vertically on the screen, and a Stack Panel also arranges components vertically on the screen but only one component is fully displayed at a time. (How to configure a Stack Panel will be described in the remaining steps.)



3. Select Stack Panel and click **Add**.
4. Double click the Stack Panel that was added to the value list.
5. In Stack Panel Properties > Child Components > Items, click **Add**.
6. Select Stack Panel Item and click **Add**.
7. Now, double click the Stack Panel Item that was just added to the value field. (If there are multiple Stack Panel Items, new ones will be listed at the bottom and can be re-ordered using the Up and Down buttons.)
8. In Stack Panel Item Properties > Child Components > Content, select **Tree Navigator** from the dropdown.
9. Click **go to component** to the right of Tree Navigator.



10. In Tree Navigator Properties:
    - **Root Node URLs**: Click **Add...** to select specific nodes to display. If no selection is made, all nodes will be available.
    - **Show Classification Leaves**: Check the box if leaf objects, defined as any object whose object type does now allow child objects, will display in the Tree Navigator for classification hierarchies.
    - **Show Recycle**: Disabled by default; enable to display the Recycle Bin along with the root nodes. For information about the Recycle Bin, see the **Recycle Bin for Tree** topic in the **Getting Started / User Guide** documentation.
    - **Advanced > Forwarding Screen**: Forwards users to a specific screen when they click on anything that falls under the root nodes designated for the Root Node URLs parameter. If no screen ID selection is made, the screen selection will be handled by the conditions set up in the Main Properties > Mappings parameter.
11. Click **Save** to save the settings and **Close** to exit design mode. If preferred, you can return to Main Properties to evaluate other parameters (described below).

These steps are specific to the Tree Navigator component. To configure a different child component, follow Steps 1 through 7 and make a different selection in Step 8.

Configuring the Main Properties

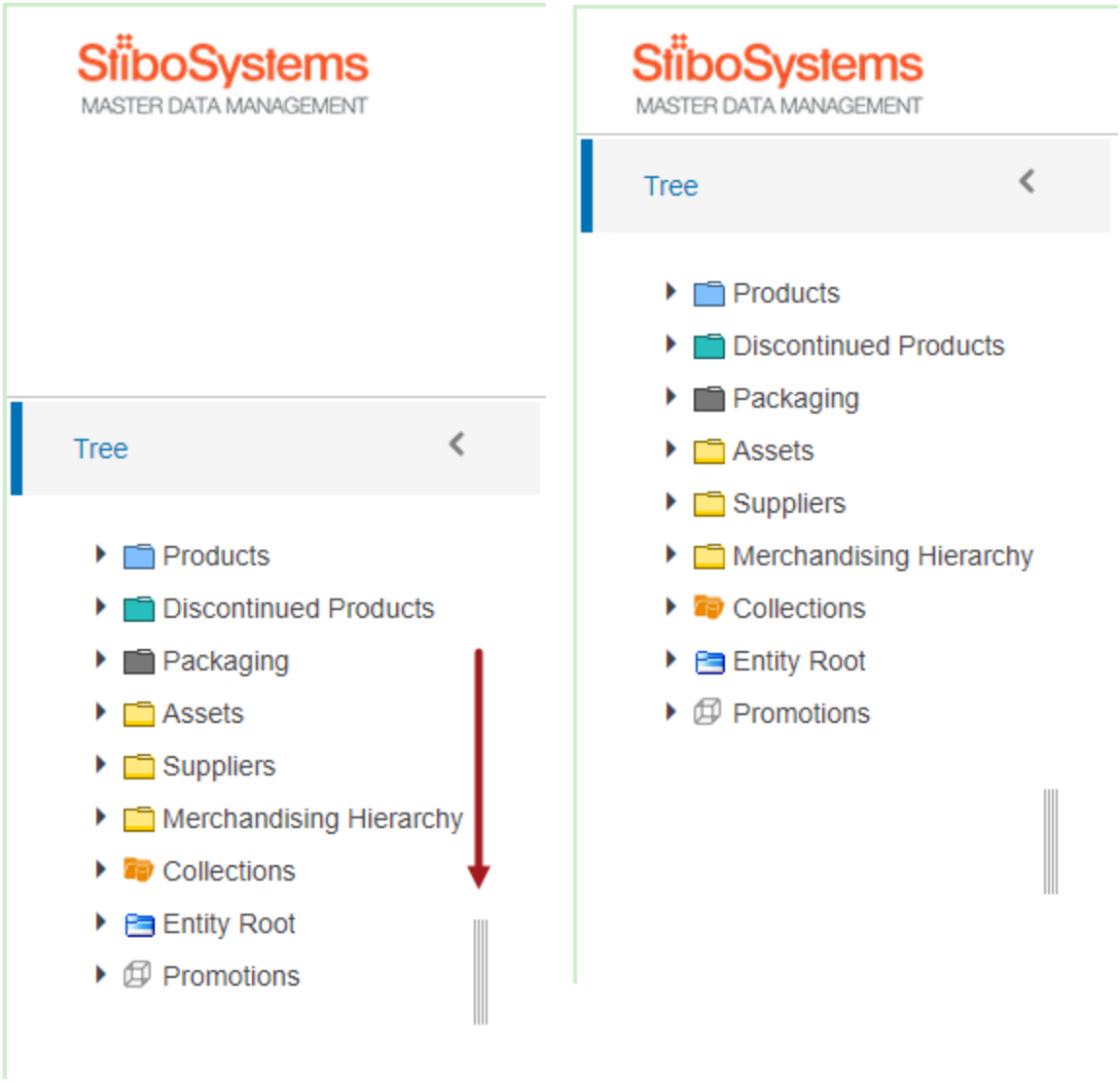
The information that follows is applicable to the components set up to display as Child Components in Main Properties.

Height / Width Settings

The default pixel values can be adjusted as needed.

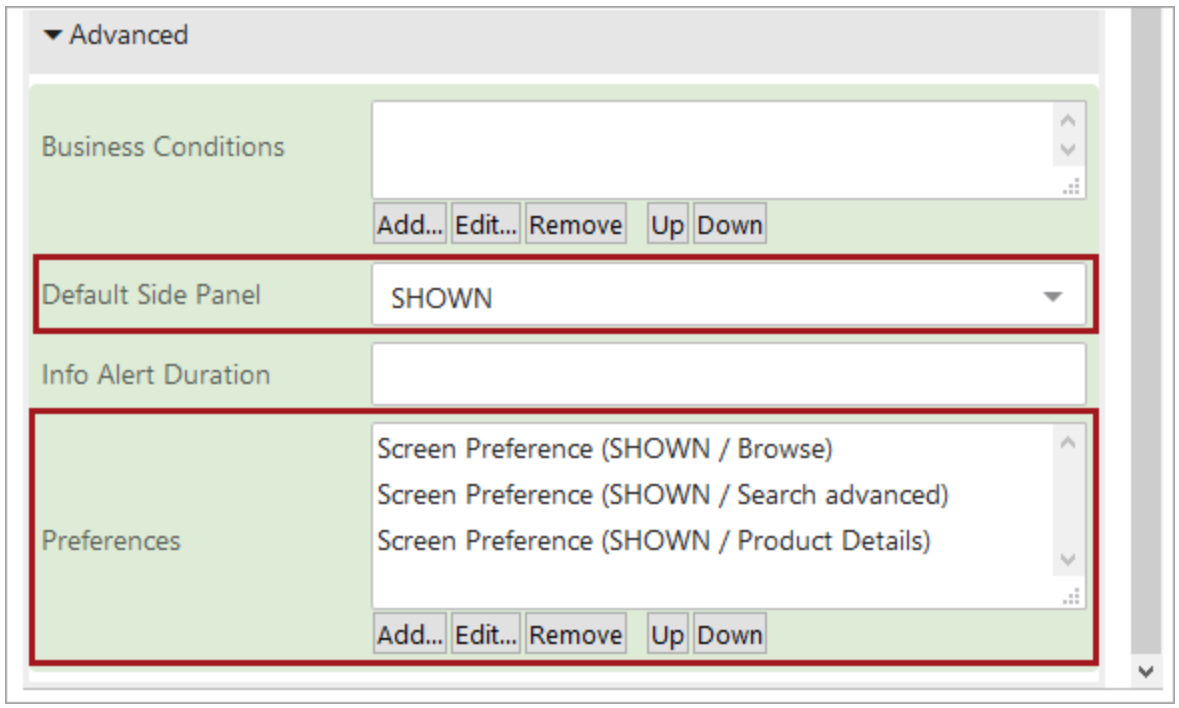
- **Bottom Height**: Determines the height of a component added to the Child Component > Bottom parameter. The parameter is placed on the bottom of the screen and expands up. The greater the number of pixels, the taller the component.
- **Left Width**: Determines the width of the component added to the Child Component > Left parameter. The parameter is placed on the left side of the screen and expands out to the right.

- **Right Width**: Determines the width of the component added to the Child Component > Right parameter. The parameter is placed on the right side of the screen and expands out to the left.
- **Top Height**: Determines how far down from the top of the screen the left and right child components are placed; the higher the number, the more space there is from the top of the screen to the top of the components. An example follows.

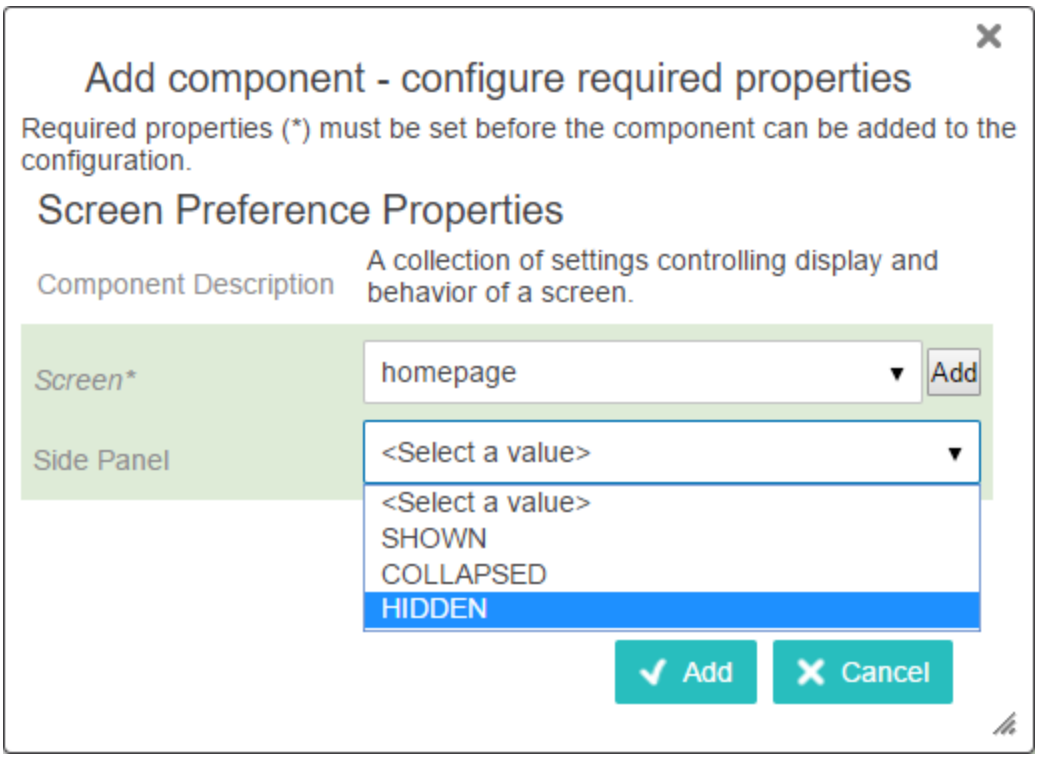


Advanced

Click on **Advanced** to display additional parameters. A description of each parameter follows. Configure each to fit your business needs.

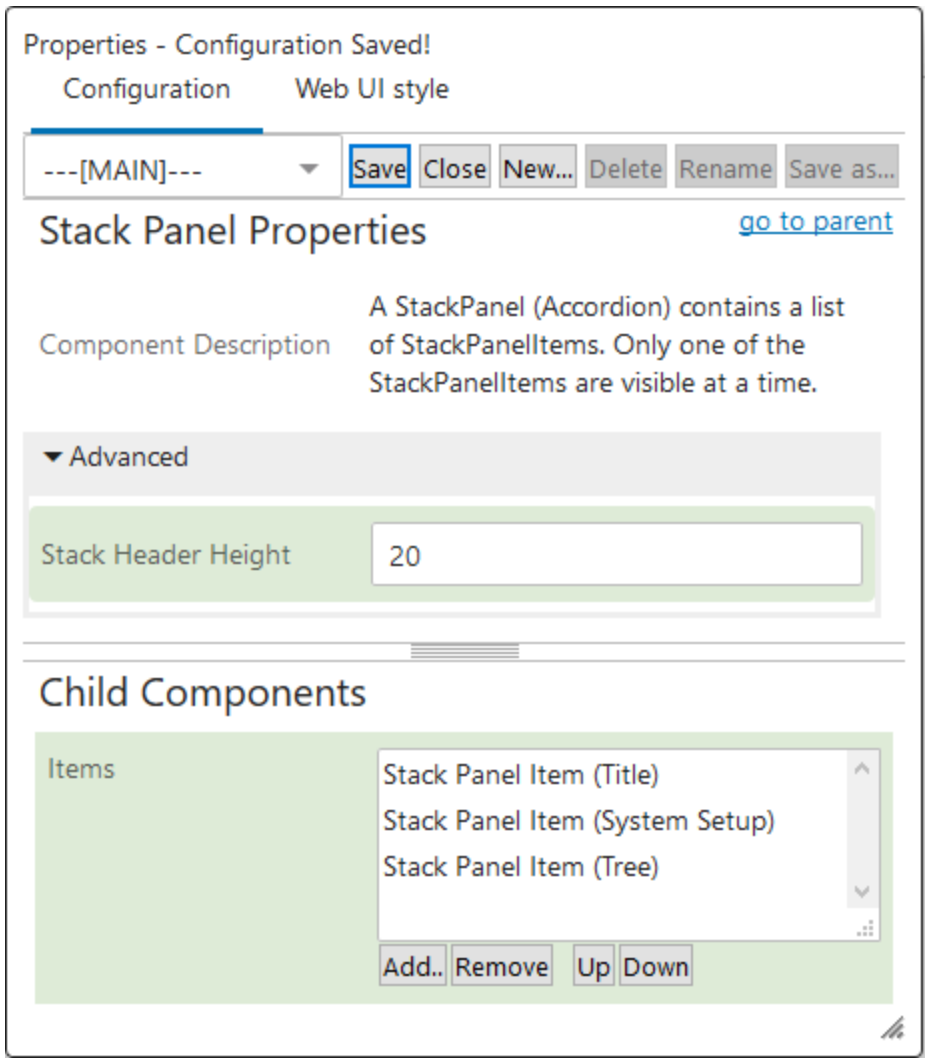


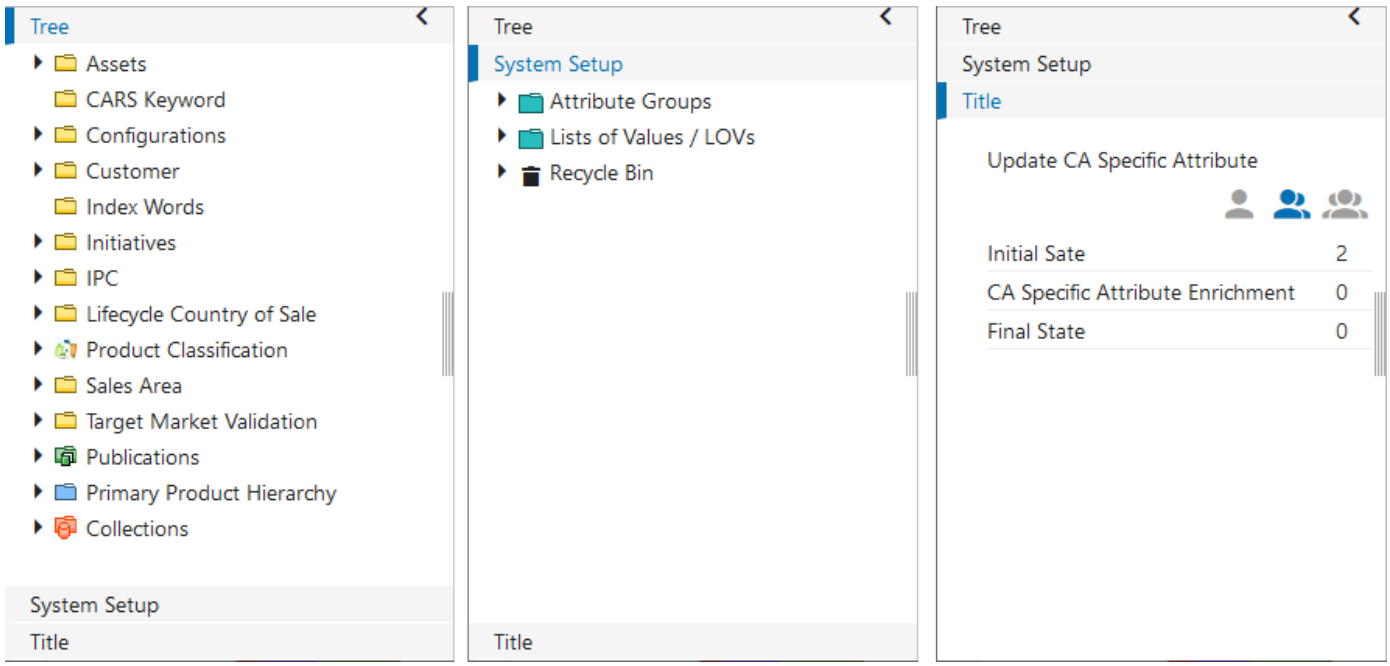
- **Default Side Panel** - This setting determines the behavior of the Left child component on all the pages within Web UI. Make a selection using the dropdown. An explanation of each option follows. *This is an all or nothing setting but may be overwritten for certain screens based on the Advanced > Preferences configuration.*
  - **HIDDEN**: Default setting; the component will not automatically display on the screen.
  - **SHOWN**: The component remains static on the left side of the screen as users navigate through Web UI.
  - **COLLAPSED**: The component does not automatically display on the screen but is accessible by clicking on a tab (›) shown on the left side of the screen.
- **Preferences**: Use the Preferences parameter to overwrite the Default Side Panel settings for specific screens. As an example, a user may decide that it is best to display the Left child component on some screens (e.g., Homepage) although the Default Side Panel parameter is set to HIDDEN.
  1. Click **Add...** and make Screen and Side Panel selections on Screen Preference Properties.
  2. Repeat to add additional screen preferences.



Stack Panel Example: Displaying a Tree Navigator Component

This is an example of a configured Main Properties > Child Components > Left configuration. A Stack Panel configured to display three Stack Panel Items: a Tree Navigator (user-titled as Tree), a Tree Navigator (user-titled as System Setup), and a Status Selector Sidebar Widget (user-titled as Status Selector).


Properties - Configuration Saved!
Configuration
Web UI style
---[MAIN]---
Save
Close
New...
Delete
Rename
Save as...
Stack Panel Properties
go to parent
Component Description
A StackPanel (Accordion) contains a list of StackPanelItems. Only one of the StackPanelItems are visible at a time.
Advanced
Stack Header Height
20
Child Components
Items
Stack Panel Item (Title)
Stack Panel Item (System Setup)
Stack Panel Item (Tree)
Add..
Remove
Up
Down



Browsing for Objects

The blue tree shows a folder structure containing the products users are privileged to view; the yellow tree shows a folder structure containing the assets users are privileged to view; etc. To expand or collapse any of the levels in a tree display, click the triangle [>] to the left of the node icons.

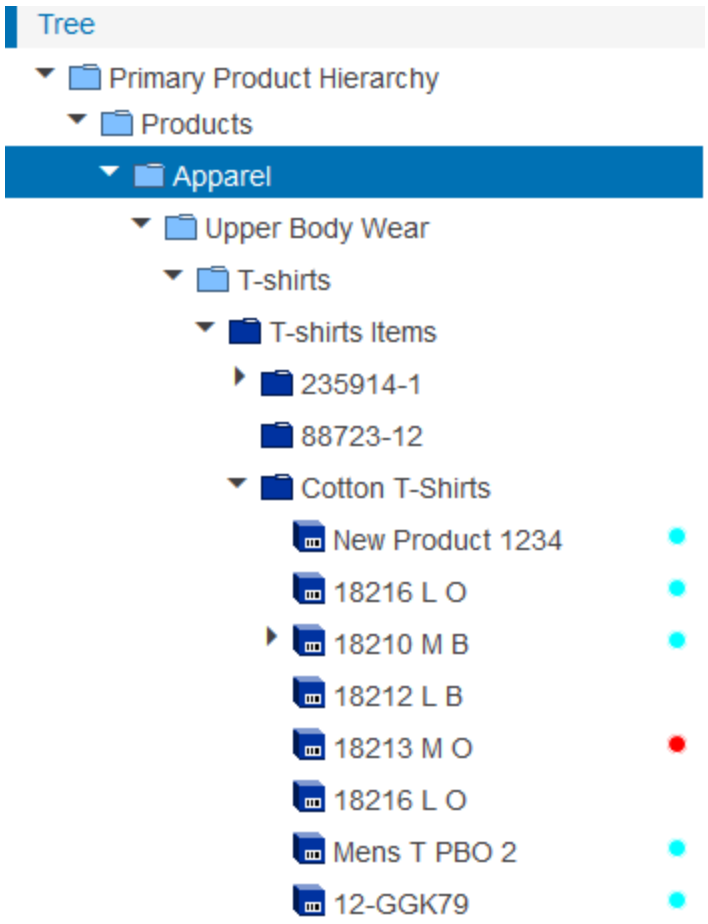
To determine whether a node is expandable within a tree display, STEP must perform an automated counting action. In taking this action, STEP checks to determine if there is at least one child object contained inside each node. If yes, the node gets a [>], which indicates at least one child object exists below the node clicked. If no, the node gets no symbol, indicating there are no child objects inside the node.

The full count of child objects inside a node is only determined following an attempt to expand the applicable node. If more child objects are contained inside than is allowed by the configuration, a [-] will display beside the node when the node is clicked to expand, along with a dialog explaining why the node is unexpandable. If the number of child objects does not surpass the configured maximum (if set), the child objects will display normally when the node is expanded.

To display details for an object or a node, click the object or node in the tree display. The screen configured for the selected object type will then display on the right side of the screen (outside of the Tree area). The screen displayed depends on a Web UIs configuration set up by an admin user.

Configuration of Alternate Node Appearance

The Tree Navigator may be configured to display with colored dots that appear to the right of nodes. The screenshot below shows an example of how a Tree Navigator looks with the 'Alternate Node Appearance' component added and configured.

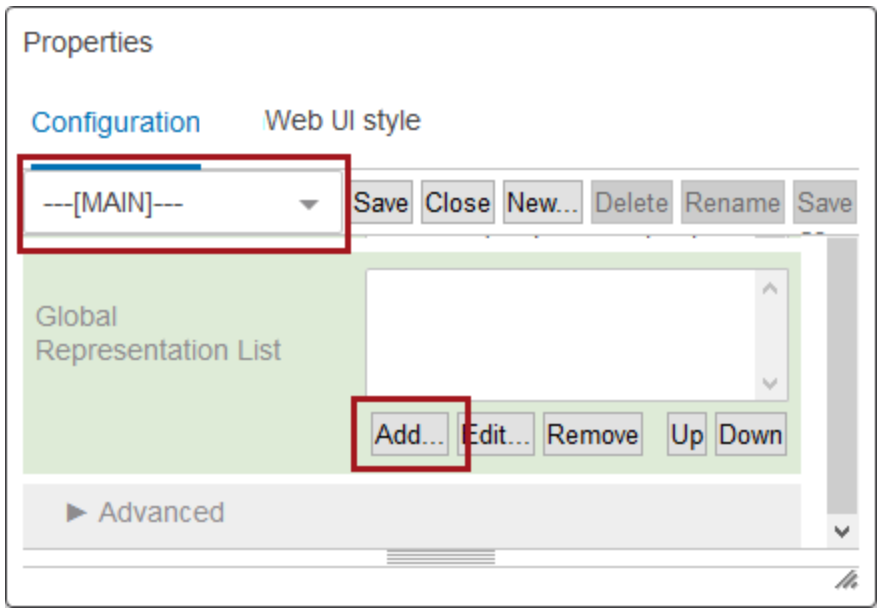


These colored dots can be configured for one attribute on a STEP system, but with multiple trigger values. For instance, if the configured attribute is 'Color,' users may configure a blue-colored dot to appear for all 'Sales Item' object types that have the value 'Blue' added to the 'Color' attribute. 'Sales Item' objects with the value 'Red' for the 'Color' attribute can have a red-colored dot display, and so on. But if the 'Color' attribute has already been configured, then no colored dots can be configured for values on, for instance, the attribute 'Height,' as only one attribute can be configured per STEP system.

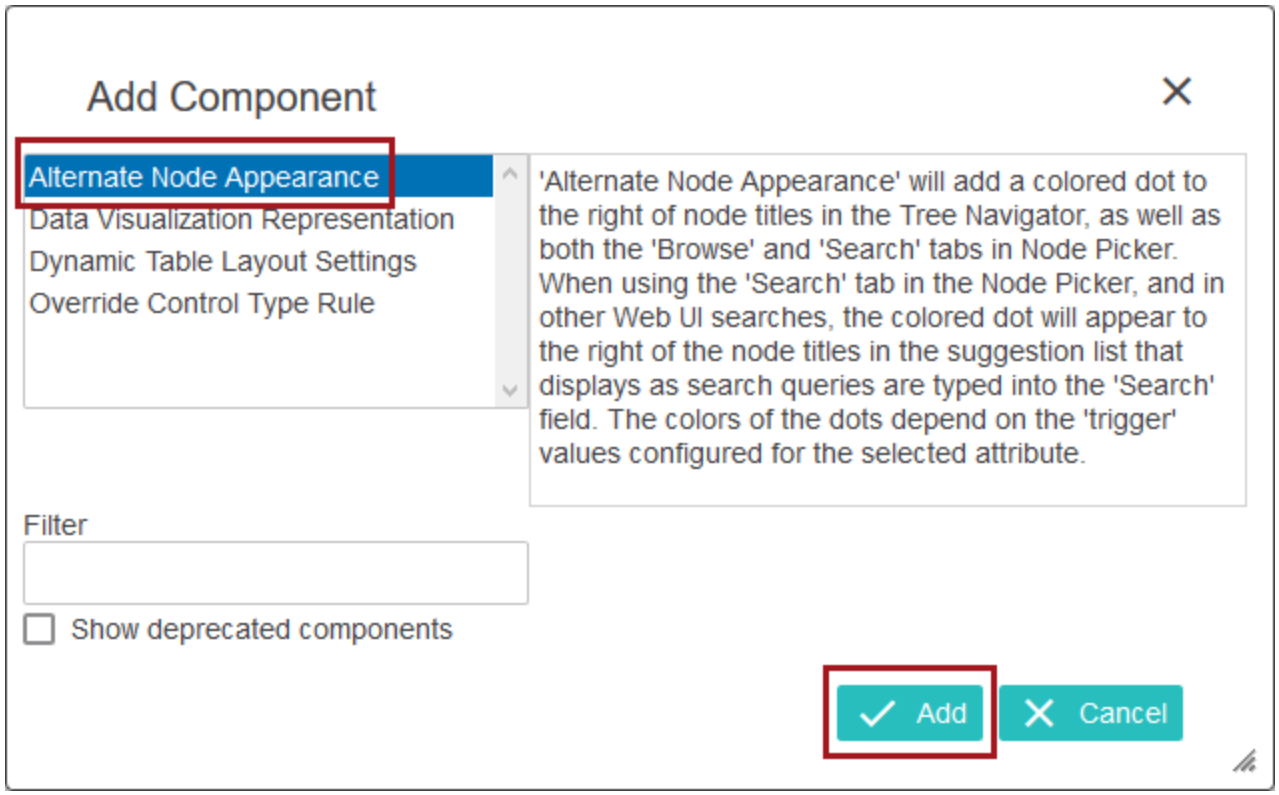
In addition to the Tree Navigator, the colored dots will appear beside the relevant objects in the 'Search' and 'Browse' tabs in Node Picker components, as well as in Global Header Search typeahead search results.

To set up colored dots to display on the Tree Navigator, take the following steps:

1. In the designer, go to [MAIN], scroll down to 'Global Representation List', and click 'Add.' It is important to note that only one instance of the 'Alternate Node Appearance' component can be configured in a STEP system.



2. In the 'Add Component' dialog, select 'Alternate Node Appearance' and click 'Add.'



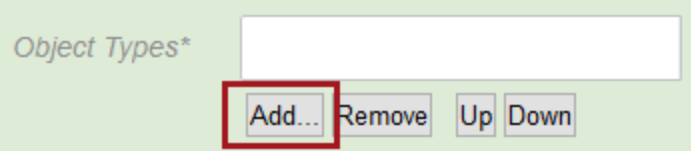
3. In the 'Alternate Node Appearance Properties' window there are three parameters that must be configured to enable this component: 'Object Types,' 'Attribute,' and 'Trigger Values.'

- **Object Types:** In this parameter, users will select which object type nodes in the Tree Navigator will be affected by the configured trigger values.
- **Attribute:** In this parameter, users will select which attribute the trigger attribute values will be configured for.
- **Trigger Values:** In this parameter, users may configure the attribute values that will trigger display of a colored dot, along with the specific color of the dot and the hover-over text that will display when users position their cursors over the dot.

Note: Use caution when configuring the 'Alternate Node Appearance' component with calculated attributes that process slowly. If a slow calculated attribute is selected for this component, users may experience performance issues as the system will evaluate each configured object type with that calculated attribute to determine if the colored dot should display, which can tax system resources.

Object Types parameter

In the 'Object Types' parameter, click 'Add.'



In the Node Selector that displays, using either the 'Browse' or 'Search' tabs, find and select the object type that will display in the Tree Navigator with a colored dot. Multiple object types can be added.

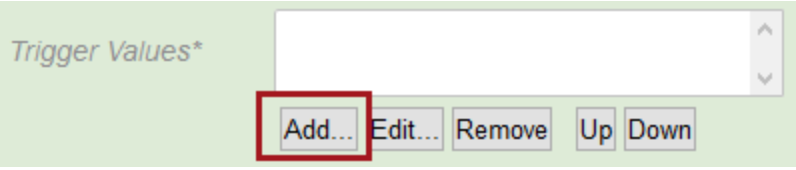
Attribute parameter

In the 'Attribute' parameter, click the ellipsis button (...) to the right of the field.

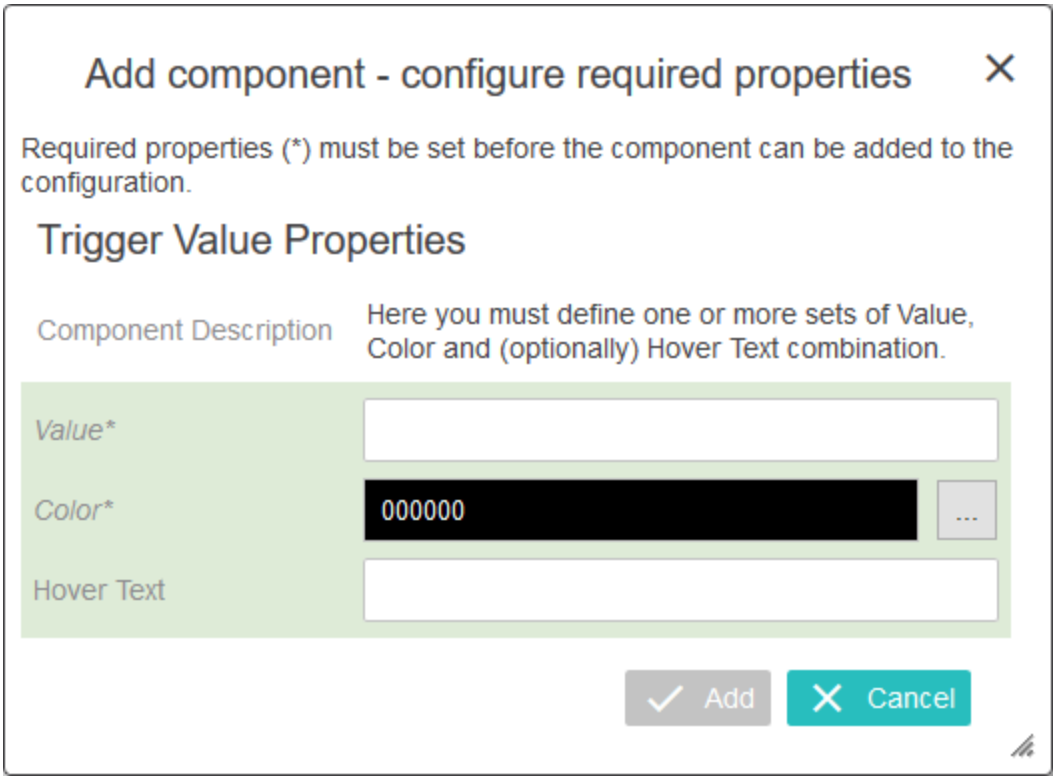
In the Node Selector that displays, using either the 'Browse' or 'Search' tabs, find and select the attribute the trigger values will be configured for.

Trigger Values parameter

In the 'Trigger Values' parameter, click 'Add.'

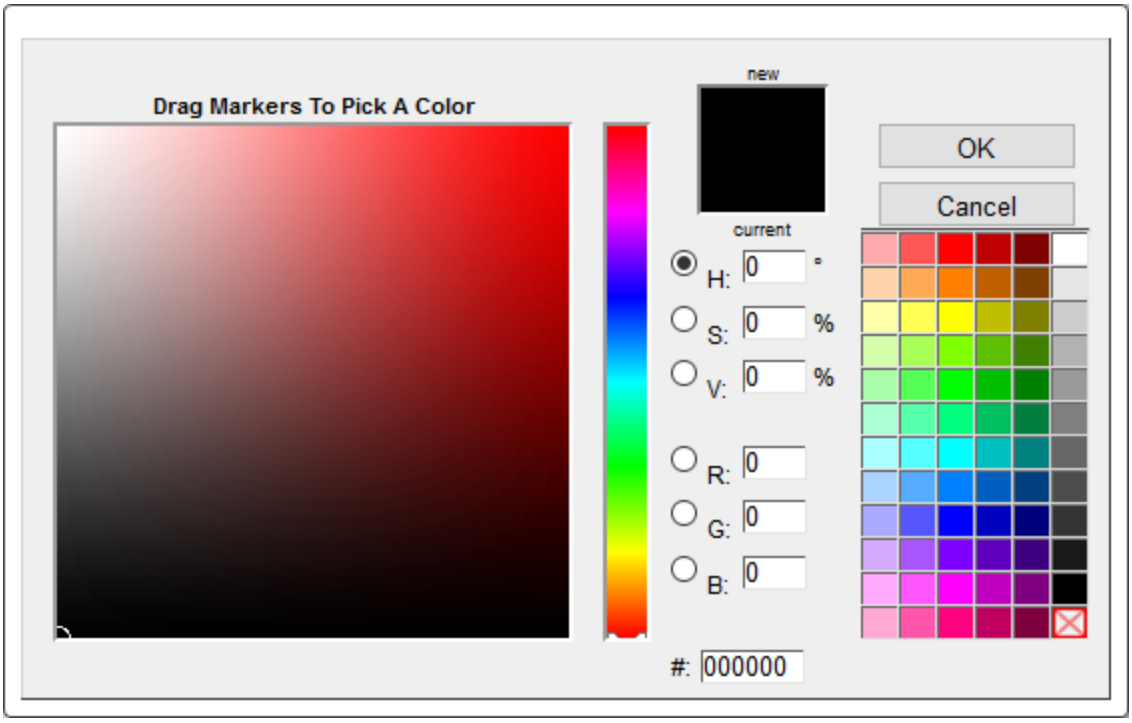


A dialog called 'Trigger Value Properties' displays.

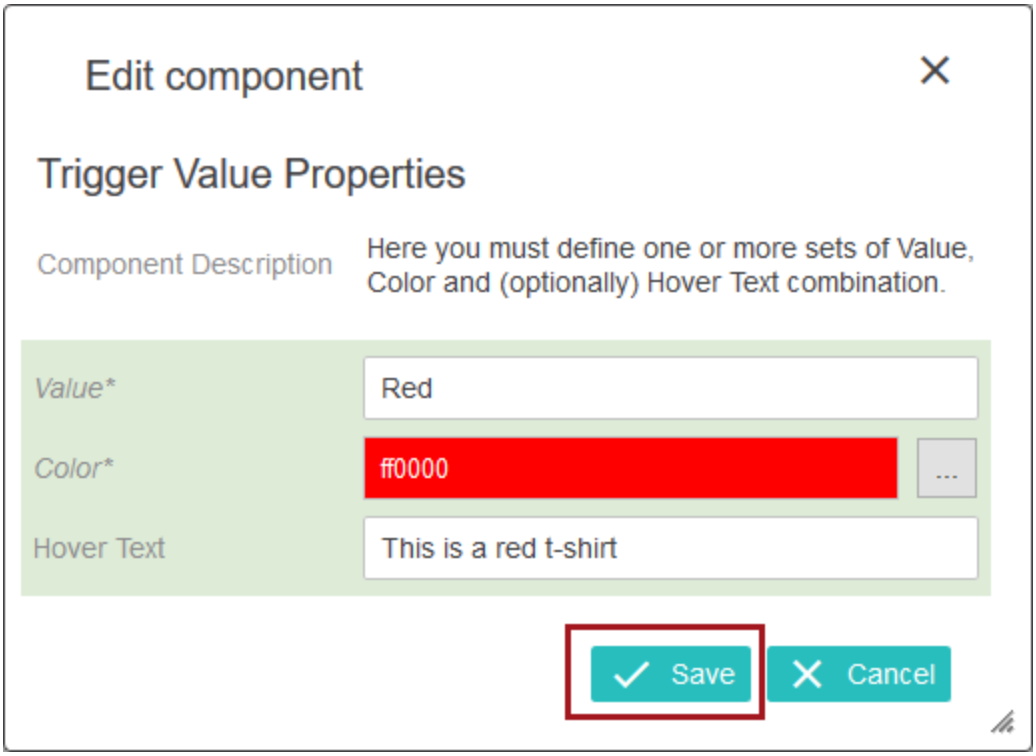


To configure a trigger value, take the following steps:

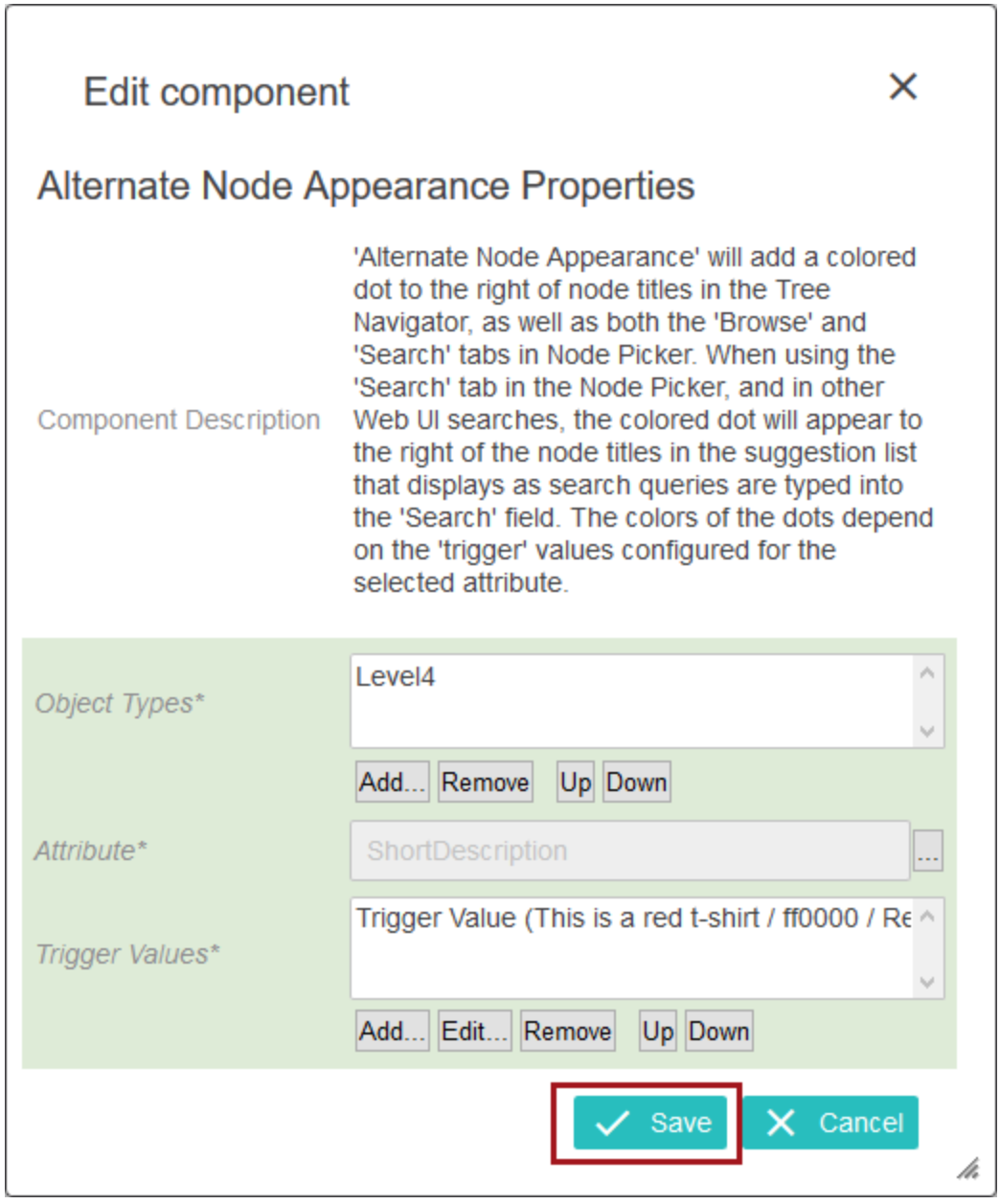
1. Add to the 'Value' field the attribute value that should initiate display of a colored dot.
2. Select the color of the colored dot that will display if the entered attribute value is present for the given attribute. Click the ellipsis button (...) to the right of the 'Color' field, and, a color-selection window displays.



3. Select a color and click 'OK.'
4. When all three parameters have been set, click 'Save.'



Clicking 'Save' brings you back to the 'Alternate Node Appearance Properties' window to complete the configuration, or to add additional trigger values or object types.



5. Save the configuration in the designer and the Alternate Node Appearance component will be enabled on the Tree Navigator.

It should be noted that the colored dots will display not only on nodes in the Tree Navigator, but also in Node Picker windows and in typeahead results.

User Configurable Views

User configurable views allow users to work more efficiently with less on-page navigation to find relevant data. Views can be named according to their intended purpose and saved for reuse across Web UI components and screens, as applicable, so users can quickly and easily switch between different views tailored to help accomplish different tasks.

If an existing view does not display the needed data, creating and configuring a more relevant view can easily be done without the Web UI designer.

This topic addresses:

- Prerequisites
- Applying a View
- Creating a New View
- Editing an Existing View
- Copying a View
- Deleting a View
- Renaming a View
- Sharing a View
- Enabling User Configurable Views

Prerequisites

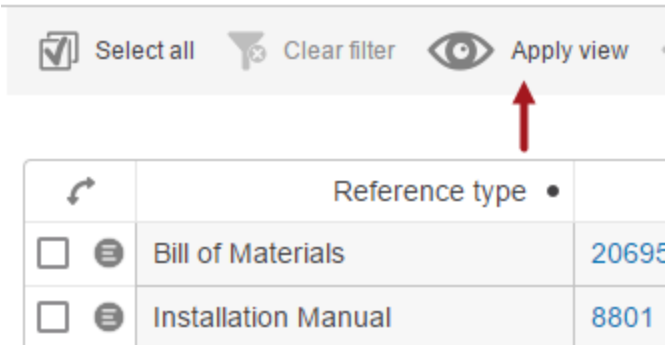
The user configurable view action can be used with the following components / screens: Multi Edit Display Mode (Node List) and the Multi Context Screen. Before a user can see and access the 'Apply view' icon, the admin user will need to have enabled the Enable User Configurable View parameter within the applicable Properties. For more information see the **Enabling User Configurable View** documentation.

Applying a View

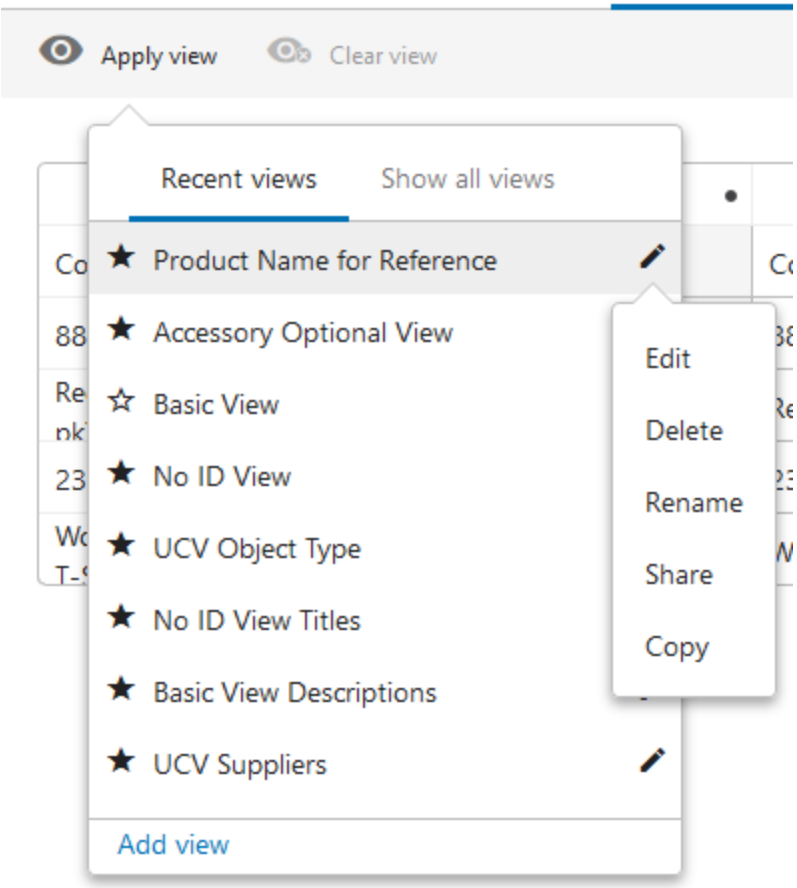
A user can choose to apply a view either created and shared by another user (Shared views) or created by the user (My views).

To apply a view:

1. Locate the **Apply view** icon in the action toolbar.



2. Click the **Apply view** button, and a dialog will display with the option to apply a recent view, show all views, or create a new view. Users can also click the **edit icon** ( ) to the right of a view's title, and options specific to the view display.



Recent Views

The 'Recent views' tab in the 'Apply view' dialog lists the last eight views the user has used. The list changes dynamically as the user applies different views. The last used or created view is placed at the top.

After clicking the **Apply view** icon, a user can then click on a specific recent view, and the 'Apply view' dialog will automatically close and the screen will render the selected view settings.

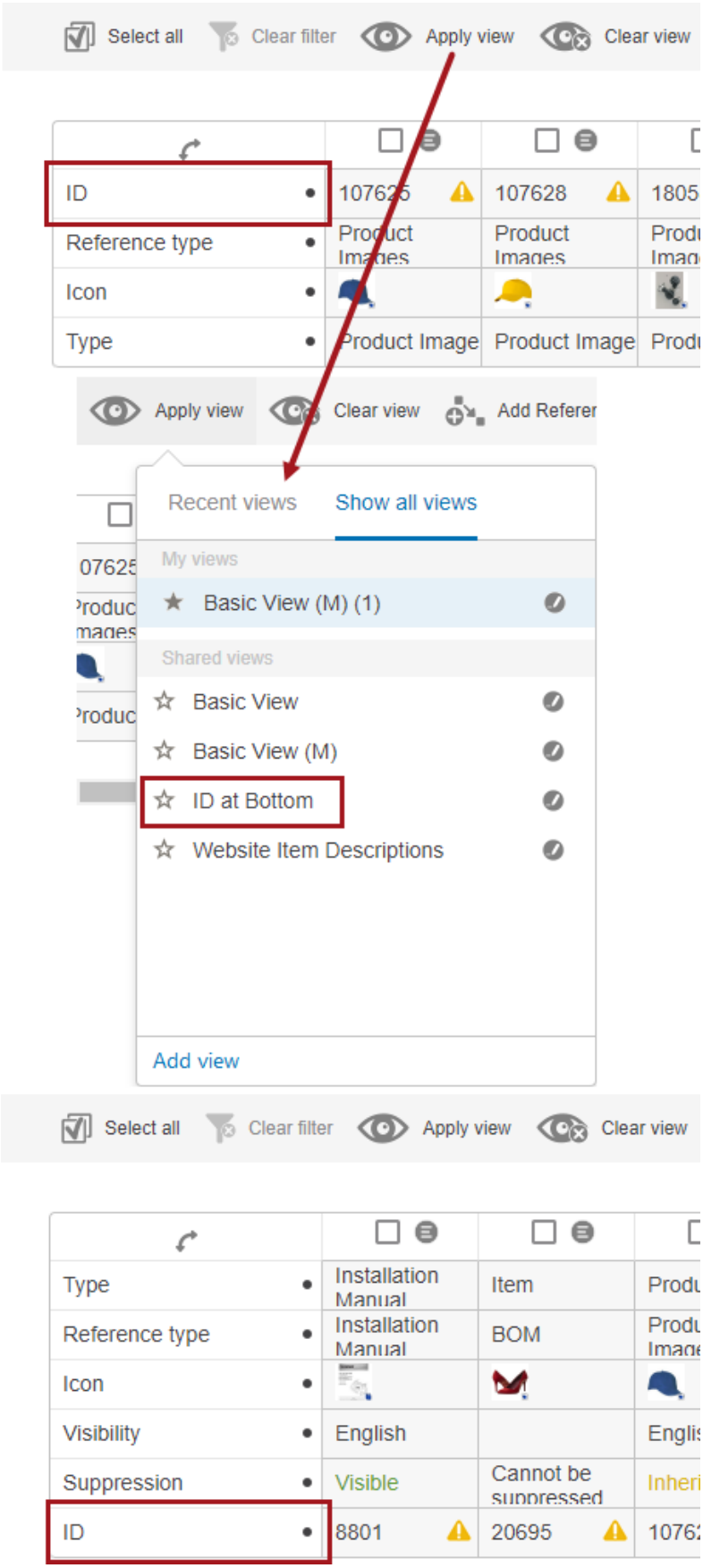
Show all views

If the list of recent views does not include the view a user needs to apply, then the user can click **Show all views** and the dialog will render the full list of 'My views.'

If the user has access to views that have been created and shared by other users, then those shared views will display in the 'Shared views' tab in the 'My views' section.

Once the desired view is located, click the view name to apply the view settings to the component / screen.

In the screenshot example below, a Node List displays five columns. When the **Apply view** icon is selected, a list of recent views displays. When the 'ID at Bottom' view is selected the Node List displays the ID row in the last position.

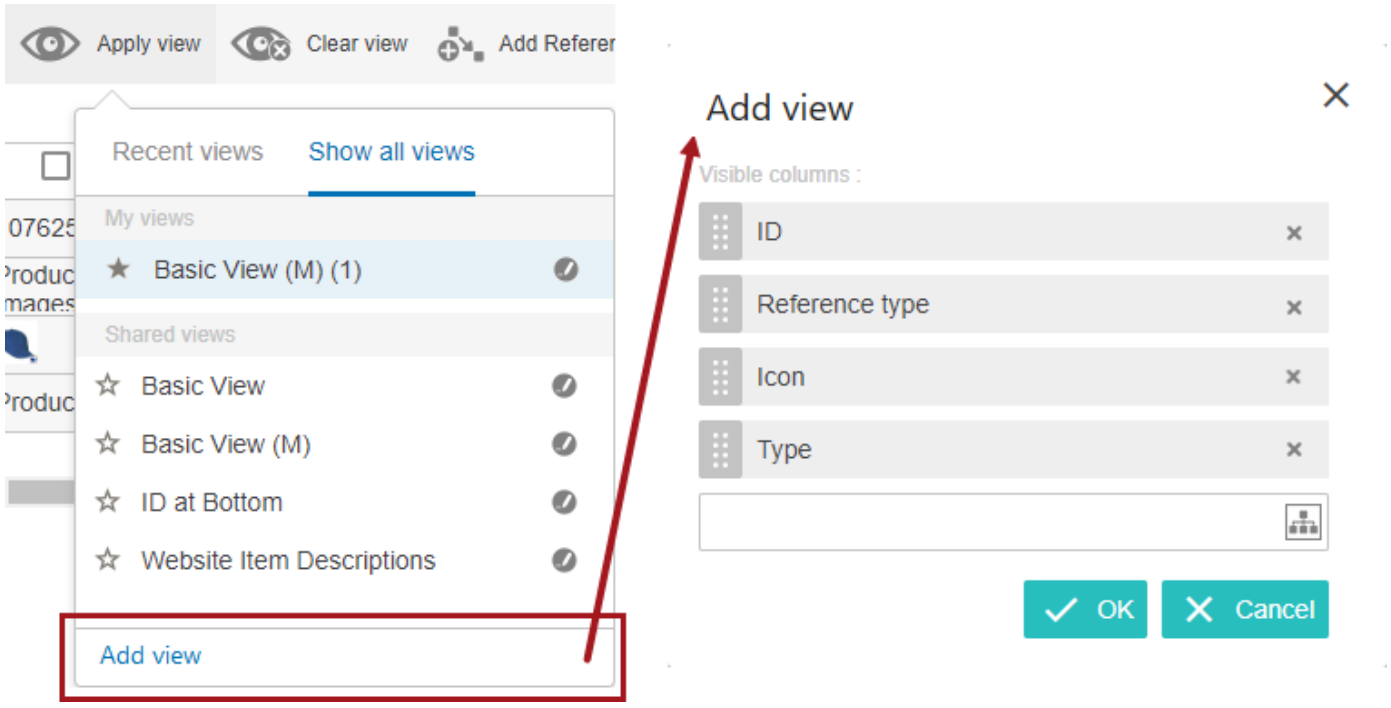

Select all
Clear filter
Apply view
Clear view
ID
Reference type
Icon
Type
Product Image
Product Image
Apply view
Clear view
Add Referer
Recent views
Show all views
My views
Basic View (M) (1)
Shared views
Basic View
Basic View (M)
ID at Bottom
Website Item Descriptions
Add view
Select all
Clear filter
Apply view
Clear view
Type
Installation Manual
Item
Reference type
Installation Manual
BOM
Icon
Visibility
English
Suppression
Visible
Cannot be suppressed
ID
8801
20695

Creating a New View

A user can create new views by clicking the 'Add View' text or by copying an existing view and then editing it.

Steps to create a new view using ' Add View':

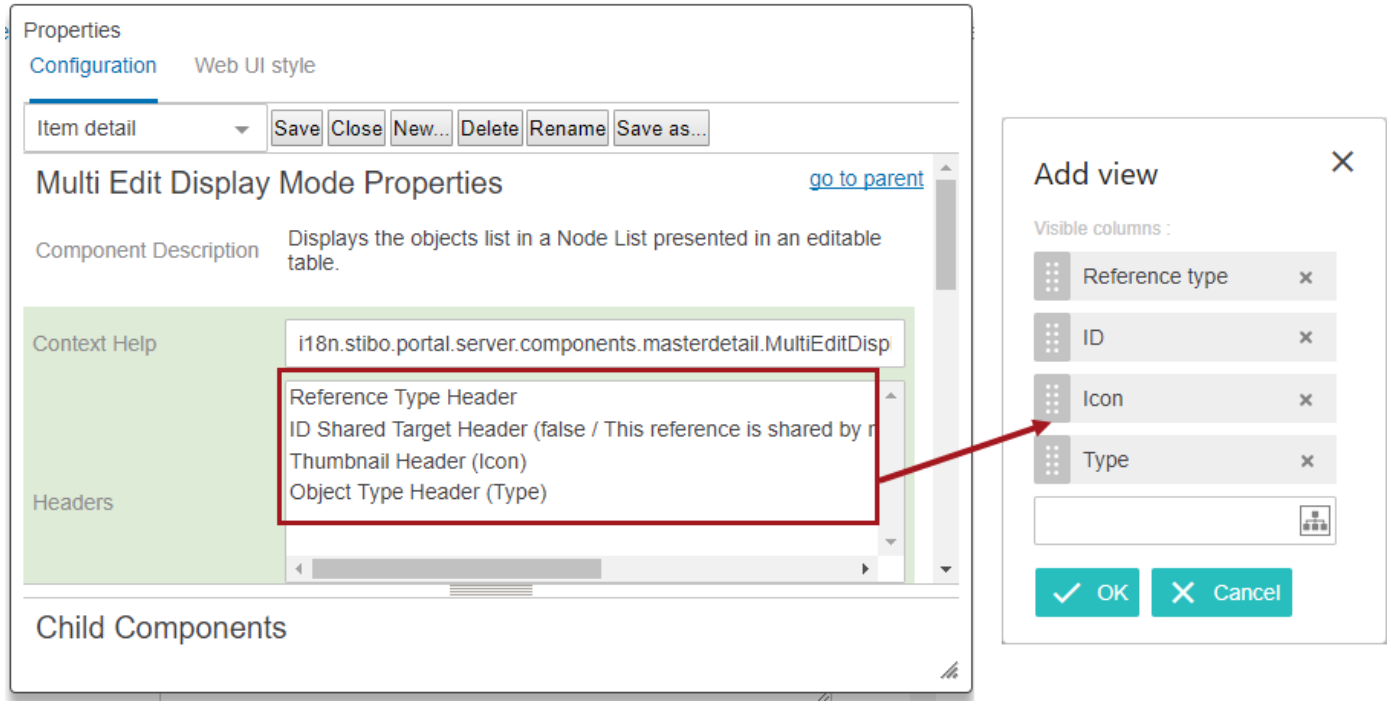
1. From the 'Apply view' dialog, click 'Add View' and the 'Add view' dialog will display.



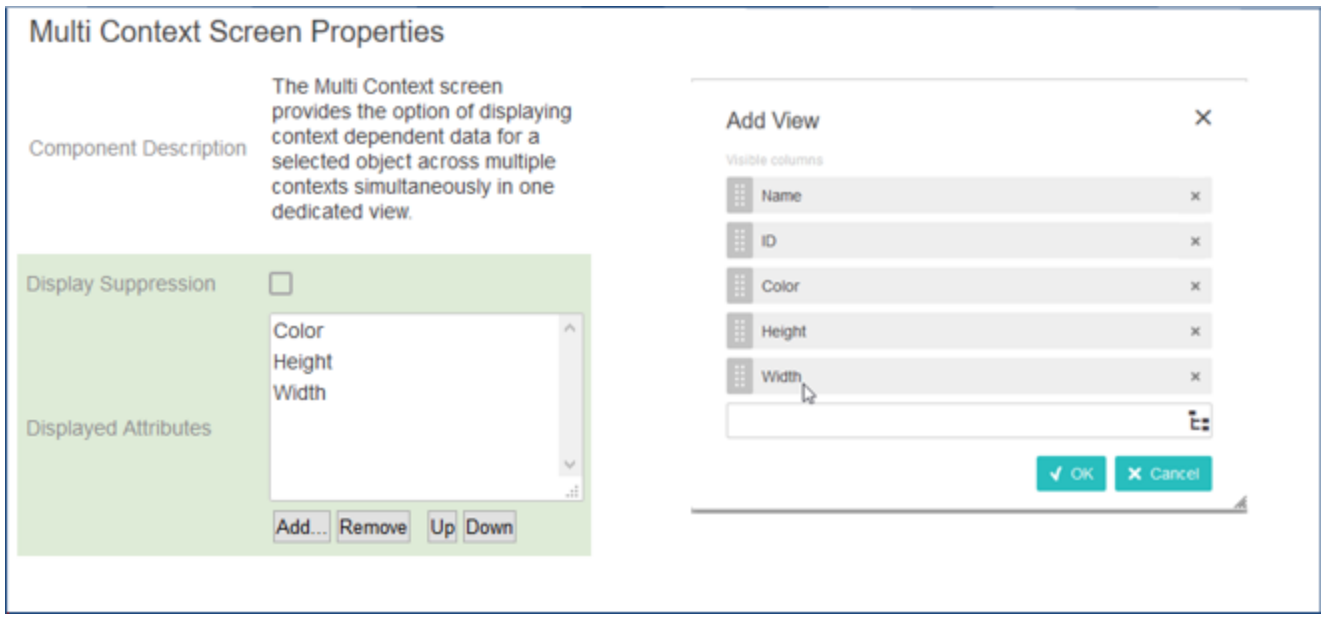
When a user creates a new view using the 'Add View' link, the 'Add view' dialog will list different Visible columns based upon different component settings.

When creating a view while working in a Node List (Multi Edit Display Mode) and selecting the 'Add View' link, the visible columns are ID, Reference type, Icon, and Type. Whereas, creating a view on a Multi Context screen, only ID and Name are listed.

The screenshot below shows how the Node List (Multi Edit Display Mode) headers added by the admin will display when the 'Add view' dialog displays for the user.



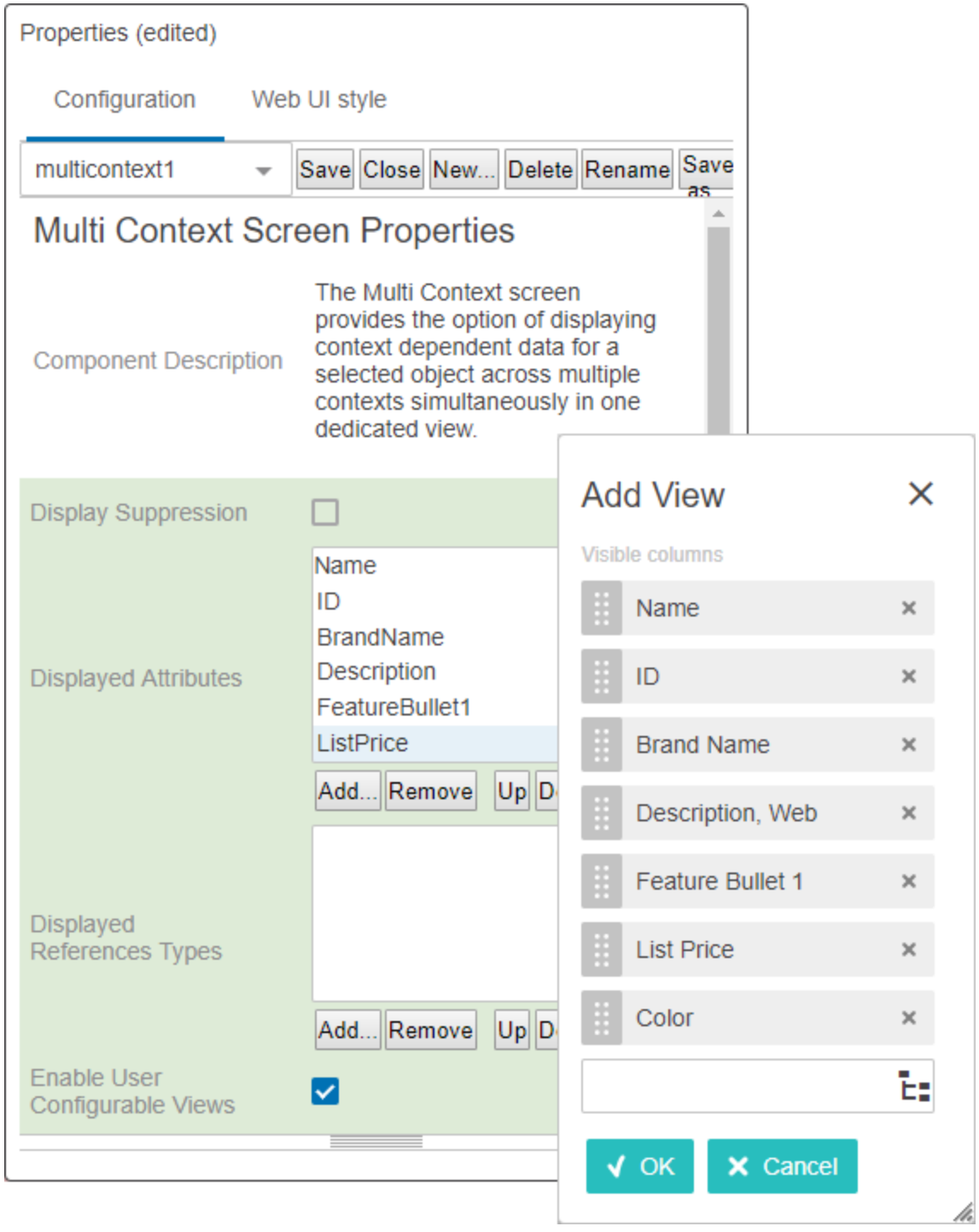
The screenshot below shows how the Multi Context Screen (Displayed Attributes) added by the admin will display when the 'Add view' dialog displays for the user.



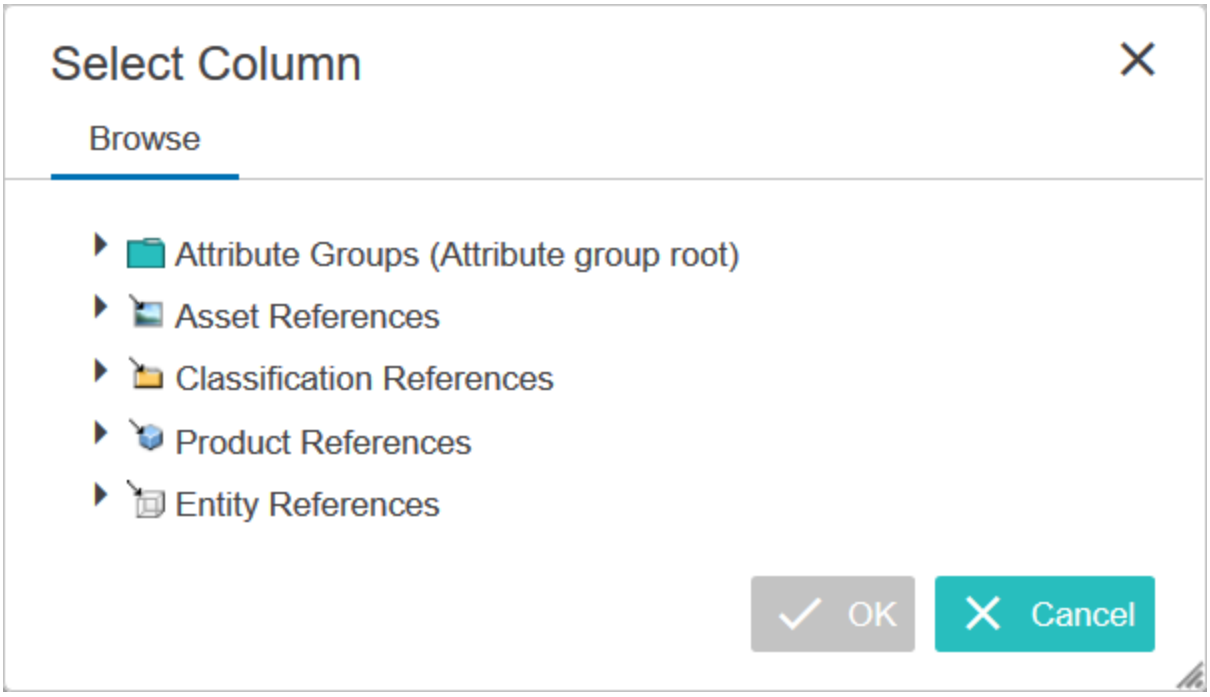
2. With the 'Add view' dialog displayed, a user can edit the new view by adding and/or removing attributes, and/or editing the display sequence.

Add Attributes / Attribute Groups as Columns

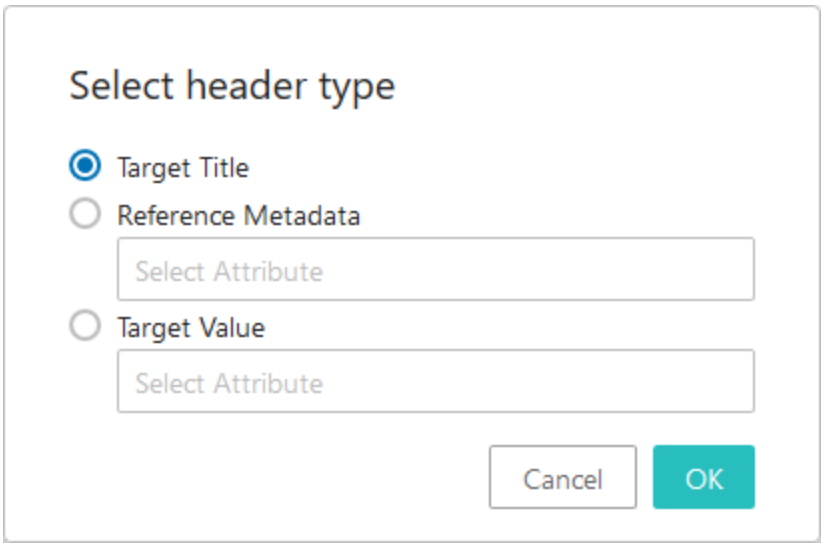
A user can add columns by using the node picker or typing the attribute / attribute group name or ID into the typeahead.



If the node picker is selected, the 'Select Column' dialog will display, allowing the user to browse for the desired attribute, attribute group, or reference. There is no 'Search' tab on the 'Select Column' dialog as this functionality is located at the bottom of the 'Add View' window.



If a single-reference reference type is added to a view, an additional dialog displays that gives users a series of options that determines which value displays in the header and which in the column's cells.



- **Target Title**. This radio button is pre-selected when the 'Select header type' dialog displays. By selecting this option, the title of the selected single-reference reference type will display in the header. In the column's cells, the ID of the referenced target object will display.

- **Reference Metadata**. When this radio button is selected, users can display reference metadata in the column's cells. Select the metadata attribute whose values should display in the column. The reference metadata attribute name will display in the column header, and the value will display in the column's cells.
- **Target Value**. When this radio button is selected, users can display values on the referenced target object. Select a valid attribute on the target object for which values should display. The attribute name will display in the header, and the value for that attribute will display in the column cells.

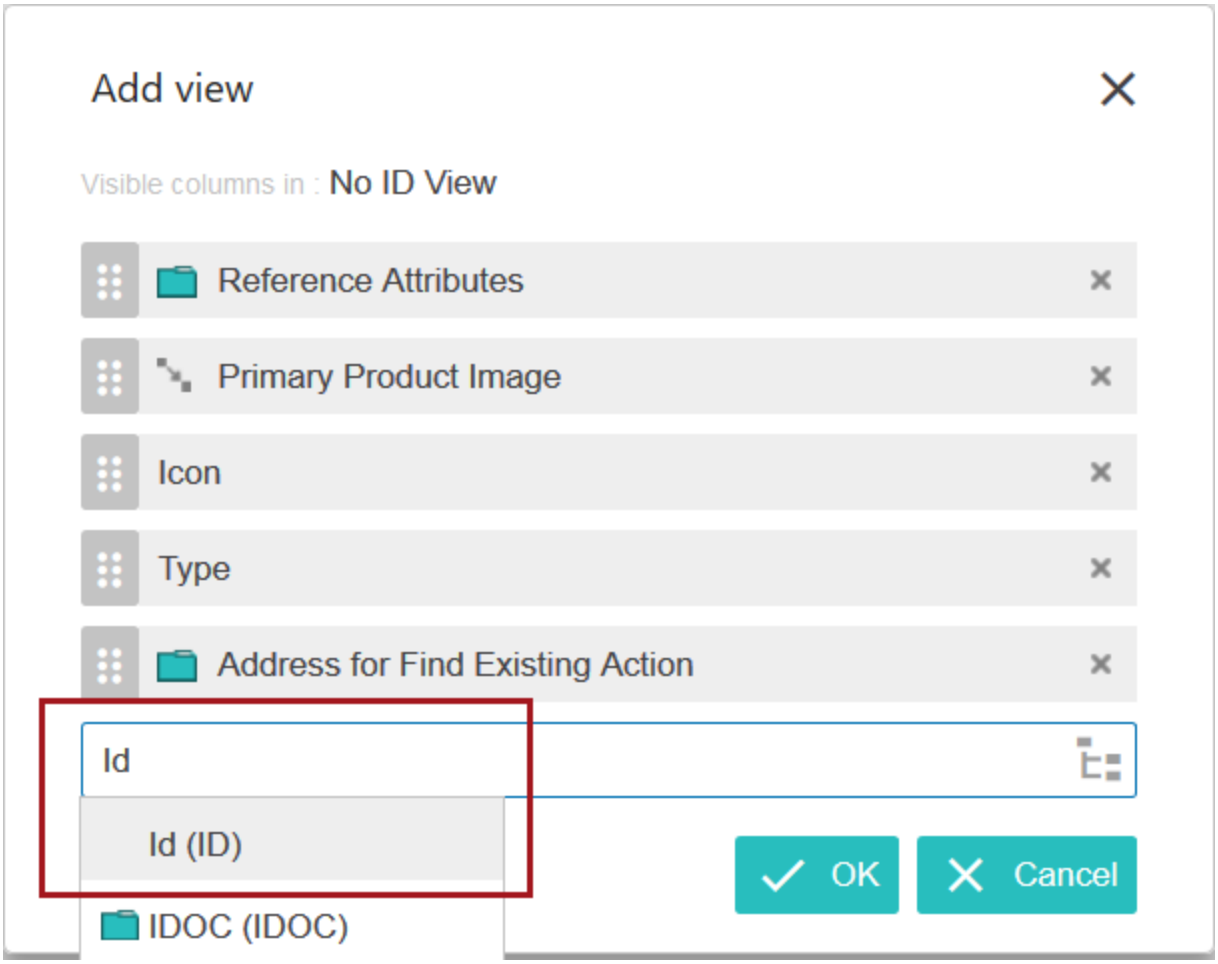
It should be noted that no node selection option is available for the 'Select Attribute' fields for the 'Reference Metadata' and 'Target Value' options. An attribute can only be selected using typeahead.

After adding columns, be sure to click **OK** for the changes to take effect.

Removing Attributes / Attribute Group Columns

Remove a column by clicking the '**x**' icon on the column. When the '**x**' icon is selected the column immediately disappears from the Edit View, however the changes will not take effect until the user clicks **OK**.

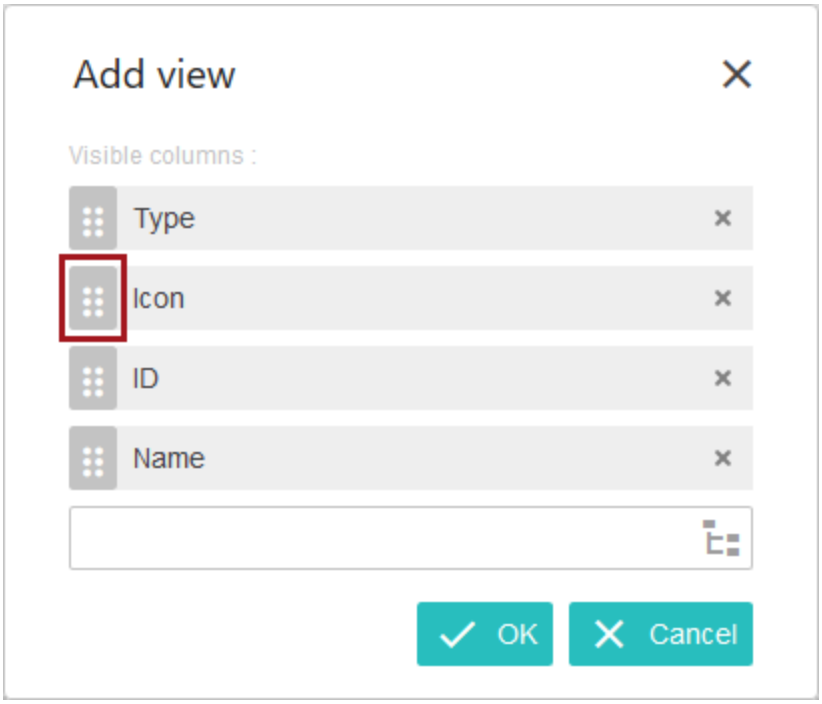
All columns can be removed using the Edit view in the Multi Edit Display Mode, including aspects like ID, Icon, Reference Type, and Type. It is important to note, however, that ID, Icon, Reference Type, and Type can only be added back in by using the typeahead feature in the 'Add view' dialog.



All columns can also be removed from the 'Add view' in the Multi Context screen, including ID and Name. As with the Multi Edit Display Mode, ID and Name can only be added back using the typeahead functionality accessible on either the 'Edit view' or 'Select Column' dialogs.

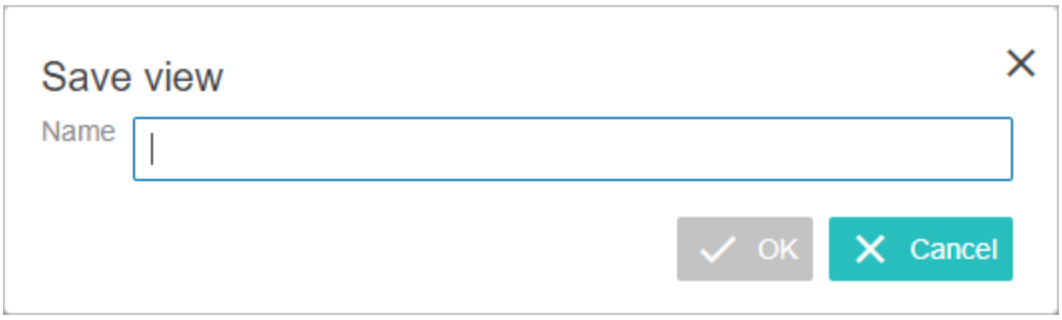
Editing Display Sequence

From the 'Add view' dialog, a user can change the sequence of visible columns by clicking and holding the dark gray drag handles to the left of each column name and dragging the column to its place in the desired order.

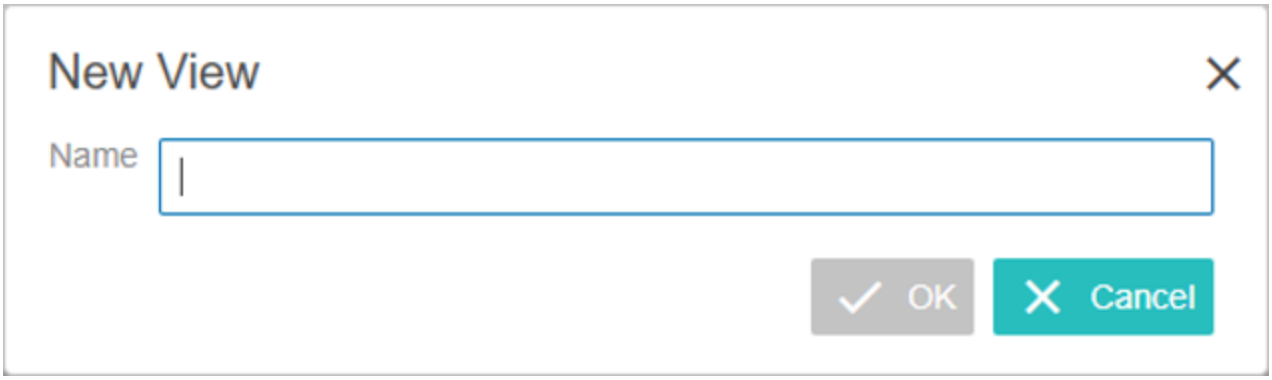


4. Once the newly created view has the necessary columns displayed as desired, click the **OK** button, and the 'Save view' (Node List) / 'New View' (Multi Context) dialog will display, prompting the user to enter the name of the new view.

