

DIGITAL ASSET EXCHANGE

USER GUIDE

The logo for StiboSystems, featuring the company name in a white sans-serif font. The 'i' in 'Stibo' has a small double-dot icon above it. The logo is positioned on the left side of the page, partially overlapping a large orange triangle that points towards the right.

StiboSystems

STEP Trailblazer 8.3

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Digital Asset Exchange

STEP assets can be either images or non-images (based on MIME type), but both include metadata, references, and digital content. For more information, see the **MIME Types** section of the **System Setup / Super User Guide**.

- **Images** are assets, usually with a MIME type of **image/***, and can be converted during export from STEP. Modifications can include changes to size, color, and/or converting the file to a format available in the wizard. Image Conversion Configurations allow these modifications to be saved and applied consistently for additional exports. For more information about converting images, see **Image Conversion Configurations** in the **Digital Asset Exchange** documentation.
- **Non-images** are assets with any other MIME type and cannot be modified during an export. Non-images are exported from STEP in the same format and manner that they were loaded into STEP.

Inbound Assets

There are two methods of importing assets into STEP:

- **Asset Importer** allows you to import assets via Web UI and/or hotfolders configured with an Inbound Integration Endpoint.
- **Manual Asset Importer** allows you to import assets via STEP Workbench but cannot be scheduled.

Outbound Assets

There are three ways to export assets:

- **Export Images and Documents** wizard allows you to manually export asset digital content.
- **Export Manager** or an **OIEP** allows you to manually export asset metadata, references, and digital content, in addition to data, using STEPXML.
- **Asset Push** allows you to automatically export modified / approved assets.

To exchange data independent of assets, see the **Data Exchange** documentation.

Exporting Assets

STEP assets can be either images or non-images (based on MIME type), but both include metadata, references, and digital content. For more information, see the **MIME Types** section of the **System Setup / Super User Guide**.

- **Images** are assets, usually with a MIME type of **image/***, and can be converted during export from STEP. Modifications can include changes to size, color, and/or converting the file to a format available in the wizard. Image Conversion Configurations allow these modifications to be saved and applied consistently for additional exports. For more information about converting images, see **Image Conversion Configurations** in the **Digital Asset Exchange** documentation.
- **Non-images** are assets with any other MIME type and cannot be modified during an export. Non-images are exported from STEP in the same format and manner that they were loaded into STEP.

There are three ways to export assets:

- **Export Images and Documents Wizard** allows you to manually export asset digital content.
- **Export Manager** or an **OIEP** allows you to manually export asset metadata, references, and digital content, in addition to data, using STEPXML.
- **Asset Push** allows you to automatically export modified / approved assets.

Asset Push

Asset push allows users to export assets from STEP to a local file system, where they can be accessed by external users and systems. These assets are automatically exported whenever an object is modified or approved (depending on the asset push configuration), ensuring that the assets stored in the local file system are always updated with the latest versions of the assets from the central STEP database. Considering the potentially large size of the assets being exported, this method is favorable over manually exporting assets in bulk.

With asset push, users can maintain a single high resolution image in STEP, and convert it to all the various formats required for use in external systems. The external files will always reflect the most up-to-date images that are in the STEP system. Conversion templates can be applied to transform these images from high resolution to low resolution, resize images, apply color scales to images, and more. Images can also be pushed as-is from STEP to make them available to other applications.

Low resolution images, such as those used in web applications, are not held inside the STEP system. The STEP system normally holds only the high resolution version of an image. Thus, dragging images or documents out of the STEP system in an ad-hoc manner would require considerable resources, and in addition, they would have to be extracted every time they were requested. That is not only true for web-type images (where conceivably there would have to be multiple on-the-fly conversions to all the required low resolution versions of the image) but also for high resolution images (where, although there is usually no conversion, images of 10-20MB or more are commonly held in STEP).

It is important to note that asset push does not send asset files directly to downstream systems. Instead, it makes files available for retrieval by these systems so that on-demand extractions from the intermediate file system can occur without putting any strain on the STEP system.

Asset Push Terminology

Term	Definition
Asset	Any collateral or document in electronic format, such as an image, Word document, Excel file, PDF, PowerPoint file, text file, etc.
Asset Push	A process that exports assets from STEP to a file system for different purposes. Conversion templates can be applied to transform images, for example from high resolution to low resolution, resizing, applying color scales, etc, though assets can also be sent as-is.
assetpush.properties file	Properties file that specifies parameters specific to an individual asset push, including login credentials for the local file system. One file of this type exists for each asset push event queue. Note that the ImagesFolder property is included in this file, which indicates the root directory to which the Relative Path Template is applied (e.g. [ImagesFolder][RelativePathTemplate]).

Term	Definition
Asset Push Event Queue	Queue to listen for events on assets. Multiple asset push configurations can exist on a single event queue, though one event queue is required per sidecar. In other words, assets being pushed to the same destination system may share a single event queue with one or more configurations assigned to it.
Configurations (as related to asset push)	Definition of how an individual asset push will function, including the conversion, relative path template, and acceptable MIME types. Any number of configurations can exist under a single Asset Push Queue in STEP.
Conversions (as related to asset push)	A series of parameters defining the way in which an image is transformed from the standard high resolution asset that exists in STEP to the required downstream format. Several conversion options are available by default, and additional conversions can be added via custom extensions. Note that conversions change assets as they are pushed, leaving the originating file in STEP unchanged. One asset push configuration is required for each required conversion, as a conversion is simply a parameter within the overall asset push configuration. Note that a Conversion is an optional parameter for each Configuration.
MIME Type	Standard identifier used to indicate the type of data that a file contains. In STEP, each asset push configuration includes an option to specify MIME Types to be used in the configuration. Leaving this entry blank means that all asset types meeting the other configuration parameters will be attempted to be converted and/or pushed as specified. Populating this entry means that conversion and/or push will only be attempted for assets meeting the specified types. For more information about MIME types, see the MIME Types section of the STEP PIM Superuser / System Setup documentation.
Relative Path Template	Used in conjunction with the asset path specified in the assetpush.properties file to tell the system where to place the pushed assets. Can be used to create a flat structure or a hierarchy structure, and will typically utilize several pre-defined STEP macros to dynamically create directories. The value entered is used following the root directory specified in the assetpush.properties file (e.g. [ImagesFolder]/[RelativePathTemplate]). For more information about Relative Path Templates, see the Relative Path Template Overview section of the Asset Push documentation.
Sharedconfig.properties file	Properties file that specifies many system parameters, including some that define general asset push functionality across all asset push event queues on the system.

Term	Definition
Sidecar	Optional STEP component consisting of external files installed on various machines, oftentimes on the application server or a remotely located machine. STEP can communicate with sidecars so that when a relevant activity is triggered in STEP, the sidecar is informed of the associated task and carries it out. One sidecar is required for each location to which assets must be pushed. Multiple configurations may share a sidecar if they are also sharing a root destination (as specified in the assetpush.properties file).

Enabling Asset Push

To enable asset push, the user must perform the following actions:

1. Create an image conversion configuration if one is required and none of the standard conversion configurations can be applied. See the **Image Conversion Configurations** section of the **Export Manager** documentation for more information.
2. Create an asset push event queue. See the **Creating Asset Push Event Queues** section of the **Asset Push** documentation for more information.
3. Create one or more asset push configurations. See the **Creating Asset Push Configurations** section of the **Asset Push** documentation for more information.
4. Ensure that the java sidecar application is installed on the client / server where the external file structure is located. The sidecar installation is handled by Stibo Systems Technical Services. Contact your Stibo Systems account manager and/or submit a helpdesk ticket to complete this step.
5. Initiate the first asset push manually. See the **Starting the Asset Push Process** section of the **Asset Push** documentation for more information.

Additional Information

- Assets that have not been pushed or have failed to push can be found by using the 'Unpushed or Failed Assets' search criterion. See the **Unpushed or Failed Assets** topic within the **Navigation and Searches** section of the **Getting Started / STEP User Guide** documentation for more information.
- It may be necessary to monitor the activity of asset pushes, which can be especially important in the event that an asset conversion or extraction fails. See the **Monitoring Asset Push** section of the **Asset Push** documentation for more information.
- Asset Push is utilized to make **assets continuously available to downstream systems** with the latest content and in any required formats, while also **minimizing any performance** impacts this could have on the system.

Asset Push Properties

System Properties

STEP employs a variety of properties to determine some basic system settings for asset push. Many properties are best utilized in their default setting, but may need to be changed in certain situations. These settings can be found in the `sharedconfig.properties` file and affect all asset pushes in the system.

The tables below describe all system properties related to asset push, and recommendations for when to change them. Note that changing any property in the `sharedconfig.properties` file may require a restart of the system for the property to take effect.

AssetPush.AutoDetectedExtension.MimeTypes

Definition	This defines a list of mimetypes (separated by comma) of generated content where auto-detected extensions will be applied (if part of template). Otherwise the original extension will be used.
Default	image/*,application/postscript Using the default, autodetected extensions will only be applied to image and postscript files.
Additional Info / When to Change the Default Value	Change only if the autodetect macro is used as part of the relative path template to ensure that all necessary types of files can be detected. Note that the autodetect macro is used sparingly so this property generally does not need to be changed. Can also be used as a means of filtering which assets have their extensions detected as those not listed will be pushed with their original extensions. You can use an asterisk (*) as wildcard at the end of mimetype.

AssetPush.BatchSize

Definition	This defines Upper limit to how many events to read ahead
Default	Using the default, value would be 100. Value specified for batch size must be an integer.
Additional Info / When to Change the Default Value	Consult with Stibo Systems Technical Services before changing this.

AssetPush.Concurrency

Definition	Option to run in concurrency mode. Running in concurrency mode means that more than one sidecar can get access to events in the same queue. Running in concurrency mode has the consequence that events will be marked read immediately, i.e. before processing. If processing fails, the event will no longer be available on the queue. In that case the asset must be touched to have a new event generated. Must be a Boolean (true or false).
Default	false
Additional Info / When to Change the Default Value	Typically changed only when a full download / push is being performed as it can speed up this process by allowing multiple sidecars to perform the work. Consult with Stibo Systems Technical Services before changing this or the Concurrency Level property (below).

AssetPush.Concurrency.Level

Definition	Defines the number of concurrent sidecars that will be used when the system is running in concurrency mode (see above).
Default	N/A
Additional Info / When to Change the Default Value	Only set if Concurrency is set to 'true'. See above.

AssetPush.DTPConfiguration

Definition	The default configuration to use from DTP Clients (IDS and QXP) when workspace is Main, in order to obtain pushed assets. The property should be an ID of the configuration.
Default	raw-main
Additional Info / When to Change the Default Value	Used for Print / InDesign asset pushes. Only relevant for new (queue-based) asset-pusher.

AssetPush.DTPConfiguration.Approved

Definition	The default configuration to use from DTP Clients (IDS and QXP) when workspace is Approved, in order to obtain pushed assets. The property should be an ID of the configuration.
Default	raw-approved
Additional Info / When to Change the Default Value	Used for Print / InDesign asset pushes. Only relevant for new (queue-based) asset-pusher.

AssetPush.DefaultDTPClientAssetLocation

Definition	Allows a default asset location to be set in the server for use by all DTP clients on site (if they have Use Default Asset Location checked in their preferences). Must be a string in the appropriate form for the DTP client and applicable platform.
Default	N/A (null)
Additional Info / When to Change the Default Value	Used for Print / InDesign asset pushes.

AssetPush.IgnoreClassifications

Definition	Defines a list of classifications (separated by semicolon ';') that will be ignored when an event is fired. ('*' will ignore all classification events).
Default	N/A (null)
Additional Info / When to Change the Default Value	Can be set to ignore classifications for asset hierarchy folders that should not be included in asset push and/or for any non-asset classification hierarchies. It is recommended to use the 'Include Classification' setting in the configuration rather than to exclude via this setting. However, either is acceptable and at least one (if not both) should be populated.

AssetPush.LegalChars

Definition	Legal characters for file name and file structure on the local file system. Any illegal characters encountered (those not in this list) will be converted to underscores. Format=\$char\$ to indicate a range, or type individual values without using \$
Default	N/A (null)
Additional Info / When to Change the Default Value	Should not be used in conjunction with Illegal Characters (use one or the other, or neither). Use when the downstream system has character limitations and allowable characters are limited (e.g. A-Z, a-z, 0-9, hyphen and underscore, indicated as \$A-Z\$a-z\$0-9\$_ OR abcdefghijklmnopqrstuvwxyz01234567890_ ABCDEFGHIJKLMNOPQRSTUVWXYZ).

AssetPush.IllegalChars

Definition	Illegal characters for file name and file structure on the local file system. Any illegal characters encountered (those in this list) will be converted to underscores. Format=\$char\$ to indicate a range, or type individual values without using \$
Default	N/A (null)
Additional Info / When to Change the Default Value	Should not be used in conjunction with Legal Characters (use one or the other, or neither). Use when the file system has character limitations and the allowable characters are significant in number (e.g. standard alphanumerics plus all accented versions allowed but forward slash and asterisk must be omitted, indicated as *).

AssetPush.Instances

Definition	Space separated list of asset push instance names, minus the assetpush- prefix. If the value is 'a b c' then there are 3 asset push instances, named assetpush-a, assetpush-b and assetpush-c. Note: A remote event handler is automatically set up for each instance.
Default	N/A (null)
Additional Info / When to Change the Default Value	Must be matched by: /[a-z0-9\.-]* ([a-z0-9\.-]+)*/

AssetPush.MaxHeapSize

Definition	The amount of memory to allow the Asset Push payload to use.
Default	256m
Additional Info / When to Change the Default Value	Typically left as defaulted. Consult with Stibo Systems Technical Services prior to changing.

