

STEP[®] Trailblazer

BULK UPDATES USER GUIDE

Release 9.0 MP5 (November 2018)

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Bulk Updates

Bulk update is an efficient way of updating multiple objects in a single operation, and it is available on the majority of objects in Tree or System Setup that have an editor. A user can also run the bulk update process on a collection, on a search result, or multiple selected objects.

The Bulk Update wizard guides a user through the process, and ensures all necessary settings and data is provided to run the update.

Setup Requirements

Setting up and using a bulk update involves the following steps:

1. Determine the method required to start the Bulk Update wizard as described in **Creating a Bulk Update**.
2. In the wizard, choose a previously saved configuration or create a new one as described in **Bulk Update Configuration**.
3. In the wizard, choose one or more operations that will run during the update as described in **Bulk Update Operations**.
4. In the wizard, supply the required parameters as described in **Bulk Update Parameters**.
5. In the wizard, review the expected results of the update as described in **Bulk Update Preview**.
6. In the wizard, set the required options and run the bulk update as described in **Bulk Update Advanced**.

Additional Information

The following information is useful once a bulk update is created or run:

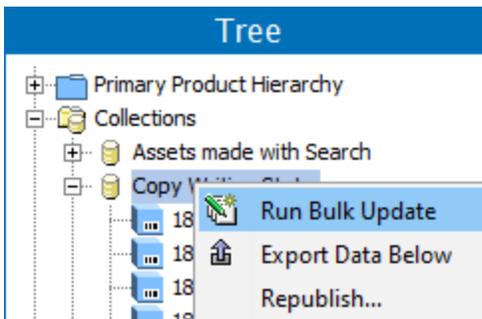
1. Monitor a bulk update through a background process as described in **Monitoring Bulk Updates**.
2. Schedule a bulk update as described in **Scheduling Bulk Updates for Collections**.

Creating a Bulk Update

The bulk update functionality allows a user to easily update a large number of objects in a single operation.

To perform a bulk update:

1. Determine the data that should be updated.
2. Use one of the following methods to select data to be updated and launch the Bulk Update wizard.
 - **Run on all objects in a single collection or multiple collections:** In Tree, select one or more collections, right-click and choose **Run Bulk Update**.

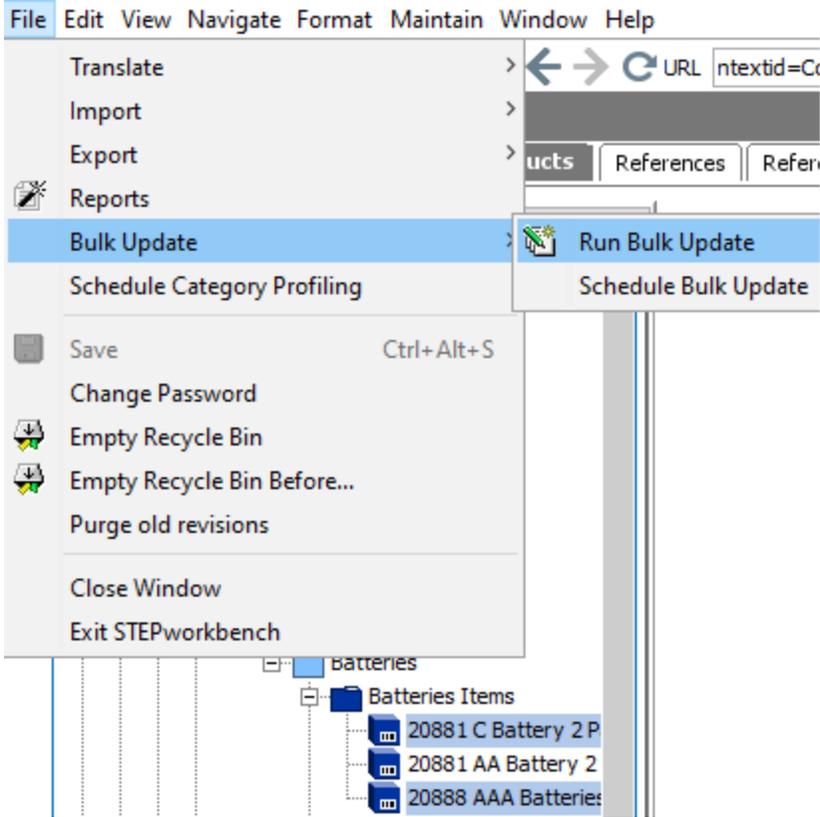


- **Run on a single or multiple selected objects in Tree or System Setup:** Select one or more of the objects defined in the following table, then from the menu choose File > Bulk Update > **Run Bulk Update**.

Note: To run a saved bulk update configuration (which loads the operations and settings) first start the wizard, and then choose the existing configuration on the Configuration step shown below.

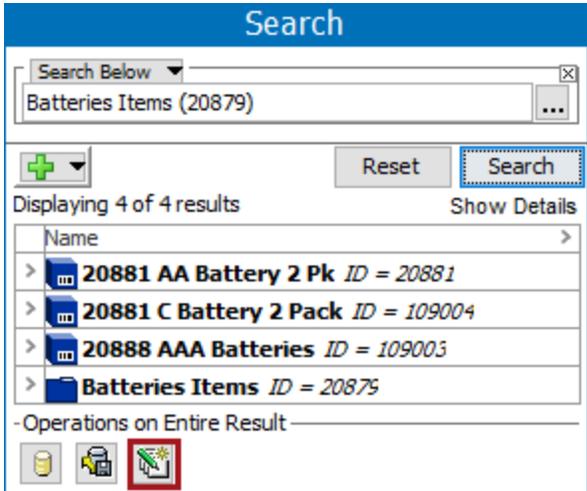
Tree Objects	System Setup Objects	
<ul style="list-style-type: none"> • Assets • Classifications • Collections • Configurations • eCatalogs • Entities • Index Words • Products • Publication groups • Publication object sections 	<ul style="list-style-type: none"> • Attributes • Attribute Transformations • Asset Importer • Change Packages • Completeness Metrics • Event Processors • Event Queues • Gateway Endpoints • GDSN- Data pool- Receiver or publisher • Global Business Rules 	<ul style="list-style-type: none"> • List of Values • Match Codes and Matching Algorithms • Outbound Integration Endpoints • Tables • Tags • Units • Users and Groups • Web UIs • Workflows • Workflow Profiles • Reference types / link types

Tree Objects	System Setup Objects	
<ul style="list-style-type: none"> DTP documents in the publication hierarchy 	(actions, conditions, and libraries) <ul style="list-style-type: none"> Inbound Integration Endpoints Keys 	<ul style="list-style-type: none"> Object type & structures (asset, classification, publication, setup group, etc.) Context -Dimension points

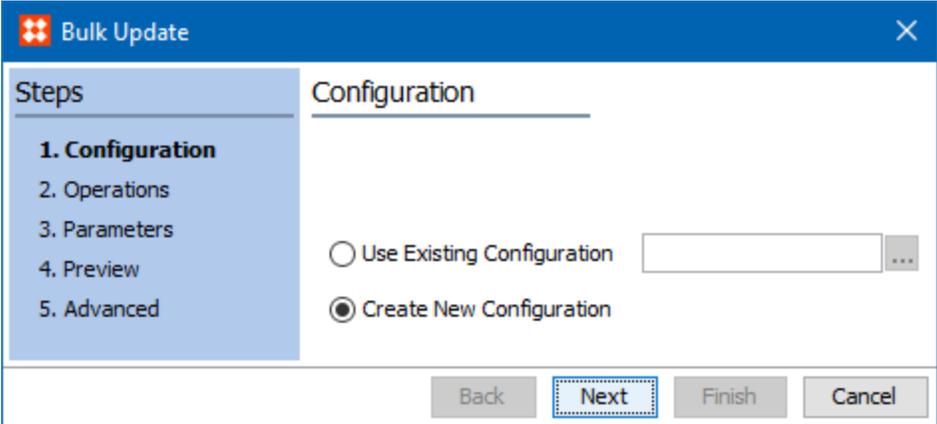


- **Run on search results:** Perform a search, and click the **Bulk Update** button ().

For more on the Search tab in workbench, see the **Search** topic in the **Getting Started / User Guide** documentation.



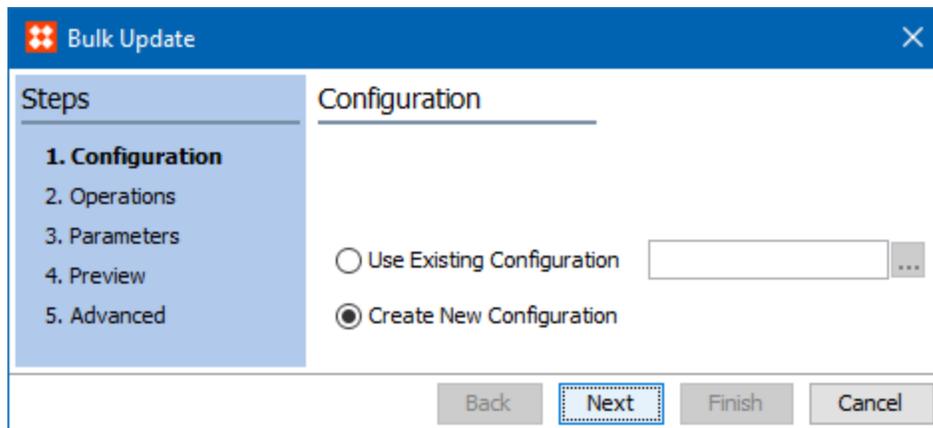
3. The Bulk Update wizard displays and can involve the following steps:



- **Configuration** allows you to choose a previously saved configuration or create a new one.
- **Operations** allows you to choose one or more operations that will run during the update.
- **Parameters** allows you to supply any required parameters.
- **Preview** allows you to review the expected results of the update.
- **Advanced** allows you to set the required options and start the background process that runs the bulk update.

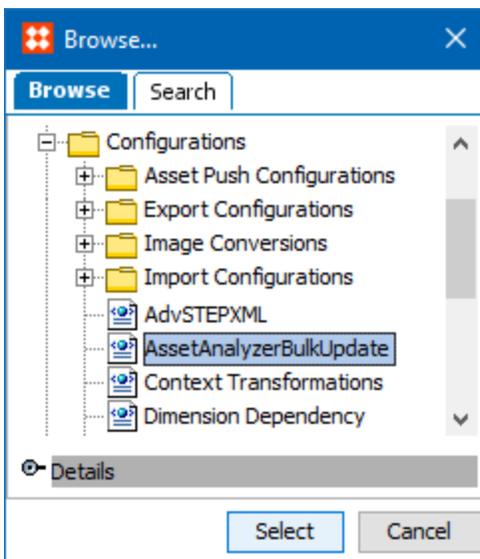
Bulk Update Configuration

Specify the configuration that should be run for the bulk update.



1. Choose the option for the desired configuration:

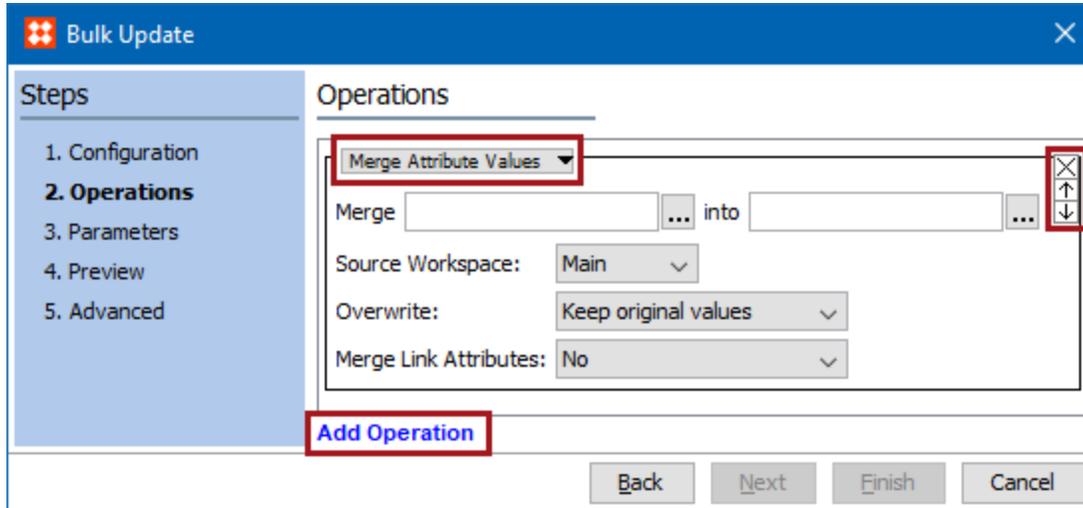
- Click the 'Use Existing Configuration' radio button to use a saved bulk update configuration, then click the ellipsis button (...) to display the configuration selection dialog. Select the relevant configuration and click the **Select** button.



- Click the 'Create New Configuration' radio button to create a new configuration.
2. Click the **Next** button to display the **Bulk Update Operations**.

Bulk Update Operations

Specify the operations the bulk update should perform on the selected objects. When an existing configuration is selected, all saved operations are displayed.



1. Add or edit the required operations as follows:

- For a new configuration, the default 'Merge Attribute Values' operation is displayed. Select the desired operation from the dropdown as defined in the individual topics that follow this topic.
- Click the 'Add Operation' link to configure an additional operation.
- Click the delete button (X) to remove an operation.
- Click the up and down arrow buttons (↕) to change the order of the operations applied to the update.

Important: Ensure that the operations are listed in the order that they need to be performed—from the top down. This means that when multiple operations are included, those run first can be overwritten by operations that run later. If one operation fails for an object (for example, due to validation base type mismatch), all changes to the object will be rolled back and the object will be left as if was prior to applying the Bulk Update.

2. Click the **Next** button to display the **Bulk Update Parameters**.

Attribute Values: Merge Attribute Values Operation

Copies the values from the first selected attribute to another selected attribute, in the current workspace, based on the parameter settings. For dimension dependent attributes, the copy is performed across all dimensions or applicable combinations of dimensions.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

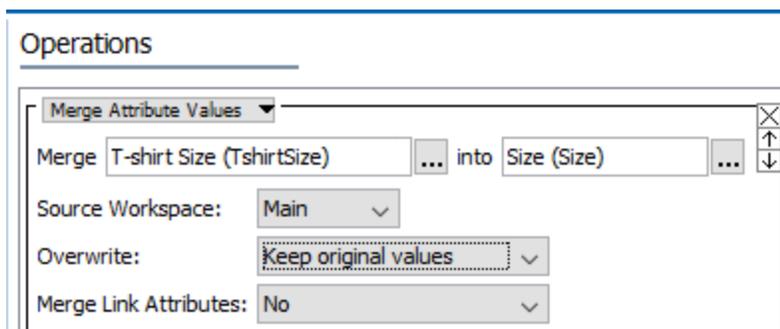
Verify Attributes for Merge

This operation can also be started from System Setup by selecting an attribute, then right-click and select Merge Attribute Values. For details about verifying the attributes before performing this operation, see the **Merging Attribute Values** section of the **System Setup / Super User Guide**.