   The 'Save view' window will display for Node Lists (Multi edit display mode).



   The 'New view' window will display for Multi Context screens.



5. Populate the new view **Name** and the 'OK' button will activate.

Note: The view name should clearly identify the view's intended use. The 'My views' list is *not* screen-specific; the same view names will appear across *all* Node Lists with the user configurable view parameter enabled. The same is true for Multi Context screens; the same view names appear across all Multi Context screens.

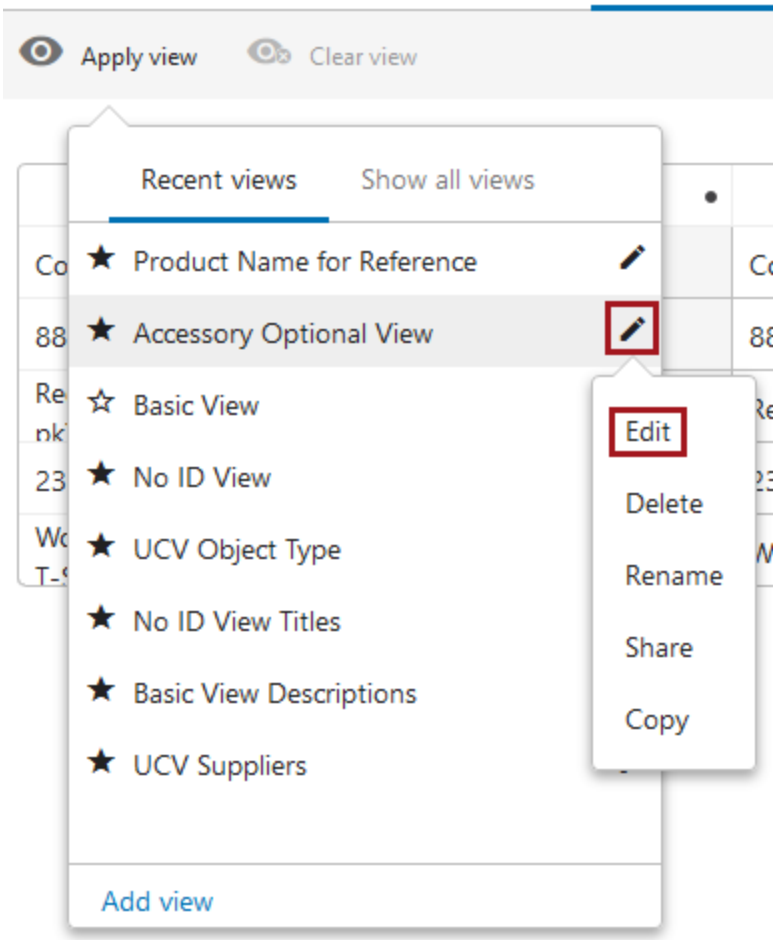
6. Click **OK** and the new view settings will be applied.

Editing an Existing View

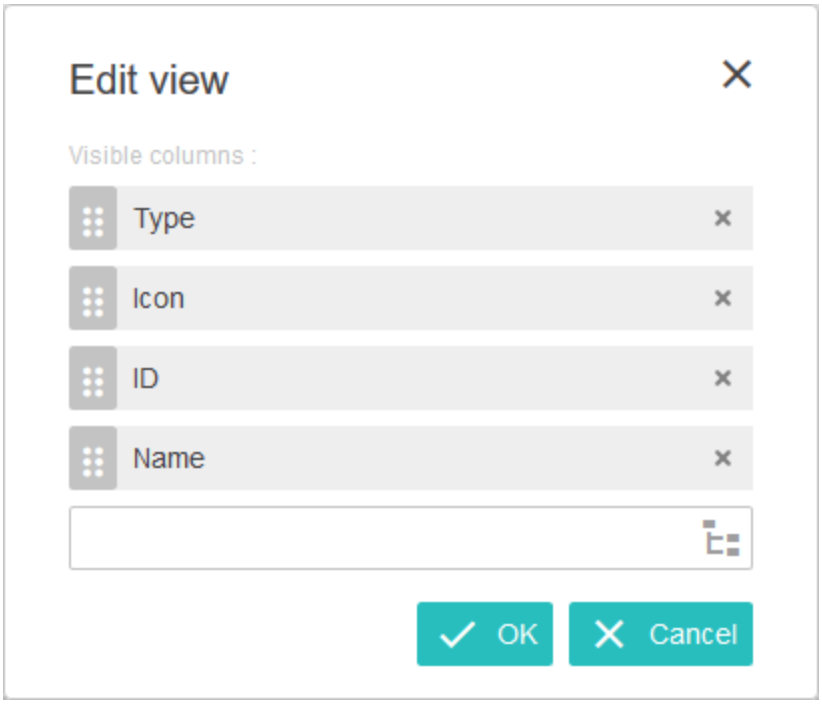
When a user edits an existing view, they can determine which attributes, references, and aspects display, as well as the order in which they display. A view can only be edited by the user who created it. Shared Views can be edited by copying shared views.

Steps to edit a view:

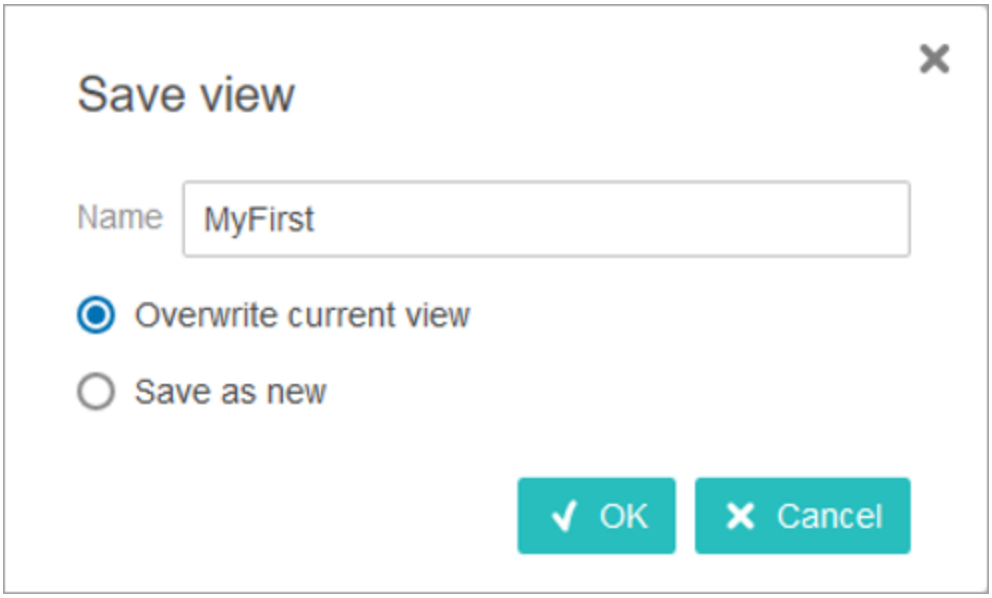
1. From the Apply view dialog, click the **edit icon** ( ) next to the title of the view to be edited, and the dialog will display a list of applicable options.



2. Click **Edit** and an 'Edit view' dialog will display with the visible columns per the selected view configuration.



3. Edit the view by adding and/or removing attributes, and/or editing the display sequence. Details on these are in the **Creating a new view** section above.
4. Click **Save** and the 'Save view' dialog will appear.
5. Edit the **Name**.
6. Select to either **Overwrite current view** or **Save as new**. Change the name, if applicable.



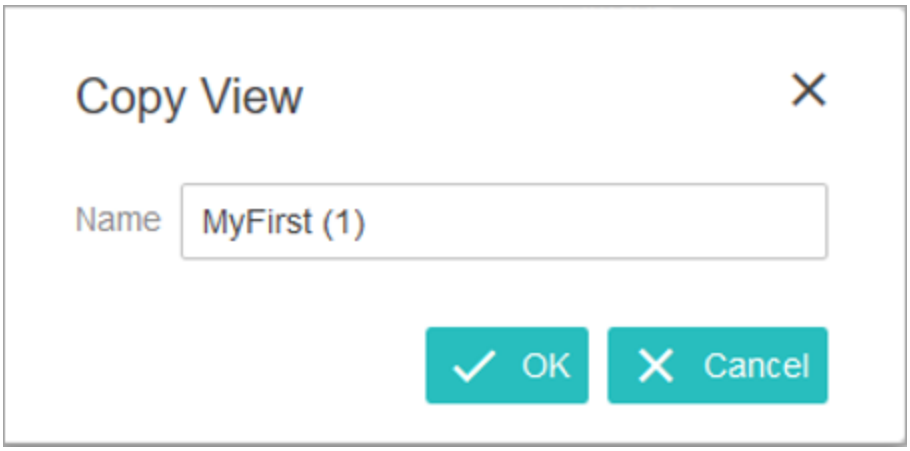
7. Click **OK**.

Copying a View

A user can copy any view. This is useful when an existing or shared view needs changes, because once the view is copied, the user can edit it.

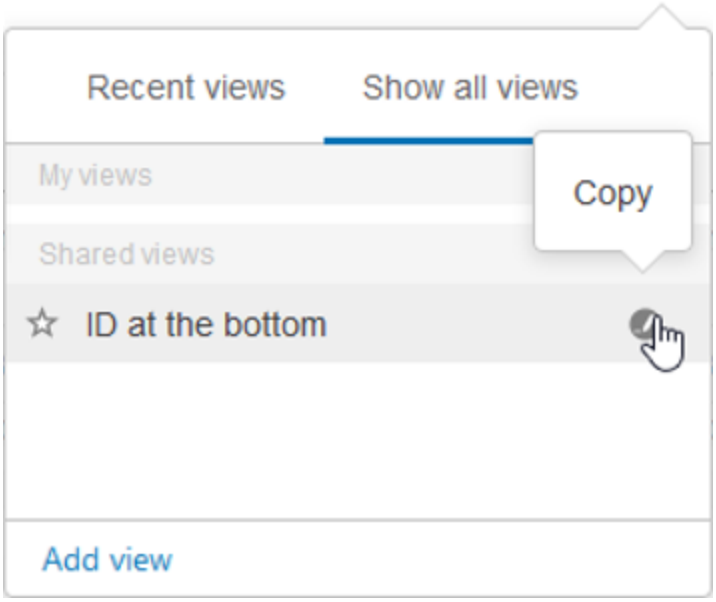
Steps to copy a view:

1. From the 'Apply view' dialog, click the **edit icon** ( ) next to the title of the view to be copied and the dialog will display a list of possible options.
2. Click **Copy** and a 'Copy View' dialog will appear.



3. Enter the desired **Name**.
4. Click **OK**.

These steps can also be used to copy shared views.

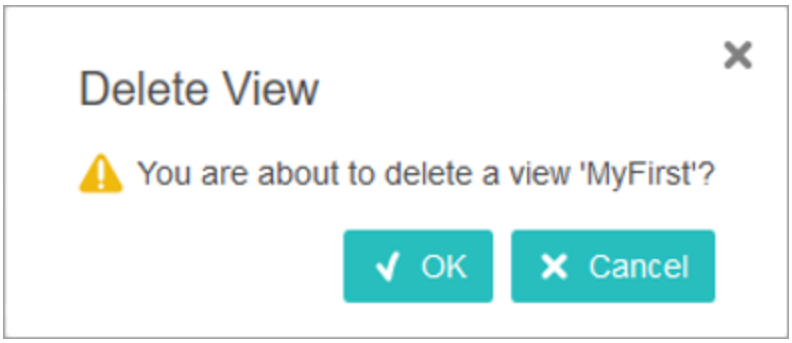


Deleting a View

A view can only be deleted by the user who created it.

Steps to delete a view:

1. From the 'Apply view' dialog, click the **edit icon** ( ) next to the title of the view to be deleted and the dialog will display a list of possible options.
2. Click **Delete**, and the 'Delete View' warning dialog will display.



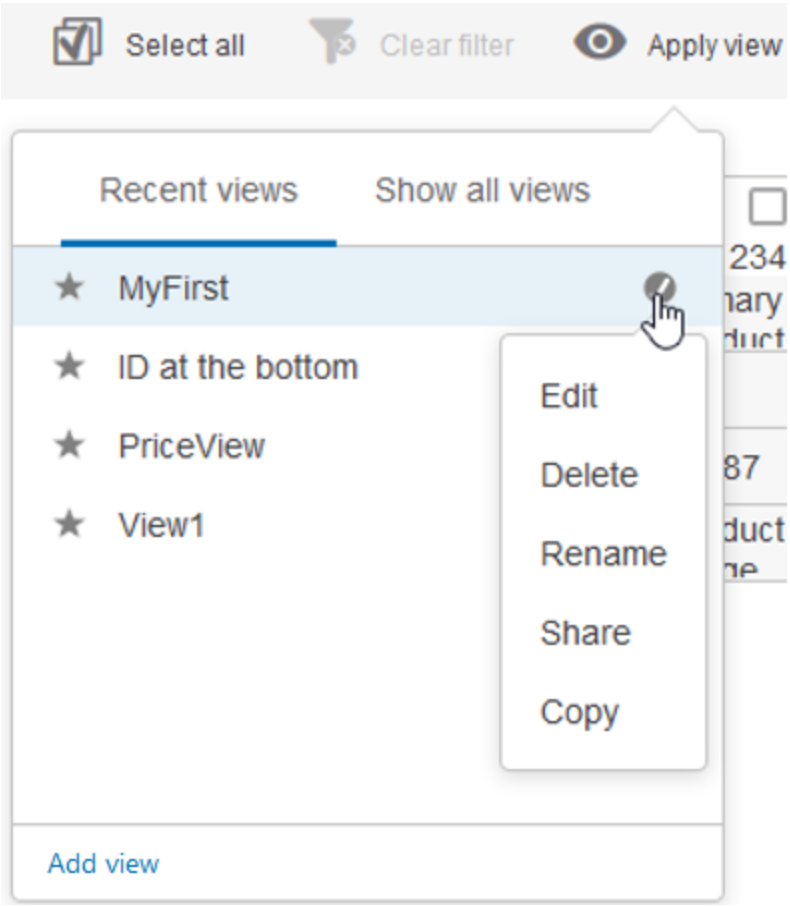
3. Click **OK**.

Renaming a View

A view can only be renamed by the user who created it.

Steps to rename a view:

1. From the 'Apply view' dialog, click the **edit icon** ( ) next to the view to be renamed and the dialog will display a list of possible options.

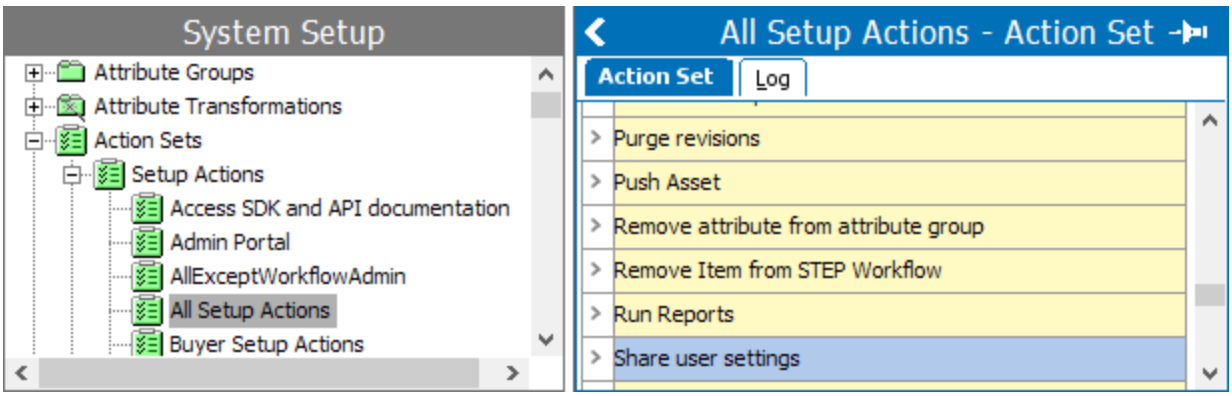


2. Click **Rename** and a 'Rename View' dialog will appear.
3. Enter the desired **Name**.
4. Click **OK**.

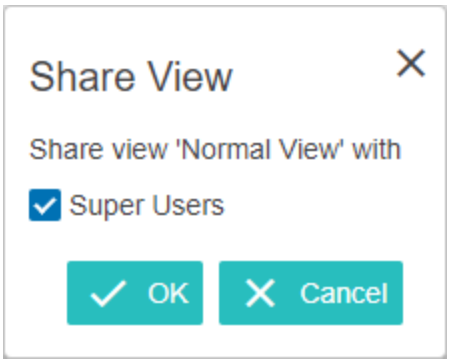
Sharing a View

Users with a Share User Settings privilege (set in the Workbench) can share views to the groups that the user is a member of. Shared views cannot be edited or shared by others users. Only the user who created the shared view can edit / share. Once a user has access to a shared view, they can copy and then edit their copy of the view.

Steps to share a view:

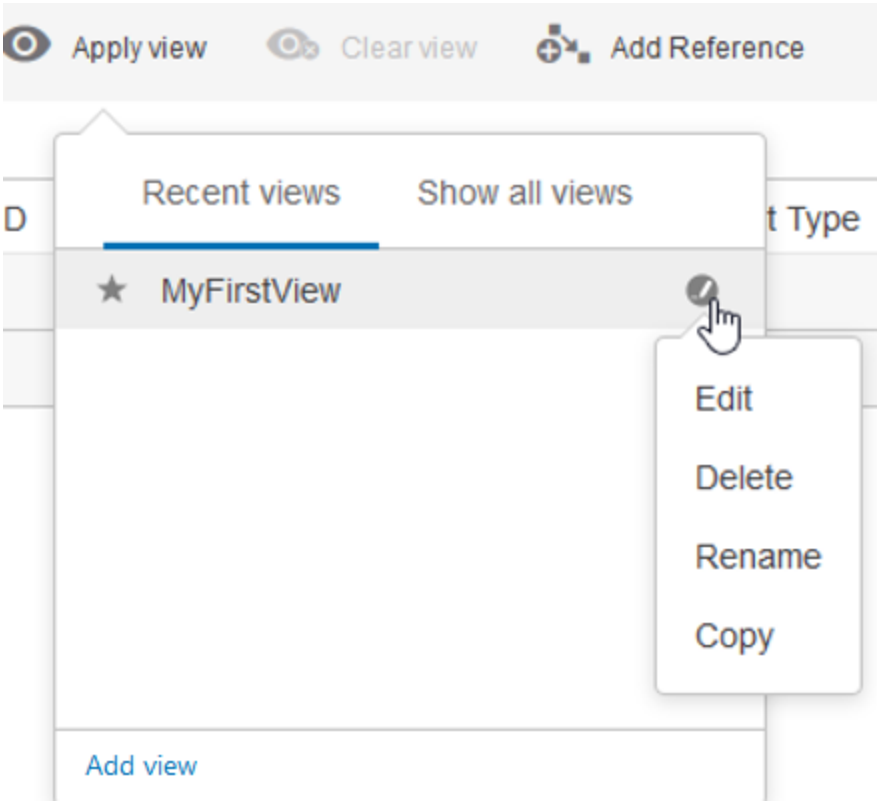


1. From the 'Apply view' dialog, click the **edit icon** ( ) next to the view to be shared, and the dialog will display a list of possible options.
2. Click **Share**, and the 'Share view' dialog will display.



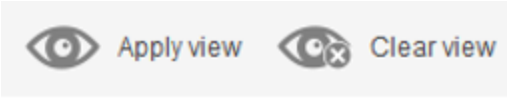
3. Select the appropriate user group(s).
4. Click **OK**.

Users with no ‘Share user settings’ privilege will not have the 'Share' option, as illustrated in the image below:



Clear View

User can clear the applied views by using the option 'Clear View.' Clicking this will clear the applied view and revert to display of the headers as configured for the screen in the designer. 'Clear view' does not delete a view.



Information regarding enabling a user configurable view can be found in the **Enabling User Configurable View** topic.

Enabling User Configurable Views

For a user to be able to access user configurable views, an admin user will need to have enabled the applicable parameter within Multi Edit Display Mode Properties (on a Node List) and/or the Multi Context Screen Properties.

This section addresses:

- Prerequisites
- Steps to Enable a User Configurable View

Prerequisites

It is expected that anyone enabling a user configurable view is familiar with the Web UI designer as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces / Web UI Getting Started** documentation.

It may also be helpful to understand the Node List component and where it can be added. See the **Node List Component** topic within the **Using a Web UI** documentation,and the **Multi Context Screen** topic.

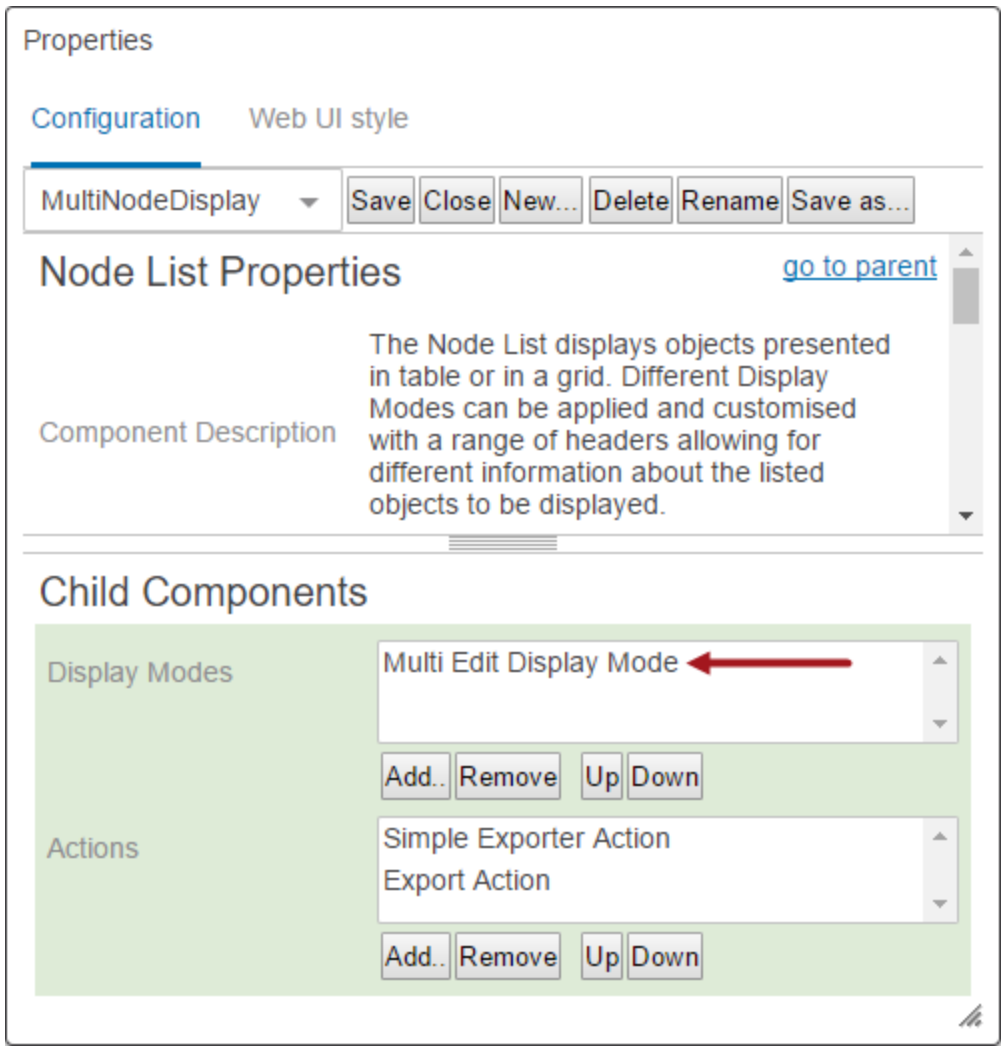
Steps to Enable a User Configurable View

Below are steps to enable a user configurable view on a Multi Edit Display Mode Properties (on a Node List) and a Multi Context Screen.

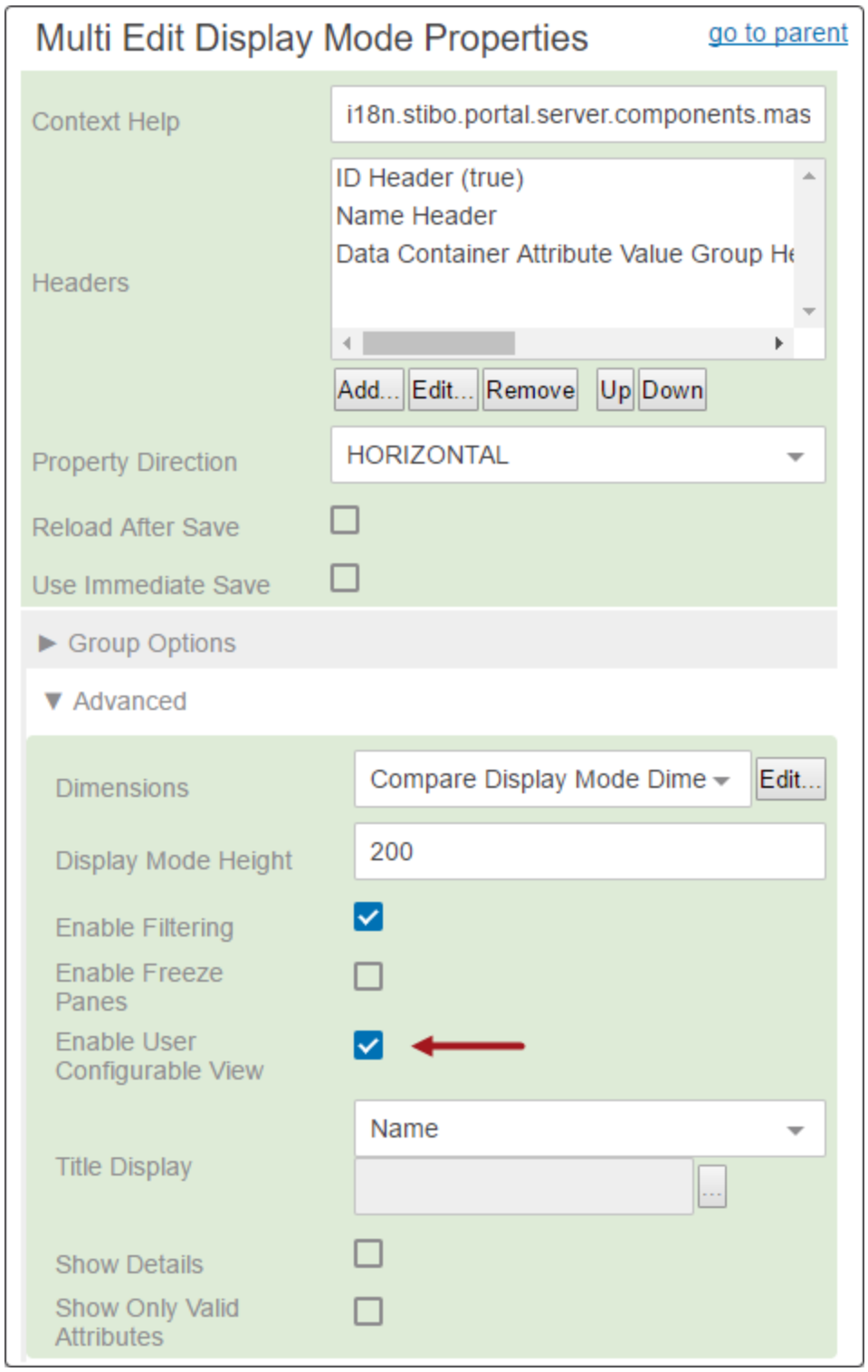
Multi Edit Display Mode

Once a Node List is configured to use Multi Edit Display Mode, an admin can easily add the user configurable view action / icon to the screen.

1. Navigate to the Node List Properties > Child Components > Display Modes parameter

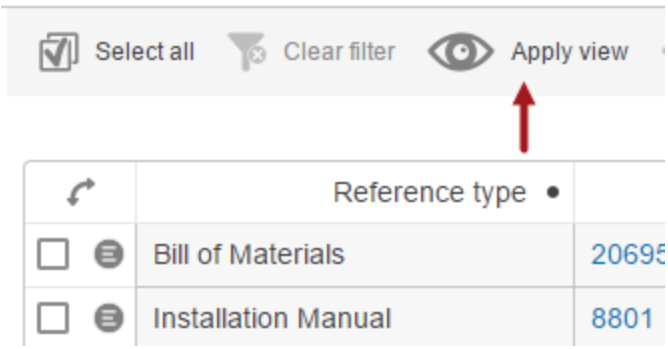


2. Double click the **Multi Edit Display Mode** and the Multi Edit Display Mode Properties will display.



3. Expand the **Advanced** parameters.
4. Enable the **Enable User Configurable View** parameter by clicking the checkbox.
5. Click **Save** and **Close**.

When a user navigates to the Node List and uses Multi Edit display mode, the Apply view icon will now be visible.



Multi Context Screen

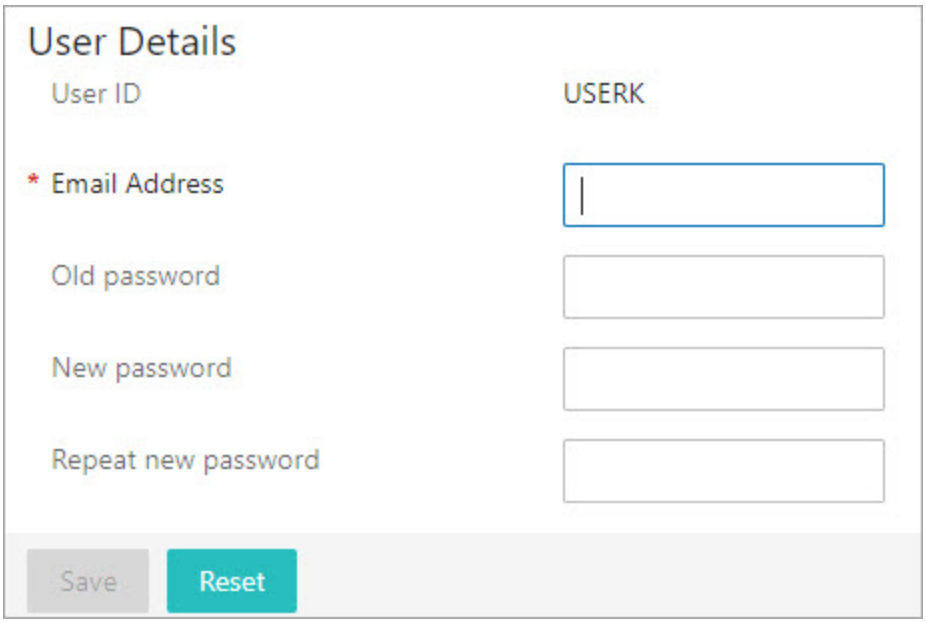
Once a Multi Context screen is configured, an admin can easily enable the Enable User Configurable Views parameter for the screen, so that the Apply view icon displays.

For more information, see the Configuring a Multi Context Screen section within the Multi Context Screen documentation.

For information regarding how to use and work with user configurable views, see the **User Configurable Views** topic.

User Details Screen

The User Details screen provides access to information specific to the logged-in user. A User Details screen can display the logged-in user's User ID, email address, username, and password. Depending on a user's privileges, these fields can be configured according to individual needs.



Prerequisites

Because basic concepts for working with the Web UI designer are not covered in this section, it is expected that anyone configuring the User Details screen is familiar with the Web UI designer. In addition, the user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** topic in the **Web User Interfaces / Web UI Getting Started** documentation.

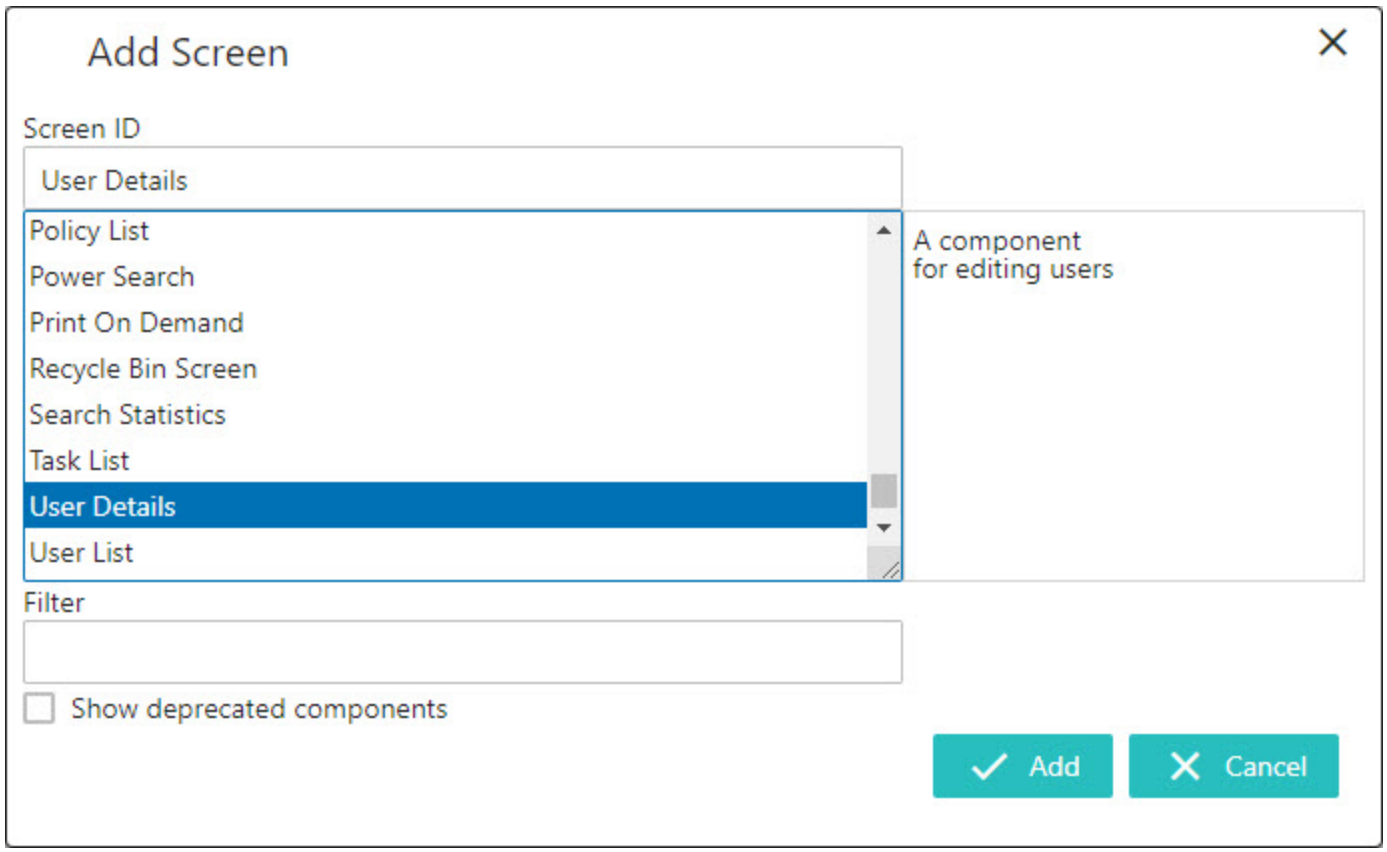
Pre-Configured User Details Screen

When creating a brand new Web UI, a User Details screen named 'userdetails' comes pre-configured. This default screen can be used, or a new one can be created (as described below).

Adding a New User Details Screen

To add a User Details screen to a Web UI, follow the steps described below.

For full details on how to create and add a new screen to a Web UI, see the **Design Mode Basics** topic in the **Web UI Getting Started** documentation. Users should be familiar with the process of creating new screens before attempting the steps listed below.



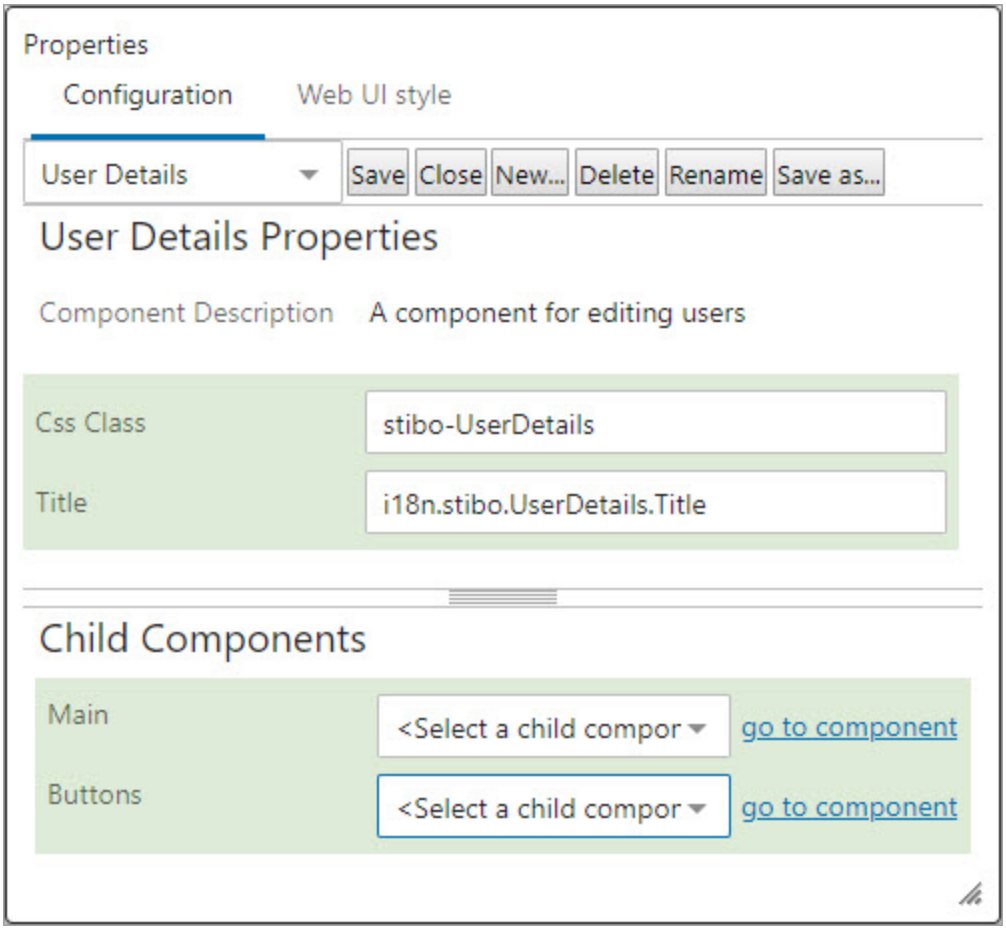
1. In the 'Add Screen' window, select 'User Details' as the screen type, as shown in the screenshot above.
2. In the 'Screen ID' text field, create a name for the User Details screen. In this example, the Screen ID is 'User Details.'
3. Click 'Add.'

The User Details screen is now ready to be configured.

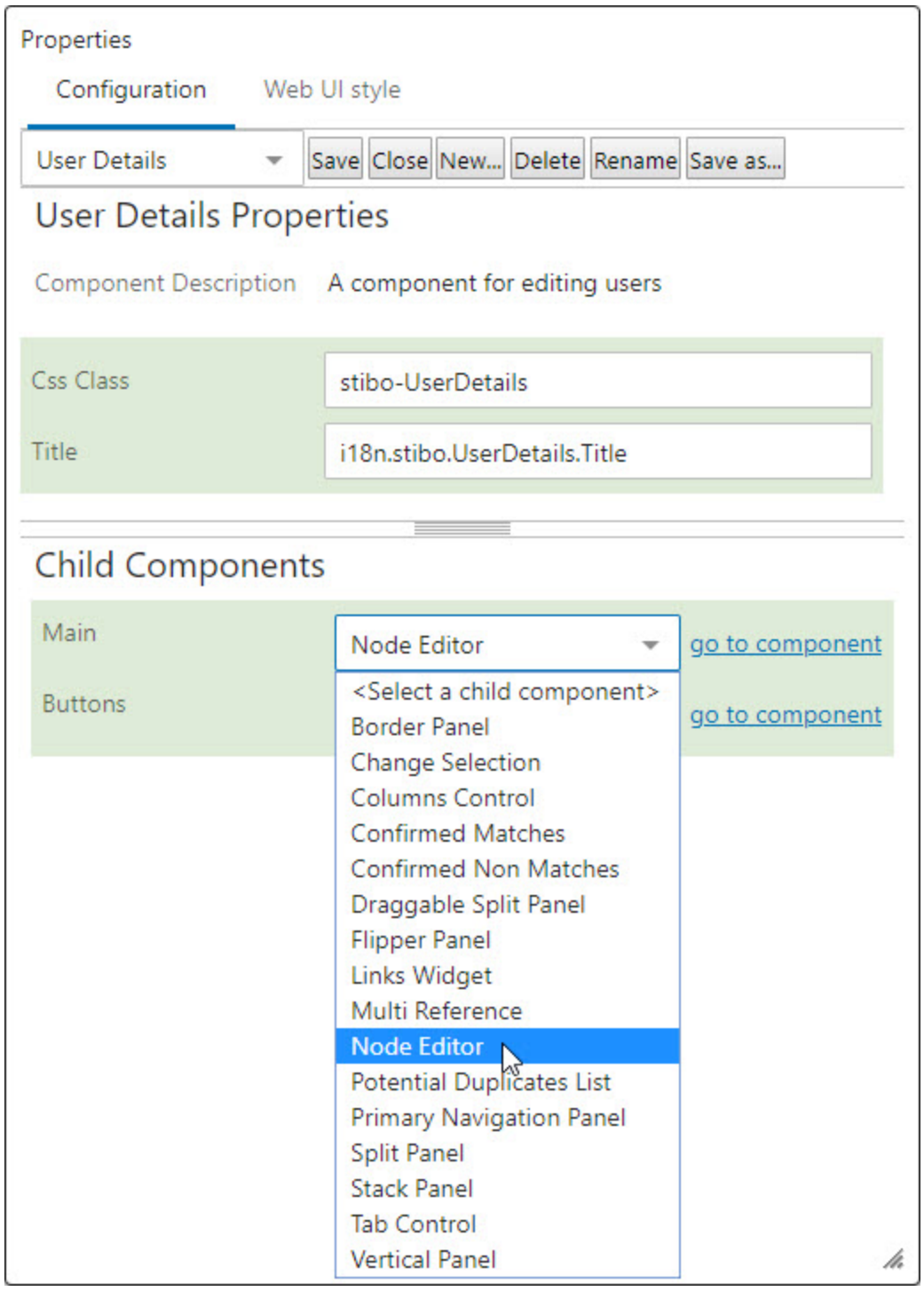
Configuring a User Details Screen

Steps for configuring the User Details Screen Properties are below.

1. To access the User Details screen, open the designer and select 'User Details' from the screen dropdown. This will open the User Details Properties in the design mode.

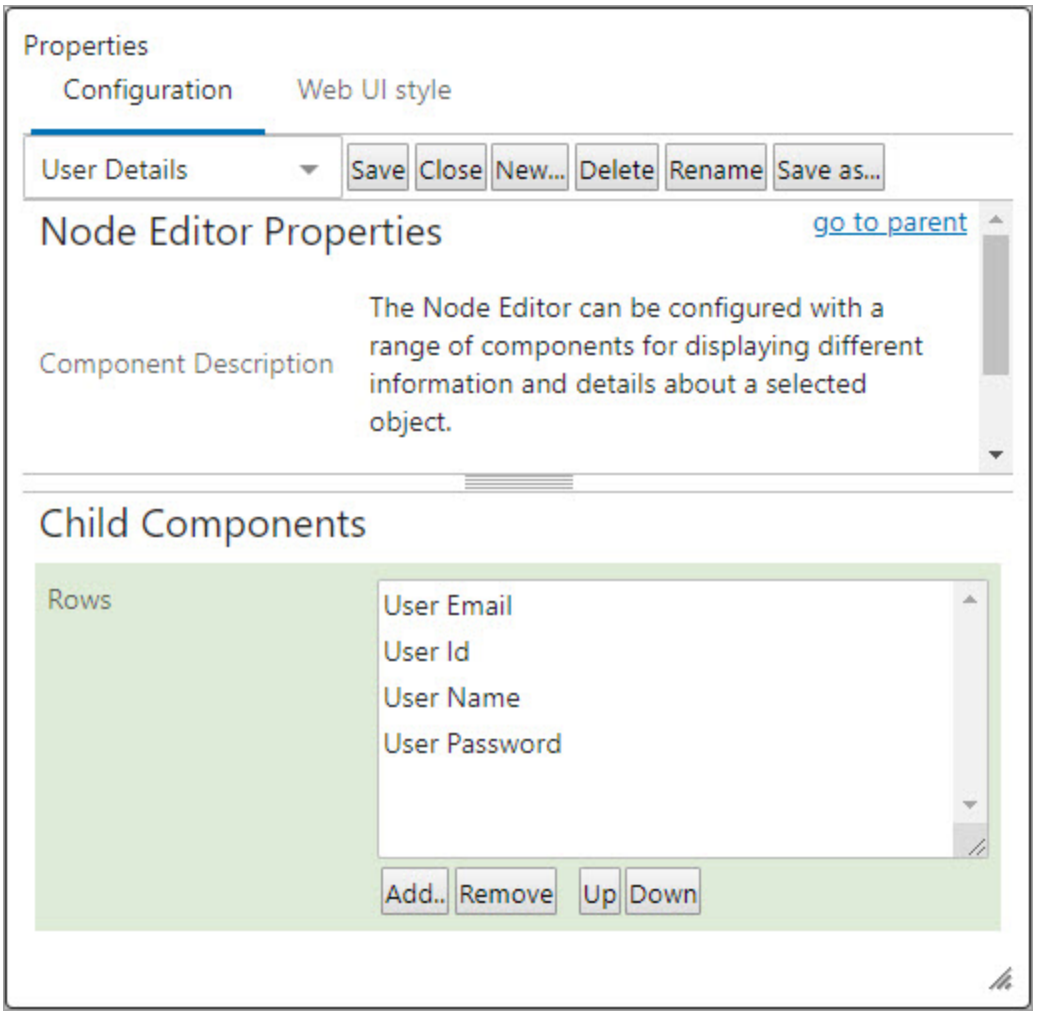


2. On the 'Main' parameter in the Child Components section, select 'Node Editor' from the dropdown menu and then click 'go to component'.'



3. Click the 'Add..' button and select the desired components. In the example below User Email, User Id, User Name, and User Password components have been added. Once you have selected a component click 'Add..' and repeat the process until all desired components are added.

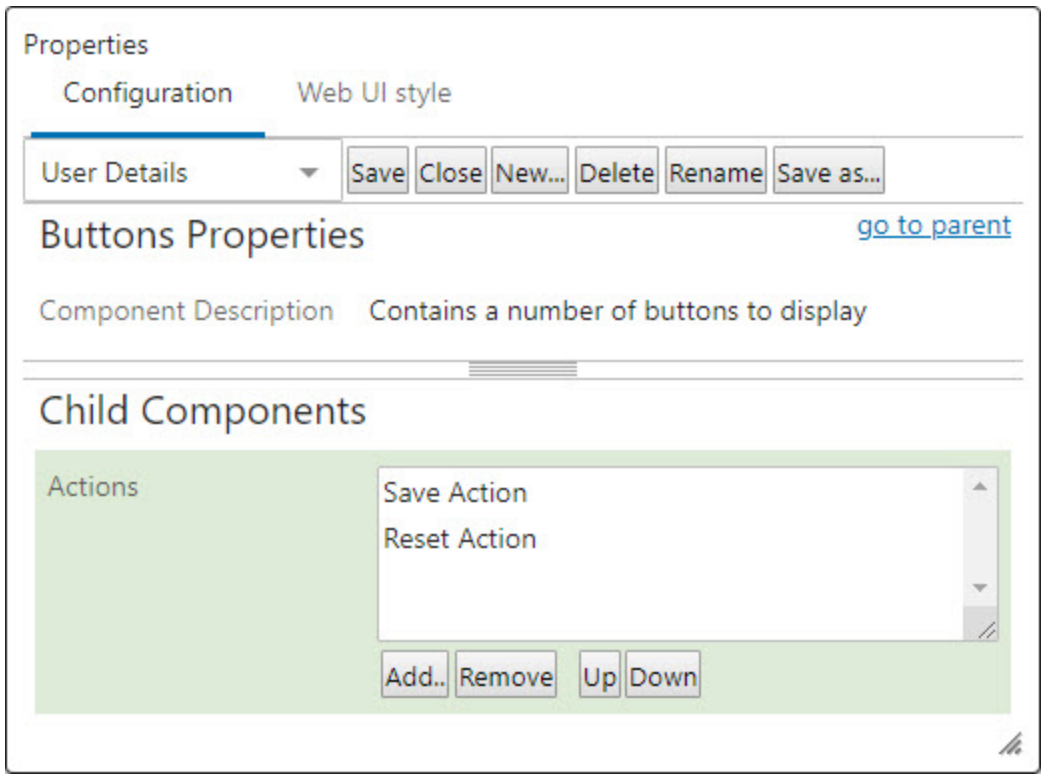
Note: Multiple components cannot be selected and added at one time. Rather, each component must be added individually.



4. To configure the Child Components, double-click on the component and make any desired changes.
5. Click 'Save'.

Adding the 'Save' and 'Reset' Buttons

1. Click 'go to parent' to return to the User Details properties.
2. On the 'Buttons' parameter in the Child Components section, select 'Buttons' from the dropdown menu, and then click 'go to component'.
3. Click the 'Add..' button, and using the same process as adding the components above, select the desired components. In this example, the Save Action and Reset Action are added.



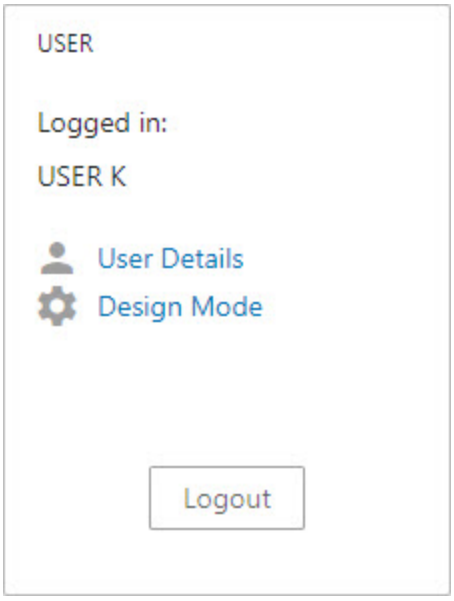
4. Once the desired components are added, click 'Save,' and then 'Close' to exit design mode.

The User Details screen is now configured and will display as shown at the beginning of this section.

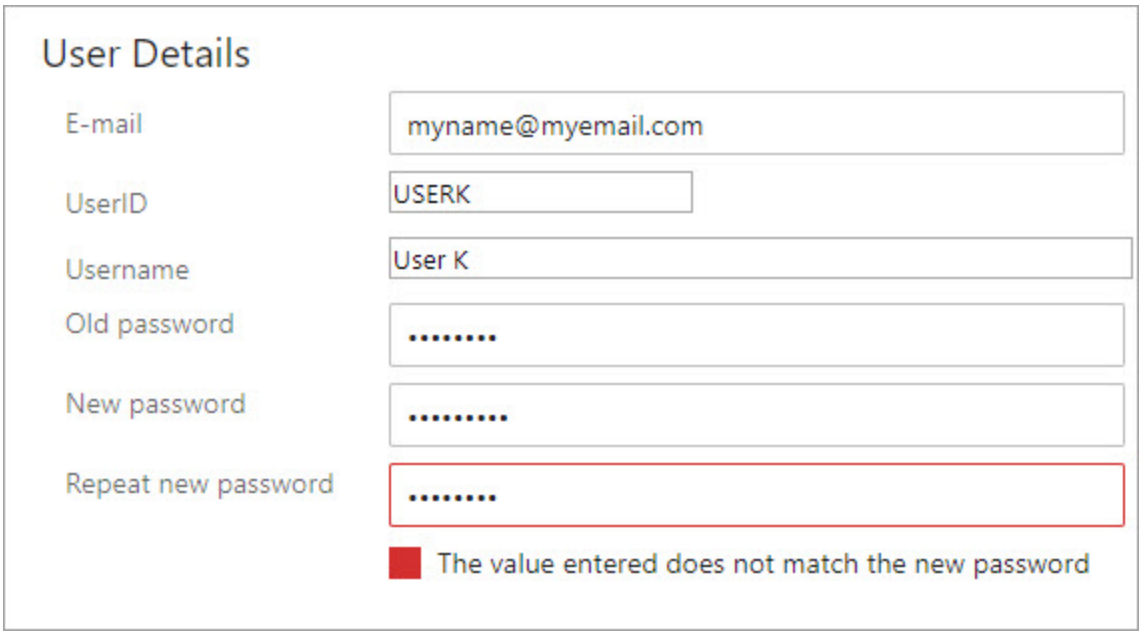
For this screen to appear on the homepage, it will need to be configured as the User Details screen within the User Widget properties, or it can be added to a Links Widget for easy homepage access. For more information about widgets, see the **Homepage Widgets** topic in the **Homepage Widgets** documentation.

Using a User Details Screen

In this example, if the screen is configured as described above and accessed via a User Widget, users can add / change their email, username, and password.

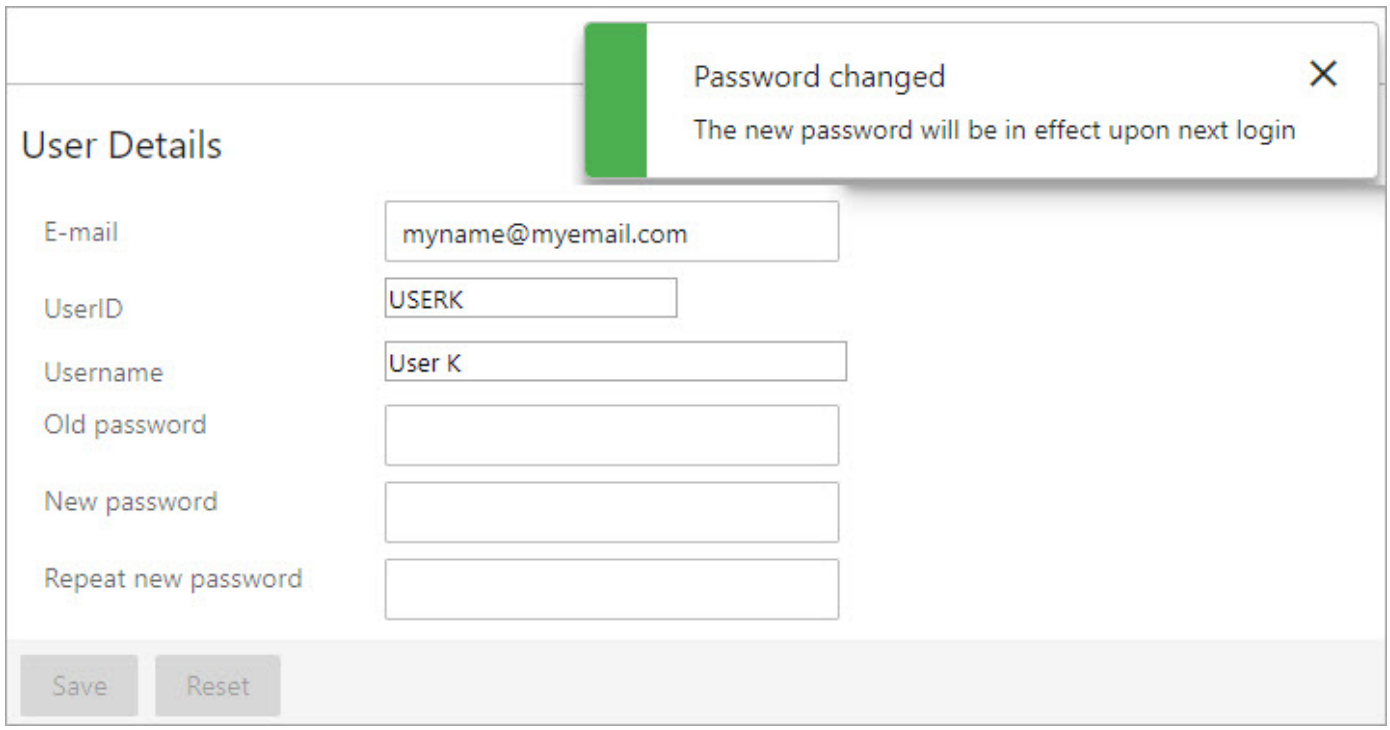


In the example below, the user has received an error message due to an incorrect password entry.



To successfully save a fully updated User Detail screen and avoid an error message, the current password must be correctly entered into the 'Old password' text field and information entered into the 'New password' and 'Repeat new password' text fields must match each other.

The example below shows a correctly filled out and saved User Details screen. The user has entered the correct current password(also known as the old password), both the new password and the repeated password match, the 'Save' button has been enabled, and the 'Saved' message is displayed, telling the user the new password will be in effect upon next login.



For more information on how to change your password in workbench, see the **Changing a User Password** topic in the **System Setup / Super User Guide** documentation.

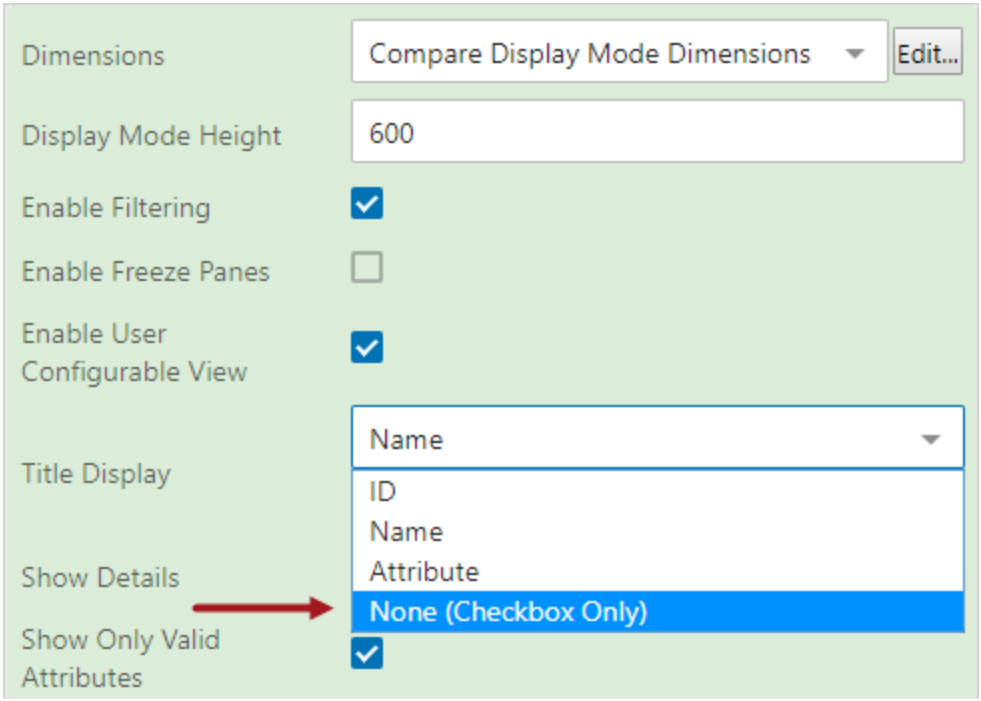
Using Checkbox Selection and Details Icons

Users select objects within Web UI tables by using checkbox selection. Clicking a checkbox is a straightforward way for users to select items, and also makes deselection much easier and more obvious to the user. The checkboxes are applicable to most tables within Web UI (including Node List component, Mass Creation screen, and Attribute Link Editor screen) with the main exception being those tables in which no toolbar actions are available.

Checkboxes and Selection Dependent Actions

When working with objects in Web UI, some objects shown in tables and different Node List views (as described in this topic) require a checkbox selection before an action can be taken on that object. Some action icons are hidden by default until a checkbox selection is made. These are user actions that are dependent on a selection being made before the action can be performed. Any action that is not dependent on a selection will continue to show on the screen. If objects are not able to be selected (no user actions available), then checkboxes are hidden from view.

Additionally, the Title Display parameter, specific to Multi Edit Display Mode and Compare Display Mode, has been updated to allow designers to make a 'None (Checkbox Only) selection,' which means that a checkbox, if applicable, will display in front of each row or on top of each column and no other identifying information (object name, ID, or attribute value) will display.

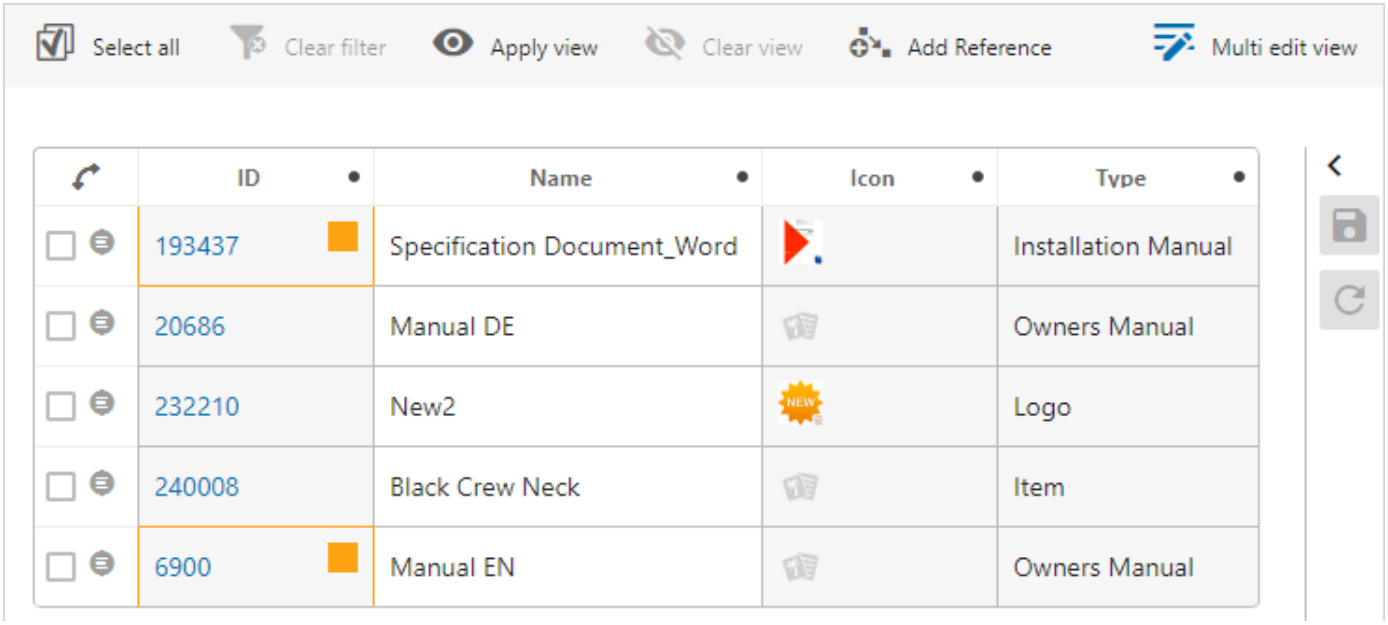


ID	Name	Icon	Type
232210	New2		Logo
240008	Black Crew Neck		Item

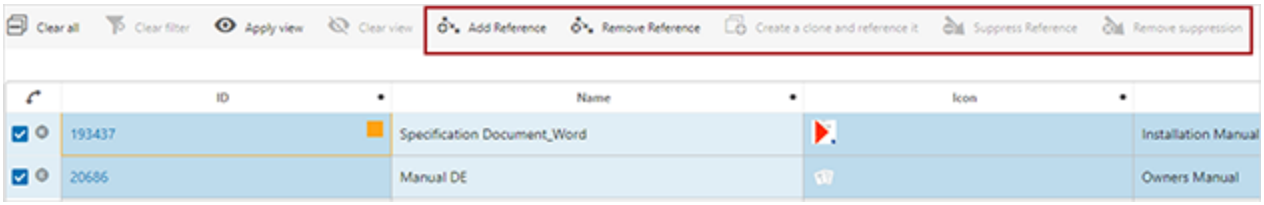
This is the same table with the orientation transposed.

ID	232210	240008
Name	New2	Black Crew Neck
Icon		
Type	Logo	Item

The following example shows a Multi Reference Editor with a Node List in Multi Edit Display Mode. Within the display mode properties, the Title Display parameter is set to None (Checkbox Only), and the Show Details parameter is enabled. By default, the toolbar includes standard actions plus the user-added Add Reference action. No checkbox selection is required to add a reference, so it displays automatically.



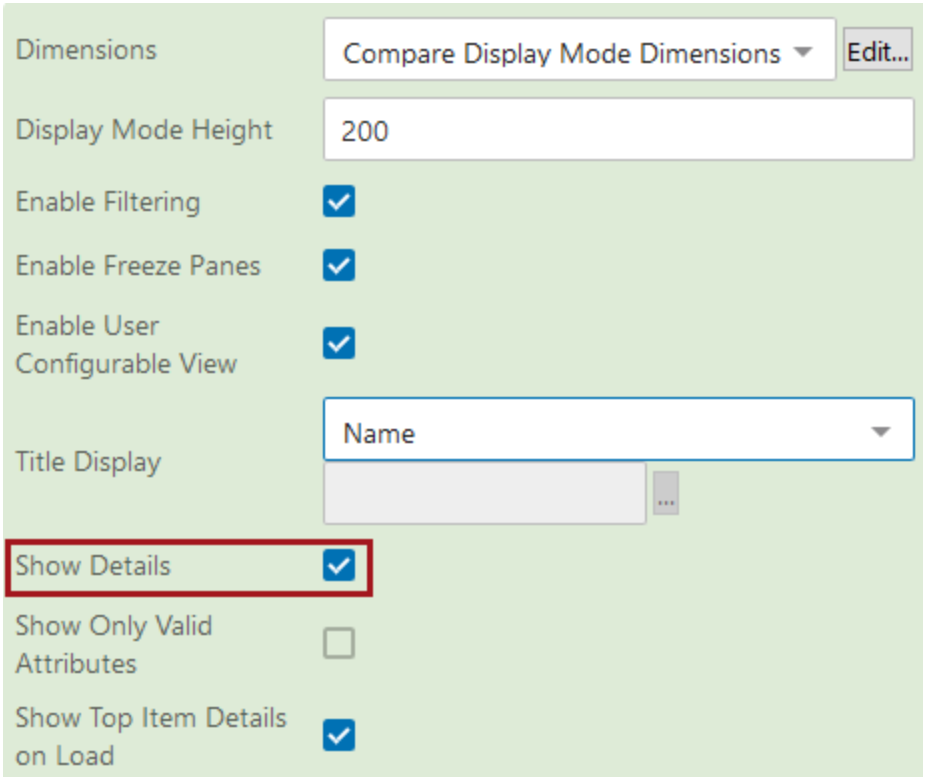
The below screenshot shows what happens when a checkbox selection is made. Additional action icons appear since specific selections are required to take those actions on the objects. If the displayed action is not applicable to the selections, it will not activate and appear light gray.



Details Icon

Along with checkboxes, many of the Node List display modes can be configured to display a details icon so that users can manually choose to display a details panel for that object instead of having the panel open automatically upon checkbox selection. This gives more control to the end user in determining what is needed to be displayed on the screen to complete their work. This icon is activated by enabling the Show Details parameter within the display mode properties. It is not advisable to use a multi selection screen as a mapping choice / selection screen when opening the details panel with the details icon.

The Show Details parameter is found under the Advanced header within the properties.



Important: The details icon works independently of the checkboxes and can be configured to display even when checkboxes are not applicable.

The details icon displays for table rows within the Workflow Profile screen. No configuration is required as the icons are displayed, where applicable, by default.

The icon is shown directly to the right of the label (if a label is shown).

To configure automatic display of a Node List's topmost item's details when a Node List screen first loads, users can activate the setting for 'Show Top Item Details on Load'. This removes the requirement that a user must first click an object's details icon to display an object's details in the details panel.

This parameter is available on the Multi Edit, Compare, and Table Display Modes. Automatic display of the top item's details upon load also requires the 'Show Details' setting be turned on, and that either a mapping be created for display of objects in the Web UI, or the relevant Node List has a screen configured under the 'Selection Screens' dropdown, dependent on the object type displayed in the Node List.

Examples

Example 1: Multi Reference Editor > Node List in Multi edit view; the Show Details parameter is enabled within the Multi Edit Display Mode Properties, and the details icon is selected for object 555-2033_M.

Node Details

Primary Product Hierarchy > Products > Electrical and Electronics > Computer Products > ThickPad X1 Carb

Clear all | Clear filter | Add Reference | Remove Reference

	ID	Thumbnail	Object Type	Reference type
☑ 555-2033_M	8801		Installation Manual	Installation Manual
☑ HYD543	6901		Product Image	Primary Product Image
☐ Manual EN	6900		Owners Manual	Owners Manual
☐ Manual DE	20686		Owners Manual	Owners Manual
☐ Manual ES	20685		Owners Manual	Owners Manual
☑ Manual FR	20684		Owners Manual	Owners Manual

Number of items : 6

Asset Detail

* Image

555-2033_M

Graphical representation of image

ID 8801

Asset Type: Installation Manual

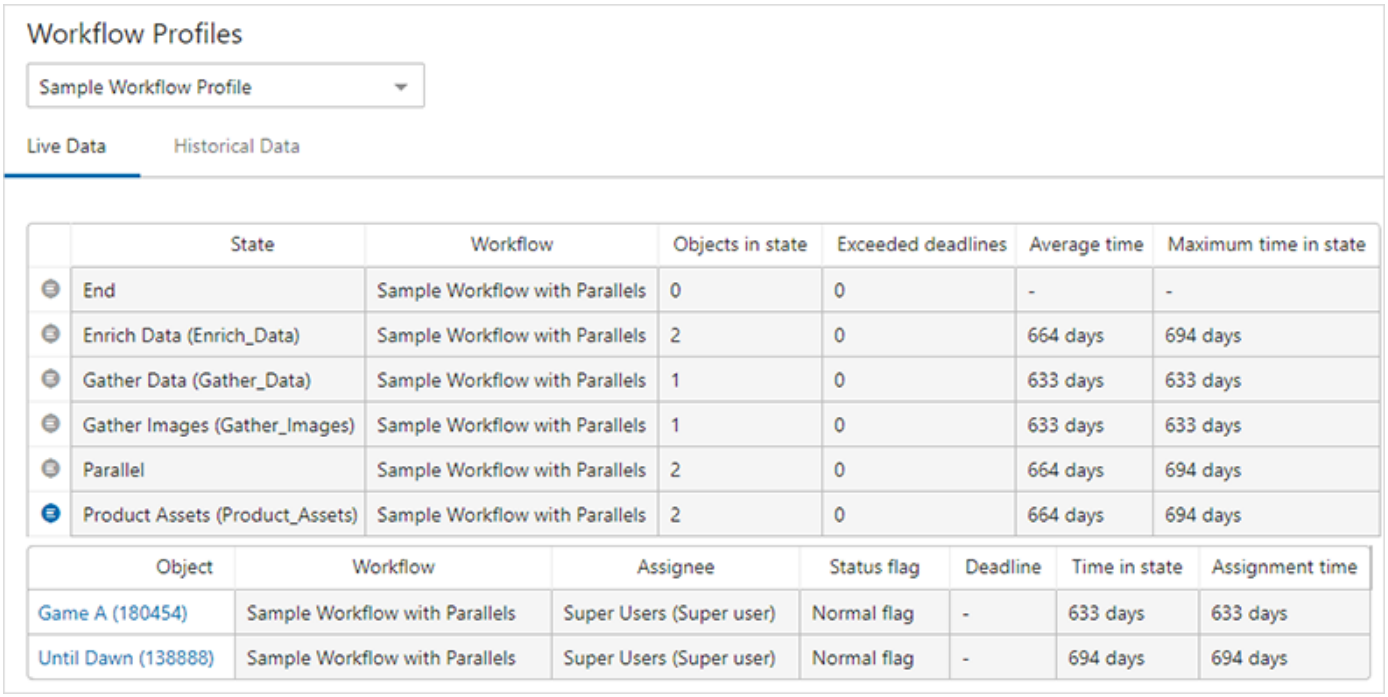
Name: 555-2033_M

Asset Object Type fx: Installation Manual

Calculated Asset File Name fx: 8801-555-2033_M

Format: PDF (Portable Document Format application)

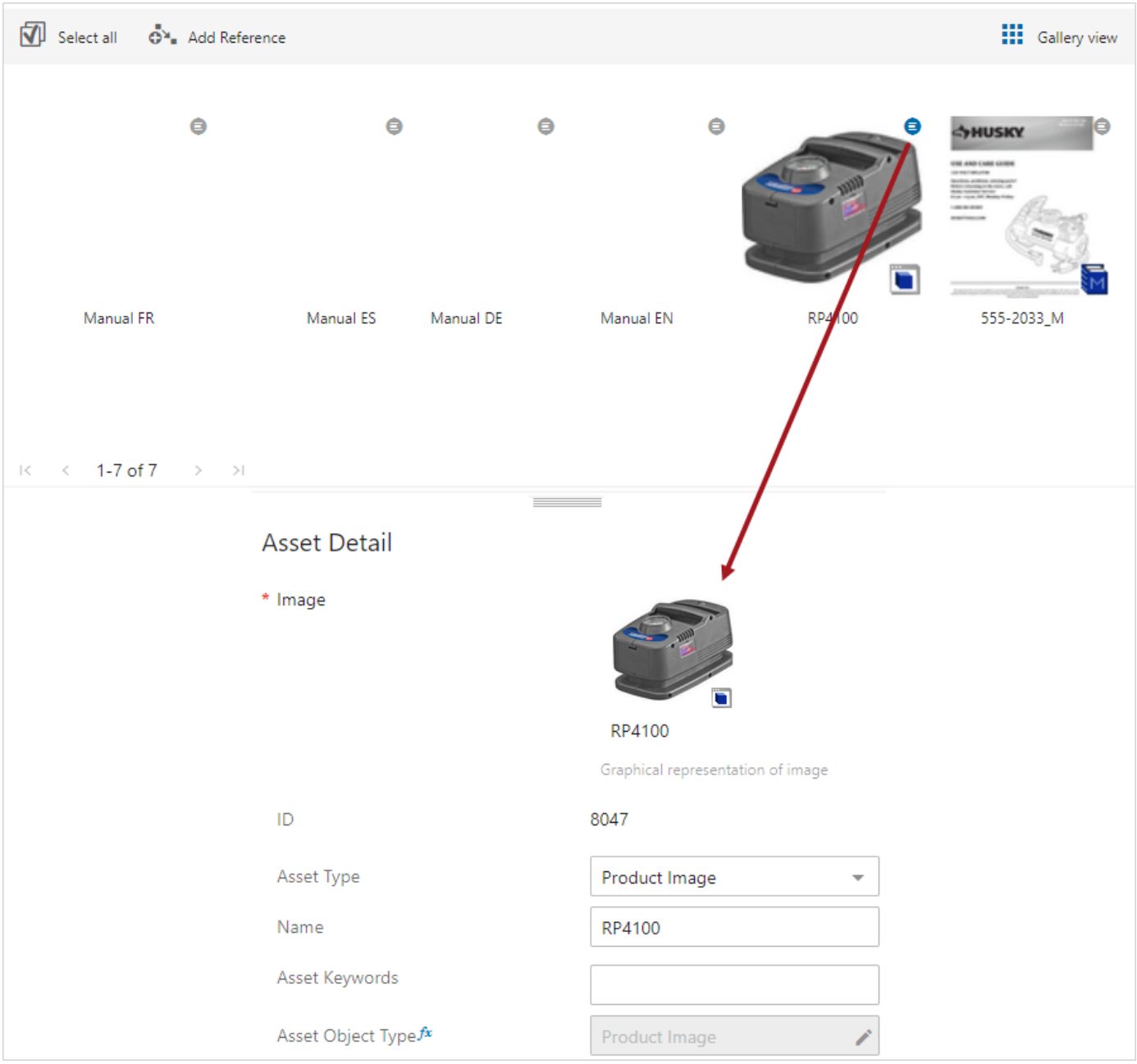
Example 2: Workflow Profile screen; the details icon displays when applicable to the selected profile. There is no additional configuration required to display the icon. The details icon is selected for the Start task.



State	Workflow	Objects in state	Exceeded deadlines	Average time	Maximum time in state
End	Sample Workflow with Parallels	0	0	-	-
Enrich Data (Enrich_Data)	Sample Workflow with Parallels	2	0	664 days	694 days
Gather Data (Gather_Data)	Sample Workflow with Parallels	1	0	633 days	633 days
Gather Images (Gather_Images)	Sample Workflow with Parallels	1	0	633 days	633 days
Parallel	Sample Workflow with Parallels	2	0	664 days	694 days
Product Assets (Product_Assets)	Sample Workflow with Parallels	2	0	664 days	694 days

Object	Workflow	Assignee	Status flag	Deadline	Time in state	Assignment time
Game A (180454)	Sample Workflow with Parallels	Super Users (Super user)	Normal flag	-	633 days	633 days
Until Dawn (138888)	Sample Workflow with Parallels	Super Users (Super user)	Normal flag	-	694 days	694 days

Example 3: Multi Reference Editor > Node List in Gallery view; the Show Details parameter is enabled within the Gallery Display Mode Properties, and the details icon is selected for object RP-4100.


Select all
Add Reference
Gallery view
Manual FR
Manual ES
Manual DE
Manual EN
RP4100
555-2033_M
1-7 of 7
Asset Detail
* Image
RP4100
Graphical representation of image
ID
8047
Asset Type
Product Image
Name
RP4100
Asset Keywords
Asset Object Type
Product Image

Workflows in Web UI

While workflow setup is done in workbench, working with workflow tasks can easily be done within Web UI. The Web UI workflow documentation is divided up into two main sections.

- **Getting Started with Workflows in Web UI** is for both administrators and end users. The **Screen / Component Configuration and Mappings for Workflows** section outlines information needed for those who will be configuring the Web UI screen properties and components. And, **Working with Tasks in Workflows in Web UI** provides information for end users.
- **Advanced Web UI Workflow Topics** covers advanced topics that may not be used with every workflow. It is great information to read through and know once you have a solid grasp of workflows and interacting with them in Web UI.

Important: It is recommended that before you start working with workflows that you are familiar with all of the **Workflows** documentation and read the **Getting Started with STEP Workflows** material in the order it appears, as topics build upon one another. Of particular interest to all users, regardless of your role (setup vs. end user) and whether or not you are using Web UI, is the **Workflow Terminology** topic and **Workflow Privileges** topic.

Getting Started with Workflows in Web UI

This portion of the material is a combination of screen and component configurations required for end users to effectively work with workflows within the Web UI, and steps the end user should follow to initiate objects into workflows as well as instructions for working with tasks.

Administrators will find setup information in the **Screen / Component Configuration and Mappings for Workflows** section.

If you are concerned only with the end user functionality, as opposed to designing and configuring components and screens, you may wish to skip directly to the **Working with Tasks in Workflows** section. The material is shown in the left-side navigation menu in the suggested reading order, as topics build upon each other.

Screen / Component Configuration and Mappings for Workflows

The details for configuring views and mappings are covered in the topics in this section. If users are going to work with workflows in Web UI, all the screens and components have to be configured for use with workflows. Any screen and workflow state mappings will also need to be created. This all ensures that users have access to the right information to complete their tasks and streamlines the work process.

The screen / component configuration determines what displays to the user and determines how a user is able to work with tasks. This is similar to the 'views' concept explained for viewing workflow information in workbench. When configuring a workflow it is important to decide what data is visible for objects (views), and define which states to display (mappings). Without views and mappings configured, all the information for a workflow will be limited to what displays within a Status Selector, leaving it impossible to work with workflows effectively within Web UI.