AssetPush.PathAddOn

Definition	An intermediate part of the path to inject if attempting to find the asset via the old asset-push system.
Default	N/A (null)
Additional Info / When to Change the Default Value	Inserted between the prePath, and before the (off-cut) relativePath. E.g. if the old pusher stored an asset in /AssetPush/Images/Main/Global/asset.gif, where /AssetPush/Images is the prePath, and the new stored the asset in /AssetPushQueue/Images/ss/et/asset.gif, then setting the AddOn to "../..../AssetPush/Images would result in the path (when searching for old-pushed assets) /AssetPushQueue/Images/../../AssetPush/Images/Main/Global/asset.gif, which is hopefully equivalent to the wanted location.

AssetPush.PathCutoff

Definition	The amount of levels (of directories) to cut off the full path, if mounting the client-drives partly into the assetpush-file-system. Defaults to zero.
Default	Zero
Additional Info / When to Change the Default Value	Only relevant for new (queue-based) asset-pusher.

AssetPush.RedownloadAllMethod

Definition	Defines how to find all assetURLs when no classification root has been specified.
Default	Query
Additional Info / When to Change the Default Value	Possible options: 'Query' and 'Traverse'. Notice, when Query is chosen, AssetPush.RedownloadAssetURLsBatchSize will be ignored.

AssetPush.RedownloadAssetURLsBatchSize=10000

Definition	Defines the number of assetURLs to fetch in each batch when doing redownload.
Default	10000
Additional Info / When to Change the Default Value	Value must be an integer. Typically left as default. Consult with Stibo Systems Technical Services prior to changing.

AssetPush.RelativePathTemplate.Sample1

Definition	A pre-defined relative path template. Will be used in the AssetPushConfiguration editor in the Relative Path Template combobox.
Default	\$configID\$/\$contentdimensionpointsID\$/\$IDpath\$/\$assetID\$.\$autodetected-extension\$
Additional Info / When to Change the Default Value	Use to provide valid and useful macro templates for asset push administrators.

AssetPush.RelativePathTemplate.Sample2

Definition	A pre-defined relative path template. Will be used in the AssetPushConfiguration editor in the Relative Path Template combobox.
Default	\$configID\$/\$IDpath\$/\$assetID\$_

	\$contentdimensionpointsID\$. \$autodetected-extension\$
Additional Info / When to Change the Default Value	Use to provide valid and useful macro templates for asset push administrators.

AssetPush.RelativePathTemplate.Sample3

Definition	A pre-defined relative path template. Will be used in the AssetPushConfiguration editor in the Relative Path Template combobox.
Default	\$conversion\$/\$workspaceID\$/\$IDpath\$/\$assetID\$_ \$contentdimensionpointsID\$. \$autodetected-extension\$
Additional Info / When to Change the Default Value	Use to provide valid and useful macro templates for asset push administrators.

AssetPush.RelativePathTemplate.Sample4

Definition	A pre-defined relative path template. Will be used in the AssetPushConfiguration editor in the Relative Path Template combobox.
Default	N/A (null)
Additional Info / When to Change the Default Value	Use to provide valid and useful macro templates for asset push administrators.

AssetPush.RelativePathTemplate.Sample5

Definition	A pre-defined relative path template. Will be used in the AssetPushConfiguration editor in the Relative Path Template combobox.
Default	N/A (null)
Additional Info / When to Change the Default Value	Use to provide valid and useful macro templates for asset push administrators.

AssetPush.UseSystem

Definition	Entry defining which AssetPush system to use. Legal values are: • new - The new, event-queue-based one. • old - The old one (pre STEP 5.1 and/or December 2009). • both - Attempt the new one, and revert to the former if nothing found.
Default	new
Additional Info / When to Change the Default Value	Should always be populated with 'new' unless on a system with a STEP installation prior to 5.1 or being upgraded from a pre-5.1 system (in which case 'both' may be appropriate).

Assetpush.Email.Notification.Minutes

Definition	Time between email notifications for asset push. Must be an integer. Set in minutes.
Default	60
Additional Info / When to Change the Default Value	Update as needed

Event Queue Properties

When a sidecar is installed for an asset push, Stibo Systems Technical Services will also create and populate an assetpush.properties file. This file defines some key information for the specific event queue with which the asset push is associated. The location of the properties file will be provided by Stibo Systems Technical Services.

Note that this file only affects individual event queues, whereas system properties apply to all asset pushes in the system. Additionally, asset properties always need to be defined, whereas system properties can often be left with the default values.

The assetpush.properties file contains the following properties:

Name	Definition
UserName	Username for file system login.
Password	Password for file system login.
ImageFolder	Specifies the first part of the path and/or parent directory into which all pushed assets will be placed. Relative Path Template takes effect after this, meaning that all asset push configurations under a single event queue will share a parent folder on the local file system, but each configuration is expected to have a separate directory structure under the common parent.
Delay	Rate in seconds for sidecar to ping the file system to ensure connection. Always set to 30 seconds and should not be changed without consultation with Stibo Systems Technical Services.

Creating and Maintaining Asset Push Event Queues

Each asset push runs off of an event queue, which defines the local file system the asset is sent to. An event queue can have any number of asset push configurations running from it, each providing their own specific parameters for the asset push, including any required conversions. While the event queue may determine the destination system, assets can be placed in different hierarchies on that system (as defined by the individual configuration of each asset push).

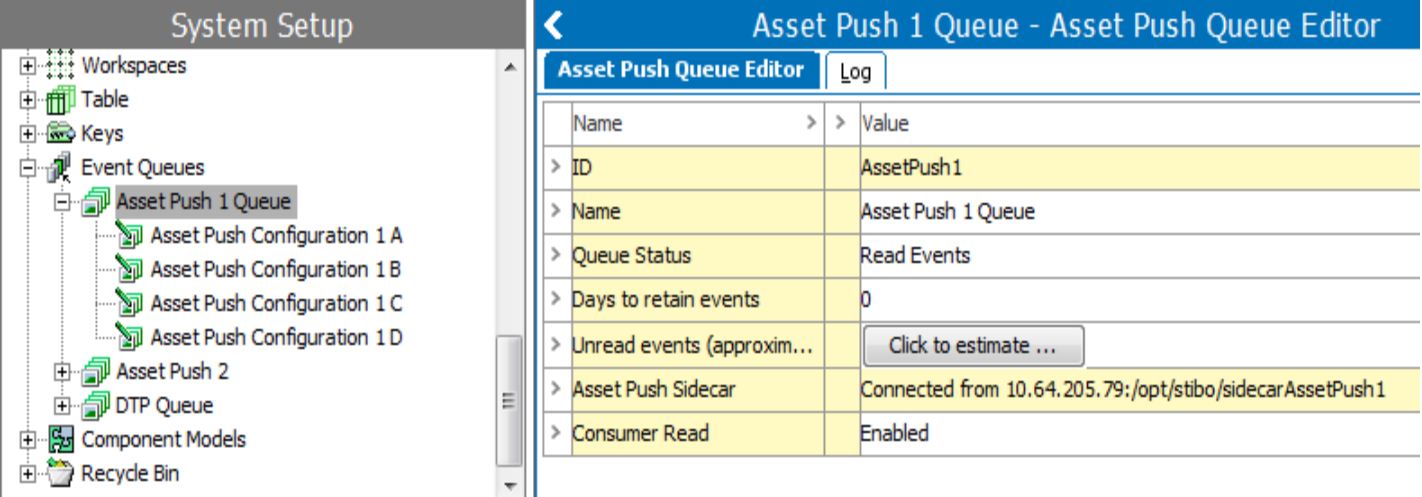
Because multiple asset push configurations can be created for each event queue, multiple queues are only needed if there is a requirement to support different target file systems. If all assets are sent to the same file system, only a single event queue should be created.

Note: The chosen file systems must be directly accessible to STEP. Typically this means pushing to some intermediate location, such as the application server, where downstream systems can access the files without putting any strain on the STEP system.

For more information on setting up asset push configurations, see the **Creating Asset Push Configurations** section of the **Digital Asset Exchange** documentation.

The below section describes how to set up and maintain an asset push event queue in the STEP Workbench. Additional global configuration options are available via the system properties. For more information on configuring event queue properties, see the **Asset Push Properties** section of the **Digital Asset Exchange** documentation.

1. In System Setup, right-click **Event Queues** and then select **New AssetPush Event Queue**. The **Create Asset Push Queue** dialog appears.
2. Enter an **ID** and a **Name** for the Asset Push Event Queue, and then click **Create**. A new Asset Push Event Queue node is created in **System Setup**, and the **Asset Push Queue Editor** tab opens.



The screenshot shows the 'System Setup' window on the left and the 'Asset Push 1 Queue - Asset Push Queue Editor' window on the right.

System Setup Hierarchy:

- Workspaces
 - Table
 - Keys
 - Event Queues
 - Asset Push 1 Queue
 - Asset Push Configuration 1 A
 - Asset Push Configuration 1 B
 - Asset Push Configuration 1 C
 - Asset Push Configuration 1 D
 - Asset Push 2
 - DTP Queue
 - Component Models
 - Recycle Bin

Asset Push Queue Editor Properties:

Name	Value
ID	AssetPush1
Name	Asset Push 1 Queue
Queue Status	Read Events
Days to retain events	0
Unread events (approxim...)	<button>Click to estimate ...</button>
Asset Push Sidecar	Connected from 10.64.205.79:/opt/stibo/sidecarAssetPush1
Consumer Read	Enabled

3. Click the **Queue Status** field, and select either **Discard Events** or **Read Events**. The default status is Discard Events.

- **Discard Events:** Any events that occur while the specified classification folders are being monitored are not processed. **Days to retain events** setting will be ignored.
 - **Read Events:** Any events that occur while the specified classification folders are being monitored are processed.
4. Double-click the **Days to retain events** field, and specify for how many days events should be saved.
- The default setting is 0, however if the user wants to reprocess an event that has already been processed, they have to specify the number of days to retain events. Events are typically reprocessed if delivered files are lost and need to be redelivered. This may be set as any integer, though it is recommended to set it between one and ten.
- For more information about rewinding events, see the **Event-Based OIEP Forward, Rewind, Purge, and Republish** section of the **Additional Information for Event-Based OIEPs** documentation.
5. In **Unread Events**, press **Click to estimate** to view approximately how many unread events are currently in the asset push event queue.
6. The **Asset Push Sidecar** displays the IP address of the sidecar. The address comes from the client that the Java sidecar application is installed on. If no sidecar is detected, the field displays **No activity yet**. A sidecar is an integral part of the asset push and is responsible for carrying out the tasks sent by the event queue. The sidecar communicates with both STEP and the local file system and provides the link between the two.
- Each asset push event queue requires its own sidecar.

Note: Installing a sidecar requires Stibo Systems Technical Services. Contact your Stibo Systems account manager and/or submit a help desk ticket to complete this step.

7. In the **Consumer Read** field, select either **Enabled** or **Disabled**.
- **Disabled:** Processed events are held and are not delivered to their final destination. This setting can be used if a user wants to temporarily stop the items from queuing, for example, when the location that receives the deliveries is experiencing problems such as a full disk.
 - **Enabled:** Delivers processed events to their final destination.

The overall functionality of the endpoint is determined by a combination of the settings, with resulting functionality as follows:

- **Enabled + Read Events:** 'Active'; Use for active queue that should deliver assets to downstream systems.
- **Disabled + Read Events:** 'Paused'; Use to temporarily disable the feed, while not losing access to events being generated while disabled. Events will continue to be read and queued, but will be retained within STEP and no attempt will be made to pass them to the downstream system until the Consumer Read setting is changed to 'Enabled'.
- **Disabled + Discard Events:** 'Inactive'; Use when no new events should be processed (now or later) and no assets should be delivered downstream.
- **Enabled + Discard Events:** 'Transition'; Not commonly used but can be employed when one queue will take over from another, or prior to running a bulk update process that should not be sent downstream.

Allows the old queue to process queued events, but not generate any new ones as new events should be set to queue on the new endpoint (or discarded if bulk update is used and events should not be sent out).

Once the asset push event queue has been set up, asset push configurations can be created. For more information on setting up asset push configurations, see the **Creating Asset Push Configurations** section of the **Digital Asset Exchange** documentation.

Creating and Maintaining Asset Push Configurations

Asset push configurations provide a set of parameters that determine which format to convert assets to, which workspace to extract assets from, which asset folder structure in STEP to monitor for changes, which file formats to convert (e.g. convert TIF, EPS, and JPG images in STEP but not BMP, PNG, or GIFs), and where to place the images on the local file system. Though they are primarily used for converting assets to different formats, some configurations will not have any conversion specified as the asset merely needs to be pushed as-is to the file system.

Any number of asset push configurations can exist within an asset push event queue, but only one is required. A separate configuration must be created for each conversion format desired. Typically, multiple configurations running off of the same event queue will not share a common conversion format unless: a push is needed from both the Main and Approved workspaces, the same assets need to be placed in multiple locations on the local file system for accessibility reasons, or assets from different STEP classifications need to be separated on the file system for organizational purposes.

Prerequisites

Prior to creating any asset push configuration, an event queue must first have been configured. For more information on asset push event queues, see the **Creating and Maintaining Asset Push Event Queues** section of the **Asset Push** documentation.