To merge attribute values for only some objects, go to the **Search** tab, and create Search Results of the objects to merge. Then either click the **Collections** button to save the results as a collection (which can be used for repeated updates), or click the **Bulk Update** button and click **Next** to display the Operations page and the following Merge Attribute Values parameters.

Configuration

1. Select **Merge Attribute Values** from the dropdown.



2. In the 'Merge' parameter, click the ellipsis button (...) to display the Select Attribute dialog, choose the attribute to copy values from, and click the **Select** button.
3. In the 'into' parameter, click the ellipsis button (...) to display the Select Attribute dialog, choose the attribute to copy values to, and click the **Select** button.
4. For the 'Source Workspace' parameter, use the dropdown to select the workspace that holds the values to be copied to the target, based on the other parameters. Values are always pasted into the Main workspace.

Consider the following example data, and assume we will choose to Overwrite existing values (as described below). Selecting the Source Workspace = Main will result in writing the T-shirt Size value of S, while selecting Source Workspace = Approved will write the XS value.

	Main	Approved
ID	18210	18210
Name	18210 M B	18210 M B
Size	small	extra small
T-shirt Size	S	XS

5. For the 'Overwrite' parameter, choose an option to determine when to write to the target attribute. Validation errors are displayed on the Preview page when a value cannot be modified.

Consider the following data and the effects of the options as shown in the Preview images below. 'T-shirt Size' is the source attribute and 'Size' is the target attribute:

ID	Name	T-shirt Size	Size
18210	18210 M B	S	small
18212	18212 L B	S	
18213	18213 M O		Medium
18216	18216 L O		

- **Keep original values** means the source value is only copied to the target attribute when the target attribute is blank. If the target attribute contains a value, the target value is not changed. Notice that the only value changed in this scenario is for object 18212 L B, since the source object had a value and the target value was blank. Since the other objects either had values for the target or the source was blank, none of them were modified.

Preview

Object		Merge Attribute [Size]
18210 M B	Old	[small]
	New	[small]
18212 L B	Old	
	New	[S]
18213 M O	Old	[Medium]
	New	[Medium]
18216 L O	Old	
	New	

- **Overwrite existing values** means the source value overwrites the target value, except when the source attribute is blank. If the source attribute is blank, the target value is not changed. Notice that two values changed in this scenario: object 18210 M B had its value overwritten since a value existed for the source, and object 18212 L B was overwritten since the source object had a value and the target value was blank. Objects 18213 M O and 18216 L O both had blank source values, so the target values were not overwritten.

Preview

Object		Merge Attribute [Size]
18210 M B	Old	[small]
	New	[S]
18212 L B	Old	
	New	[S]
18213 M O	Old	[Medium]
	New	[Medium]
18216 L O	Old	
	New	

- For 'Merge Link Attributes' parameter, if the selected attributes are both used as an attribute on a reference, a product classification link, or an attribute link, merging of those values are based on the Yes or No set in this parameter, as well as the other parameters on the operation. This option is not relevant when values do not exist on references for the selected attributes.

For example, consider the following values for the attributes 'Qty of Next Lower Package' and 'Qty of Next Higher Package' on the Case to Child reference.

Source	Reference Type	Target	Qty Of Next Lower Package	Qty of Next Higher Package
T-shirt, case (L B)	Case To Child	18212 L B	48	96
T-shirt, case (L O)	Case To Child	18216 L O	24	
T-shirt, case (M B)	Case To Child	18210 M B		36
T-shirt, case (M O)	Case To Child	18213 M O		

Setting the operation parameters as 'Qty of Next Lower Package' for the source, 'Qty of Next Higher Package' for the target, using the Overwrite existing values, and setting Merge Link Attribute = Yes results in this preview of resulting values:

Preview

Object >	>	Merge Attribute [QtyNextHigherPackage] >
> T-shirt, case (L B)	Old	[18212(96)]
> T-shirt, case (L B)	New	[18212(48)]
> T-shirt, case (L O)	Old	
> T-shirt, case (L O)	New	[181951(24)]
> T-shirt, case (M B)	Old	[18210(36)]
> T-shirt, case (M B)	New	[18210(36)]
> T-shirt, case (M O)	Old	
> T-shirt, case (M O)	New	

For more information about attributes on references, see the **Product Attribute Link Type** section of the **System Setup / Super User Guide** documentation.

Note: The Merge Attribute Values operation does not delete any attributes, it can only update values. If desired, manually delete the source attribute once you confirm the merged data.

Attribute Values: Set Value Operation

Sets the value of the selected attribute based on a value entered manually or via a function.

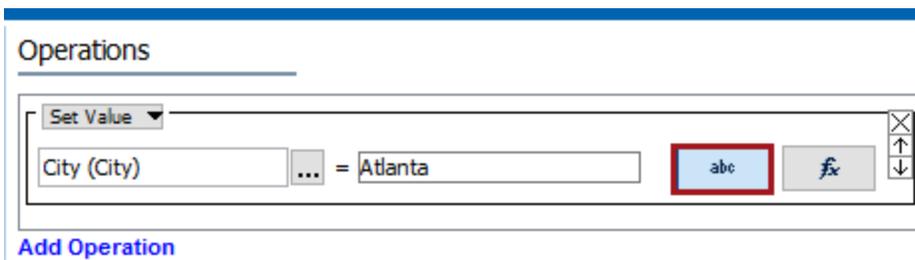
For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

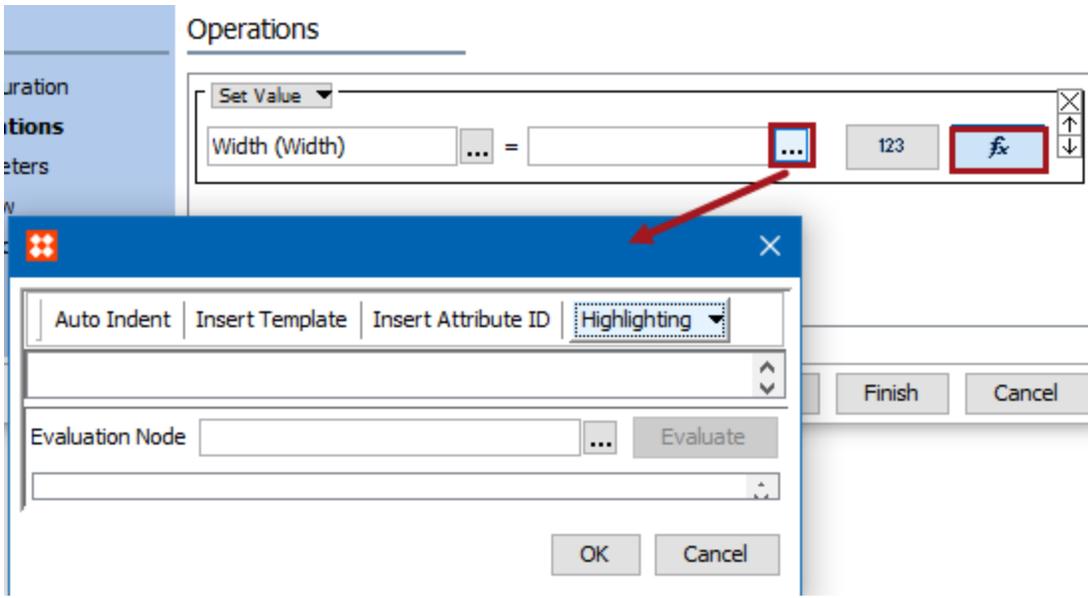
1. Select **Set Value** from the dropdown.
2. For the first parameter, click the manual ('abc') button or the function ('fx') button and then click the ellipsis button (...).

Note: The selected attribute dictates the label on the manual button. In the image below, the selected attribute requires a text value and so the label is 'abc.' If the selected attribute is numeric, '123' is displayed, and so on for each validation base type.

- For manual selection, the Select Attribute dialog is displayed, select an attribute, and click **Select**.



- For function selection, click the ellipsis button (...) displayed near the text field to display the Function Editor dialog. Add a function and evaluate, then click **OK**. See the **Using Function Editor** topic within the **Resource Materials** online help for more information on writing functions.
3. For the second parameter (=), click the manual ('abc') button or the function ('fx') button.
 - For manual selection, type the value required for the selected attribute into the text field.
 - For function selection, click the ellipsis button (...) displayed near the text field to display the Function Editor dialog. Add a function and evaluate, then click **OK**. See the **Using Function Editor** topic within the **Resource Materials** online help for more information on writing functions.



Data Containers: Update Data Containers Operation

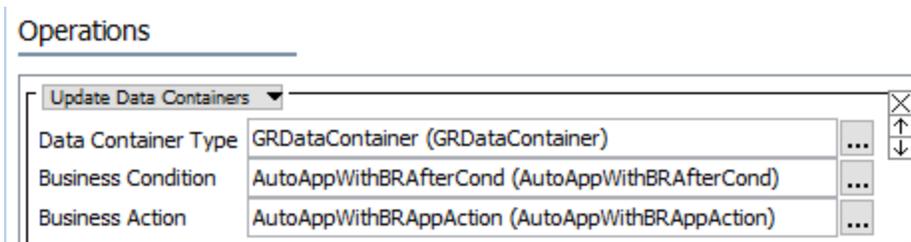
The following option is available for Data Containers. For more information on Data Containers, see the **Data Containers** topic in the **System Setup / Super User Guide** documentation.

This operation allows users to run business actions on selected data container objects. When executing this operation, users can filter which data container objects to work with by specifying a business condition and/or data container type, before running the specified business action on those objects.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Update Data Containers** from the dropdown.



2. In the 'Data Container Type' parameter, (optional) click the ellipsis button (...), select the data container type this operation should apply to, and click **Select**.
3. In the 'Business Condition' parameter, (optional) click the ellipsis button (...), select the data container type this operation should apply to, and click **Select**.
4. In the 'Business Action' parameter, (required) click the ellipsis button (...), select the data container type this operation should apply to, and click **Select**.

Data Quality: Generate Match Codes Operation

Use this operation to generate match code values for the selected objects of the bulk update.

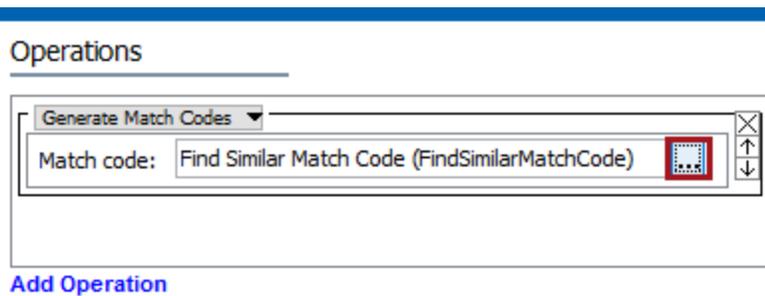
For more on match codes and how to create them see the **Configuring Match Codes** topic in the **Matching and Linking** documentation.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select objects for the bulk updated and open the Bulk Update wizard.
2. Select **Generate Match Codes** from the dropdown.
3. For the 'Match code' parameter, Click the ellipsis button (...), select the match code to use, and click **Select**.

Note: Collection objects should match to the match code object type and category.



Data Quality: Match Duplicates Operation

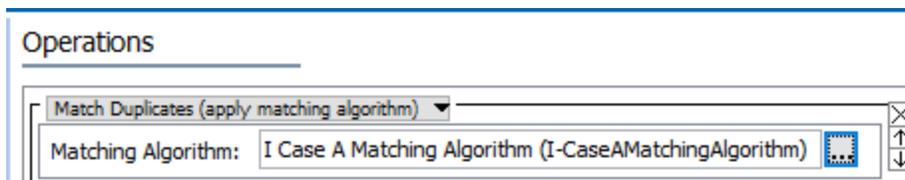
DEPRECATED. Instead, use 'Send Republish Event' to Event Processor configured to apply matching using user's matching algorithm, as defined in the **Send Republish Event Operation** topic.

This option applies the selected matching algorithm on selected objects for the bulk update. This includes generating a list of possible duplicates and a score that indicates how identical the objects are. And if a golden record matching algorithm is used it will also update golden record links and re-apply survivorship rules.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Match Duplicates (apply matching algorithm)** from the dropdown.



2. For the 'Matching Algorithm' parameter, click the ellipsis button (...), select the algorithm to use, and click **Select**.

Data Quality: Standardize Address Operation

This operation allows for different standardization actions to be taken on addresses by using the Loqate solution. If applicable, CASS (Coding Accuracy Support System) operations can also be performed to apply a stricter level of address validation to US-based addresses.

Standardize Address bulk update operations are valid for execution on entities with flat attributes, e.g. Address object types and address Data Containers (Data Containers with address attributes).

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Prerequisites

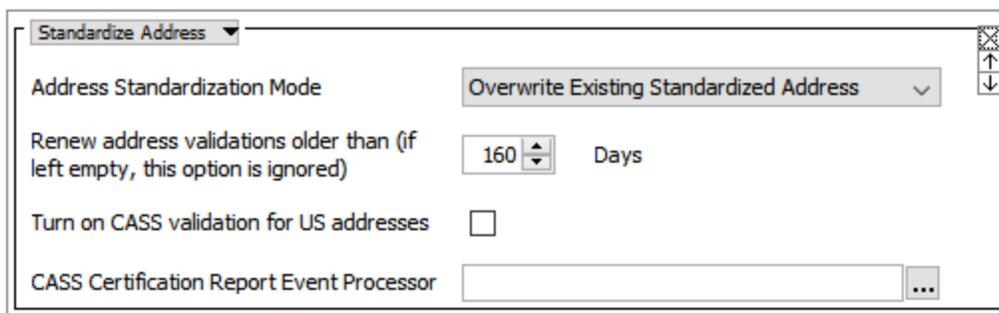
Before a Standardize Address bulk update operation can be run, the following conditions must be met:

- Users must be connected to a Loqate server, either through a cloud API or local API.
- The Address Component Model must already be configured. It is strongly recommended to configure this component model using the 'Easy setup of Address Component Model' wizard. For more information, see the **Address Component Model** section of the **Loqate** documentation.
- To view and use the CASS features, users must:
 - Purchase a CASS license
 - Be connected to Loqate through a *local* API (CASS components will not work with a Loqate Cloud API)
 - Be based in the US, as CASS is not valid outside of the US
 - Configure the CASS Address Component Model. For more information, see the **CASS Address Component Model** topic in the **Loqate** documentation.