This section provides details regarding the components and screens that can be configured. Your setup will be dependent on your business needs, so examples and information may not match exactly with what you will create. However, it does provide a guidance and examples on what can be done.

Before configuring screens and components, or mappings, it is important to be aware of the following points:

- The views and mappings configured in Web UI only apply to Web UI. If users will not be interacting with workflows in the Web UI, it is not necessary to configure components / screens or set up Web UI mappings. Instead, set up views and mappings in workbench using the STEP Workflow Designer. Details can be found in the **Getting Started with STEP Workflows** section of the **Workflows** documentation.
- A screen can contain both object and workflow-specific data. This means that a view can contain attributes, attribute groups, and aspects information specific to the object (such as name, ID, approval status, etc) as well as elements like workflow assignee, deadline, workflow variables, and workflow attachments.

Status Selector Homepage Widget

The Status Selector widget is the starting point for users who want to work with a workflow in Web UI. As its name implies, the **Status Selector Homepage Widget** displays on the Web UI homepage, and its main purpose is to show states and the number of tasks in each state in a particular workflow. Upon clicking one of the displayed states, users will be navigated to a screen in which they can work with an individual task or multiple tasks. The screen that a user sees to work with the tasks depends on how the widget is configured. There are a number of possibilities, including the Task List screen, a Workflow Screen, or an Advanced Search screen.

Since each widget is configured for a single workflow, multiple widgets can be set up and used as needed. Each Status Selector Homepage Widget is highly configurable and, when configured properly, a user can initiate tasks into a workflow, track tasks, and see what status flags they have (if applicable).

If interested in using a widget that has the same functionality but is displayed within one of the Web UI side panels, see the **Status Selector Sidebar Widget** topic.

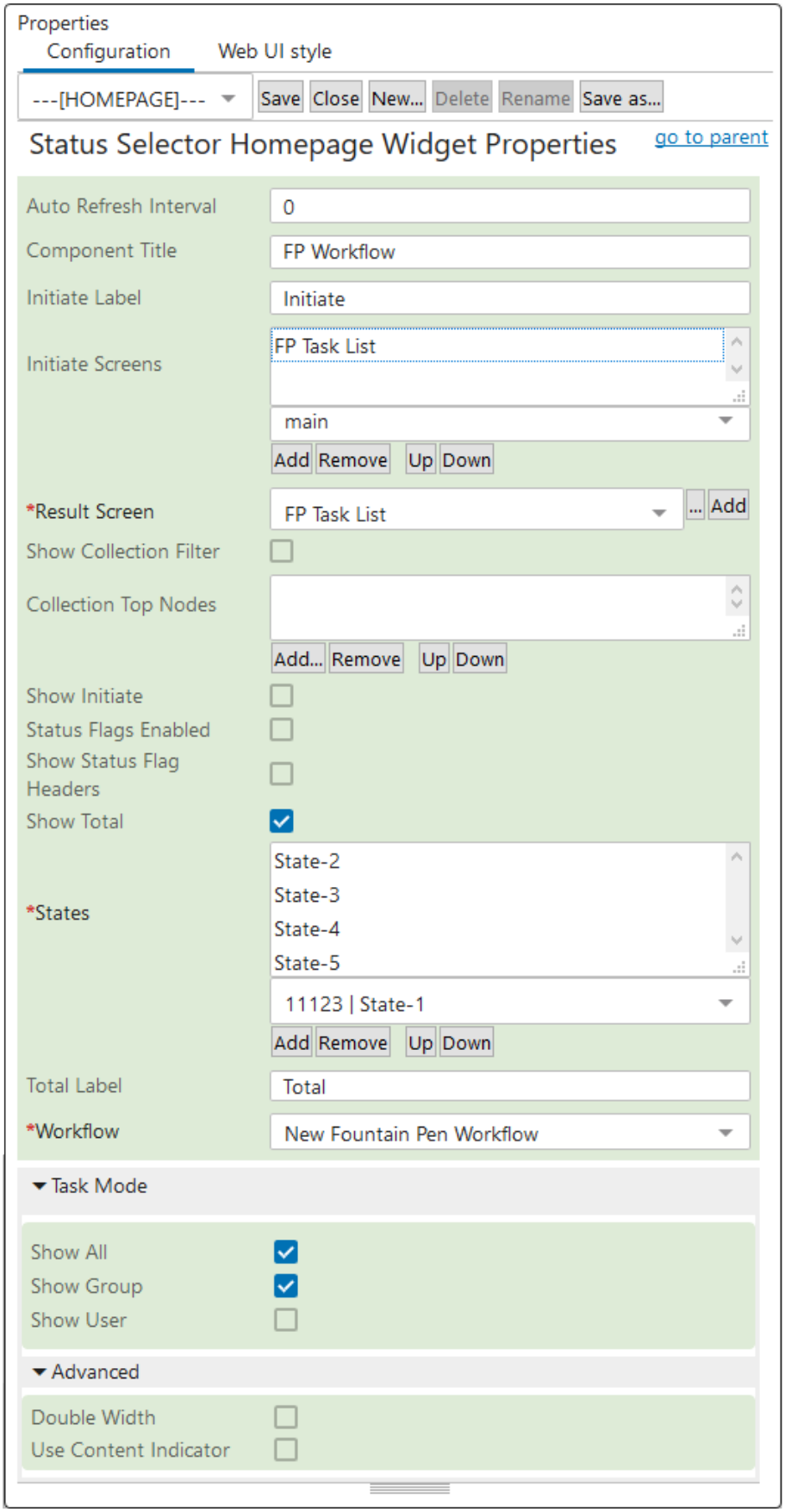
Note: From this point on, it is assumed that the workflow the widget will interact with is already set up in workbench.

Adding a Status Selector Widget

The Status Selector Homepage Widget must be added to the homepage prior to configuration. Details on how to add a widget to a homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

Setting up the Status Selector Homepage Widget Properties

The Status Selector Homepage Widget Properties designer screen is shown below.

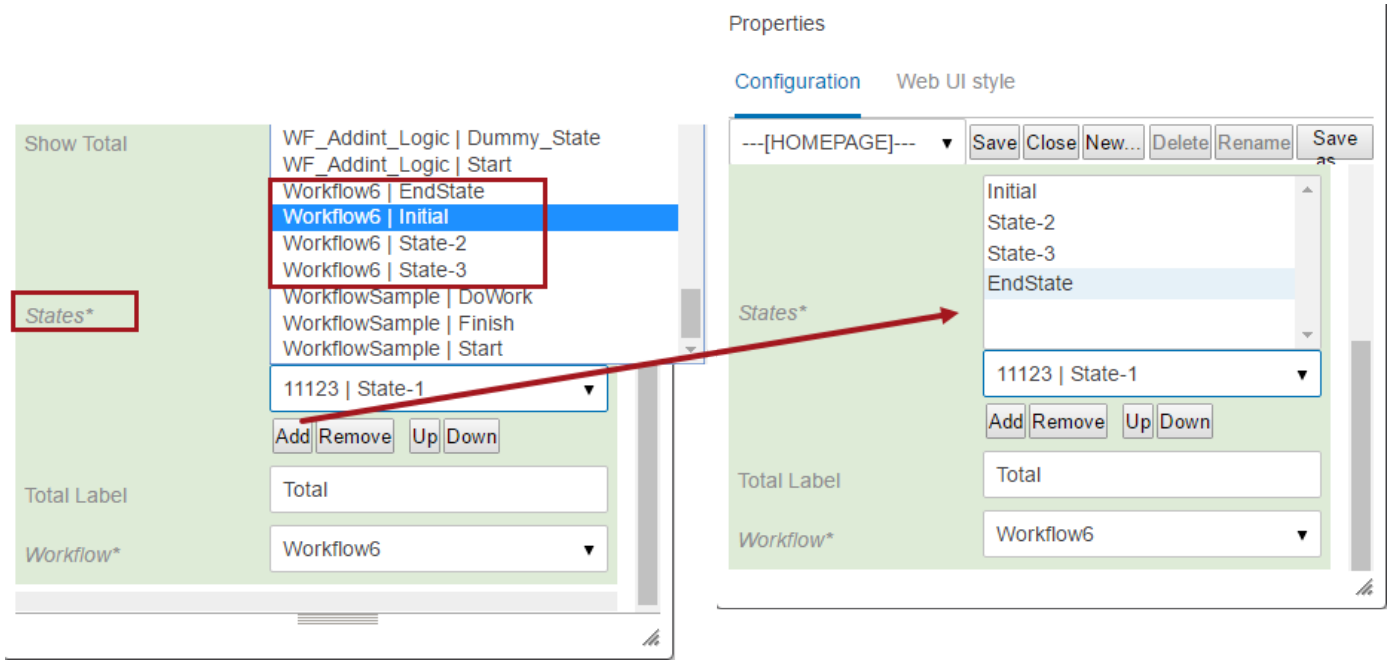

Properties
Configuration
Web UI style
---[HOMEPAGE]---
Save
Close
New...
Delete
Rename
Save as...
Status Selector Homepage Widget Properties
go to parent
Auto Refresh Interval
0
Component Title
FP Workflow
Initiate Label
Initiate
Initiate Screens
FP Task List
main
Add
Remove
Up
Down
*Result Screen
FP Task List
...
Add
Show Collection Filter
Collection Top Nodes
Add...
Remove
Up
Down
Show Initiate
Status Flags Enabled
Show Status Flag Headers
Show Total
*States
State-2
State-3
State-4
State-5
11123 | State-1
Add
Remove
Up
Down
Total Label
Total
*Workflow
New Fountain Pen Workflow
Task Mode
Show All
Show Group
Show User
Advanced
Double Width
Use Content Indicator

Status Selector Homepage Widget Properties can be saved as long as the workflow, the results screen, and at least one workflow state are configured. The steps required to set up these required parameters are listed below, followed by the remaining optional parameters. These parameters are listed in the same order from top to bottom as listed within the properties.

Required Parameters

1. Towards the bottom of the properties, you will find the **Workflow*** parameter. Using the dropdown select the ID of the workflow you will be working with using the Status Selector.
2. Next, for **States***, click the dropdown to see all the states within all workflows, which are listed by workflow ID and then the state ID. Look for the states that are in the workflow you selected in Step 1. Once you have selected a state, click the **Add** button. Continue this process until all the states you need are added. Use the Up and Down buttons to reorganize the states as they will display within the Status Selector in the order they are listed in the Properties (top to bottom).

   In the screenshot below, the workflow ID is Workflow6 and the four applicable states are 'Initial,' 'State-2,' 'State-3,' and 'EndState.'



3. Use the **Results Screen*** dropdown to select the screen, Task List or Advanced Search, that users will be navigated to upon clicking a workflow state.

   If the desired screen has not been created yet, click the Add button to the right of the field and follow the typical steps for creating a new screen. The screen ID of the newly created screen will be selected once the process is complete.

   If using an Advanced Search screen and wanting to further filter the task list, you can designate a specific (previously saved) search to use when navigating to the Advanced Search screen upon state selection. Click the ellipsis button (...) and select a search from the Saved Search dropdown. Save the selection.

Click **Save** in the designer window to save the changes you have made up to this point.

Additional Parameters

4. Set an **Auto Refresh Interval**, if desired. Enter, in seconds, how much time should pass before the Status Selector is automatically updated. Enter 0 to disable automatic updates. If you leave the field blank, it defaults to 0 upon saving the Properties.

   Disabling the functionality means that you will only see updates to the number of tasks in each state when the Web UI screen is refreshed (logging in and out; navigating to another page and then back to the homepage) versus automatic updates to the info displayed on the Status Selector without user intervention.

5. If you want to give the Status Selector a specific title, enter the text in the **Component Title** field. The workflow name automatically populates as the title when this field is blank.
6. If you want an initiate object link to display in the Status Selector as a way for user to create / initiate objects into the designated workflow, then enable the **Show Initiate** parameter. Also, insert text to be used for the link in **Initiate Label**. If you leave the label field blank, then 'Initiate' will automatically populate the field after saving the Properties.

   If the **Show Initiate** option is enabled (checked), a selection needs to be made for **Initiate Screens** using the dropdown. Make a selection, and then click Add. Repeat the process to add additional screens. The screen links will appear in order (top to bottom). Use Up and Down to reorganize as needed.

7. Click the **Status Flags Enabled** checkbox if you use Status Flags and want to the task count within the Status Selector to be grouped by Status Flag (columns) in addition to states (rows). While workflow state names are clickable and show all tasks within that particular state, clicking on a number under a Status Flag header gives you just the tasks within that state row that have that status.

   Additionally, if you want the headers to display above the columns, enable **Show Status Flag Headers**.

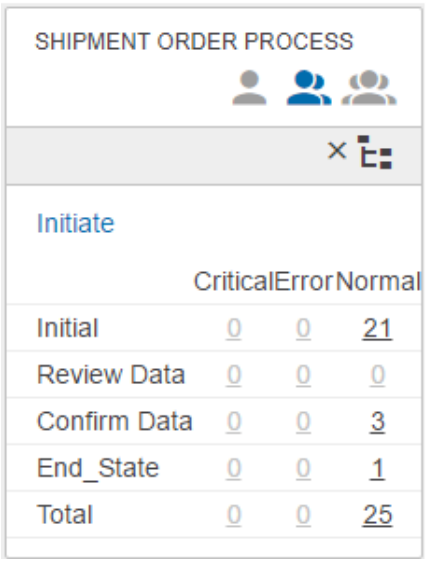
8. Enable the **Show Total** checkbox to add a row below all the workflow states that totals all the tasks. Also, the **Total Label** defaults to 'Total' upon save and can be kept as-is or alternate text can be entered into the parameter field.
9. Click the **Task Mode** heading bar to display three checkbox parameters that pertain to which of the three task mode icons -- User, Group, and All -- can be accessed by the user in the Status Selector Homepage Widget. The three parameters that display in this section are 'Show All', 'Show Group', and 'Show User'. How these three fields are checked determine which task modes are accessible by the user in the Status Selector Homepage Widget. All three parameters default to checked when accessed in the designer. When all are checked, all three task modes ( ) are enabled for display, depending on the user's privileges. If the user unchecks all options, no icons display and only the tasks for the user and the group to which the user belongs will show.

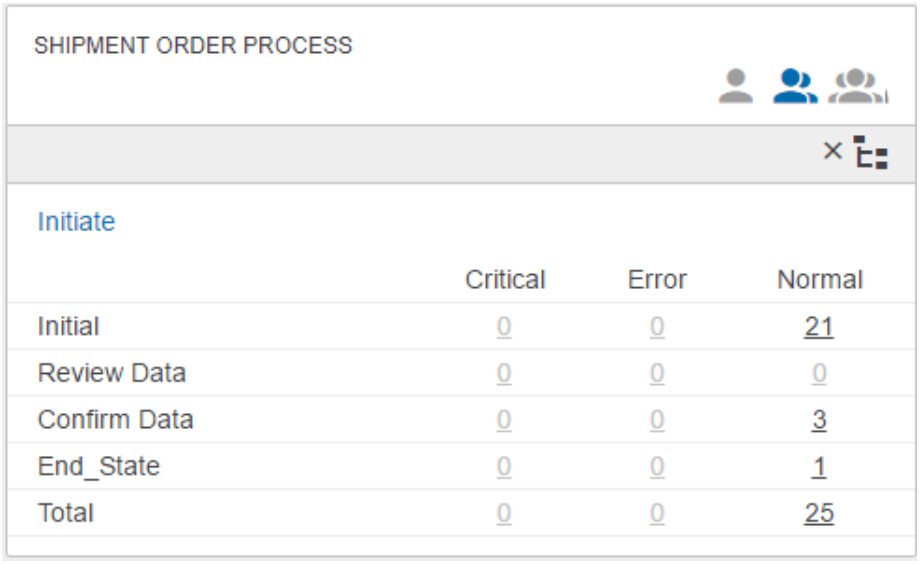
   When configuring the 'Task Mode' parameters for users without admin privileges, it is important to note that the 'All' task mode icon may not display in the Status Selector, regardless of configuration. As a result, if all three parameters are checked, only the 'Group' and 'User' icons will display. If 'All' and one of the other two task modes are checked, no icon will display and the tasks specific to the other checked task mode ('User' or 'Group') will be shown. If only 'Group' is checked, no icon will display and the tasks for the user and the

configured group to which the user belongs will show. If only 'User' is checked, no icon will display and the tasks for the logged-in user will display.

10. Click the **Advanced** heading bar to display the **Double Width** parameter. By clicking the checkbox, you double the display width of the Status Selector widget. You may wish to enable this parameter if you are using multiple status flags and want to see all the columns at one time, or you desire a bit more space between the columns.

    In the example below, standard size is shown on the left and double width is shown on the right.





11. Click the **Advanced Heading** to display the **Use Content Indicator** parameter if desired. When checked, the component displays a content indicator instead of the exact task count.

Again, click **Save** in the designer window to save the changes you have made up to this point

Setting up Collections Viewing

Collections are containers for storing sets of objects, and collection groups are containers that can hold collections or other collection groups. A collection can be applied as a filter limiting the available objects to the ones present in the chosen collection. Collections are typically used in relation to Bulk Update functionality.

To make use of Collections Filtering in Web UI, initial setup needs to take in place in STEP Workbench and be in place before starting the next steps. Permissions for viewing and working with collections are also configured in workbench.

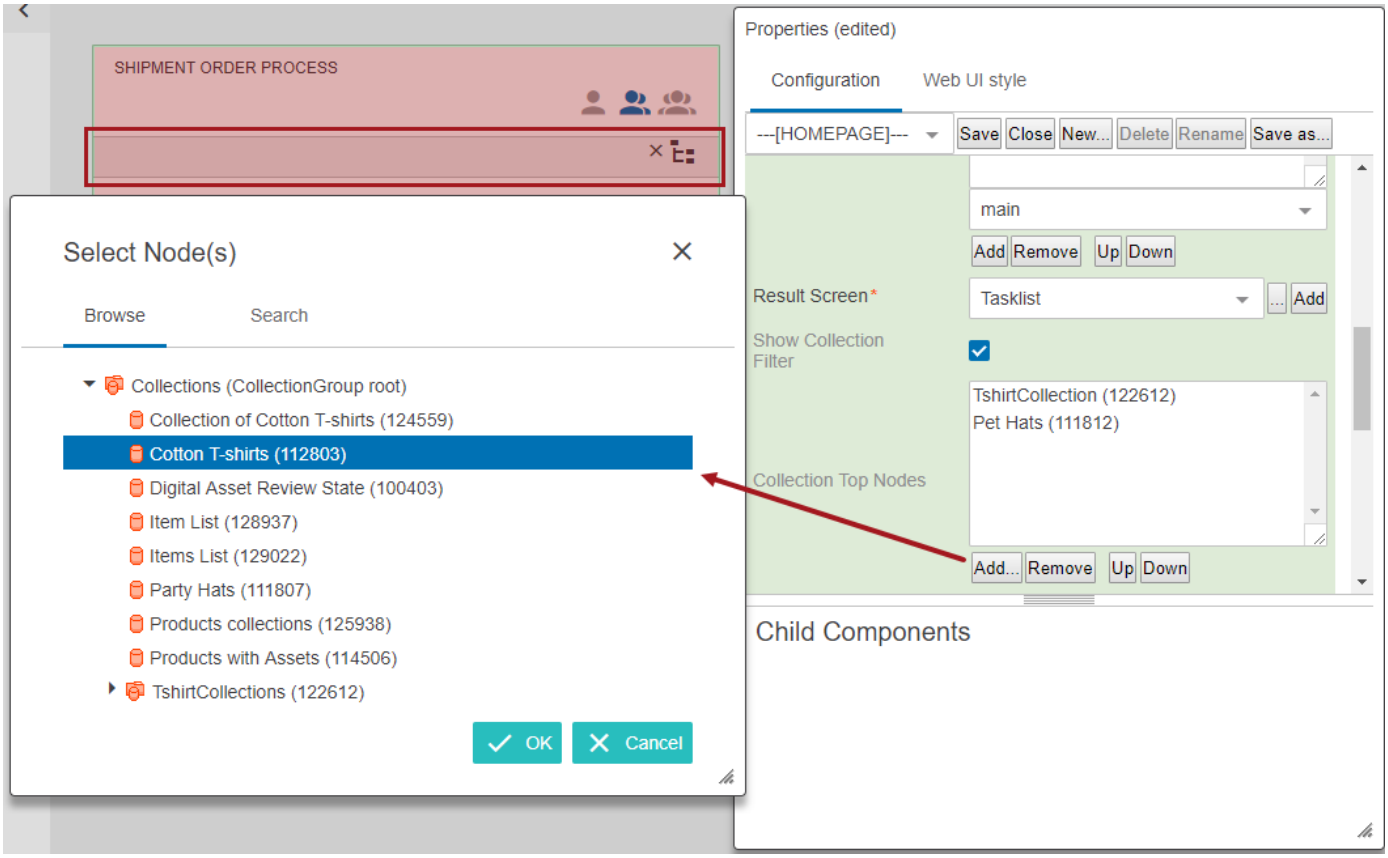
For more on collections, see **Collections** in the **System Setup / Super User Guide** documentation.

Note: For information on how to schedule bulk updates for collections in Web UI, see the **Scheduling a Collection Refresh in Web UI** topic in the **Bulk Updates** documentation.

---

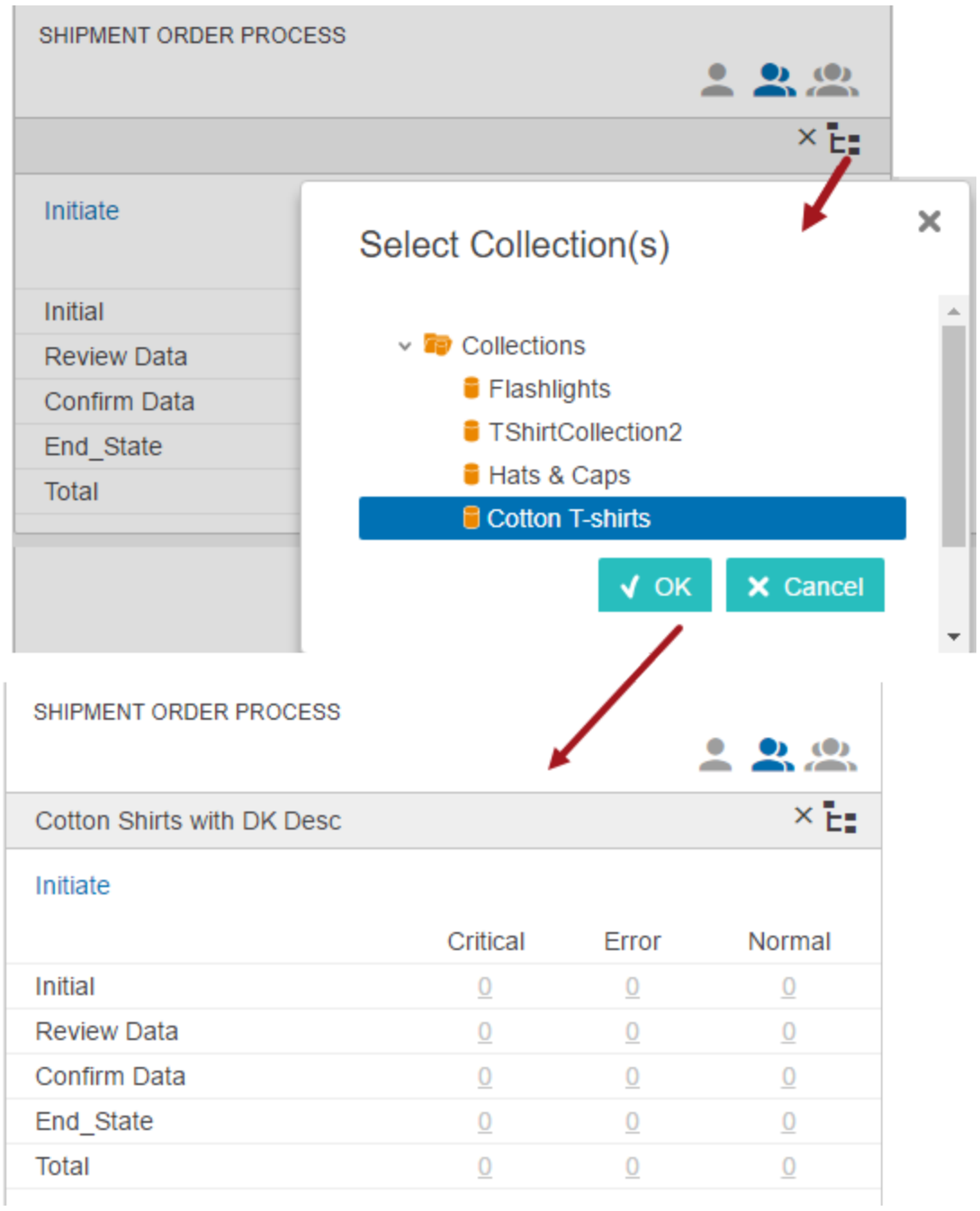
1. Select **Show Collections Filter** to show collections.

2. Add any **Collections Top Node Filters** to further narrow down the collection or collections accessible to users. Click Add, and make a selection or selections, and then click OK. The selections can be reorganized as needed.



Save the changes and **Close** the designer window.

Only collections available to the user or user group will be shown when configured properly. The user can then filter the states based on the collection or collection group selected.



For more information on end-users tasks such as initiating objects into a workflow and working with states and tasks within the Status Selector Homepage Widget, see the **Working with Tasks in Workflows** section of the **Workflows in Web UI** documentation.

Status Selector Sidebar Widget

The Status Selector widget is the starting point for users who want to work with a workflow in Web UI. The **Status Selector Sidebar Widget** displays within a side panel, and its main purpose is to show states and the number of tasks in each state in a particular workflow. Upon clicking one of the displayed states, users will be navigated to a screen in which they can work with an individual task or multiple tasks. The screen that a user sees to work with the tasks depends on how the widget is configured. There are a number of possibilities, including the Task List screen, a Workflow Screen, or an Advanced Search screen.

Since each widget is configured for a single workflow, multiple widgets can be set up and used as needed. Each Status Selector Sidebar Widget is highly configurable. If configured properly, a user can initiate tasks into a workflow, track tasks, and see what status flags they have (if applicable).

If interested in using a widget that has the same functionality but is displayed on the homepage, see the **Status Selector Homepage Widget** topic.

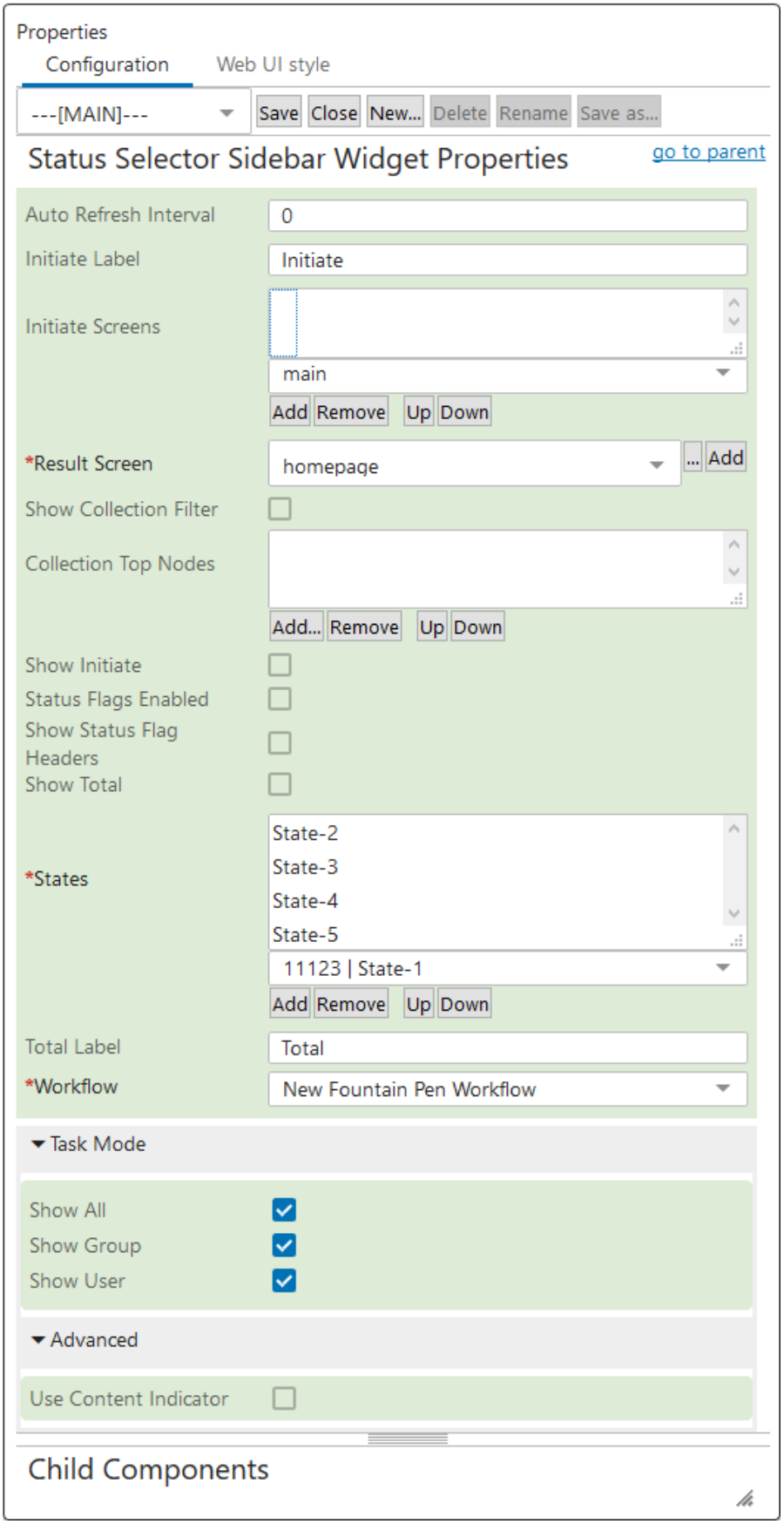
Note: From this point on, it is assumed that the workflow the widget will interact with is already set up in workbench.

Adding a Status Selector Widget

The Status Selector Sidebar Widget needs to be added as a Stack Panel Item in Main Properties prior to configuration. Follow the standard procedure, which is detailed in the **Main Properties** topic of the **Using a Web UI** documentation.

Setting up the Status Selector Sidebar Widget Properties

The Status Selector Sidebar Widget Properties screen is shown below:

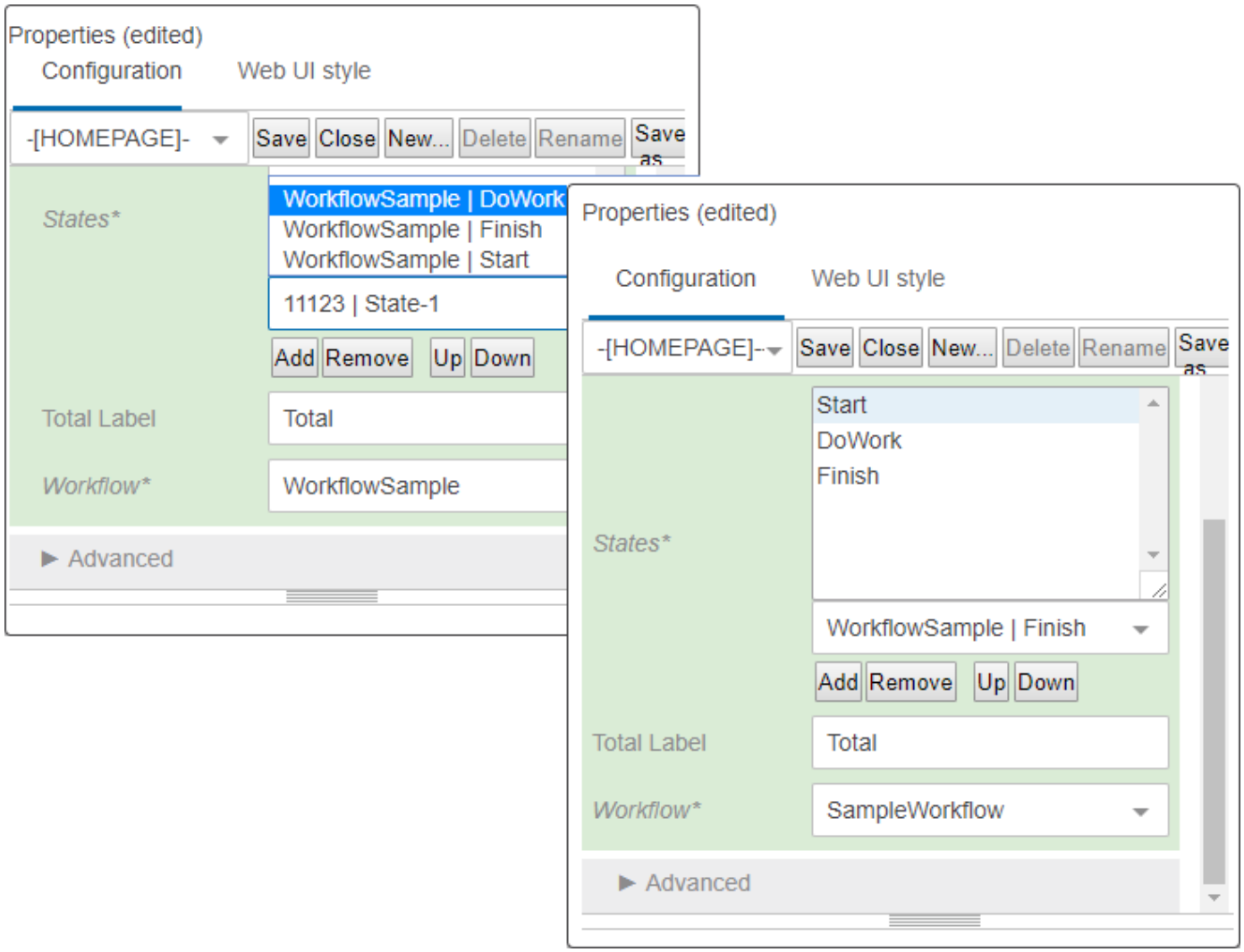

Properties
Configuration
Web UI style
---[MAIN]---
Save
Close
New...
Delete
Rename
Save as...
Status Selector Sidebar Widget Properties
go to parent
Auto Refresh Interval
0
Initiate Label
Initiate
Initiate Screens
main
Add
Remove
Up
Down
*Result Screen
homepage
...
Add
Show Collection Filter
Collection Top Nodes
Add...
Remove
Up
Down
Show Initiate
Status Flags Enabled
Show Status Flag Headers
Show Total
*States
State-2
State-3
State-4
State-5
11123 | State-1
Add
Remove
Up
Down
Total Label
Total
*Workflow
New Fountain Pen Workflow
Task Mode
Show All
Show Group
Show User
Advanced
Use Content Indicator
Child Components

Status Selector Sidebar Widget Properties can be saved as long as the workflow, the results screen, and at least one workflow state is configured. Below, the steps to set up these required parameters are listed first and then the remaining parameters go in order from top to bottom as listed within the properties.

Required Parameters

1. Towards the bottom of the properties, you will find the **Workflow*** parameter. Using the dropdown select the ID of the workflow you will be working with using the Status Selector.
2. Next, for **States***, click the dropdown to see all the states within all workflows, which are listed by workflow ID and then the state ID. Look for the states that are in the workflow you selected in Step 1. Once you have selected a state, click the **Add** button. Continue this process until all the states you need are added. Use the Up and Down buttons to reorganize the states as they will display within the Status Selector in the order they are listed in the Properties (top to bottom).

   In the screenshot below, the workflow ID is WorkflowSample and the three applicable states are 'Start,' 'DoWork,' and 'Finish.'



3. Use the **Results Screen*** dropdown to select the screen, Task List or Advanced Search, that users will be navigated to upon clicking a workflow state.

   If the desired screen has not been created yet, click the Add button to the right of the field and follow the typical steps for creating a new screen. The screen ID of the newly created screen will be selected once the process is complete.

   If using an Advanced Search screen and wanting to further filter the task list, you can designate a specific (previously saved) search to use when navigated to the Advanced Search screen upon state selection. Click the ellipsis button (...) and select a search from the saved search dropdown. Save the selection.

Click **Save** in the designer window to save the changes you have made up to this point

Additional Parameters

4. Set an **Auto Refresh Interval**, if desired. Enter, in seconds, how much time should pass before the Status Selector is automatically updated. Enter 0 to disable automatic updates. If you leave the field blank, it defaults to 0 upon saving the Properties.

   Disabling the functionality means that you will only see updates to the number of tasks in each state when the Web UI screen is refreshed (logging in and out; navigating to another page and then back) versus automatic updates to the info displayed on the Status Selector without user intervention.

5. If you want an initiate object link to display in the Status Selector as a way for user to create / initiate objects into the designated workflow, then enable the **Show Initiate** parameter. Also, insert text to be used for the link in **Initiate Label**. If you leave the label field blank, then 'Initiate' will automatically populate the field after saving the Properties.

   If the **Show Initiate** option is enabled (checked), a selection needs to be made for **Initiate Screens** using the dropdown. Make a selection, and then click Add. Repeat the process to add additional screens. The screen links will appear in order (top to bottom). Use Up and Down to reorganize as needed.

6. Click the **Status Flags Enabled** checkbox if you use Status Flags and want to the task count within the Status Selector to be grouped by Status Flag (columns) in addition to states (rows).

   Additionally, if you want the headers to display above the columns, enable **Show Status Flag Headers**.

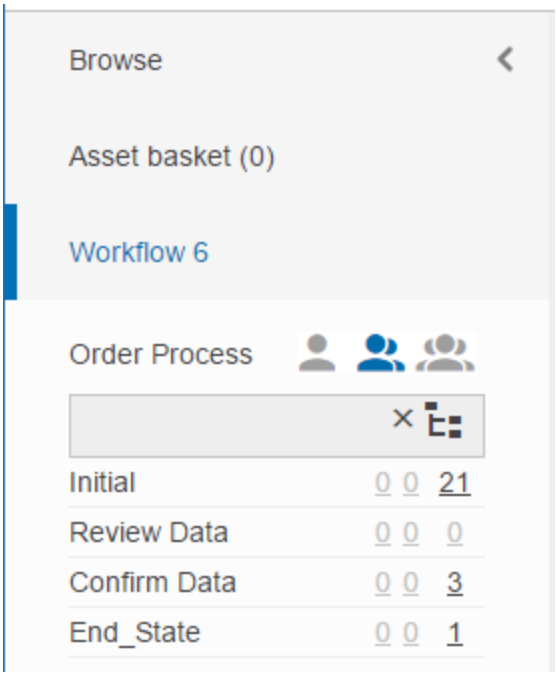
7. Enable the **Show Total** checkbox to add a row below all the workflow states that totals all the tasks. Also, the **Total Label** defaults to 'Total' upon save and can be kept as-is or alternate text can be entered into the parameter field.
8. Click the **Task Mode** heading bar to display three checkbox parameters that pertain to which of the three task mode icons -- User, Group, and All -- can be accessed by the user in the Status Selector Sidebar Widget. The three parameters that display in this section are 'Show All', 'Show Group', and 'Show User'. How these three fields are checked determine which task modes are accessible by the user in the Status Selector Sidebar Widget. All three parameters default to checked when accessed in the designer. When all are checked, all three task modes ( ) are enabled for display, depending on the user's privileges. If

the user unchecks all options, no icons display and only the tasks for the user and the group to which the user belongs will show.

When configuring the 'Task Mode' parameters for users without admin privileges, it is important to note that the 'All' task mode icon may not display in the Status Selector for non-admin users, regardless of configuration. As a result, if all three parameters are checked, only the 'Group' and 'User' icons will display. If 'All' and one of the other two task modes are checked, no icon will display and the tasks specific to the other checked task mode ('User' or 'Group') will be shown. If only 'Group' is checked, no icon will display and the tasks for the user and the configured group to which the user belongs will show. If only 'User' is checked, no icon will display and the tasks for the logged-in user will display.

9. Click the **Advanced** heading bar to display the **Use Content Indicator** parameter. Clicking the checkbox, will cause the component to show a clickable content indicator instead of the exact task count.

Again, click **Save** in the designer window to save the changes you have made up to this point



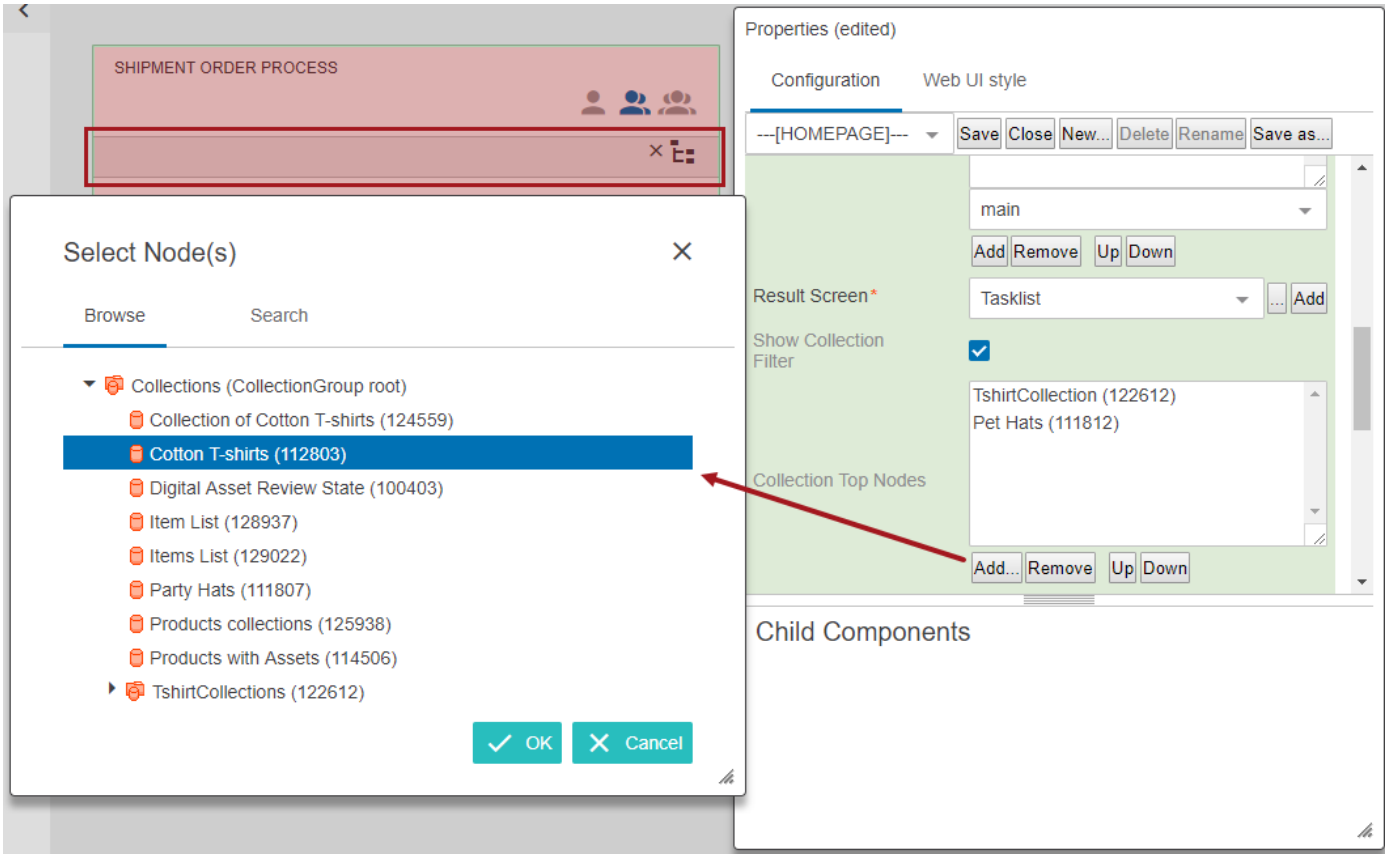
Setting up Collections Viewing

Collections are containers for storing sets of objects, and collection groups are containers that can hold collections or other collection groups. A collection can be applied as a filter limiting the available objects to the ones present in the chosen collection. Collections are typically used in relation to Bulk Update functionality.

To make use of Collections Filtering in Web UI, initial setup needs to take place in STEP Workbench and be in place before starting the next steps. Permissions for viewing and working with collections are also configured in workbench. For more on collections, see **Collections** in the **System Setup / Super User Guide** documentation.

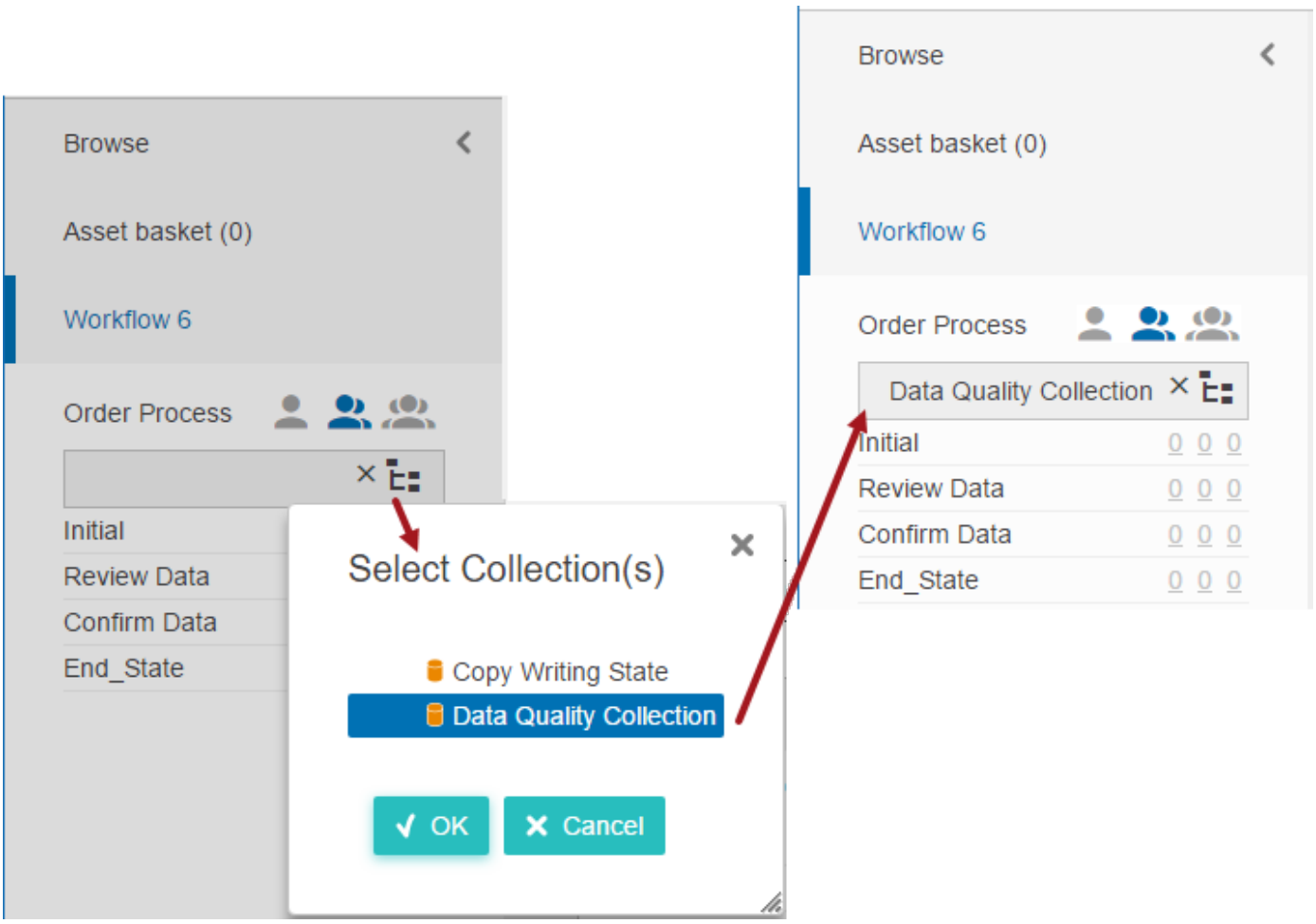
1. Select **Show Collections Filter** to show collections.

2. Add any **Collections Top Node Filters** to further narrow down the collection or collections accessible to users. Click Add, and make a selection or selections, and then click OK. The selections can be reorganized as needed.



Save the changes and **Close** the designer window.

Only collections available to the user or user group will be shown when configured properly. The user can then filter the states based on the collection or collection group selected.



For more information on end-users tasks such as initiating objects into a workflow and working with states and tasks within the Status Selector Sidebar Widget, see the **Working with Tasks in Workflows** section of the **Workflows in Web UI** documentation.

Initiate Item Screen

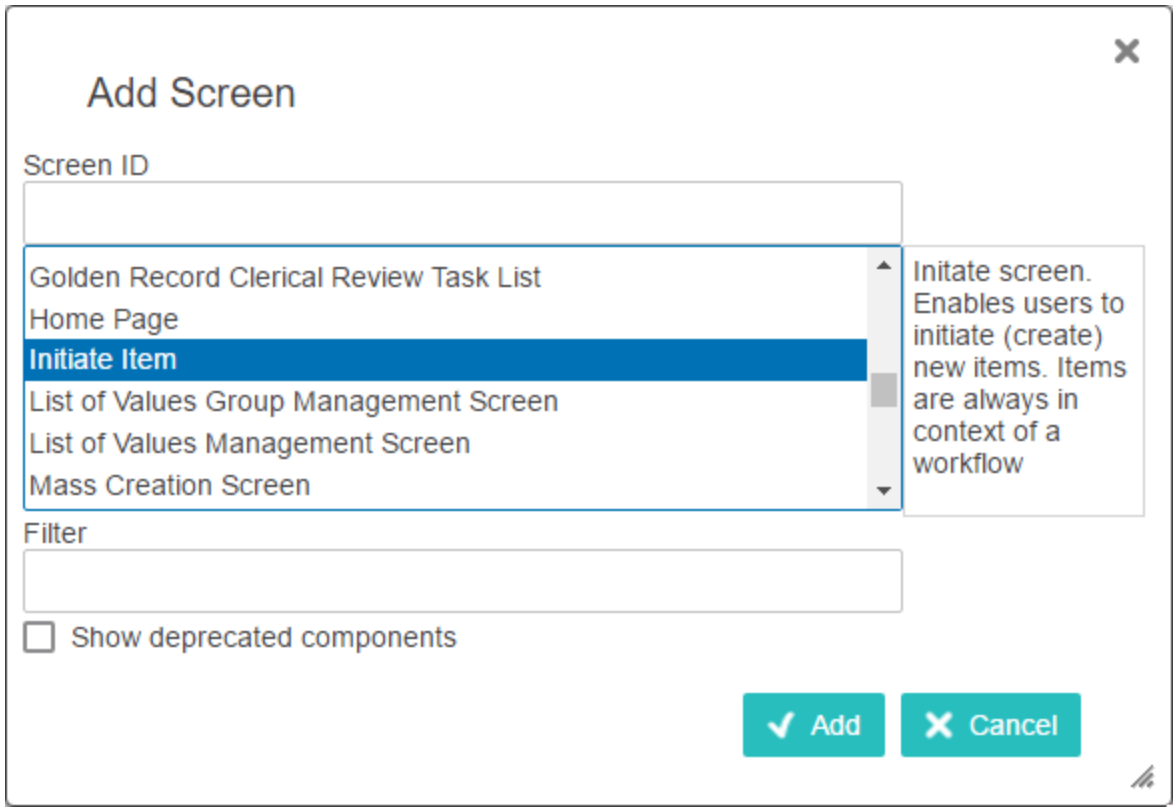
The **Initiate Item** screen is used to create new objects using STEP Web UI and initiate those objects into a workflow. Once configured, an Initiate Item screen is accessible using a Status Selector Homepage Widget and/or Status Selector Sidebar Widget.

Steps provided in this topic assume the Web UI designer is in design mode prior to starting the configuration process. For more information about getting started using a Web UI and details about design mode access / usage, see the **Web UI Getting Started** documentation.

Adding a New Initiate Item Screen

Steps for creating a new screen using the Initiate Item screen type are below.

1. In the designer window, click the **New** button in the action icon row.
2. Choose **Initiate Item** from the screen list and type in a Screen ID. The screen ID should be something easily identifiable when it is time to configure the screen and/or set up screen mapping.

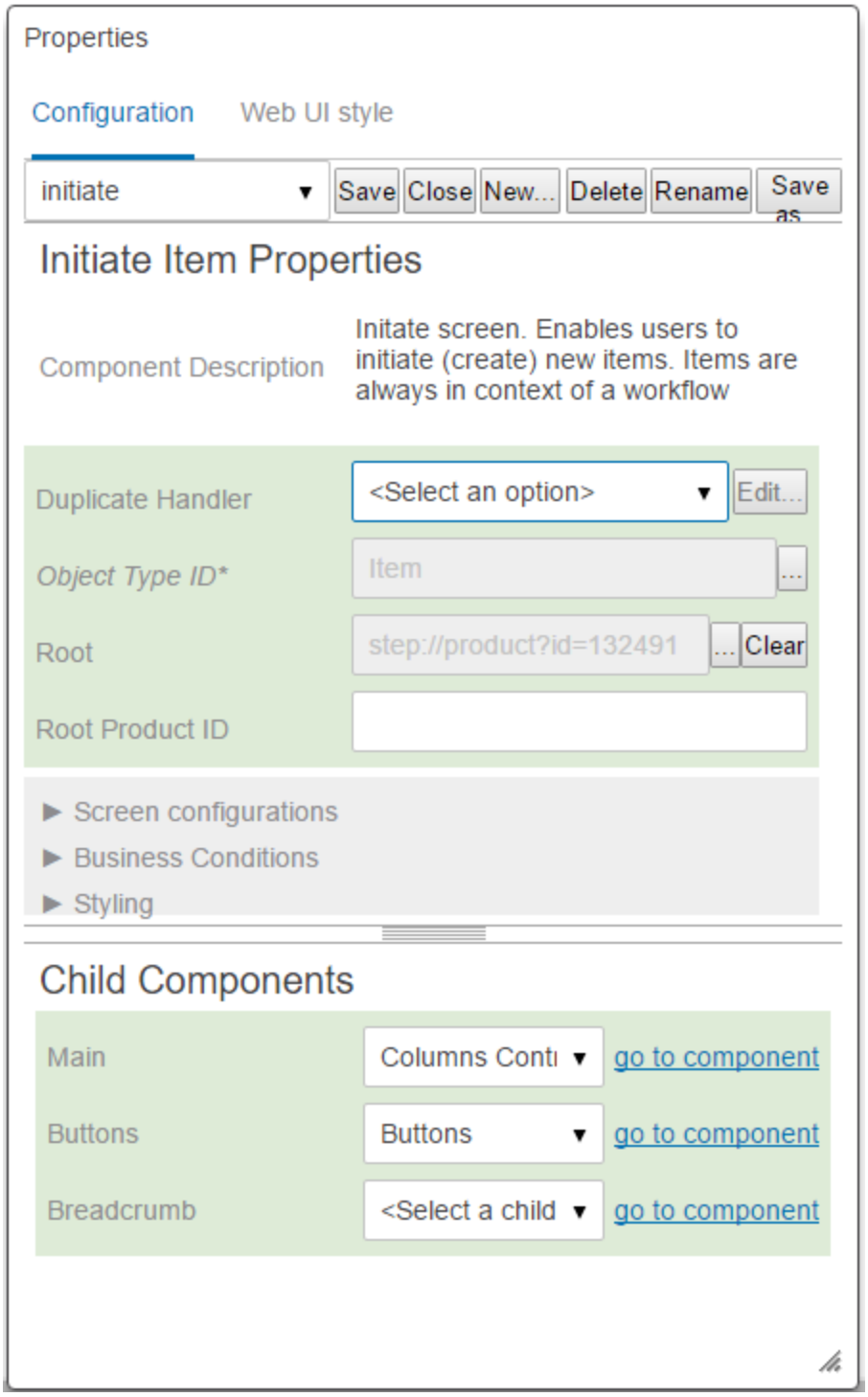


3. Click **Add**.
4. At this point, either close the designer and configure the screen at a later time, or continue on with the **Initiate Item** configuration. You must do Step 1 of the next section before you can successfully save Initiate Item Properties.

Configuring Initiate Item Properties

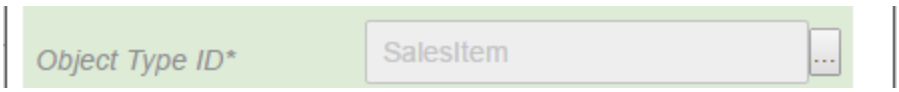
Some STEP Web UI templates include a pre-configured Initiate Item screen type with a screen ID 'initiate.' If using the existing 'initiate' screen, there may be modifications required to the default settings. These are touched on later in this topic under the **Editing Pre-configured Initiate Item Properties** section.

The steps in this topic outline how to create a new screen and configure the parameters to your data structure and can be adapted to edit an existing screen.

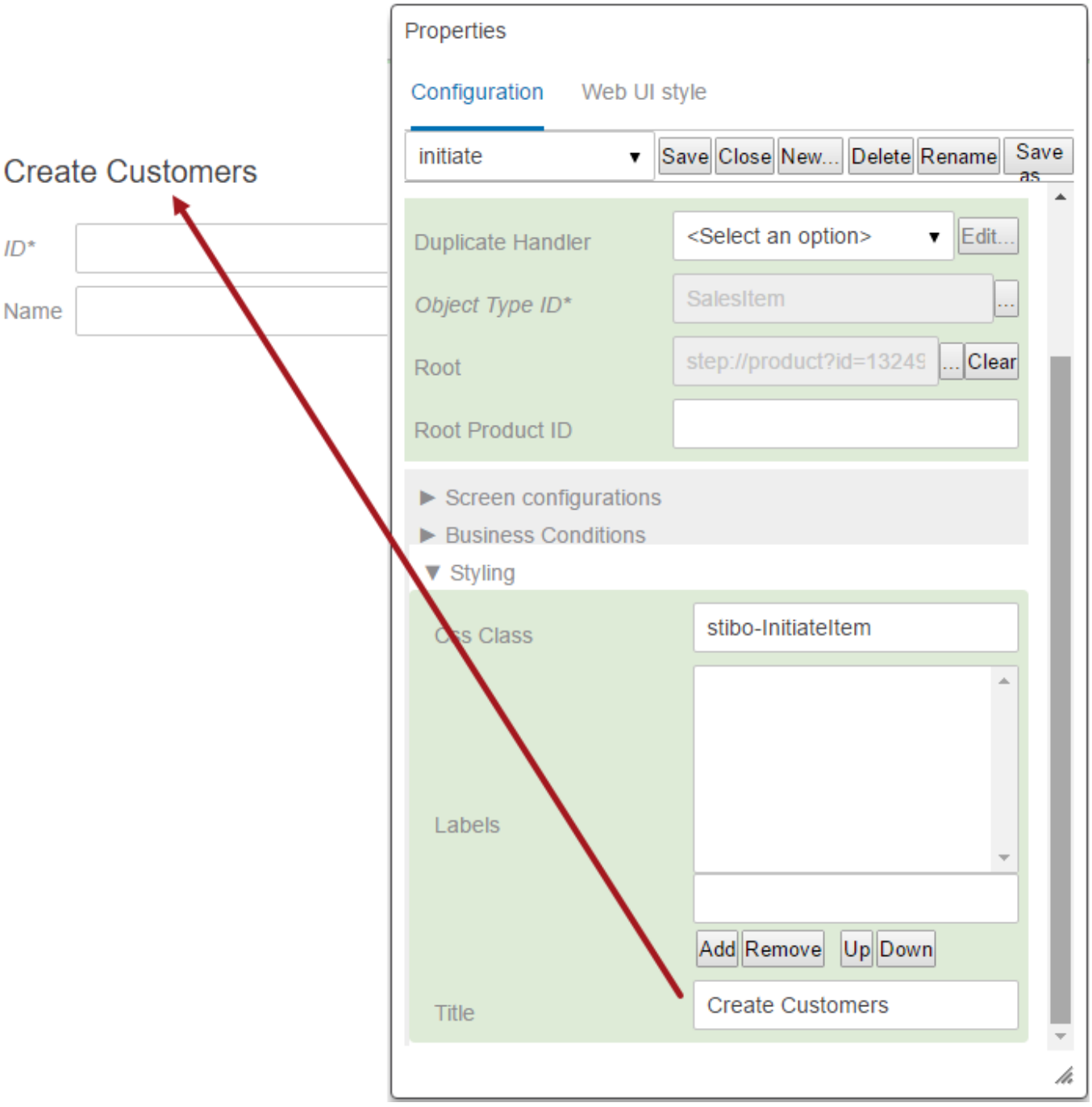


Initiate Item Master Components

1. For the **Object Type ID** parameter; click the ellipsis button (...) to make a single selection from the 'Select Node(s)' dialog. When new objects are created using this screen, they will be created as the object type selected. In the example below, the Object Type is set to 'SalesItem.'

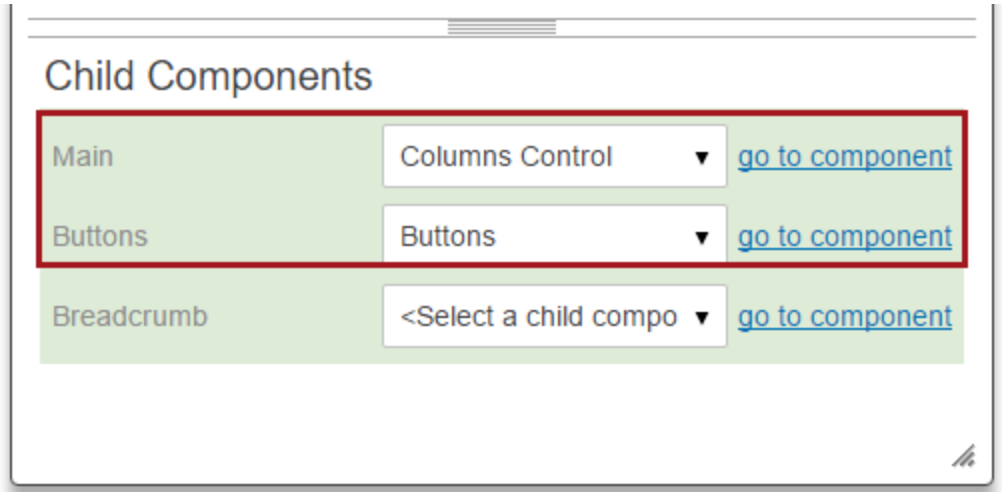


2. If all new items will be created below a specific root node, click the ellipsis button (...) to make a **Root** parameter selection. If not all new items should be created in the same location, skip this step and instead use a component on the screen that allows the user to pick the parent (see Step 4 of the **Initiate Item Child Components** section).
3. The **Root Product ID** parameter field should be blank.
4. Click **Screen configurations** to access the **Forwarding Screen** parameter. Using the dropdown, you can choose a screen (by screen ID) to forward the user to once they have initiated an item successfully. If the desired screen does not exist, one can be added and configured at a later time.
5. Click **Business Conditions** to display additional parameters:
    - **Business Conditions**: Click **Add...** to select an existing business condition to be executed to validate attribute values on the node being edited. Multiple business conditions can be added, but all must succeed for the process to continue. For more information about Business Conditions, see **Business Conditions** in the **Business Rules** documentation.
    - **Disable Auto Vendor**: Click the checkbox to disable automatic linking to the supplier (vendor classification), if desired and applicable to your Web UI usage / setup.
6. Click **Styling** to display additional parameters.
    - **Title**: The default title (Initiate Item) can be used as-is or a more descriptive title can be typed in to the value field. Titles are displayed at the top left of the screen. In the example screenshot below, the default value is overwritten with 'Create Customers.'



Initiate Item Child Components

The options you pick may not exactly match the steps below. These components are configurable based on your setup needs and preferences. As an example, in Step 1 below, you are instructed to select Columns Control. Some Web UI setups may use Tab Control in place of Columns Control. The steps to configure a Tab Control component (or any other selection) will differ slightly than outlined below. Follow the Properties dialogs presented to you on the screen.



1. For **Child Components** > **Main**, choose **Columns Control** from the dropdown. Then click on **go to component**.
2. In Columns Control Properties, click the **Add** button below the Child Components > Columns field and select **Node Editor**. Click **Add**.
3. Back on Columns Control Properties, double click the **Node Editor** title in the Columns value field.
4. Click **Add** to make selections under Node Editor Properties > Child Components > Rows. These selections are the fields that will display on the Initiate Item screen as users create and initiate objects. Examples include ID Value, Name Value, Attribute Value Component, Attribute Value Group Component—anything that should have a populated value during the initial creation of an object.
   - If initiating items into different root nodes within the object structure, a component such as 'Parent Selector' can be added so that the user can select the root node for each object created. As explained earlier in this topic, if all objects should be created under one static root node, then that selection can be made in the Initiate Item Properties > Root parameter.

Important: The Parent Selector component should only be used with the Initiate Item Screen. While the component can be added to other screens, it is recommended that the Business Action with Web UI Bind be used instead. For more information, see the **Business Action with Web UI Bind** topic in the **Web User Interfaces / Web UI Getting Started** documentation.

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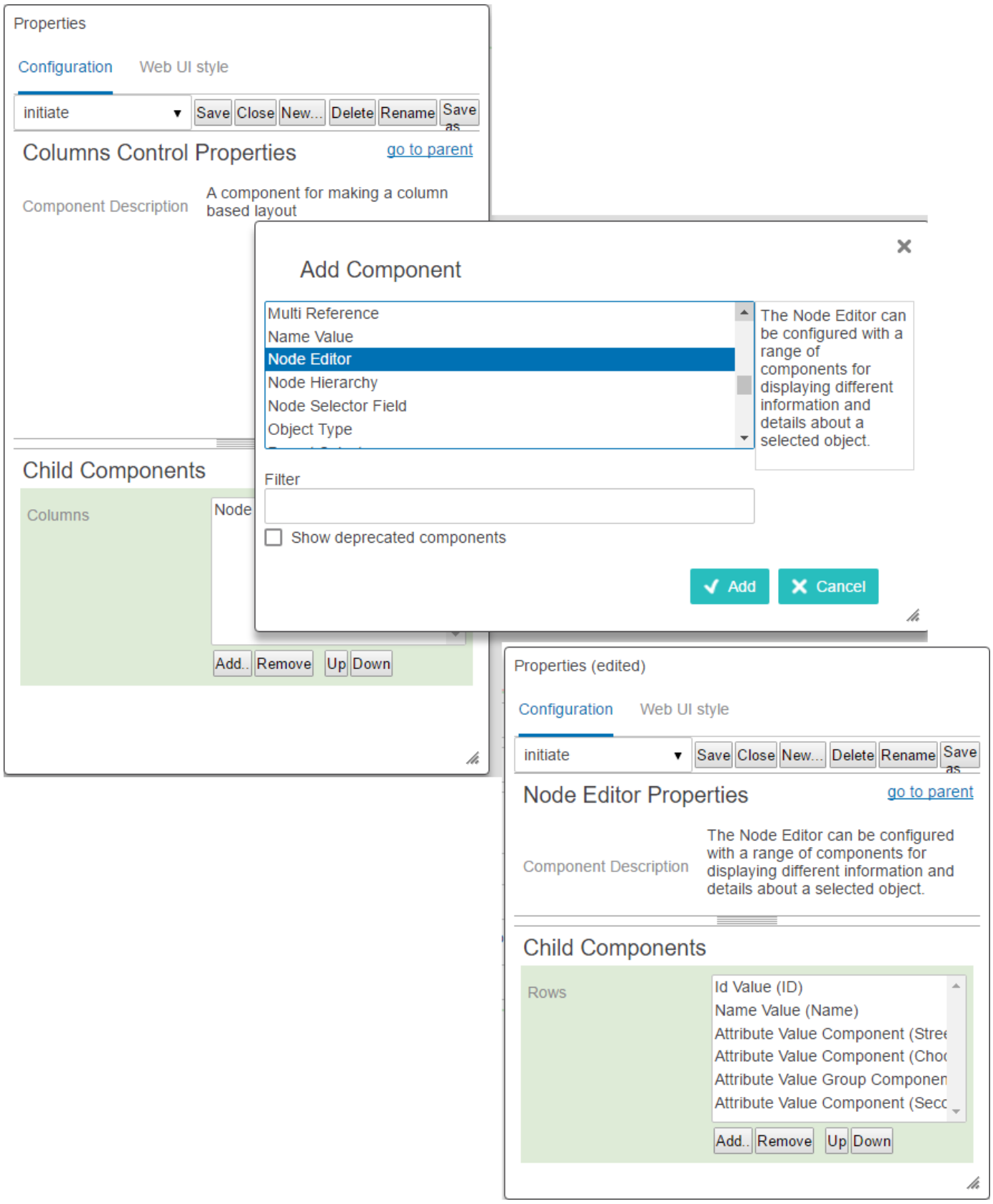
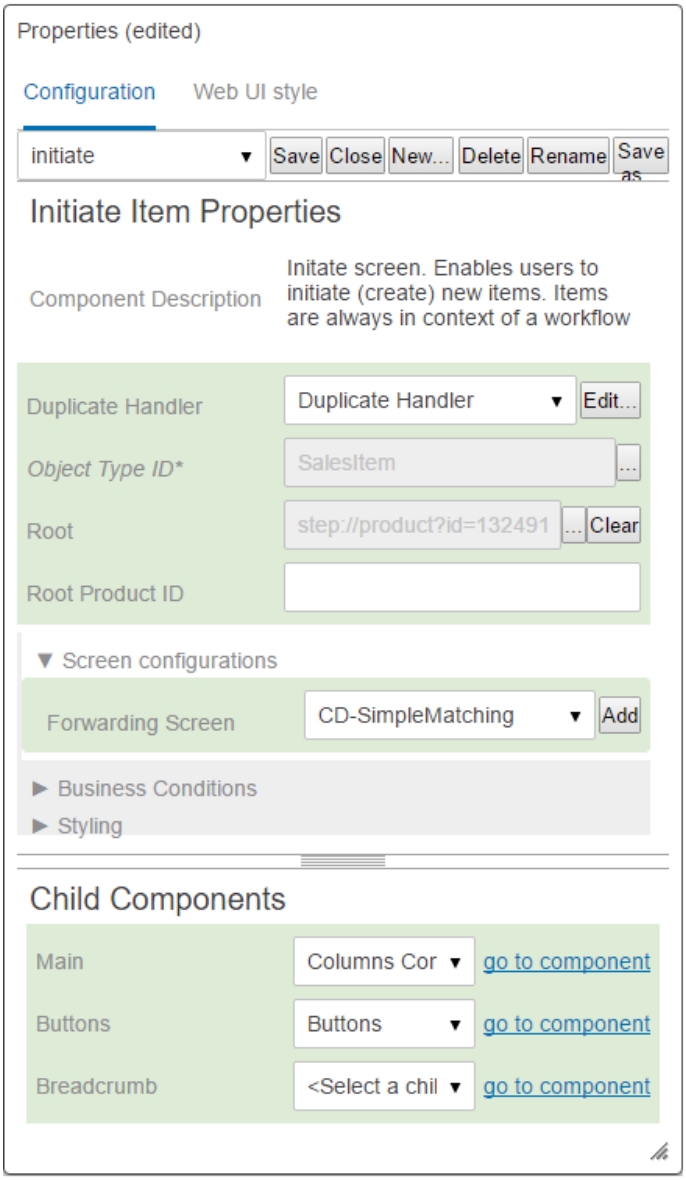
5. Click **go to parent** on Columns Control Properties to return to Initiate Item Properties.

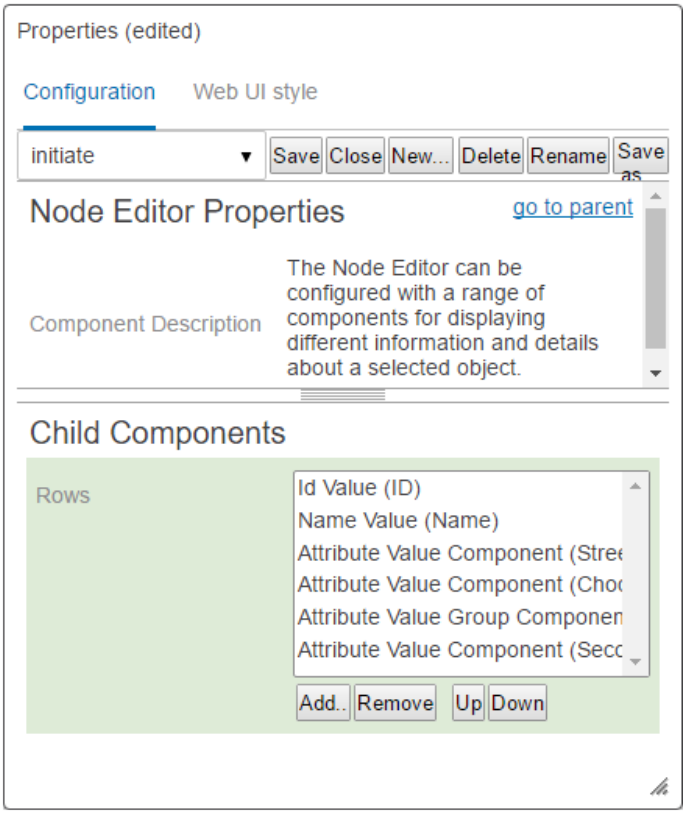

Properties
Configuration
Web UI style
initiate
Save
Close
New...
Delete
Rename
Save as
Columns Control Properties
go to parent
Component Description
A component for making a column based layout
Add Component
Multi Reference
Name Value
Node Editor
Node Hierarchy
Node Selector Field
Object Type
The Node Editor can be configured with a range of components for displaying different information and details about a selected object.
Filter
Show deprecated components
Add
Cancel
Child Components
Columns
Node
Add..
Remove
Up
Down
Properties (edited)
Configuration
Web UI style
initiate
Save
Close
New...
Delete
Rename
Save as
Node Editor Properties
go to parent
Component Description
The Node Editor can be configured with a range of components for displaying different information and details about a selected object.
Child Components
Rows
Id Value (ID)
Name Value (Name)
Attribute Value Component (Stree
Attribute Value Component (Choc
Attribute Value Group Componen
Attribute Value Component (Secc
Add..
Remove
Up
Down

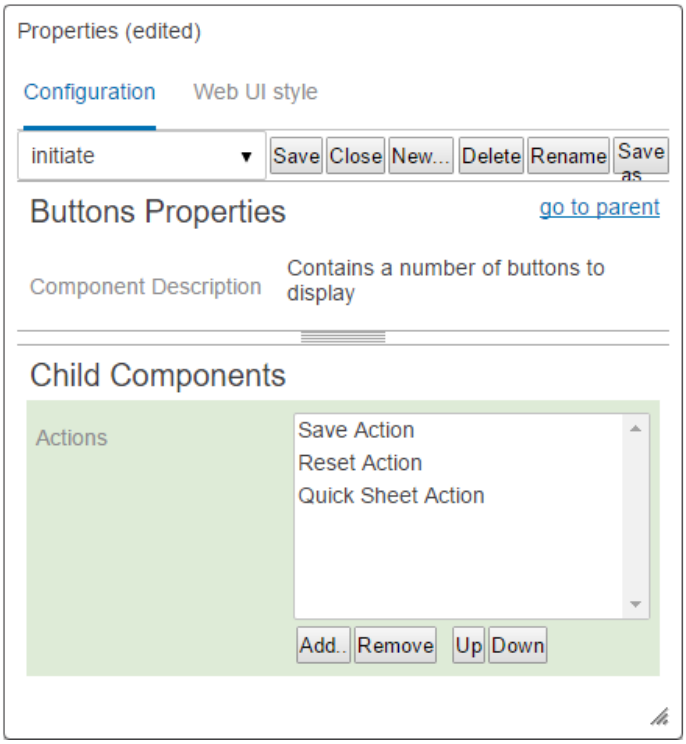
6. Back on the Initiate Item Properties screen, go to **Child Component** > **Buttons** and select **Buttons** from the dropdown. Then, click on **go to component**.
7. On **Buttons Properties**, click the **Add** button below the Actions field, then select a component from the 'Add component' list and click **Add**. Additional configuration may be required depending on which action is selected. This is a small sample of available Actions with brief descriptions:
    - The **Save Action** is necessary to save / create objects.
    - The **Reset Action** erases unsaved data if the user needs to clear the screen for any reason.
    - The **Find Similar Action** is used to identify similar objects prior to initiating new ones, to avoid duplicate data.

Note: The Initiate Item Properties > Duplicate Handler parameter is used with the Find Similar action button that is mentioned above. The specific setup required to use Find Similar functionality and the Duplicate Handler parameter is explained in the **Find Similar** section of the **Using a Web UI** documentation.

8. Repeat the previous step as needed to add additional actions. The action buttons will display in the order they are listed in the Actions value field. Reorganize by using the Up and Down buttons.
9. Click the **Save** button in the designer.