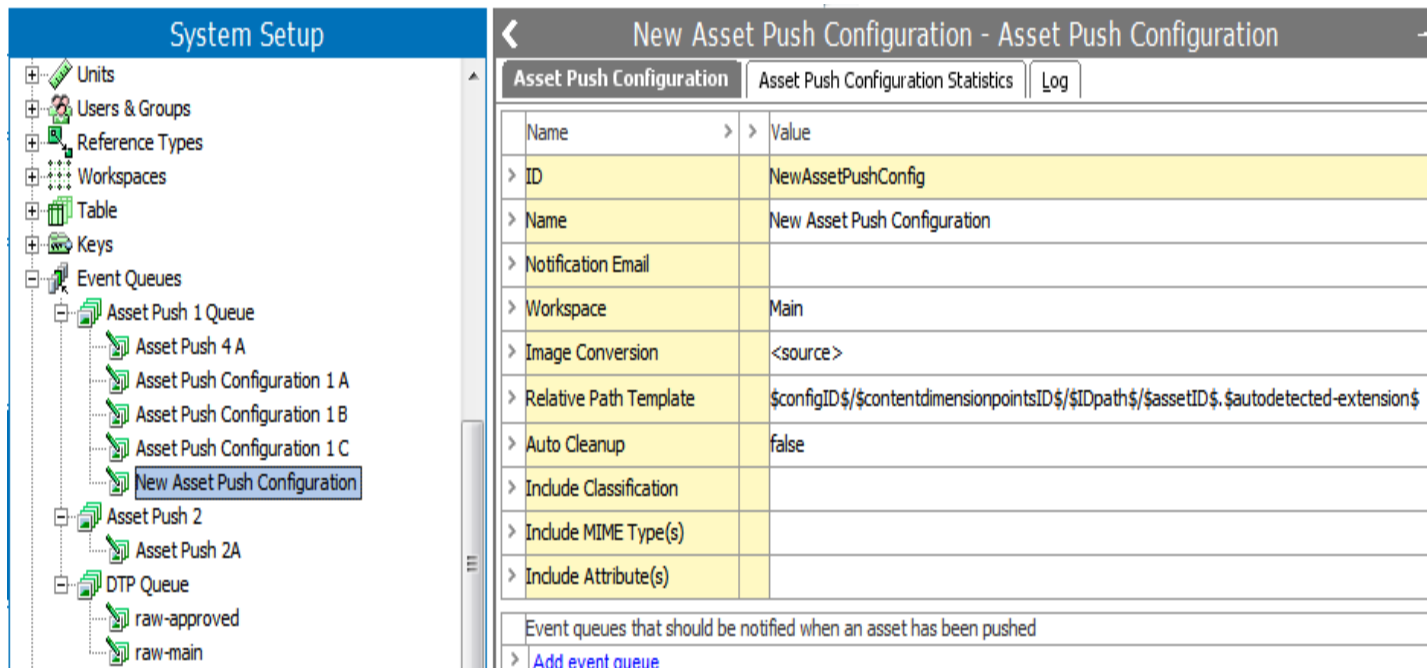
Additionally, if image conversion is required as part of the asset push, the image conversion configuration must be completed prior to the asset push configuration, so that the conversion can be selected as part of the configuration. See the **Image Conversion Configurations** section of the **Export Manager** documentation for more information.

Configuration

1. In **System Setup**, right-click an **Event Queue** and then choose **New Asset Push Configuration**. Each Configuration consists of ten parameters.
2. Enter an **ID** and a **Name** for the asset push configuration, and then click **Create**.

Important: Do not use spaces in this ID. Also, it is strongly suggested that the ID and the Name of a Configuration be kept the same, or at very least closely the same, e.g., ID of 'HighResLondon,' Name of 'High Res London').

A new asset push configuration node is created in System Setup and the **Asset Push Configuration** tab opens.



System Setup

- Units
- Users & Groups
- Reference Types
- Workspaces
- Table
- Keys
- Event Queues
 - Asset Push 1 Queue
 - Asset Push 4 A
 - Asset Push Configuration 1 A
 - Asset Push Configuration 1 B
 - Asset Push Configuration 1 C
 - New Asset Push Configuration**
 - Asset Push 2
 - Asset Push 2 A
 - DTP Queue
 - raw-approved
 - raw-main

New Asset Push Configuration - Asset Push Configuration

Asset Push Configuration | Asset Push Configuration Statistics | Log

Name	Value
ID	NewAssetPushConfig
Name	New Asset Push Configuration
Notification Email	
Workspace	Main
Image Conversion	<source>
Relative Path Template	\$configID/\$contentdimensionpointsID/\$IDpath/\$assetID\$. \$autodetected-extension\$
Auto Cleanup	false
Include Classification	
Include MIME Type(s)	
Include Attribute(s)	

Event queues that should be notified when an asset has been pushed

[Add event queue](#)

- (Optional) Click the **Notification Email** field, and enter a valid email address. If populated, this will result in an email being sent to the specified address in the event that a queued asset fails to be converted and / or extracted.
- Click the **Workspace** field, and select the workspace from where the assets are to be pushed. If **Approved** is selected, asset push is triggered by asset approval. For example, Web or Electronic initiatives. If **Main** is selected, assets are pushed when they are edited and / or replaced, and no approval is required to trigger the push. For example, print initiatives.
- If the assets need their format, size, or image color settings converted when pushed to the target system, click **Image Conversion Configuration**, and select the relevant conversion configuration from the list. Upon creation of Asset Push Configuration, <source> is set as default value on Image Conversion.

The list contains all of the conversions that are available in the system. Configurations that have (conversion) appended to their names are custom conversions, and those without (conversion) appended are standard conversions.

Asset Push Configuration			Asset Push Configuration Statistics	Log
Name	>	>	Value	
ID			NewAssetPushConfig	
Name			New Asset Push Configuration	
Notification Email				
Workspace			Main	
Image Conversion			<source>	
Relative Path Template			<source>	
Auto Cleanup			ApparelJPG-RGBConversion (conversion)	
Include Classification			GreyJPEG (conversion)	
Include MIME Type(s)			JPEG Low (conversion)	
Include Attribute(s)			JPG TWST (conversion)	
Event queues that should be notified			PNG Low (conversion)	
			TIFF LZW (conversion)	
			DCS (AssetPush_highres)	

If <Source> is selected, no conversion takes place.

See the **Image Conversion Configurations** section of the **Export Manager** documentation for more information.

- In the **Relative Path Template** field, specify how to organize the generated file structure. Typically the folder structure is based on the asset's ID, which cannot be changed and ensures the external structure is stable and free from accidental duplication.

To specify the structure, a string of macros must be entered into this field.

Note: That this field accepts predefined STEP “macro” tags.

See the **Relative Path Template** section of the **Asset Push** documentation for more information on the available macros.

- In **Setting Auto Cleanup**, the user must specify whether they want to keep or remove pushed assets from the target system. Selecting **True** removes previously pushed assets from the target system in the following situations:

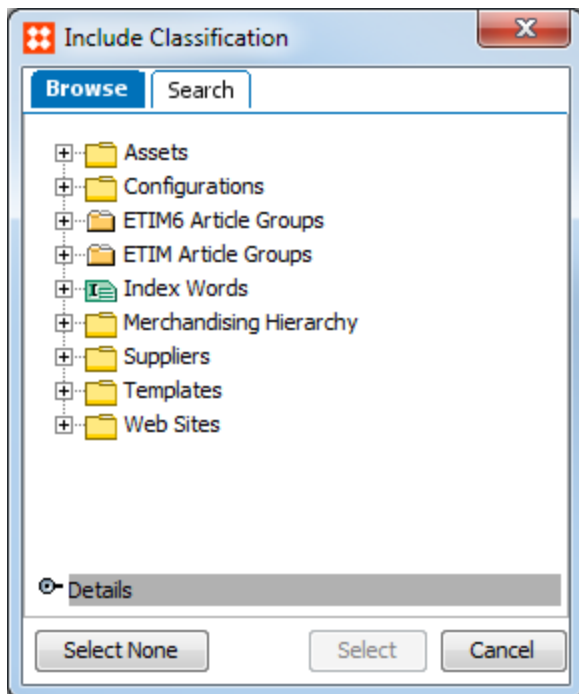
- The asset has been renamed and pushed again
- The asset push configuration has been changed, and the asset has been pushed again
- The asset has been deleted from STEP and the deletion has been approved

If **False** is selected, which is the default option set, STEP will not automatically cleanup the file system.

Note: It is recommended to set Auto Cleanup to 'true' so that manual intervention is not required in maintenance of the file system.

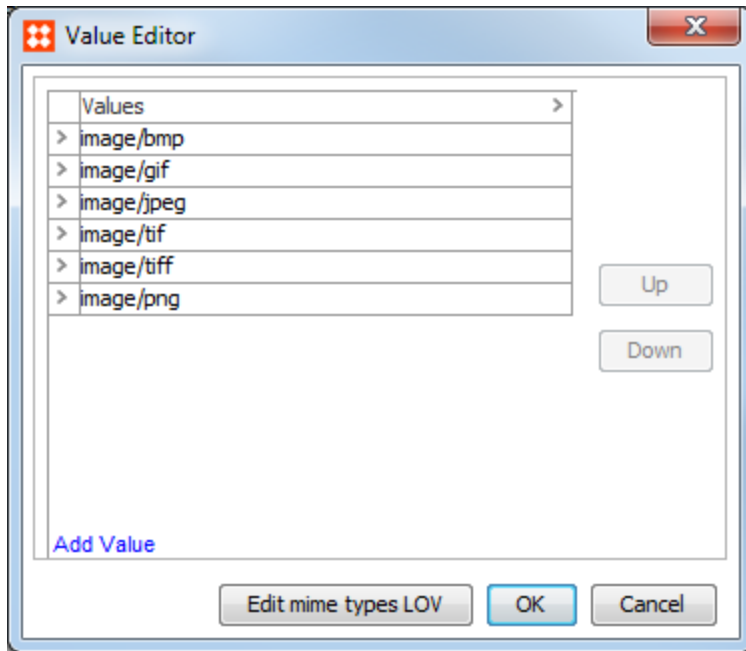
- Click **Include Classification**, and then click the ellipsis button (...). The **Include Classification** dialog appears. Select which classification node(s) asset push will monitor for changes, and then click **OK**.

Note: This field should not be left blank as that forces the system to monitor all classification folders, of which only a subset are actually valid for assets. At a minimum, the root classification folder for assets should be specified, which causes the system to monitor all child folders in the asset hierarchy.



- Double-click the **Include MIME type(s)** field to filter which assets are included in the push via their MIME type. In the **Add Value Editor**, click **Add Value** to add the relevant MIME types, and then click **OK**.

It is recommended that this field be filled, otherwise the asset push configuration will convert all MIME types (e.g. .wav, .xls, .exe), which is typically not required. If all standard images should be included, the image/* and application/postscript MIME types should usually be included.

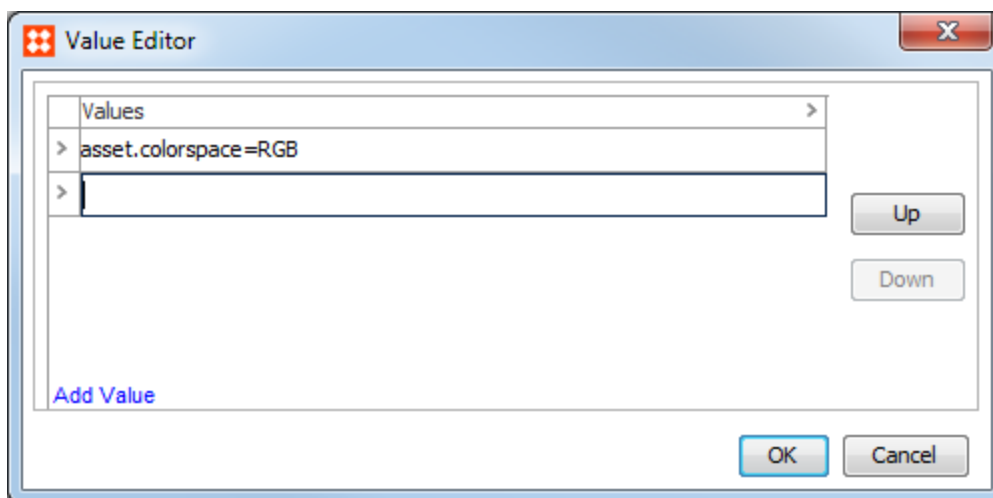


For more information about MIME types, see the **MIME Types** section of the **STEP Superuser / System Setup** documentation.

10. (Optional) Double-click the **Include Attribute(s)** field to specify if the asset push configuration is restricted to assets with specific attribute values. This setting allows users to add some basic intelligence to the conversion without requiring any system extensions. Populating this field means that only assets that have the specified value in the indicated attribute will be pushed.

In the **Add Value Editor**, click **Add Value** to add the relevant attribute values, then click **OK**.

Valid inputs require the following format: [Attribute ID]=[Attribute value]. Populating the field with multiple attributes acts in an 'AND' fashion (asset must meet both conditions to be pushed).