Configuration

This documentation topic describes the options available when configuring a Standardize Address bulk update operation. For more detailed information on the overall Loqate and CASS solutions, see the **Loqate Integration** section of the **Data Integration** documentation.

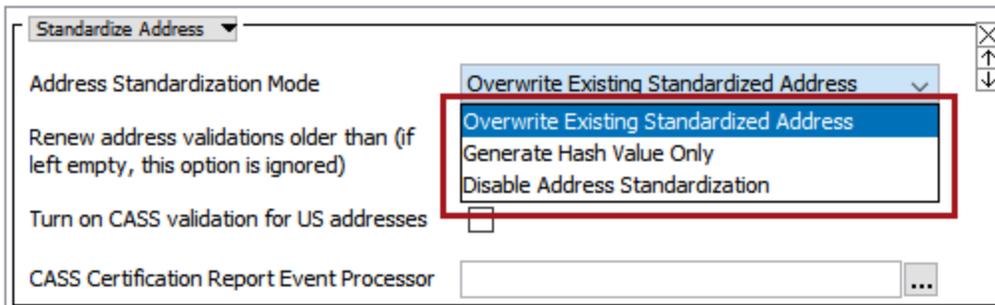
1. Select **Standardize Address** from the dropdown.



2. Make selections for the parameters as defined in the following sections.

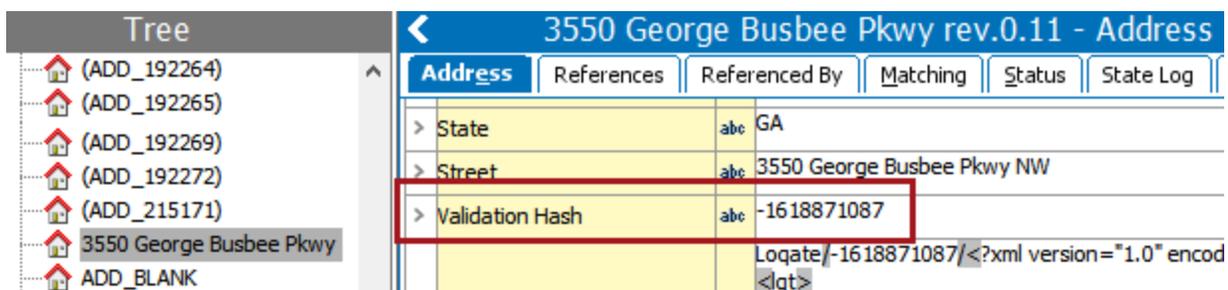
Address Standardization Modes Parameter

Three options are available from the Address Standardization Mode dropdown list.



- **Overwrite Existing Standardized Address:** Overwrites an existing standardized address by making a call to Loqate, which returns the latest standardized address and overwrites the existing one.
- **Generate Hash Value Only:** When this option is chosen, the business action will recalculate the 'Validation Hash' value without making a call to Loqate. The hash value is based on the address input fields only and is calculated and maintained by STEP.

This option is used in cases when pre-standardized addresses, which are known to be correct, are imported. Because the addresses are new, no hash value is present. When the 'Generate Hash Value only' action is run, STEP generates a hash value and places it into the 'Validation Hash' field. The hash value lets STEP know that the addresses are new, ensuring that they are not picked up and restandardized by STEP shortly after they are imported. For users of the Loqate Cloud API solution, this saves money by avoiding unnecessary calls to Loqate, since users are charged a fee for every call made to Loqate.



- **Disable Address Standardization:** This option is primarily useful for users who import addresses in bulk, either manually or by using an inbound integration. If a business rule is in place that runs a Standardize Address bulk update on import, then selecting 'Disable Address Standardization' is a simple way to temporarily turn off automatic address validation on import. This allows users to validate the addresses later.

Renew Address Validations Parameter

The checkbox option **Renew address validations older than** allows for addresses older than a designated number of days to be revalidated. This is useful in case an address was validated an extended period of time ago and the address may no longer be valid. The default number of days is 160. The field is disabled by entering the value '0.'

STEP determines the age of an address by the value present in the 'Validation Time' field.

Tree	Address	References	Referenced By	Matching
(ADD_192268)				</result>
(ADD_192269)				</results>
(ADD_192272)				</qt>
(ADD_215171)				
3550 George Busbee Pkwy	> Validation Time	abc	2017-06-09 09:41:15	
ADD_BLANK	> Zip	t2a	30144	

Important: For users of the Loqate Cloud installation, care should be exercised when using this functionality. Since all addresses older than the specified time period will be revalidated, each additional validation will make a chargeable call to Loqate.

CASS Validation Parameters

Two CASS address validation options are available on the Standardize Address dialog.

- **Turn on CASS validation for US addresses:** If checked, all addresses are sent for standardization to the Loqate Local server integration and also validated against CASS data.
- **CASS Certification Report Event Processor:** If you would also like a CASS certification report generated after using CASS validation on an address, click the ellipsis button (...) and select the relevant CASS certification report event processor from the 'Select Event Processor' dialog. For more information, see the **CASS Certification Report Processing Plugin Parameters and Triggers** section of the **Event Processors** documentation.

Publishing: Check Publication Document for Needs Update Operation

A page will need an update if any elements mounted on the page (for example, attribute values or image references) have changed in STEP since the page was originally saved to STEP.

This operation checks all actual pages saved to the selected publication / section to determine if updates are needed.

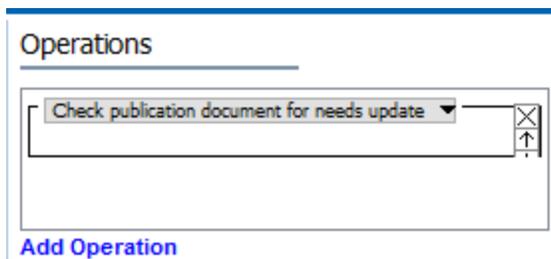
Checking documents for updates from within the STEP Workbench is primarily useful for AutoPage and Flatplanner publications. Since near-identical functionality can be accessed from other locations in the workbench (including right-clicking on a publication or section object in the Tree and clicking 'Check for update needed...'), the use cases and applications for checking documents for updates are detailed in the following publishing-specific topics instead:

- **Updating Documents in AutoPage** in the **AutoPage** documentation
- **Updating Documents in Flatplanner** in the **Flatplanner** documentation

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Check Publication Document for Needs Update** from the dropdown.



2. No parameter configuration is required.

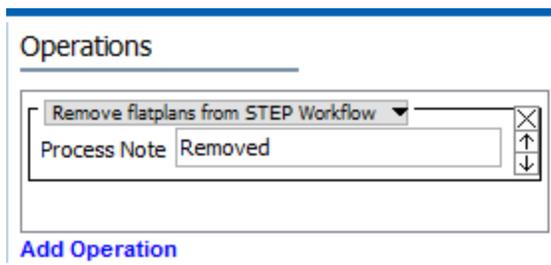
Publishing: Remove Flatplans from STEP Workflow Operation

This operation is legacy functionality (pre-STEP 8.0) from when only one workflow at a time was allowed for planned pages. There is no ability to select a specified workflow.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Remove Flatplans from STEP Workflow** from the dropdown.



2. Type a 'Process Note' to name the background process used.

Note: If only using one Flatplanner workflow, this removes all planned pages from the workflow.

Publishing: Start Flatplans in STEP Workflow Operation

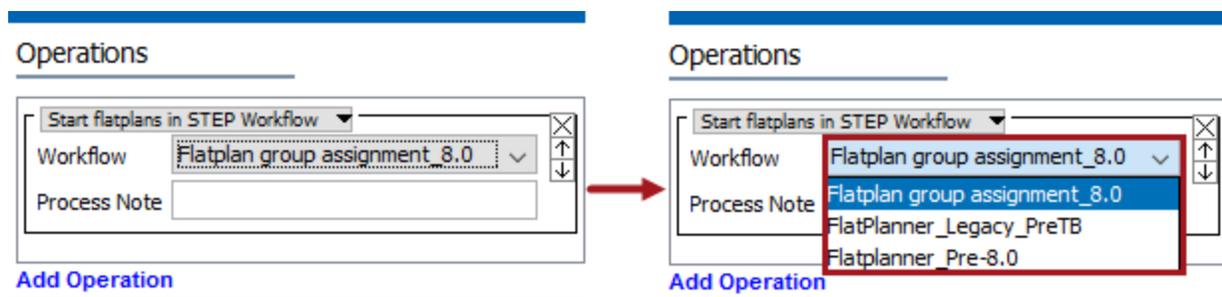
Adds all Flatplanner spreads (planned pages) in the selected publication group, publication, or section into the specified Flatplanner workflow. The bulk update is initiated by right-clicking on the desired publication group, publication, or section. A selection of planned pages can also be chosen for bulk initiation into a Flatplanner workflow by multi-selecting them and going to File > Bulk Update > Run Bulk Update.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Start Flatplans in STEP Workflow** from the dropdown.
2. In the 'Workflow' parameter, select the desired workflow from the dropdown.

Note: Only workflows valid for planned pages are displayed. Flatplans that are already in a workflow are not affected.



3. In the 'Process Note' parameter, type a name for the background process.

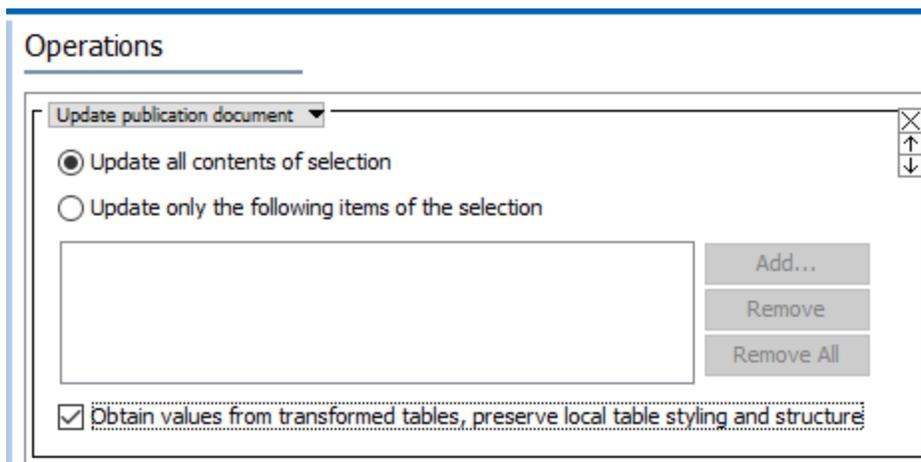
Publishing: Update Publication Document Operation

The 'Update publication document' bulk update option functions almost identically to the **Update** feature that is directly accessed by right-clicking on publication, section, or DTP document objects in the Tree. The selections in the 'Operations' dialog pictured above are identical to those in the 'Update contents of documents' dialog that is accessed through the 'Update' feature. Because of these similarities—and because the 'Update' feature is more commonly used than the bulk update feature to update documents—this feature is detailed in the STEP'n'design documentation instead. See **Updating Documents From the Workbench** in the **STEP'n'design** documentation for more information.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Update Publication Document** from the dropdown.



2. Choose one of these options:
 - **Update all contents of section:** This updates all information on all actual pages saved to the selected publication, section, or DTP document.
 - **Update only the following items of the selection:** Choosing this allows for the selection of specific items to be updated on the actual pages, such as attributes, image references, and table types.

References and Links: Add Attribute Link Operation

The selected attribute will be linked to the collection of valid objects.

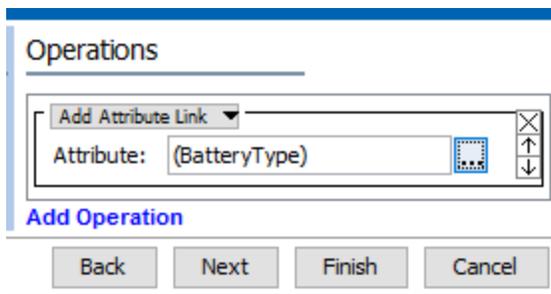
- If the attribute is on an object, it can be viewed on the References tab on the object, under the 'Linked Attributes from Product Hierarchy' flipper.
- If the attribute does not have an editable field (or link) to store data, this option adds a link and allows data to be stored.

For more information on linked attributes see the **Attribute Links** topic in the **System Setup / Super User Guide** documentation.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Add Attribute Link** from the dropdown.



The screenshot shows a dialog box titled 'Operations'. Inside, there is a dropdown menu with 'Add Attribute Link' selected. Below the dropdown is a text field labeled 'Attribute:' containing the text '(BatteryType)'. To the right of the text field is an ellipsis button (...). Below the text field are two small vertical arrows (up and down). At the bottom of the dialog box, there is a blue link labeled 'Add Operation' and four buttons: 'Back', 'Next', 'Finish', and 'Cancel'.

2. In the 'Attribute' parameter, click the ellipsis button (...), select the attribute that will be updated, and click **Select**.

Example

The following images show before and after the 'BatteryType' Add Attribute Link bulk update is run.

References and Links: Automatic Classification Operation

Classifies the selected objects automatically according to a set of rules.

The Automatic Classification functionality is controlled by a component model. For more information, see the **Automatic Classification** documentation.

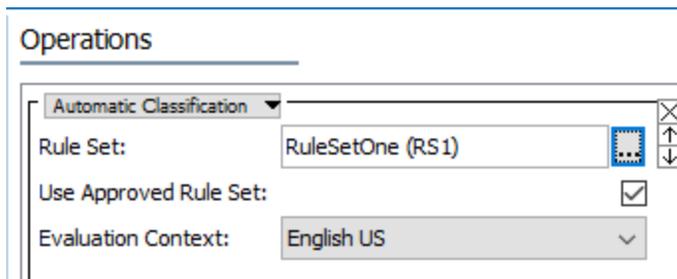
For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Prerequisites

The Rule Set object instance in Tree must be configured per the component model definition.