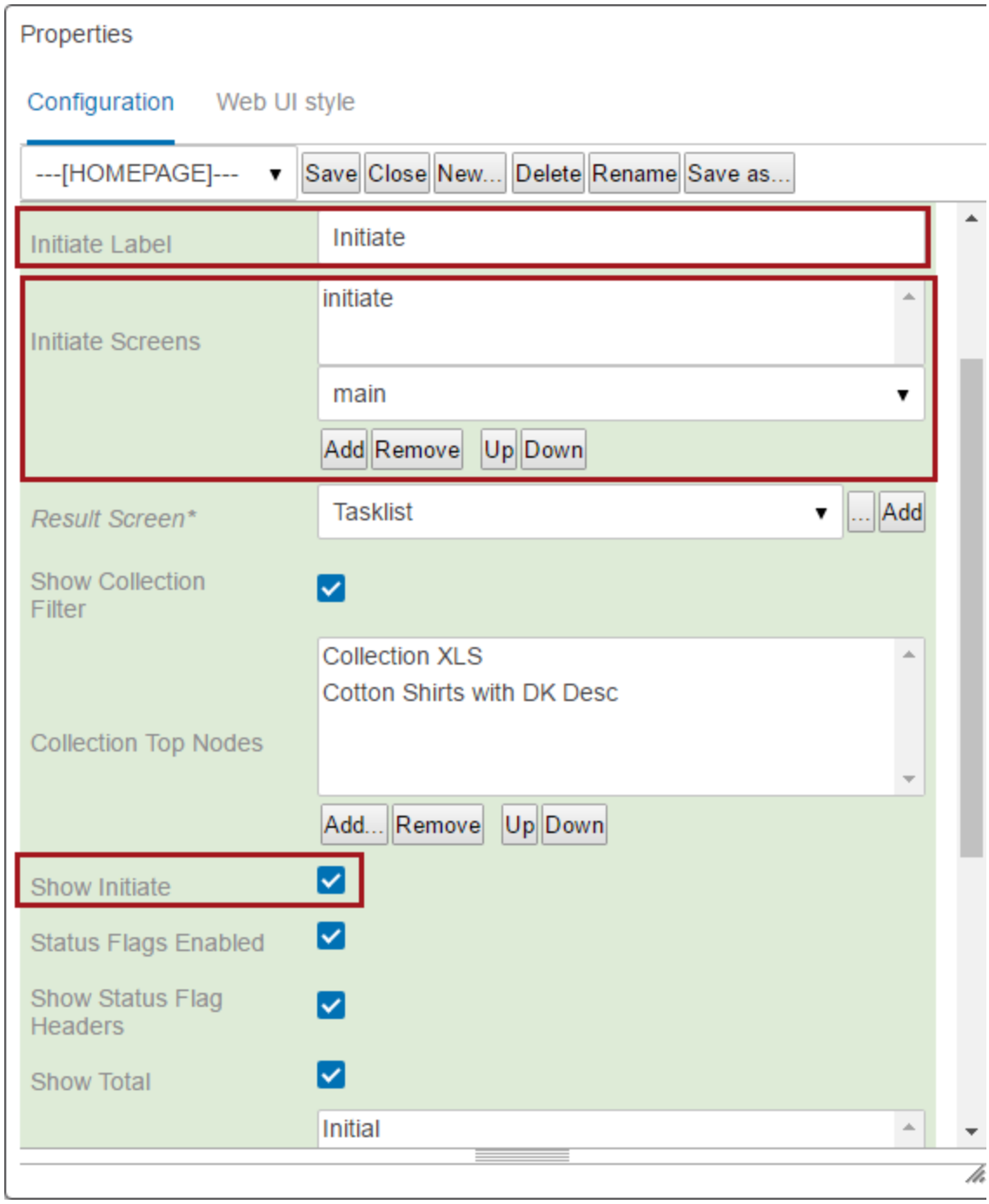


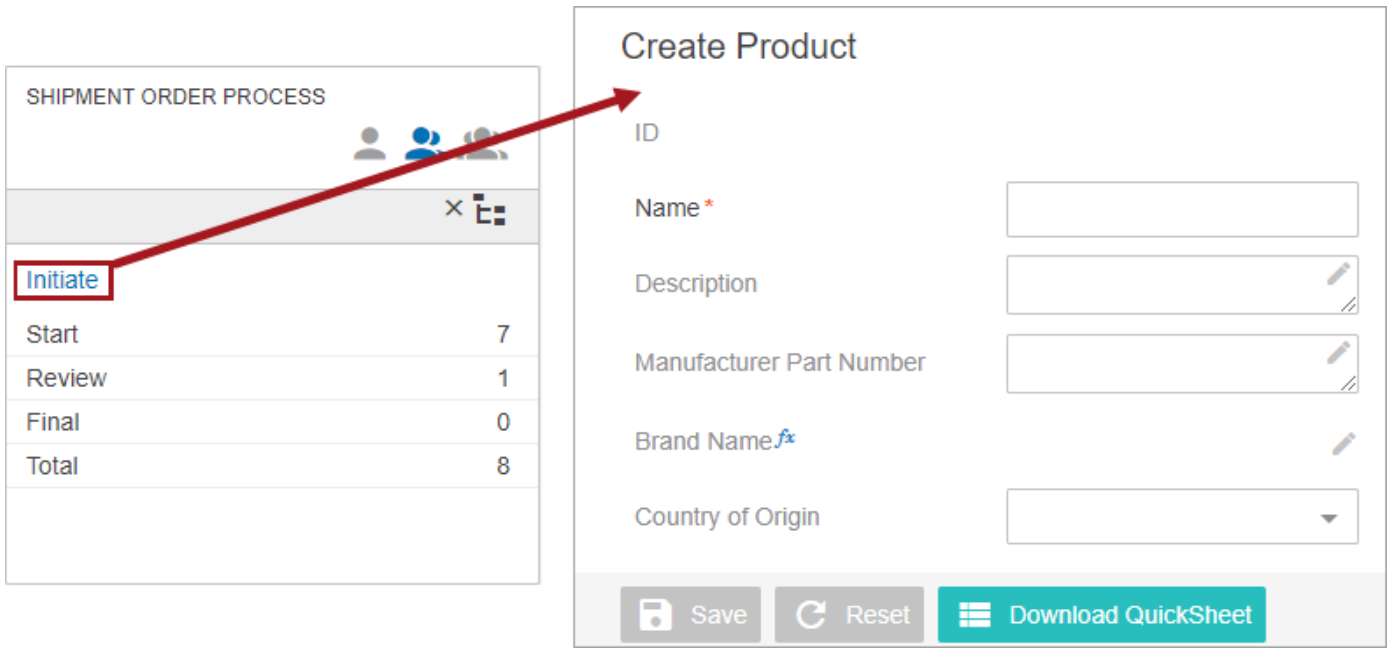




10. Click **Close** to exit design mode or use the dropdown to switch screen IDs and configure other properties.

Important: Initiate Item screens are accessed via status selector widgets. The appropriate screen ID must be configured as the value for the Initiate Screens parameter within Status Selector Homepage Widget Properties and/or Status Selector Sidebar Widget Properties (example screenshots below). For more information about the widgets, see the **Status Selector Homepage Widget** section in the **Web User Interfaces** / **Using a Web UI** documentation.



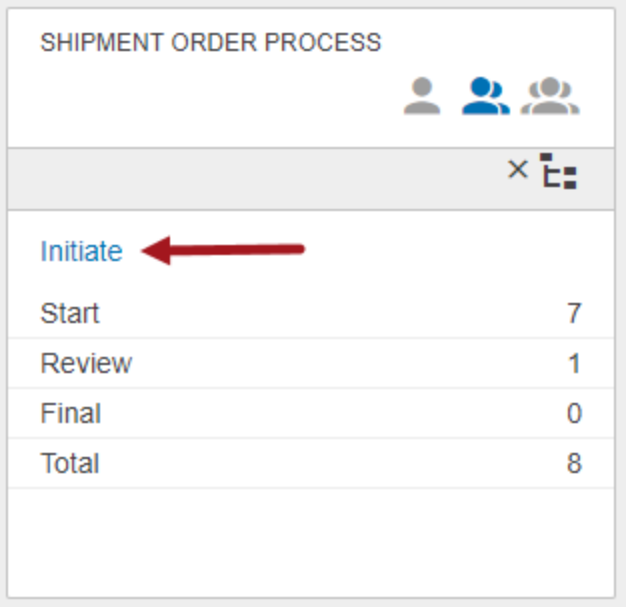


Note: To learn about Find Existing functionality that can be used with the Store Single Referenced Target component (shown in the screenshot above with the Contact to Contact bale and Contact Name and Phone Number attributes) and in conjunction with the Find Similar action, see the **Find Existing** section of the **Using a Web UI** documentation.

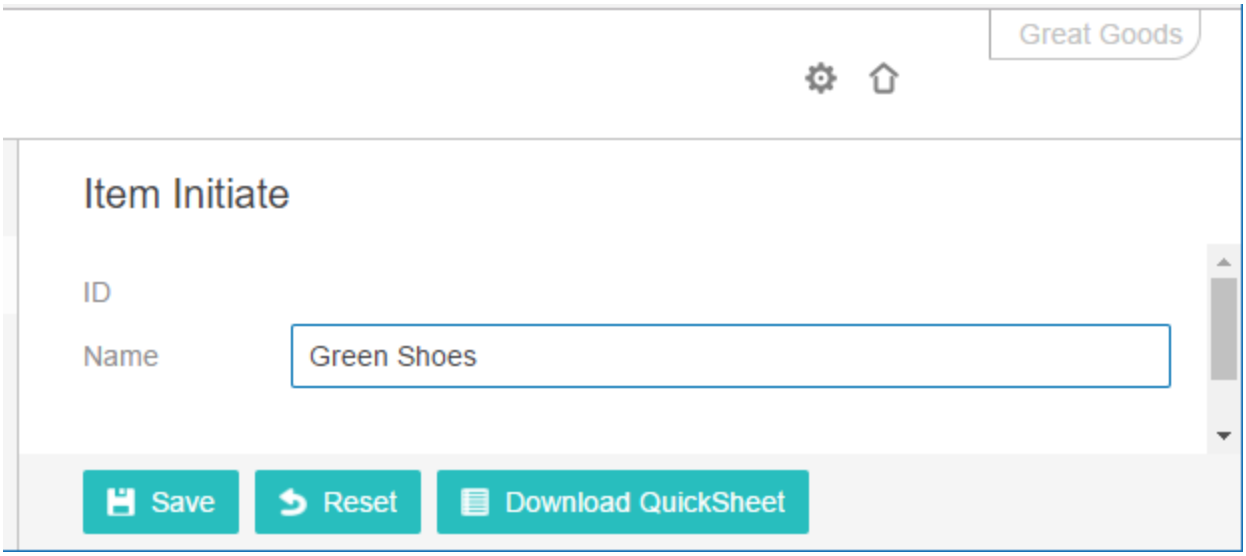
Using an Initiate Screen

A simple usage example follows:

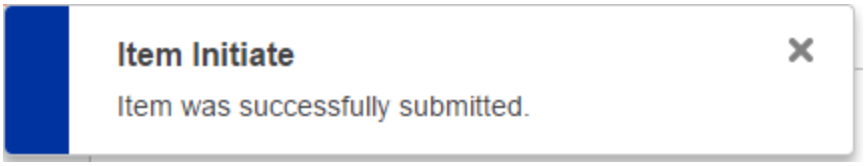
A user clicks on the Initiate link on a Status Selector Homepage Widget.



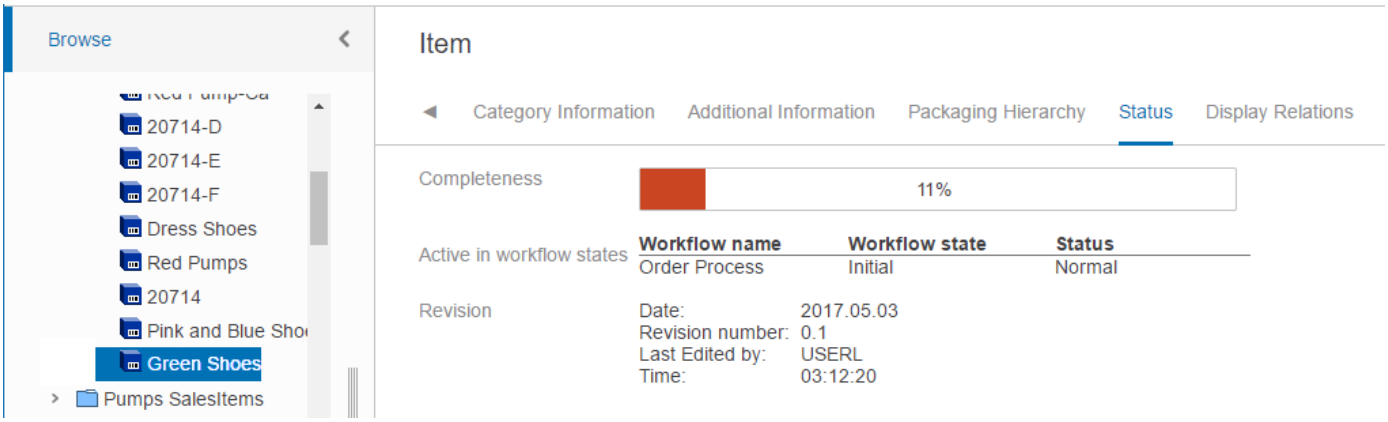
The Initiate Item screen displays.



Once the object information is entered, the user clicks the Save button (above) and a success confirmation message displays (below).



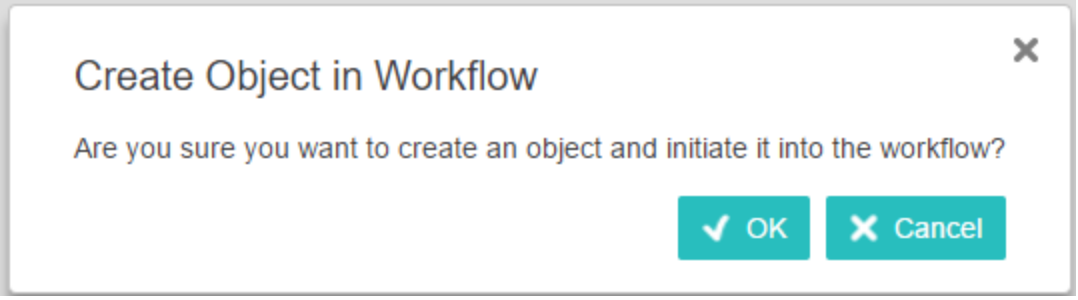
Below is verification that the newly created object was automatically initiated into the workflow that is configured within the Status Selector Homepage Widget Properties.



Bypassing the Initiate Item Screen

When creating new objects from a Status Selector component, users can create and initiate objects into a workflow in a single step if the object type utilizes an auto-generated ID. This allows for a more streamlined object creation by giving the option to bypass the Initiate Item screen.

By using the **Create Object in Workflow** screen type, fields for entering object data are not presented to the user since the object is created with the simple click of a button. Users can seamlessly go in post-creation to work with the object and edit data since they are auto-navigated to an editing screen (determined by the overall Web UI mappings).



Preconditions

Before configuring a Create Object in Workflow screen, it is important to ensure that the data model supports the functionality and that the desired end result can be achieved. Specifically, users should be aware of the following:

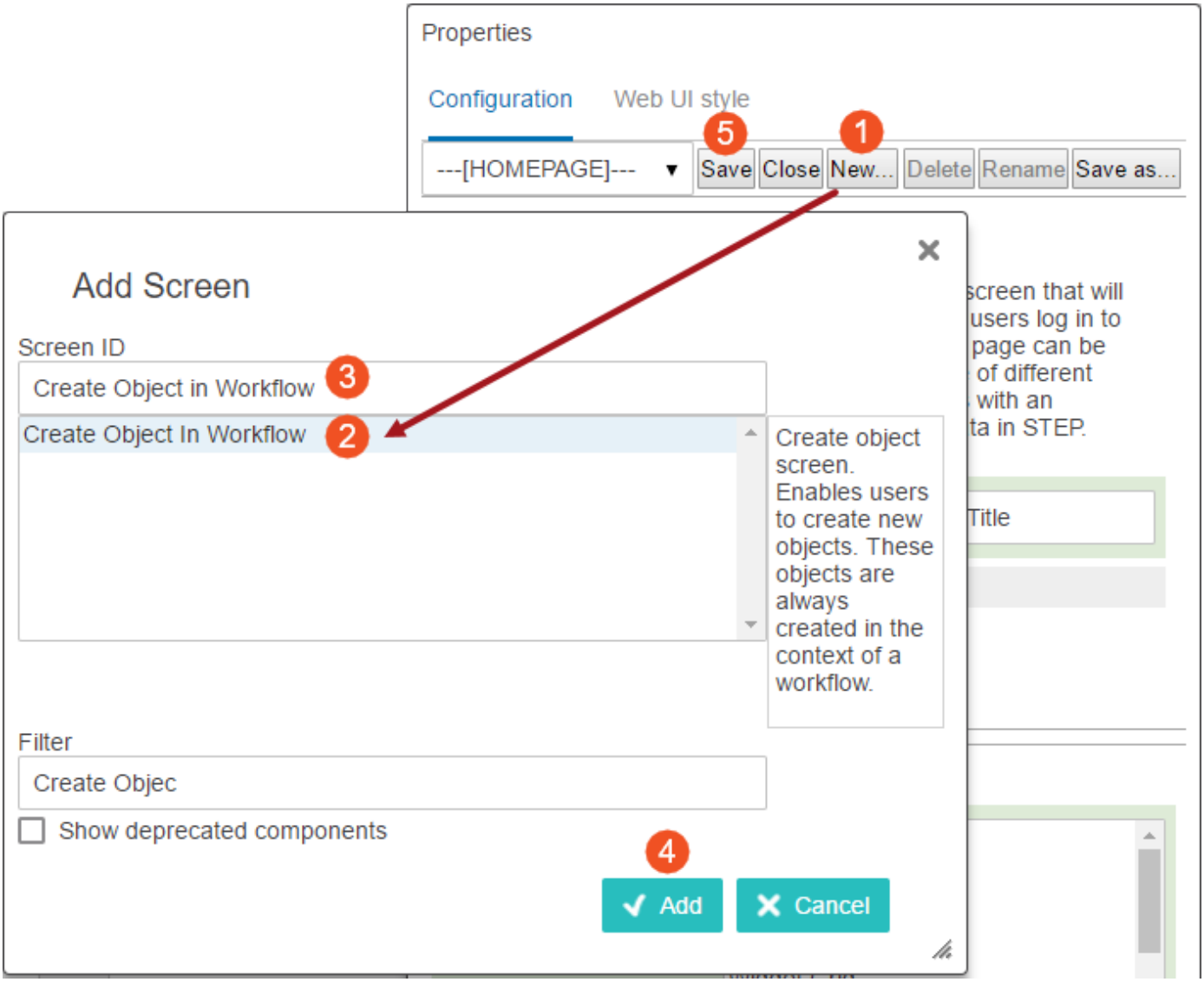
1. Underlying privileges are not applied to the Create Object in Workflow screen. Therefore, only users who should be allowed to create and initiate objects into the relevant workflow should be given access to this functionality.
2. Objects created using this functionality are all created under a single common parent. It is therefore recommended that a subsequent workflow state require reparenting of the newly created objects, unless a flat hierarchy structure is desired.
3. Objects created using this functionality must use autogenerated IDs.
4. This functionality should only be used for workflows that have a single initial state. If used within a workflow that has initial parallel states, it is not possible to specify which state they will be directed to upon creation of the object.

Required Configuration to use the Create Object in Workflow Screen

Step 1: Create a new screen of type 'Create Object In Workflow'

1. Click **New** in the Web UI Designer.
2. In the Add screen dialog, select the **Create Object in Workflow** screen type.
3. Populate an appropriate ID for the new screen.

4. Click **Add** in the bottom of the dialog.
5. Click **Save** in the main screen of the Web UI Designer.



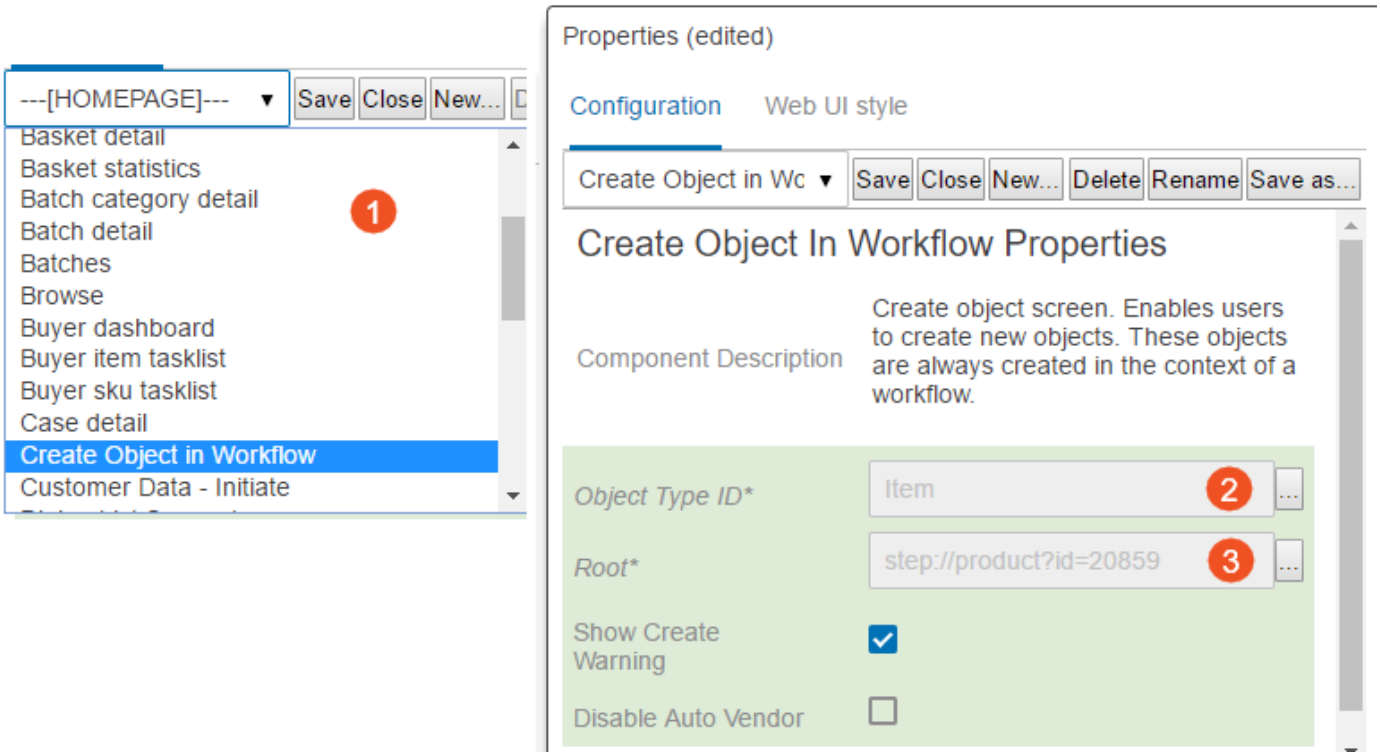
Step 2: Configure the 'Create Object in Workflow' screen

Once created, you must configure the Create Object in Workflow screen. Save the changes once complete.

1. Access the screen by selecting it from the dropdown in the Web UI Designer. Find the screen that matches the ID you populated in the previous steps.
2. Select an **Object Type ID**. This selection specifies the object type that will be applied to all new objects created via the 'Create Object in Workflow' screen. Note that the object type selected must use an autogenerated ID.

3. Select a **Root**. This selection specifies the common parent under which all new objects created via the 'Create Object in Workflow' screen will be placed.
4. Enabled by default, **Show Create Warning** means that end users will be presented with a dialog that requires them to confirm the creation and initiation of an object upon clicking the Create Object in Workflow designated link within the Status Selector. Disable if no message should display to the user.
5. **Disable Auto Vendor** can be used to prevent automatic object linking to a vendor classification. This parameter is unchecked by default.
6. At this point, if you want to utilize the Create From Template functionality, click on the Create From Template Tab header, enable **Show Create From Template**, and select a **Template Root**. Additionally the List Dialog properties, found under **Child Components** > **Create From Template List**, need to be configured.

   See **Using a Template to Create and Initiate an Object in a Workflow** for more information.



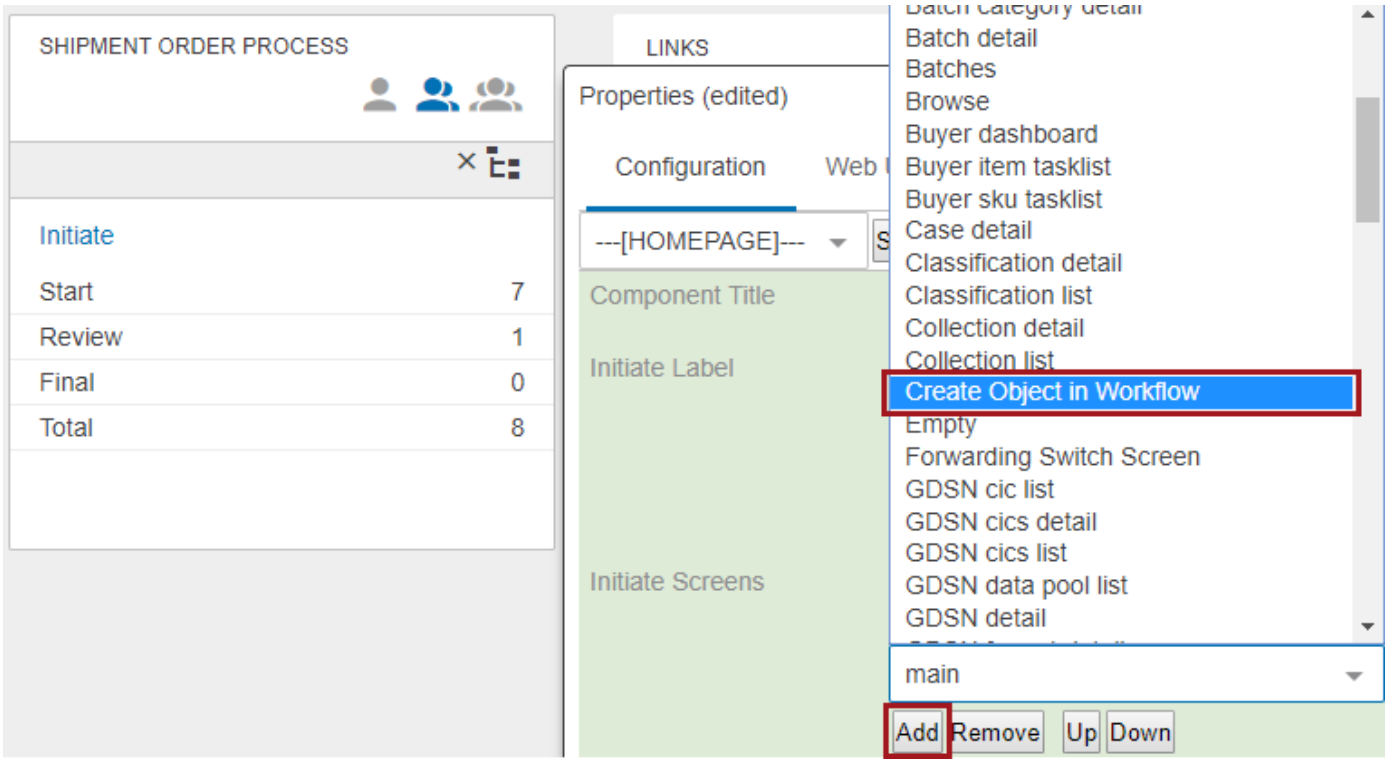
Note: All objects created using the Create Object in Workflow screen type are initially created under the same parent. It is therefore recommended that a subsequent workflow state require reparenting of the newly created objects, unless a flat hierarchy structure is desired. In addition, care should be taken in configuration to ensure that the selected object type and parent root are compatible (and valid for the workflow), else the end user will receive an error when attempting to create / initiate.

Step 3: Configure the Status Selector Initiate Screen

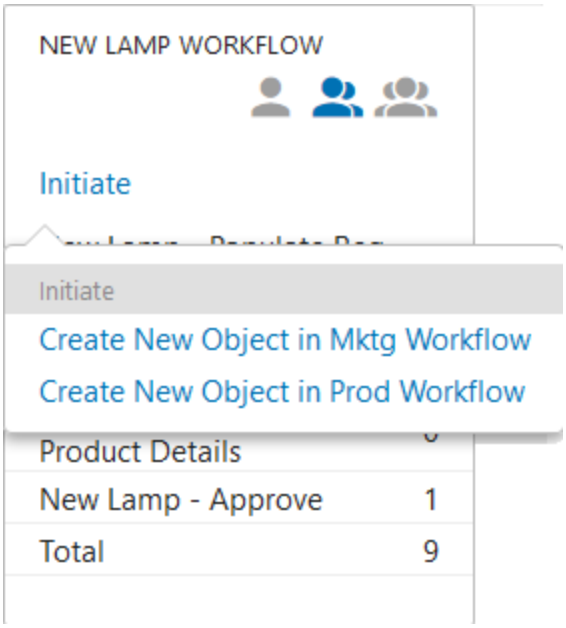
The **Create Object in Workflow** screen must be mapped as the Initiate Screen in a Status Selector component (Status Selector Homepage Widget recommended, but Status Selector Widget may also be used).

Important: Underlying user privileges are not applied to the Create Object in Workflow screen. Therefore, only users who should be allowed to create and initiate objects into the relevant workflow should be given access to the screen.

1. Open the Web UI Designer for the selected widget.
2. In the Initiate Screens parameter, find the newly created screen in the dropdown and click **Add**.

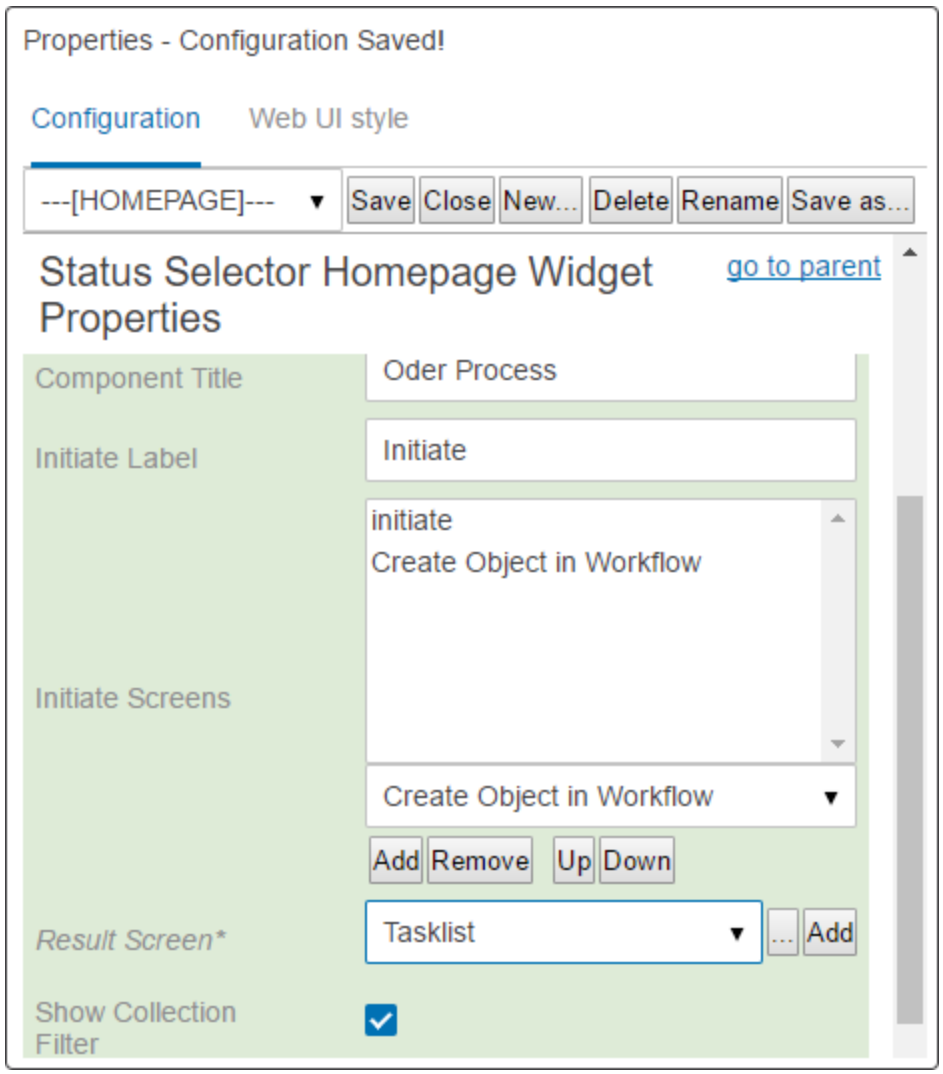


If using the superseded Status Selector Widget (rather than the Status Selector Homepage Widget), only a single Initiate Screen can be selected. If the Status Selector Homepage Widget is used, multiple screens can be mapped. In this case, users will see a selection option for each available screen when clicking the 'Initiate' link in the widget:



Step 4: Complete Status Selector Configuration

Complete configuration of the Status Selector, including selection of the relevant workflow and states. Ensure that the **Show Initiate** parameter is checked. A sample configuration of the Status Selector is shown below.



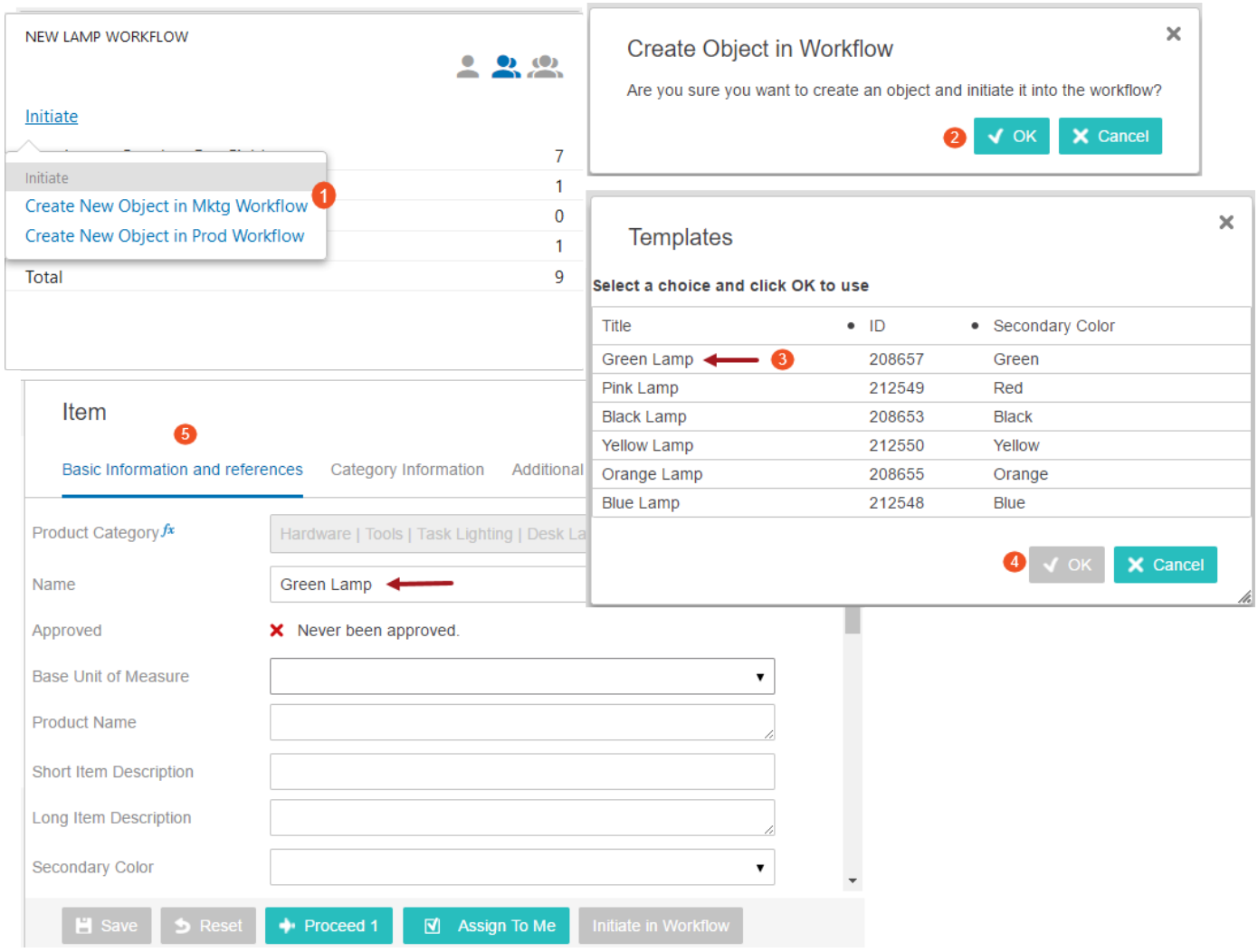
Using the Create Object in Workflow Screen

If configured properly, end users can click on the Initiate option in the Status Selector widget to create a new object. The object will be created with an autogenerated ID, under the parent specified by the configuration, and of the object type specified by the configuration. If the warning is enabled, users will see the confirmation 'Create Object in Workflow' dialog (as shown).

If Create From Template has been enabled and set up, then the end user will be presented with a templates list after the warning message, or in place of it (if the warning is disabled).

Upon creation, users are taken directly to the first screen mapping that meets the conditions applicable to the object created. Users can begin work on the object, without having to have entered an Initiate Item screen to create the object.

An example of the process is shown below:



Note: It is recommended that the Create Object in Workflow screen only be used for workflows that have a single start state. If, for example, business rules pass an object into parallel states upon entry to the workflow, users cannot be routed to a specific state and have the potential to see the object in either of the states in which a current task exists.

Using a Template to Create and Initiate an Object in a Workflow

When bypassing the Initiate Item screen and using Create Object in Workflow, users are able to create and initiate new objects without having to enter attribute values prior to creation. By enabling the Create From Template functionality, users can further simplify the object-creation process by selecting a template to use when creating a new object. Creating an object from a template can be useful to the end user tasked with updating the object data because the template's attribute values are copied into the new object automatically. The end user only needs to populate the subset of data that must differ between the template and the new object.

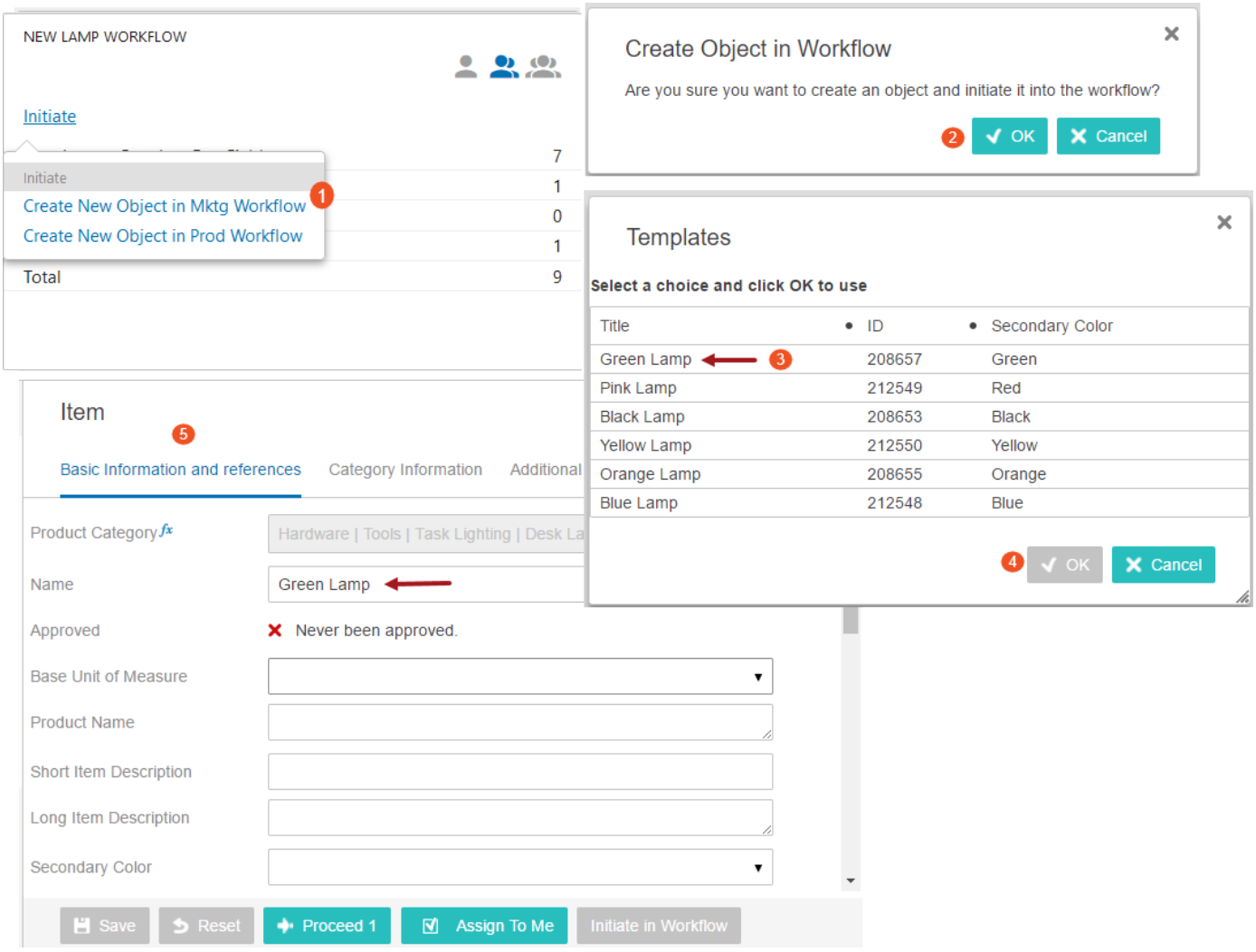
Using Templates with Create Object in Workflow

If configured properly, end users can click on the Initiate option in a Status Selector Homepage / Sidebar widget to create a new object using a Create Object in Workflow screen type. The object will be created with an auto-generated ID under the parent specified by the configuration, and of the object type specified by the configuration. If 'Show Create Warning' is enabled, end users will see the confirmation 'Create Object in Workflow' dialog (as shown) and must click OK to move ahead. Clicking Cancel will navigate the user back to the home page.

If using the Create From Template functionality, the 'Templates' Dialog List will display with available templates once the warning is shown and creation is confirmed (if applicable). The display shown below is configured to show Title (Name), ID, and Secondary Color attributes. The end user selects a template by clicking on a row within the list, then selects OK. A new object is created and initiated into the applicable workflow.

Upon creation, users are taken directly to the first screen mapping that meets the conditions applicable to the object created. Users can begin work on the object, using the attribute values and reference targets from the template that now populate the empty attributes that apply to the new object, and changing any attribute values that should differ from the template (i.e., Name).

An example of the process is shown below:

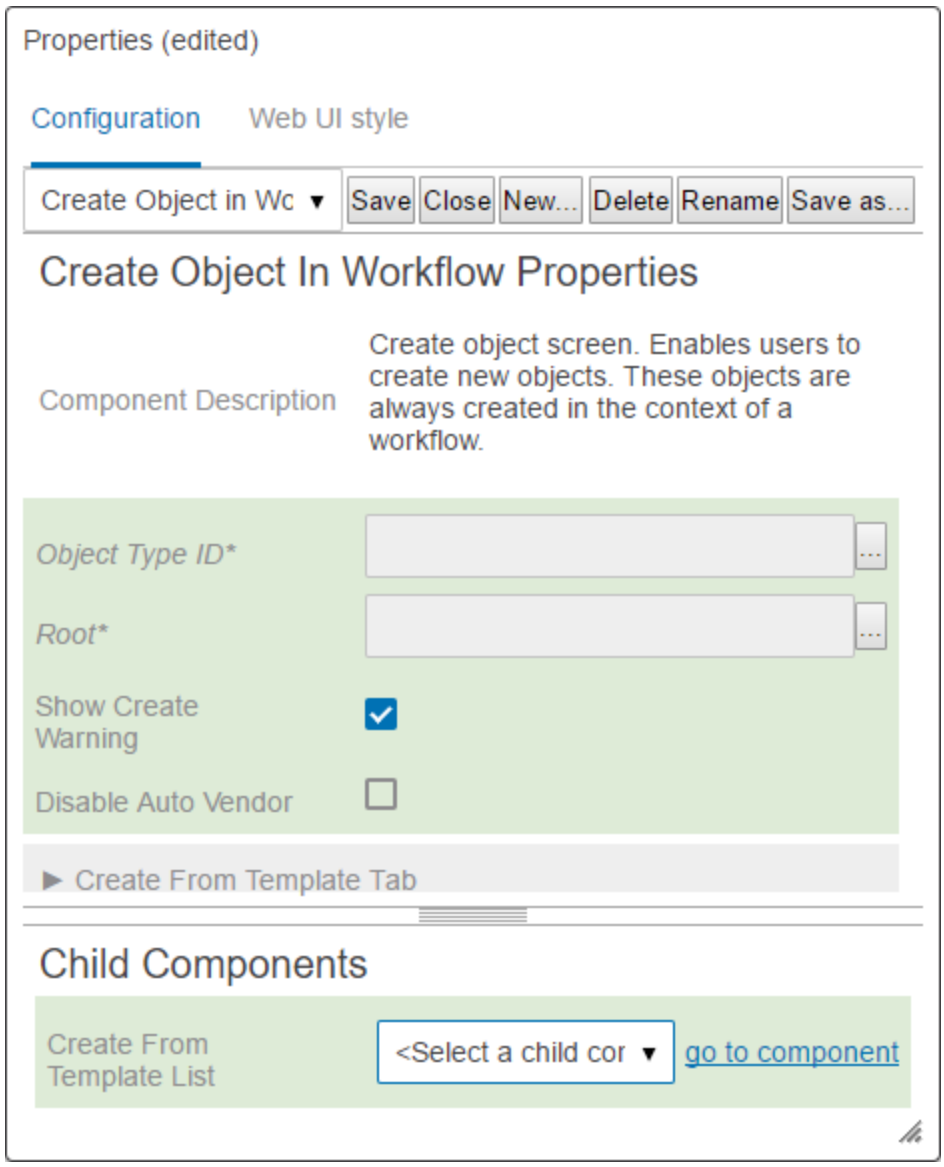


Configuring the Create Object in Workflow Properties

See the **Bypassing the Initiate Item Screen** topic for information regarding the preconditions that must be met to use a Create Object in Workflow screen and how to configure its use.

The first five steps are repeat steps outlined in the Bypassing the Initiate Item Screen topic. If you have previously set up the Create Object in Workflow Properties and just want to enable the Create From Template functionality, skip to Step 6.

Steps 1 and 2 must be completed before the Create Object in Workflow Properties can be saved.



1. Enter design mode and access the Create Object in Workflow screen ID via the dropdown. The **Create Object in Workflow Properties** will display.
2. Select an **Object Type ID**. This selection specifies the object type that will be applied to all new objects created via the Create Object in Workflow screen. Note that the object type selected must use an autogenerated ID.
3. Select a **Root**. This selection specifies the common parent under which all new objects created via the Create Object in Workflow screen will be placed.
4. Enabled by default, **Show Create Warning** means that end users will be presented with a dialog that requires them to confirm the creation and initiation of an object upon clicking the Create Object in Workflow designated link within the Status Selector. Disable if no message should display to the user.

5. **Disable Auto Vendor** can be used to prevent automatic object linking to a vendor classification. This parameter is unchecked by default.

Note: All objects created using the Create Object in Workflow screen type are initially created under the same parent. It is therefore recommended that a subsequent workflow state require reparenting of the newly created objects, unless a flat hierarchy structure is desired. In addition, care should be taken in configuration to ensure that the selected object type and parent root are compatible and valid for the workflow, otherwise, the end user will receive an error when attempting to create / initiate.

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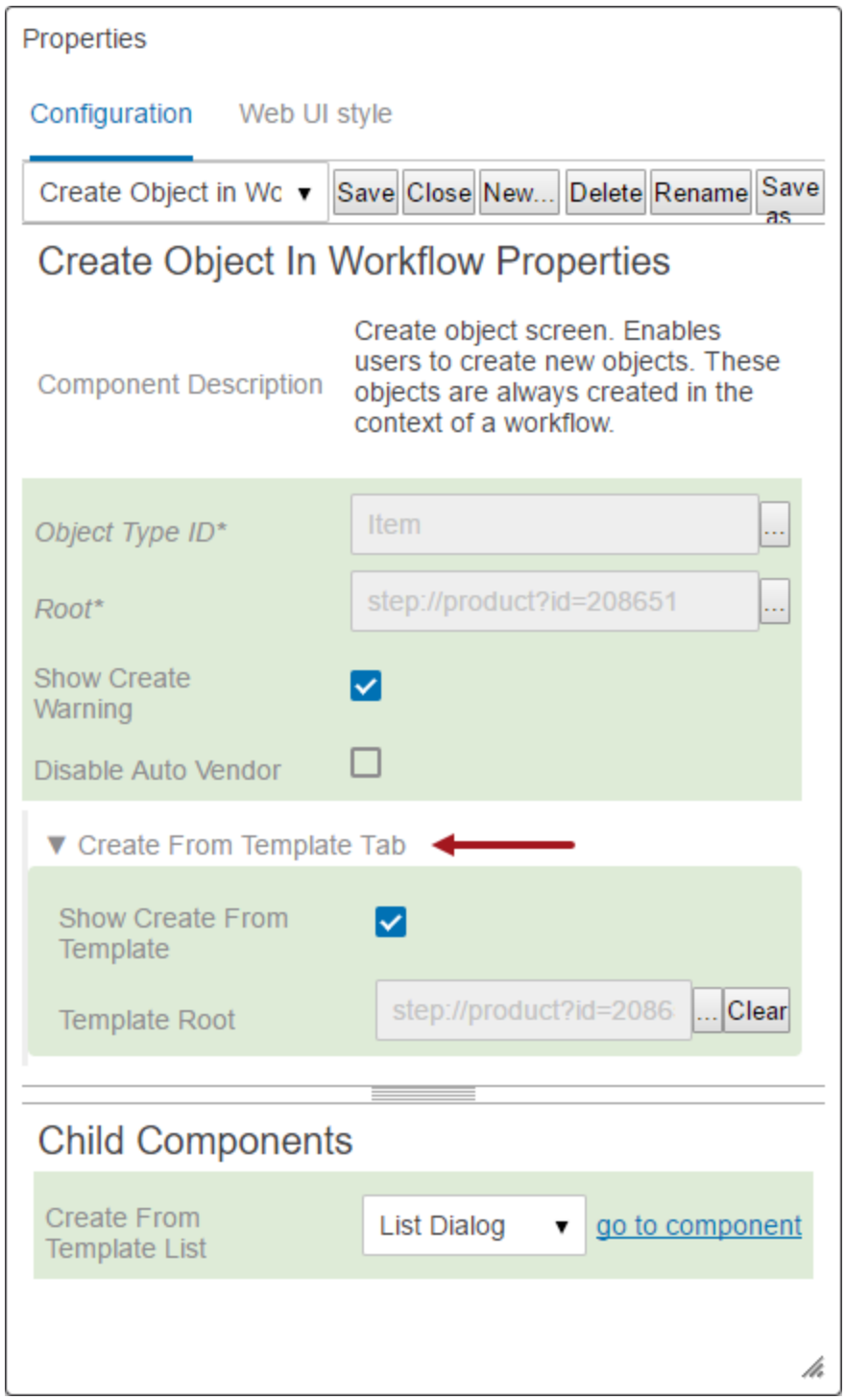
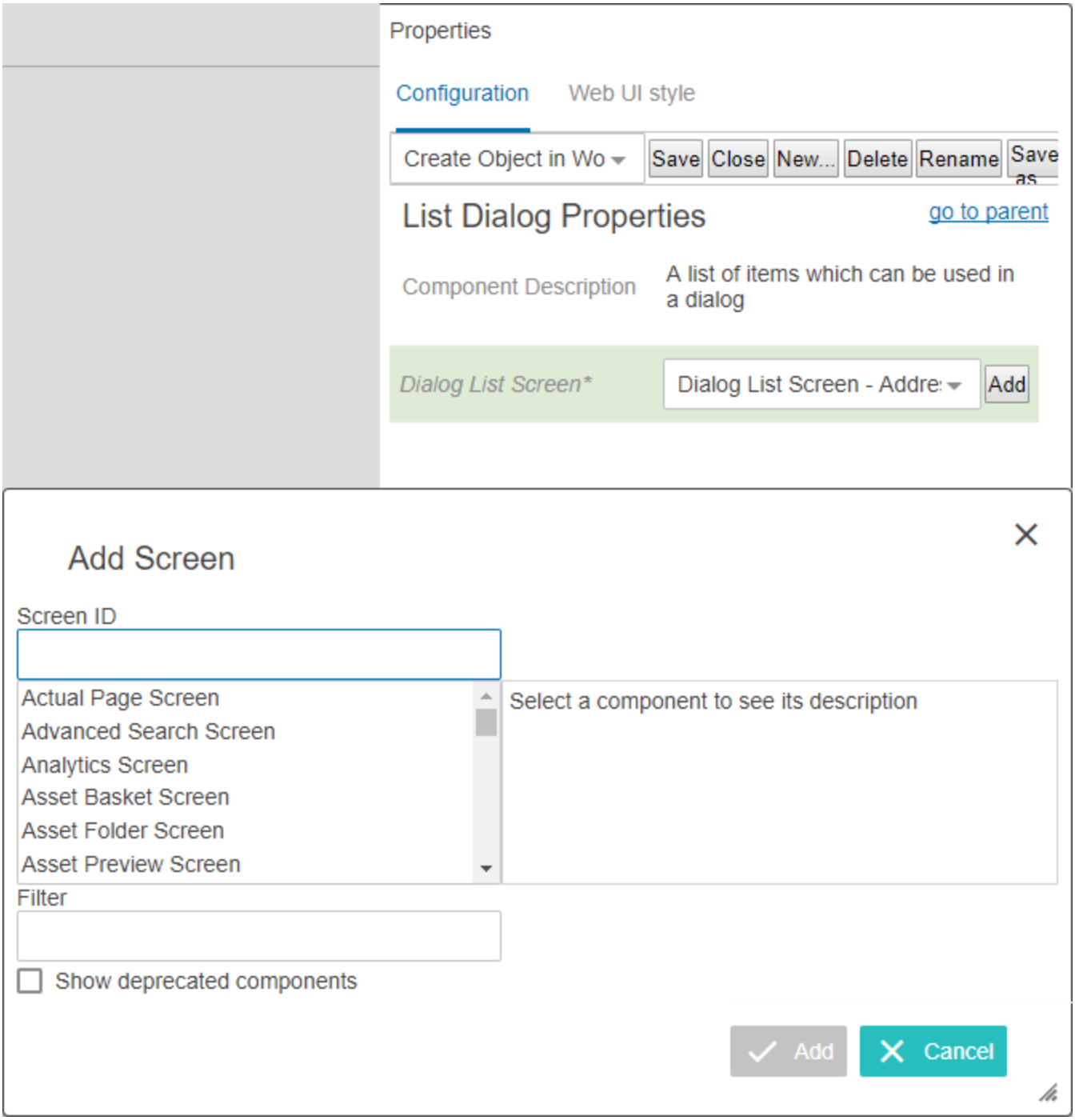
6. Click the **Create From Template Tab** heading to display additional parameters.



7. Enable **Show Create From Template**.
8. Click the ellipsis button (...) for **Template Root** to select the node from which child objects can be used as templates. It is recommended that the template set remain fairly small for manageability and to limit the templates that the end user has to choose from.

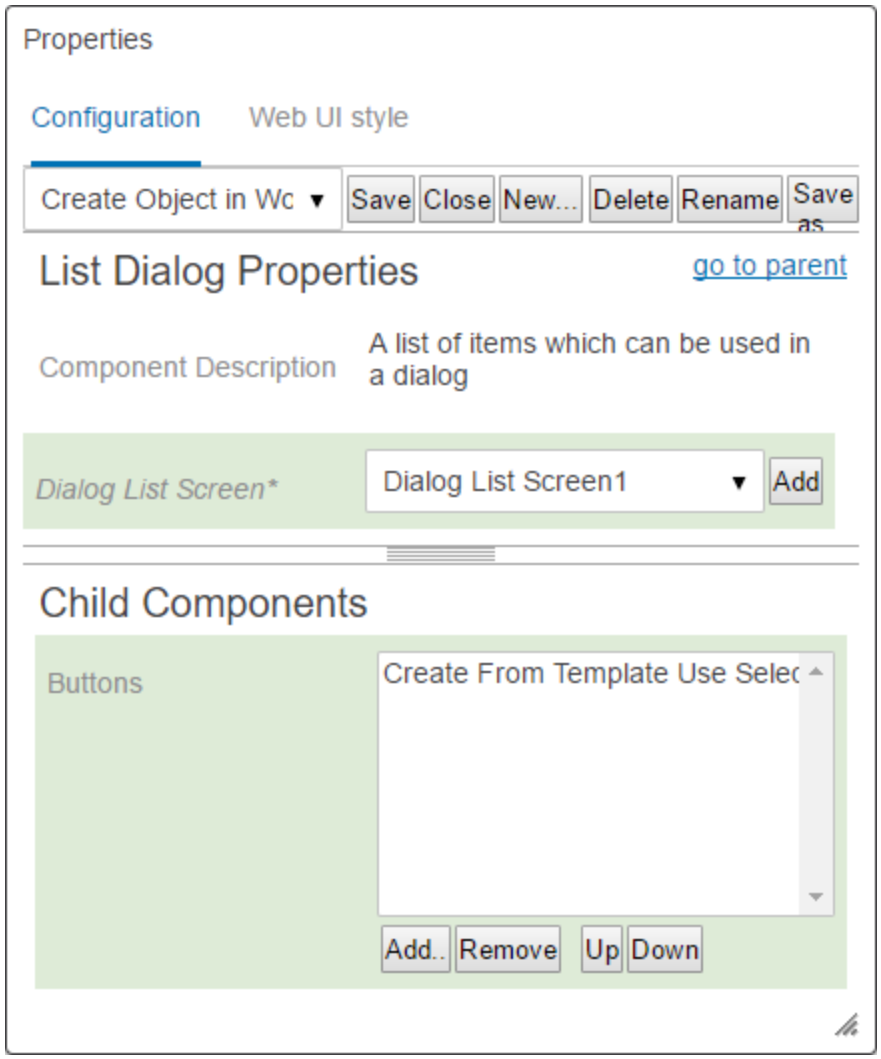
9. Under **Child Components** > **Create From Template List**, select **List Dialog** from the dropdown menu.
10. When presented with the **List Dialog Properties**, click the **Add** button to the right of the **Dialog List Screen** field.



11. Create a new screen by selecting **Dialog List Screen** from the list of available screen types / components. Enter an easily identifiable Screen ID, click **Add**. The screen ID will automatically populate in the Dialog List

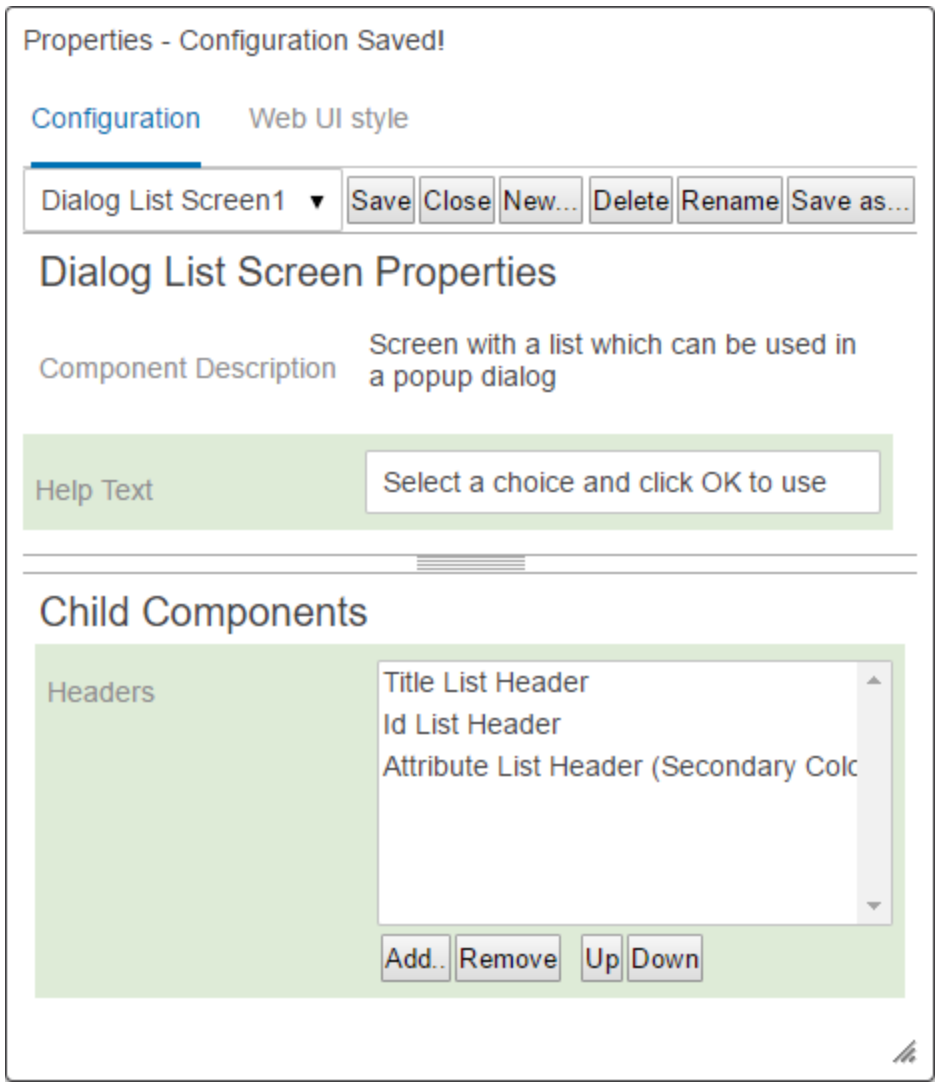
Screen value field.

12. If a **Dialog List Screen** already exists, skip the previous two steps and select the screen using the dropdown.
13. Back on the **List Dialog Properties** screen, in the **Child Components** > **Buttons** field, click **Add** and select **Create From Template Use Selected Item Action**. Click **Add**, and then click **Save** in the designer window.



14. Before exiting design mode, select the Dialog List Screen ID of the screen you just created from the dropdown menu. In the example above, the screen ID is 'Dialog List Screen - Address.'
15. Configure the **Child Components** > **Headers** section of the **Dialog List Screen Properties**. Click **Add** under the value field to select the attributes, attribute groups, IDs, and/or Titles that will display within columns in the 'Templates' dialog for the results list.

16. Make a component selection and fill in any required parameters (e.g., attribute / attribute group, where applicable). For each component, edit the **Label** text if the column headers should read something different than the object Title (name), ID, or the applicable attribute name / group name.
17. Edit **Help Text**, if desired. This text displays at the top of the 'Templates' results list.



18. Click **Save** and **Close** design mode to return to normal Web UI mode.

Considerations and Limitations

- Create From Template functionality is available for Product and Entity object types only.
- Care must be taken in the configuration of the Create From Template option to ensure that end users are provided with valid selection options. The selections for object type of the template (if used), object type of the object being created, and parent must all align to yield valid results based on the data model and configurations.

- It is recommended that the Create Object in Workflow screen only be used for workflows that have a single start state. If, for example, business rules pass an object into parallel states upon entry to the workflow, users cannot be routed to a specific state and have the potential to see the object in either of the states in which a current task exists.

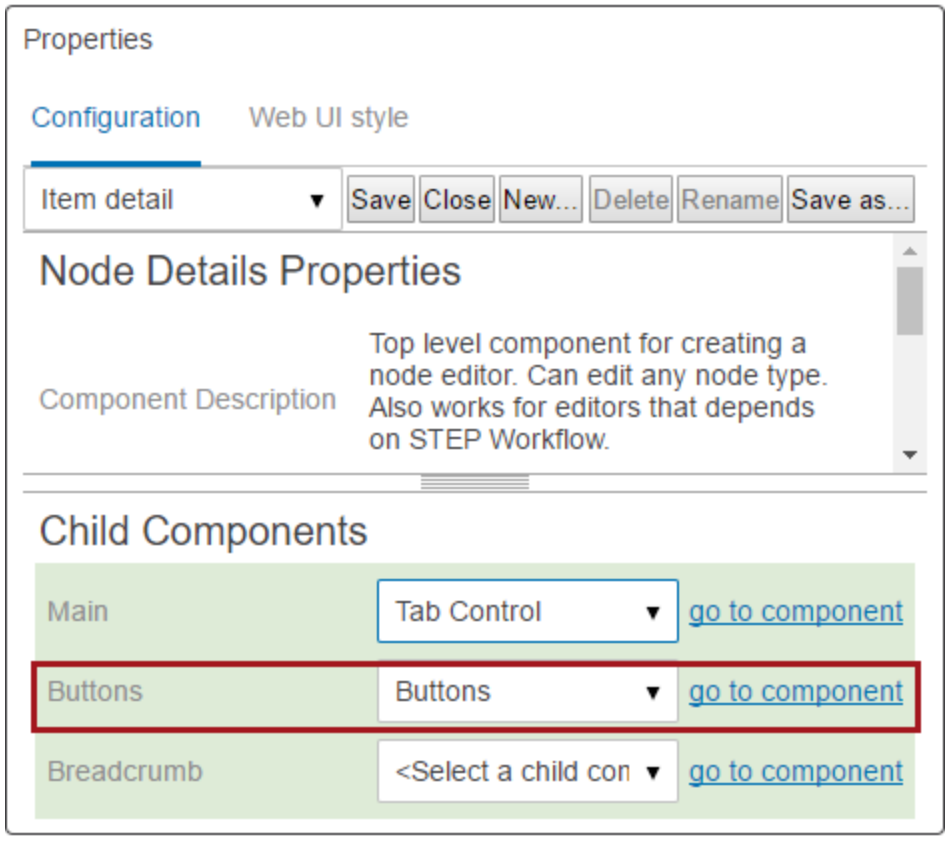
Start Workflow Action

When working with objects in Web UI, a **Start Workflow Action** button can be added to any Node Details screen. This allows users to work with object data and then initiate the object into a workflow with a click of a button.

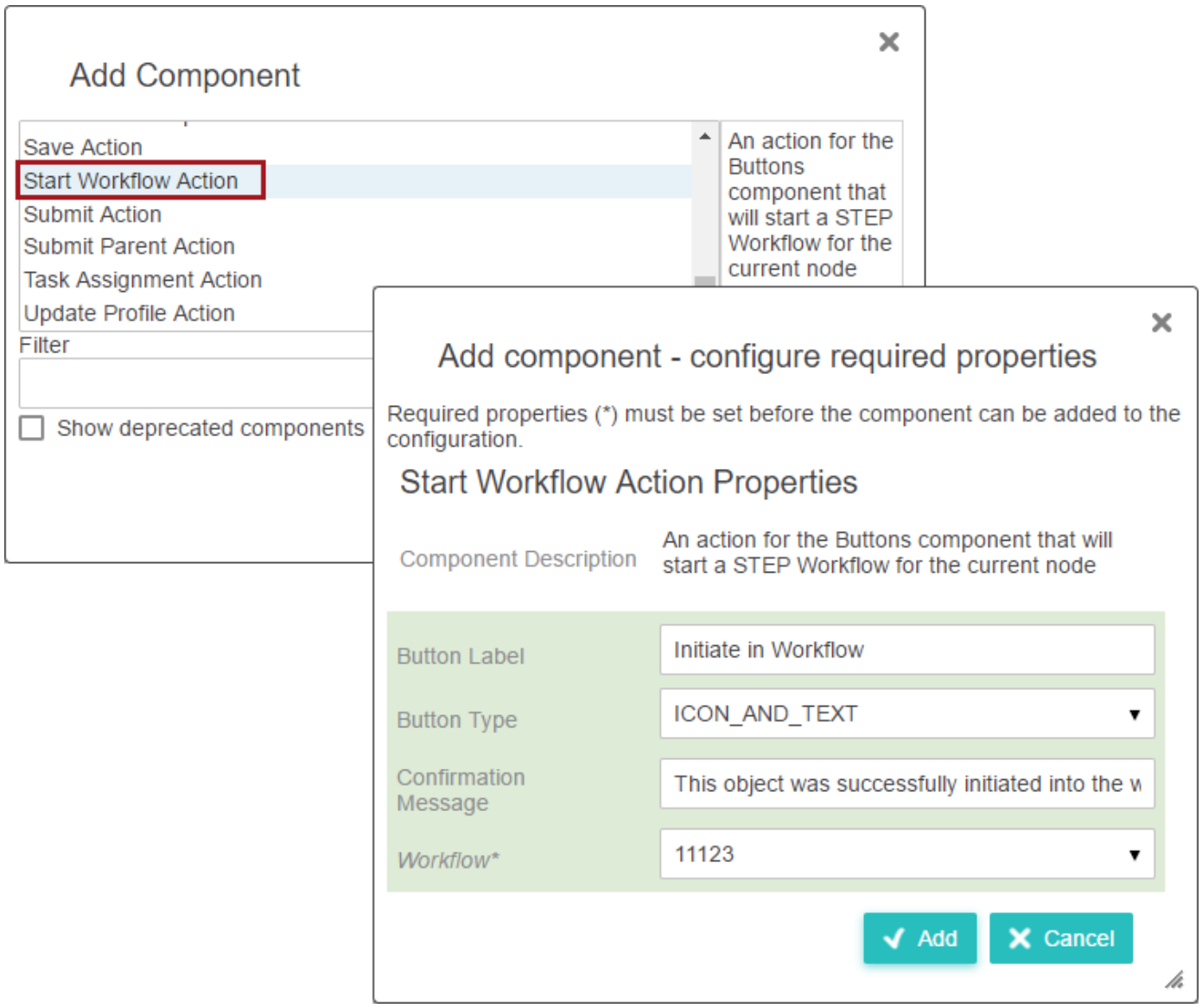
Detailed information about how to set up a Node Details screen is outlined in the **Node Details Screen** topic.

These are the steps to add / configure the button:

1. Enter the Web UI designer and selected the screen ID for the applicable Node Details screen.
2. Within Node Details Properties, select **Buttons** from the Buttons parameter dropdown, then click **go to component**.



3. On **Buttons Properties**, click the Add button below the **Actions** field, then select **Start Workflow Action** from the 'Add component' list and click **Add**.



4. Within the **Start Workflow Action Properties**, all parameters are initially blank except for Workflow (defaults to first existing workflow in STEP). Make your selections and click **Add**.
   - **Workflow*** is the only required setting. This is the workflow that you want to initiate items into.
   - The **Button Label** is the text you want to appear in the button displayed on screen.
   - Select from ICON_AND_TEXT, ICON, and TEXT using the **Button Type** dropdown. If you select TEXT or ICON_AND_TEXT and the Button Label parameter is empty, the default text 'Start STEP Workflow' will display.

Button Types	Button Displayed As
ICON	
TEXT	
ICON_AND_TEXT	

- The **Confirmation Message** will display to the user once a successful initiation of the object is complete. If the parameter is left blank, a 'STEP Workflow "Sample Workflow (3 states) with Variables" has been started' message will display, with the name of the workflow displaying within the quotation marks.

5. Click the **Save** button in the designer and **Close**.

See **Initiating Objects in a Workflow using Web UI** for information regarding how to use initiate an object in to a workflow using the Start Workflow Action.

Task List

A **Task List** is used for displaying total objects in a selected workflow, objects within a specific workflow state, and if applicable, tasks by Status Flag. To use a Task List, it must be configured as a results screen for a **Status Selector (Homepage / Sidebar) Widget** and be configured with a **Node List**.

This topic gives you information regarding how to set up a Task List. Information regarding how to use a Task List is included in the **Moving Tasks Through a Workflow in Web UI** topic.

If your system is using In-Memory technology, there is additional configuration that can be done to support the filtering and sorting of large Task Lists. See the **In-Memory Large Task List Management** topic in the **Resource Materials** online help.

Note: If you are using an Advanced Search Screen as a task list, then setup is similar when it comes to the Node List component (starting with Step 7 under Configuring Task List Properties). The only major difference is the absence of the Status Flag Header and Workflow Variable Header as options available within the Multi Edit Display Mode Properties. For more information about Advanced Search Screen setup, so the **Advanced Search** section in the **Using a Web UI** documentation.

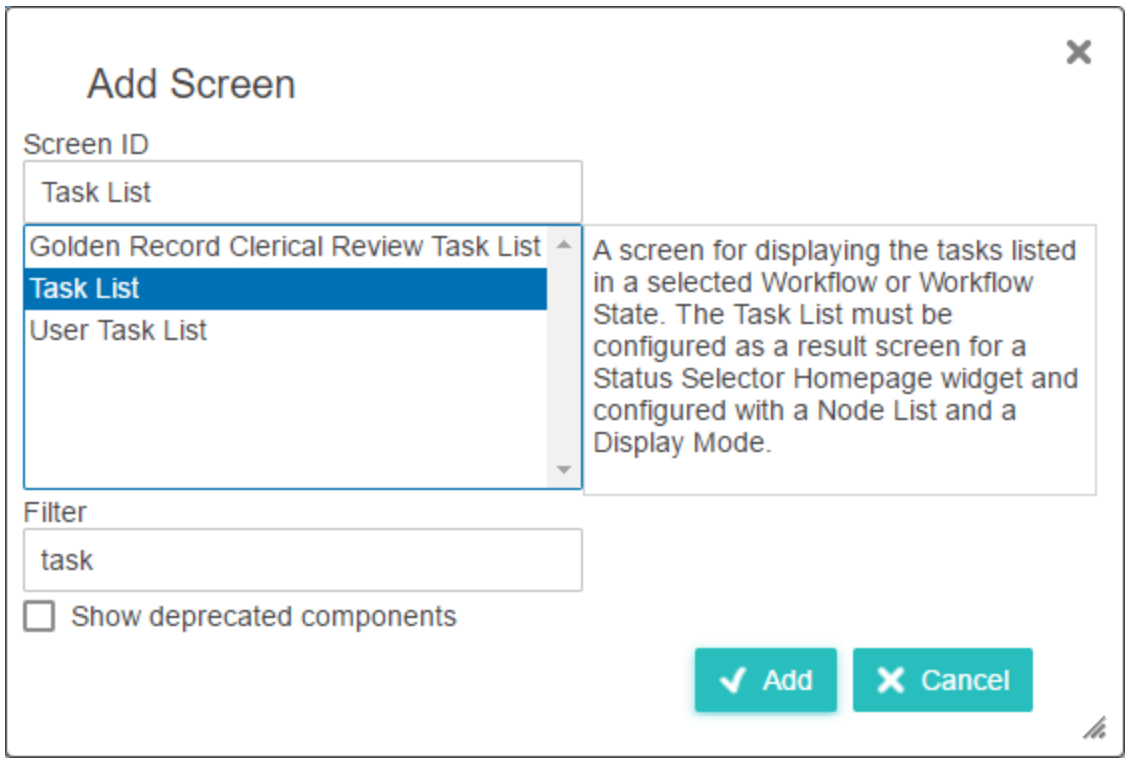
Prerequisites

It is expected that anyone configuring the Task List screen is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. The user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web UI Getting Started** documentation.

Additionally, to follow the use-case examples in any of the workflow topics, the STEP user should have all workflow related privileges.

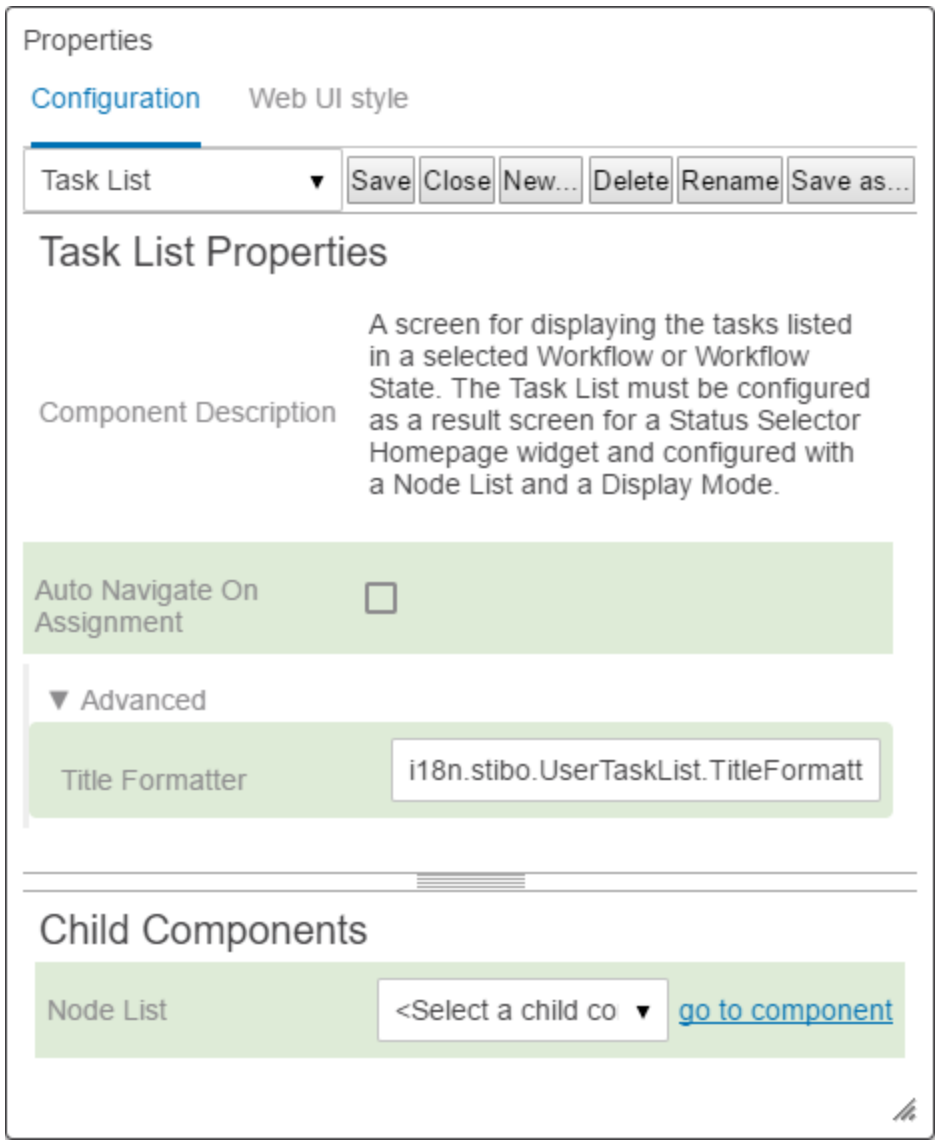
Adding a New Task List Screen

Steps for creating a new screen are outlined in the **Creating a New Screen** section of the **Design Mode Basics** topic. Select 'Task List' as the screen type (shown in the screenshot below).



Configuring Task List Properties

Once a new screen is created, you can configure it. If you are not already seeing the properties for the screen you just created, then select the screen ID from the designer dropdown list. In the example below, the screen ID is 'Task List.'