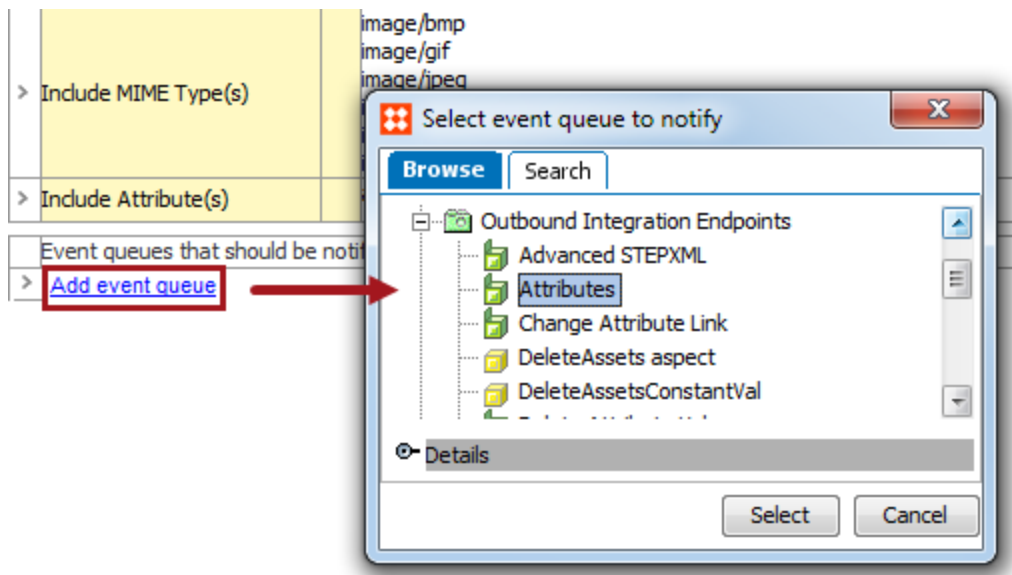
Each STEP asset has a series of metadata attributes that are automatically set upon import of the asset. Users may also create additional metadata attributes and define how they are to be set as part of the import

configuration. Note that any assets with user-created metadata attributes must be pushed from the Approved workspace for the **Include Attribute(s)** setting to operate according to the value. If the asset only uses pre-existing system metadata attributes it can be pushed from either the Main or Approved workspaces.

See **System Metadata Attributes** below for a list of all metadata attributes that are automatically set upon import of the asset.

Note: When using this functionality, it is important to ensure that the selected attribute(s) are both valid on the asset types being handled by the push, and that the assets will have value(s) for the attribute(s).

11. (Optional) Click **Add event queue** and select an integration endpoint from the pop-up window. Populating this setting means that the listed queues will be notified when an asset has been pushed, and an event will be created on the queue if applicable.



Note that asset push sends only the actual asset files to a downstream system. Oftentimes it is useful to also provide an XML or other file type that contains the asset metadata, including the Relative Path of the asset so that users can easily find it on the downstream system.

Outbound endpoints that send asset metadata are often triggered at approval, which is typically the same trigger used for the asset push. This means that the Relative Path for any asset is not yet populated at the time of the outbound metadata file trigger. When the asset Relative Path needs to be included in the outbound metadata file, it is then necessary to notify the outbound queue following the push (using this setting). This triggers an event on the outbound file queue so that the metadata is sent (again) and includes the Relative Path.

12. When a new configuration is created, or an existing configuration is updated, it may be necessary to restart the asset push sidecar.

System Metadata Attributes

The following asset metadata attributes exist as defaults on the system and are populated automatically for any asset that contains the relevant information:

- `asset.class`
- `asset.colors`
- `asset.colorspace`
- `asset.compression`
- `asset.creator`
- `asset.depth`
- `asset.dsc-conformance`
- `asset.extension`
- `asset.filename`
- `asset.format`
- `asset.format-version`
- `asset.height`
- `asset.mime-type`
- `asset.pages`
- `asset.pixel-height`
- `asset.pixel-width`
- `asset.preview`
- `asset.preview-format`
- `asset.profile`
- `asset.samples`
- `asset.size`
- `asset.uploaded`
- `asset.width`
- `asset.xdpi`
- `asset.ydpi`

Use Cases

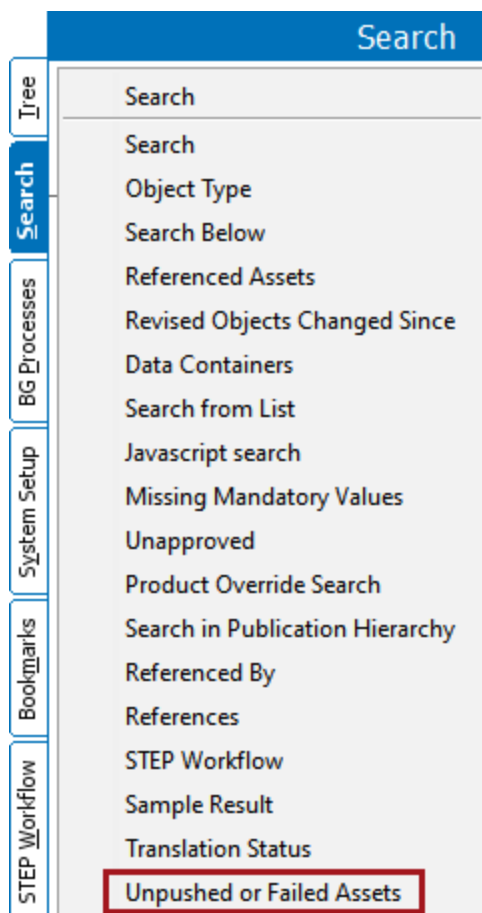
- Users can set the assets to be pushed to a file system(s) with or without format conversion.
- Users should use `<source>` for any situation where you simply want to export the asset as-is. This applies to PDFs, movie clips, Word doc files, etc.
- Users can configure the MIME types, workspace, and asset folder structure in STEP to be monitored for changes on assets.
- Users can push an asset from both the main and approved workspaces with the same conversion format, and can place both configurations beneath the same asset push event queue.
- Users can restrict the asset push configuration to push assets with specific attributes.

- Users can create one configuration for each conversion needed, and have them placed beneath a single Asset push event queue.
- Users can set the asset push configuration to notify any specific event queue.
- Users can configure the notification email to be sent in the event that a queued asset fails to be converted and/or extracted.
- Users can select between standard and custom Image conversion configurations.
- Users can define how to organize the generated file structure using a string of macros in the Relative path template.
- Users can specify whether to keep or remove pushed assets from the target system.

Monitoring Asset Push

It may be necessary to monitor the activity of asset pushes, which can be especially important in the event that an asset conversion or extraction fails. Listed below are four methods of monitoring the status of asset pushes within the STEP Workbench. If additional monitoring is required, it is recommended that standard system monitoring tools are utilized (e.g. designated external monitoring system). Additionally, the STEP System Administration page can be used.

1. Each asset push configuration can be set up to send an email when any assets fail attempted extraction and/or conversion. See step 3 of the **Creating and Maintaining Asset Push Configurations** section of the **Asset Push** documentation for more information.
2. Assets that have not been pushed, or have failed to push, can be found by using the 'Unpushed or Failed Assets' search criterion.



See the **Unpushed or Failed Assets** topic within the **Navigation and Searches** section of the **Getting Started / STEP User Guide** documentation for more information.

3. Statistics regarding each asset push can be viewed on the **Asset Push Configuration Statistics** tab. 'Refresh Statistics' button can be used to refresh and get the updated information.

'Reset Statistics' button can be used to reset the counters and last timestamp of last reset can be found in value field of 'Time for last reset of statistics'.

Asset Push Configuration Statistics	
> Total no. of successful download requests (downl...	6
> Total no. of successful download requests (uptod...	9
> Total no. of failed download requests	0
> Avg. asset size of successful downloads (bytes)	0
> Avg. duration of successful downloads (millisec)	227
> Time for last reset of statistics	Tue Nov 17 14:54:19 EST 2015

Buttons: Refresh Statistics, Reset Statistics

- The status of each individual asset relative to all asset push configurations can be viewed on the Status tab of the asset, under the Asset Push Status flipper.

Configuration	Asset Push Status	Relative Path	Workspace
> Asset Push Configura	✓ Up to date	AssetPushConfig1B/05/97/110597.jpg	Main
> Asset Push Configura	Never been handled		Main
> Asset Push Configura	Never been handled		Main
> raw-main	✓ Up to date	raw-main/05/97/110597.png	Main
> Asset Push Configura	Not included		Approved
> raw-approved	✓ Up to date	raw-approved/05/97/110597.png	Approved

The available statuses are:

- Asset not in workspace: The configuration pushes only from the approved workspace, and the selected asset has never been approved.
- Downloaded: An initial push of the asset has been carried out
- Never been handled: The asset has never been pushed with the indicated configuration. This may be because the configuration is not applicable for the selected asset or because the configuration has not had an initial push carried out.
- Up to date: The asset has been modified since initial push, and the updated image has been pushed.

Use Cases

- Users can select any asset and view its push status in various asset push queues.
- Users can obtain asset push configuration statistics and can also refresh and reset the counters.
- Users can run a search to find unpushed or failed assets of any specific asset push configuration.
- Users can opt to receive an email notification in the case of a failed asset push.

Monitoring and Error Handling Asset Push

STEP will monitor failed asset pushes. Two reasons for these failures are:

- Improper asset file in the Asset hierarchy
- Filesystem on Application server is out of space

Higher level of monitoring data can be attained by polling a STEP 'Sensor' for the Asset Push Queue. To poll this sensor, you must use the following URL:

URL: `http://<step-app-server> /admin/monitoring/Sidecar-assetpushqueue-AssetPushQueue/`

The sensor can present information in a number of formats:

- User readable overview
- Simple status response
- Nagios format
- XML

The problem can be resolved by either correcting the error in STEP, or increasing system storage space on the application server.

Once the problem has been resolved, the Asset Push may be attempted again. This may be done by forcing a new push, or by waiting for the asset push queue to automatically push assets that are changed and approved in the future.

Note: A full push may be very demanding and require a large amount of system resources.

If the Asset Push Sidecar stops working due to patching or an issue in the system, the application server must be restarted. Rebooting the server will re-enable the Asset Push Sidecar.

STEP will not monitor the following processes once STEP has delivered assets to the application server filesystem:

- Transport of files from STEP application server file system to eCommerce Server.
- Import of assets in the eCommerce application for display on the web.

Relative Path Template

Rather than using the file structure in STEP, an asset push configuration specifies how to organize the generated external file structure via a Relative Path Template (RPT). Typically the folder structure is based on the asset's ID, which cannot be changed and ensures the external structure is stable and free from accidental duplication. This means that it is not possible for the same image to occur in multiple folders in the external structure (unless multiple configurations are used).

The RPT is used in conjunction with the ImagesFolder property in the assetpush.properties file to tell the system where to place the extracted assets. Specifically, the RPT dictates a path, file name, and appropriate file name extension, with the intent that all the images pushed into the structure have a unique path and/or file name. The RPT is typically populated with a series of predefined STEP macros and also allows users to control whether the assets will be pushed to a flat file structure or a folder hierarchy structure. In this field, some predefined STEP 'macros' may be used.

Note: RPT takes effect after the path specified in the ImagesFolder property of the assetpush.properties file: [ImagesFolder value]/[Relative Path Template]

The RPT can be constructed using a series of macros for dynamic creation, as well as any static text that is required. Static text can be applied in many ways, including file extensions, folder names, or anything that designates a static folder into which assets and / or child folders should be placed. The system will automatically create all folder structures dictated by the RPT on the local file system, with each slash (/) creating a new directory level.

Important: Care should be taken to ensure that the RPT is constructed in such a way that: file paths do not exceed the length limits of the target system; only legal characters for the target system are incorporated (illegal characters will be automatically replaced by an underscore); and each asset is assigned a unique file name within the target folder.

Many of the macros are optional. The one macro that really is mandatory is the '\$assetID\$' (or '\$assetName\$') macro. Without this, all images would be converted to the exact same file name, which is hardly practical.

If assets have been declared as dimension dependent, then it is mandatory to include either the '\$contentdimensionpointsID\$' or the '\$contentdimensionpointsName\$' macro in the RPT. The system will not save your RPT entry if you exclude this.