Configuration

1. Select **Automatic Classification** from the dropdown.



2. For the 'Rule Set' parameter, click the ellipsis button (...), select the rule set, and click **Select**.
3. For the 'Use approved rule set' parameter, when checked, only approved rule sets can be used for this operation.
4. For the 'Evaluation Context' parameter, from the dropdown, select the context in which the rule conditions should be evaluated.

References and Links: Industry Classification Synchronization Operation

This operation allows users to reclassify products to newer eCl@ss, ETIM, or UNSPSC versions. When executing this operation the specified product to classification link type will be overwritten with the new version of the classification hierarchy for all updated products.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Run a search for any products that need their classification links updated to a newer eCl@ss, ETIM, or UNSPSC classification hierarchy, and run the bulk update wizard.
2. Select **Industry Classification Synchronization** from the dropdown.

Operations

Industry Classification Synchronization ▾

Industry standard matcher: eClass ▾

Source classification root: eClass 9.1 (eClass_9.1) ...

Target classification root: eCl@ss 9.1.1 (eClass 9.1.1) ...

Product to classification link type: eClassSEG (eClassSEG) [icon]

3. In the 'Industry standard matcher' parameter, select the relevant industry standard from the dropdown list.
4. In the 'Source classification root' parameter, click the ellipsis button (...), select the classification root node for the original industry classification version, and click **Select**.
5. In the 'Target classification root' parameter, click the ellipsis button (...), select the classification root node for the new industry classification version, and click **Select**.
6. In the 'Product to classification link type' parameter, click the ellipsis button (...), select the product to classification link type the products use to link into the classification hierarchy, and click **Select**.

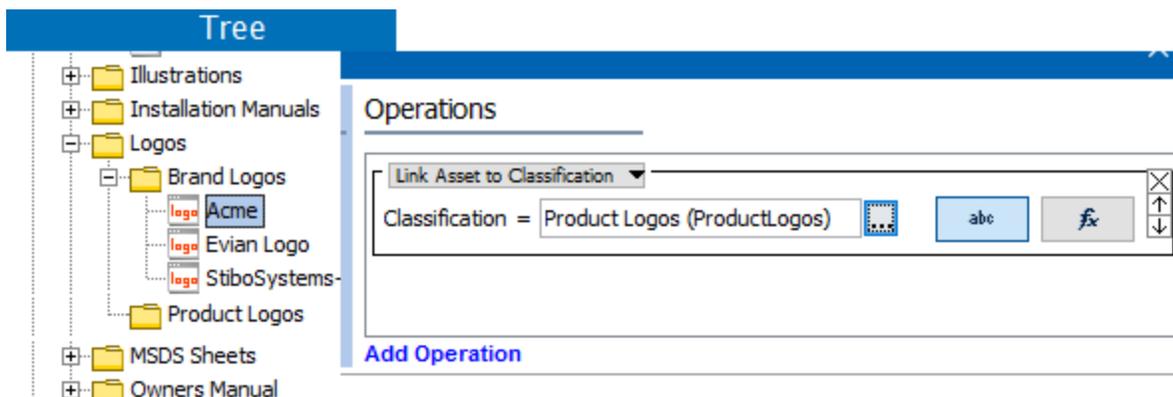
References and Links: Link Asset to Classification Operation

This allows users to link assets to a specified classification.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

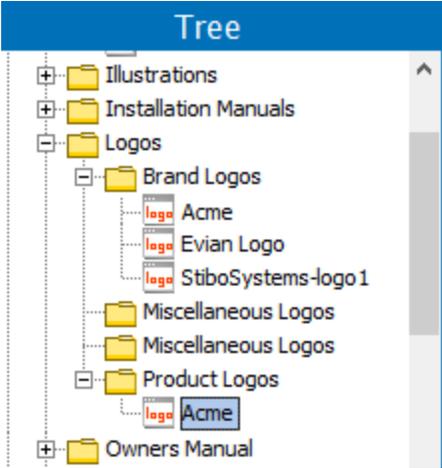
Configuration

1. Select the assets that need to be linked, and run the bulk update wizard.
2. Select **Link Asset to Classification** from the dropdown.



3. In the 'Classification' parameter, click the manual ('abc') button or the function ('fx') button and then click the ellipsis button (...).
 - For manual selection, the Select Classification dialog is displayed, select a classification object, and click **Select**.
 - For function selection, the Function Editor dialog is displayed. Add a function and evaluate, then click **OK**. See the **Using Function Editor** topic within the **Resource Materials** online help for more information on writing functions.

Once the bulk update runs, assets appear under designated classification folder.



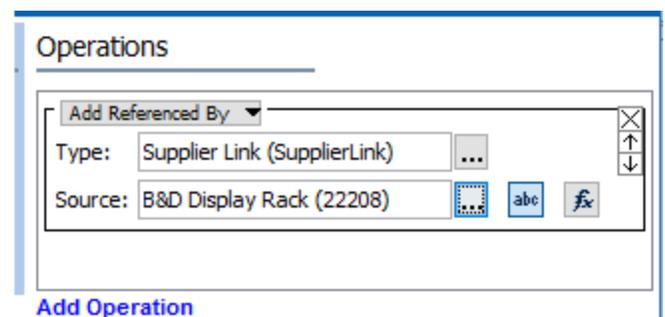
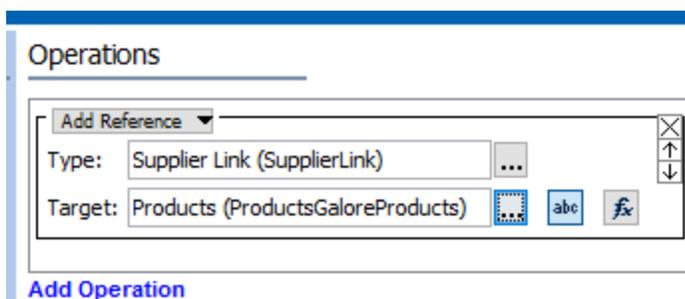
References and Links: Add Reference or Add Referenced By Operations

Add Reference and **Add Referenced By** both have similar configurations for bulk updates. Performing this action for **Add Reference** adds a reference of a specified type to a target. Alternatively, for **Add Referenced By** this adds a reference from a target to the source.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select the objects that are to receive the reference and run the bulk update wizard.
2. Select **Add Reference** or **Add Referenced By** from the dropdown.
3. For the 'Type' parameter, click the ellipsis button (...), select the reference type, and click **Select**.

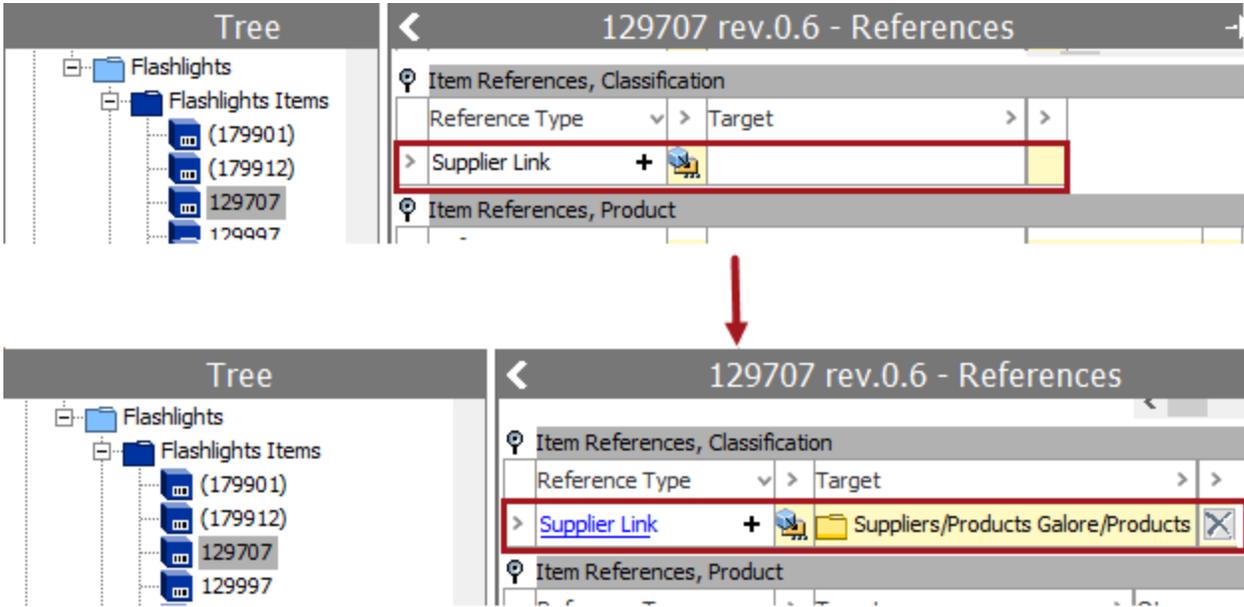


4. For the 'Target' or 'Source' parameter, click the manual ('abc') button or the function ('fx') button and then click the ellipsis button (...).
 - For manual selection, the Select Reference Target or Select Reference Source dialog is displayed, select a Target or Source object that is in accordance with the selected link type, and click **Select**.
 - For function selection, the Function Editor dialog is displayed. Add a function and evaluate, then click **OK**. See the **Using Function Editor** topic within the **Resource Materials** online help for more information on writing functions.

Note: The selected object dictates the label on the manual button. In the image below, the selected objects requires a text value and so the label is 'abc.' If the selected object is numeric, '123' is displayed, and so on for each validation base type.

Examples

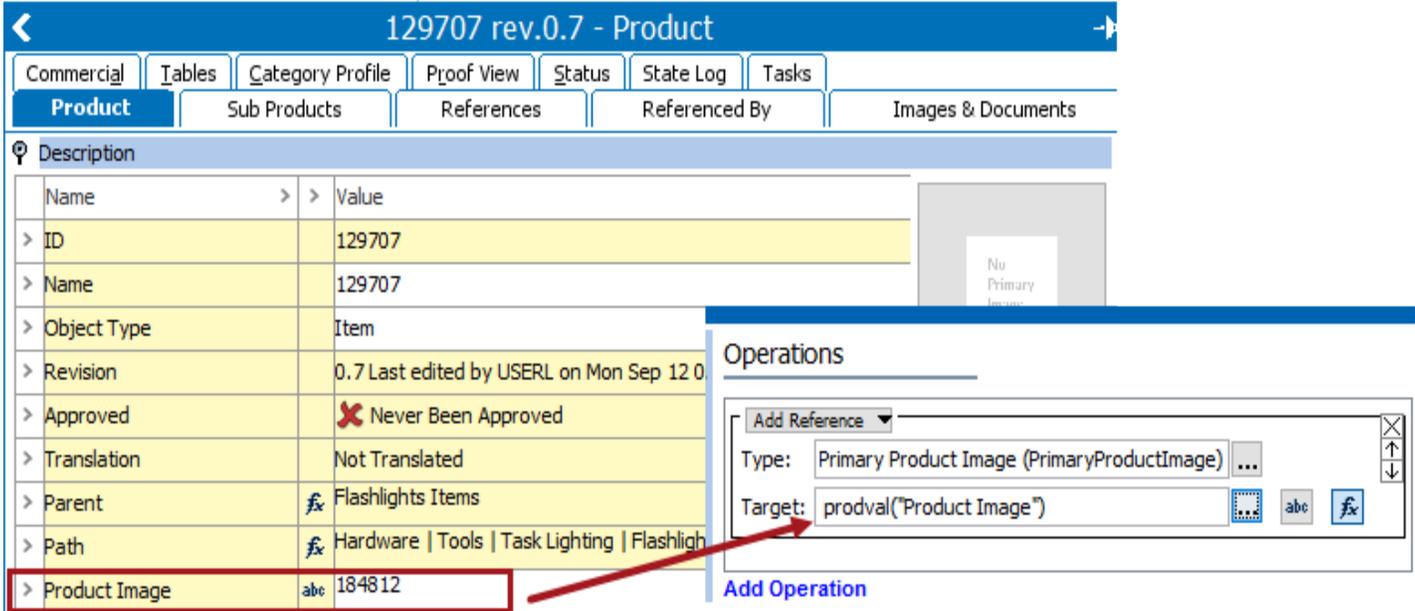
An example using **Add Reference** is below:



Similarly, a user could specify a function in the function editor by selecting the 'fx' button and clicking the ellipsis buttons to bring up the editor.

Again, an example using **Add Reference** is below though it works the same way for **Add Referenced By**:

After selecting the 'Type' of reference, a user opens the function editor and types in the function needed. In this case there is an attribute on the item called 'Product Image' that holds the ID of an image asset.



When the bulk update is run, it uses the ID in the attribute to call forth which asset to put on the Primary Product Image reference.

Tree

- Flashlights
 - Flashlights Item
 - (179901)
 - (179912)
 - 129707
 - 129997
 - 129999
 - 134852
 - 134853
 - 134855

129707 rev.0.7 - References

Category Profile | Proof View | Status | State Log | Tasks

Referenced By | Images & Documents | Commercial | Tables

Product | Sub Products | **References**

Image References

Reference Type	Target	Thumbnail
> Brand Name Logo +		
> Illustration +		
> Primary Product ... +	MagLiteFlashlight	

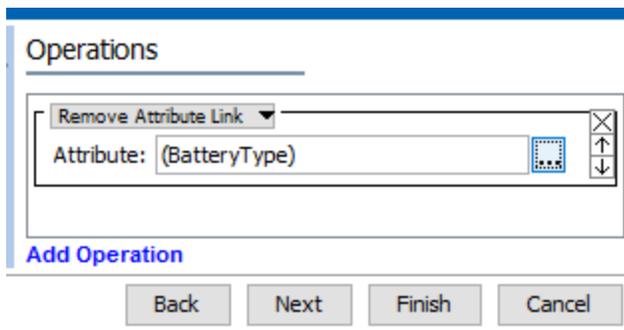
References and Links: Remove Attribute Link Operation

This option removes the selected link to an attribute when the selected object is linked to the attribute.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Remove Attribute Link** from the dropdown.



2. For the 'Attribute' parameter, click the ellipsis button (...), select the attribute that will be updated, and click **Select**.

Example

The following images show before and after the 'BatteryType' Remove Attribute Link bulk update is run.