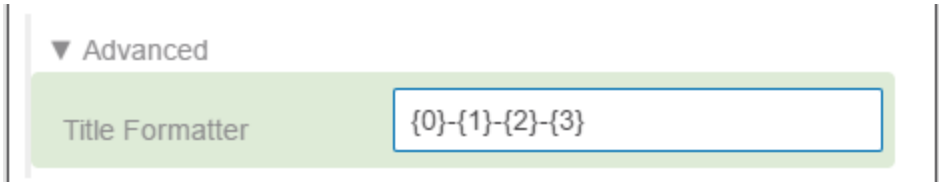


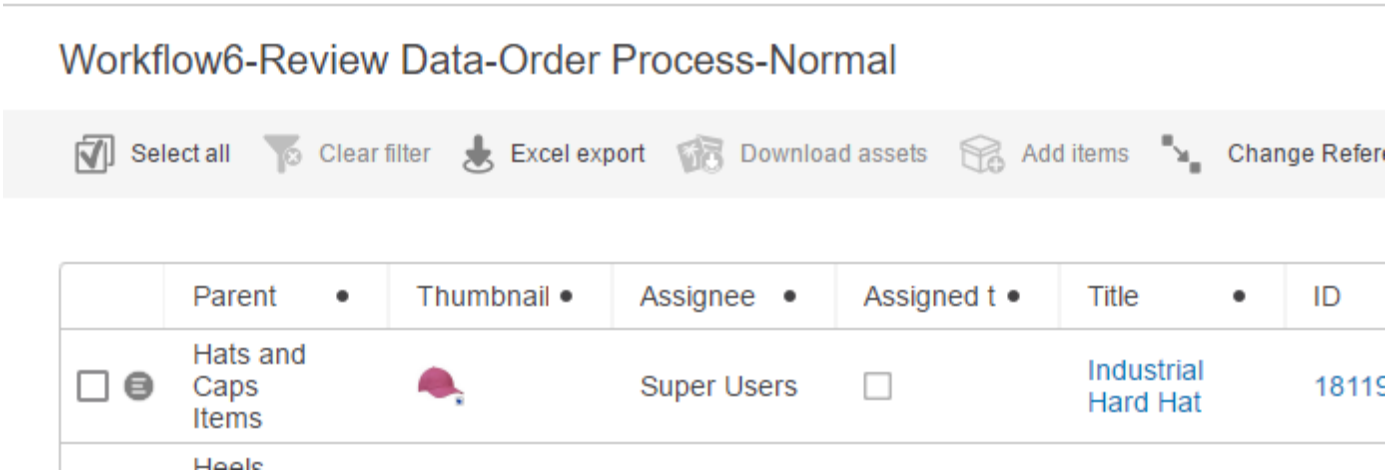
1. The **Auto Navigate On Assignment** parameter is disabled by default. If enabled, when a task is claimed by a user in the Task List (e.g., when a user makes an 'Assign to Me' selection), the user is automatically navigated to the editor screen at the time of assignment so that they can continue working with the task.
2. Click the **Advanced** heading to display the **Title Formatter** parameter.
3. **Title Formatter** can be left as-is to display the default 'Task List' title on the screen, or placeholders can be used in conjunction with (or in place of) static text to automatically insert workflow information within the screen title. These placeholders can be used individually or together. These placeholders are useful, for example, when mapping screens based on status flag or workflow state since this information is dynamically reflected in the screen title.
   - {0} displays the Workflow ID
   - {1} displays the Workflow State

- {2} displays the Workflow Name
- {3} displays the Status Flag Name

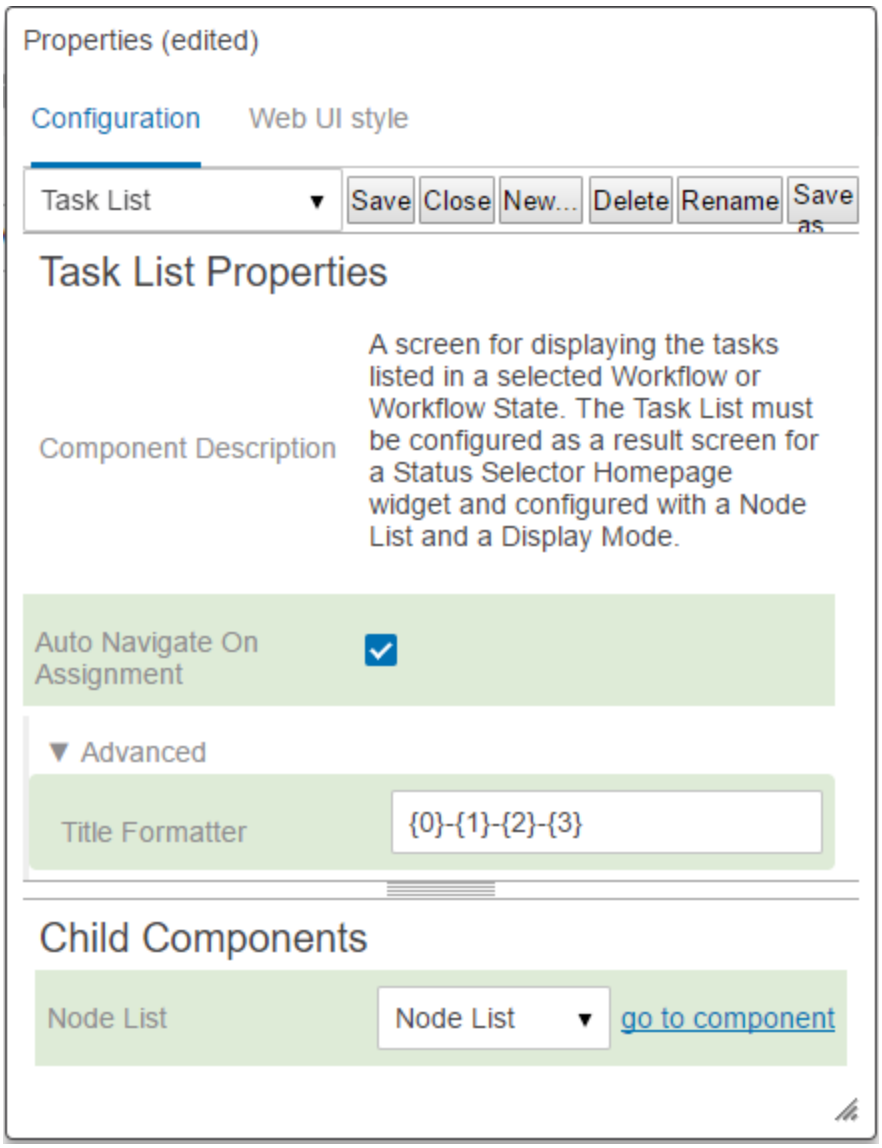
The Status Flag displays within the title only if applicable. If the user clicks on a link in the Status Selector that takes them to a results set that includes objects with a mix of different Status Flags, then the {3} placeholder will not populate within the screen title.

A screenshot showing the default title is displayed at the beginning of this section. A screenshot showing the placeholders within the Title Formatter parameter field is shown below along with a screenshot showing an example of an auto-populated Task List screen title (workflow ID, workflow state, workflow name, and the status flag name).





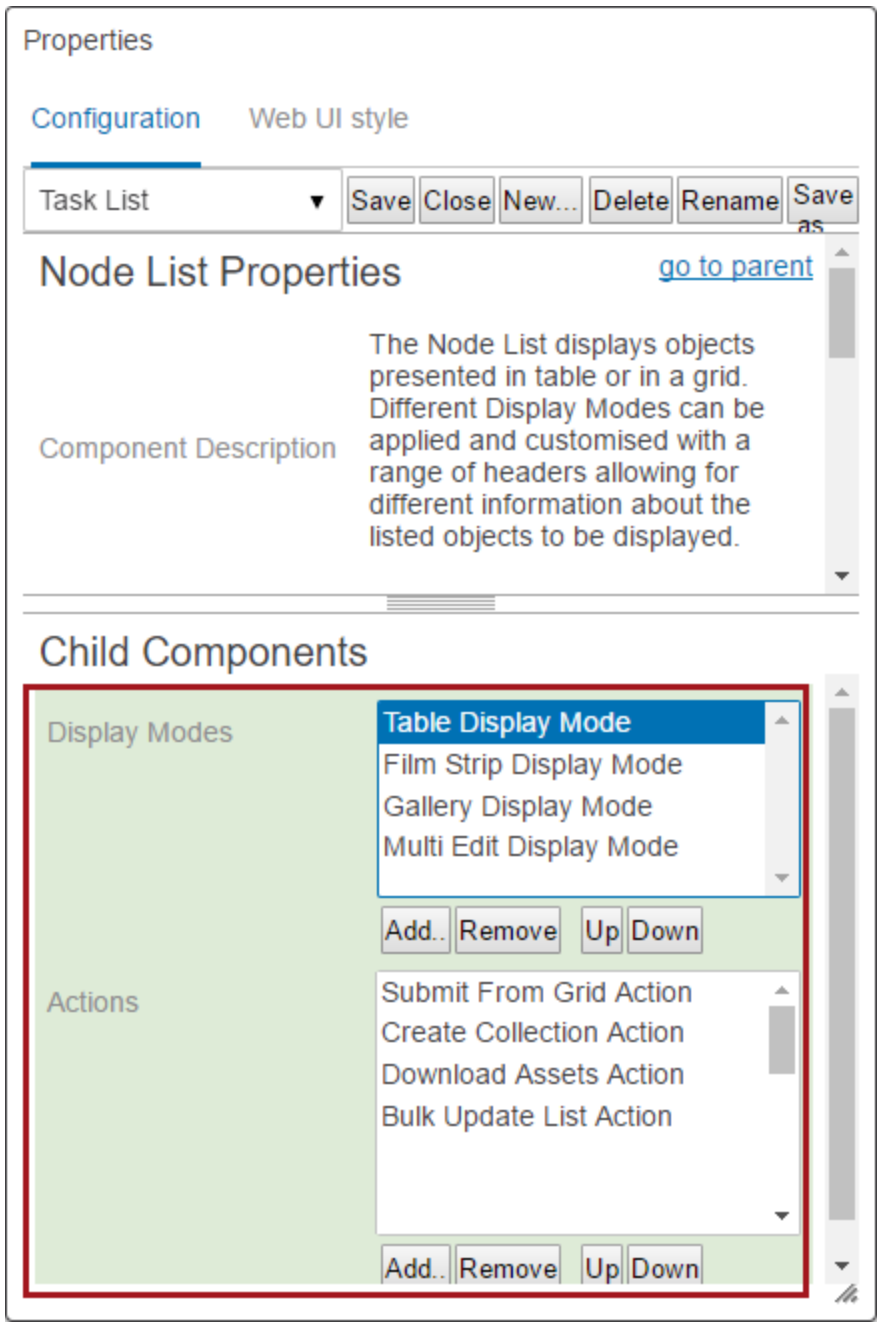
5. Under **Child Components** > **Node List**, select **Node List** from the dropdown.
6. Click **Save** in the designer window to save all changes made up to this point.



7. After saving, click **go to component** to the right of the **Child Components** > **Node List** dropdown. This opens the Node List Properties.
8. Under **Child Components** > **Display Modes**, you must add at least one display mode. Typically, **Multi Edit Display Mode** is used with workflows / Task List screens so that bulk updates can be made and submitted.

   While other display modes (e.g., Table) may be used and any number of them can be added, it is recommended practice to add only those truly needed to work with objects on a Task List screen. If multiple modes are configured, users are able to toggle between the different views. The name of each display mode must then be double-clicked to be configured for use.

   See the next section, **Configuring Multi Edit Display Mode for a Task List Screen**, for more information.



9. For **Child Components** > **Actions**, any applicable actions can be added. On a Task List, it is common to add the **Export Action** or **Submit From Grid Action**. These action buttons will be used by end users to work with and submit tasks. Again, these Actions can be double-clicked and configured / customized (e.g., button titles, process description templates) according to user needs.

   The Submit From Grid Action is highly customizable. This is true for the Submit Action that can be added to a Node Details screen, when working with single tasks. If any business rules logic is configured and applied, those will run when a user submits the task.

10. Click **Save** in the designer window to save all changes made up to this point.

Configuring a Multi Edit Display Mode for a Task List Screen

To work with objects in a workflow, **Multi Edit Display Mode** offers users the opportunity to bulk edit / update objects in the workflow. While this topic does not go into great detail on how to configure the Multi Edit Display Mode Properties in its entirety, it does touch on the parameters and components you will mostly likely use when working from a Task List screen.

These are the basic steps to configure Multi Edit Display Mode within a Task List. If a particular parameter is not explained below, or you want more details, you can access help text by hovering the mouse pointer over the area to the right of a parameter name within the properties dialog, and then clicking on the icon that appears.

1. Double-click on 'Multi Edit Display Mode ' within the Node List > Child Components > Display Modes field. The **Multi Edit Display Mode Properties** will open.
2. Click on the **Add** button under the **Headers** value field and click on each header shown in the 'Add Component' dialog to view details about that particular header. Make a selection and then click Add. Continue this process to add all the desired Headers. They can then be edited, removed, and reordered as needed.

   The following list is not an all-inclusive list of the headers you may use to populate the Node List table, but these give you an idea of what workflow-related headers you can use. These are in addition to standard headers like ID Header / ID Shared Target Header, Name Header, Attribute Value Header, and the Attribute Value Group Header.

   - Assign to Me Header
   - Assignee
   - Status Flag Header
   - Workflow Deadline Header
   - Workflow Navigation Header
   - Workflow Status Header
   - Workflow Variable Header

   While configuring the headers in display mode properties, a user can choose to set up the table sort order based on a specific header. By editing a particular header's properties, sorting order (ascending or - descending) can be designated using the dropdown next to **Table Sorting**.

   Also, if editability of workflow variables or status flags is not desired, it can be disabled by checking the 'Read Only' option in the component configuration.

3. When adding a header, the header properties all have some sort of optional configuration that can be done. Workflow Navigation and Workflow Variable will automatically display their own properties when selected, requiring you to populate required parameters before being able to use the header. Fill in any required information (indicated by an asterisk next to the parameter name), and then click the Save button.

Important: While ID is the only parameter that indicates it is required within the Workflow Navigation Header Properties, you need to enter text into the Label parameter field. If you do not, then the header will show as 'Not Configured' within the Node List.

---

4. Back on Multi Edit Display Mode Properties, select the **Property Direction** of the table using the dropdown.
5. Enable **Use Immediate Save** if you prefer that any edits made within the table be saved immediately without user intervention. This lessens the risk of losing unsaved data when navigating away from the Task List screen. If disabled, the user must manually click the save button after making any object edits. For details, see the **Auto-Save in the Web UI** topic.
6. Click the **Group Options** and **Advanced** headings to display additional parameters that determine the behavior of the data in the table.

If using another display mode, the configuration will be similar to the steps above. Auto-save functionality is only available as an option within Multi Edit Display Mode since this is the only mode available to use when editing data.

Information regarding how to use a Task List is included in the **Moving Tasks through a Workflow in Web UI** topic.

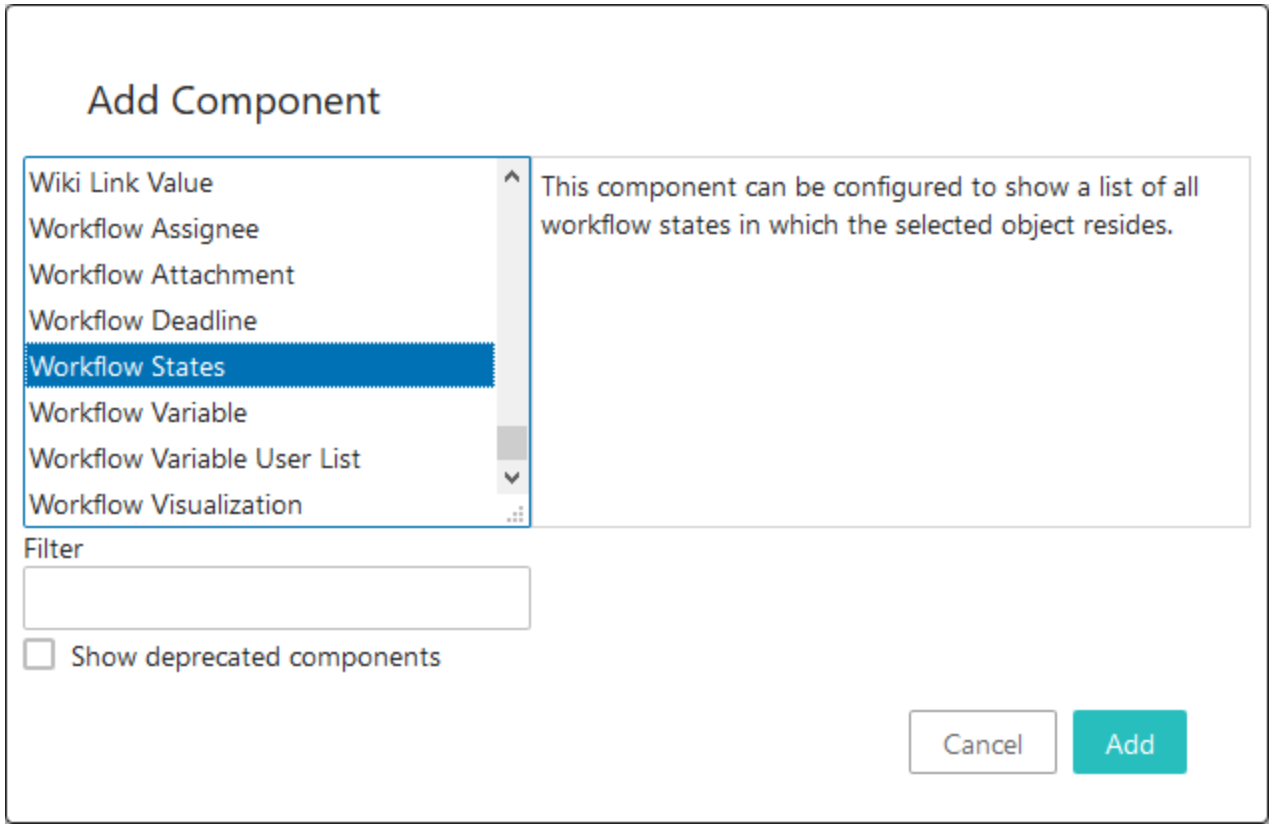
Workflow States Component

The Workflow States component allows users to see which workflow states an object currently resides in, even if the object resides in multiple states in different workflows. If, for example, an object is moving through a single workflow and enters a parallel state that puts the object in both the Photo Enrichment state and Text Enrichment state simultaneously, this component can list the object in both states. This component is enabled by pre-selecting all valid states that can display should the object reside in any of those states. This allows users to fine-tune display of this component to exclude display of cluster or parallel states, for example, that may give the user irrelevant information.

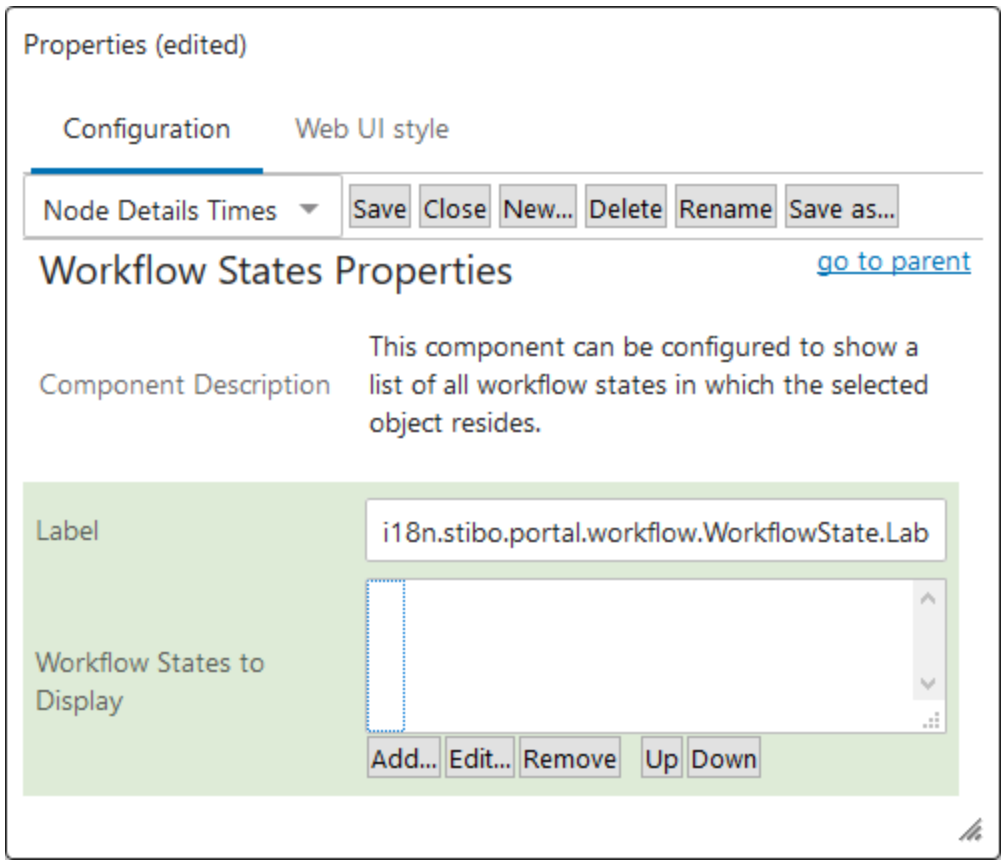
Configuring the Workflow States component

The Workflow States component can be added to a screen with a Node Editor. It can be added to a screen that is configured with other components or on a tab by itself.

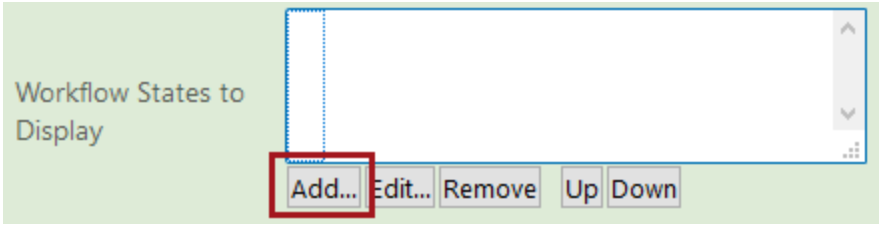
1. Enter the Web UI designer and navigate to the Node Details screen to be configured. Select Node Editor from the 'Main' dropdown under 'Child Components'.
2. On the Node Editor, navigate to Node Editor Properties > Child Components > Rows. Click 'Add' and select **Workflow States** from the 'Add component' dialog.



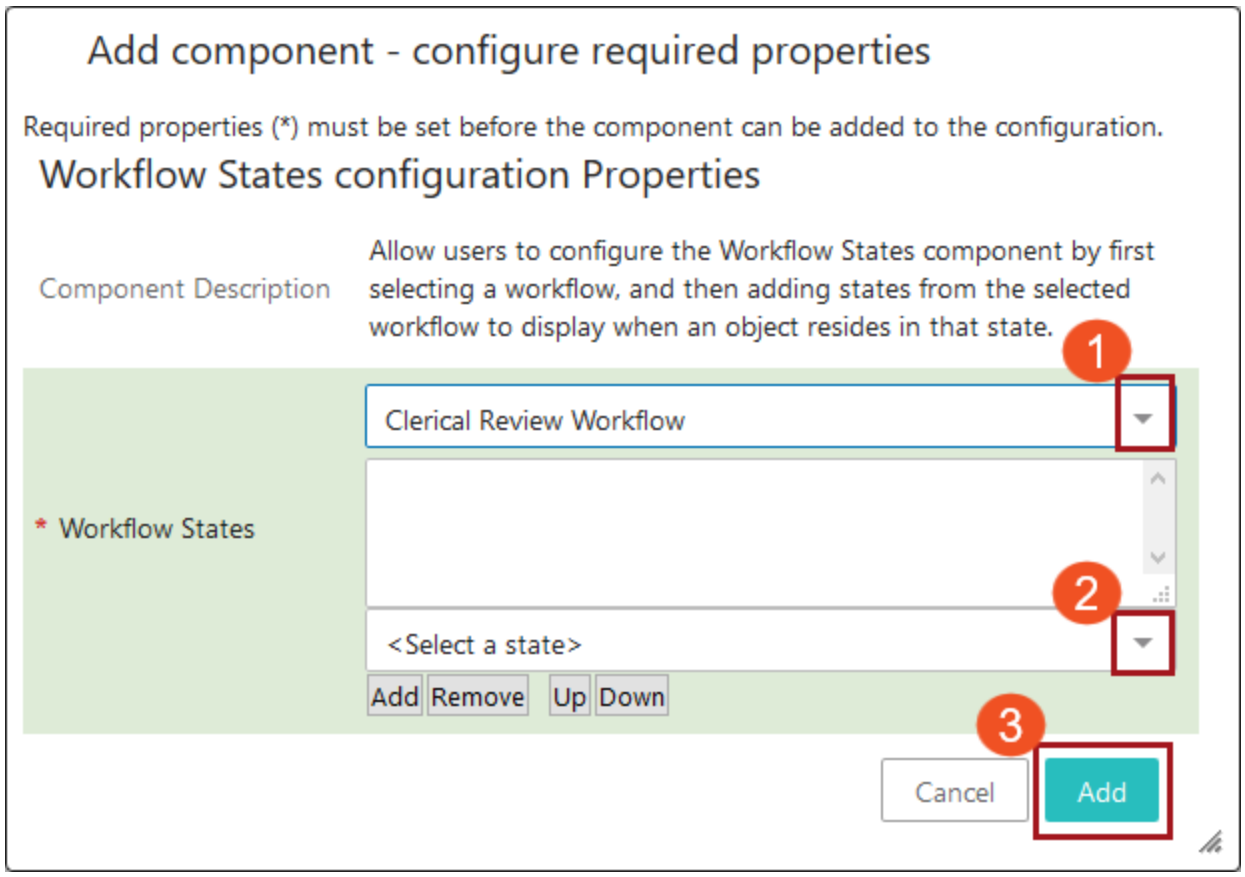
3. Double-click on the component name where it appears in the 'Rows' field to open the **Workflow States Properties**.



4. In the Workflow State Properties screen in the designer, two parameters are available: 'Label' and 'Workflow States to Display'. If a custom label for this parameter must display in the Web UI, add the custom text to the 'Label' field. If no text is added, the label defaults to 'Workflow States'. In the 'Workflow States to Display' field, add the eligible workflow states that will display if and when the object resides in it. To do this, click the 'Add' button beneath the field.



5. In the 'Workflow States configuration Properties' window that displays, users can do the work of workflow state selection. First, select the workflow of which the desired state is a part by clicking the dropdown arrow at the far right of the first field. Once clicked, a list of all workflows configured in the system will display. Second, select the workflow state to add to the Workflow States component. Only those states that are configured for the selected workflow will display. Third, click the 'Add' button to complete the process. Repeat steps two and three for all desired workflow states from the selected workflow. Each entry added to the 'Workflow States to Display' field contains workflow states from a single workflow. To add a workflow state or states from a different workflow, a new entry must be added in the 'Workflow States to Display' field.



6. No additional configuration is required. To edit an existing workflow state element in the 'Workflow States to Display' field, select the element in question and click 'Edit'. To change the ordering of how workflow states will display when an object is simultaneously in two or more workflow states that are added to the Workflow States component, select the element in question and position as desired using the 'Up' and 'Down' buttons.

Below is a screenshot of a Workflow States component as it displays on a tab page.

Basic Information and references 2 | Asset Preview | Category Informations | Additional Information

Workflow states	Bulb Specification Workflow State: Bulb Discard/Delete State Shade Specification Workflow State: Shade Suitability Review State
Primary Product Image	

Mapping Workflow States in Web UI

When creating a screen in Web UI and configuring the components on that screen (the view), you need to tell the system how users access that view. Some screens are accessed through widgets; however, access is usually set up using Web UI mapping.

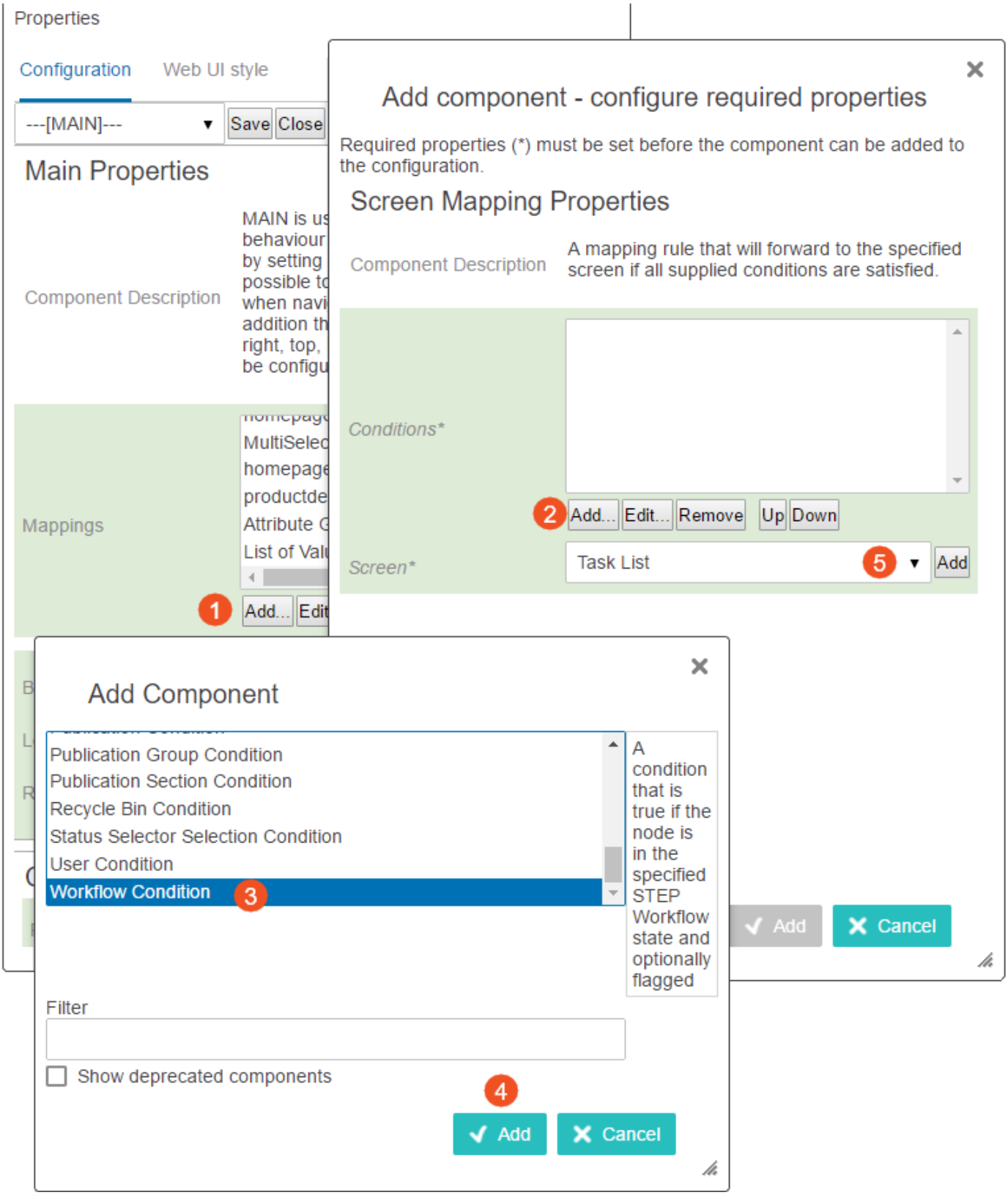
Through mapping configurations, a user can click on a task within a Node List (one configured within a Task List and/or an Advanced Search Screen), and be taken to a specific screen designated for display of objects in the particular workflow and state that the object is currently in.

As a very basic example:

1. You have a workflow with three states.
2. You click on the 'State A' name within the Status Selector Sidebar Widget.
3. A Task List displays.
4. You click on one of the tasks in that Task List, and you are taken to 'Screen A.'
5. Begin again, clicking on 'State B' within the Status Selector.
6. The same Task List displays.
7. You click on one of the tasks and are taken to 'Screen B.'

Continuing on, you could conceivably set up a different destination screen for tasks that you click on for 'State C' when displayed within a Task List (or Advanced Search Screen used as a task list).

The screenshot below gives you a simplified look at the steps to take to add a mapping for a Workflow Condition. To get a thorough understanding of how mapping works and how you might use this feature, see the **Main Properties** topic in the **Using a Web UI** documentation.


Properties
Configuration
Web UI style
---[MAIN]---
Save
Close
Main Properties
Component Description
Mappings
Add...
Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
Screen Mapping Properties
Component Description
A mapping rule that will forward to the specified screen if all supplied conditions are satisfied.
Conditions*
Add...
Edit...
Remove
Up
Down
Screen*
Task List
Add
Add Component
Publication Group Condition
Publication Section Condition
Recycle Bin Condition
Status Selector Selection Condition
User Condition
Workflow Condition
A condition that is true if the node is in the specified STEP Workflow state and optionally flagged
Filter
Show deprecated components
Add
Cancel
1
2
3
4
5

Adding the Workflow Condition component, displays the Workflow Condition dialog, which allows selection of the Workflow, Workflow State, and the Status Flag. For details on setting these parameters, see the **Status Flags in Web UI** topic.

For a step-by-step example that can be used as a starting point to complete your own mappings configuration when using Advanced Search as a task list (instead of a standard Task List screen type), see the **Mapping Task List to Workflow State** topic in the **Web UI Advanced Search** documentation.

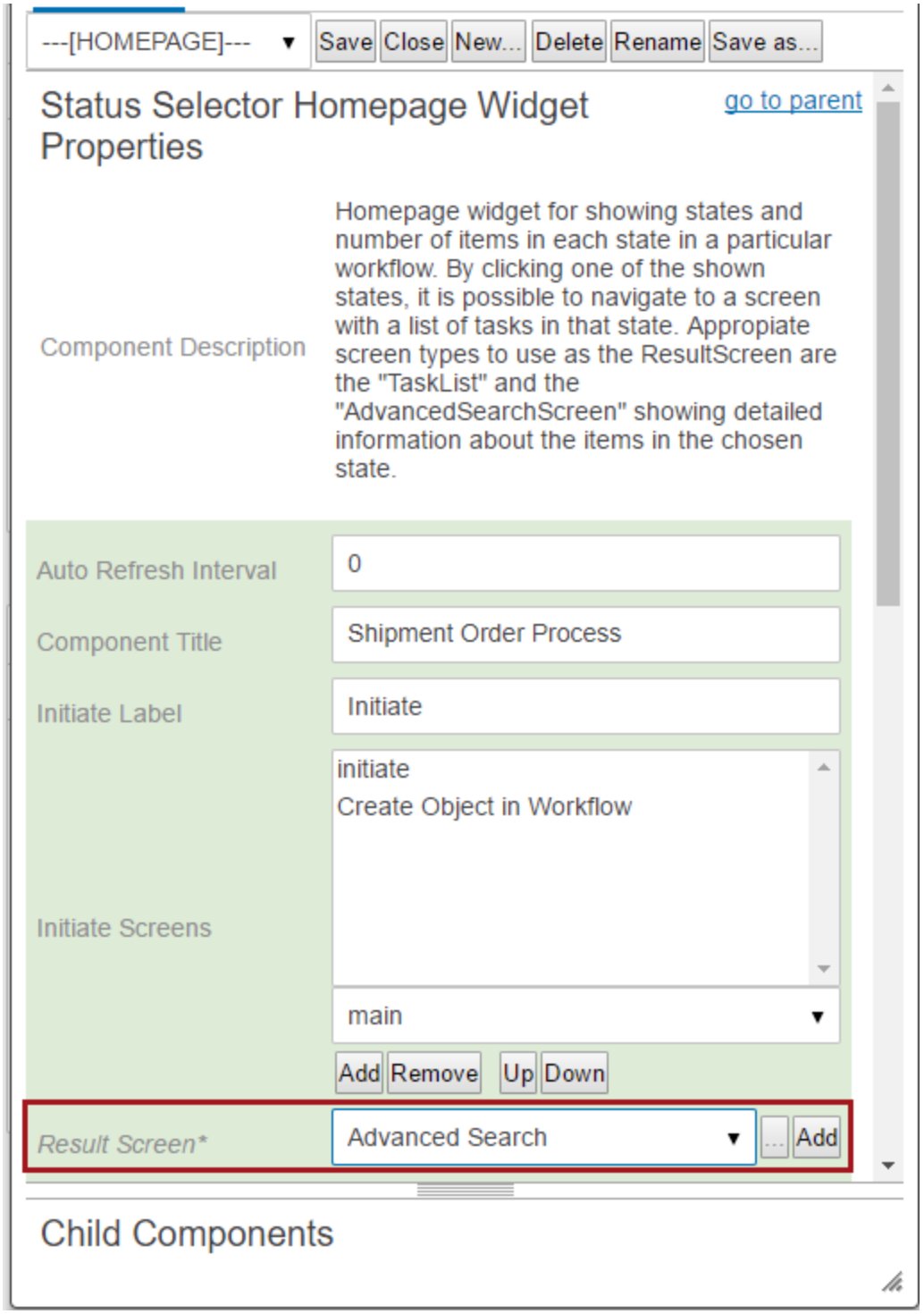
Important: When using Workflow Condition mapping with Advanced Search, regardless of the mapping method, ensure that the Enable Workflow Selection parameter is enabled within Advanced Screen Properties.

Using Advanced Search with Workflow Tasks

When clicking on a workflow task within a Status Selector Homepage / Sidebar Widget, most Web UI s are set up to take a user to a Task List screen, which is used for displaying the tasks listed in a selected workflow or workflow state.

Alternatively, the Status Selector Homepage Widget can be configured so that the Advanced Search screen is used as the results screen. Both the Advanced Search screen and Task List use a Node List component to display information.

Configuration of the **Status Selector Homepage Widget** and the **Status Selector Sidebar Widget** are also described in separate topics found within the **Getting Started with Workflows in Web UI** section of the documentation.



If using a saved search, click the ellipsis button (...) go the right of the Results Screen value field to make a selection.

Note: If the State Names are lengthy and need additional space to align properly in the widget, use the Advanced > Double Width option to increase the width of the widget.

When Show Collection Filter is enabled, it causes only the products that are part of the selected collection to display. This can be used to efficiently track the products in various states based on the collection created with various search criteria. For example, if there are some prime products that have a strict release dates and the enrichment process should be completed on priority, you can create a collection of these products and on the Web UI, monitor the enrichment progress in various states by filtering these products in collections.

Advanced Search as a Results Screen

When accessing the Advanced Search screen via a workflow task selection, the default screen behavior varies depending on whether or not the Workflow search criterion has been added to the Search Criteria tab / panel.

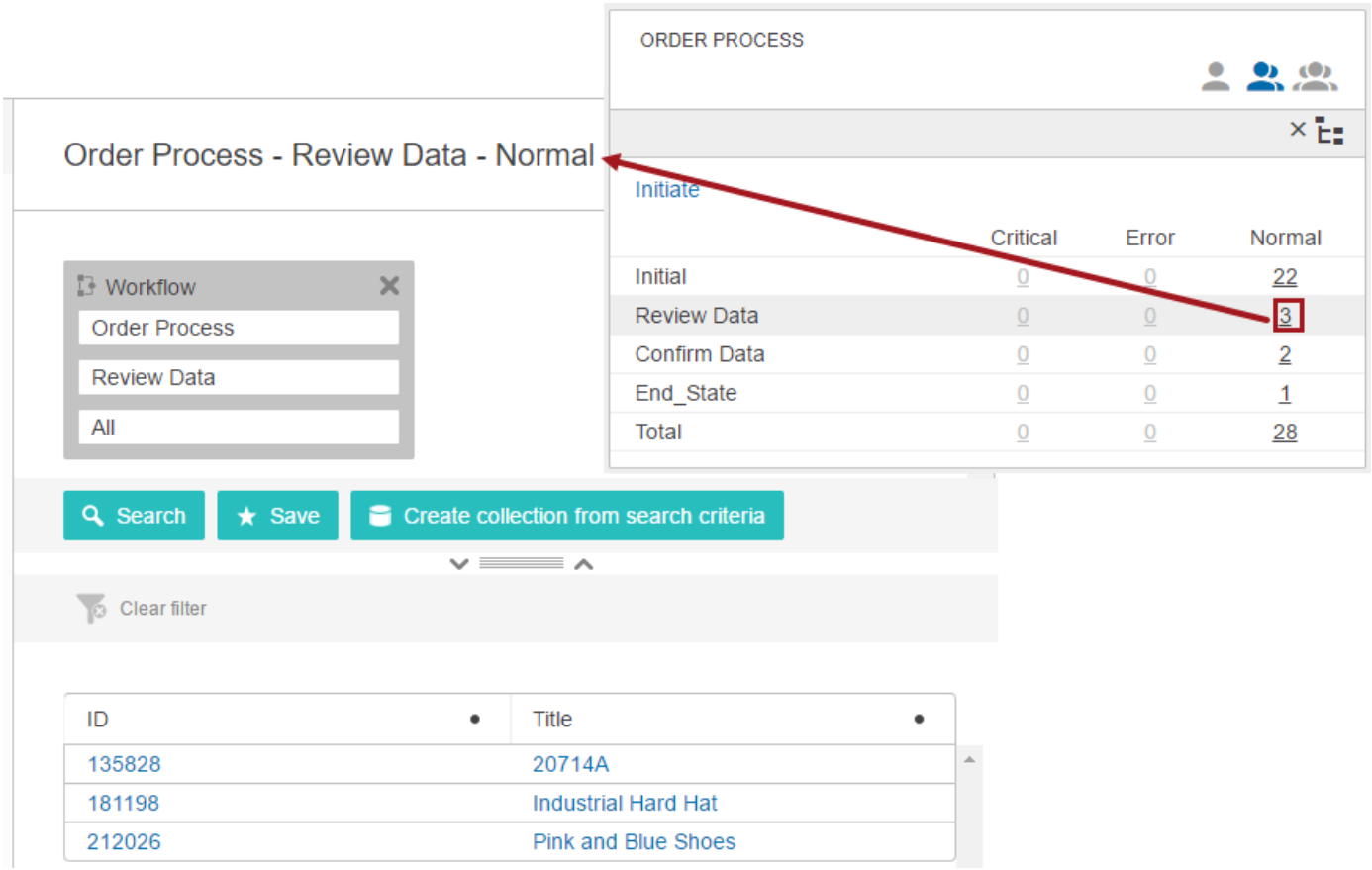
Other factors also impact the behavior depending on all the other Advanced Search screen configurations (e.g., collapsed search canvas, title configuration). Before working with either scenario below, users should be familiar with how to set up and use Advanced Search. Information can be found in the **Advanced Search** section of the **Using a Web UI** documentation.

Example Scenarios

Scenario #1 (with the third bullet below being *key* to this functionality):

- The Advanced Search screen is configured as the result screen for a Status Selector (Homepage / Sidebar) widget
- A Status Selector task selection has been made
- The Workflow criteria is removed from, or not initially configured as one of, the valid Search Criteria selections through the Advanced Search Screen Properties

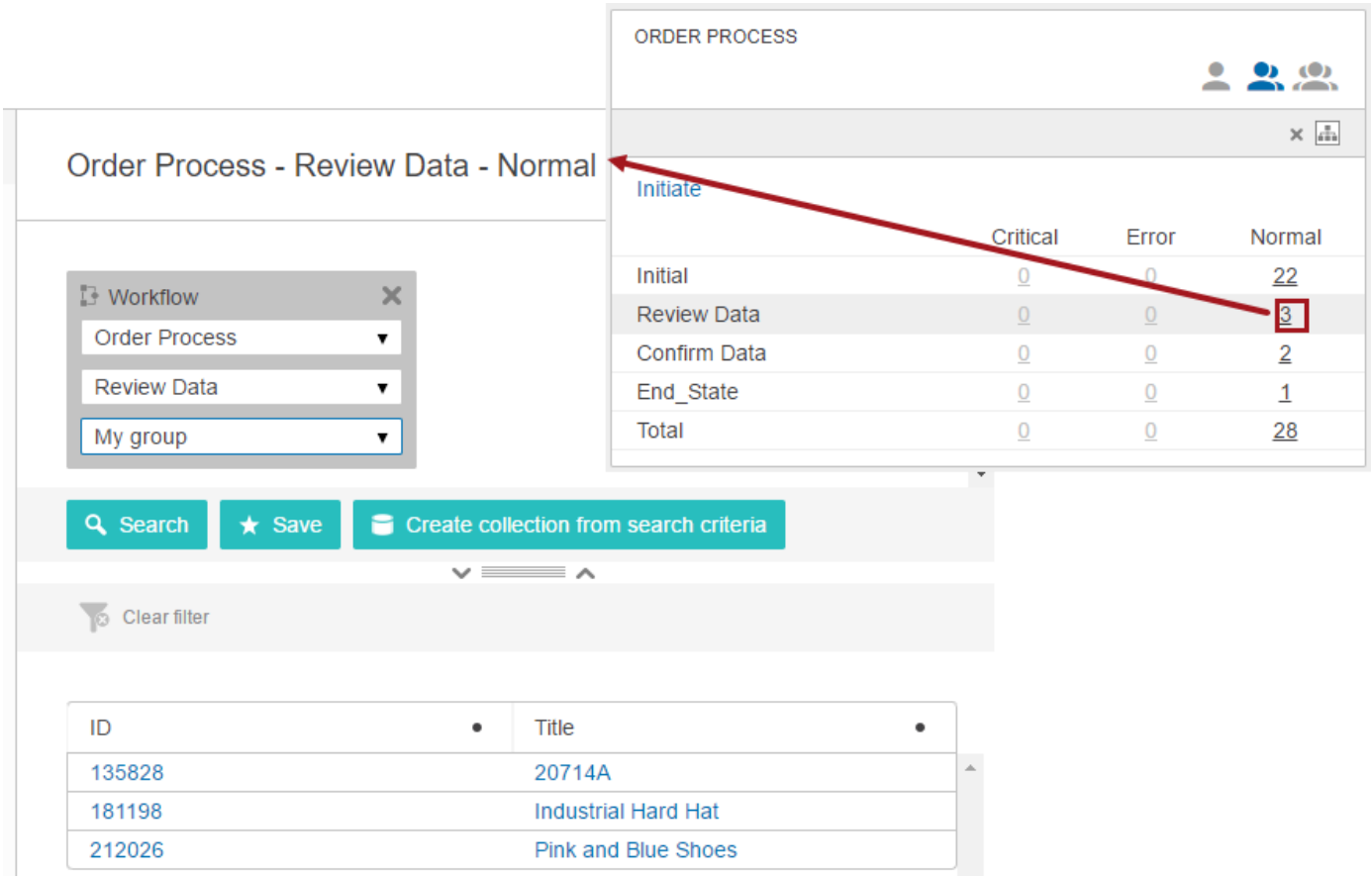
When users make a task selection in the widget operating under this scenario, the workflow criteria fields display on the screen (as long as the search canvas is not collapsed). The search criteria values are read-only, and the workflow criteria cannot be removed from the search area. Privileged users can add / remove additional criteria to do more focused searches, but the user is always left with the original workflow search criteria that they began with. This allows for end users to focus on their tasks without any concern that they may inadvertently take action on tasks that they do not own.



Scenario #2 (with the third bullet below being *key* to this functionality):

- The Advanced Search screen is configured as the result screen for a Status Selector (Homepage / Sidebar) widget
- A Status Selector task selection has been made
- The Workflow criteria is configured as one of the valid Search Criteria selections within Advanced Search Screen Properties

When users make a task selection in the widget operating under this scenario, the workflow criteria fields display on the screen (as long as the search canvas is not collapsed). The search criteria values are NOT read-only so the workflow criteria can be removed from the search area. Privileged users can add / remove additional criteria to do more focused searches, and it is possible for the user to remove the original workflow search criteria that they began with. This presents the possibility for end users to inadvertently take action on tasks that they do not own.



Additional Settings Applicable to Workflows

Users will find more information on how to further customize the Advanced Search screen when it is to be used as a results screen for workflow task selections in the **Advanced Search Initial Configuration** topic within the **Advanced Search** section of the **Using a Web UI** documentation.

A few options to be aware of:

- The Advanced Search Screen Properties > **Title** parameter can be customized to display information specific to a workflow by using placeholders, which can be used in conjunction with, or in place of, that text to automatically insert workflow-specific information into the screen title. These placeholders ({WorkflowID}, {WorkflowState}, {WorkflowName}, and {StatusFlag}) can be used individually or together and display exactly what the name implies.
- The Advanced Flipper > optional **Enable Workflow Selection** parameter. If enabled, when a search contains one or more workflow criteria, clicking on a single node in the search results will take the user to a Node In State selection. The selection can then be matched by a Workflow Condition in a Screen Mapping configuration, either on the Main screen or on a Forwarding Switch Screen.
- The **Unrestricted User Groups** parameter, if enabled, listed user groups will be able to create, maintain, and save searches in Advanced Search. Users in groups not listed will be restricted to perform only searches on the basis of pre-configured searches that have been shared with the group.

Important: If no user groups are listed, all users will have full access to functionality in Advanced Search.

Working with Tasks in Workflows

This set of topics focuses on the end user, e.g., the user working with tasks in a workflow in the Web UI, rather than the screen / component configuring and/or designing a workflow. They are written under the assumption that the configurations described in the **Getting Started with Workflows in Web UI** section of the **Workflows in Web UI** documentation have been completed and all options described are available to the end user.

After reading these topics, a user should be able to access workflow tasks, edit data on objects in a workflow, and submit tasks through the assigned states in a workflow.

Topics covered in this section are:

- Initiating Objects in a Workflow using Web UI
- Moving Tasks through a Workflow in Web UI
- Assigning Workflow Tasks in Web UI

Additionally, the **Dun & Bradstreet Integration in Web UI** topic is also included in this section since working with D&B in Web UI requires workflows.

While concepts remain the same across workbench and Web UI, the interfaces differ. For general workflow information that also includes some materials specific to workbench, see the **Workflows** guide. Furthermore, to follow the examples, the STEP user should have all workflow related privileges.

Initiating Objects in a Workflow using Web UI

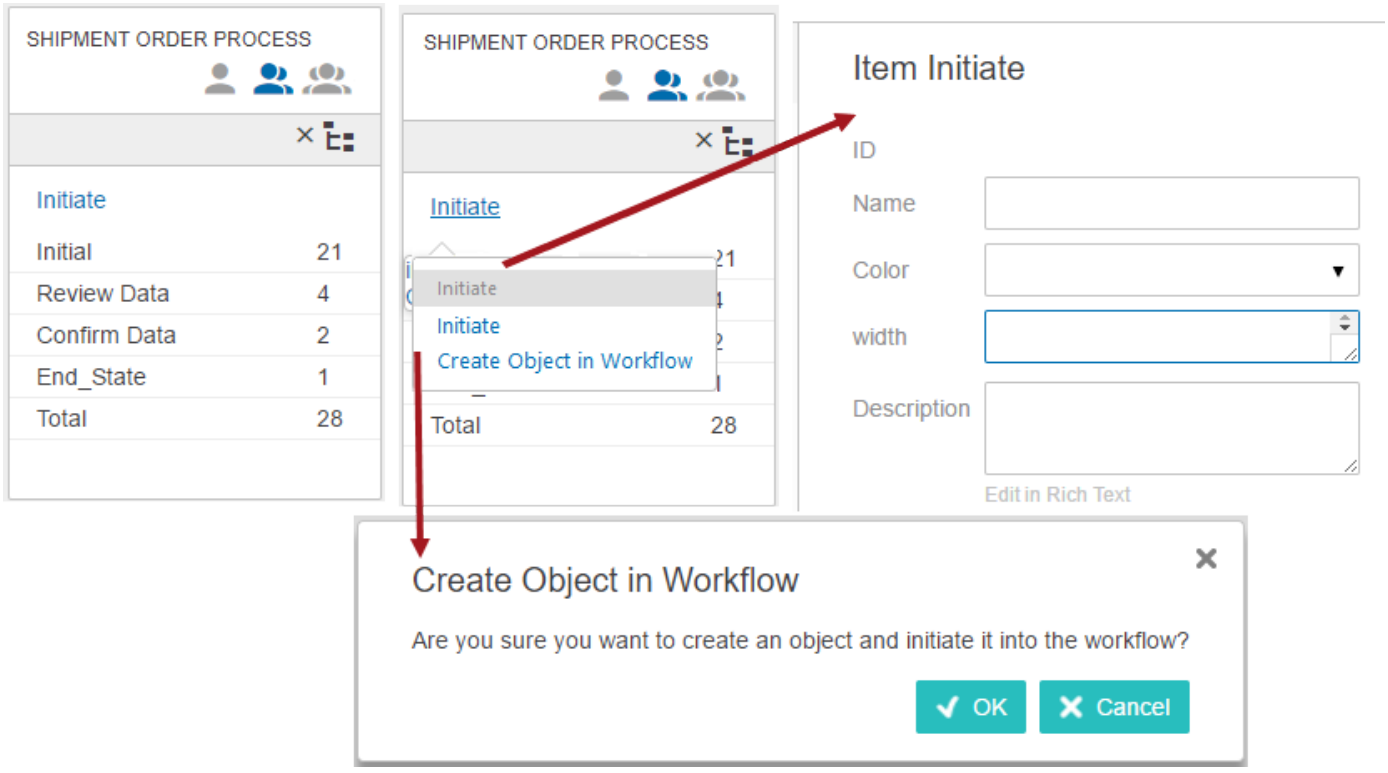
The below process describes two ways to initiate an object into a workflow using Web UI. However, it is important to note that oftentimes workflows will be configured to automatically initiate objects of a certain type or types into the workflow upon creation of the object. In addition, workflows can be initiated by a variety of other actions or processes (both automated and manually initiated), such as business rules, imports, and bulk updates.

Note: It is important to be aware that link names, screen names, and button text referred to in the examples / steps in this topic may differ from what is shown on your own system.

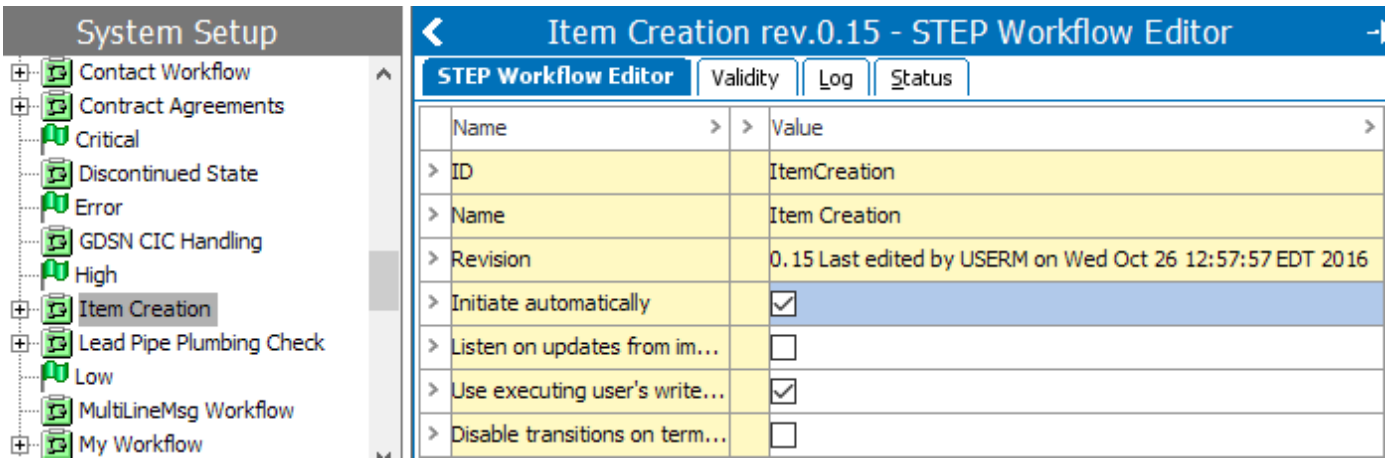
Initiating New Objects

Users can initiate objects into a workflow using a Status Selector Homepage Widget or a Status Selector Sidebar Widget configured to display a link or links to screens used to create and initiate objects into a designated workflow. This functionality uses Initiate Item and/or Create Object in Workflow screen types. Each option is described in greater detail below.

Once created using either method, the objects are automatically initiated into the workflow designated by the Status Selector.



Note: Option 'Initiate automatically' must be checked in STEP Workbench for respective workflow. If a user wants to initiate a product automatically on the creation of products / items, then **Initiate automatically** needs to be check.



Create Object in Workflow

When creating new objects that use auto-generated IDs, users can create and initiate objects into a workflow in a single step using a Create Object in Workflow screen type as the Status Selector initiate screen. This allows for a more streamlined object creation process since the user is able to bypass the Initiate Item screen, which means that attribute values do not need to be filled in prior to object creation, and users are automatically taken to an editor screen (determined by the overall Web UI mappings) where they can easily start working with the object data.

1. Click on the initiate link, which is the top link within the Status Selector. This link is shown as 'Initiate' in the example above.
2. Select the 'Create Object in Workflow' link.
3. Choose OK when presented with the 'Create Object in Workflow' dialog.
4. Work with the object to fill in attribute value and/or progress the task through the workflow.

Initiate Item

Using an **Initiate Item** screen, users fill in attribute values then submit to create and initiate an object. Upon a successful submission, the end user will be navigated to a designated screen configured as part of the Initiate Item Properties setup.

1. Click on the initiate link, which is the top link within the Status Selector. This link is shown as 'Initiate' in the example above.
2. Select the 'Initiate Item' link.
3. On the object details screen, fill in the attribute values and then click Save at the bottom of the screen to create and initiate the object.
4. Your next step will depend on the screen you are taken to after clicking Save. You can continue working with the object to fill in attribute value and/or progress the task through the workflow.

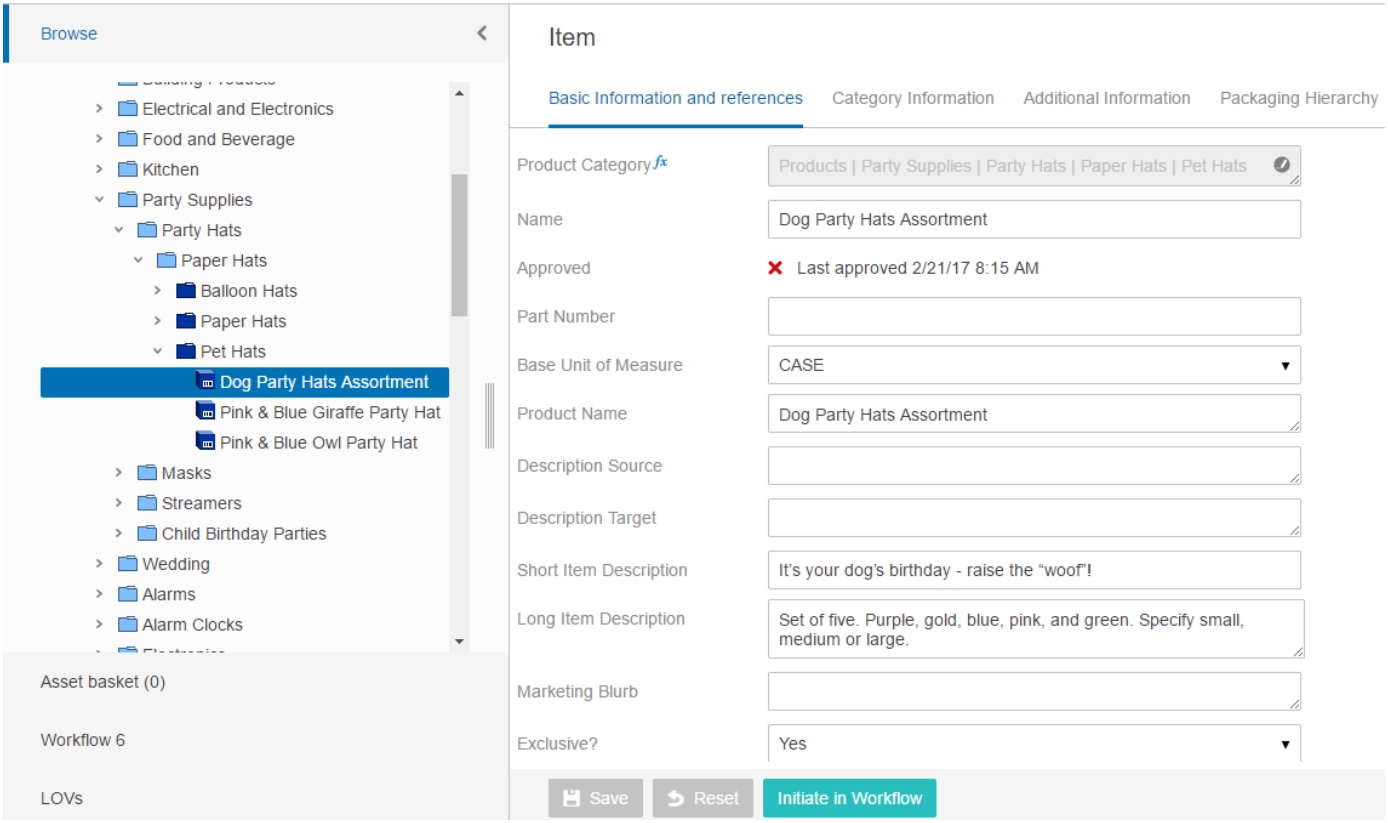
Initiating Existing Objects

When working with objects in Web UI, a **Start Workflow Action** button can be added to any Node Details screen. This allows users to work with object data and then initiate the object into a workflow by clicking the 'Start STEP Workflow' button at the bottom of the screen.

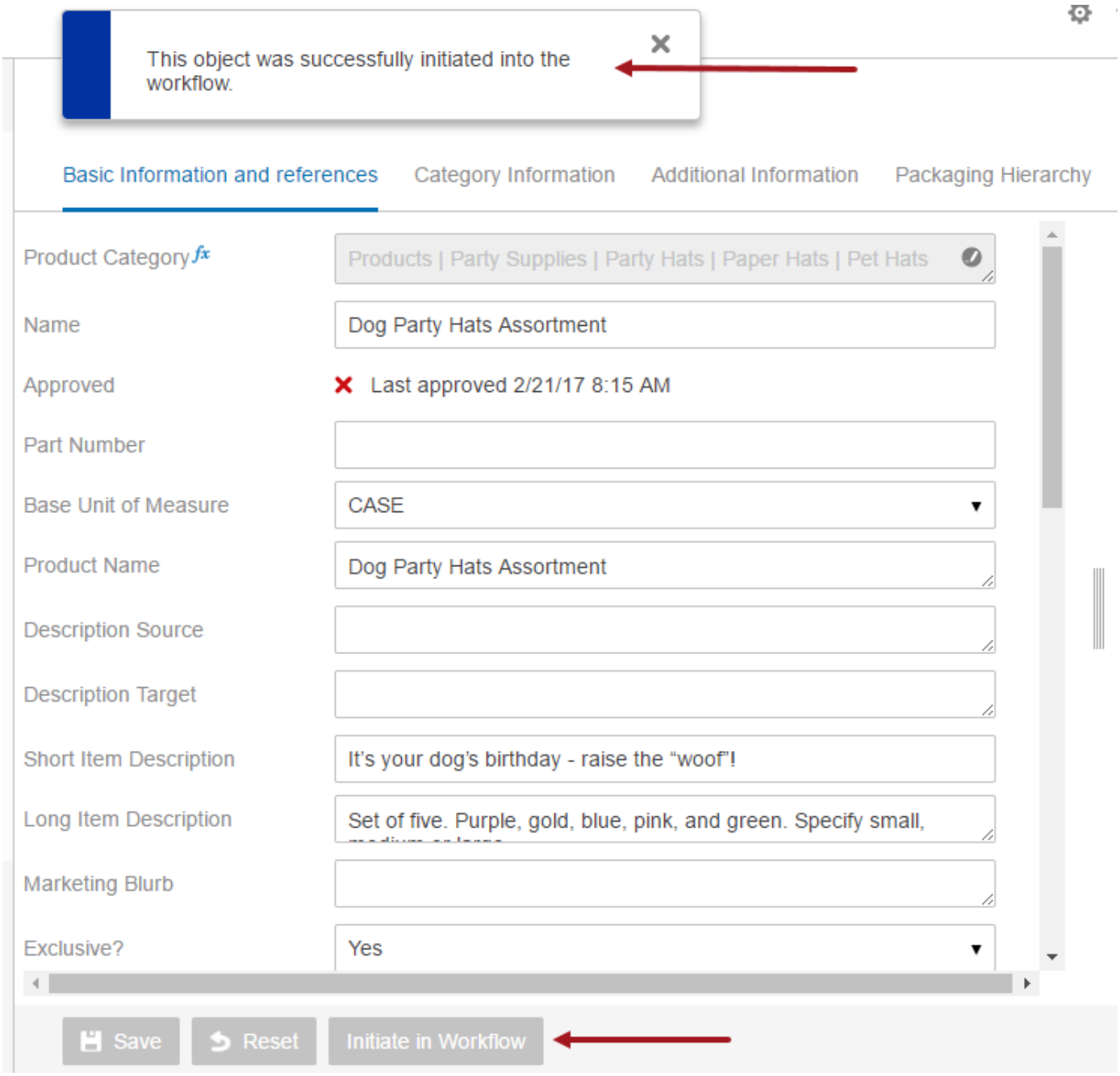
Note: The button label for 'Start STEP Workflow' can be configured in the designer.

The button will only activate when initiation is possible. If deactivated, the object may already exist as a task in the designated workflow.

In the picture below, the 'Start STEP Workflow' button was added, and the button label was changed to read 'Initiate in Workflow.'



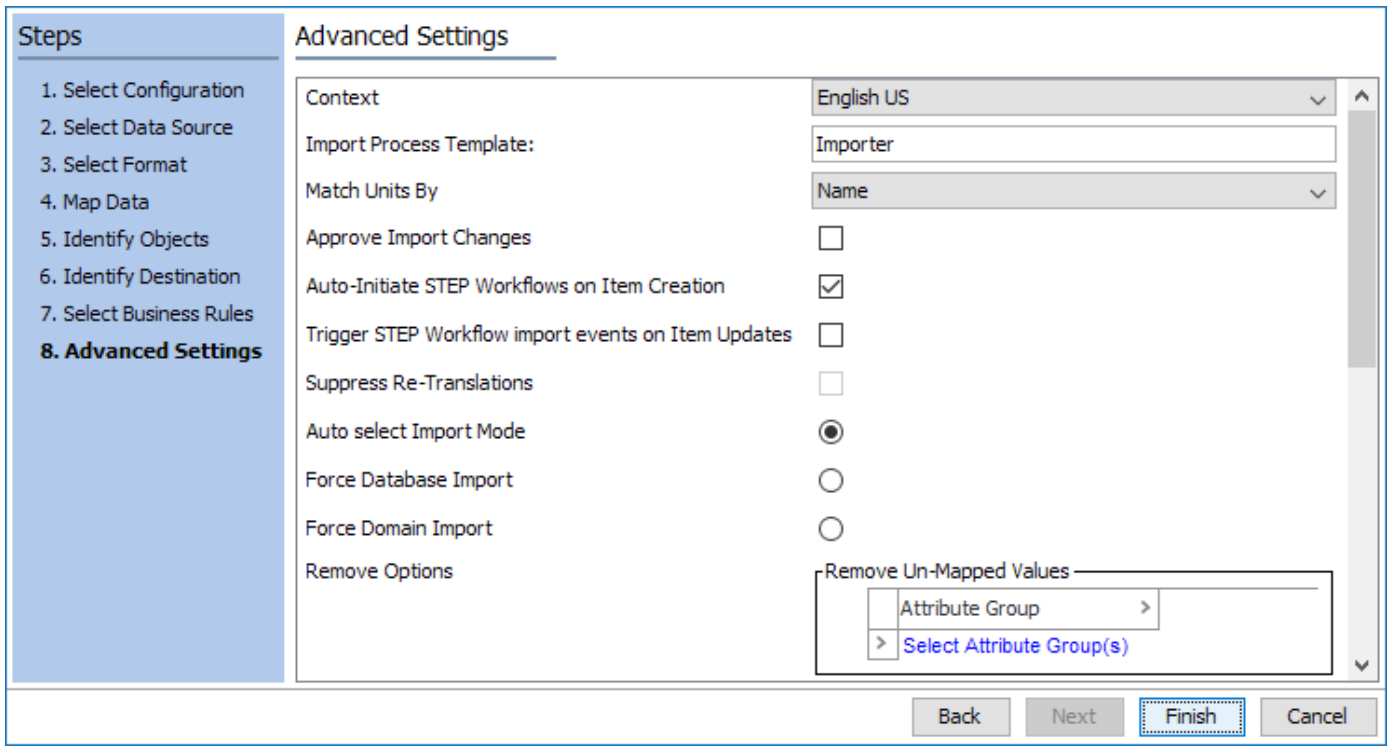
Once initiated, you will see a confirmation message displayed at the top of the screen, and the 'Start STEP Workflow' button will deactivate for that particular workflow.



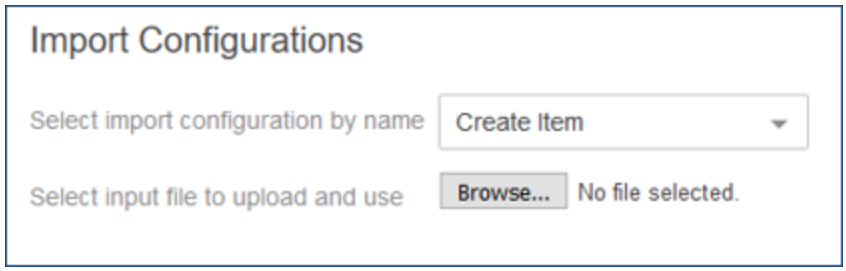
Note: One product / item can be initiated into only one workflow through Web UI. For the configuration of a workflow action button, see **Screen / Component Configuration and Mappings for Workflows** topic in the Web User Interface documentation.

Initiating by Import

In Web UI, to initiate the products / items to workflow on creation through import, an import configuration needs to be used, and the 'Auto-Initiate STEP Workflows on Item Creation' option needs to be enabled when creating the Data Import screen.



In the example below, the 'Create Item' configuring, which was created in STEP Workbench by enabling the option 'Auto-Initiate STEP Workflows on Item Creation,' is used.



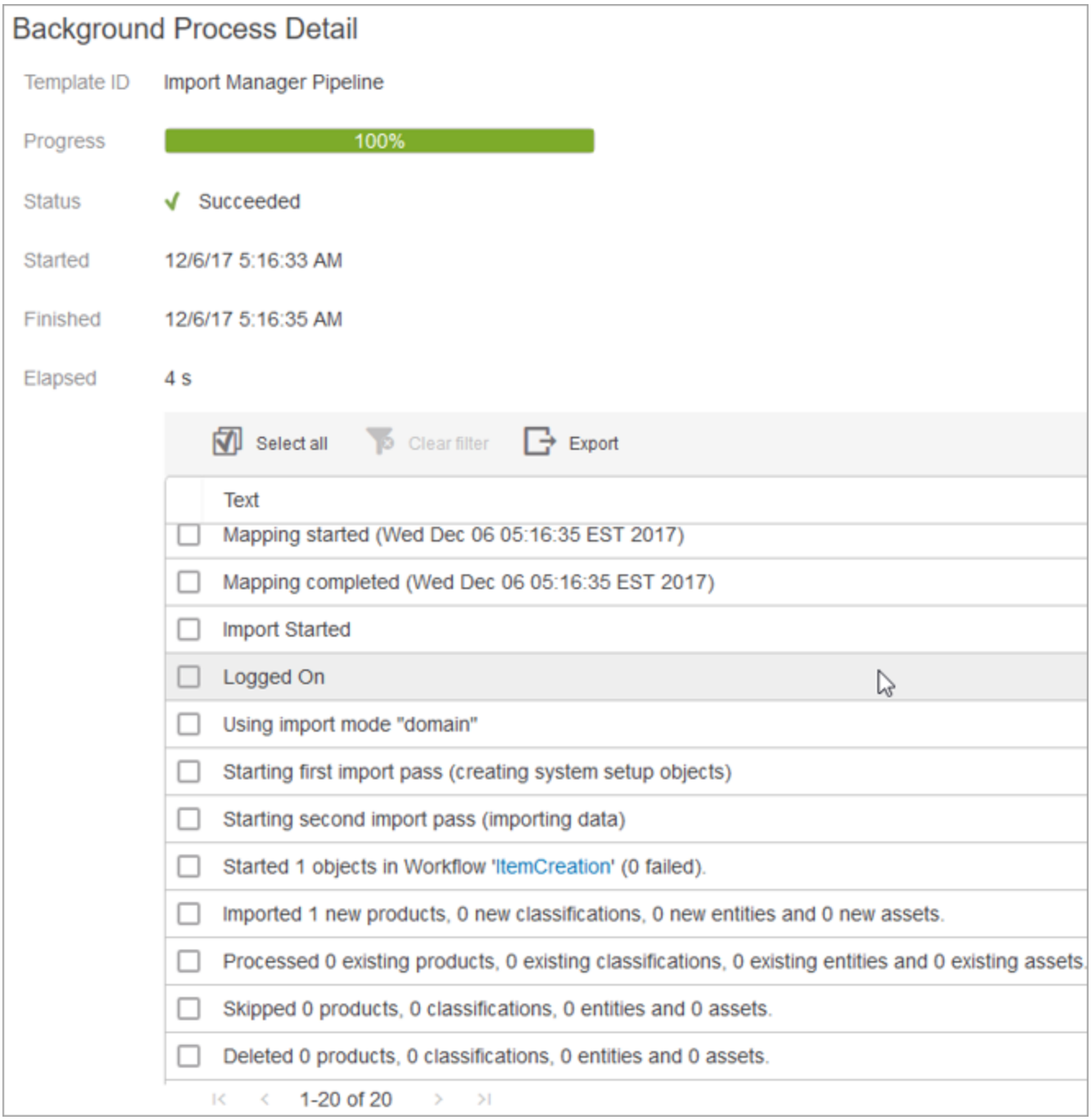
The sample input file field is below:

	A	B	C	D
1	<ID>	<Name>	<Parent ID>	<Object Type ID>
2		CreatingItem	18209	Item
3				

To initiate a product or item into this workflow:

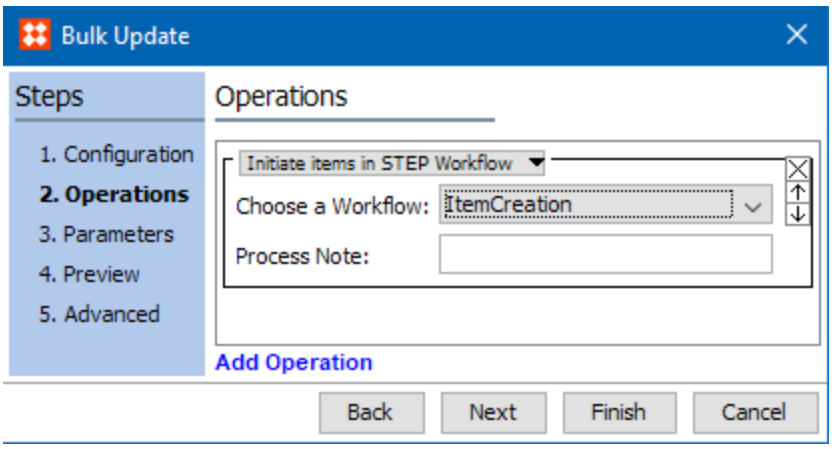
1. Click on the Browse button in the Import Configuration.
2. The select File window will be displayed.
3. Select the sample import file.

4. Click on the OK button.
5. The background process will be started.
6. In the background process, the initiated Item is visible.



Initiating by Bulk Update

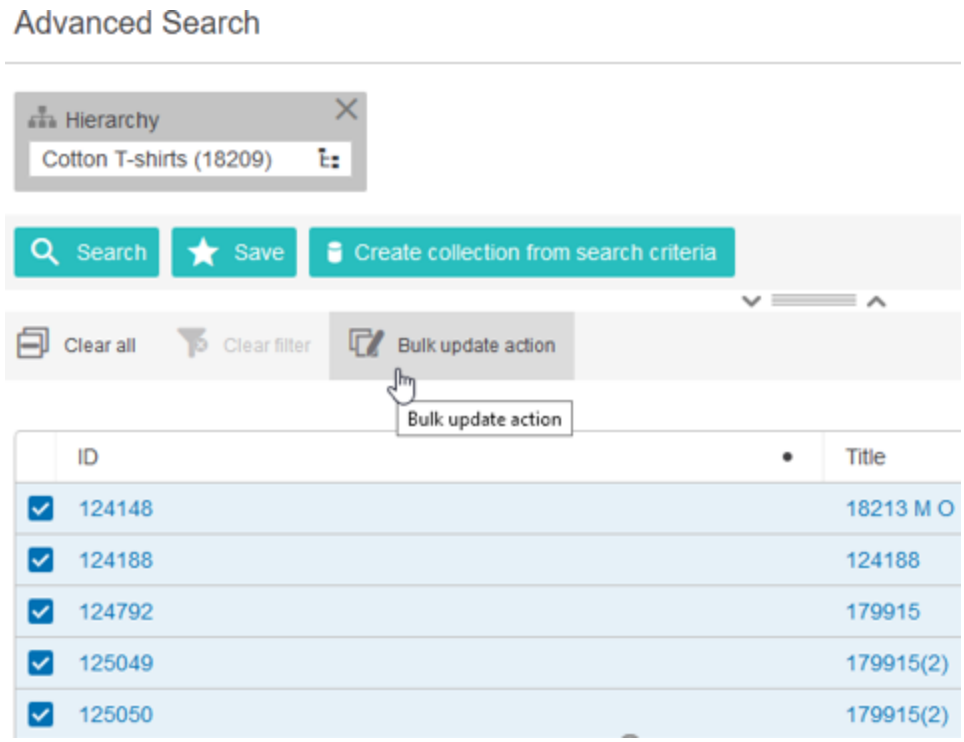
In Web UI, to initiate the products / items to a workflow through a bulk update, a Bulk Update Configuration needs to be used. This is created using the 'Initiate items in STEP Workflow.'



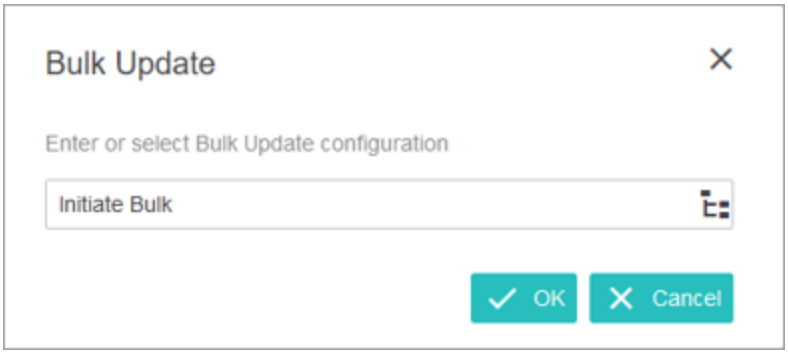
In this example, the 'Initiate Bulk' configuration is used, which was created in STEP Workbench.

Steps:

1. In Advanced Search, search for the products that need to be initiated into the workflow.
2. Select the products from the list.
3. Click on the 'Bulk update action' button.



4. The 'Bulk Update' window will display.
5. Select the required Bulk Update configuration.
6. Click on the OK button.



7. The background process will start.
8. The selected items will be initiated into the workflow.

Note: The Bulk Update action button is available on an Advanced Search screen on a Node List. Additionally, items can be initiated into a workflow from a Node List by adding the 'Start Workflow from Grid' action.

To work with the object(s) that were just placed in the workflow, continue on with the topics found in the **Working with Tasks in Workflows** section.

Note: In STEP Workbench, the workflow must have validity for objects being initiated.

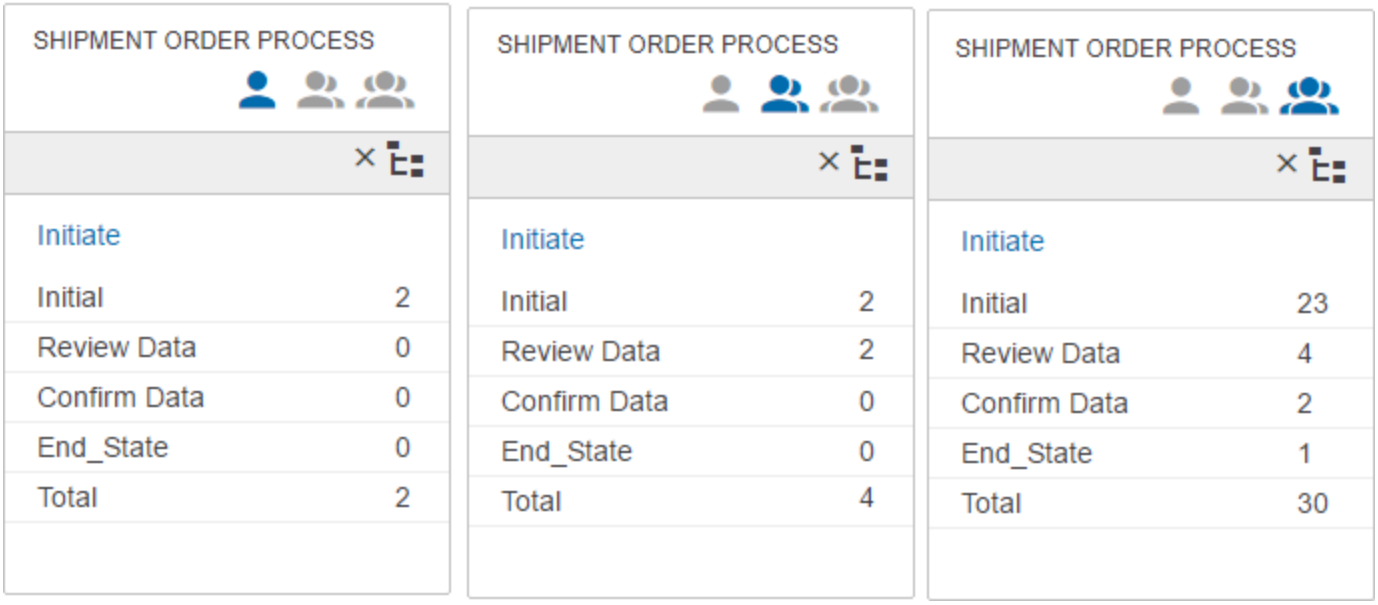
Moving Tasks through a Workflow in Web UI

Once an object is initiated in a workflow, it is available in one or more states of the workflow. Each instance of an object in a state represents a task to be completed. Each state is assigned to a particular user or group who has the responsibility of completing the tasks in that state. Because of this, tasks are most often accessed via the states themselves, rather than via the objects in the states. Using a Status Selector Homepage Widget, users can click on a state within a specific workflow to view a Task List. Using a Task List allows users to view and then work with tasks in the states to which they have privilege to access. For more information on the Task List screen, see the **Task List** topic.