The following is a list of relevant macros:

Macro	Notes
\$configID\$	STEP ID of the asset push configuration. Often used as a parental folder level for the RPT.
\$contentdimensionpointsID\$ / \$contentdimensionpointsNAME\$	STEP ID / Name of the dimension point of the asset. ID macro should be used whenever possible in place of Name. Required to use a dimension macro if any assets are dimension dependent. System will not save the

Macro	Notes
	RPT entry if a dimension macro is not specified and the system includes dimension dependent assets. Note that if any asset types are declared dimension dependent (i.e. the asset's Name is dimension dependent) then the user cannot use the \$assetNAME\$ macro for file names, \$assetID\$ must be used instead.
\$IDpath\$	Tells the system to autogenerate external file folders using the ID of the asset. Use when a folder structure for assets is needed. Excluding this will result in a flat file structure being created on the local file system (all assets placed within the same folder). It is also possible to use \$IDpath3\$, \$IDpath4\$, or \$IDpath5\$ to specify how many characters to use to create the external file folders. For example, if an asset has an ID of 0123456789, then: • \$IDpath\$ will generate a file folder structure of 67/89/ • \$IDpath3\$ will generate a file folder structure of 456/789/ • \$IDpath4\$ will generate a file folder structure of 2345/6789/ • \$IDpath5\$ will generate a file folder structure of 01234/56789/ The use of more characters reduces the number of possible asset entries in each folder. Higher numbers recommended if large numbers of assets are being pushed as the user should aim to have fewer than 1,000 assets per folder to allow for navigability on the file structure.
\$assetID\$ / \$assetNAME\$	STEP ID / Name of the asset being pushed. It is required that one of these or the attribute:key macro be used to define the file name, otherwise all assets will be pushed with the same file name. ID must be used if any of the assets being pushed are dimension dependent (NAME cannot be used in this case). Best practice is to use ID (rather than NAME) whenever possible. Note that STEPXML only includes asset ID in the product references section so communication of product to asset relationships to downstream systems will require an additional section and/or feed to map asset Names and IDs if the NAME macro is utilized.
\$attribute:key\$	Extracts values from any Description attribute on an asset so that they can be used as the asset file name. When the asset is pushed, the value of the attribute specified by the key replaces the macro configuration in the file

Macro	Notes
	name. Note that this macro can also be used as part of the relative path rather than as the file name, but the intended use is for file name. See below Configure \$attribute:key\$ Macro section for setup instructions. Dimension dependent Attributes are not available for use as path keys. This is checked when the attribute dimension is changed for an attribute and when a new asset push template is created. A change in value on the attribute bound to the path key will cause the asset to be re-pushed. If the asset push configuration is set to publish from the Main workspace, any changes made to the relevant attribute value will prompt an asset push. Likewise, if the configuration is set to publish from the Approved workspace, the asset push will trigger when the value change is reflected in the Approved workspace. Changes made to externally maintained attributes will prompt an asset push from either workspace. Note that if 'Auto Cleanup' is set to 'true' in the asset push configuration, the previous version of the updated asset will be deleted.
\$autodetected-extension\$	Detects the type of file generated by the conversion and applies the appropriate extension. Used only when intelligent conversion is used, whether via asset metadata or a custom conversion, as intelligent conversions may produce different types of output files. Standard conversions produce only one file type per conversion, so static text or the \$extension\$ macro should be used, and are the preferred methods for applying the file extension. When using this, be sure to insert a text entry of “.” before the \$autodetected-extension\$ macro so that the file name will have the usual period between the name and its extension (e.g. xxx.\$autodetected-extension\$).
\$extension\$	Applies the file type extension specified by the conversion. If the configuration does not include conversion, assets are passed through and assigned the same extension they had within STEP. When using this, be sure to insert a text entry of “.” before the \$extension\$ macro so that the file name will have the usual period between the name and its extension (e.g. xxx.\$extension\$). Either this macro or static text should be used to generate the extension for

Macro	Notes
	all standard (non-intelligent) conversions.
\$workspaceID\$ / \$workspaceNAME\$	STEP ID / NAME of the workspace which the assets are being pushed from (e.g. Main or Approved). ID macro should be used whenever possible in place of Name. Typically used only if the system has multiple configurations with at least one pushing assets from each workspace.
\$conversion\$	Specifies the type of image conversion in the file path. This macro is not frequently used, but can be useful if it is required to keep different versions of the same asset separated by conversion type. Example (\$conversion\$ is bolded): AssetPushConfig1/plain-thumbnail/23/45/12345.jpg

Important Macros to Note

Most frequently used macros

- \$configID\$
- \$contentdimensionpointsID\$
- \$contentdimensionpointsNAME\$
- \$IDpath\$
- \$assetID\$
- \$extension\$

Additional useful macros

- \$IDpath3\$
- \$IDpath4\$
- \$IDpath5\$
- \$assetNAME\$

Relative Path Template Example

- ID of asset push configuration=AssetPushConfig1
- ImagesFolder property in assetpush.properties file set to 'images'

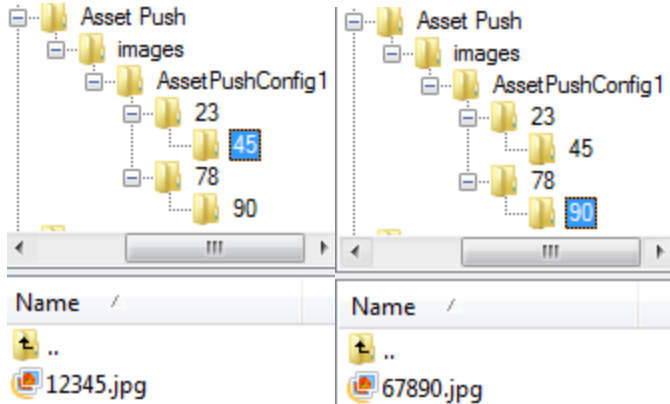
- RPT in configuration set to '\$configID\$/\$IDpath\$/\$assetID\$.jpg'
- Assumes conversion is used with resulting file type of JPG
- Two assets are pushed, with STEP IDs of '12345.gif' and '67890.png'
- The resulting Relative Paths in the asset status tab should read:
 - AssetPushConfig1/23/45/12345.jpg

Configuration	Asset Push Status	Relative Path	Workspace
> AssetPushConfig1	✓ Downloaded	 AssetPushConfig1/23/45/12345.jpg	Main

- AssetPushConfig1/78/90/67890.jpg

Configuration	Asset Push Status	Relative Path	Workspace
> AssetPushConfig1	✓ Up to date	 AssetPushConfig1/78/90/67890.jpg	Main

- Once on an external server, they resemble the below images:

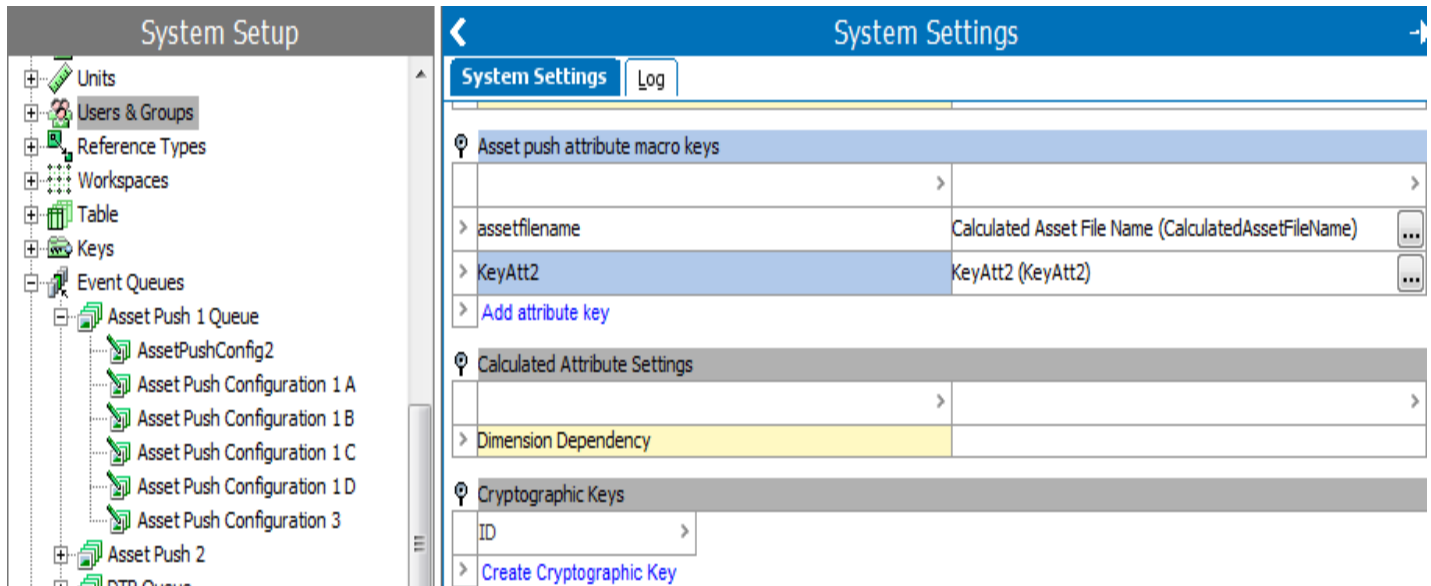


For an example using a calculated attribute and attribute macro key within a Relative Path Template, see the **Asset Push File Name Scenario** documentation.

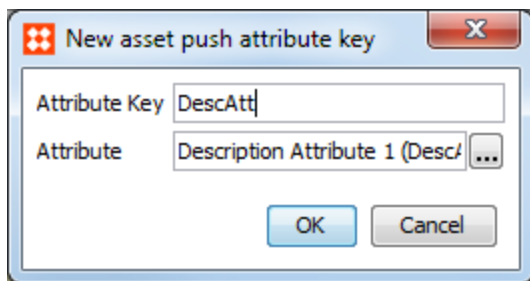
Configure \$attribute:key\$ Macro

Before the \$attribute:key\$ macro can be used the applicable attributes must be configured in **System Settings**.

1. In **System Setup**, click on the **Users & Groups** node and navigate to the 'Asset push attribute macro keys' section under the **System Settings** tab.

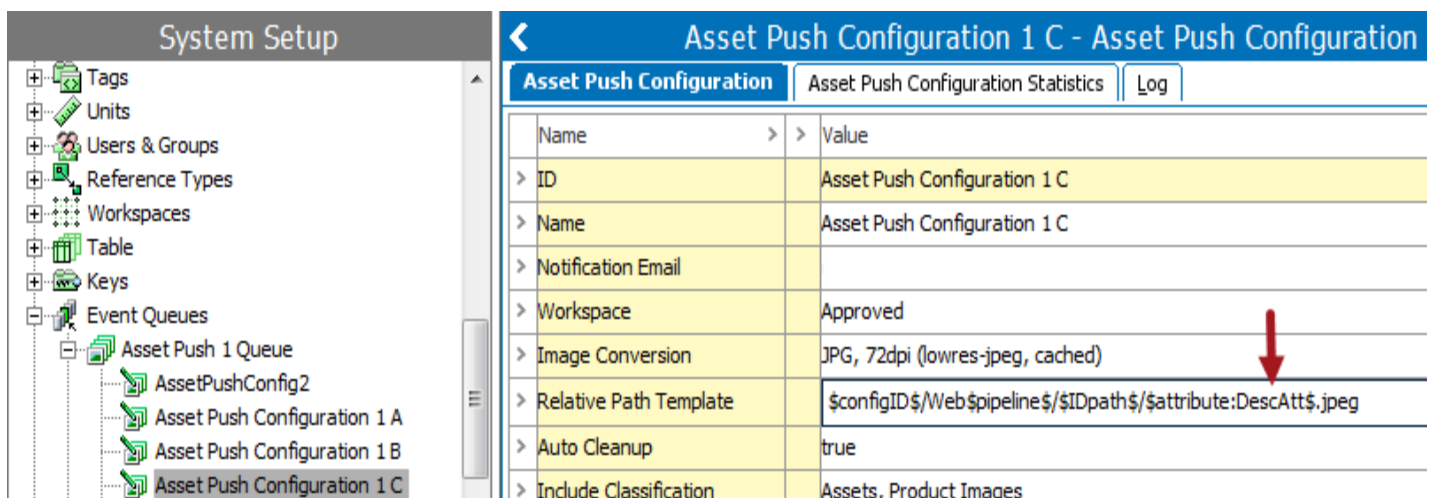


2. Click **Add attribute key**.
3. In the pop up window, enter a name for the Attribute Key. This name can differ from the selected attribute, and is used in place of 'key' in the macro. Click on the ellipsis and select the desired attribute from the list.



Note: On the **System Settings** screen, the Attribute Key appears in the first column and the attribute's STEP name appears in the second column.

4. Return to the desired asset push configuration and enter the desired Attribute Key.



Miscellaneous Notes

If the user does not have dimension dependent images, there is no need to use either of the \$contentdimensionpoint macros (ID or NAME) in the RTP.

Even if the names of the images have not been set to dimension dependent, use the macro \$assetID\$ in favor of \$assetName\$.

Use one of the \$IDpath macros when it is necessary to have a folder structure for the assets.

- Do not use this macro if it isn't needed. It is normal to have an \$IDpath macro for high-resolution images, but for low-resolution web images, you may not need to use a folder structure.

File name extensions — For DTP applications, where there is no image conversion at all, use the macro \$extension\$.

- Do not use the \$autodetected.extension\$ macro if it isn't needed. It should only be a very rare occurrence when you do need it.
- For web images, use the actual filename extension that the conversion is creating. If your conversion is creating jpg images, just put .jpg in the RTP.
- Do not bother to use a macro for the extension. Same if the conversion is creating a gif or png file – just type that extension directly in to the RTP.

Specify a Classification Folder to be monitored for assets. Leaving this entry blank forces the system to monitor and review all classification folders.

Also, specify the MIME types that you want the conversion to work on. Otherwise, the conversion will attempt to convert assets such .exe files, .wav files, xls files etc.

With print items, if your user does not wish to use the approved workspace for images, do not set up a configuration for it (e.g. raw-approved). However, the user needs to make sure that in the sharedconfig.properties file that the system pulls from raw-main even when in the Approved workspace.

Starting the Asset Push Process

After creating or editing an asset push configuration, an initial asset push must be manually performed. This initial push ensures that the local file system has all of the initial information (assets), and receives only changes from the event queue going forward.

Note that the initial asset push can be a time consuming process so care should be given to the timing and initiation of the push.

- 1. In the **Tree**, navigate to one of the folders that is being monitored by the asset push configuration, and then click an image.
- 2. Navigate to the **Status** tab, and in the **Asset Push Status** area, the status should read '**Never been handled**', which means the image has never been pushed.