Tree

- Primary Product Hierarchy
 - Products
 - Apparel
 - Footwear
 - Safety
 - Hardware
 - Tools
 - Task Lighting
 - Flashlights
 - Flashlights Items
 - (111204)
 - 20862
 - 20883

Flashlights Items rev.0.5 - References

Images & Documents | Commercial | Tables | Category Profile | Proof View | Status | State Log | Tasks

Product | Product Variants | Sub Products | **References** | Referenced By

> Add Index Word

Publications

ID	Name
----	------

> Link to Publication or Section

Linked Attributes from Product Hierarchy

(DisplaySequence)	Completeness Score	ID	Name	(Product Variant Priority)	(Value2)
>		BatteriesIncluded	(BatteriesIncluded)		
>		BatteryType	(BatteryType)		
> 5		BrandName	(BrandName)		



Tree

- Primary Product Hierarchy
 - Products
 - Apparel
 - Footwear
 - Safety
 - Hardware
 - Tools
 - Task Lighting
 - Flashlights
 - Flashlights Items
 - (111204)
 - 20862
 - 20883

Flashlights Items rev.0.5 - References

Images & Documents | Commercial | Tables | Category Profile | Proof View | Status | State Log | Tasks

Product | Product Variants | Sub Products | **References** | Referenced By

> Add Index Word

Publications

ID	Name
----	------

> Link to Publication or Section

Linked Attributes from Product Hierarchy

(DisplaySequence)	Completeness Score	ID	Name	(Product Variant Priority)	(Value2)
>		BatteriesIncluded	(BatteriesIncluded)		
>		BatteryType	(BatteryType)		
> 5		BrandName	(BrandName)		

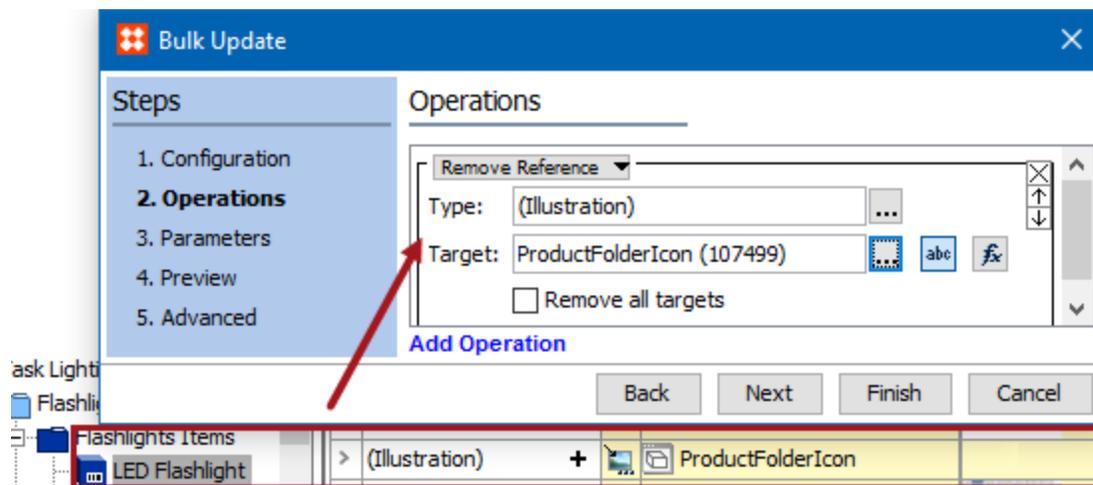
References and Links: Remove Reference Operation

This option removes references to a specific target or all references of a specific type.

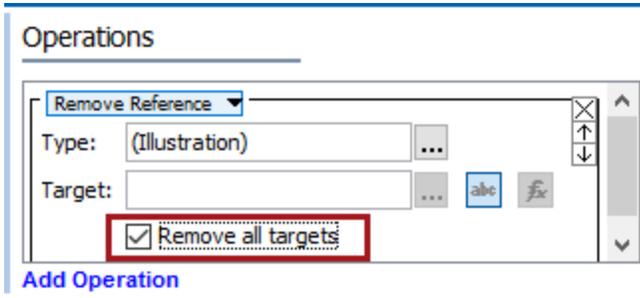
For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Remove Reference** from the dropdown.
2. For the 'Type' parameter, click the ellipsis button (...), select the reference type, and click **Select**.
3. For the 'Target' parameter, determine which object type(s) are affected as follows:
 - To remove references from a specific target, for the Target parameter, click the manual ('abc') button or the function ('fx') button and then click the ellipsis button (...).
 - For manual selection, the Select Reference Target dialog is displayed, select a Target object that is in accordance with the selected link type, and click **Select**.
 - For function selection, the Function Editor dialog is displayed. Add a function and evaluate, then click **OK**. See the **Using Function Editor** topic within the **Resource Materials** online help for more information on writing functions.



- To remove all references of a specific type from all targets, leave the Target parameter blank and check the 'Remove all targets' checkbox.



Example

The 'Product Image' attribute on the item holds the ID of an image asset.

Name	Value
ID	129708
Name	129707
Object Type	Item
Revision	0.7 Last edited
Approved	Never Been
Translation	Not Translated
Parent	Flashlights Item
Path	Hardware Tool
Product Image	abc 184812

When the bulk update runs, it uses function to determine the value of the attribute, to find which reference to remove from the Product Image type.

Tree

- Task Lighting
 - Flashlights
 - Flashlights Item
 - (179901)
 - (179912)
 - 129707
 - 129997
 - 129999
 - 134852
 - 134853

129707 rev.0.7 - References

Commercial | Tables | Category Profile | Proof View | Status | State Log | Tasks

Product | Sub Products | **References** | Referenced By | Images & Documents

Image References

Reference Type	Target	Thumbnail
> Brand Name Logo +		
> Illustration +		
> Primary Product ... +		
> Product Image +	MagLiteFlashlight	

Tree

- Ware
 - Tools
 - Task Lighting
 - Flashlights
 - Flashlights Items
 - (179901)
 - (179912)
 - 129707
 - 129997
 - 130000

129707 rev.0.7 - References

Commercial | Tables | Category Profile | Proof View | Status | State Log | Tasks

Product | Sub Products | **References** | Referenced By | Images & Documents

Image References

Reference Type	Target	Thumbnail
> Brand Name Logo +		
> Illustration +		
> Primary Product ... +		
> Product Image +		



References and Links: Set Product to Classification Link Type Operation

This assigns a new object type and a classification link type to the selected classifications.

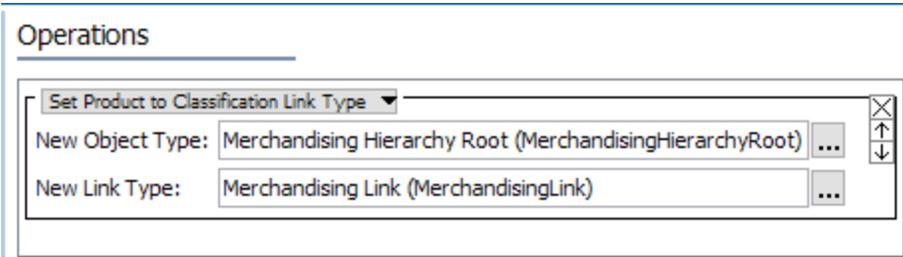
For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Prerequisites

Verify the object type is valid for the classification type.

Configuration

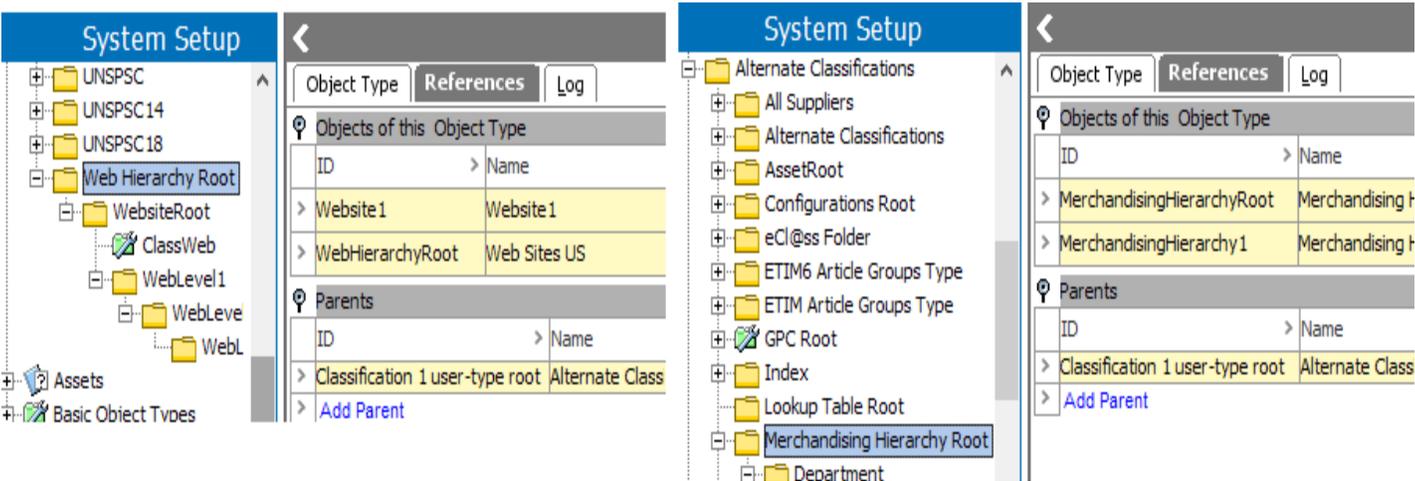
1. Select **Set Product to Classification Link Type** from the dropdown.



2. For the 'New Object Type' parameter, click the ellipsis button (...), select the object type, and click **Select**.
3. For the 'New Link Type' parameter, click the ellipsis button (...), select the link type, and click **Select**.

Example

In the following example data, Website1 object type is valid for the 'WebHierarchyRoot', but will be changed to be valid for 'MerchandisingHierarchyRoot.'



The items under the WebHierarchyRoot with the Website Link are now going to be of the object type 'Merchandising Hierarchy Root' with the MerchandisingLink type.

The screenshot displays a software interface with three main components:

- Tree View:** A hierarchical folder structure on the left. The 'Classifications' folder is expanded, showing sub-folders: 'Office Documents', 'TOfficeDoc', 'Merchandising Hierarchy1', and 'Website1'. Other folders include 'Assets', 'Configurations', 'eClass 8.0', 'eClass 9.1.0', 'ETIM 5 Article Groups', 'ETIM 6 Article Groups', 'GPC', 'Index Words', 'Merchandising Hierarchy', and 'Sunliers'.
- Classification Table:** A table with tabs for 'Classification', 'Sub Products', 'References', 'Referenced By', and 'Images & Document'. The 'Classification' tab is active, showing a table with columns 'Name' and 'Value'. A row for 'ID' has the value 'Website1'.
- Bulk Update Dialog:** A blue dialog box titled 'Bulk Update' with a close button. It has a 'Steps' list on the left (1. Configuration, 2. Operations, 3. Parameters, 4. Preview, 5. Advanced) and a 'Preview' table on the right. The 'Preview' table shows the update for 'Website 1':

Object		Set Object Type MerchandisingHi... >
>	Old	ObjectType=Web Hierarchy Root, LinkType=Website Link
>	New	ObjectType=Merchandising Hierarchy Root, LinkType=Merchandising Link

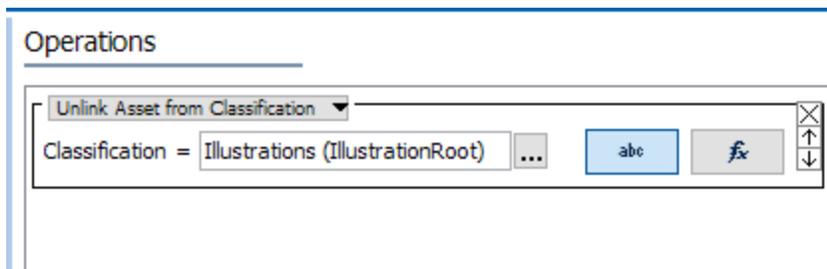
References and Links: Unlink Asset from Classification Operation

Using this operation, selected assets are unlinked from the specified classification.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Unlink Asset from Classification** from the dropdown.



2. For the 'Classification' parameter, click the manual ('abc') button or the function ('fx') button and then click the ellipsis button (...).
 - For manual selection, the Select Classification dialog is displayed, select a classification object where the assets will be unlinked, and click **Select**.
 - For function selection, the Function Editor dialog is displayed. Add a function and evaluate, then click **OK**. See the **Using Function Editor** topic within the **Resource Materials** online help for more information on writing functions.

Examples

Using the setting displayed in the image above, the operation is run on the data shown below. The preview shows that the IllustrationRoot classification reference will be removed.

The screenshot shows the 'Tree' view on the left with 'TruckIcon' highlighted. The 'References' window on the right shows a table of classifications:

ID	Name	Object Type	Revision
IconRoot	Icons	Icons	0.2 Last edited
IllustrationRoot	Illustrations	Illustrations	0.1 Last edited

The 'Bulk Update' dialog is in the foreground, showing a 'Preview' table:

Object	Old	New	Unlink Asset from Classification
TruckIcon	2 links	1 links	

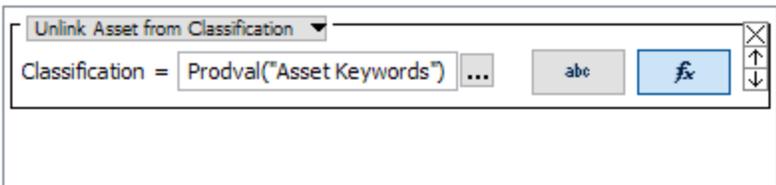
Another example uses the following product and a function to determine the link being removed. The 'Asset Keywords' attribute on the 'BlueTruckIcon' item holds the ID of the classifications folder. In this case, the reference to 'BlueTruckIcon' should be removed from the Illustrations classification folder.