Processing Tasks in a Workflow

The Status Selector is the primary interface for working with tasks in the Web UI. A Status Selector shows all tasks assigned to the current user (either directly to the user or to a group of which the user is a member). A list of the configured states is displayed, with an object count displaying the number of tasks in the state that the user has access to. Additionally, depending on a user's privileges and the selected task mode icon, a user may see tasks assigned to any user. Click the task mode icons shown at the top right of a Status Selector Homepage / Sidebar Widget to change the view.

In the example below, you see that there are two (2) tasks assigned directly to the user. There are four (4) tasks assigned to a group in which the user is a member (including the current user's tasks), and thirty (30) tasks total within the states showing the specific workflow.



To work with tasks via the Status Selector (Homepage / Sidebar) Widget:

1. Navigate to the widget applicable to the workflow and select the appropriate task mode to determine the view. There are three options to choose from (as shown in the screenshots above):
   - **User** : Only tasks assigned directly to the current user are displayed.

- **Group** : Tasks assigned directly to the current user and to the User Group of which he /she is a member are displayed.
- **All** : All tasks are displayed. This button is only available if the user has 'STEP Workflow Administrator' privileges for the workflow.

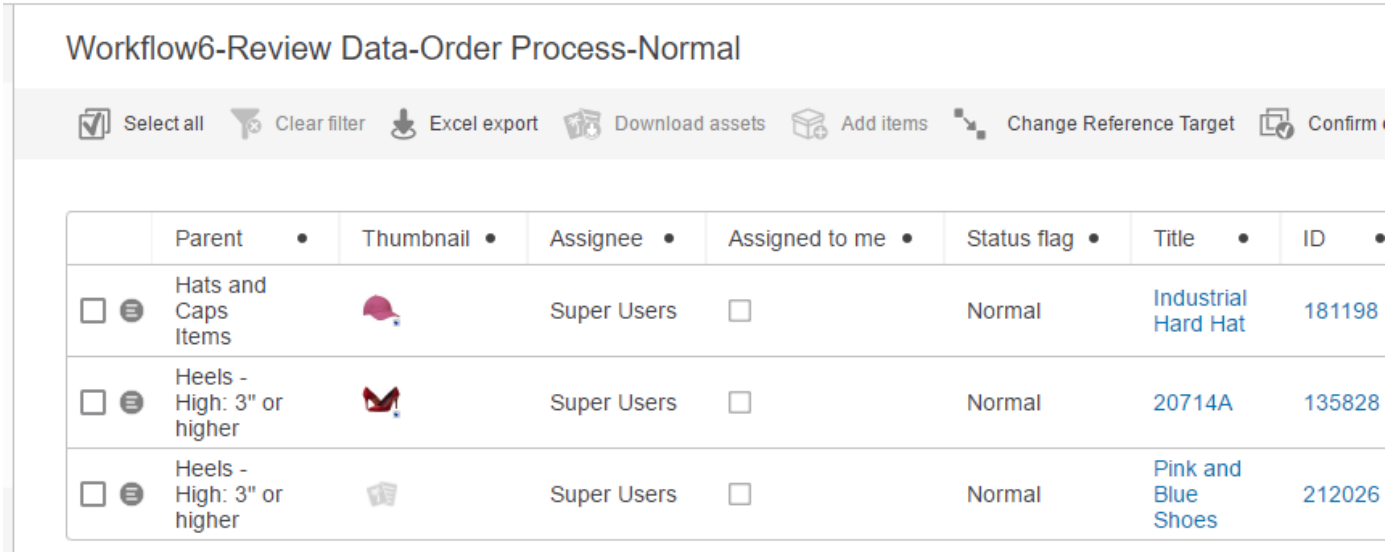
Additionally, a user can further refine the task view by using the 'Filter by Collection' option. If a collection has been previously set up, selecting that collection using the Node Picker button ( ) will filter the task list to display only tasks for objects contained in the collection.

It is useful to note that the display of task mode icons in the Status Selector components is also configurable. Using the 'Task Mode' parameter in the designer, admin users may select which of the three task modes will be available to end users, so users may see different task mode icons based on those settings, and on their user group's privileges. For more information on configuring task mode display, see the Status Selector Homepage Widget documentation and the Status Selector Sidebar Widget documentation.

To enable the node picker button, check the 'Show Filter' parameter in the Status Selector Homepage Widget properties.

For more on creating collections, see the **Collections** documentation.

2. With the appropriate view selected, click the link for the state in which tasks should be accessed or, if shown, click the number of the tasks displayed in the Status Flag columns for a specific state. This will display the tasks according to the view configured by the workflow administrator, allowing users to review and/or edit data as needed. The Task List is typically configured to use to work with tasks. However, the Advanced Search Screen may also be used since both screens use a Node List component when working with the task sets. In the examples in this topic, the **Task List** will be used.

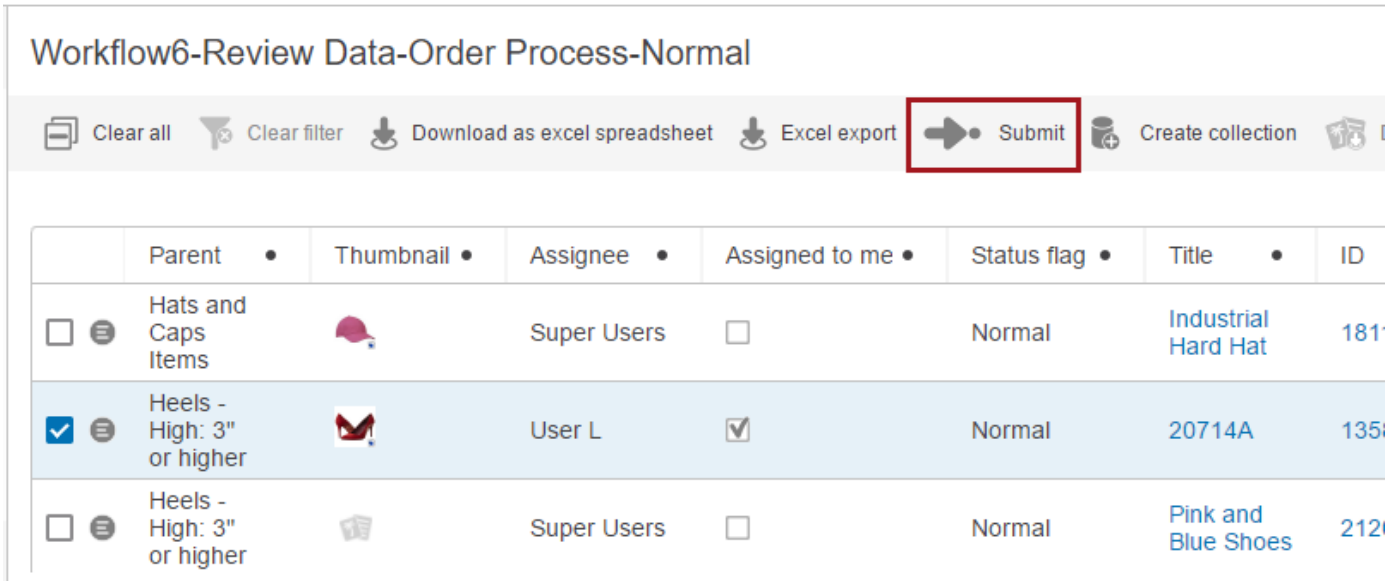


Gray cells are read-only, while white cells can be edited. Cells that have a column header with an asterisk after it (e.g., UPC*) are considered mandatory and should be populated prior to submission, though the system may

or may not prevent transition of the task if they are not populated (based on how the designer has configured the workflow).

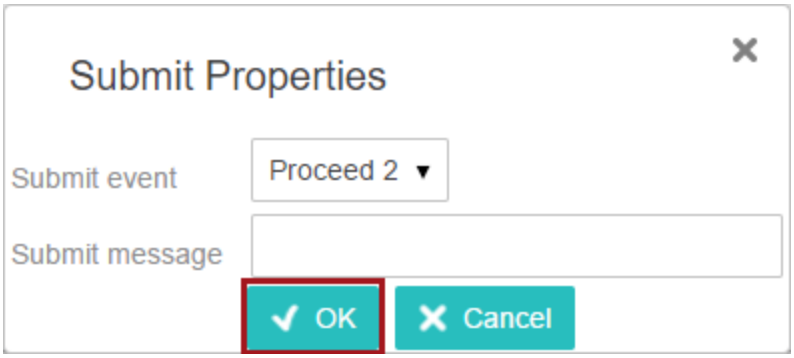
3. Submitting a task to a subsequent state indicates that work on the task is complete. Unless the user has access to a subsequent task for that object, it will no longer be accessible for them in the workflow. To submit a task, select the task (multi-select is enabled using Ctrl + click), choose the appropriate row or column (depending on the table orientation), and then click Submit. The available options for selection are configurable based on the design of the workflow. In some cases only a single selection will be present and therefore it is not required for the user to select a specific transition.

   If applicable, any business rules applied to the Submit action will run.

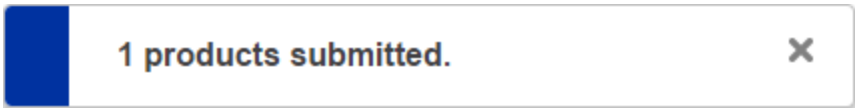


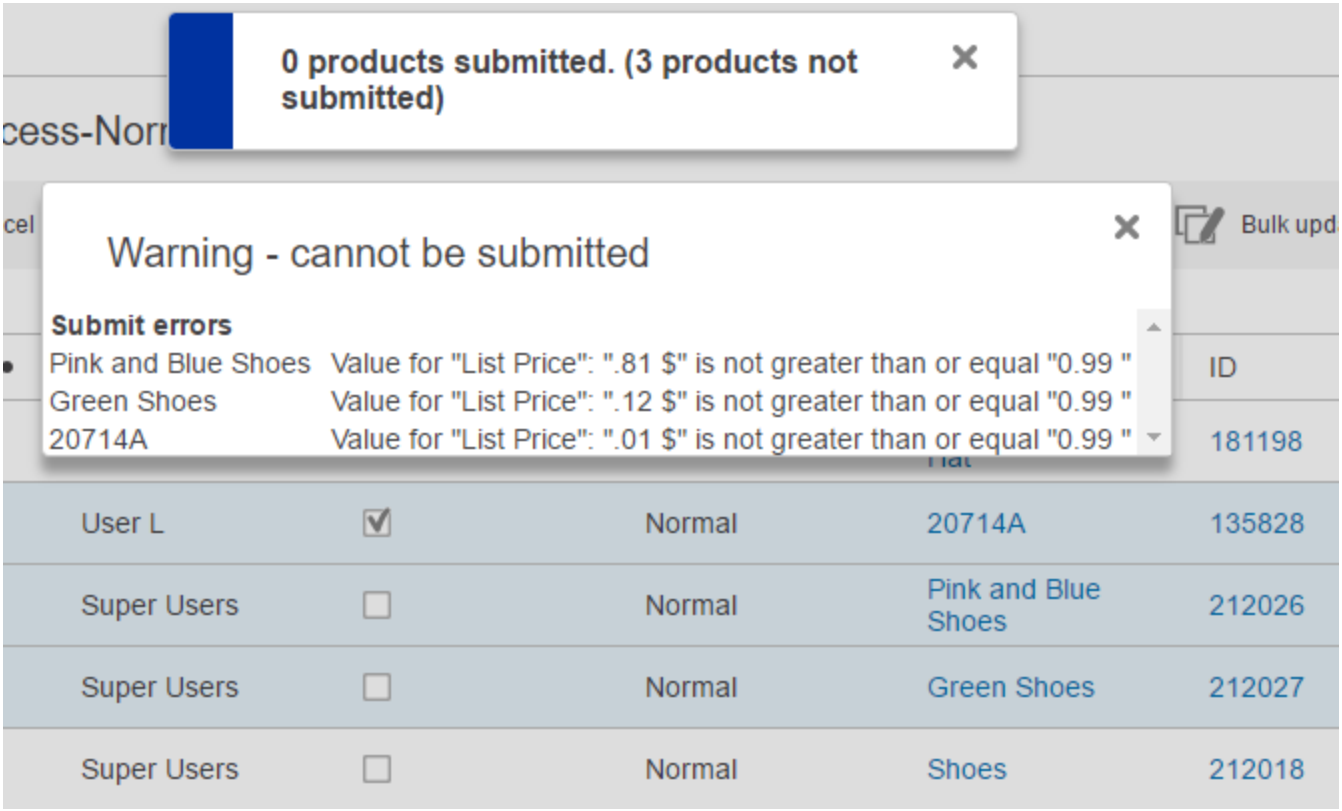
In the Task List, the Submit From Grid Action button can be added within the Child Component 'Actions' parameter. Then state transition ID events can be added.

4. A dialog will appear, allowing the user to input a comment, which will be recorded within the background processes details. Note that if multiple objects were selected, the same comment will be applied to all. From the dialog, click the **OK** button to complete the task, or click **Cancel** to return to the Task List.

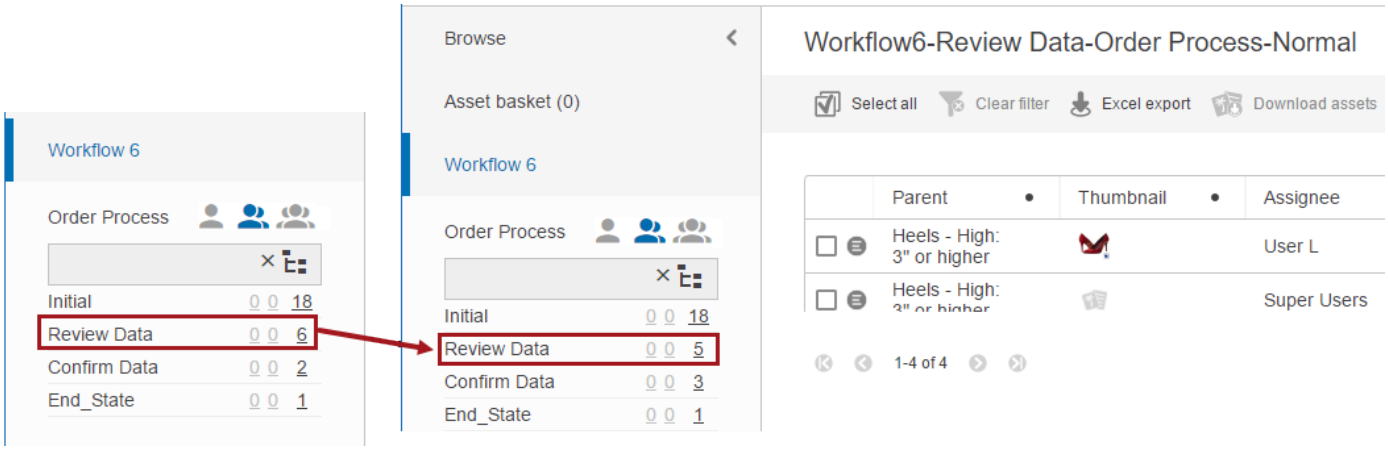


5. Review submission message at the top of the screen. This message will tell you if the workflow submission was successful or not. And, if not, additional details should be provided. Examples follow:

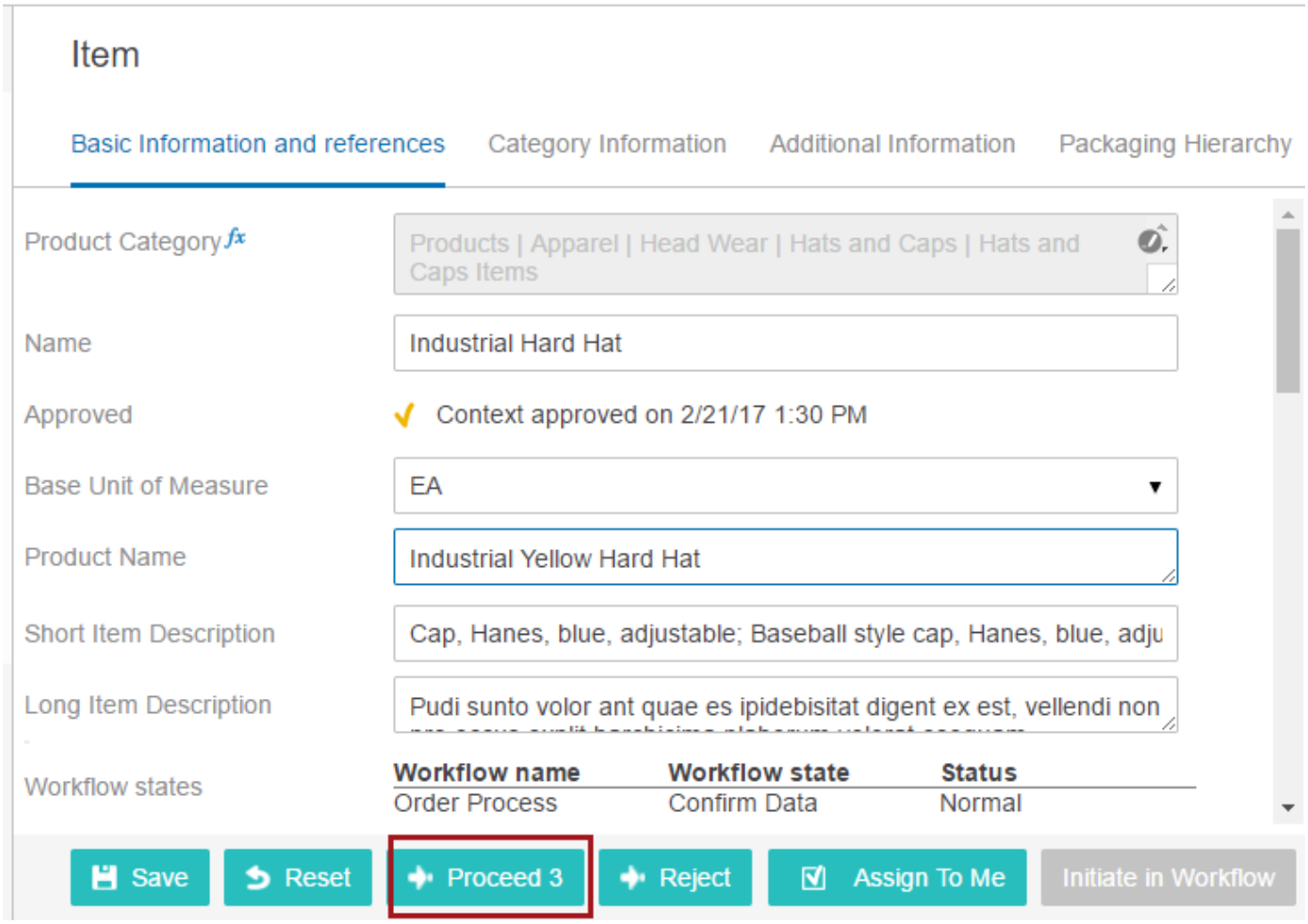




6. Refreshing your browser screen will update the Status Selector. However, if the admin configured the Auto Refresh Internal, the Status Selector will update automatically after a set number of seconds.



Note: An alternate way to submit tasks is by clicking on the object ID link (if enabled) within the task list. If an object details (Node Details) screen has been configured to display upon object selection and a Submit button has been configured to display within that screen, then the user can go directly to the object and submit it. The submit button is only active when coming directly from a Task List. It is important to note that this functionality is only available if the admin has allowed for this scenario.



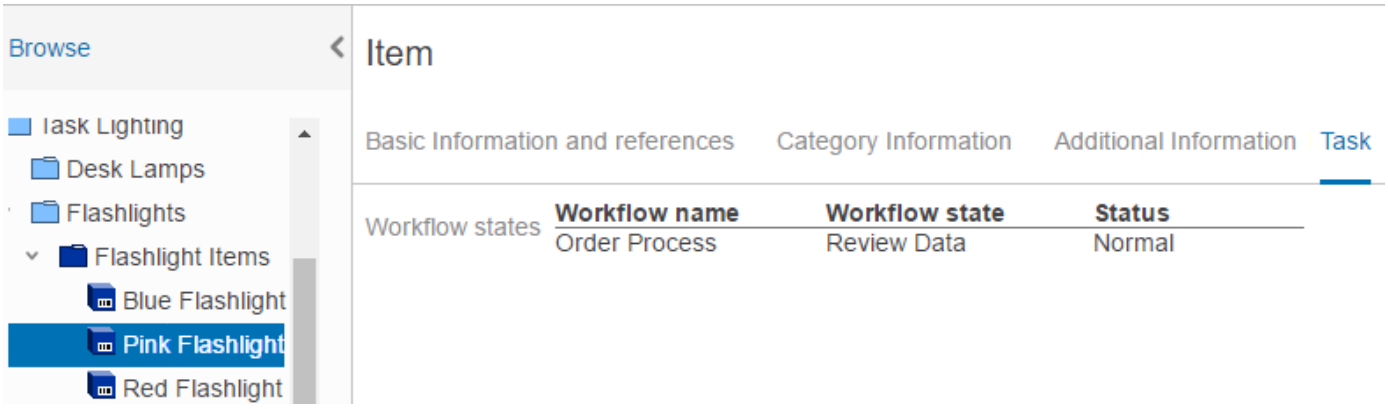
In the Node Details screen of the workflow, add the Submit Action button, including state transition ID events.

Tasks Tab on an Object

When viewing an object in Workbench via the Tree, a Tasks tab displays all tasks across all workflows for that object, subject to the user's privileges. Only tasks that the user has rights to address are visible.

There is not a pre-configured Tasks tab in Web UI; however, it is easy to set one up or add the task info to an existing screen / tab. Consult with your admin how best to do this.

An example / way to view the workflow states for an object is provided in the preceding screenshot. The information is configured to display within a Node Editor on a Node Details > Tab Page. Another example is provided below in the form of a Tasks tab dedicated to show workflow states.



Note that the tasks displaying in Web UI are active tasks. The Web UI does not display historic task information. You may access that information through the workbench. To configure the Task tab, add the Workflow State Component in Node Editor properties on a separate tab.

For more information on the Workflow State Component, see the **Screen Component Configuration and Mappings for Workflows** topic.

Assigning Workflow Tasks in Web UI

Workflow tasks viewed and actioned in the Web UI can be claimed, released, or assigned, depending on the privileges of the users involved.

The following is a list of methods that can be used to assign tasks, whether to one's self or to other users, in a workflow task list:

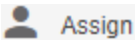
- the 'Assign Toolbar Action'
- the 'Assigned to Me' workflow component
- the 'Task Assignment Action' button

The 'Assign Toolbar Action' provides users with the most flexibility in that users may not only claim and release tasks, but also assign them to other users, whereas the other methods, the 'Assigned' to Me' workflow component and the 'Task Assignment Action' button, are limited to claiming and releasing tasks for the logged in user.

Assign Toolbar Action

To enable the 'Assign' toolbar action to a task list, users must add the 'Assign Toolbar Action' action to the Node List on a Task List.

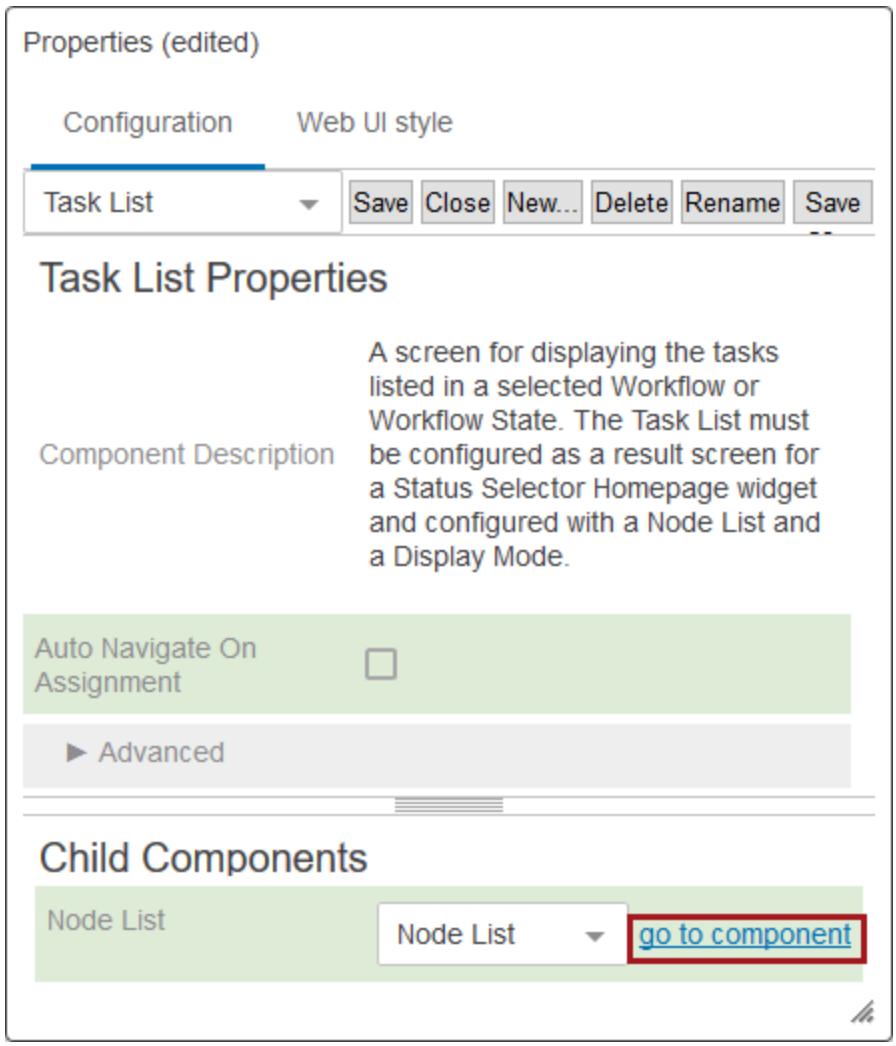
Below is how the 'Assign Toolbar Action' button will appear in the Web UI with the default icon and label:



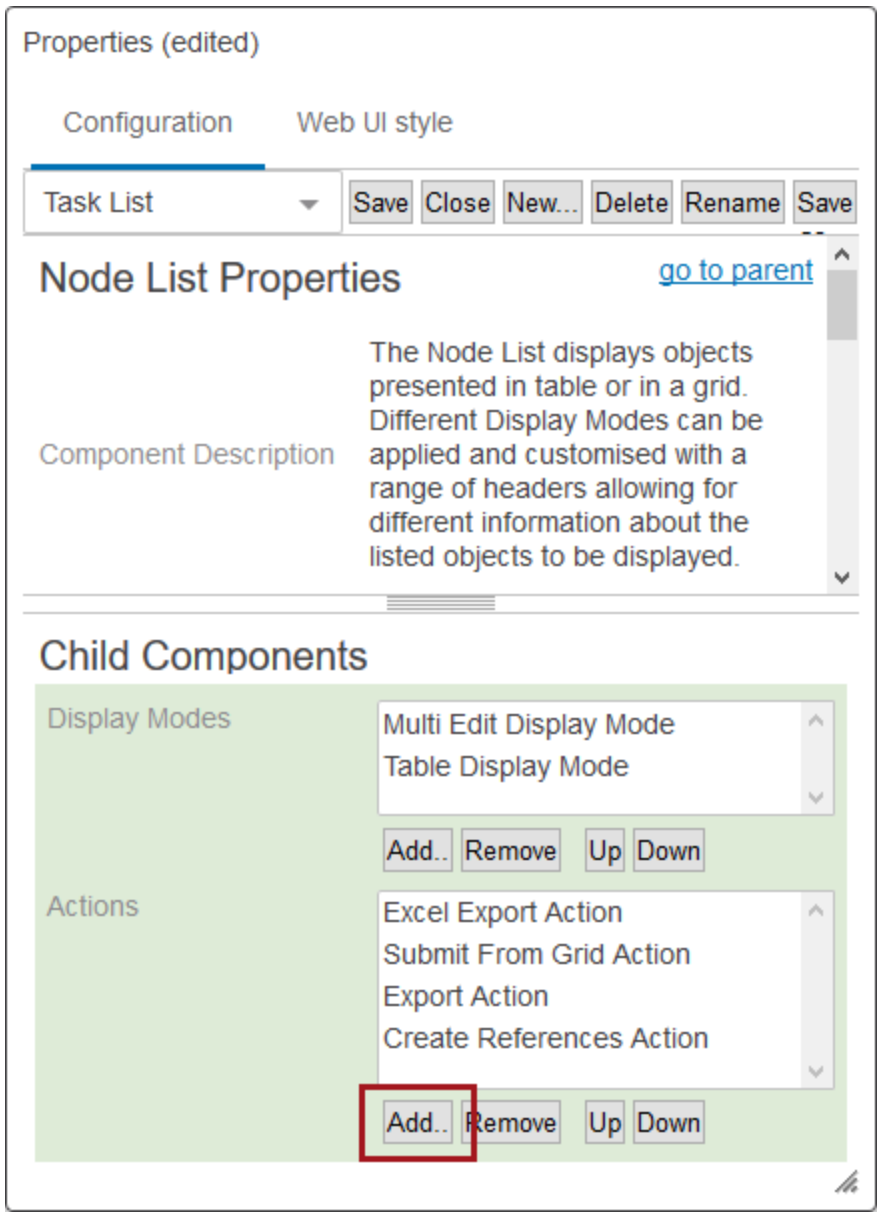
Adding the Assign Toolbar Action

To add the 'Assign Toolbar Action' to a Task List screen, follow these steps:

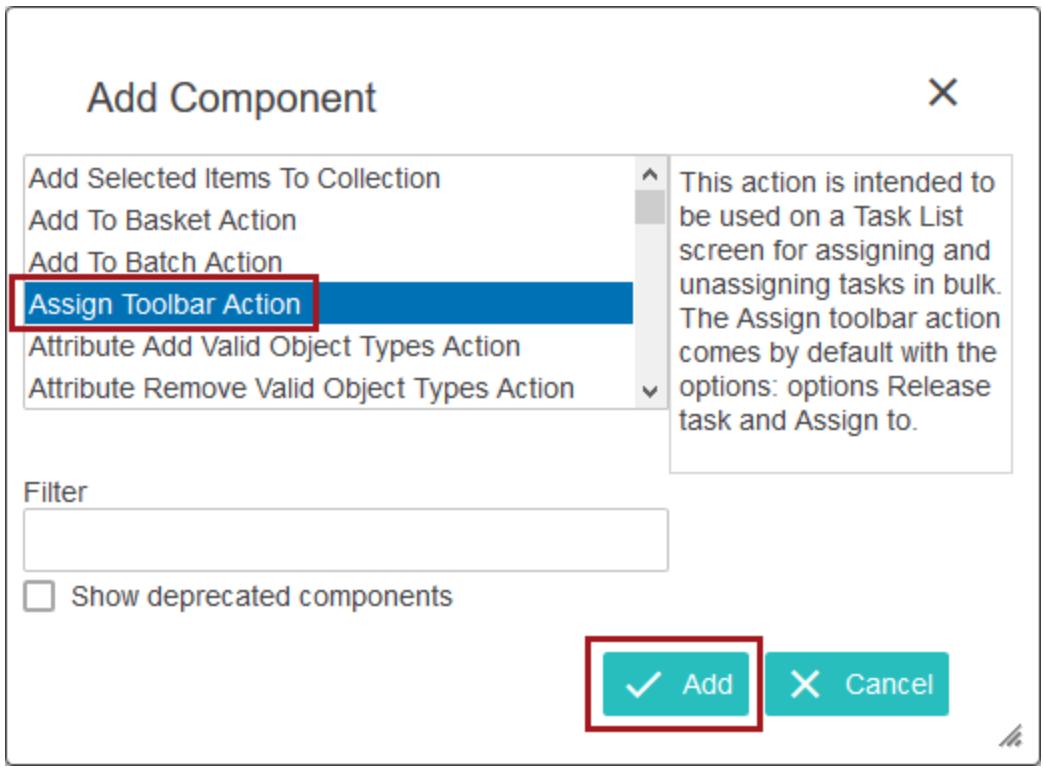
1. Under 'Child Components' on 'Task List Properties' in the designer, click **go to component** link on the 'Node List' component.



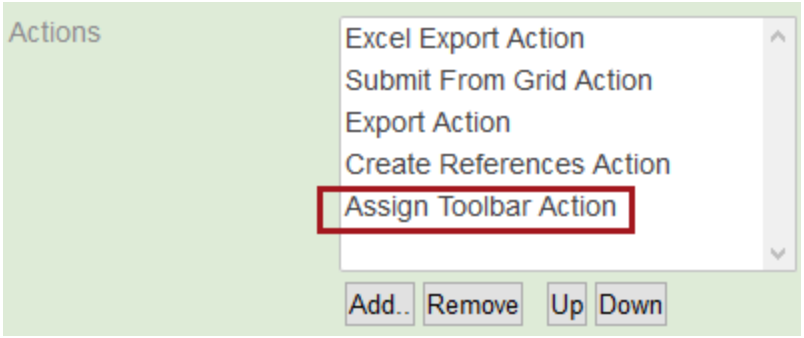
2. Under 'Child Components' on 'Node List Properties', click **Add..** under the 'Actions' field.



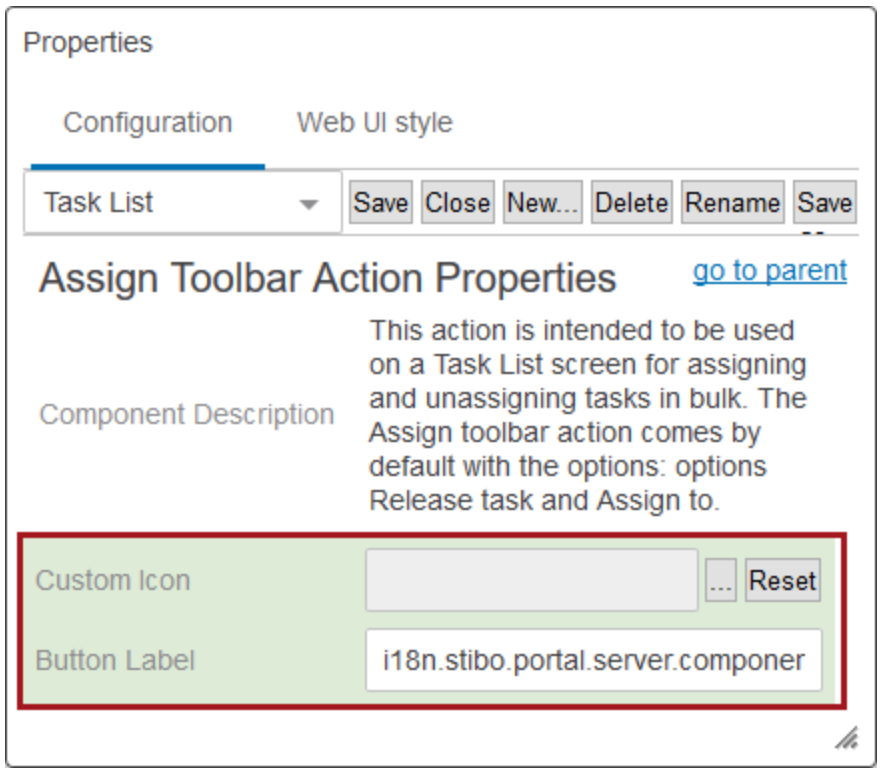
3. In the 'Add Component' dialog, select 'Assign Toolbar Action' and click the 'Add' button.



4. In the 'Actions' field, double click the newly added 'Assign Toolbar Action.'



5. In the 'Assign Toolbar Action Properties' window, users may upload a custom icon for the toolbar action, and also provide a custom label for the toolbar action button.

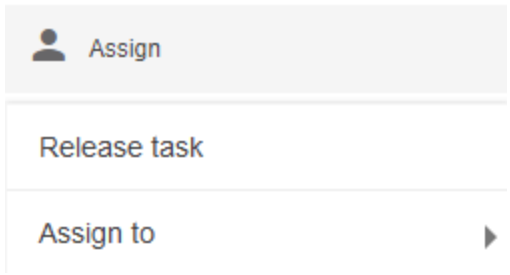


The default icon for the 'Assign Toolbar Action' is , and the default label is 'Assign.'

Using the Assign Toolbar Action

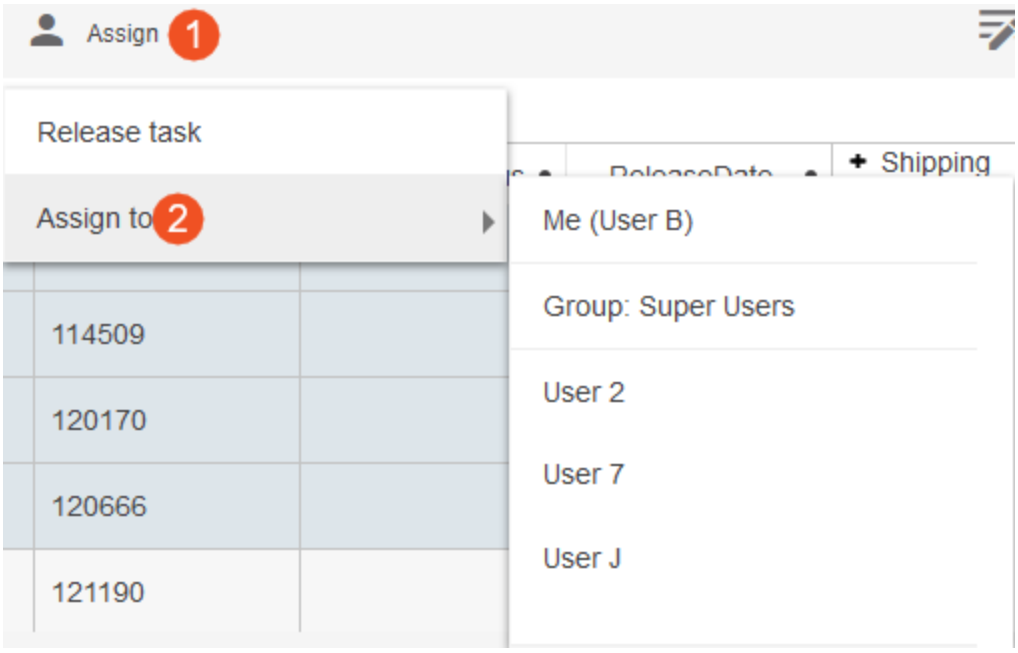
Properly privileged users will be able to view and access the 'Assign' toolbar action button on a Task List when one or more items in that Task List have been selected. If no list item is selected, the 'Assign' toolbar action button will not display.

When the 'Assign' toolbar action button is clicked, a dropdown displays that provides two options:



- **Release task:** Selecting this option will release the task to the user group to which the workflow is assigned. If, for instance, five list items are multi-selected and four of the five are already assigned to the default user group, only one list item will be assigned to the group; the other four will have no assignment action applied to them.
- **Assign to:** When clicked, this option results in a second dropdown that first lists the logged-in user and the default user group to which the workflow has been assigned first, followed by all users to which the task item

can be assigned. All potential assignees listed after the current user and default user group display in alphabetical order.



When the selecting user selects themselves (listed in the secondary dropdown as 'Me' followed by their Web UI username), the task list item's assignee switches to the selecting user.

When the selecting user selects the default user group, the task list item's assignee changes to the default group. This is the same result as when the user selects the 'Release task' option in the primary dropdown.

The other listed options under 'Assign to' are the other users that are privileged members of the user group to which the workflow is assigned.

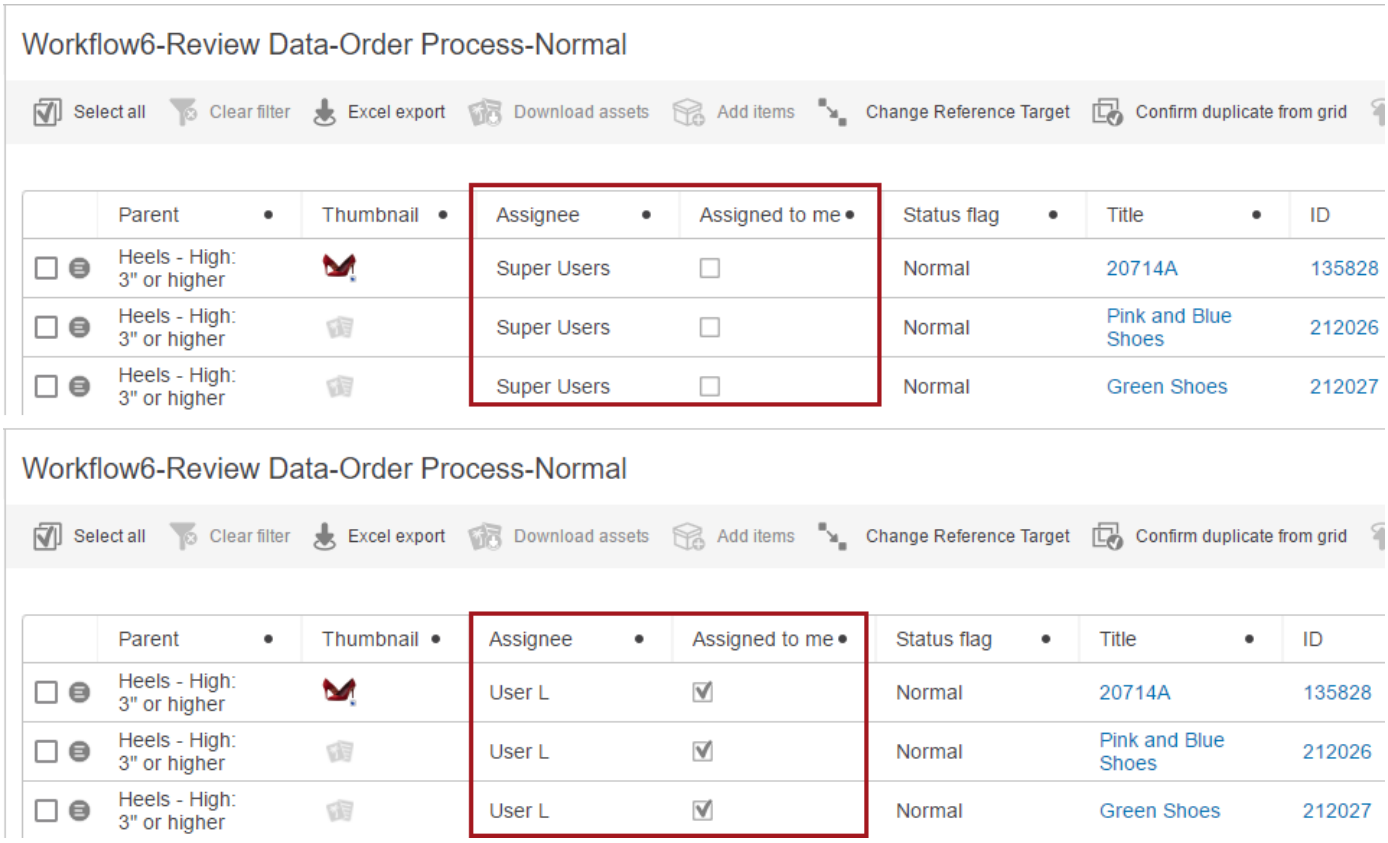
Users may multi-select task list items by selecting a single item and then holding down the SHIFT key while clicking on the final item in the desired list of selected items. It should be noted that, if the user clicks 'Select all' and the task list contains more than the maximum number of items defined in the Node List's 'Page Size' parameter in the designer (the default is 25), the 'Assign' toolbar action will be disabled and inactive. This restriction was put in place to reduce errors that stem from the potential visual discrepancy between the small number of tasks visible in the browser versus the potentially large number of tasks that might be present in the task list. On task lists in which the number of tasks are within the configured page maximum, the 'Select all' button can be clicked and the 'Assign' button will be active.

Important: To use the 'Assign Toolbar Action,' a user must be part of a setup group that has either the 'Re-Assign STEP Workflow Tasks' or the 'STEP Workflow Administrator' setup actions enabled. If the 'Re-Assign STEP Workflow Tasks' setup action is not present in the 'All Setup Actions', click 'Add Action' at the bottom of the list and then add the setup action.

Claiming and Releasing tasks using an Assign to Me Header

The Assigned to Me header can be added to a Node List on a Task List or an Advanced Search Screen. This header allows users to quickly assign task list items to themselves. By clicking the Assigned to Me checkbox, the user claims the task for (assigns the task to) the current user logged in to Web UI. Upon clicking the checkbox, depending on the settings that the admin has set, a user may be auto-navigated to an object details screen so that they can work with the object that they just claimed.

Below is an example of a Task List that originally displayed 'Super Users' as the Assignee for all five tasks. After clicking 'Assigned to Me' and reloading the Task List screen, the Assignee changed to User L. User L is the user currently logged in to the Web UI.



Similarly, to release a task, uncheck the 'Assigned to me' box and the Assignee column changes back to the user group the user is a part of, and another individual in the same user group can now see the task and claim it, if needed.

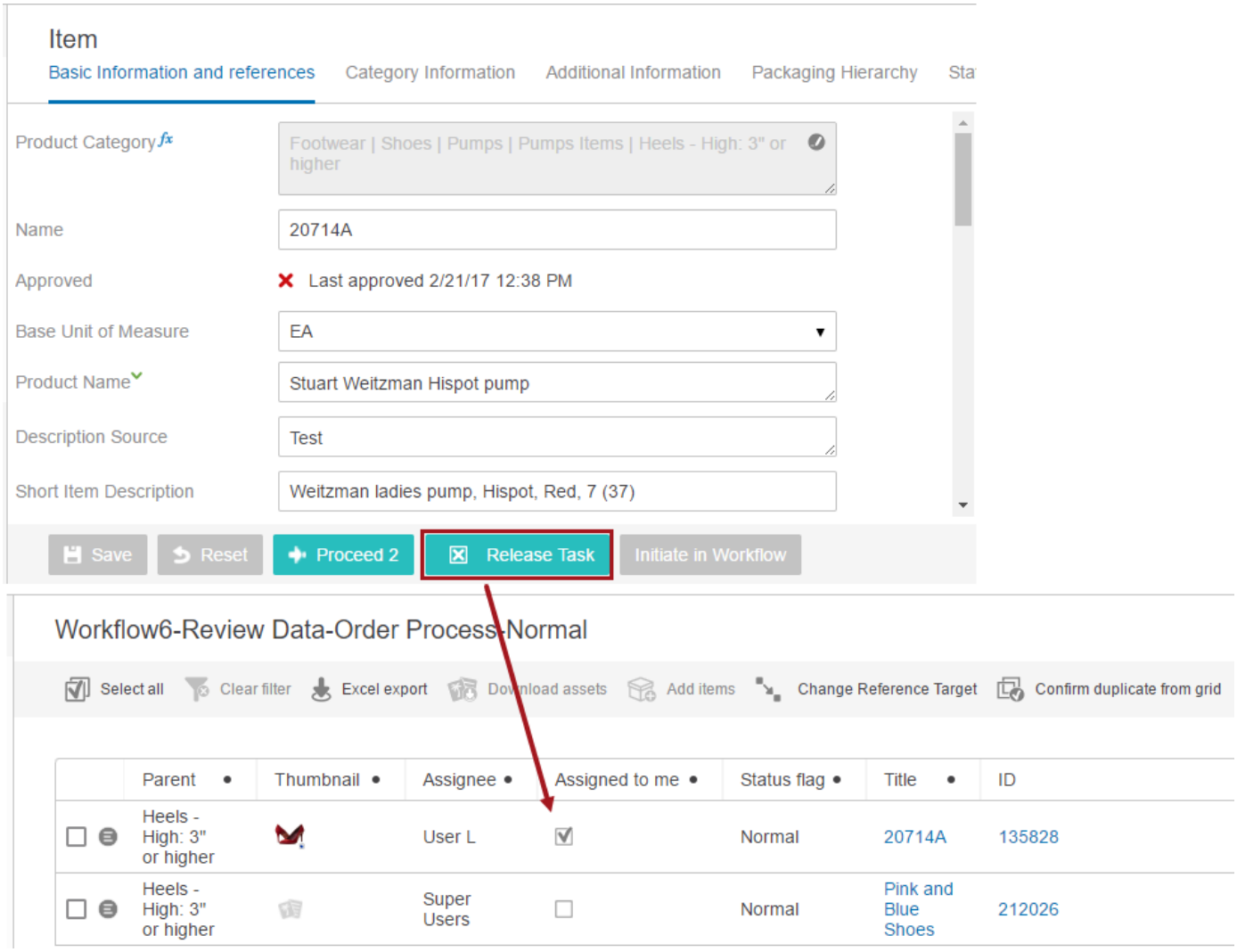
For full details regarding the benefits of claiming a task and information on how this works in workbench, see the **Claiming and Releasing Tasks in Workflows** section of the **Workflows** documentation.

Claiming and Releasing Workflow Tasks in Node Details

While it is very convenient to have the Assign To Me header on Task Lists and Advance Search screens, sometimes it is necessary for a user to click on a task in a Task List to see if it is something they should claim. If the user decides it is something they should claim, instead of going back out to the Task List or Advance Search

screen, finding the task again, and claiming it, they may claim it directly from the Node Details screen using the 'Task Assignment Action' button. This option will only appear if the Node Details was accessed through a Task List.

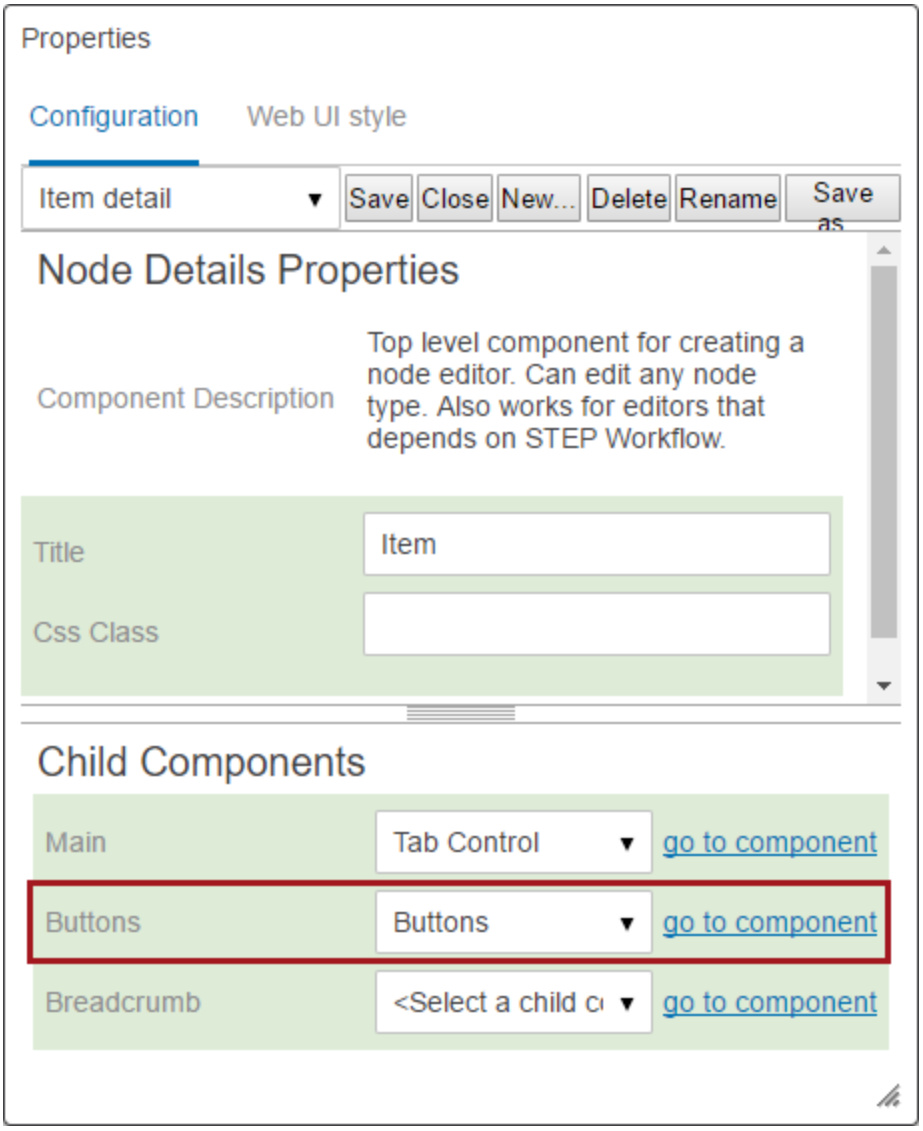
Similar to the Assign To Me header component, when a user selects the 'Task Assignment Action' button on the Node Details screen, the task will be assigned to the current user who is signed into the system. When the button is clicked, it not only reflects on that view of Node Details, but it also reflects on the Task List under the 'Assign To Me Header' component, if configured.



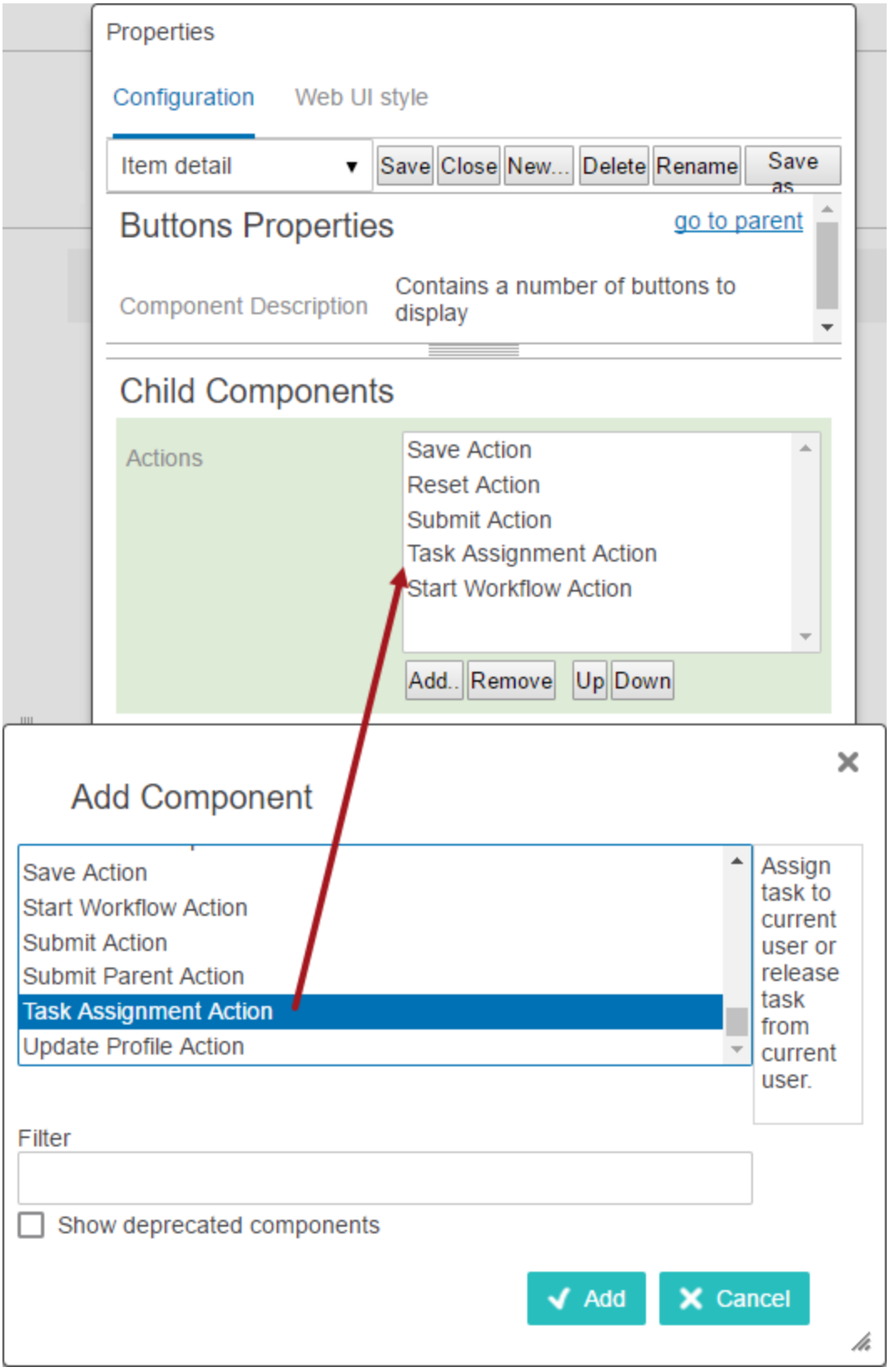
The 'Task Assignment Action' button is customizable with two labels, one for claiming the task and the other for releasing the task. A user can also choose to show just the button, just the icon, or the button and the icon.

Configuring the 'Task Assignment Action' Button

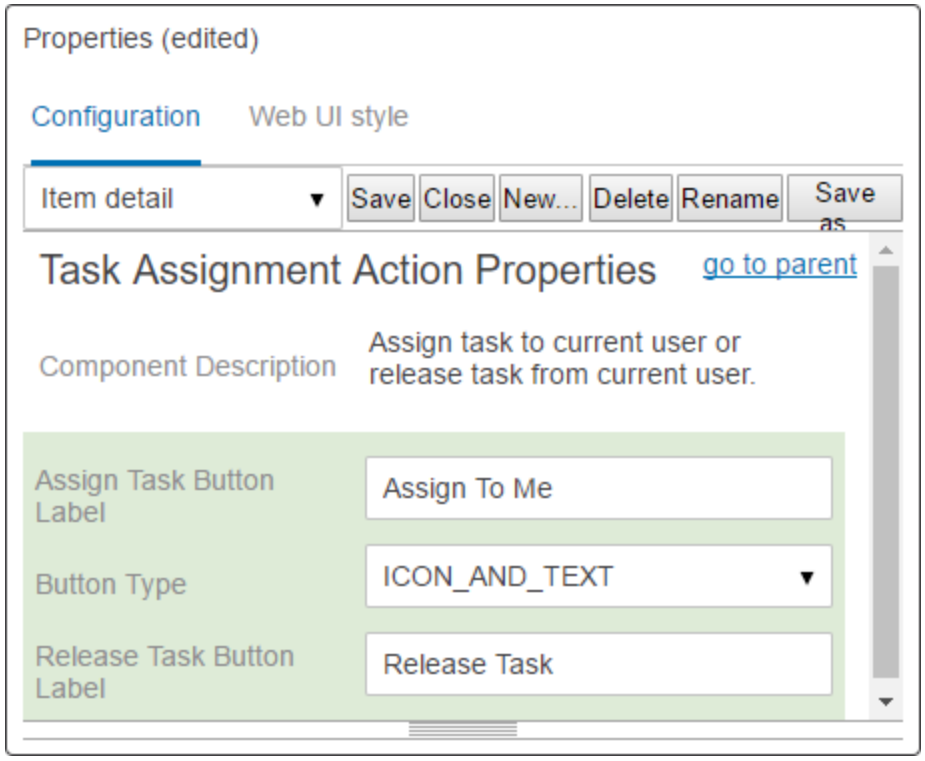
1. Navigate to a Node Details. Once on the Node Details, navigate to Child Components > Buttons field > select 'Button' from dropdown > click **'go to component'**.



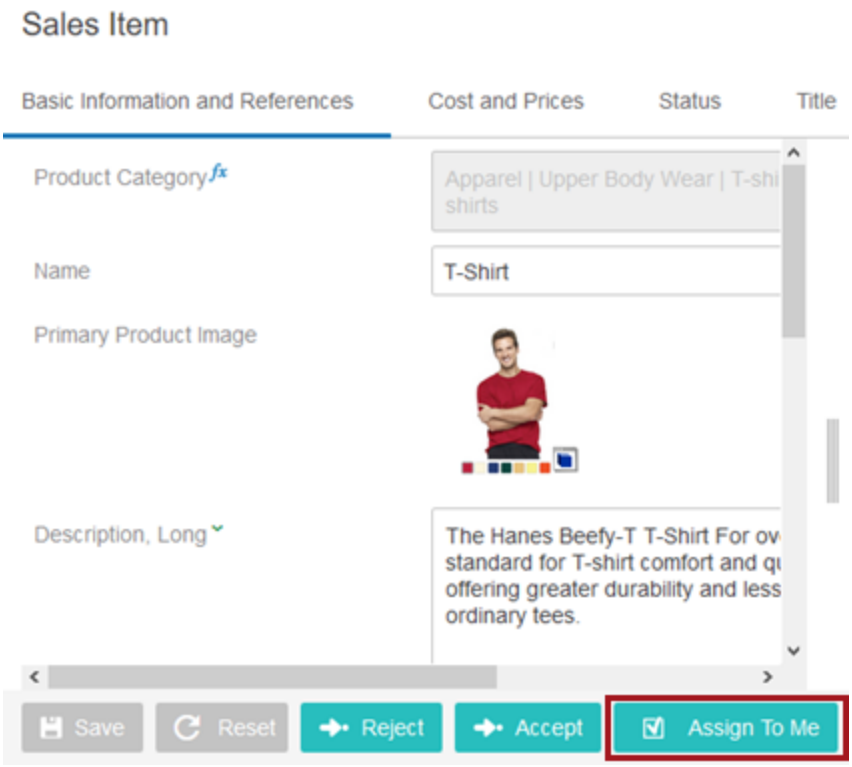
2. On Button Components under Child Components, add the 'Task Assignment Action' button.


Properties
Configuration
Web UI style
Item detail
Save
Close
New...
Delete
Rename
Save as
Buttons Properties
go to parent
Component Description
Contains a number of buttons to display
Child Components
Actions
Save Action
Reset Action
Submit Action
Task Assignment Action
Start Workflow Action
Add..
Remove
Up
Down
Add Component
Save Action
Start Workflow Action
Submit Action
Submit Parent Action
Task Assignment Action
Update Profile Action
Assign task to current user or release task from current user.
Filter
Show deprecated components
Add
Cancel

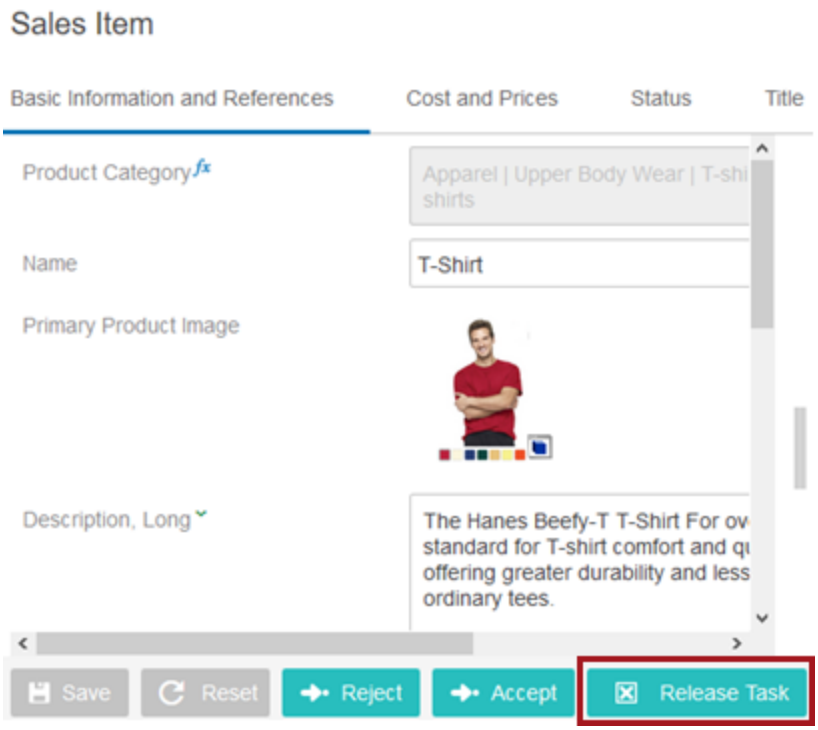
3. Double click on the Task Assignment Action button and configure the Assign Task Button Label and the Release Task Button Label as desired, or leave the default labels. In the Button Type dropdown field, select to show the icon, text, or icon and text. Once all fields are configured as desired, save and close the designer.



The 'Task Assignment Action' button now appears on Node Details when accessed through a Task List.



When the task is claimed, the button label changes to 'Release Task'.



Dun & Bradstreet Integration in Web UI

Dun & Bradstreet (D&B) integration allows customers to use the Web UI for matching and detailed company profile enrichment once all setup is complete.

- For matching, the Web UI must be configured with a Status Selector (Homepage / Sidebar) Widget for the D&B Match Candidate workflow. Also, a D&B Candidate Matching screen must be created, configured, and made accessible. This setup / process is used when an organization entity (customer record) has multiple D&B organization entity (D&B record) match candidates.
- For detailed company profiling, it is not necessary to create a Status Selector. Recommended practice is to initiate objects into the D&B Detailed Company Profile workflow using a bulk update, an automated business action rule, or by placing an action button on a node editor screen.

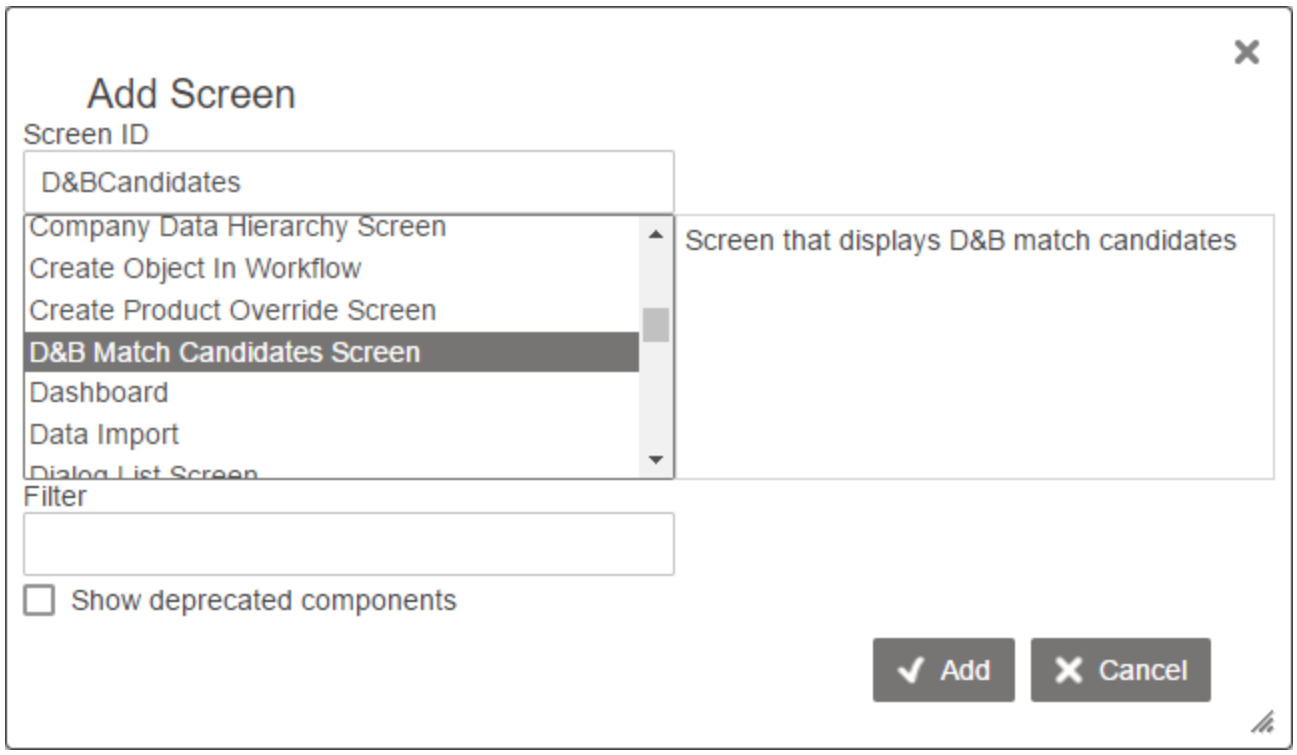
Prerequisites

This section of the D&B integration requires an understanding of the Web UI, how to create screens and widgets, and the necessary user permissions to do so. See the **Web User Interfaces** documentation for more information on these topics.

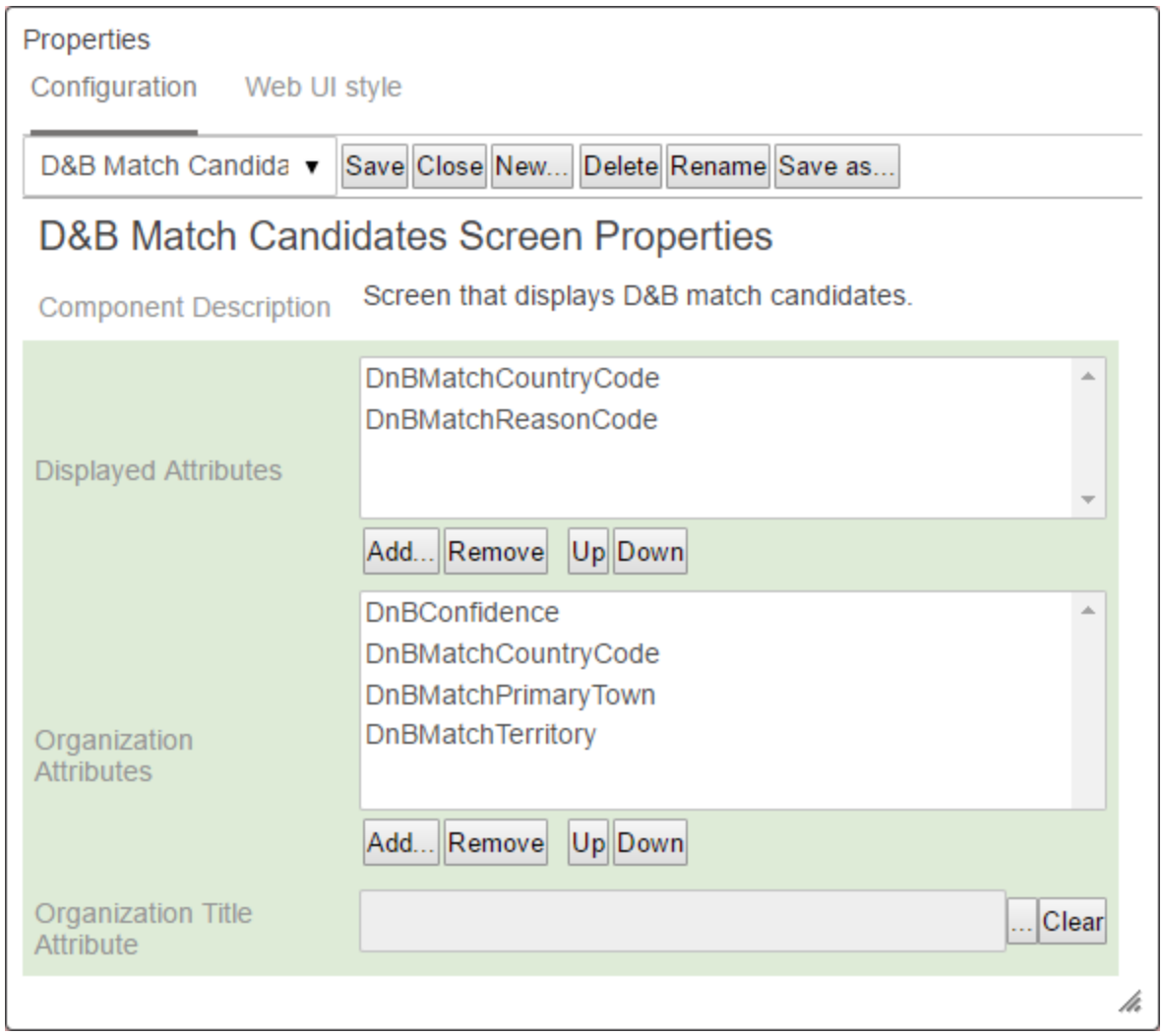
Additionally, users should be familiar with the D&B integration setup and processes. For more information, see the **Dun & Bradstreet Integration** section.

Creating a New D&B Match Candidates Screen

1. From the Web UI designer, select **New**.
2. From the Add Screen prompt, select the **D&B Match Candidates Screen** option from the list then select **Add**.



3. On the **D&B Match Candidates Screen Properties** configuration, select the desired attributes for both the Displayed Attributes and Organization Attributes parameters by choosing **Add**.
    - The Displayed Attributes are the titles of the attribute columns that will be included with the Confidence score, DUNS number, and Name of the D&B record within the task list on the screen.
    - The Organization Attributes are for the current organization entity and appear above the task list.
4. Click the ellipsis button (...) to make an **Organization Title Attribute** selection.
5. When configured as desired select **Save** then **Close** to exit design mode.



If configured correctly, the attributes selected in step 3 will appear on the screen as shown in the next image.

Before you can use the D&B Match Candidates Screen, you need to configure how a user will access the screen. This is done by mapping a Workflow Condition within the mapping field in Main Properties. Details on how to do this can be found in the **Mapping Workflow States in Web UI** topic of the **Workflows in Web UI** documentation.

Each state of the D&B workflow will have a Workflow Condition, and the screen that you are selecting within the Screen Mapping Properties is the screen you just created.

Adding and Configuring a D&B Workflow Status Selector Widget

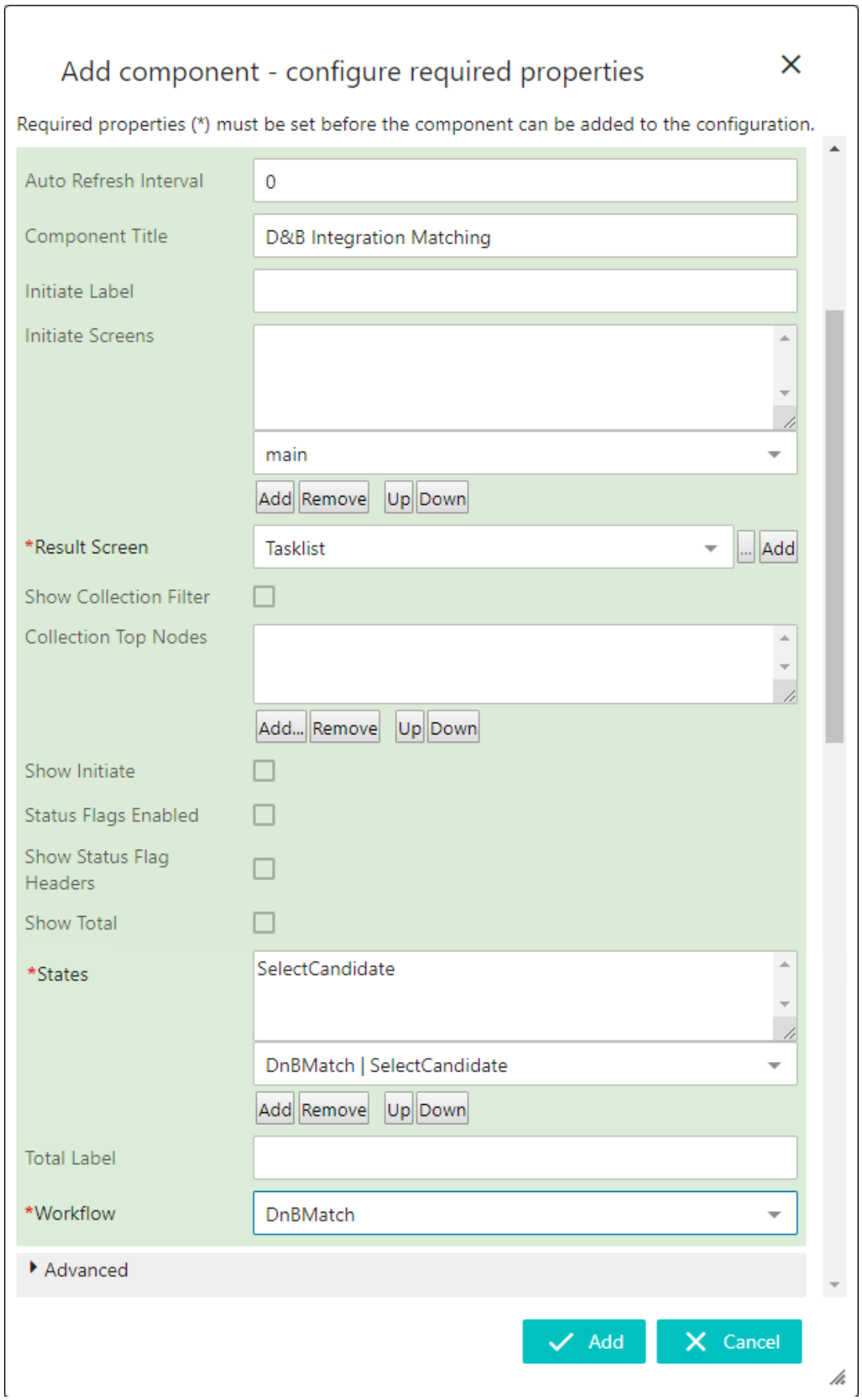
To process a customer record for matching to D&B data, the record must go through the D&B Integration Matching workflow. To access tasks for this workflow, a Status Selector Homepage /Sidebar widget is needed.

The directions for setting up a Status Selector widget are outlined in **Getting Started with Workflows in Web UI** > **Screen / Component Configuration and Mappings for Workflows** documentation.

For this example, we are adding the D&B Integration Matching workflow to the Web UI Homepage via a Status Selector Homepage widget. Configure the widget as desired. The next screenshot is an example of how this implementation may look. Select add when the widget is configured as desired.

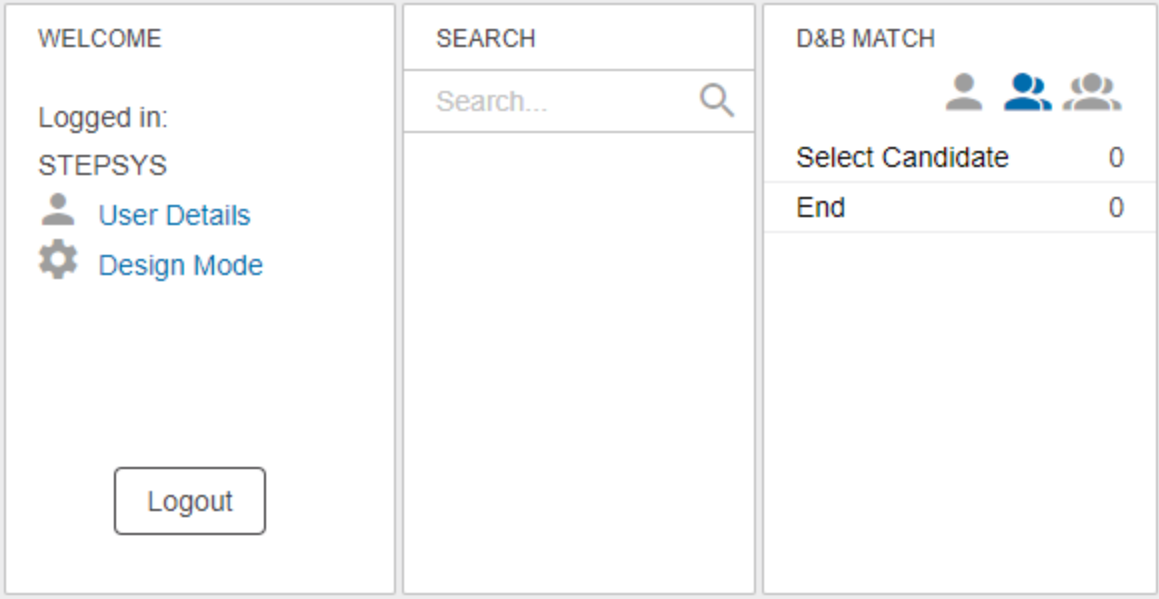
Required parameters that must be selected to save the Widget Properties and use the functionality:

- **Results Screen**: select the screen ID for the Task List screen to be used.
- **States**: add the states for the applicable workflow.
- **Workflow**: select the ID of the applicable workflow. For D&B integration, select DnBIntegrationMatch Candidate.