Tree

Assets

Assets

Sample Config

Truck

Icons

BlueTruckIcon

Product

TruckIcon

Illustrations

Installation Manuals

Logos

MSDS Sheets

Owners Manual

Product Images

Product Videos

Product rev.0.2 - Status

Images & DocumentsReferencesReferenced ByStatusState LogTasks

Revisions

Workspaces

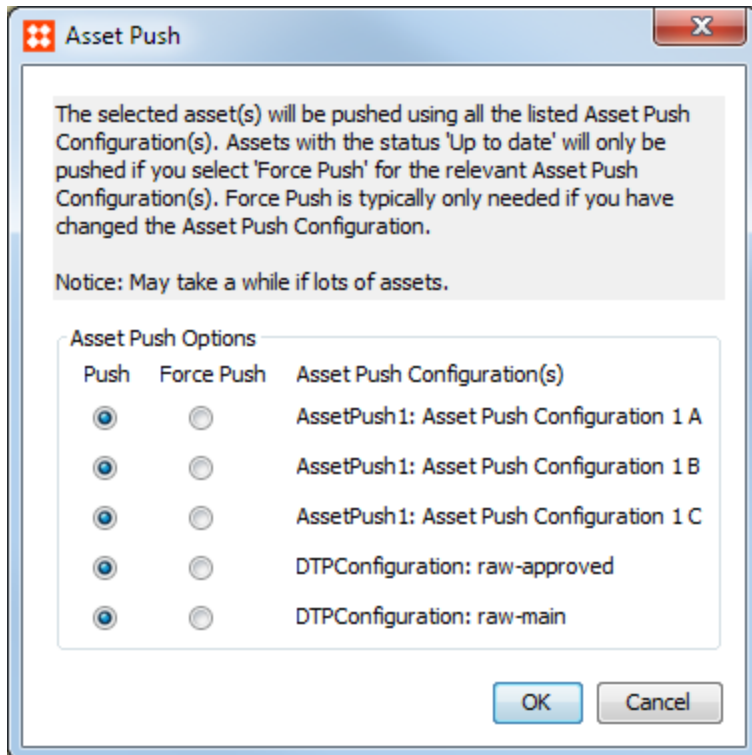
Translation

Asset Push Status

Configuration	Asset Push Status	Relative Path	Workspace
> Asset Push Configura	✓ Up to date	AssetPushConfig18/05/97/110597.jpg	Main
> Asset Push Configura	Never been handled		Main
> Asset Push Configura	Never been handled		Main
> raw-main	✓ Up to date	raw-main/05/97/110597.png	Main
> Asset Push Configura	Not included		Approved
> raw-approved	✓ Up to date	raw-approved/05/97/110597.png	Approved

- 3. To verify that the process works as expected, right-click the image in **Tree** and choose **Push Asset(s)**. A window appears that lists every conversion associated with this particular folder. Click **OK**.

Note: The initial push of assets can be initiated by selecting the classification(s) under which the assets reside, then right-clicking, and selecting 'Push Asset(s)'. This will open the 'Asset Push' dialog, similar to the one shown below.



Note: If the user wants to push assets whose status is set to "Up to date", they have to select **Force Push**.

- The asset push process is carried out and the **Asset Push Status** changes to **Downloaded** if changes were made or **Up to date** if the downloaded / converted file is already in place and the file-timestamp corresponds to the upload-timestamp on the asset in the database.
- If the process works as expected, select the top level folder of the folders that are being monitored, and then repeat steps 1-3 above. This starts an initial push of all assets in the top-folder and sub-folders.

Republishing Assets

A republishing of assets should be carried out anytime a change is made to an asset push configuration, and may also be done periodically for synchronization and / or refresh purposes. Prior to completing any republishing, the asset push configuration should be set to 'true' for the Auto Cleanup parameter to prevent duplication of assets. Alternatively, existing assets for the configuration may be manually removed from the target system.

To initiate republishing, follow the same steps as for an initial push, except select to 'Force Push' in the Asset Push dialog box. This will force the assets to be re-pushed, regardless of the current status.

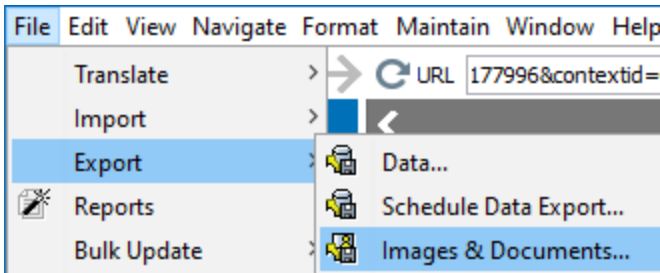
Use Cases

- Users can manually push assets from STEP folders to the required asset push queue.
- If the configuration has been changed, users can force push anthe asset to the desired asset push queue even if it up to date.

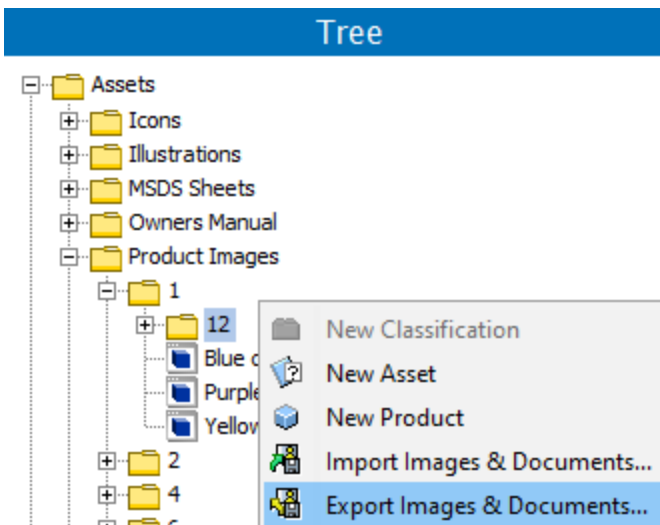
Export Images and Documents Wizard

The Export Images and Documents wizard allows you to export assets on demand. There is a separate wizard for Images and Documents (Assets) that is different from the wizard used for exporting data.

1. Select the appropriate STEP context.
2. Use one of the following methods to launch the wizard:
 - On the Tree, select an asset or a classification folder that contains assets to be exported, click the File menu > Export > **Images & Documents**.

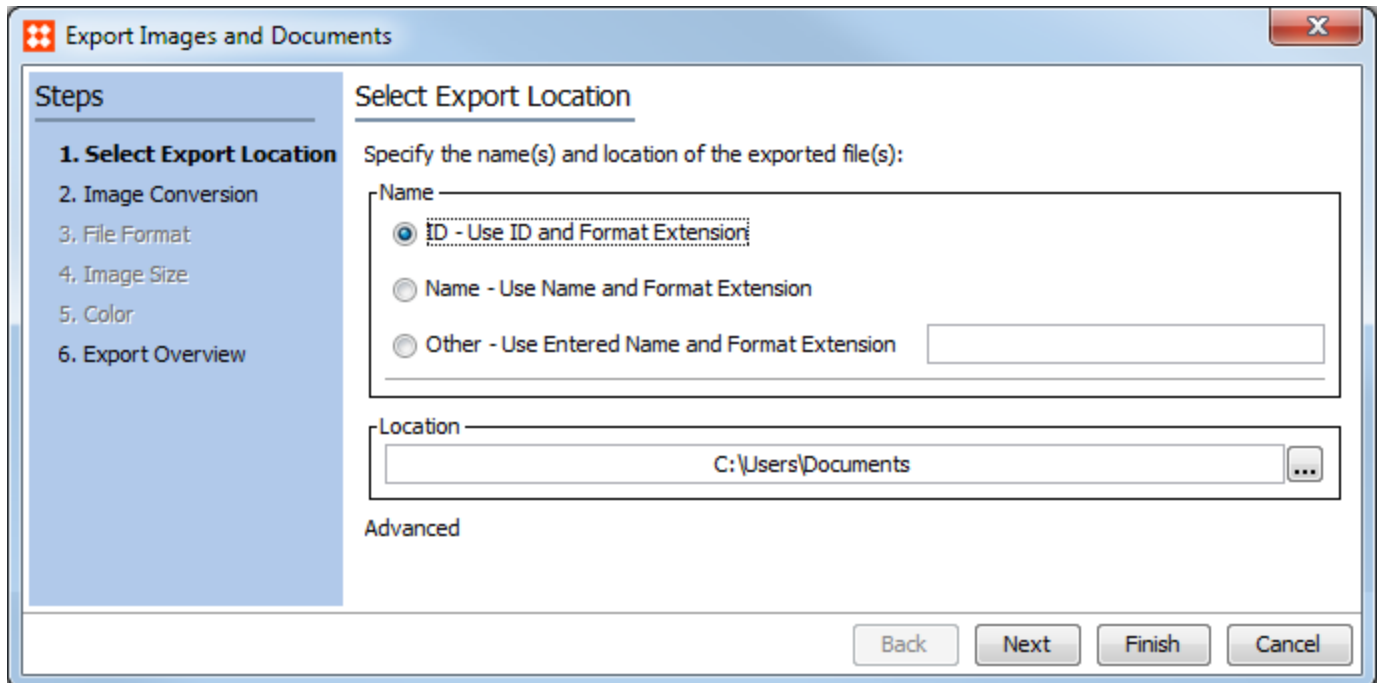


- On the Tree, select a classification folder that contains assets to be exported, or select an individual asset, right-click, and then click **Export Images and Documents**.



3. The Export Images and Documents wizard displays and can involve the following steps:

Note: If the user does not select a folder first, the 'Export Images & Documents' option will not be enabled.



- **Select Export Location** determines the location where assets will be downloaded. In the same window, name of downloading assets can be defined.
- **Image Conversion** allows you to select a predefined image conversion configuration, script, or pipeline, or specify a custom setup to convert the format, size, and/or color settings of the exported images.
- **File Format** allows you to specify the file format of the images exported. This option is available only if the user wants to do custom image conversion.
- **Image Size** allows you to specify the size of the images exported. This option is available only if the user wants to do custom image conversion.
- **Color** allows you to specify the color definition of the images exported. This option is available only if the user wants to do custom image conversion.
- **Export Overview** provides an overview of selected the export settings, which displays name, output name and size of the image, and allows you to start the export.

Note:

- If the user chose to export documents, they will skip three screens and be taken directly to the final wizard screen.
- If the user selects a Classification folder that has both images and non-image assets in it, the following wizard screens relate only to the images.
- There are no modification options that the user can set for non-image assets upon export.
- The Export Asset component does not export subfolders or contents of subfolders.
- If the user selects a Classification folder that has both assets and subfolders linked to it, only the assets directly linked to the selected folder will be exported.

-
- The system does not build subfolder hierarchies on output.
 - If the user selects a Classification folder with no assets directly linked, nothing will be exported.
-

Use Cases

- The user can set the export location where images should be downloaded.
- The user can specify the name of the asset – which can be ID.extension, Name.extension, or Custom name.extension.
- The user can opt for no image conversion or predefined conversion pipelines for format conversion, or they can define custom format conversion.
- If the user wants a Custom conversion then, File Format, Image Size and Color settings can be specified.
- The user can have an overview image export and initiate the export.

Select Export Location

In this step, the user can set naming format for output file and specify the location and delivery method for the export. The user can normally choose one of two options; the third is only available to you if you have selected only one file for export.

Export Images and Documents

Steps

- 1. Select Export Location**
2. Image Conversion
3. File Format
4. Image Size
5. Color
6. Export Overview

Select Export Location

Specify the name(s) and location of the exported file(s):

Name

☒ ID - Use ID and Format Extension

☐ Name - Use Name and Format Extension

☐ Other - Use Entered Name and Format Extension

Location

C:\Users\Documents

Advanced

Back Next Finish Cancel

- In the **Name** area, select one of the following options.
 - ID – Use ID and Format Extension:** Builds the file names of the exported files by taking the asset's ID and appending the file format's associated extension. For example, a PDF document with the ID 1234567 is exported as 1234567.pdf
 - Name – Use Name and Format Extension:** Builds the file names of the exported files by taking the asset's name and appending the file format's associated extension. For example, a PDF document with the file name Installation Manual is exported as Installation Manual.pdf.
 - Other – Use Entered Name and Format Extension:** This option available when you have selected only one asset for export. You can enter any file name and extension that you want.
- In the **Location** area, select the delivery location. You can toggle between **Advanced** and **Basic** export options, by clicking the Advanced / Basic text below the location field.
 - In **Basic** mode, click the ellipsis button (...), and then navigate to the preferred location. The user will be presented with a standard browse window to your local and network drives. Browse to and select the folder where you want your assets to be placed.

- In **Advanced** mode, use the dropdown to choose a delivery option.

Delivery location

SFTP

FTP

Server Side Delivery

- **FTP** delivers a file using file transfer protocol (FTP). You must specify the host name of the remote server, the user name and password used to log on to the remote server, a file name, and if the file name should be provided with a time stamp.
- **SFTP** delivers a file using the Secure File Transfer Protocol (SFTP). You must specify the host name of the remote server, the user name and password used to log on to the remote server, a file name, and if the file name should be provided with a time stamp.

Delivery location

SFTP

Delivers exported data to a remote server via the SSH File Transfer Protocol (SFTP).

Host name

User name

Password

Filename

TimeStamp

No

- **Server Side Delivery** exports the file into a folder located on the Application Server of the STEP system. The file is only delivered if the specified path has read / write access on the server. Enter the path of the application server and the name of the file.