The screenshot shows the 'Tree' view on the left with 'BlueTruckIcon' highlighted. The 'Description' window on the right shows a table of attributes:

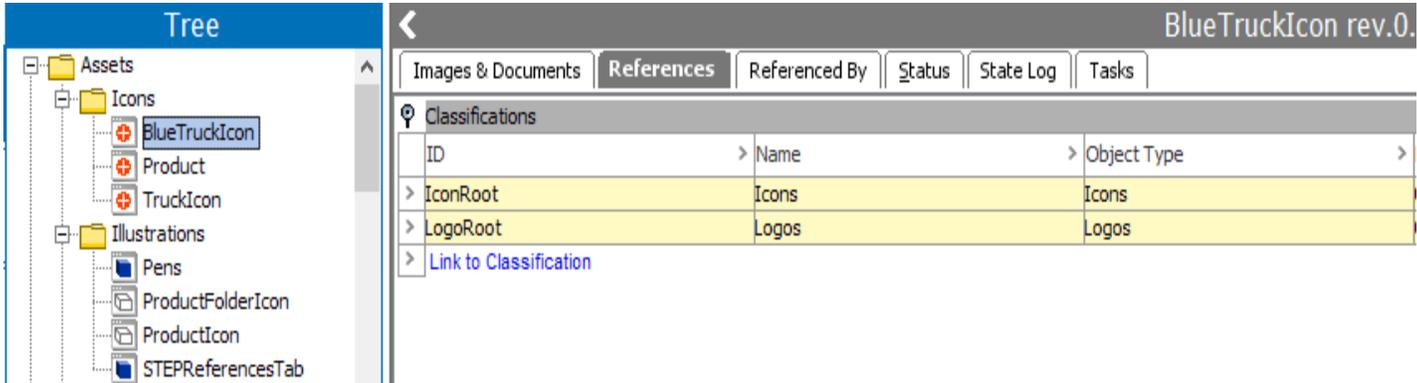
Name	Value
ID	120833
Name	BlueTruckIcon
Object Type	Icon
Revision	0.6 Last edited by USERL on Mon Nov 21 11:41:19 EST 20
Approved	Last Approved on Tue Sep 13 11:58:54 EDT 2016
Translation	Not Translated
Path	Classification 1 root/Assets/Icons/BlueTruckIcon
Content In	Language=Language Root, Country=Country Root
Asset Keywords	abc IllustrationRoot

The **Prodval("Asset Keywords")** function is used to remove the classification link by getting the value of the attribute that holds the ID of the link to be removed.

Operations



Once completed, the asset is no longer linked to the Illustrations classification folder.



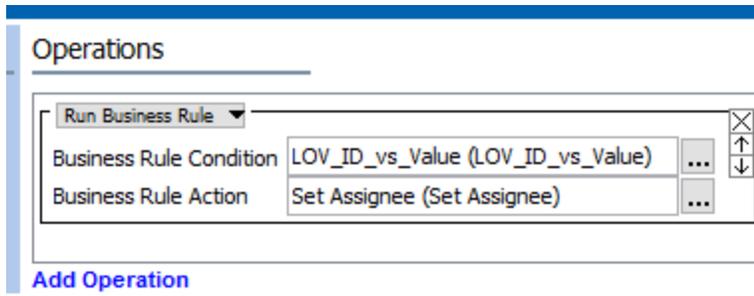
Run Business Rule Operation

This operation runs a business condition and/or action on the selected objects.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Run Business Rule** from the dropdown.



The screenshot shows a configuration window titled "Operations". At the top, there is a dropdown menu with "Run Business Rule" selected. Below this, there are two rows of configuration fields. The first row is "Business Rule Condition" with the value "LOV_ID_vs_Value (LOV_ID_vs_Value)" and an ellipsis button. The second row is "Business Rule Action" with the value "Set Assignee (Set Assignee)" and an ellipsis button. To the right of these fields are navigation arrows (up, down, and close). At the bottom left of the window, there is a blue button labeled "Add Operation".

2. For the 'Business Rule Condition' parameter, if a condition should be run, click the ellipsis button (...), select the condition, and click **Select**. If the condition evaluates to 'true', the selected business action will run.
3. For the 'Business Rule Action' parameter, click the ellipsis button (...), select the action, and click **Select**. If the action should always run, no condition should be selected.

Send Republish Event Operation

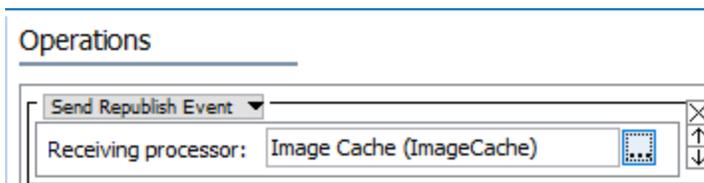
This option performs the same operation as selecting 'Republish' on a receiving processor. A republish event is sent to the event queue of the selected processor for all objects selected for the bulk update.

For more on republishing, see the **Event-Based OIEP Forward, Rewind, Purge, and Republish** topic in the **Outbound Integration Endpoints** section of the **Data Exchange** documentation.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Send Republish Event** from the dropdown.



2. For the 'Receiving Processor' parameter, click the ellipsis button (...), select the receiving processor, and click **Select**.

This can be an event processor, outbound integration endpoint with an event queue, or an event queue directly.

Example

For example, in the images below, the 'Item Attribute Change' OIEP is selected as the receiving processor. It has no events ready to process. Running this bulk update operation adds an event to the OIEP.

System Setup

- Delete LOV
- Delete Prod Ref redo
- Delete Product References
- DimDepLOV
- Downstream Data_Event-base
- Downstream Data_Object-Bas
- EmptyValues
- Event Processor
- Item Attribute Change**
- LOV Definitions
- LOV Value Update On Prods

Item Attribute Change - Configuration

Background Processes | Statistics | Error Log Excerpts | Log | Status

Outbound Integration Endpoint | **Configuration** | Event Triggering Definitions

Event Actions: Forward | Rewind | Purge | Republish

> Days to retain events	0
> Number of events to batch	1000
> Number of event batches to include per delivery	1
> Queue Status	Read Events
> Unread events (approximated)	0 (2016-09-13 12:37:37)

Bulk Update

Steps

1. Configuration
- 2. Operations**
3. Parameters
4. Preview
5. Advanced

Operations

Send Republish Event

Receiving processor: Item Attribute Change (ItemAttributeChange)

Add Operation



System Setup

- Delete LOV
- Delete Prod Ref redo
- Delete Product References
- DimDepLOV
- Downstream Data_Event-base
- Downstream Data_Object-Bas
- EmptyValues
- Event Processor
- Item Attribute Change**
- LOV Definitions
- LOV Value Update On Prods
- Matchcodeprocess
- Mongo1

Item Attribute Change - Configuration

Background Processes | Statistics | Error Log Excerpts | Log | Status

Outbound Integration Endpoint | **Configuration** | Event Triggering Definitions

Event Queue Configuration

Event Actions: Forward | Rewind | Purge | Republish

> Days to retain events	0
> Number of events to batch	1000
> Number of event batches to include per delivery	1
> Queue Status	Read Events
> Unread events (approximated)	1 (2016-09-13 12:34:46)

Edit Configuration

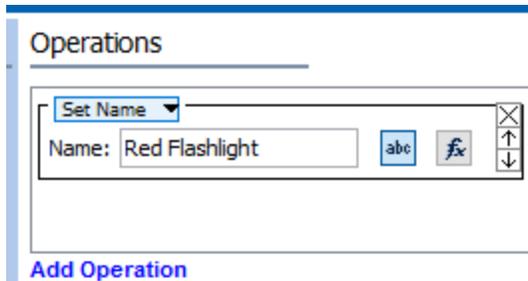
Set Name Operation

This operation sets the name of the object on which the bulk update is run. A user can either enter the name manually, or specify a function in the Function editor for naming the object.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Set Name** from the dropdown.



2. For the 'Name' parameter, click the manual ('abc') button or the function ('fx') button.
 - For manual selection, type the name into the text field.
 - For function selection, click the ellipsis button (...) displayed near the text field to display the Function Editor dialog. Add a function and evaluate, then click **OK**. See the **Using Function Editor** topic within the **Resource Materials** online help for more information on writing functions.

Example

To create a name using the function editor, often attribute values on an item are concatenated. In the image below, the 'Primary Color' and 'Brand Name' attributes will be combined to create the name of this flashlight.

129707 rev.0.7 - Product		
Product	Sub Products	References
Name	>	Value
> ID		129708
> Name		129707
> Object Type		Item
> Revision		0.7 Last edited by USERL on Mon Sep 12 14:59:21 EDT 2016
> Approved		✘ Never Been Approved
> Translation		Not Translated
Category Specific Attributes		
Name	>	Value
> Batteries Included		Yes
> Primary Color		Black
Item Brand Information		
Name	>	Value
> Brand Owner	abc	Beaming Glow Inc
> Brand Name	abc	Beaming Glow Light

Using the Concatenate function, the value from two attributes make a name for this flashlight item.

Operations

Set Name

Name: Concatenate(Prodval("PrimaryColor"), " ", Prodval("BrandName"))

Add Operation

Product	Sub Products	References
Description		
Name	>	Value
> ID		129708
> Name		Black Beaming Glow Light
> Object Type		Item
> Revision		0.7 Last edited by USERL on Mon Sep 12 15:26:17 EDT 2016

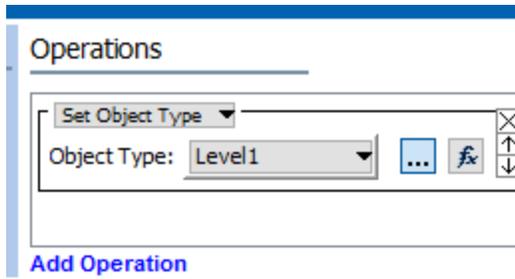
Set Object Type Operation

This operation changes the object type of the object on which the bulk update is run. The selected object type should be valid under the parent of the current object.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Set Object Type** from the dropdown.



2. For the 'Object Type' parameter, click the ellipsis button (...) for manual selection or click the function ('fx') button.
 - For manual selection, select an object type from the dropdown.
 - For function selection, click the ellipsis button (...) displayed near the text field to display the Function Editor dialog. Add a function and evaluate, then click **OK**. See the **Using Function Editor** topic within the **Resource Materials** online help for more information on writing functions.

Example

The example below, 'Attribute C' on the item holds the ID of an object type.

Tree

Flashlight Camping rev.0.1 - Product

Product | References | Referenced By | Images & Documents | Commercial | Tables | Proof View | Status | State Log | Tasks

Description

Name	Value
ID	FlashlightCamping
Name	Flashlight Camping
Object Type	Fl-Item
Revision	0.1 Last
Approved	Never
Translation	Not Translated
Path	Primary

Sales Item Marketing Descriptions

Item Manufacturer Information

Attribute Group

Name	Value
Attribute C	abc Item

Bulk Update

Steps

1. Configuration
2. Operations
3. Parameters
4. Preview
5. Advanced

Operations

Set Object Type

Object Type: prodval("Attribute1")

Add Operation

Back Next Finish Cancel

When the bulk update runs, it uses the value in the attribute to determine the object type.

Tree

Flashlight Camping rev.0.1 - Product

Product | References | Referenced By | Images & Documents | Commercial | Tables | Proof View | Status | State Log | Tasks

Description

Name	Value
ID	FlashlightCamping
Name	Flashlight Camping
Object Type	Item
Revision	0.1 Last edited by USERL on Tue Sep 13 10:38:39 EDT 2016
Approved	Never Been Approved

Workflow: Claim Operation

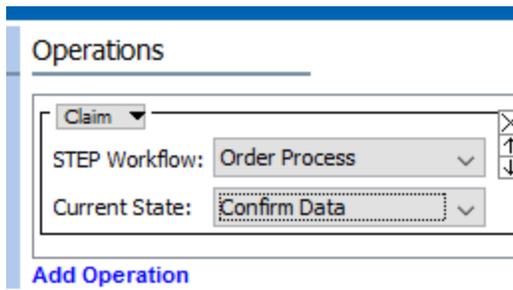
Workflow tasks are assigned to user groups where individual users in those groups can then claim the task for themselves. A user can use the Claim operation to claim a number of tasks at once based on workflow and state.

For more information on claiming bulk updates in workflows see the **Bulk Update Operations for Workflows** topic in the **Workflows** documentation.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Claim** from the dropdown.



The screenshot shows a configuration window titled "Operations". Inside, there is a dropdown menu with "Claim" selected. Below it, there are two more dropdown menus: "STEP Workflow" with "Order Process" selected, and "Current State" with "Confirm Data" selected. To the right of these dropdowns are small icons for deleting (an 'X') and moving up/down (up and down arrows). At the bottom left of the window, there is a blue button labeled "Add Operation".

2. For the 'STEP Workflow' parameter, select the workflow from the dropdown.
3. For the 'Current State' parameter, select the state from the dropdown.

When the bulk update runs, all tasks in the selected workflow with the selected state are claimed for the user.

Workflow: Initiate Items in STEP Workflow Operation

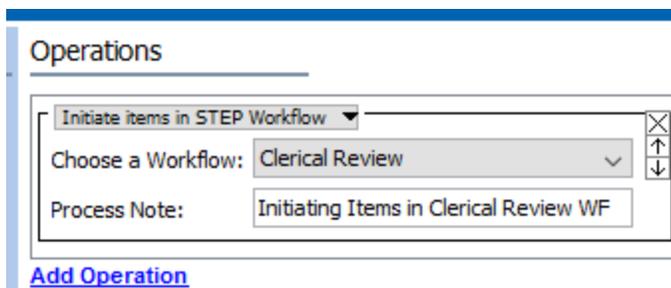
This operation initiates the bulk update objects into the selected workflow, assuming that the objects selected are valid for the workflow.

For more information on initiating items in a STEP workflow via bulk updates see the **Bulk Update Operations for Workflows** topic in the **Workflows** documentation.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Initiate Items in STEP Workflow** from the dropdown.



The screenshot shows a configuration window titled "Operations". Inside the window, there is a dropdown menu with "Initiate items in STEP Workflow" selected. Below this, there is a "Choose a Workflow:" label followed by a dropdown menu with "Clerical Review" selected. Below that, there is a "Process Note:" label followed by a text input field containing "Initiating Items in Clerical Review WF". To the right of the dropdown menus are up and down arrow icons. Below the configuration area is a blue link labeled "Add Operation".

2. For the 'Choose a Workflow' parameter, select the workflow from the dropdown.
3. For the 'Process Note' parameter, type a note for the background process.

Workflow: Remove Items from STEP Workflow Operation

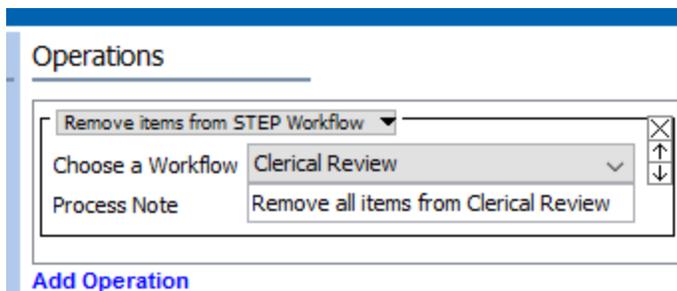
This operation removes all objects from one state in a workflow.