Add component - configure required properties
Required properties (*) must be set before the component can be added to the configuration.
Auto Refresh Interval
0
Component Title
D&B Integration Matching
Initiate Label
Initiate Screens
main
Add
Remove
Up
Down
*Result Screen
Tasklist
...
Add
Show Collection Filter
Collection Top Nodes
Add...
Remove
Up
Down
Show Initiate
Status Flags Enabled
Show Status Flag Headers
Show Total
*States
SelectCandidate
DnBMatch | SelectCandidate
Add
Remove
Up
Down
Total Label
*Workflow
DnBMatch
Advanced
Add
Cancel

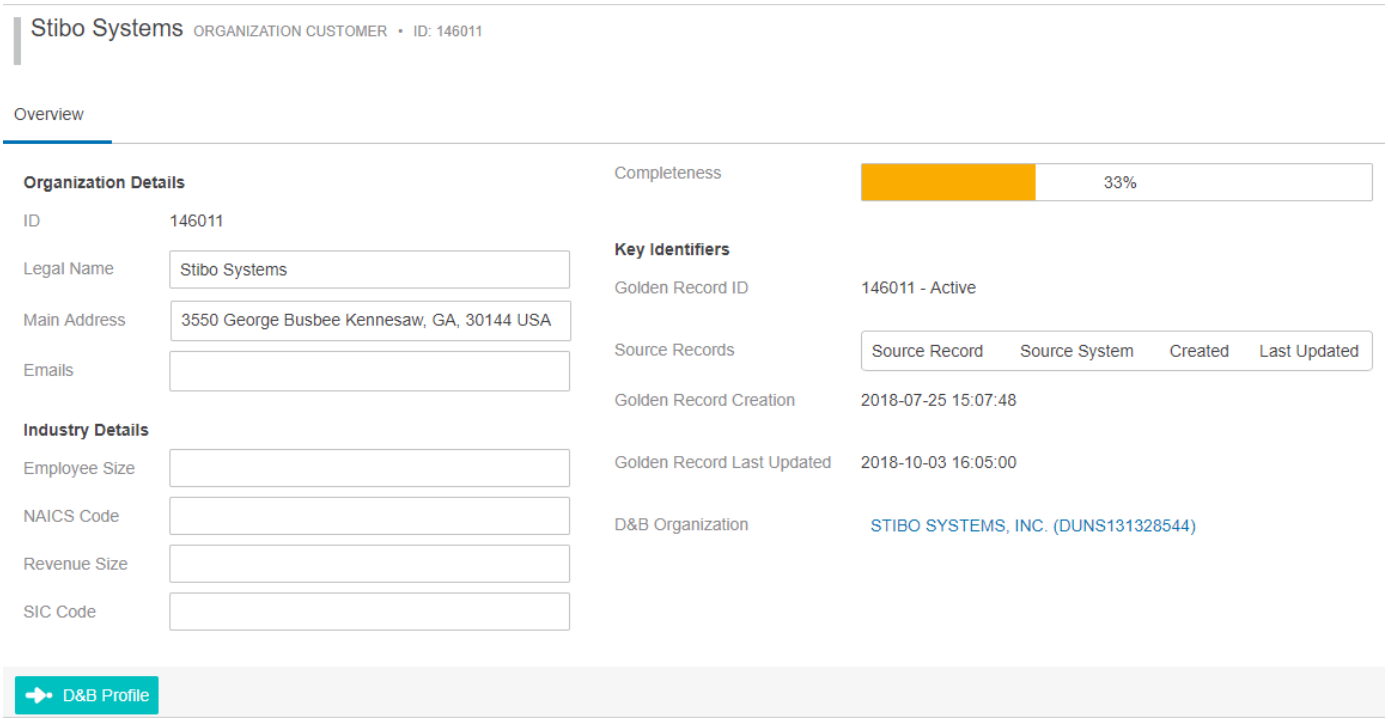
Select **Save** and then **Close** to exit the Web UI designer.

After the Web UI refreshes, the widget will now appear on the home screen of the Web UI.



Using Web UI for Dun & Bradstreet Integration Matching

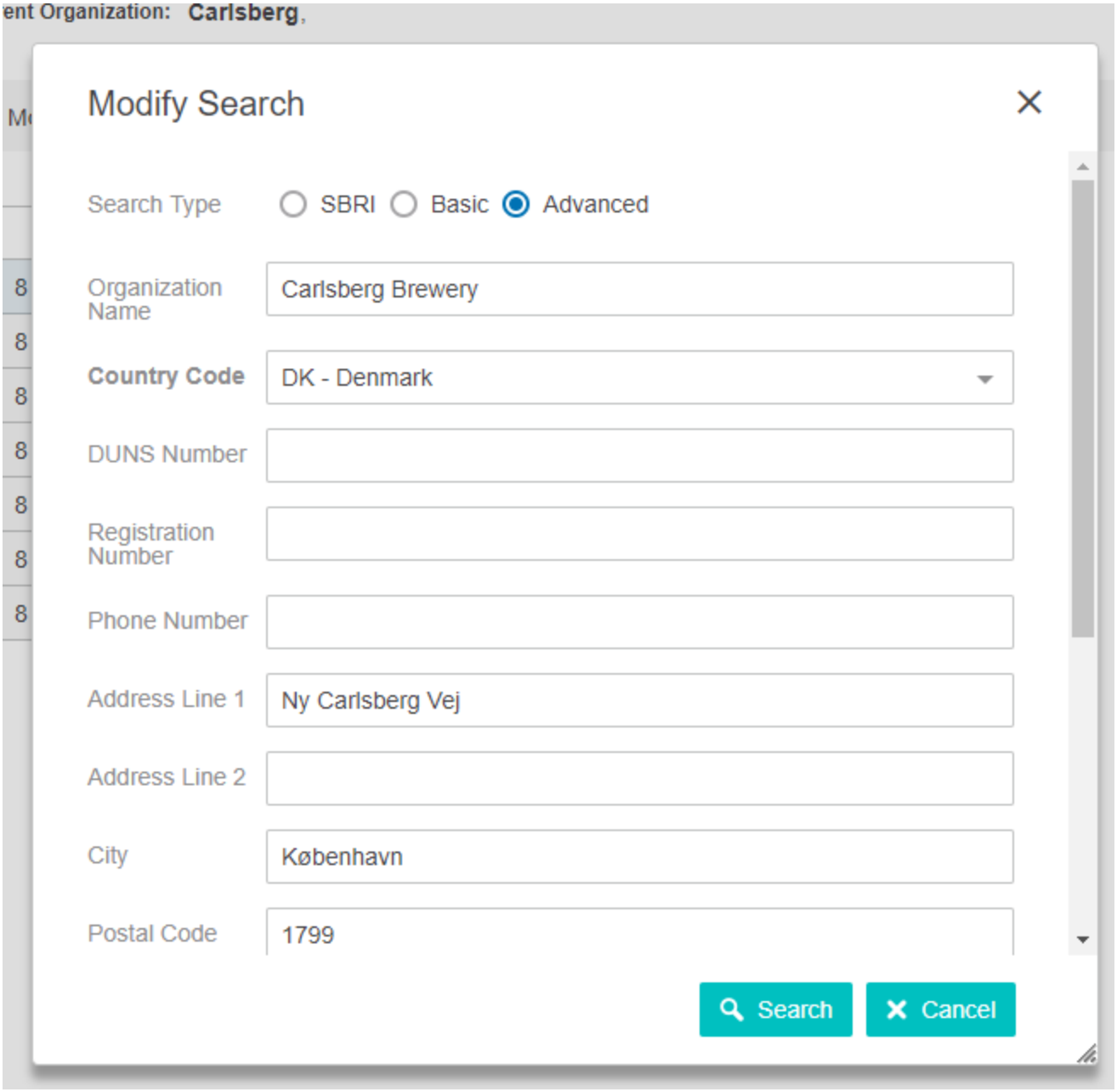
Customer records enter the D&B Match Candidate workflow via standard methods. An individual customer objects can be initiated in bulk or individually via Web UI or Workbench. You may want to add a business action button on a Node Details screen to initiate objects when looking at the details of the customer record. Initiating records is not covered in this topic but is a necessary step before you are able to work with tasks in the workflow.



This is a basic example of how a STEP user would use the D&B Integration Matching functionality. True functionality depends on the customer setup.

Perform Match

1. A user clicks the Select Candidate state within the D&B Match Candidate status selector.
2. Upon arriving at the Task List, the user selects a customer by clicking on the ID or Title link within a row.
3. A search is performed. The results list shown, determined by a D&B algorithm used to match the D&B records to the customer. If no candidates are found, a message will display, and users can click the 'Modify search' icon on the screen to edit the search.

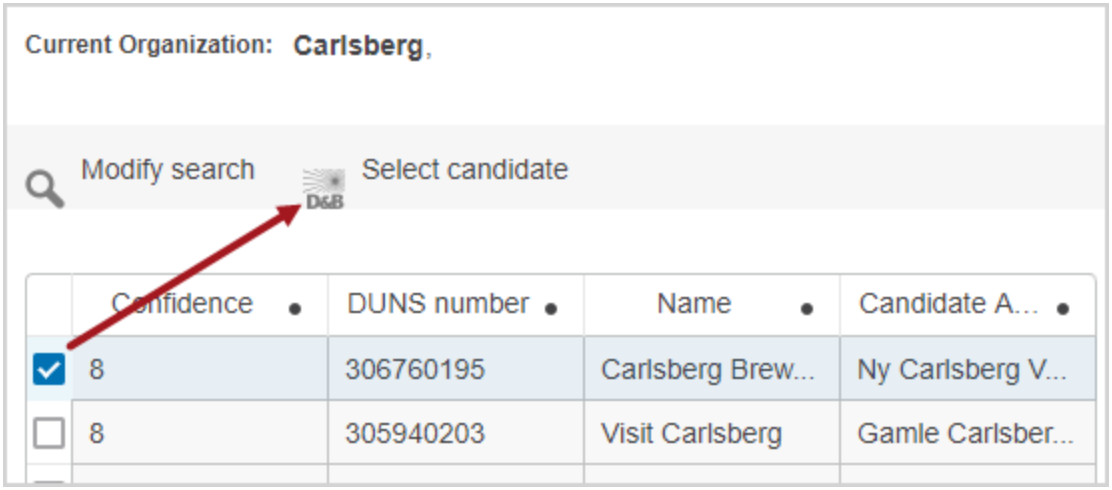


Select Candidate

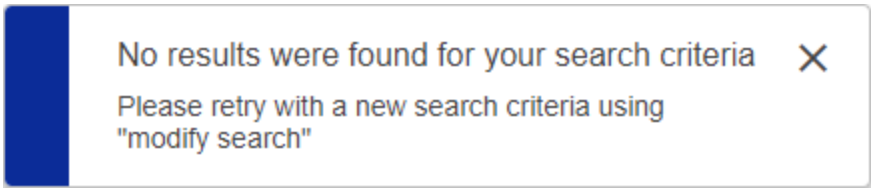
1. A user clicks the Select Candidate state within the D&B March Candidate status selector. If doing a search above, the Select Candidate button should be available without switching screens.
2. Upon arriving at the Task List, the user selects a customer by clicking on the ID or Title link within a row.
3. The D&B Match Candidates screen is displayed, and the user can compare customer record information with the D&B records list shown.
    - The customer record information will display above the results list. The information displayed is determined by the Displayed Attributes selected on the D&B Match Candidates Screen Properties.

- The D&B records are shown in a table with the Confidence, ID, and Name columns displayed by default. Any other columns are determined by the attributes designated within the Organization Attributes field of the D&B Match Candidate Screen Properties.

4. A candidate selection is made by clicking the checkbox at the beginning of the D&B record row, and then, clicking the 'Select candidate' button above the table. Only one candidate can be selected.



5. Users will see a message on the screen confirming a candidate selection:

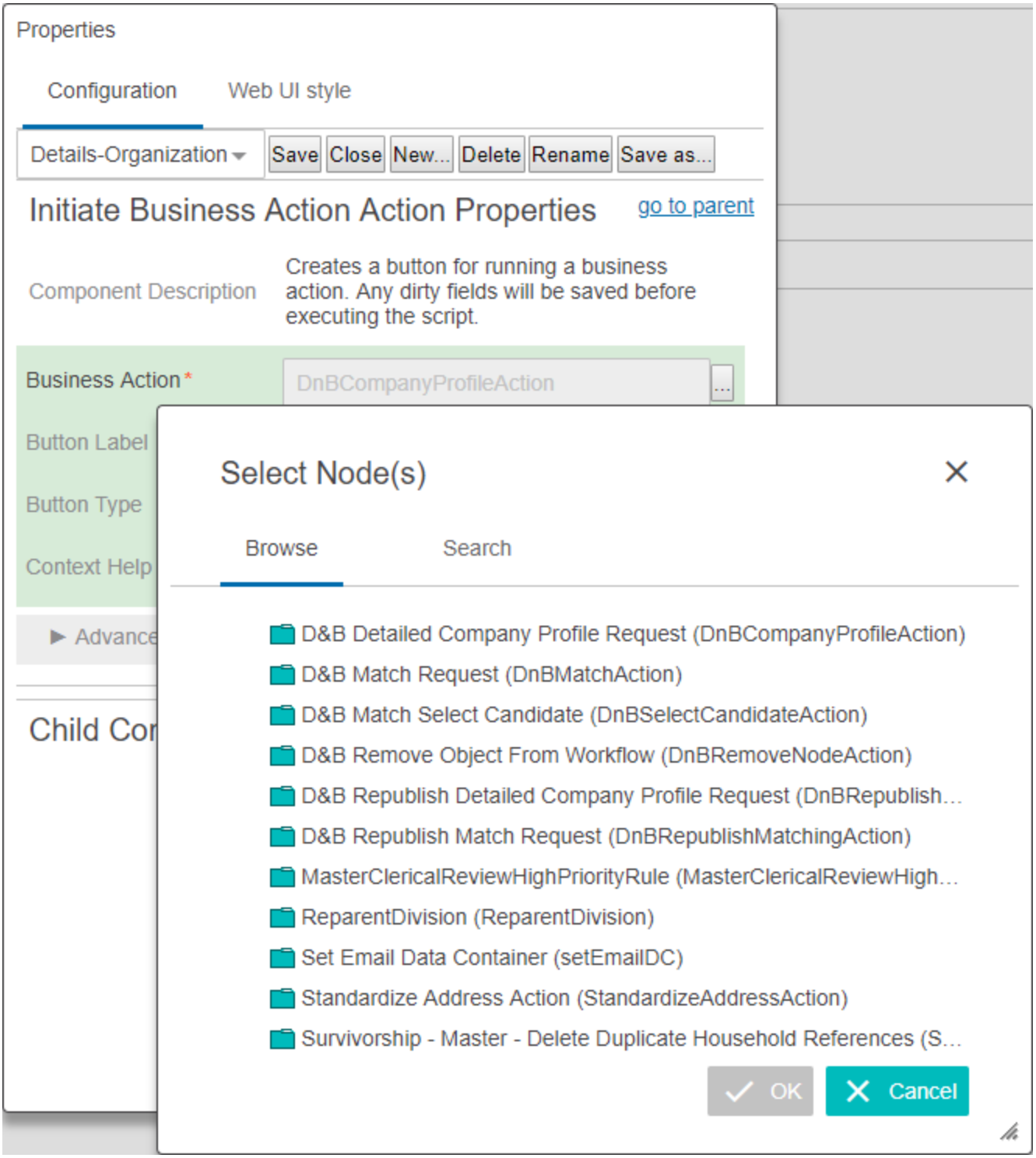


Note: It is important to note that if any matching errors occur during the process, a user must handle those tasks, accessible via the 'Matching error' state.

Using Web UI for Dun & Bradstreet Detailed Company Profile

Once a customer entity is linked to a D&B record, detailed company profiling can take place if you have the API license key and password from Stibo Systems and have input it in the easy setup wizard in the workbench.

If you are doing detailed company profiling via the Web UI, you can add a button to a Node Details screen that runs the D&B Detailed Company Profile Request business action. This allows users to click a button to start the profiling process.



Alternatively, you can push the task through the workflow with the submit action within a Task List.

For more details about workflows, see the entire suite of topics in the **Workflows in Web UI** documentation. You will find information about widget setup, moving tasks through workflows, and initiating objects in a workflow.

Advanced Web UI Workflow Configurations

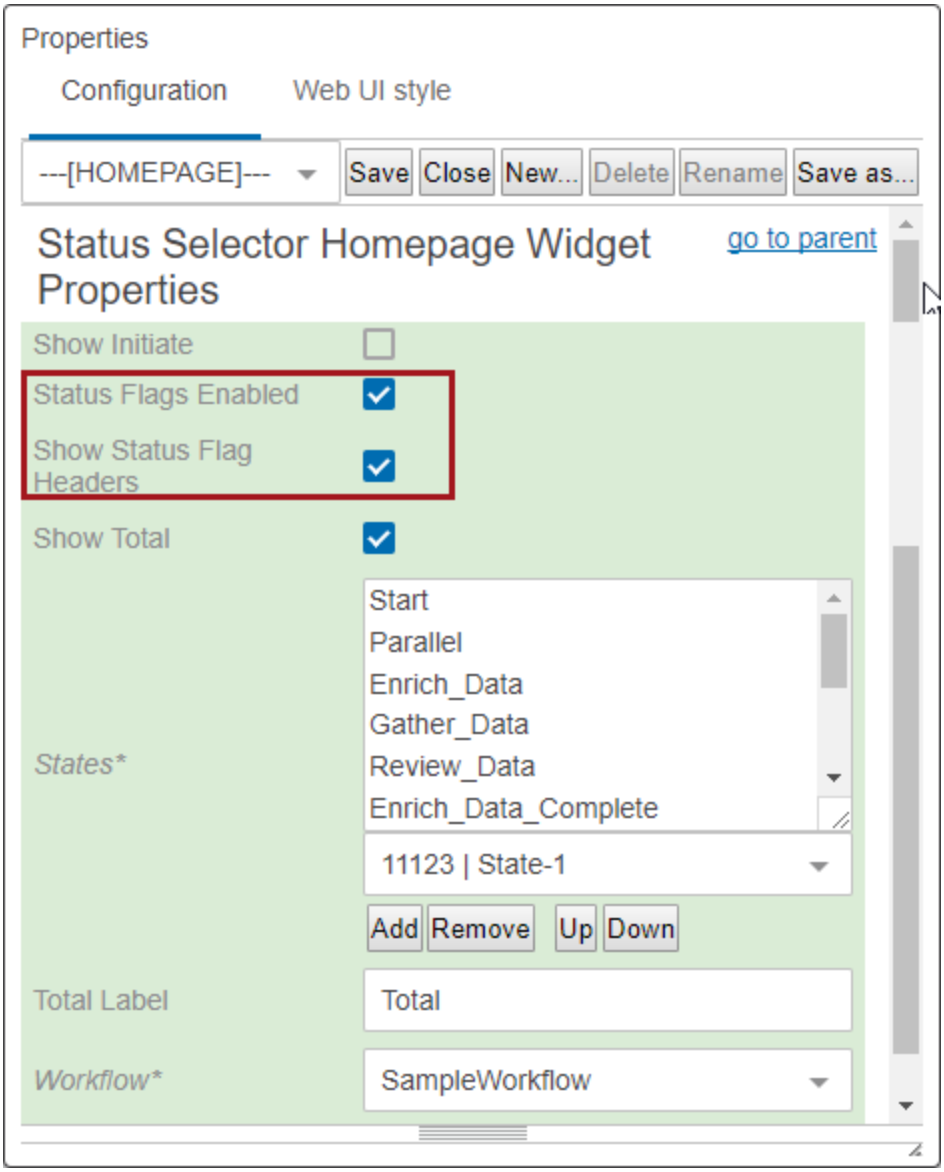
This portion of the material covers more advanced workflow configurations, going beyond the basic setups described in the introductory material. Users should be familiar with all material in the **Getting Started with Workflows in Web UI** documentation before attempting to configure and/or utilize more advanced workflow functionality.

Most real-world workflows will utilize the functions described in the advanced topics, but none are required in any particular workflow. The topics generally do not build on one another and completing one configuration typically does not require knowledge of any other, outside of the basic workflow setup and how Web UI screens and components work together. In other words, the advanced workflow documentation is function and topic based, meaning that each topic describes a particular function a user may wish to carry out or a particular topic a user may wish to read about. Therefore, there is no suggested reading order and users should approach the material in the order that seems most relevant for their workflow.

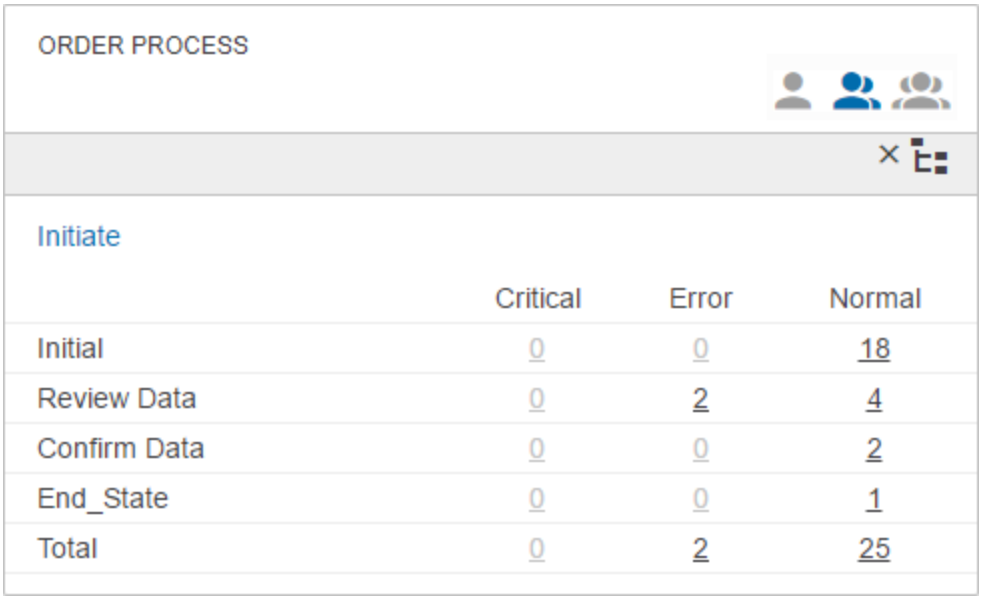
Status Flags in Web UI

When working with workflows in Web UI, it is important to be able to view status flags should there be any. By configuring the **Status Selector Homepage Widget** and/or the **Status Selector Sidebar Widget**, users can see the task count for selected states in workflows, as well as any status flags defined in the workflow.

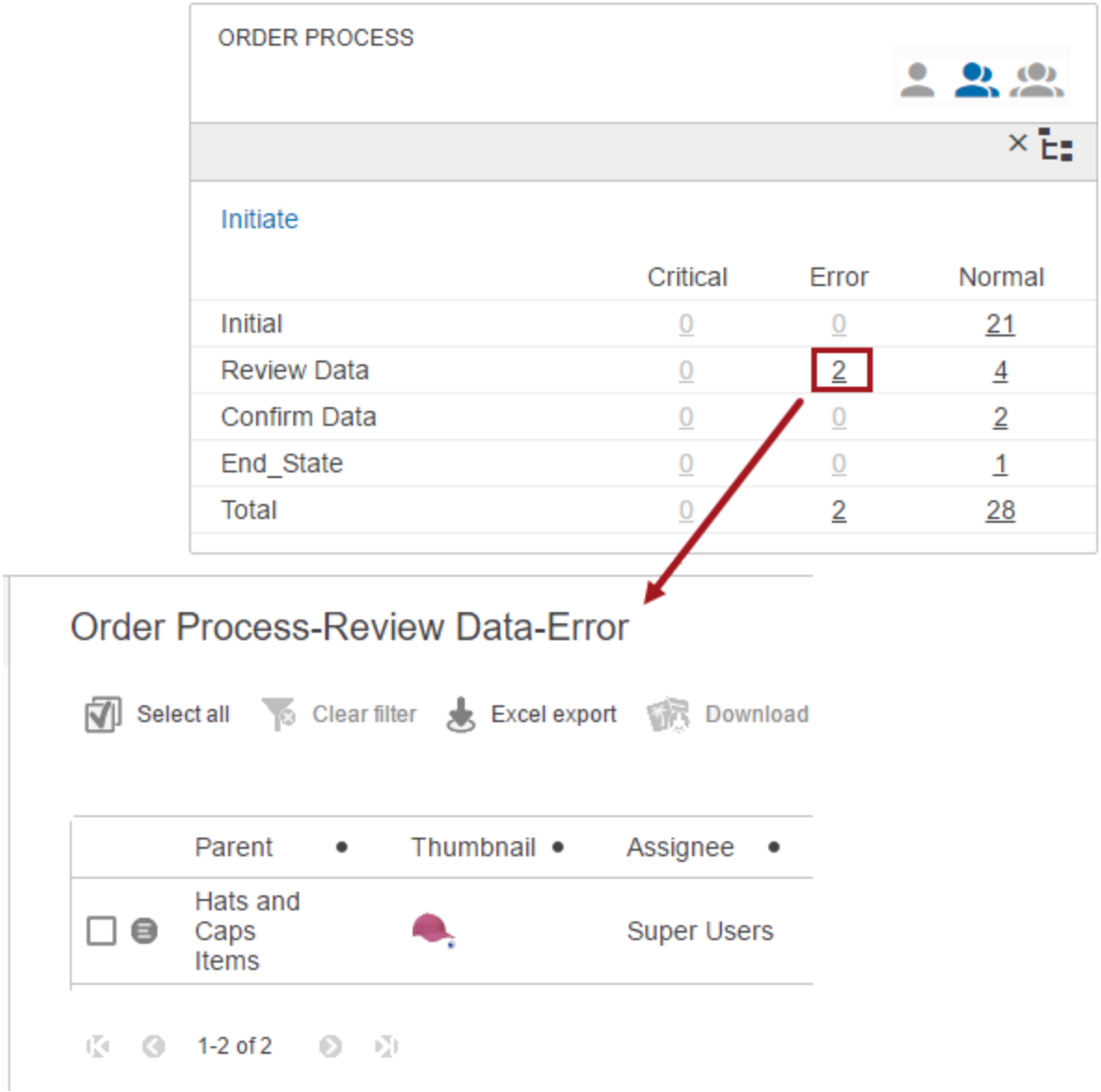
In Web UI designer, enable check boxes 'Status Flags Enabled' and 'Show status Flag Header' to display the status flag and its header on 'Status Selector Homepage widget properties' component as illustrated below image.



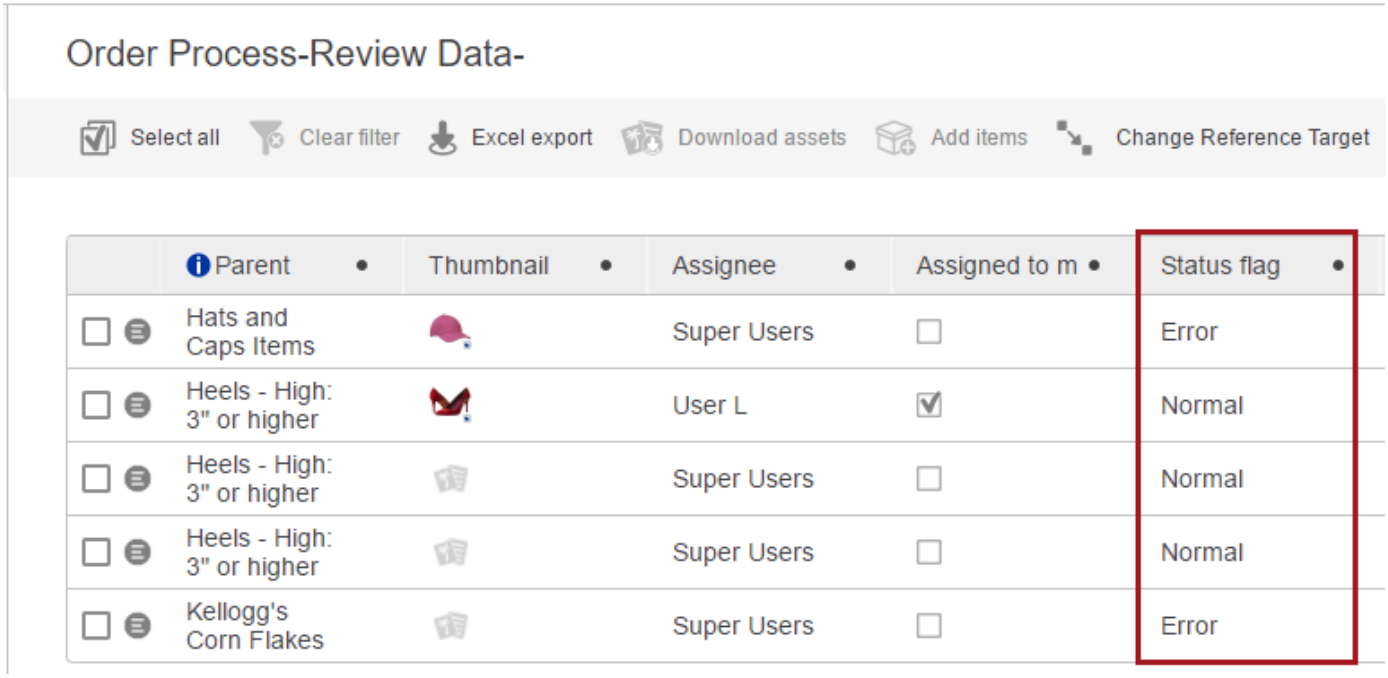
Example below, after enabling status flag



Additionally, it allows the user to navigate to a **Task List** showing just the tasks having the chosen status flag.

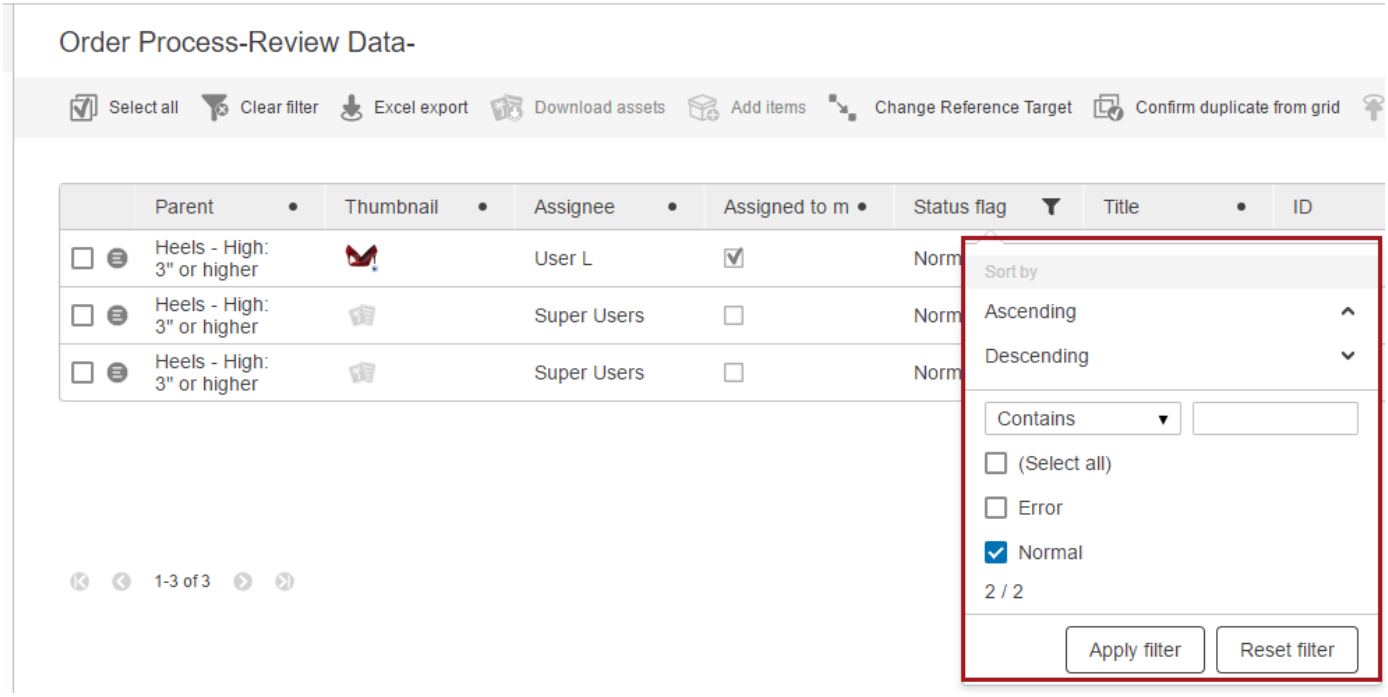


In a **Task List** in **Table Display Mode** or **Multi Edit Display Mode**, a user can add a **Status Flag Header**, which enables viewing of status flags.

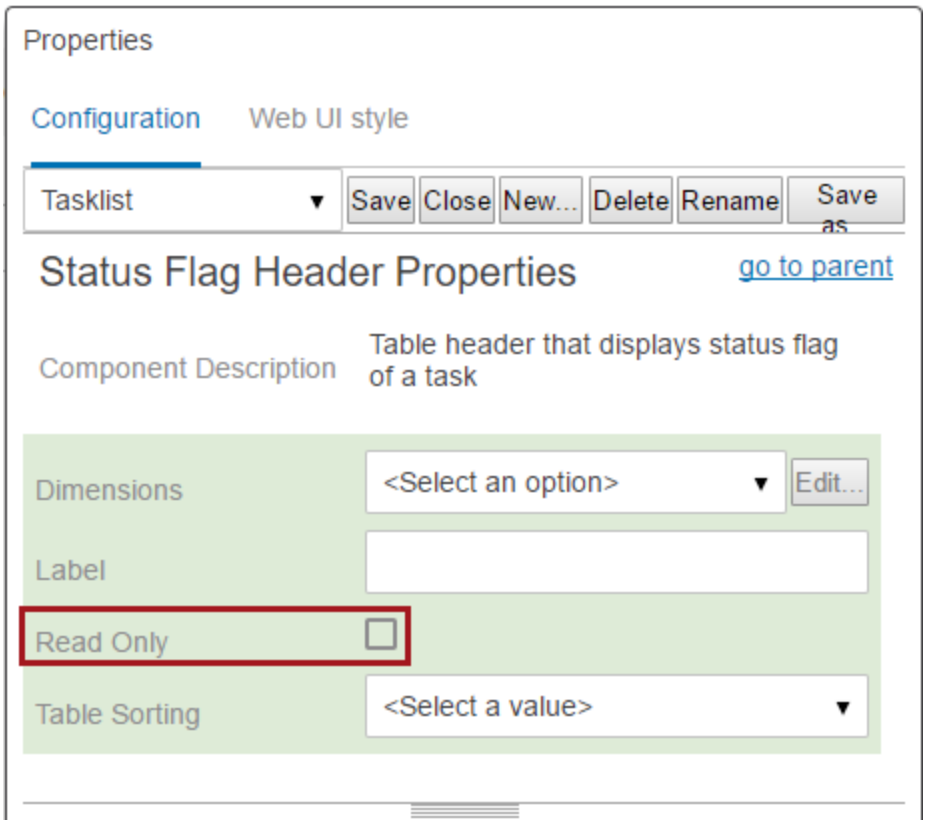


This header, like other column headers in the **Table Display Mode** or **Multi Edit Display Mode**, can have a filter applied to it to show only the status flags of interest.

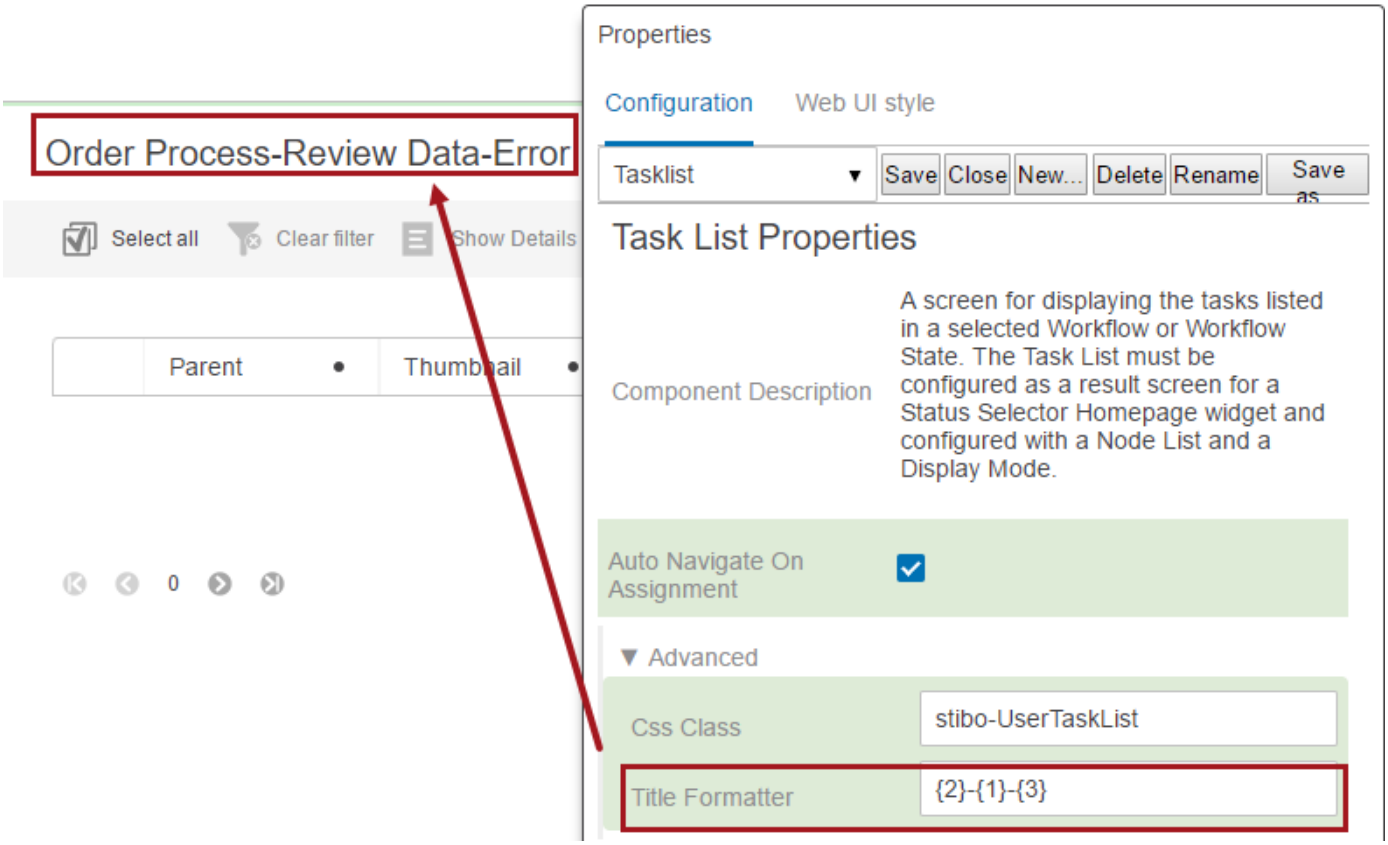
The **Status Flag Header** values are also editable when utilizing the **Multi Edit Display Mode**.



Users can double-click on a table cell and use the dropdown to select between the different status flags that have been configured for the Workflow. If editability of status flags is not desired, it can be disabled by checking the 'Read Only' option in the component configuration.



Additionally on a **Task List**, under **Advanced**, a user can enter expressions in the **Title Formatter** parameter to return the name of the status flag object associated with the workflow / state selection. This is especially useful when mapping screens based on status flags, as the status flag can also be dynamically reflected in the screen title.



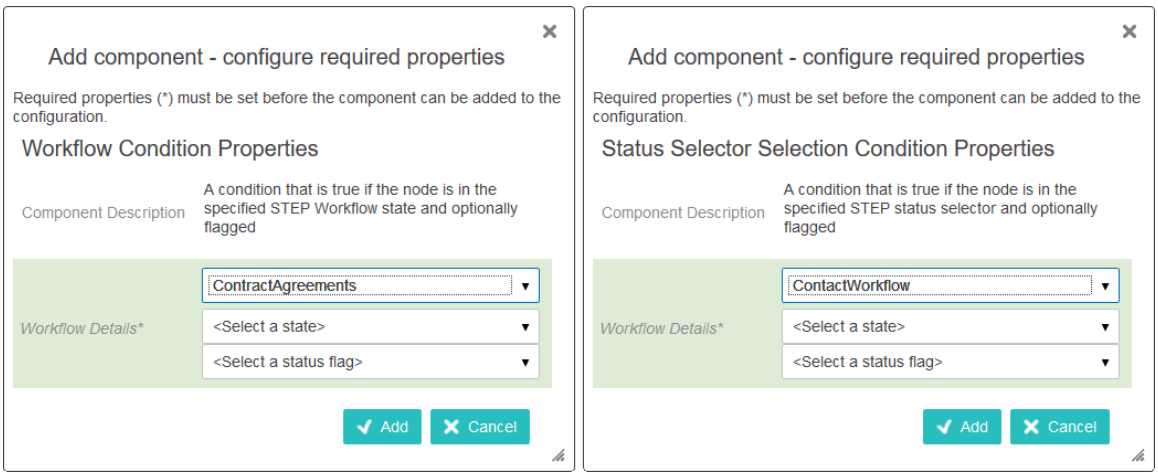
A complete list of expressions available for use is below:

- {0} – Workflow ID
- {1} – State Name
- {2} – Workflow Name

For more on how to configure the Status Selector Homepage Widget, see **Status Selector Homepage Widget** in the **Getting Started with Workflows in Web UI** section. For more on a Task Lists screen, see **Task List**.

Status Flags in Screen Mapping Conditions

Adding status flag values is also available for screen mapping conditions on the **Workflow Condition** and **Status Selector Condition**. This makes it possible for tasks that have a status flag of one type, such as 'Normal', to bring the user to one screen when selected, while tasks that have a status flag of a different type, such as 'Error', to bring the user to a different screen. This helps users to isolate and address high priority tasks in the appropriate way, as Web UI designers have the option to present different data and/or instructions to the end user based on task status.

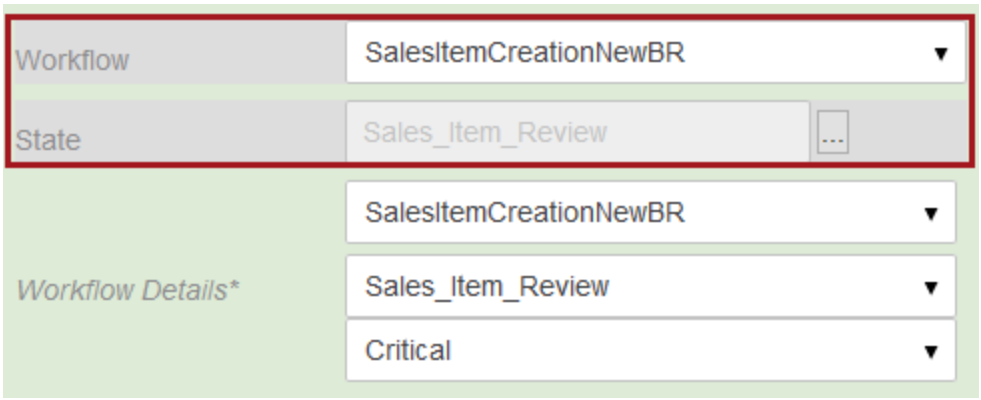


The selections available in the **State** and **Status Flag** parameters are only those relevant to the selected workflow. This interdependency prevents you from selecting an invalid option.

For more on Screen Mapping, see **Mapping Workflow States in Web UI** in the **Getting Started with Workflows in Web UI**.

Legacy Parameters

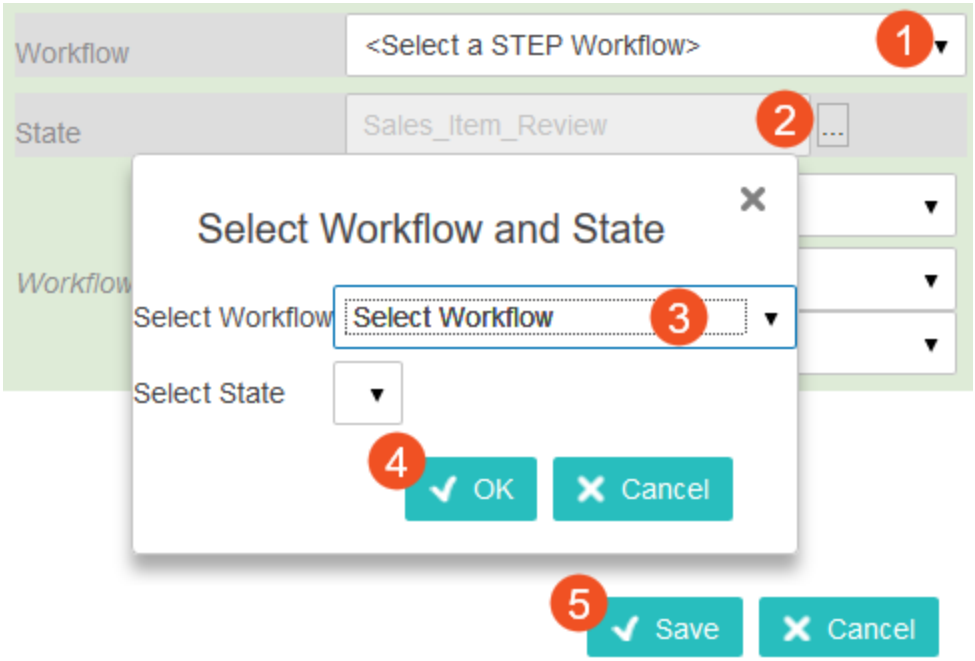
Legacy parameters are displayed with a gray background, as shown in the image below, and can be safely removed once selections are made in the Workflow Details fields.



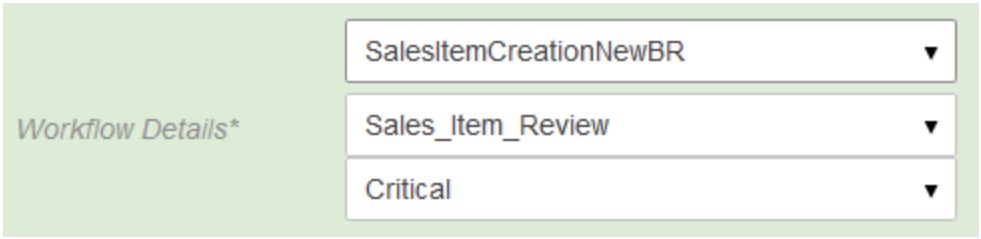
To remove legacy parameters:

1. Open the **Workflow Condition** or **Status Selector Condition** dialog.
2. Make all required selections for the three (3) Workflow Details parameters.
3. Update the legacy parameters, choosing the first option to indicate 'no selection,' and click the Save button.

Note: If no selection was previously made for a legacy parameter being displayed, first make a selection and click Save, then select the first option to indicate 'no selection,' and click Save again.



The next time the Workflow Condition or Status Selector Selection Condition dialog is displayed, only the Workflow Details parameter are shown.



Monitoring Workflows Using Web UI

Workflows can be monitored in Web UI via the Workflow Profile Screen. Profiles can be viewed with the 'View STEP Workflow Profile' privilege.

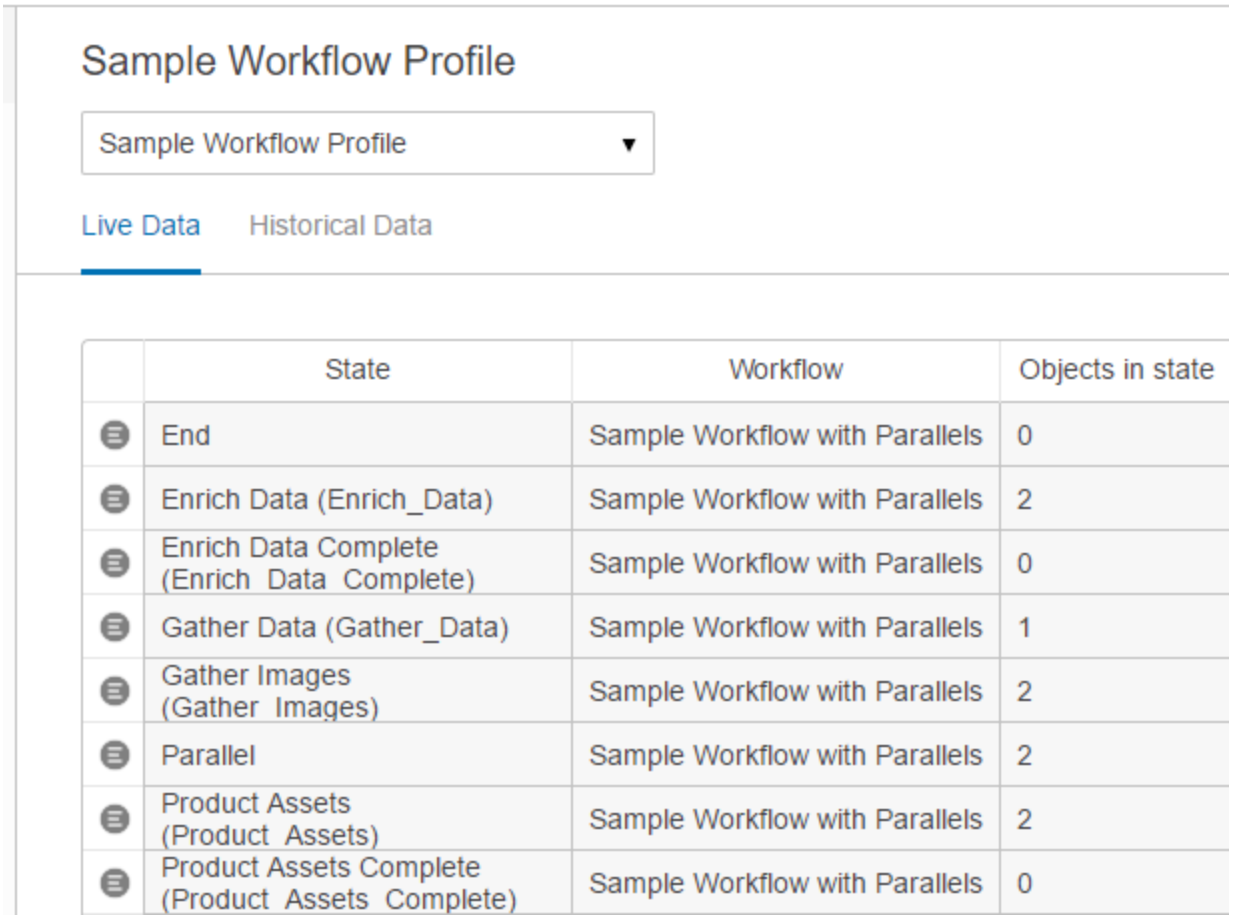
A profile can contain a wealth of information about workflows, such as number of exceeded deadlines, how long the tasks have been assigned to the assignees, what is the workflow throughput this month versus the last six months, and much more. Initial configuration is done through the STEP Workflow Profile Wizard, and detailed instructions can be found in the **Monitoring Workflows** section of the **Workflows** > **Advanced Workflow Topics** documentation.

Workflow Profiles can be monitored via Web UI in a number of ways:

- Workflow Profile Screen
- Workflow Profile Chart Dashboard
- Workflow Historical Line Dashboard

Workflow Profile Screen

Workflows can be monitored in Web UI via the Workflow Profile screen. A profile can contain a wealth of information about workflows, such as number of exceeded deadlines, how long the tasks have been assigned to the assignees, what is the workflow throughput this month versus the last six months, and much more.



State	Workflow	Objects in state
End	Sample Workflow with Parallels	0
Enrich Data (Enrich_Data)	Sample Workflow with Parallels	2
Enrich Data Complete (Enrich_Data_Complete)	Sample Workflow with Parallels	0
Gather Data (Gather_Data)	Sample Workflow with Parallels	1
Gather Images (Gather_Images)	Sample Workflow with Parallels	2
Parallel	Sample Workflow with Parallels	2
Product Assets (Product_Assets)	Sample Workflow with Parallels	2
Product Assets Complete (Product_Assets_Complete)	Sample Workflow with Parallels	0

Prerequisites

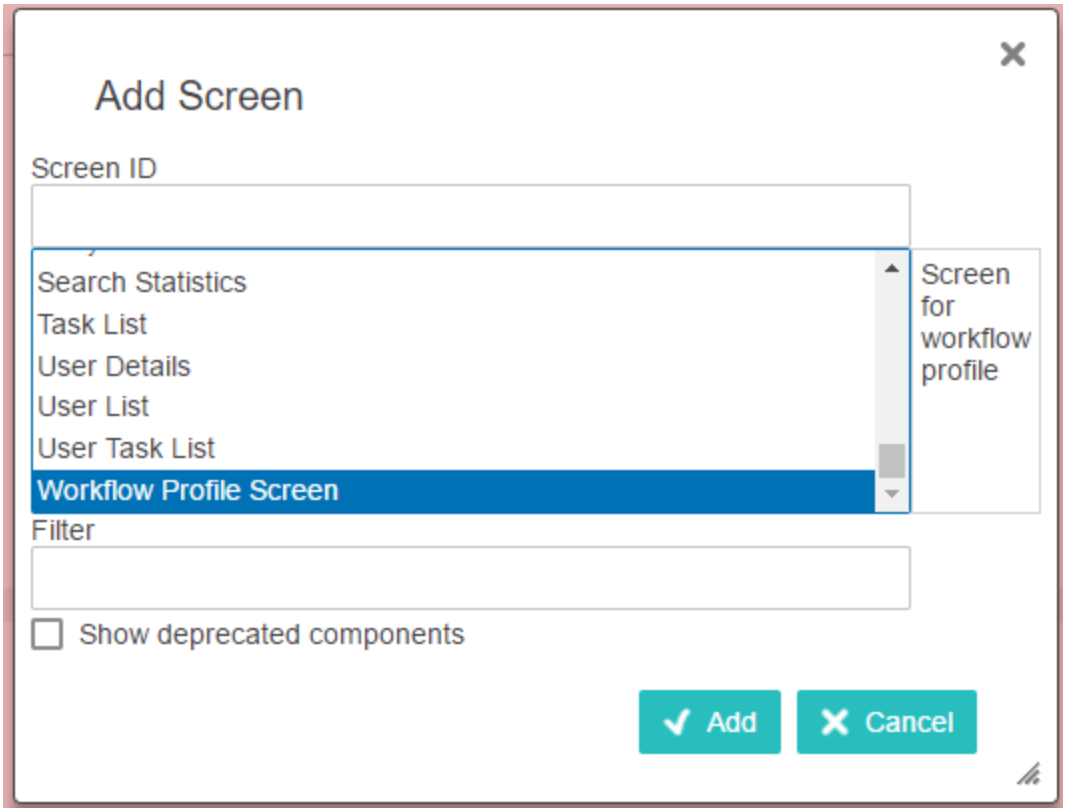
It is expected that anyone configuring the Workflow Profile Screen is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. The user must have appropriate privileges to access the designer. Additional information can be found in the **Designer Access** section of the **Web User Interfaces** / **Web UI Getting Started** documentation.

Profiles are maintained in workbench on the Step Workflow tab within the Profile sub-tab. Profiles are available to users with the 'View STEP Workflow Profile' and/or 'Maintain STEP Workflow Profile' privileges. Initial configuration is done through the STEP Workflow Profile Wizard, and detailed instructions can be found in the **Monitoring Workflows** section of the **Workflows** > **Advanced Workflow Topics** documentation.

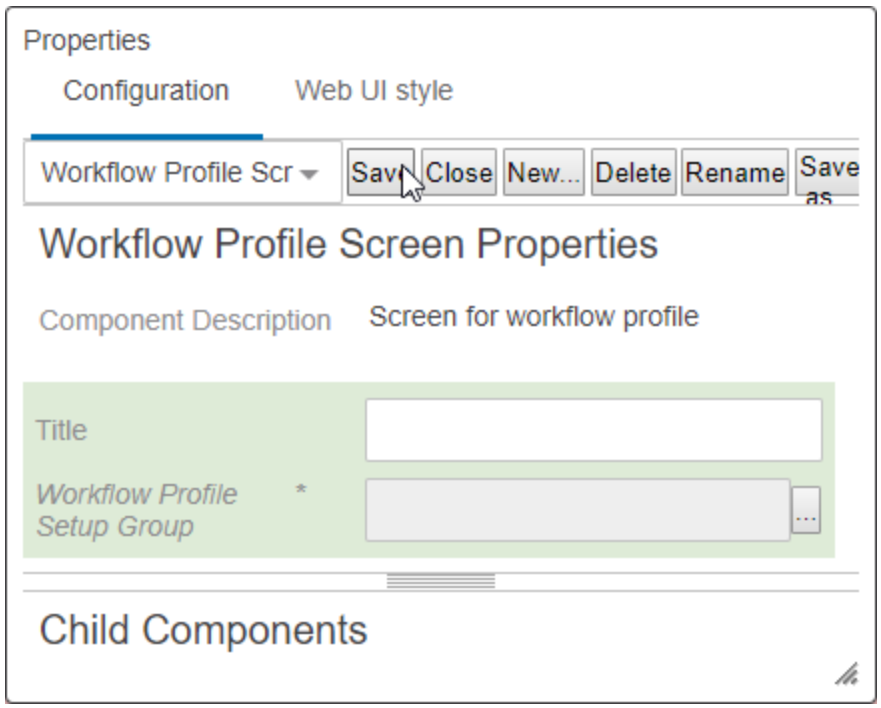
Adding a New Workflow Profile Screen

Steps for creating a new screen using the Workflow Profile screen type are below.

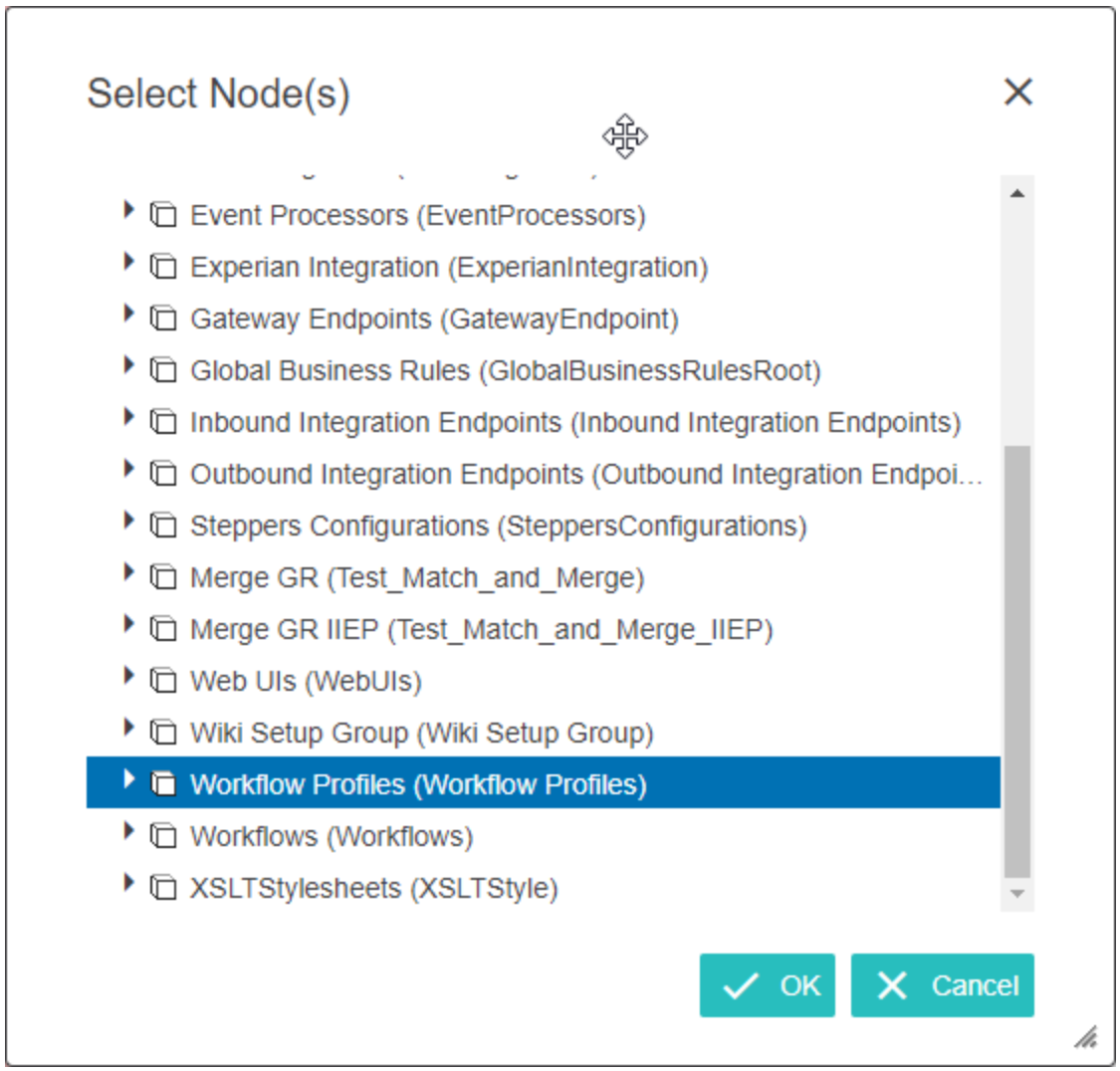
1. Enter design mode.
2. In the designer window, click the **New** button in the action icon row.
3. Choose **Workflow Profile Screen** from the screen list and type in a Screen ID. The screen ID should be something easily identifiable when it is time to configure the screen and/or set up screen mapping.



4. Click **Add**. A new dialog, **Workflow Profile Screen Properties**, displays with fields that are mandatory for configuration.



5. The **Title** parameter is blank by default, and can be populated with the desired name.
6. In the **Workflow Profile Setup Group** parameter, click the ellipsis button (...) next to the field.
7. Select **Workflow Profiles** from the 'Select Node(s)' dialog and click OK.

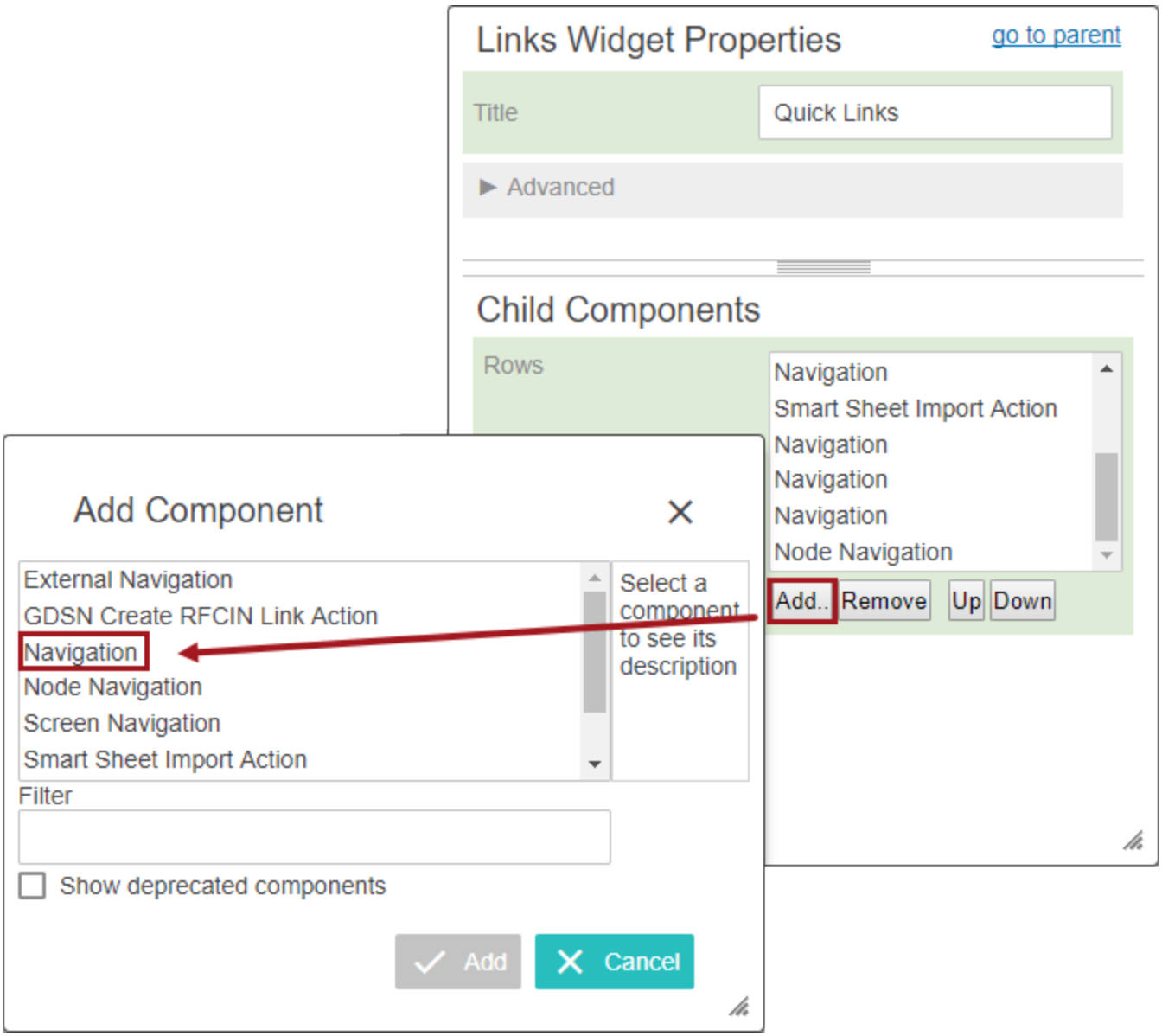


8. Save the screen properties and close the designer, or determine where the screen should be displayed. To display it on the homepage of the Web UI, see the next section.

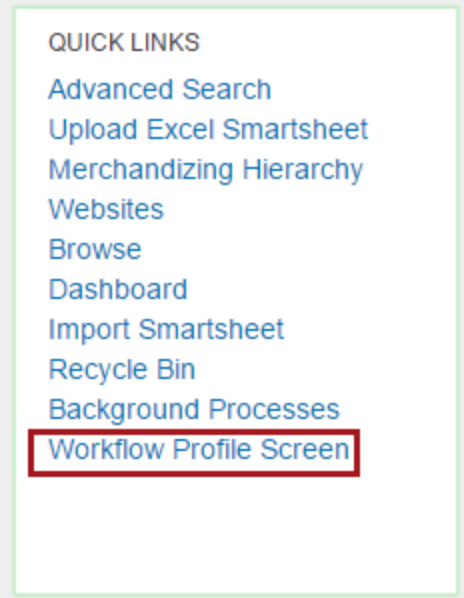
Adding the Workflow Profile Screen to the Homepage

To add an easily accessible link to the Workflow Profile screen on the homepage:

1. With ---[HOMEPAGE]--- as the screen selection in designer, click the links widget (titled Quick Links). The Links Widget Properties dialog opens. For more information about creating or navigating into links widgets, see **Homepage Widgets** topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.
2. Go down to the Child Components section, and click the **Add** button.



3. Choose the Navigation component, and click **Add**.
4. On the Navigation properties screen, select your workflow profiles screen ID from the Screen dropdown (it is 'Workflow Profile' in the screenshot examples).
5. Fill in the Label field with the name that will show on the links widget, then click **Add**.
6. You can move the Links widget Child Components up and down based on your preference for how they show on the homepage.
7. Click **Save** in the Properties Configuration dialog box.
8. The Workflow Profile link will now show in the Quick links widget.

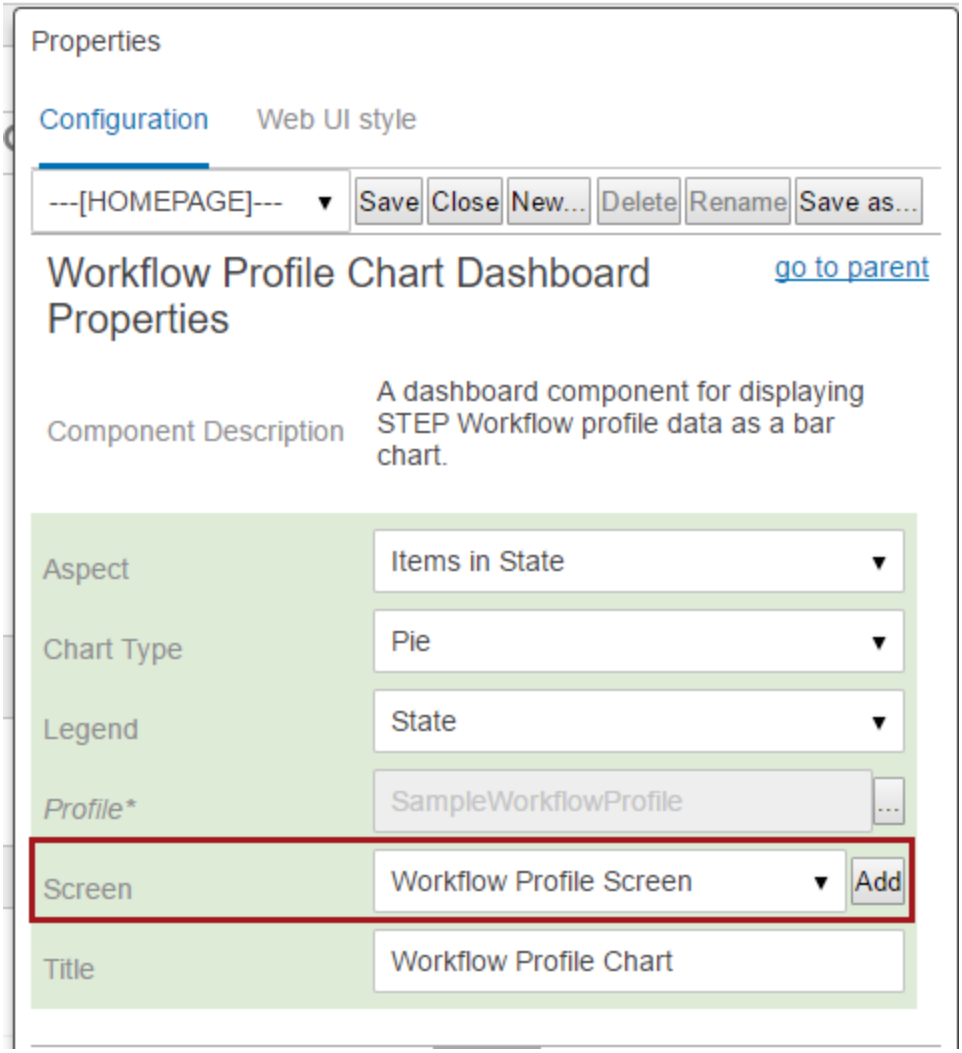


Linking the Workflow Profile Screen from a Homepage Widget

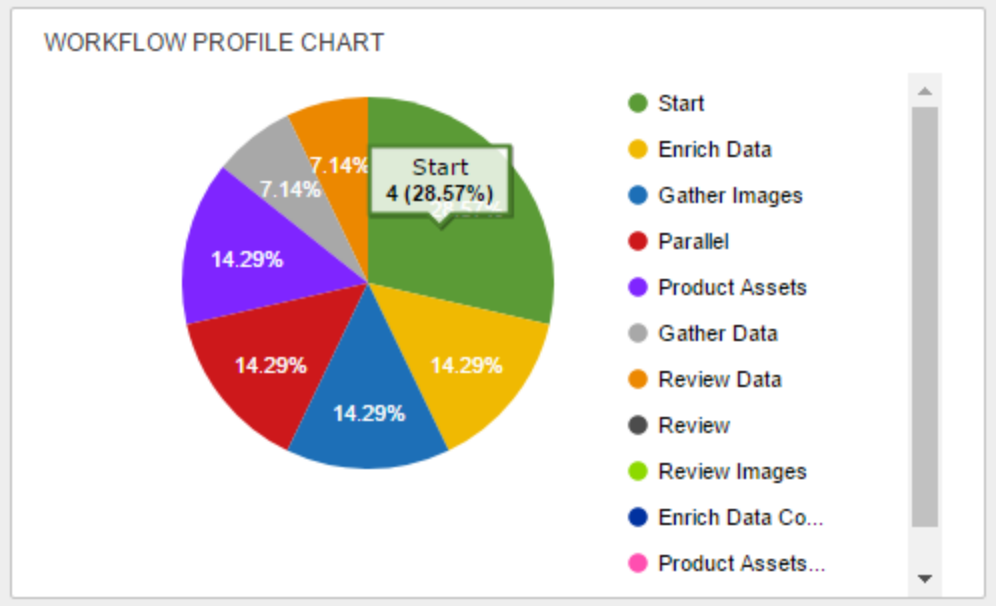
The Workflow Profiles screen can also be accessed through the Workflow Historical Line Dashboard and Workflow Profile Chart Dashboard homepage widgets. Once linked, clicking on the graph within the widget will bring you to the Workflow Profile screen.

To link a widget the Workflow Profile screen:

1. With ---[HOMEPAGE]--- as the screen selection in designer, click the Workflow Historical Line Dashboard or Workflow Profile Chart Dashboard.
2. In the Screen parameter, select the Workflow Profile screen from the dropdown, then click **OK**.



3. Save the changes.



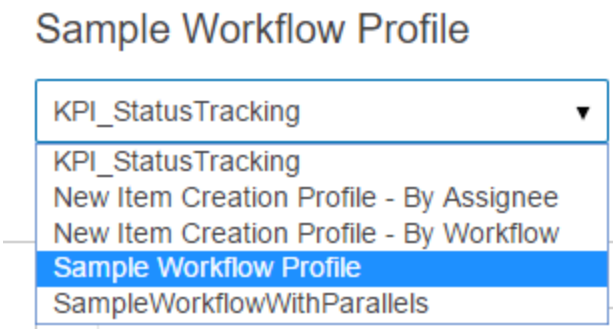
For more information on the Workflow Profile Chart Dashboard widget, see the **Workflow Profile Chart Dashboard** section of the **Web User Interfaces / Web UI Getting Started** documentation.

For more information on the Workflow Historical Line Dashboard widget, see the **Workflow Historical Line Dashboard** section of the **Web User Interfaces / Web UI Getting Started** documentation.

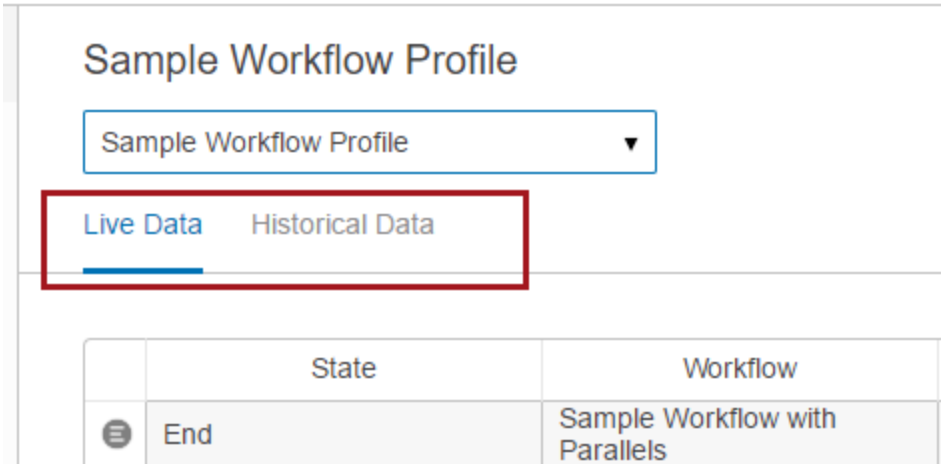
Using the Workflow Profile Web UI Interface

The Workflow Profile screen functions in a similar fashion as its workbench counterpart.

To select a Workflow Profile to view, use the dropdown above the profile table.

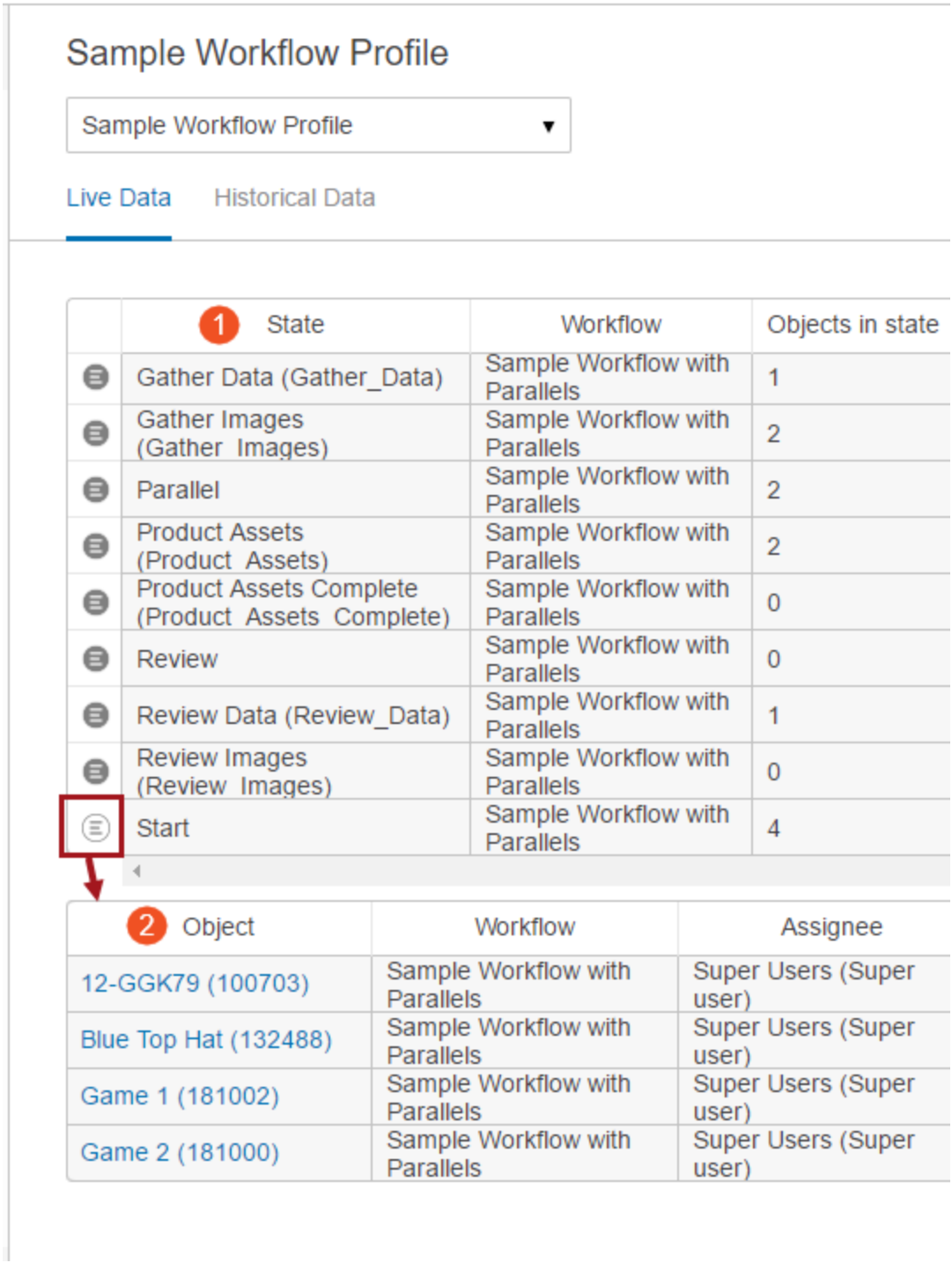


The displayed profile data is split into two tabs: Live Data and Historical Data.