Delivery location

Server Side Delivery

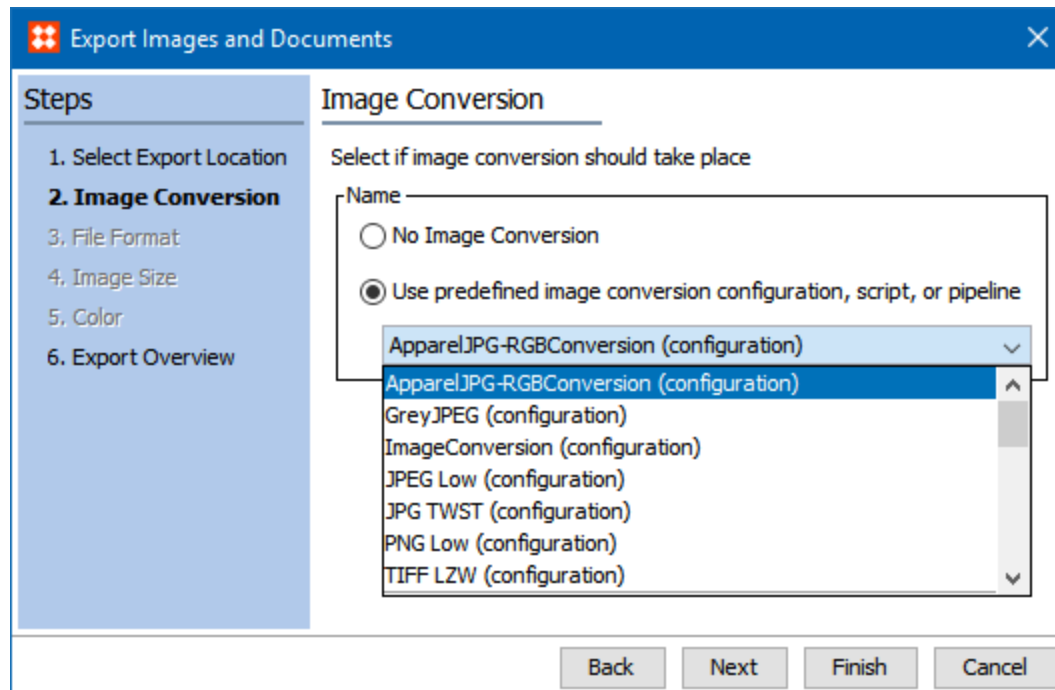
Deliver output file to location on server

Path

Filename

Image Conversion

In this step, the user can define whether an image has to undergo any formatting (includes format conversion, size, and color settings) on export. If formatting is needed, then the user can pick from predefined configuration, script, or pipeline or can define new custom formatting.



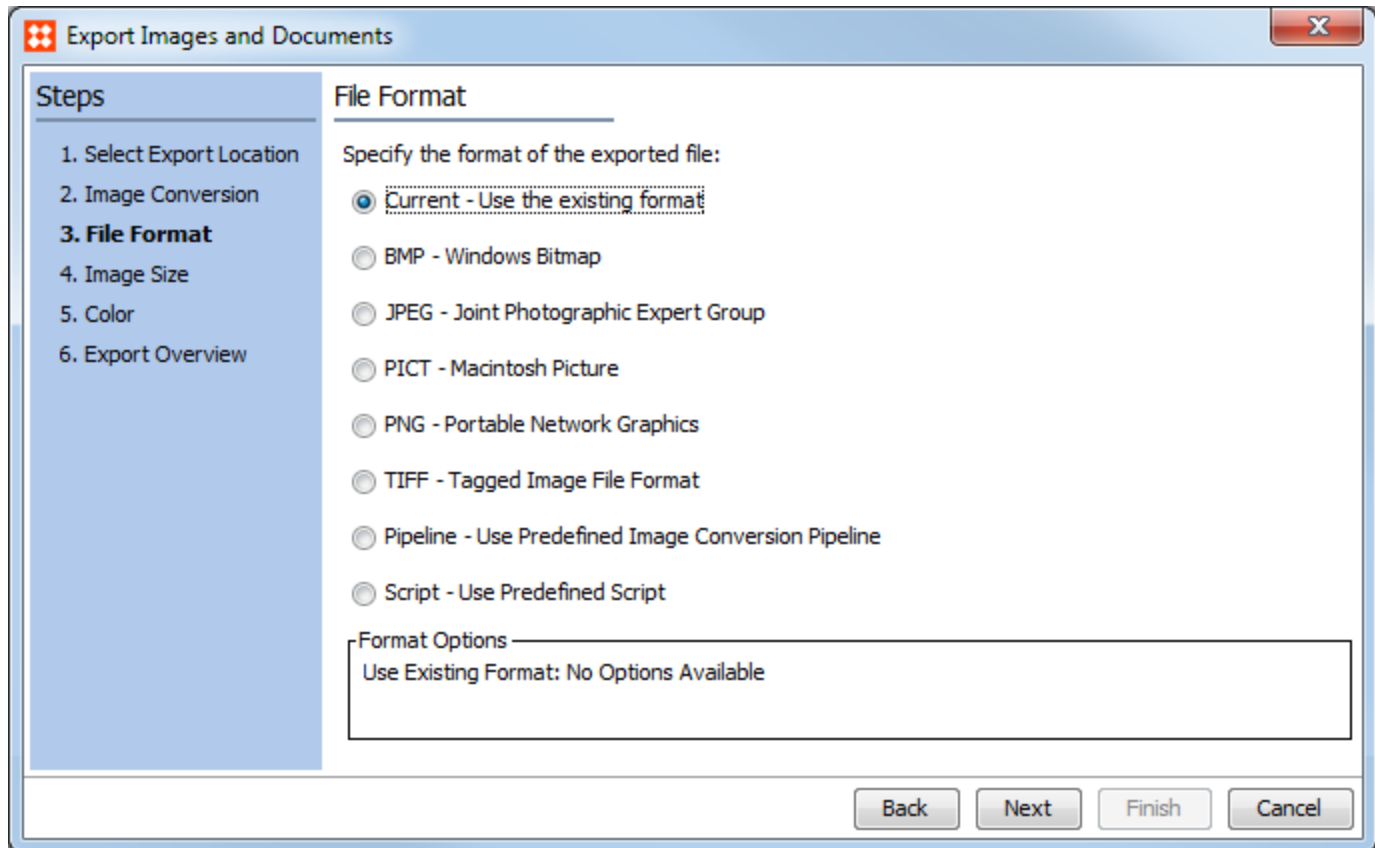
1. For Name, select **No Image Conversion** to export the images as is. No additional information is required.
2. If an image conversion is required to change the image settings on export, select **Use predefined image conversion configuration, script or pipeline**.
3. Use the dropdown to select one of the predefined image conversion configurations, scripts, or pipelines available on your system. Select **Custom** to specify a new image conversion using the File Format, Image Size, and Color wizard steps.

If the user select 'Custom...' which only will enable **3. File Format**, **4. Image Size**, and **5. Color**.

1. Click **Next** to continue or click **Finish** to start the export.

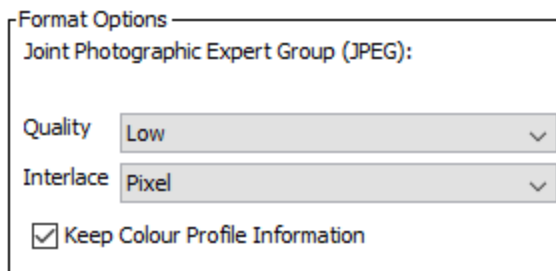
File Format

The File Format option is available only when 'Custom Image Conversion' is selected in the previous step, 'Image Conversion.' File Format allows users to export images in a number of different file formats.



1. Set the format required for export by selecting one of the following options:
 - **Current – Use the existing format:** Keeps the current (original) file format of the images selected for export. Format options are not available.
 - **BMP – Windows bitmap:** Converts all image files in the selected folder to .BMP files. Any non-image asset in the selected folder remains unchanged and is exported as is. Format options are not available.
 - **JPEG – Joint Photographic Expert Group:** Converts all image files in the selected folder to .JPG files. Any non-image asset in the selected folder remains unchanged and is exported as is. When using this format, you must specify the following:
 - **JPEG Quality:** Low, Medium, High Maximum
 - **Interlace:** Pixel or Plane

- **Keep Colour Profile Information**



Format Options

Joint Photographic Expert Group (JPEG):

Quality: Low

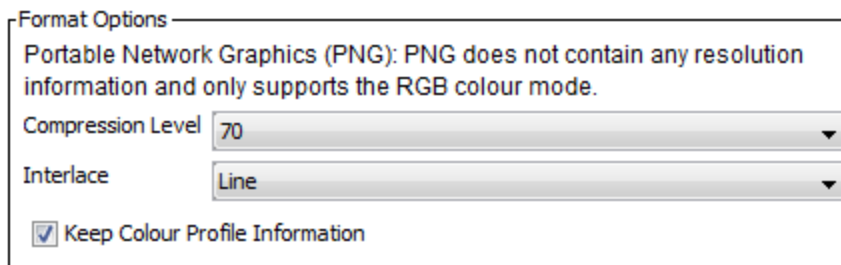
Interlace: Pixel

☒ Keep Colour Profile Information

Note: The 'Keep Colour Profile Information' option available with some formats (JPEG, PNG , and TIFF) can override other selections made in the conversion configuration. If results of the conversion are not as expected, try disabling the selection (which is checked by default).

- **PICT – Macintosh Picture:** Converts all image files in the selected folder to .PICT files. Any non-image asset in the selected folder remains unchanged and is exported as is. Format options are not available.
- **PNG – Portable Network Graphics:** Converts all image files in the selected folder to .PNG files. Any non-image asset in the selected folder remains unchanged and is exported as is. When using this format, you must specify the following:

- **Compression Level:** From 0 to 90 in increments of 10
- **Interlace:** Line or Pixel
- **Keep Color Profile information**



Format Options

Portable Network Graphics (PNG): PNG does not contain any resolution information and only supports the RGB colour mode.

Compression Level: 70

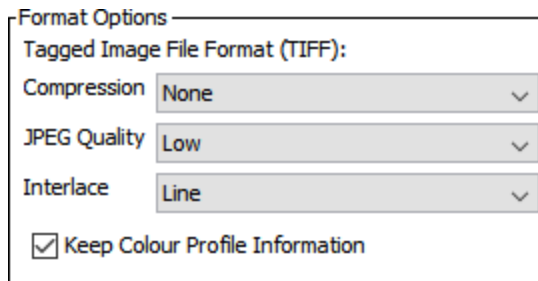
Interlace: Line

☒ Keep Colour Profile Information

Note: PNG supports only RGB-color mode.

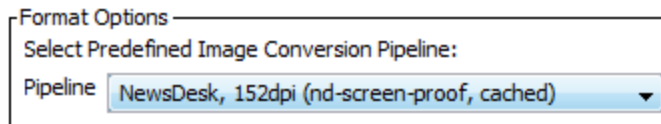
- **TIFF – Tagged Image File Format:** Converts all image files in the selected folder to .TIFF files. When you select this format, you must specify the following:
 - **Compression:** None, ZIP, JPEG, RLE, Fax, Group 4, LZW
 - **JPEG Quality:** Low, Medium, High Maximum
 - **Interlace:** Line, Pixel, Plane

- **Keep Color Profile Information**



Note: All of these options relate to those offered by Adobe Photoshop.

- **Pipeline – Use Predefined Image Conversion Pipeline:** Uses a standard image pipeline. The available conversion pipelines depend on your system setup. Selecting a pipeline automatically provides the image conversion options each time you export images. No additional wizard settings are required. Steps **4. Images Size** and **5. Color** will be greyed out in the wizard. Click **Next** to display the **Export Overview** or **Finish** to start the export.



- **Script - Use Predefined Script:** Uses a predefined script to convert the images. Scripts are system dependent. Selecting a script automatically provides the image conversion options each time you export images. No additional wizard settings are required. Click **Next** to display the **Export Overview** or **Finish** to start the export.

The 'Script' option is a small piece of development that can be applied e.g. a PURL script that can make a special transformation of an asset. This is normally done by Stibo developers because it must fulfill customer requirements. The script is placed in a specific folder on the application server, and once it is present there, it will appear in the dropdown list of scripts.

The script must take three arguments:

1. The contents of the asset in question
2. The properties of the asset in question (e.g. mimetype, width, extension etc.) as a property file
3. A file name where the script should generate the result, i.e., the converted images.

Saving an image conversion configuration allows you to apply the same settings for multiple exports. For more information, see **Image Conversion Configurations**.

2. Click **Next** or click **Finish** to start the export.

Use Cases

- This screen is relevant only to images and allows the user to define the file format in which to download the images that are within user selection.
- All images will be affected by the settings in this screen.
- The user cannot multi-select different images to have different output formats.

Image Size

In this step, the user can define whether the image has to undergo any resizing on export. If yes, then the user can resize proportionally by specifying dimensions, scaling, print size, and resize type.

'Image Size' option will be available only when 'Custom Image Conversion' is selected in previous step, **3. Image Conversion**.

Export Images and Documents

Steps

1. Select Export Location
2. Image Conversion
3. File Format
- 4. Image Size**
5. Color
6. Export Overview

Image Size

Specify the size of the exported image(s):

☐ Current - Do Not Resize the Image(s)

☒ Resize Proportionally

Resize Settings

Dimensions

Width: 73 (pixels)

Height: 68 (pixels)

☐ Scale to Nearest Width or Height

☐ Fixed Canvas Size

Document Size

Width: 25.752777 mm

Height: 23.988888 mm

Resolution: 72 DPI

Resize Type: cubic

Scale Image: Always

Back Next Finish Cancel

1. Select **Resize Proportional** if you want to resize the images. If you do not want to resize the images select **Current - do not resize the image**.
2. For Resize Settings, use the **Dimensions** area. Enter the desired height or width in the selected unit of measure, which may be set in either pixels or percentages (%). Because the images are scaled proportionally, when you enter the first dimension, the other values change accordingly.

- **Scale to Nearest Width or Height** – when checked the affected image will scale to the nearest width or height in pixels. If both the height and width have values, the system will determine which maximum value is hit first and the image conversion will complete accordingly.
- **Fixed Canvas Size** – This setting is enabled only when 'Scale to Nearest Width or Height' checkbox is checked. This option will scale and fill with white pixels to the desired canvas size.