For more on how to remove items from STEP Workflows using bulk updates, see the **Remove Objects From Workflows** topic in the **Workflows** documentation.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Remove Items from STEP Workflow** from the dropdown.



The screenshot shows a configuration window titled "Operations". Inside, there is a dropdown menu with "Remove items from STEP Workflow" selected. Below it, there are two input fields: "Choose a Workflow" with "Clerical Review" selected, and "Process Note" with the text "Remove all items from Clerical Review". To the right of the "Choose a Workflow" dropdown are up and down arrow buttons. Below the configuration area is a blue "Add Operation" button.

2. For the 'Choose a Workflow' parameter, select the workflow from the dropdown.
3. For the 'Process Note' parameter, type a note for the background process.

Workflow: Trigger STEP Workflow Event Operation

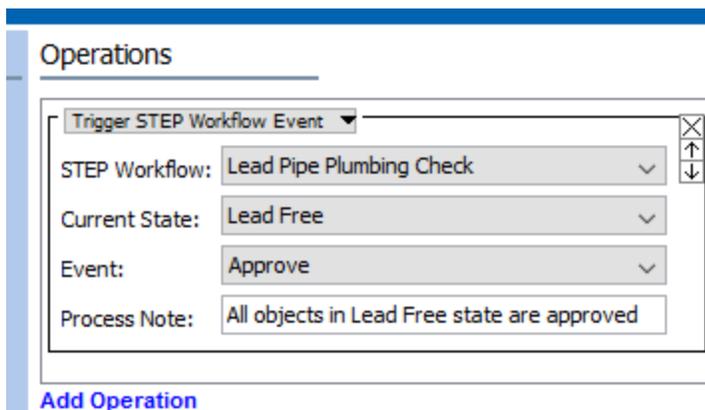
This operation allows a user to move a task from one state to another state.

For more on triggering STEP Workflow events, the **Bulk Update Operations for Workflows** topic in the **Workflows** documentation.

For more information on the Bulk Update wizard, see the **Creating a Bulk Update** topic.

Configuration

1. Select **Trigger STEP Workflow Event** from the dropdown.



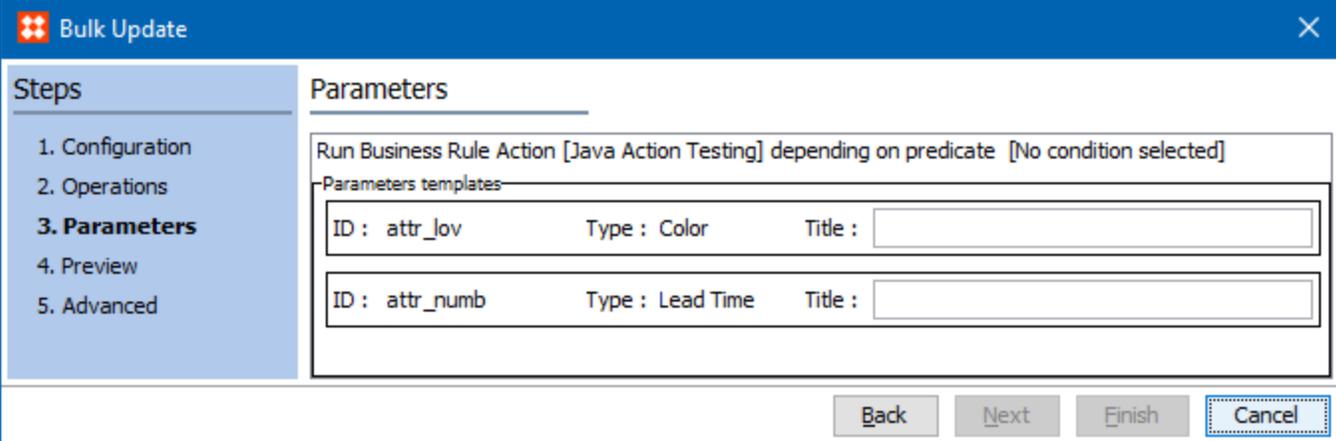
The screenshot shows a configuration window titled 'Operations'. Inside, there is a dropdown menu set to 'Trigger STEP Workflow Event'. Below this are four fields: 'STEP Workflow:' with a dropdown set to 'Lead Pipe Plumbing Check', 'Current State:' with a dropdown set to 'Lead Free', 'Event:' with a dropdown set to 'Approve', and 'Process Note:' with a text box containing 'All objects in Lead Free state are approved'. To the right of the dropdowns are up and down arrow icons. Below the configuration area is a blue 'Add Operation' button.

2. For the 'STEP Workflow' parameter, select the workflow from the dropdown.
3. For the 'Current State' parameter, select the state from the dropdown.
4. For the 'Event' parameter, select the workflow event from the dropdown.
5. For the 'Process Note' parameter, type a note for the background process.

Bulk Update Parameters

The parameters step is only enabled when the 'Run Business Rule' operation is selected on the Operations step, and the selected JavaScript business rule includes one or more 'Attribute Validated Parameter' binds.

For more information, see the **Parameterized Business Actions in Web UI** topic in the **Web User Interfaces / Web UI Setup and User Guide** documentation.

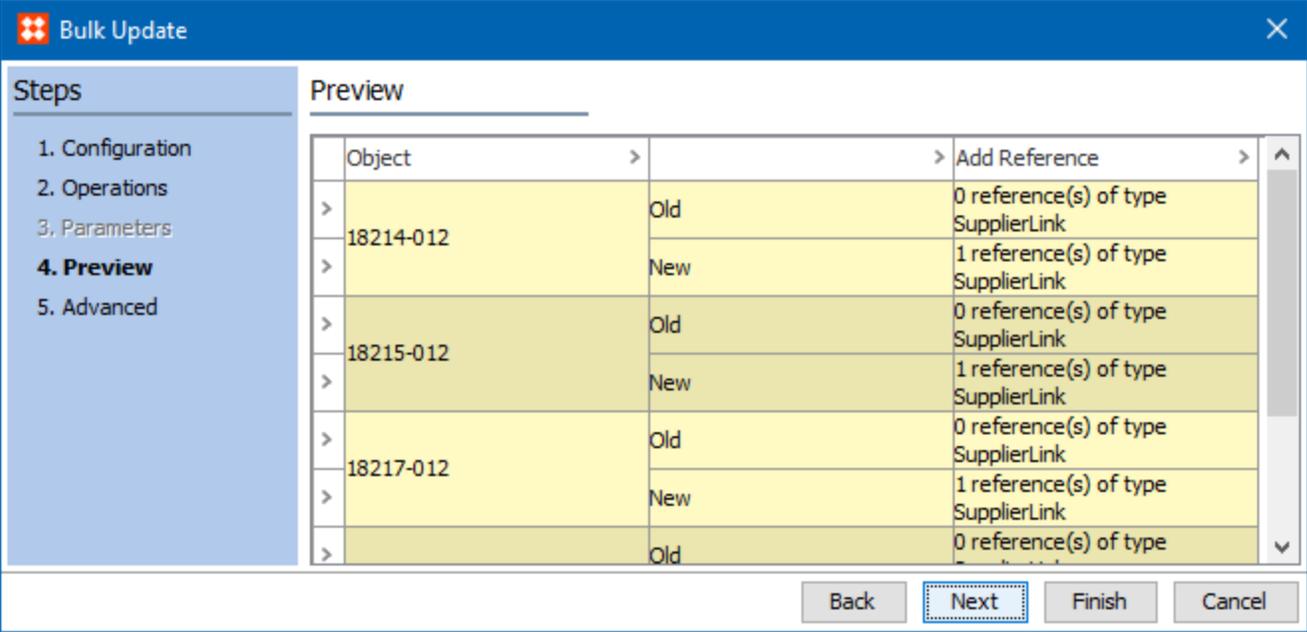


The screenshot shows a dialog box titled "Bulk Update" with a close button (X) in the top right corner. On the left, a "Steps" sidebar lists five steps: 1. Configuration, 2. Operations, 3. Parameters (highlighted), 4. Preview, and 5. Advanced. The main area is titled "Parameters" and contains the text "Run Business Rule Action [Java Action Testing] depending on predicate [No condition selected]". Below this is a section for "Parameters templates" with two rows. The first row has "ID : attr_lov", "Type : Color", and "Title : [text box]". The second row has "ID : attr_num", "Type : Lead Time", and "Title : [text box]". At the bottom right, there are four buttons: "Back", "Next", "Finish", and "Cancel" (which is highlighted with a dashed border).

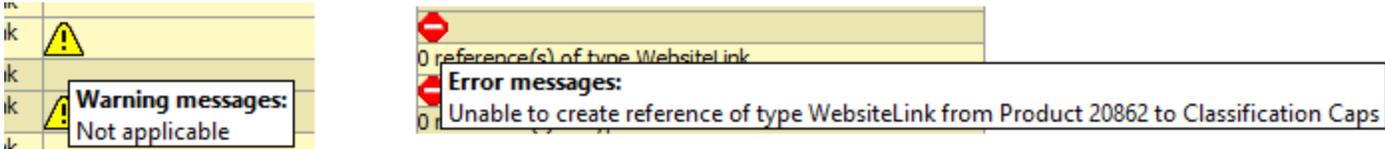
1. If the Parameters step is enabled, supply the necessary data.
2. Click the **Next** button to display the **Bulk Update Preview**.

Bulk Update Preview

This step of the wizard shows some of the results of the configured operations. A maximum of 10 objects are displayed. For each object, the existing data is shown on the 'Old' row and the data that will result from the update is shown on the 'New' row.



1. Hover over a warning or error icon to review potential problems with the bulk update



- 2. Click the **Back** button to resolve warnings and errors by modifying an operation or parameter.
- 3. Click the **Next** button to display **Bulk Update Advanced**.

Bulk Update Advanced

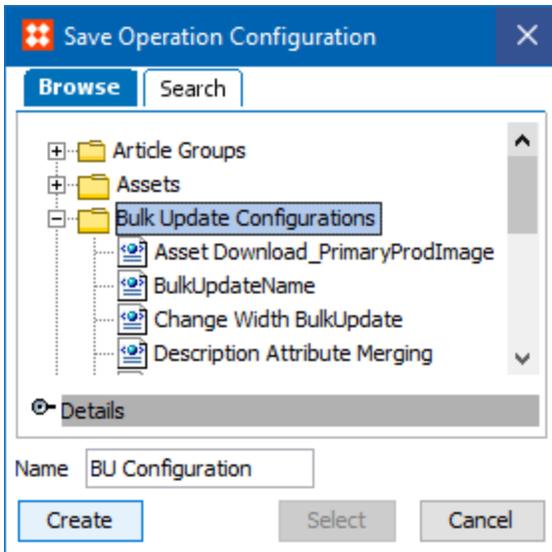
In the final step, select one or more of the available options.

1. Set the following parameters as necessary:

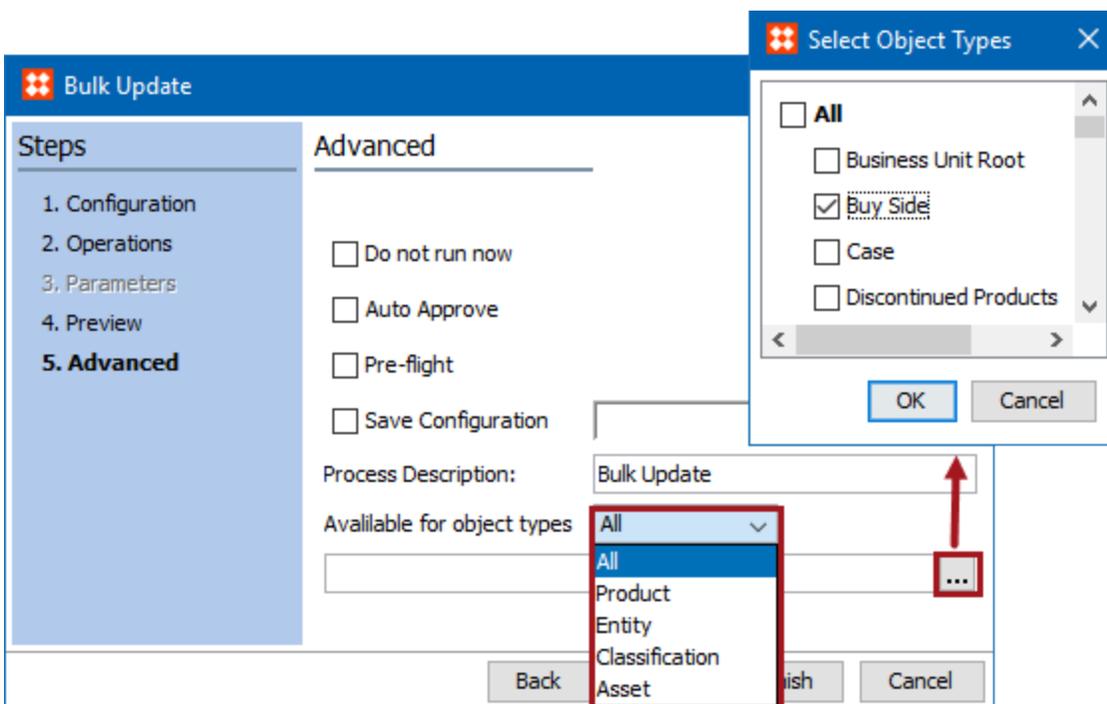
- **Do not run now** runs the bulk update later, and not immediately when the wizard is finished. This allows a user to save the configuration. When checked, the **Auto Approve** and **Pre-flight** parameters are disabled.
- **Auto Approve** approves the updated objects once the update succeeds. The objects are displayed in the approved workspace.
- **Pre-flight** performs a test run of the update. When the user clicks 'Finish', the test runs in a background process. Selected operations are applied and then rolled back. An execution report and an impact report is generated. Temporary collections are created for the objects where the operations were successfully applied, and for the ones where errors were generated. The availability of this option depends on the user's system setup.

Important: There is no 'undo functionality for bulk updates. It is recommended to run a Pre-flight and/or to apply operations to a small set of objects before updating a large number of objects.

- **Save configuration** defines a location and name for the saved configuration so that it can be used again. Click the ellipsis button (...) to display the 'Save Operation Configuration' dialog. To name a new configuration, select a folder and type a name in the Name parameter, and click **Create**. To overwrite an existing configuration, select the configuration and click **Select**.