Live Data Tab

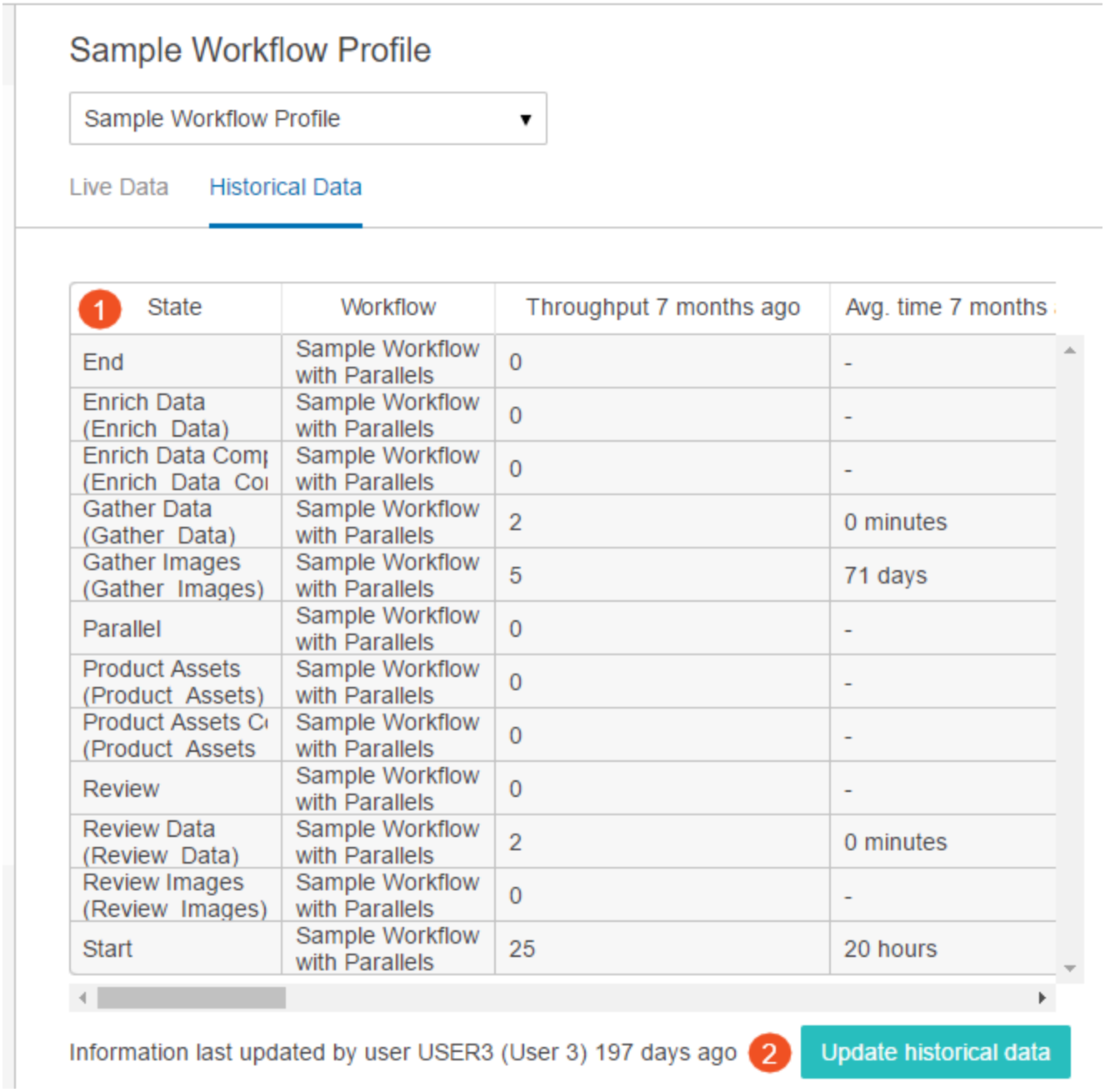
The Live Data tab displays workflow information as it currently exists. For the 'States' and 'Assignees' domains, the view is divided into a master table at the top and a details table at the bottom. Data on the details table is populated based on what is selected in the master table. For all domains, any columns displayed are based on the profile definition. To view individual the details of the workflow, click the Details icon on the left of the State name of the desired workflow.



1. **The Live Data master table -** Populated based on the workflow profile selection. This displays more general information about the stages or assignees.
2. **The Live Data details table -** Populated based on the master table selection. This appears when a row in the Master Table is selected and displays more specific information about the objects that are contained within a state or assigned to an assignee.

Historical Data Tab

Unlike the Live Data tab, the Historical Data tab is updated on-demand and displays historical information about the workflow(s).

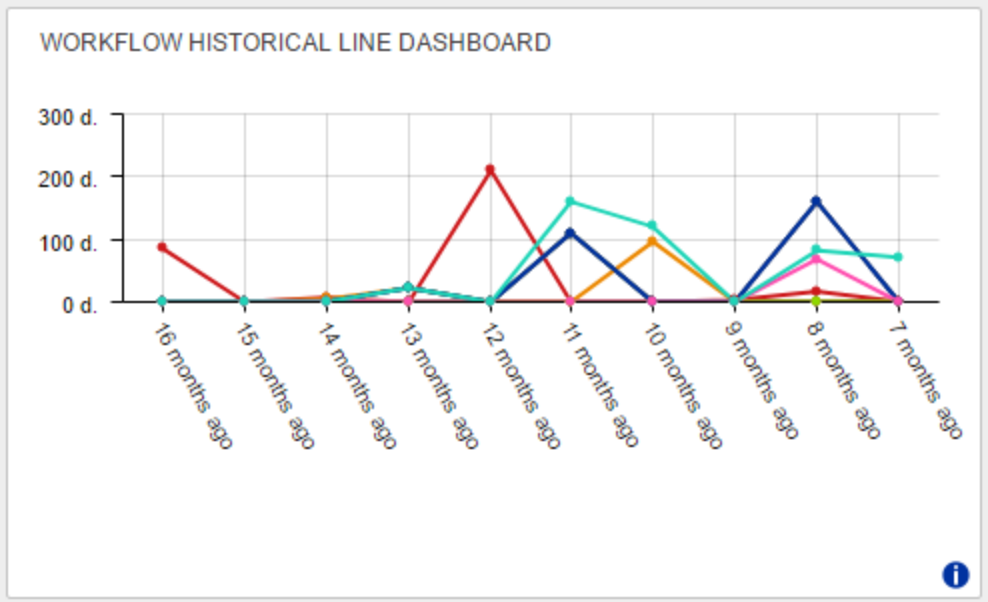


1. **Historical Data table -** Populated based on the workflow profile selection.
2. **Update historical data button -** Click to update the workflow profile's historical data.

For more information on configuring what data appears on this screen, see the **Monitoring Workflows** section of the **Workflows** documentation.

Workflow Historical Line Dashboard

Historical workflow profile data can be displayed as a line graph on the Web UI homepage via the Workflow Historical Line Dashboard widget.



The graph data is populated based on the workflow profile specified in the configuration and must be manually updated in order to get the most up-to-date historical data. The data can be updated via the **Update historical data** button found on the Workflow Profile screen in Web UI.

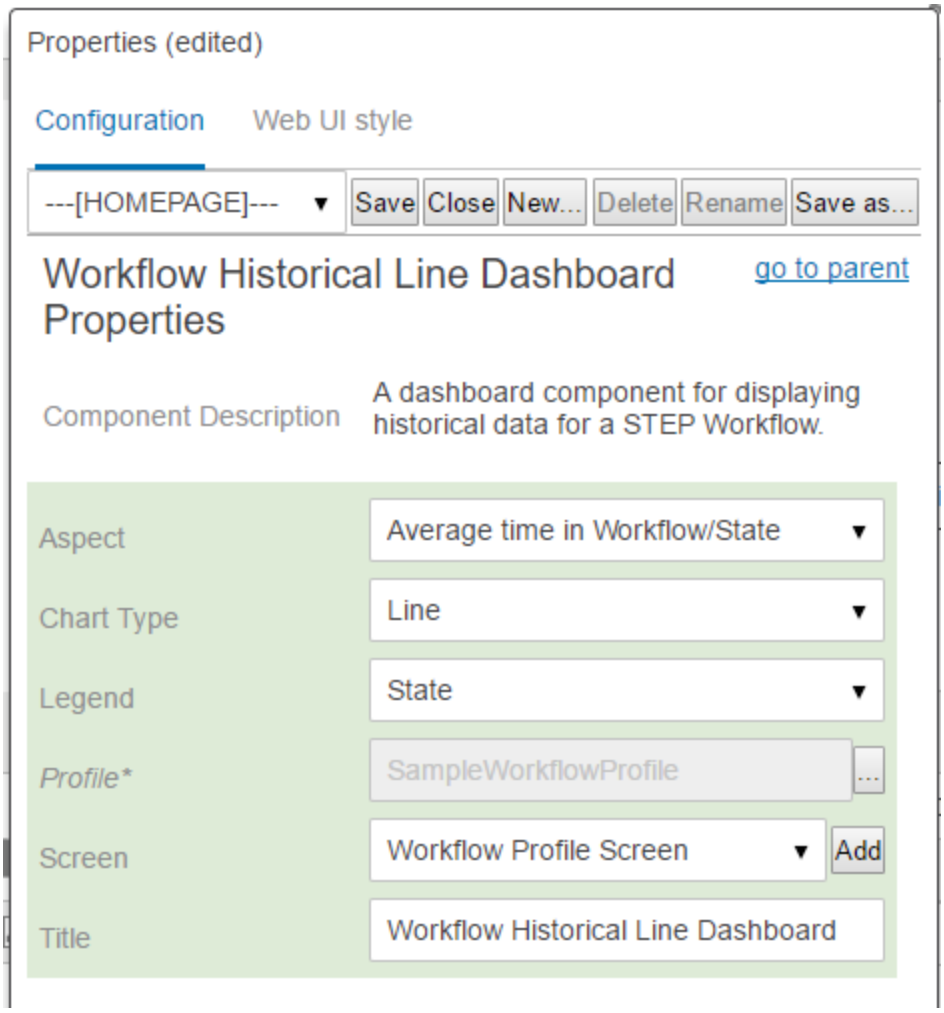
For more information on Workflow Profiles, see the **Monitoring Workflows** section of the **Workflows** documentation.

Configuration

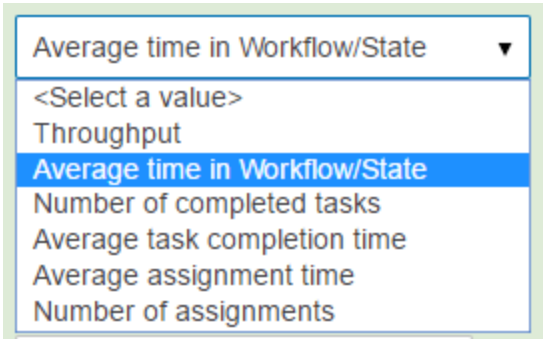
It is expected that anyone configuring the Workflow Historical Line Dashboard is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer.

Details on how to add a widget to a homepage can be found in the **Adding Widgets to a Homepage** topic in the **Getting Started** documentation.

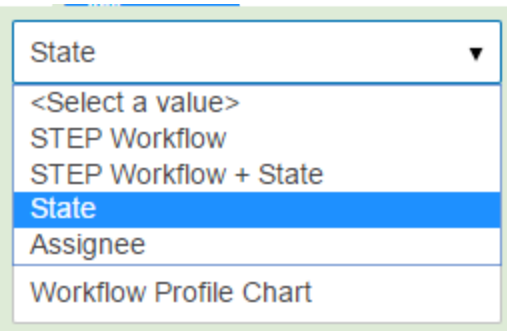
1. When configuring the Workflow Historical Line Dashboard for the Homepage, there are six parameters to consider: Aspect, Chart Type, Legend, Profile, Screen, and Title.



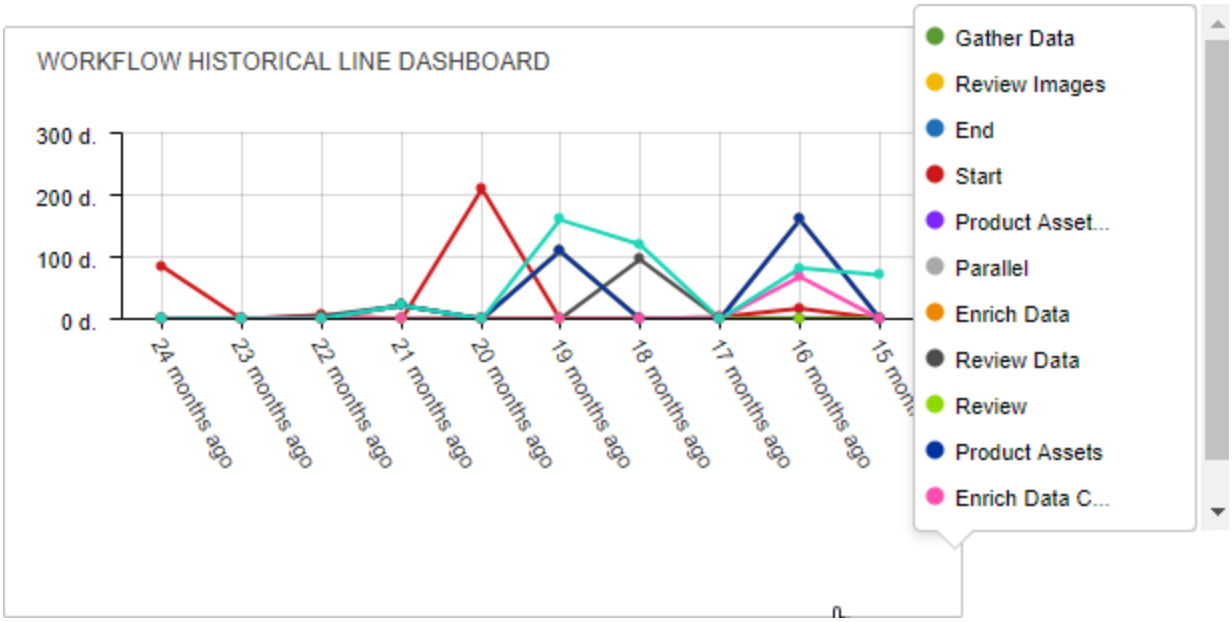
2. In the 'Aspect' parameter, use the dropdown to select which aspect of the workflow profile to display in the graph.



3. In the 'Chart Type' parameter, ensure 'Line' is selected from the dropdown.
4. In the 'Legend' parameter, determine how the entries in the chart should be represented via the dropdown.



When hovering over the lower right hand corner of the widget, the cursor changes. When it is clicked, the chosen legend (chosen as a state in this case) becomes available.



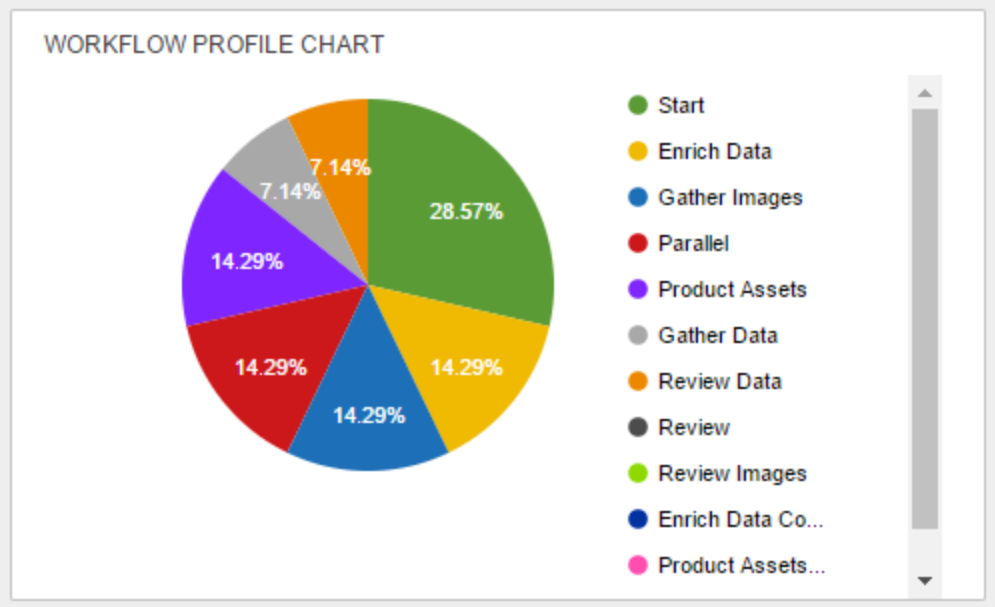
5. In the 'Profile' parameter, Click the ellipsis button (...) and select which workflow profile to display. Click **OK**.

Note: The 'Profile' parameter is mandatory.

6. In the 'Screen' parameter, select a screen to link the widget to from the dropdown. Typically, this screen should be a Workflow Profile screen.
7. In the 'Title' parameter, enter a title for the widget.

Workflow Profile Chart Dashboard

Live workflow profile data can be displayed on the Web UI homepage via the Workflow Profile Live Data widget. This data can be displayed as either a pie or line graph.



The graph data is populated based on the workflow profile specified in the configuration.

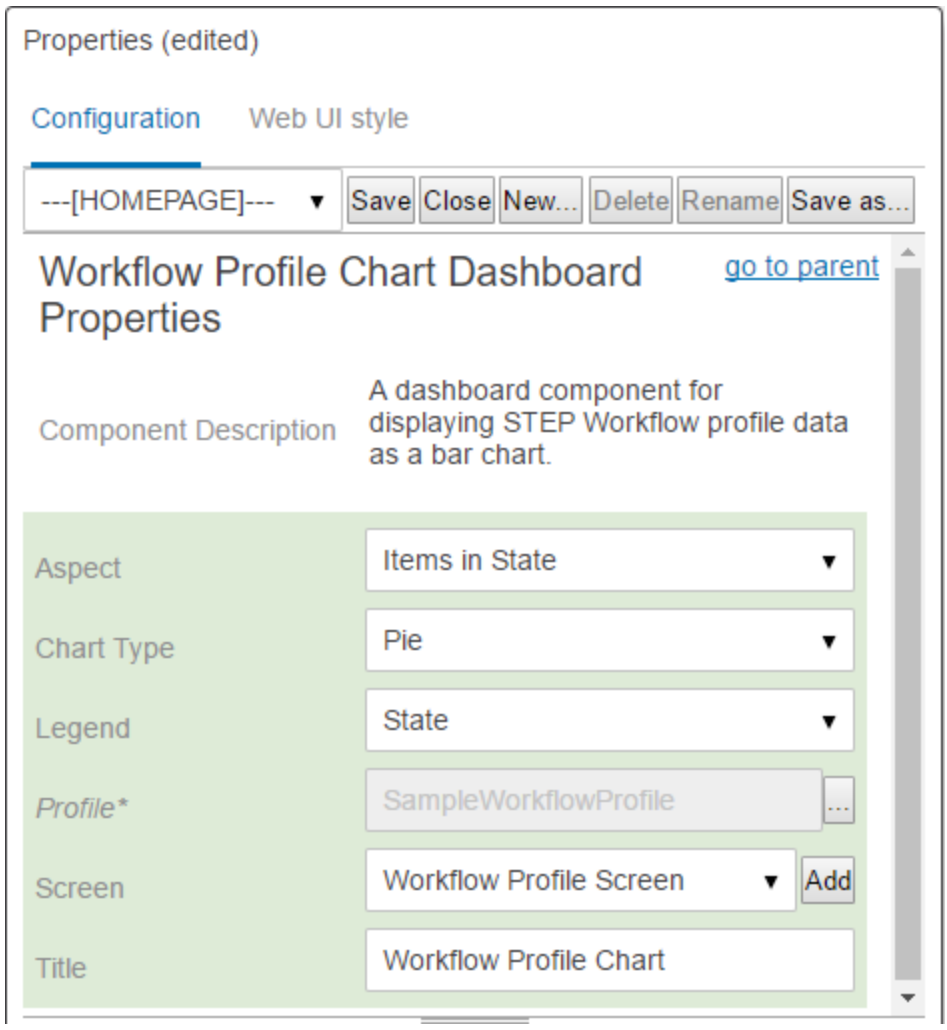
For more information on Workflow Profiles, see the **Monitoring Workflows** section of the **Workflows** documentation.

Configuration

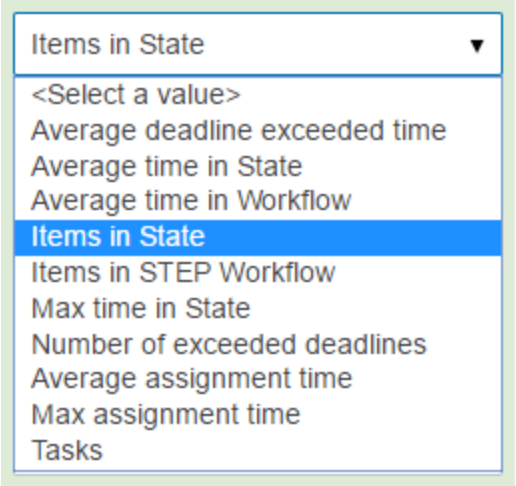
It is expected that anyone configuring the Workflow Profile Live Data Widget is familiar with the Web UI Designer, as basic concepts for working with the designer are not covered in this section. In addition, the user must have appropriate privileges to access the designer.

For information on adding a widget to a homepage, see the **Homepage Widgets** section of the documentation.

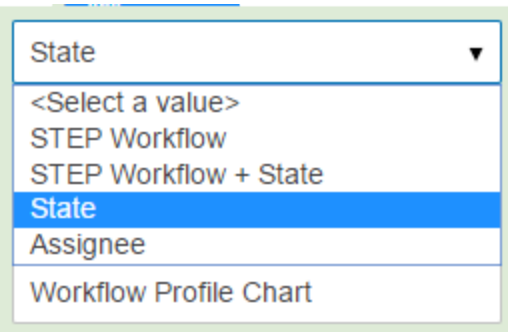
1. When configuring the Workflow Profile Live Data Widget for the Homepage, there are six parameters to consider: Aspect, Chart Type, Legend, Profile, Screen, and Title.



2. In the 'Aspect' parameter, use the dropdown to select which aspect of the workflow profile to display in the graph.



3. In the 'Chart Type' parameter, select which type of chart to use from the dropdown. Options include pie charts and bar charts.
4. In the 'Legend' parameter, determine how the entries in the chart should be represented via the dropdown.



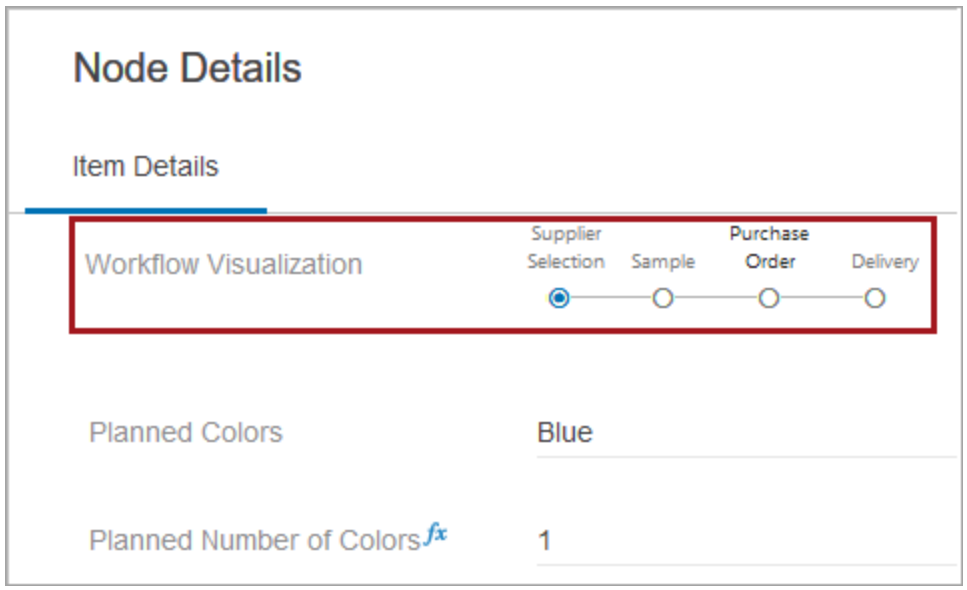
5. In the 'Profile' parameter, Click the ellipsis button (...) and select which workflow profile to display. Click **OK**.

Note: The 'Profile' parameter is mandatory.

6. In the 'Screen' parameter, select a screen to link the widget to from the dropdown. Typically, this screen should be a Workflow Profile screen.
7. In the 'Title' parameter, enter a title for the widget.

Workflow Visualization

The Workflow Visualization component allows you to visually track objects in various workflows by defining a group of STEP workflow states (from one or more workflows) into one workflow visualization work process step. Once these process steps are configured, you can see an object's step-by-step progression on the screen. This can help in understanding, at a glance, the overall status of an object, instead of having to review every workflow the object is in.

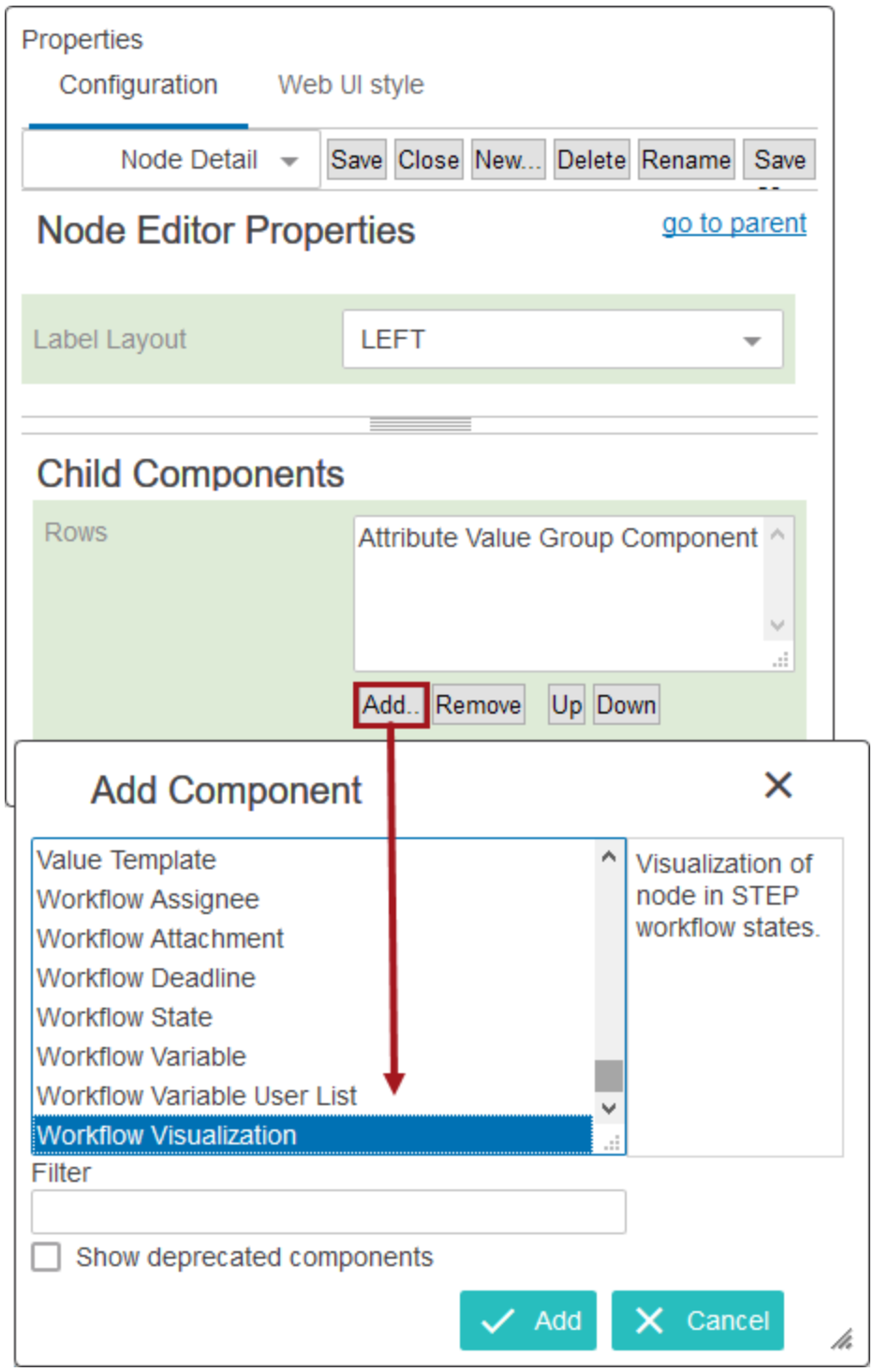


The Workflow Visualization component, which is applied to a Node Editor on a Node Details screen, is highly configurable, making it easy to display the status of an item, according to company needs. See below for configuration.

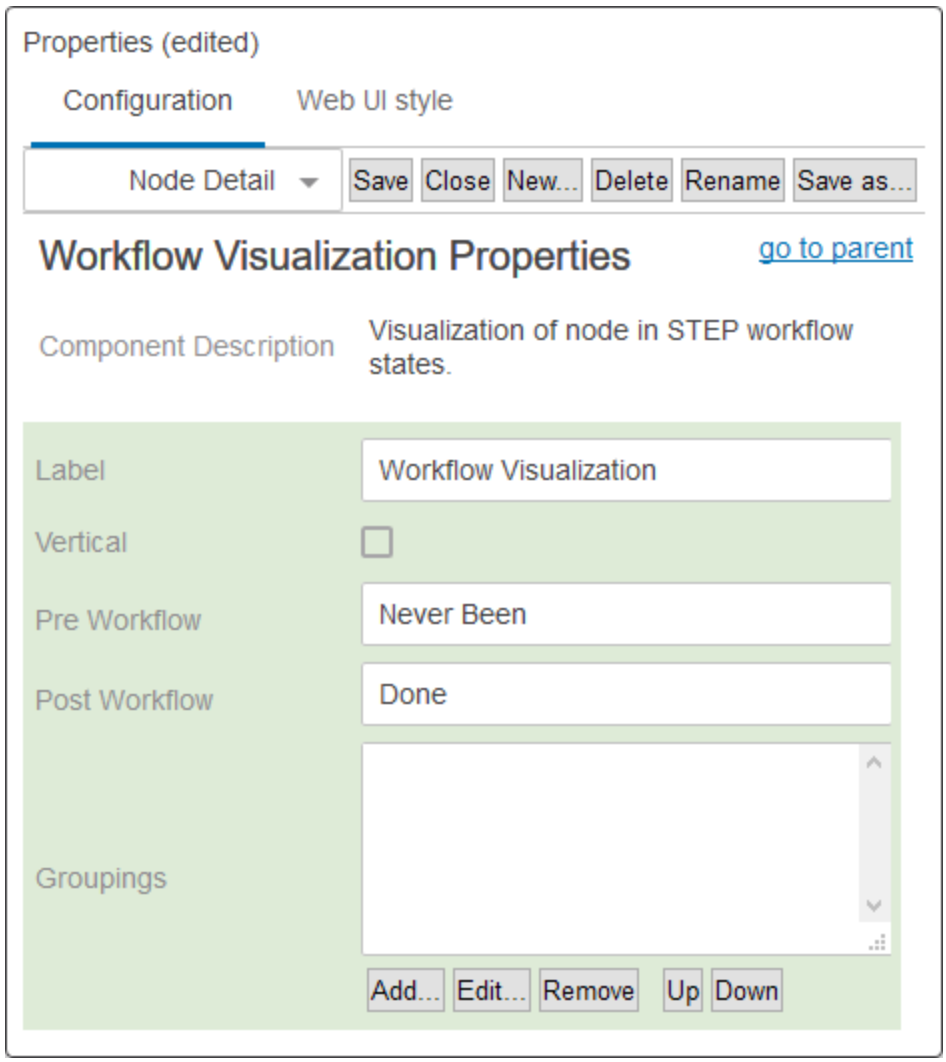
Configuring Workflow Visualization

This component is intended to be used on objects or tasks that will enter into multiple workflows at one time. To configure the Workflow Visualization component for an object, follow these steps:

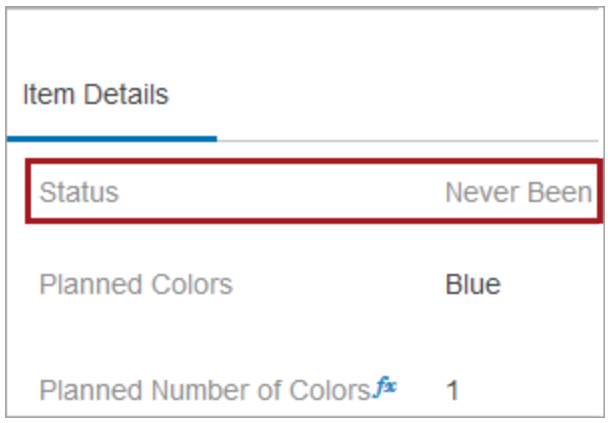
1. In Web UI, open the designer and navigate to the desired **Node Editor Properties**. Typically, this will be a Node Editor configured to view and provide details about the desired objects.
2. On the Node Editor Properties go to Child Components > Rows > add a **Workflow Visualization** component.



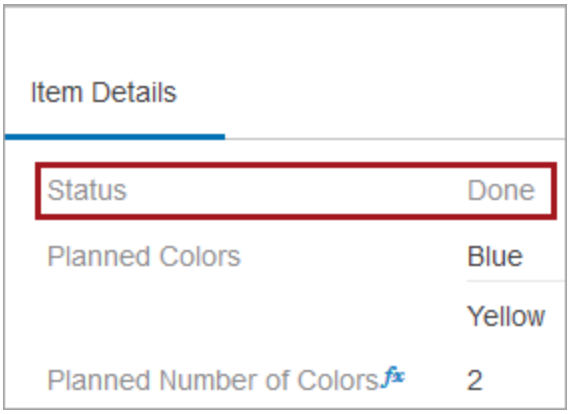
3. Double click on the newly added Workflow Visualization component to navigate to Workflow Visualization Properties. The fields are defined below.



- **Label** -Displays as the workflow visualization label.
- **Vertical** - When checked, displays the workflow visualization vertically instead of horizontally.
- **Pre Workflow** - Displays in place of the workflow visualization tracker if the viewed object ***has not been initiated*** into any mapped workflow visualization work process steps.



- **Post Workflow** - Displays in place of the workflow visualization tracker if the viewed object ***has exited*** all mapped workflow visualization work process steps.

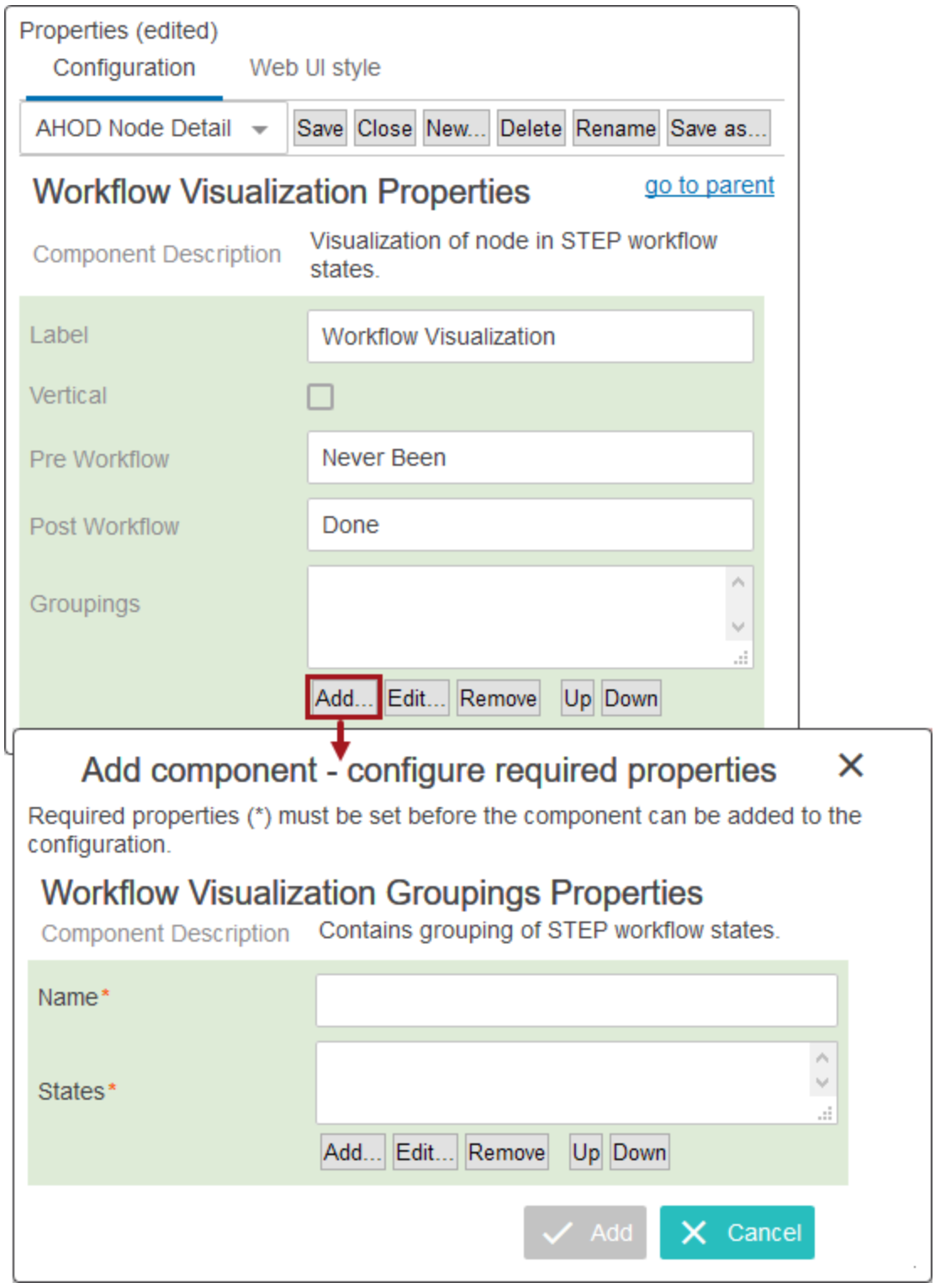


- **Groupings** - Field to configure mappings from workflow states to workflow visualization work process steps.

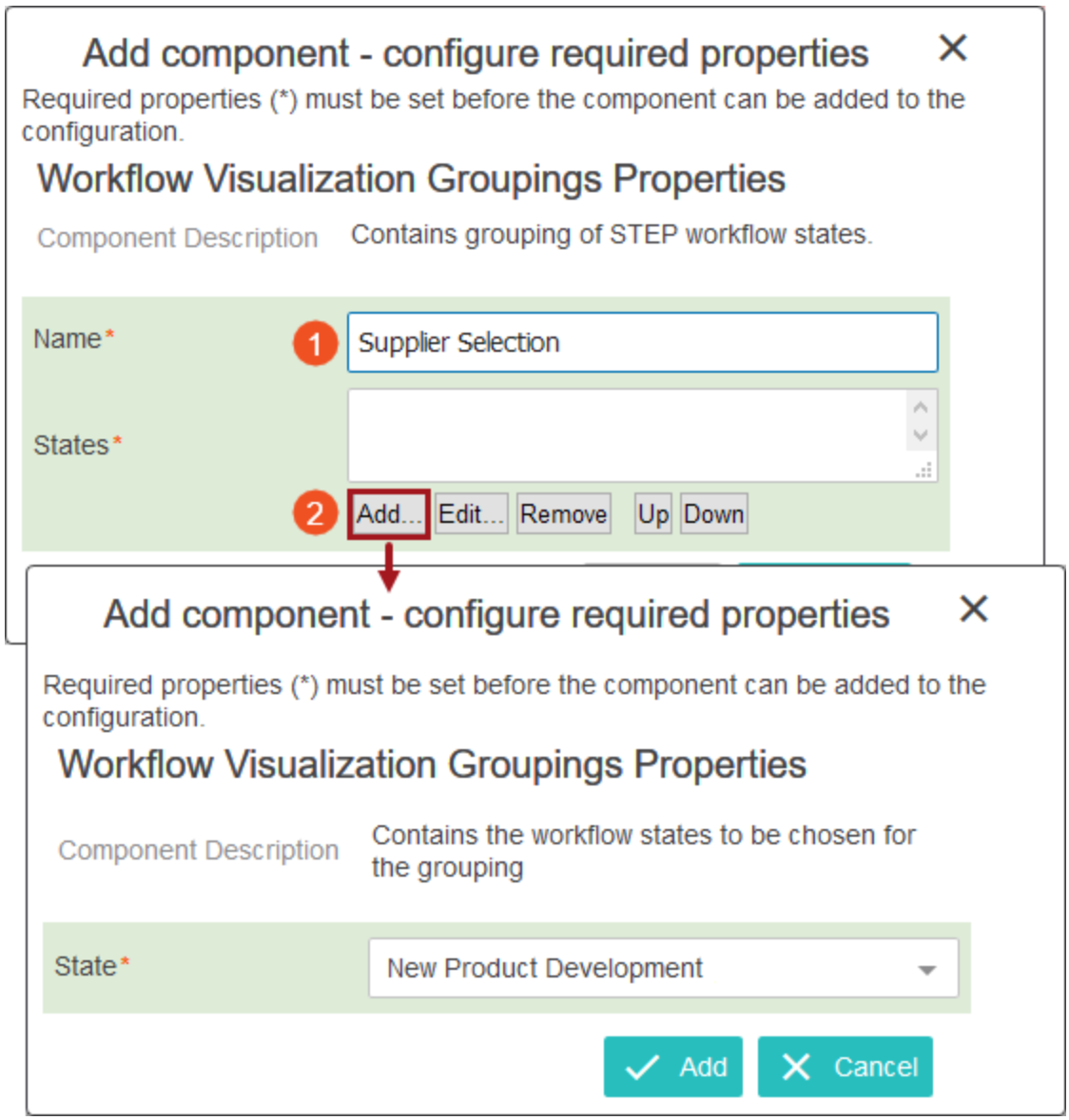
Configuring Groupings

To map states from various workflows to one workflow visualization work process step, follow the directions below:

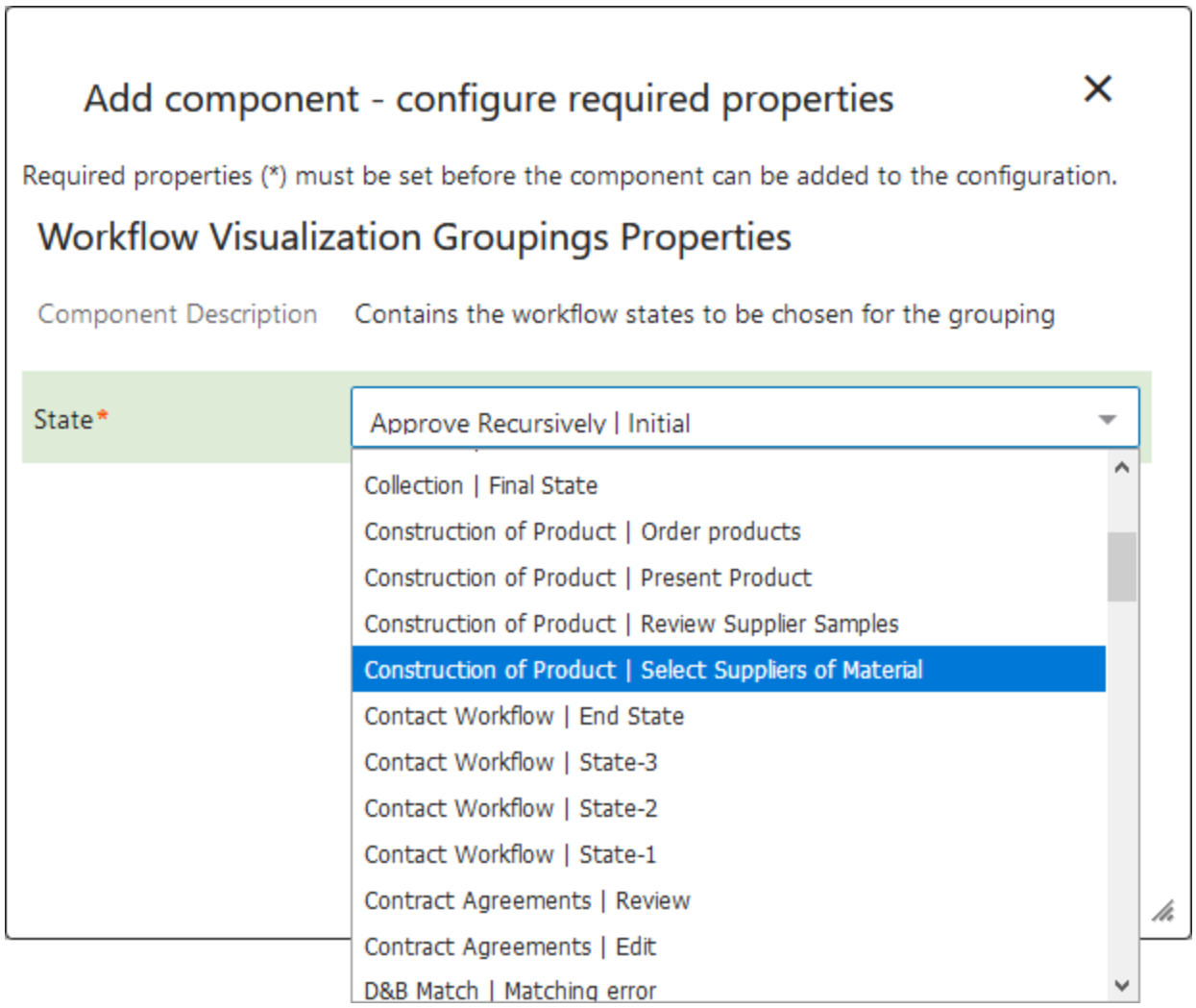
1. In the Groupings field, click the **Add** button to open the Workflow Visualization Groupings Properties.



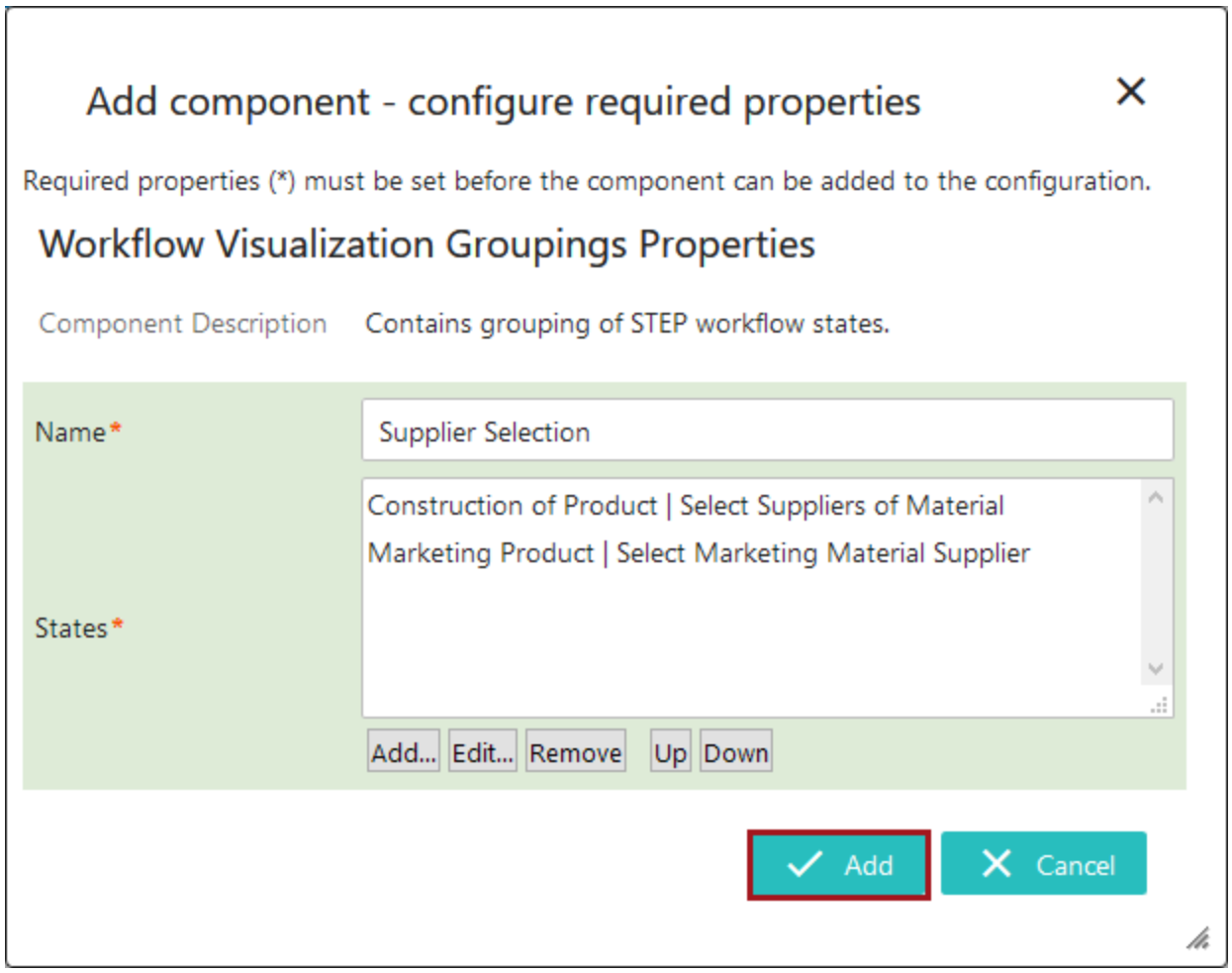
2. First enter in a name for the workflow visualization work process step, then in the States field, click the **Add** button.



3. All valid workflows and their respective states are visible in the dropdown menu 'State.' Select the desired workflow state, and click **Add**.

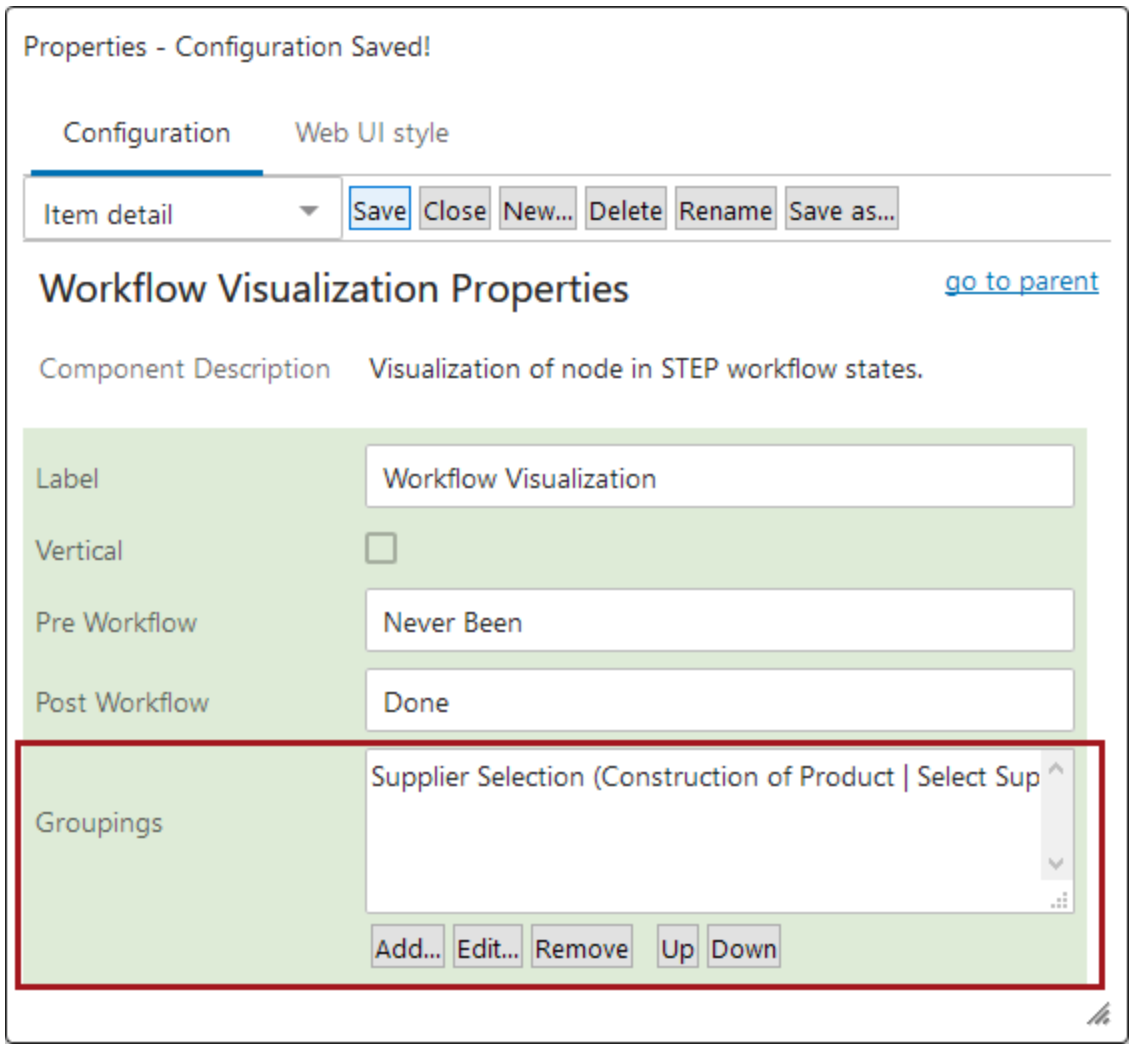


4. Continue to add as many states from various workflows as needed. When finished, click the **Add** button on the Workflow Visualization Grouping Properties.

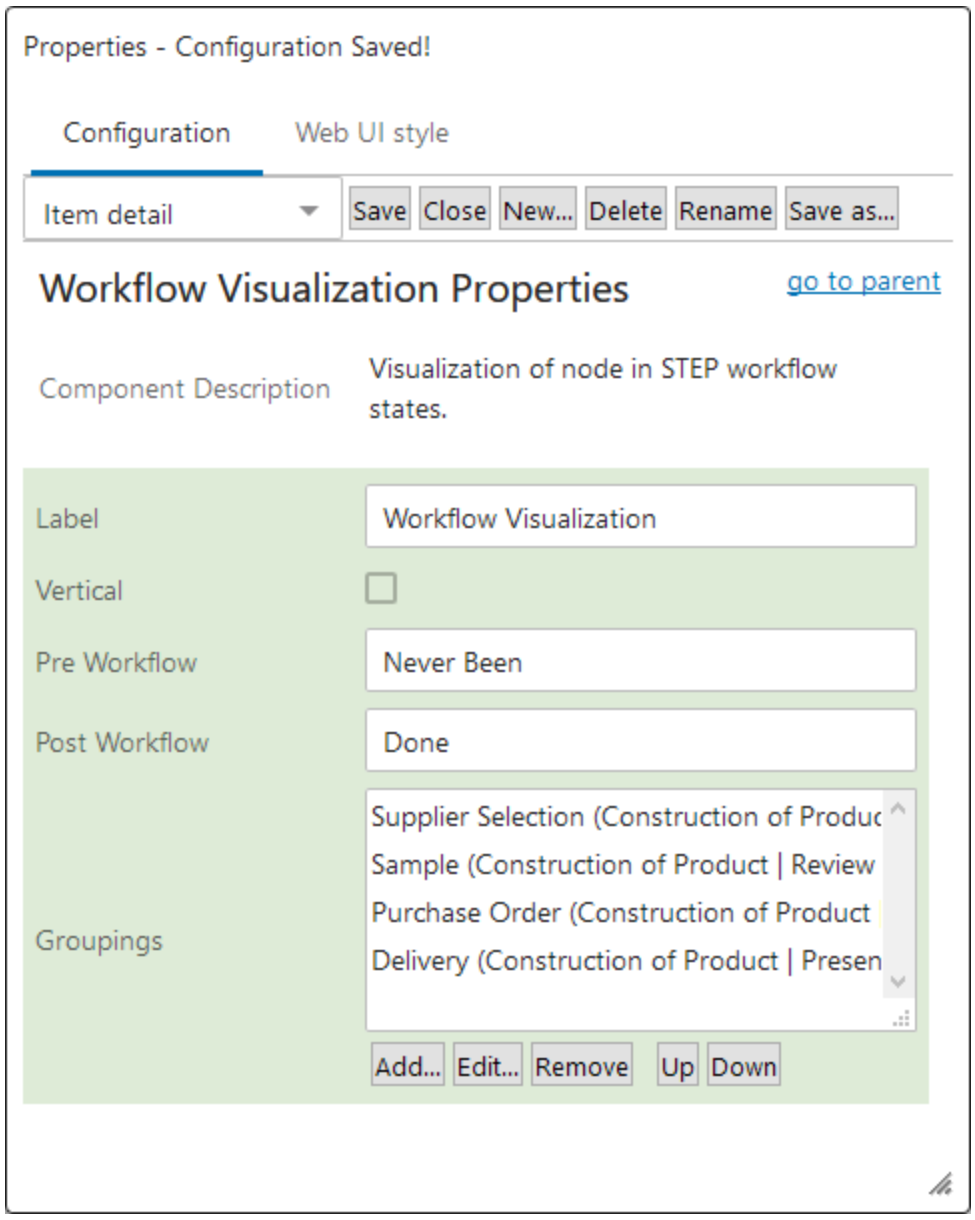


The first work process step for the workflow visualization is now complete.

Note: When creating work process steps for workflow visualization, it is a recommended practice to use only workflows that are valid for the same object type.

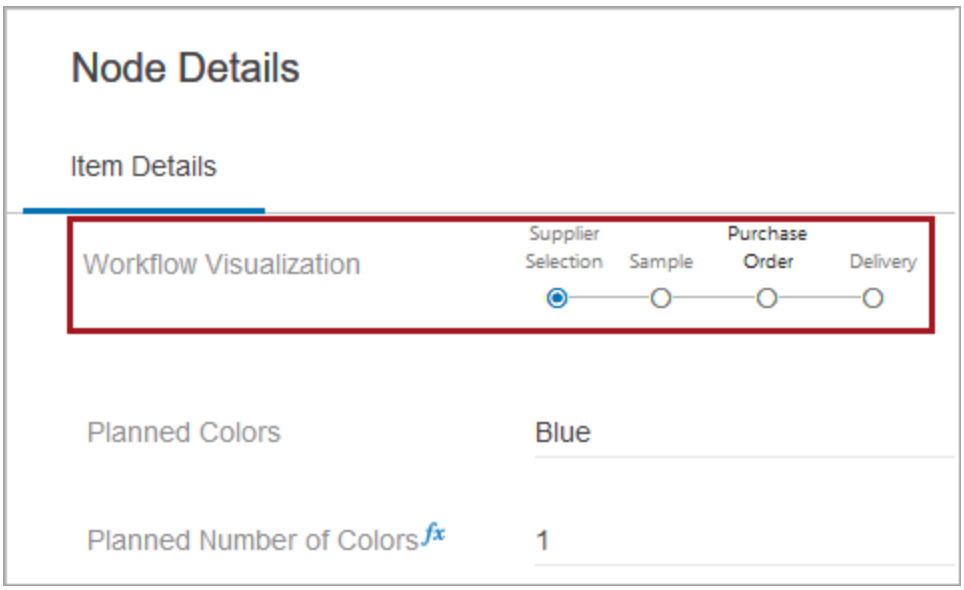


5. Repeat steps one through four to add as many workflow visualization work process steps as needed. Work process step are displayed in the Web UI in the sequence configured in the designer. If the order needs to be altered, use the Up and Down buttons.



6. When all needed work process steps are finished, click **Save** and **Close**.

If configured correctly, clicking on an object displaying on a Node Details screen in which the workflow visualization has been configured will display the configured workflow visualization tracker.



See the **Using Workflow Visualization** topic in this documentation for an example.

Note: It is recommended practice to create workflows strategically before mapping any states to workflow visualization work process steps. If a particular state does not require mapping to a workflow visualization work process step, it may be best to include that state in a cluster, and map the cluster to a workflow visualization work process step. This is due to the fact that if one or more states in the relevant workflows are unmapped, the user risks seeing a false data reading. For any workflow state not mapped to a workflow visualization work process step, when an object enters this state, the workflow visualization will display as if it is completed and show the default label or manually-entered text set in the Post Workflow parameter field of the Web UI designer instead of the workflow visualization tracker. Then once the object enters into a workflow state that is mapped to a work process step, the workflow visualization will once again display the object in a work process step in the workflow visualization tracker. To aid in avoiding this, workflow designers should consider using cluster states. For more on creating workflows and cluster states, see the Creating A Workflow topic in this documentation.

Using Workflow Visualization

Once the workflow visualization component is successfully configured, users may use the workflow visualization tracker to review an object's progress in one or multiple workflows. To understand how the workflow visualization tracker works, read the following section.

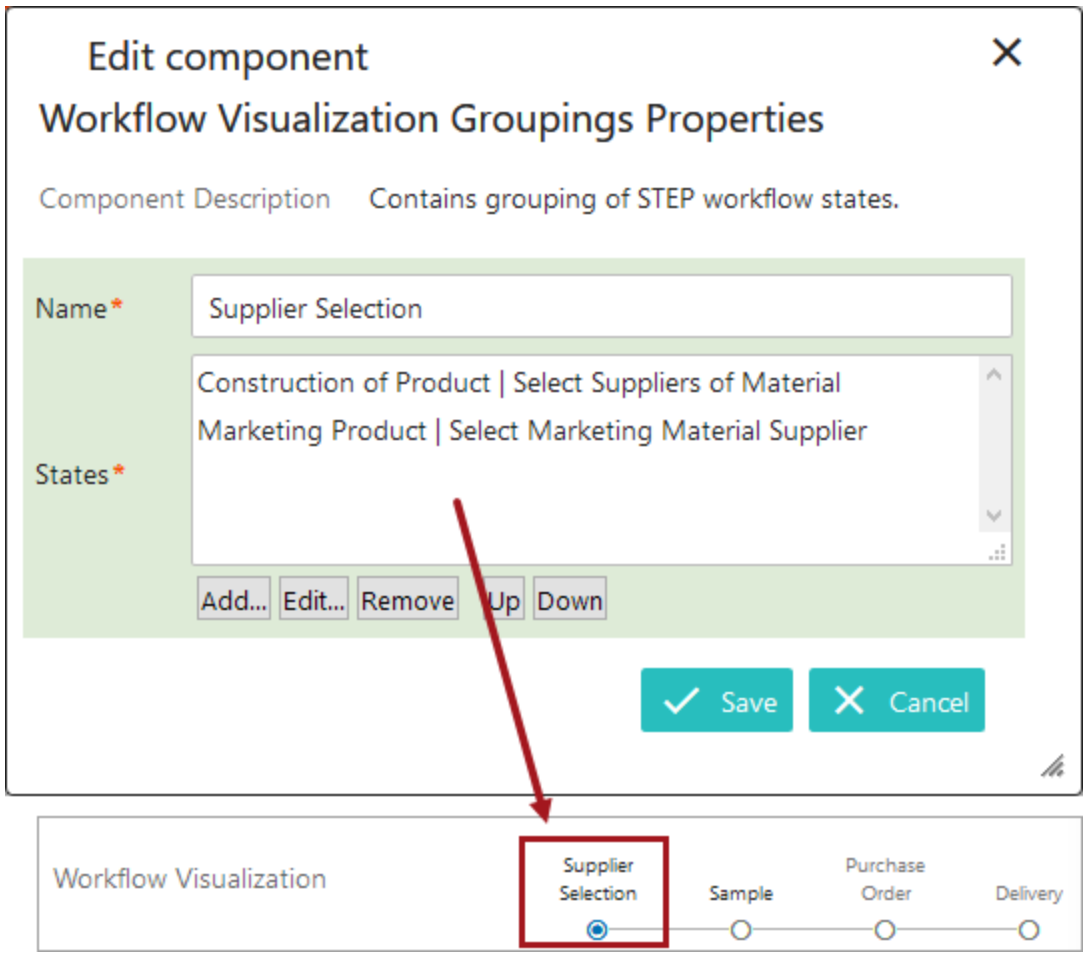
Workflow Visualization Tracker

The workflow visualization tracker is comprised of defined work process steps. The number of work process steps are defined in the designer and depend on the number of workflow states or cluster states that need to be mapped for visibility. For more information on how to create workflow visualization work process steps, see the **Workflow Visualization** topic in this documentation.

In the example below, a workflow visualization is comprised of two workflows:

- Marketing Product
- Construction of Product

Each of these workflows has four states. Each state is mapped, in order, to four workflow visualization work process steps. An example of the first workflow process step is shown below.



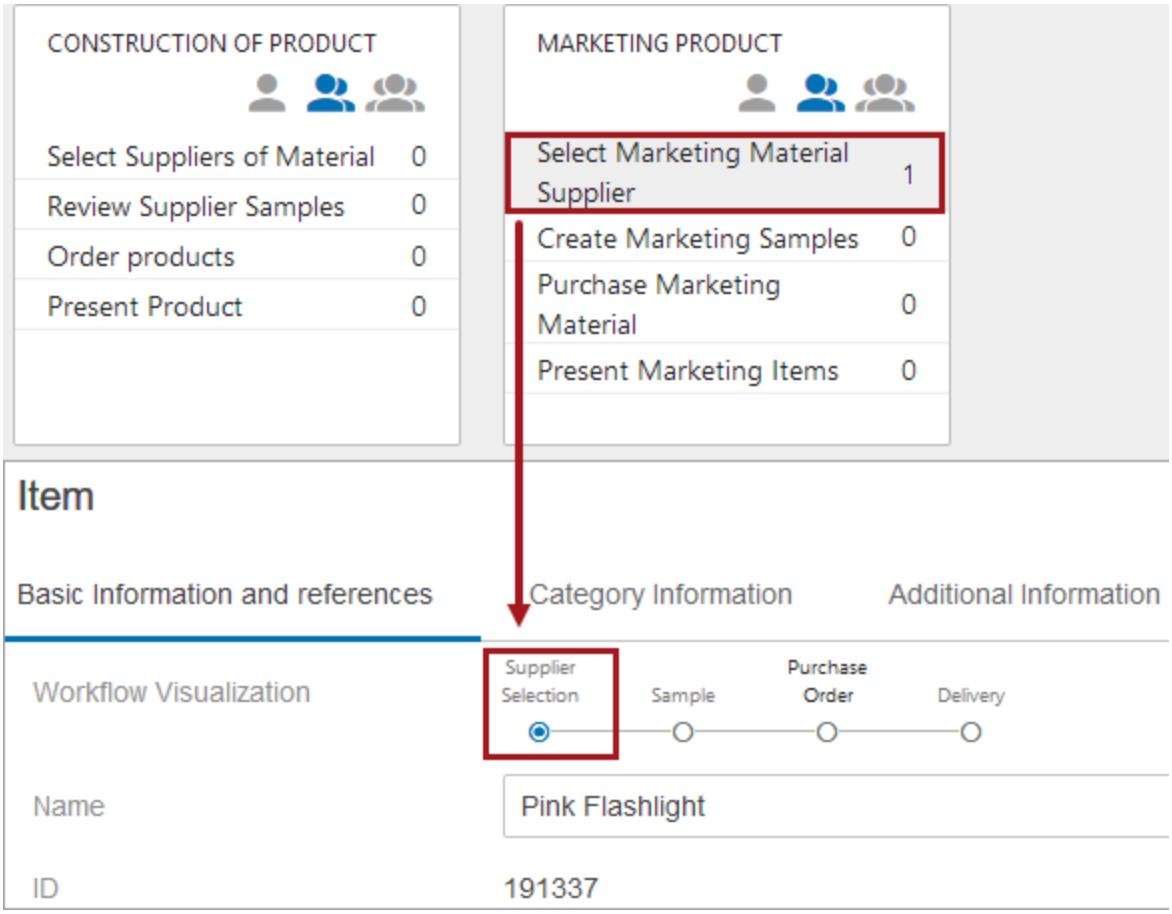
For more on how to map work process steps, see the **Workflow Visualization** topic in this documentation.

Tracking an Object Through a Workflow Visualization Tracker

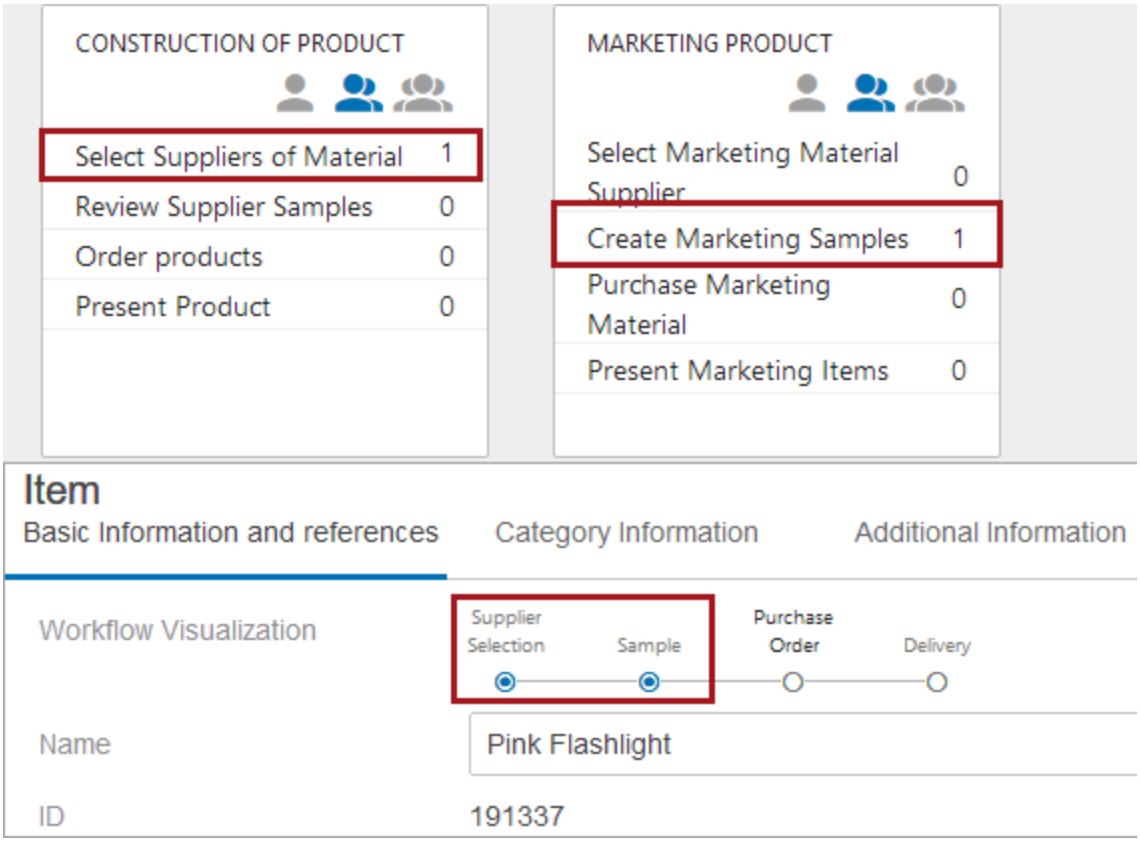
Using the workflow visualization described above, the object 'Pink Flashlight' will be tracked through the workflow visualization tracker.

1. If the 'Pink Flashlight' product has not been initiated into any workflow state that has also been mapped to a workflow visualization work process step, the workflow visualization tracker does not display. What displays in its place is the text added into the workflow visualization component's Pre Workflow field (or the default value, 'Never Been').

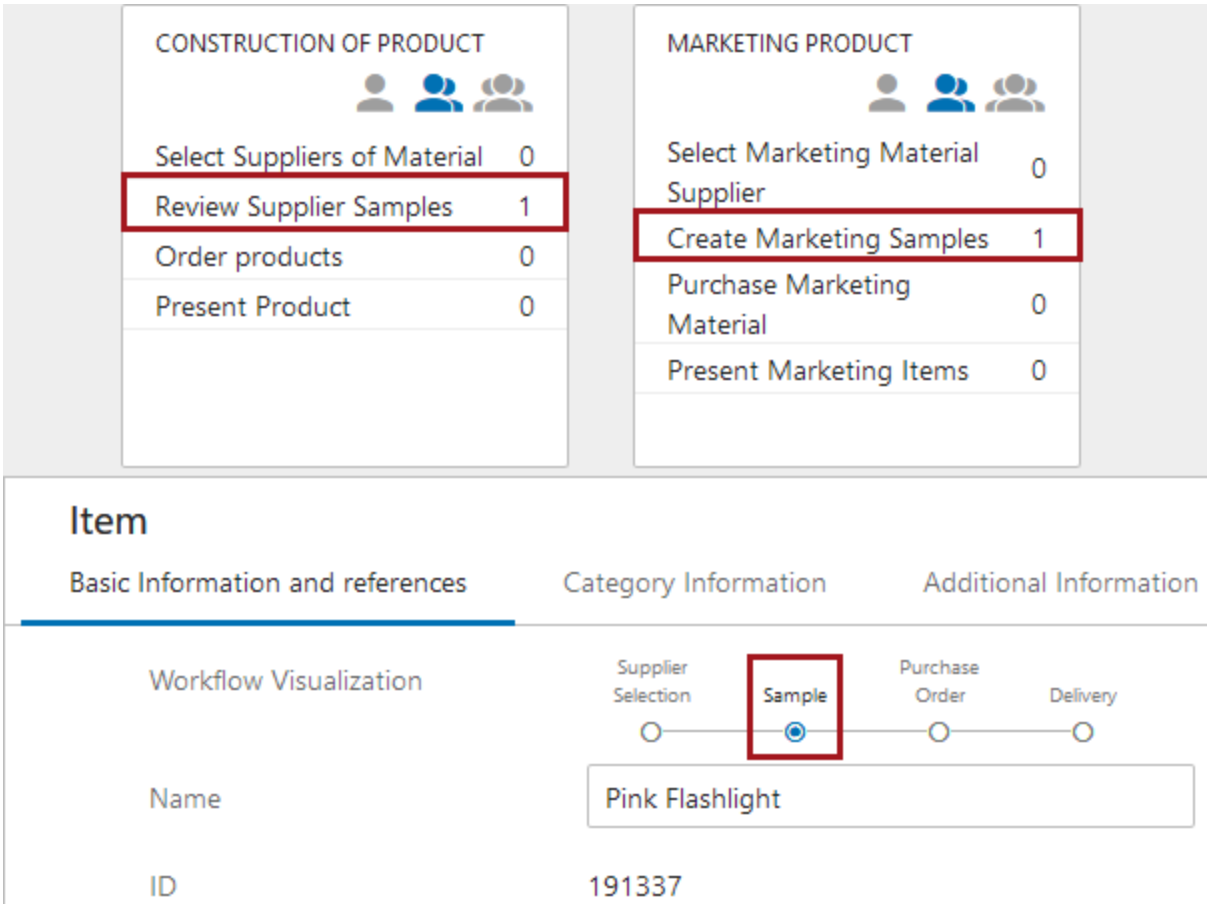
2. Once the 'Pink Flashlight' enters into one of the workflow states mapped to the first work process step, the workflow visualization tracker will display and highlight the first work process step.



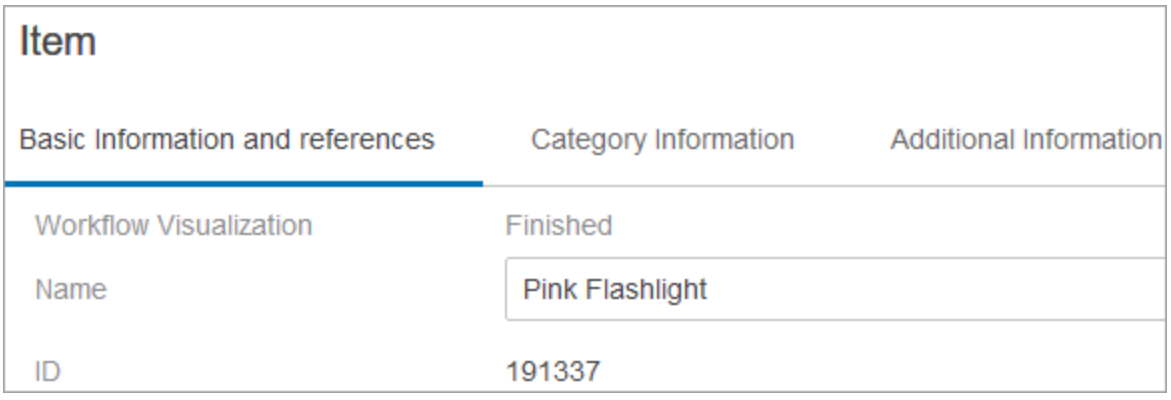
3. The 'Pink Flashlight' then enters into state one of the 'Construction of Product' workflow, but moves to state two in the 'Marketing Design' workflow. Because state two is mapped to workflow visualization step process two, the workflow visualization tracker will show the object as existing in both work process steps one and two.



After the 'Pink Flashlight' completes the first state in the 'Construction of Product' workflow, and in turn exits all states mapped to the first workflow visualization process step, the workflow visualization tracker no longer shows the product as existing in the first work process step. Instead, if the 'Pink Flashlight' is in the second states of both the 'Marketing Product' and 'Construction of Product' workflows, then only process step two will be highlighted.



4. After the 'Pink Flashlight' has completed all states from all workflows mapped to the workflow visualization work process steps, the tracker will no longer display. What displays in its place is the text added into the workflow visualization component's designer's Post Workflow field, (or the default value, 'Finished').



Workflow Mandatory Attributes in Web UI

It is often necessary that attributes or whole groups of attributes are mandatory for a state or transition in a STEP Workflow. This means that the object can only pass further in the workflow if the indicated attributes have values. To facilitate this, the relevant mandatory attribute groups and/or attributes can be indicated directly in the STEP Workflow Designer, with mandatory indications being enforced in both the workbench and Web UI.

This simplifies the configuration within the workflow itself, enabling business users to steer the Web UI and Smartsheets behavior for end-users without requiring use of the Web UI Designer.

For more information on how to setup these attributes in a workflow, see **Mandatory Attributes in Workflows** in the **STEP Workflows** documentation.

For information about how conditionally mandatory attributes are handled in Web UI, see the **Conditionally Mandatory Workflow Attributes** section of the **STEP Workflows** documentation.

Handling Workflow State and Transition Mandatory Attributes in Web UI

Web UI screens must be configured to include all mandatory attributes. If not, end users will receive errors that they cannot correct. Mandatory attributes set on a Web UI screen are only honored if the 'Submit Action' has 'Enforced Validity' checked within the component properties.

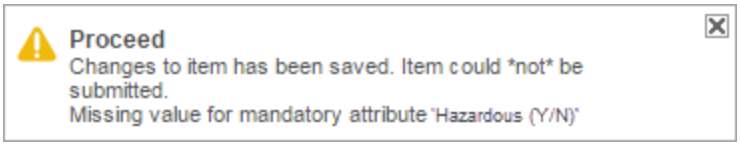
State mandatory attributes are checked prior to transition mandatory attributes. In the case that both are used, end users will first have to correct state mandatory attributes before transition mandatory attribute errors are displayed.

Note: References listed in attribute groups are not supported for use in workflow state and transition mandatory attributes (e.g. selecting an attribute group that includes a reference will not cause that reference to be considered mandatory).

Web UI support of mandatory attributes requires the use of Attribute Value or Attribute Value Group Web UI components. To make an attribute mandatory, they must be added on the appropriate Properties dialog via the Mandatory parameter, as described in the following topics:

- Attribute Value Component
- Attribute Value Group Component

Enforcement of the mandatory attributes occurs in the Web UI, with errors being displayed to the user if an attempt to transition the attribute is made without all mandatory attributes being populated.



Any mandatory attributes are indicated in the Web UI with an asterisk. Those that are mandatory on transitions, rather than states, do not show an asterisk until the user has attempted to submit the object to the next state in the workflow.

Additionally, when using tab pages within a Node Details screen type, if there is any kind of error that impacts the data displayed on a tab (a validation error or missing mandatory value), then a yellow line is displayed directly under the tab name. The underline serves as an easy notification to users that attention is required on a particular tab page or on multiple tab pages. No configuration is needed to turn on this feature.

Important: It is important to consider how mandatory attributes interact with conditional attributes.