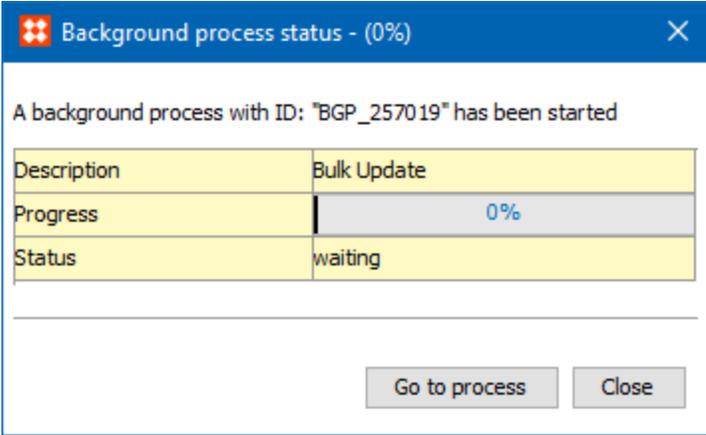
- **Process Description** displays the name for the background process.
- **Available for object types** limits the object types and nodes affected by the bulk update operations. First select an object type from the dropdown, then click the ellipsis button (...) to select the nodes to update.



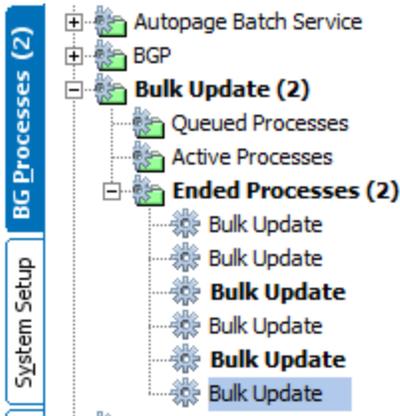
2. Click **Finish** to complete the bulk update configuration and start the operation(s) in a background process.
3. Monitor the bulk update as defined in the **Monitoring Bulk Updates** topic.

Monitoring Bulk Updates

When a user completes the Bulk Update wizard, the **Background process status** dialog displays. This allows a user to monitor the status of the bulk update that was created.



Click **Go to Process** to display the Background Process tab for additional information about the process execution.



Note: If one operation on an object or the auto approval of the object fails, changes made by other operations are rolled back, and the object is left as it was prior to the bulk update.

Background Process		Queue Info
Created	Tue Aug 23 16:48:11 EDT 2016	
Started	Tue Aug 23 16:48:13 EDT 2016	
Finished	Tue Aug 23 16:48:13 EDT 2016	
Processing Time	0 m 0 s	
Time in Queue	0 m 2 s	
# of warnings	0	
# of errors	1	

Execution Report

- 1 **Bulk update background process started** (Tue Aug 23 16:48:13 EDT 2016)
- 2 Context: Context6
- 3 Workspace: Main
- 4 Commit Mode: Pre-Flight Check (rollback)
- 5 Auto Approve: No
- 6 Collection: [BGP_111871_tmp_input](#)
- 7 Configuration: temporary configuration
- 8 Read bulk update operation configuration successfully (Tue Aug 23 16:48:13 EDT 2016)
- 9 Created temporary collection: [BGP_111871_tmp_fail](#) (Tue Aug 23 16:48:13 EDT 2016)
- 10 **Applying operations to dataset** (Tue Aug 23 16:48:13 EDT 2016)
- 11 **[(111204), operation 1]: Error: Unable to create reference of type WebsiteLink from Product (111204) to Classification Exterior**
- 12 **(rollback)** (Tue Aug 23 16:48:13 EDT 2016)
- 13 **Summary** (Tue Aug 23 16:48:13 EDT 2016)
- 14 0 objects OK. 1 objects failed.
- 15 0 info messages. 0 warning messages. 1 Error messages.
- 16 **Operations Summary** (Tue Aug 23 16:48:13 EDT 2016)
- 17 Operation 1: [Add Reference]
- 18 Errors: 1
- 19 1: Unable to create reference
- 20 End of Summary

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◀
1-20 of 20
▶
▶▶

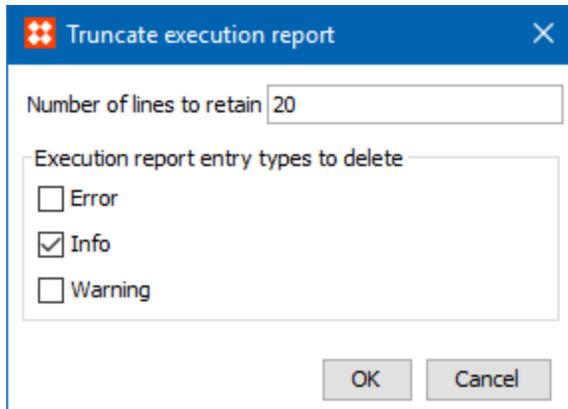
Save...
Truncate

Bulk Update Actions

Relaunch Wizard
Bulk Update OK Objects
Save Failed Objects
Impact Report

When the process has completed, the following options are available in the **Bulk Update Actions** flipper on the Background Process tab.

1. Click **Save** to keep a copy of the execution report. This can be saved locally.
2. Click **Truncate** if not all lines in the execution report are needed. Upon selecting Truncate, a dialog will appear allowing users to select which lines to delete, and how many lines to retain.



3. Click **Relaunch Wizard** to open the Bulk Update wizard again. The wizard opens with the same objects selected and with the same operations specified in the process that was just completed.
4. Click **Bulk Update OK Objects** if a pre-flight process was run the bulk update should now be run on the objects that were processed without errors.
5. Click **Save Failed Objects** to save the objects for which the bulk update failed as a new collection. Note that this option is only available if there were failed objects.
6. Click **Impact Report** to view a report of the errors that occurred during the bulk update process. This option is only available if objects failed during the bulk update.

Scheduling Bulk Updates for Collections

Scheduling a bulk update with collections is useful for a group of objects that needs to be updated on a regular basis. The scheduled collection can save time instead of performing it manually. For example, if all current accessory references should be removed before a group of objects is implemented into a workflow.

Prerequisites

The following tasks must be completed before a collection is scheduled to run a bulk update.

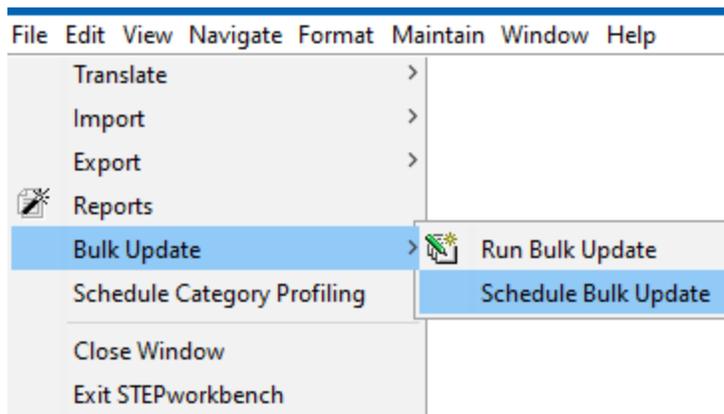
1. Create a collection. More on creating a collection can be found in the **Creating Collections** topic in the **Getting Started / User Guide** documentation.
2. Create a bulk update configuration. See **Creating a Bulk Update** topic for more on how to configure a bulk update.

The steps below explain how to schedule a bulk update using collections.

Scheduling Bulk Updates

To perform a bulk update on a collection at regular intervals, create a schedule that applies to that particular collection. The bulk update is then automatically run at the scheduled time.

Start the Bulk Update wizard



1. Open the Schedule Bulk Update wizard from File > Bulk Updates > **Schedule Bulk Update**.

Setup

The screenshot shows a dialog box titled "Schedule Bulk Update" with a close button (X) in the top right corner. On the left, a "Steps" sidebar lists four steps: 1. Setup (highlighted), 2. Preview, 3. Schedule Process, and 4. Name Process. The main area is titled "Setup" and contains two sections:

- Collection:** A text field containing "Assets made with Search (111650)" and an ellipsis button (...). Below it is a checkbox labeled "Refresh before each run (Search Collections only)".
- Configuration:** A text field containing "Asset Search Configuration (111652)" and a small icon button. Below it is a checkbox labeled "Auto Approve Changes".

At the bottom of the dialog, there are four buttons: "Back", "Next", "Finish", and "Cancel".

1. Click the ellipsis button (...) to locate and select the relevant collection. This option is not valid if the collection is created by going to File > Bulk Update > Run Bulk Update.

If the collection selected was created using the search criteria, and the **Refresh before each run (Search Collections only)** checkbox is selected, it will refresh the collection based on the current data in STEP using search criteria, before executing the bulk update operation(s).

2. Click the ellipsis button (...) to locate and select the relevant configuration.
3. Check **Auto approve changes** if you want to place the updated objects in the approved workspace immediately after the update.
4. Click **Next**.

Preview

The screenshot shows a software window titled "Schedule Bulk Update" with a close button in the top right corner. On the left, a "Steps" sidebar lists: 1. Setup, 2. Preview (highlighted), 3. Schedule Process, and 4. Name Process. The main area is a "Preview" table with the following data:

Object	Old	New	Set single value [Caption1]
HYD543	Old		
	New		Pictures by Stibo Inc.
RP4100	Old		
	New		Pictures by Stibo Inc.
Glasses	Old		
	New		Pictures by Stibo Inc.
Evian, case	Old		
	New		Pictures by Stibo Inc.
Evian, open	Old		
	New		Pictures by Stibo Inc.
Evian, pack	Old		
	New		Pictures by Stibo Inc.
Evian, 6pk	Old		
	New		Pictures by Stibo Inc.

At the bottom of the window are four buttons: "Back", "Next" (highlighted with a dashed border), "Finish", and "Cancel".

1. Review the example results of the update.
2. Click **Next**.

Schedule Process

1. Create the time schedule by selecting either **Now**, **Later**, **Weekly**, **Monthly**, or **Later and repeat**.
2. Complete the options related to the schedule.
3. Click **Next**.

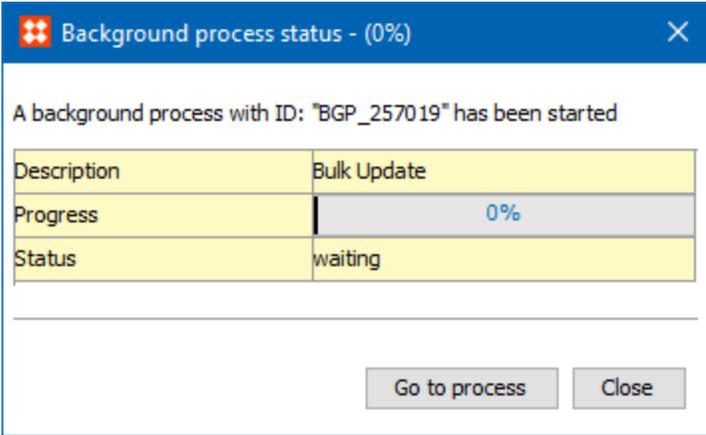
The screenshot shows the 'Schedule Bulk Update' wizard at the 'Schedule Process' step. On the left, a 'Steps' sidebar lists: 1. Setup, 2. Preview, 3. **Schedule Process**, and 4. Name Process. The main area is titled 'Schedule Process' and contains a 'Start' section with the following options: 'Now', 'Later', 'Weekly' (selected), 'Monthly', and 'Later and repeat'. To the right of these options are input fields for 'Start at (hh:mm):' (11:04), 'Start on (yyyy-mm-dd):' (2016-08-19), and 'End on (yyyy-mm-dd):' (-). Below these is an 'Every:' section with checkboxes for days of the week: Mon (checked), Tue, Wed, Thu, Fri, Sat, and Sun. At the bottom of the main area, a summary line reads 'Start every mon at 11:04, starting 2016-08-19'. At the bottom right, there are four buttons: 'Back', 'Next', 'Finish', and 'Cancel'.

Name Process

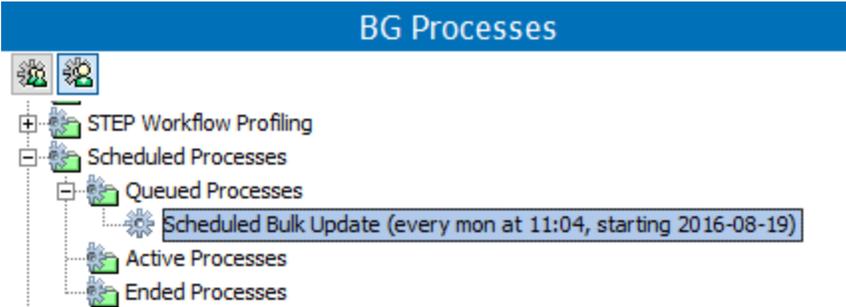
- 1. Enter a name for the **Schedule Process Name** parameter.
- 2. The **Process Name** parameter displays the name displayed in the Background Processes tab.
- 3. Click **Finish** to complete the wizard.

The screenshot shows the 'Schedule Bulk Update' wizard at the 'Name Process' step. The 'Steps' sidebar now lists: 1. Setup, 2. Preview, 3. Schedule Process, and 4. **Name Process**. The main area is titled 'Name Process' and contains two input fields: 'Schedule Process Name:' with the value 'Scheduled Bulk Update' and 'Process Name:' with the value 'Bulk Update'. At the bottom right, there are four buttons: 'Back', 'Next', 'Finish' (highlighted with a dashed border), and 'Cancel'.

Run the Background Process



1. On the Background Processes dialog choose an option:
 - Click **Go to process** to display the background process.
 - Click **Close** to display the workbench.
2. Viewing the process shows a bulk update that is scheduled to run at a later time under 'Queued processes.'



The Execution Report shows the process with a Status of 'waiting.'

< Scheduled Bulk Update (every mon at 11:04, starting 2016-08-19) - Background Process ->

Background Process

Properties

Property	Value
Started by	USERL
Id	BGP_111657
Description	Scheduled Bulk Update (every mon at 11:04, starting 2016-08-19)
Execution Server	doc-rel
Status	waiting - 1 of 1 in SCHEDULE
Created	Fri Aug 19 11:13:35 EDT 2016
Started	Fri Aug 19 11:13:36 EDT 2016
Finished	Fri Aug 19 11:13:36 EDT 2016
Processing Time	0 m 0 s
Time in Queue	0 m 1 s
# of warnings	0
# of errors	0
Start After	Mon Aug 22 11:04:00 EDT 2016

Execution Report

- 1 Collection: [Assets made with Search](#)
- 2 Configuration: [Caption 1 Configuration](#)

Navigation controls: << < 1-2 of 2 > >> Save... Truncate