Note: When unit of measure percentage is selected, 'Scale to Nearest Width or Height' checkbox option and 'Fixed Canvas Size' checkbox option are **disabled**.

Important: While users must set only one of the two dimension values (Width or Height) when the 'Scale to Nearest Width or Height' option is enabled, it is good practice to also define a max value in the other field rather than leaving it empty. The reason to set both values in this way is because, without a max value set for one of these values, the image may stretch so far as to cause obvious distortion. Setting both values helps avoid this result.

3. For **Resize Settings**, use the **Document Size** area to show the print size of the image and the resolution. In **Resolution**, specify the preferred resolution if different from the current resolution. Enter the desired height or width in the selected unit of measure. Units of measure available are mm, cm, inches, pt, and pica. Because the images are scaled proportionally, when you enter the first dimension, the other values change accordingly.

In **Resolution**, specify the preferred resolution if different from the current resolution. DPI is the available measure, which stands for Dots Per Inch.

4. For **Resize Type**, select the preferred resize type: cubic, scale, subsample, lanczos, and default. These types are similar to those offered by Photoshop.

Note: It is easier to successfully reduce the resolution of an image than it is to increase it. Also, it is recommended to scale TIFF images by no more than 140%.

5. For **Scale Image**, select when you want the to scale the images from the following options:

- **Always:** images are always scaled to the specified size.
- **When Smaller:** images are scaled when they are smaller than the specified size.
- **When Larger:** images are scaled when they are larger than the specified size.

6. Click **Next** to continue or click **Finish** to start the export.

Miscellaneous Information

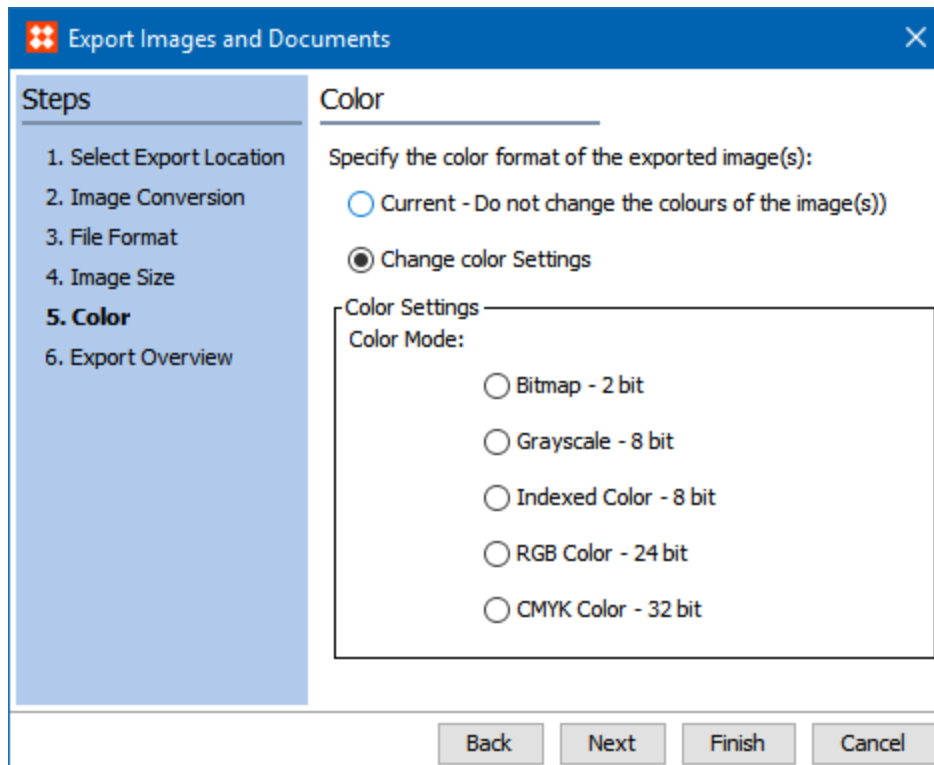
Image Size screen will be disabled if **below File Formats** are selected in step **3. File Format** of Export Wizard:

- **Pipeline** – Use Predefined Image Conversion Pipeline
- **Script** - Use Predefined Script

Color

In this step, the user can define whether the image has to undergo any color changes on export. If yes, then the user can select the color mode.

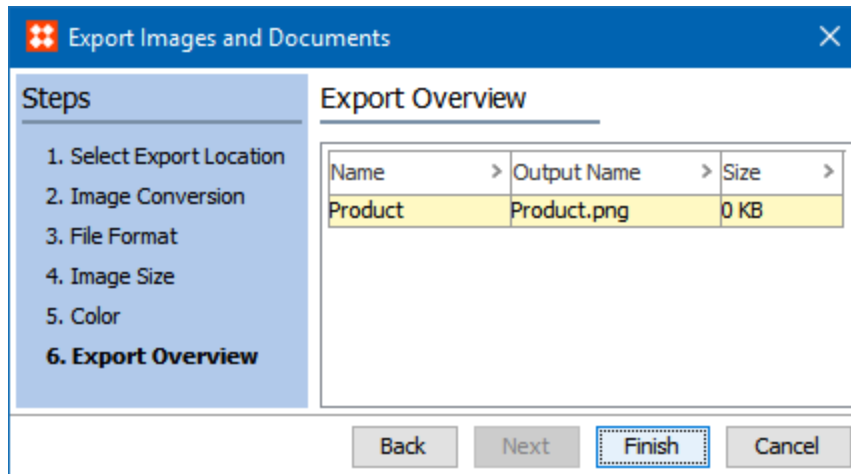
Color option will be available only when 'Custom Image Conversion' is selected in previous step, **Image Conversion**.



1. Select **Change color settings** if you want to modify the image color, otherwise, select **Current - do not change the colors of the image**.
2. For **Color Settings**, select the preferred color mode from the available options:
 - Bitmap – 2 bit
 - Greyscale – 8 bit
 - Indexed Color – 8 bit
 - RGB Color – 24 bit
 - CMYK Color – 32 bit
3. Click **Next** to continue or click **Finish** to start the export.

Export Overview

In the final step, the user may review the image being exported.



1. Review the STEP name of the asset, the file name to be used for export, and the file size.
2. To start the export process, click **Finish**.
3. Monitor the output location identified in Step 1 to ensure that all selected assets were exported.

There are no options to select on this screen, it is merely information only. It is intended to give you an idea of the assets that will be exported in case you see something that is incorrect; you can go back to a prior screen to correct the problem.

You will see a small Progress screen showing the file that is being exported. When the Progress window disappears, all assets have been exported.

You should do a quick check on the output folder to make sure you have all your requested assets. There are no monitoring or Execution Report functions associated with the export of assets.

Assets and Content with STEPXML

For on demand exporting, the Export Manager wizard STEPXML and Advanced STEPXML formats include the option to export asset metadata, references, and digital content for both images and non-images. For automatic exports based on events, an OIEP can be configured to listen for new, changed, and deleted assets. For automatic exports based on a static set of data, a Select Objects OIEP can be configured. All options are defined below.

Image Conversion Configurations can be used to save image conversion settings when the same image will be used in a modified way for different use cases, for example on a web site or a printed catalog. Both export manager and the event processor enable the use of Image Conversion Configurations. Additionally, automatic caching of converted images can be achieved via the Image Cache event processor. For more information, see the **Image Conversion Configurations** section of the **Digital Asset Exchange** documentation and see **Image Cache Parameters and Triggers** section of the **Creating Event Processors** documentation.

Note: These new tags are only available for export from STEP. Importing with these tags is not supported. If assets will routinely be exported with conversions, it is highly recommended to enable the new asset caching functionality (defined below in the 'New event processor and option to cache assets upon import' section) to optimize export performance.

Assets and Content using Export Manager

1. Complete the first three steps of the **Export Manager** wizard. If needed, the following topics provide details:
 - Launch the Export Manager wizard as described in **Creating a Data Export**.
 - In **Select Configuration** create a new configuration.
 - In **Select Objects**, select the assets to export.
 - In **Select Format**, select STEPXML. If you will provide your own template including the tag described below, select Advanced STEPXML.
2. For the **Include Assets** parameter, choose an option. For details about these options, see the **Minimum, Referenced, and Selected in STEPXML** topic.

Important: If None is selected, neither assets nor asset content is output.

Export Manager

Steps

1. Select Configuration
2. Select Objects
3. Select Format
4. Map Data
5. Advanced
6. Select Delivery Method

Select Format

STEPXML

Exports data in a STEP Product Information XML format. Note that this format ignores the leaf products only setting.

Include Keys as IDs

No

Include Entities

Minimum

Include Entity Attribute Values

Yes

Include Data Containers

No

Include Products

Minimum

Include Product Attribute Values

Yes

Include Overridden Products

No

Include Classifications

None

Include Tables

No

Include Assets

Minimum

Include Asset Content

None

Selected

Minimum

All

Select Image Conversions

Include Workflow Tasks

No

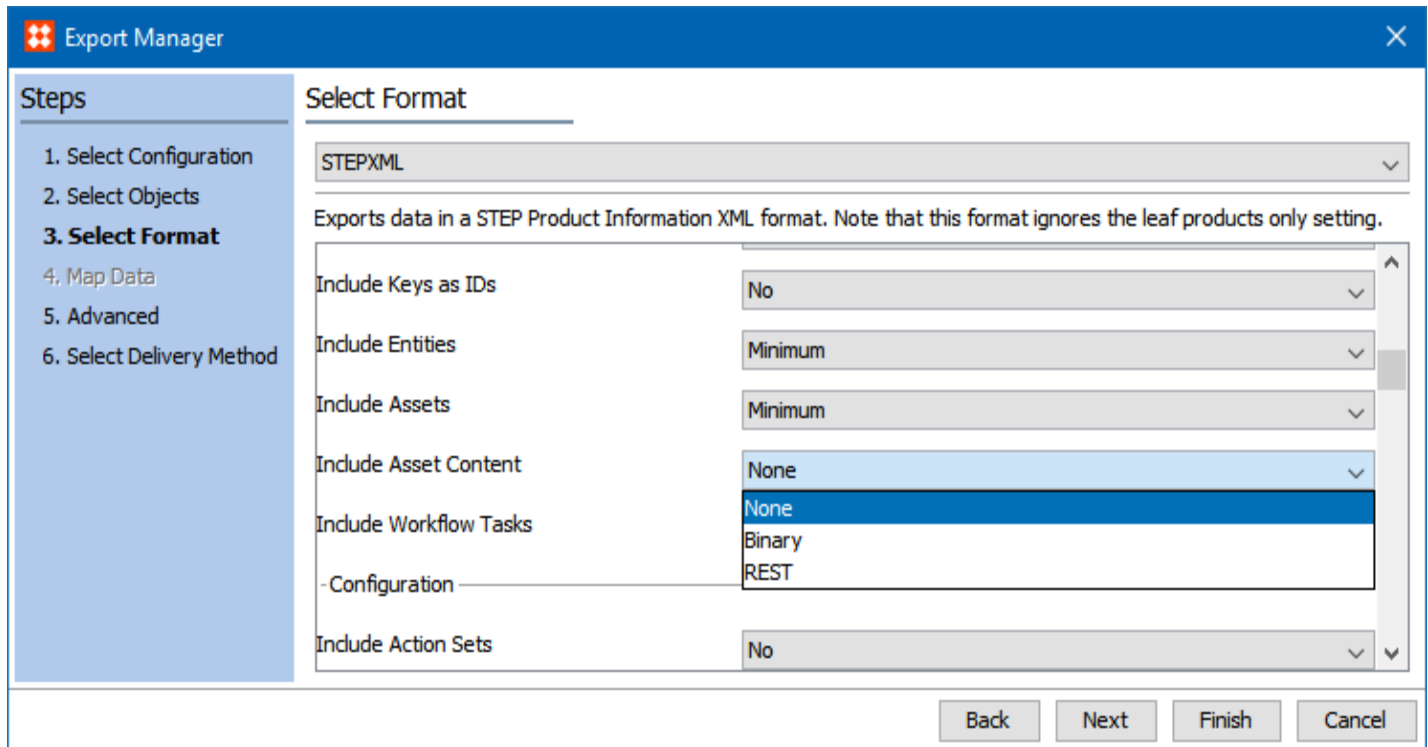
Back

Next

Finish

Cancel

3. For the **Include Asset Content** parameter, choose **Binary** or **REST**, based on the information below:
- The binary option includes the asset content using BASE64 encoding, which can be decoded by the external system.
 - The REST option includes a relative REST resource URL. The external system must provide information necessary to complete the path to the REST resource.

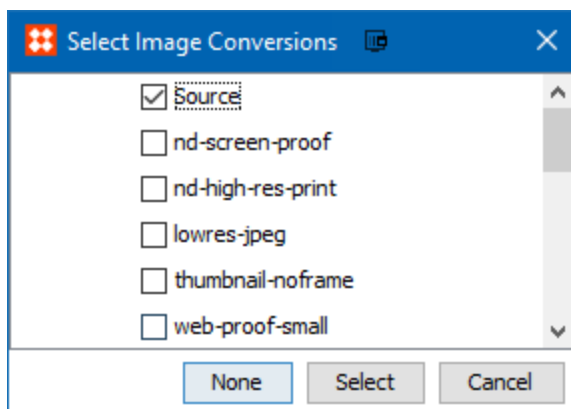


For more information on the STEPXML tag used and the data included in the output of asset content, see the **AssetContent Tag in STEPXML** section of the **STEPXML Format** documentation.

Note: If no content is available for the selected image(s), the XML tag is not exported. In this scenario, a record of the attempt to export the image is included in execution report.

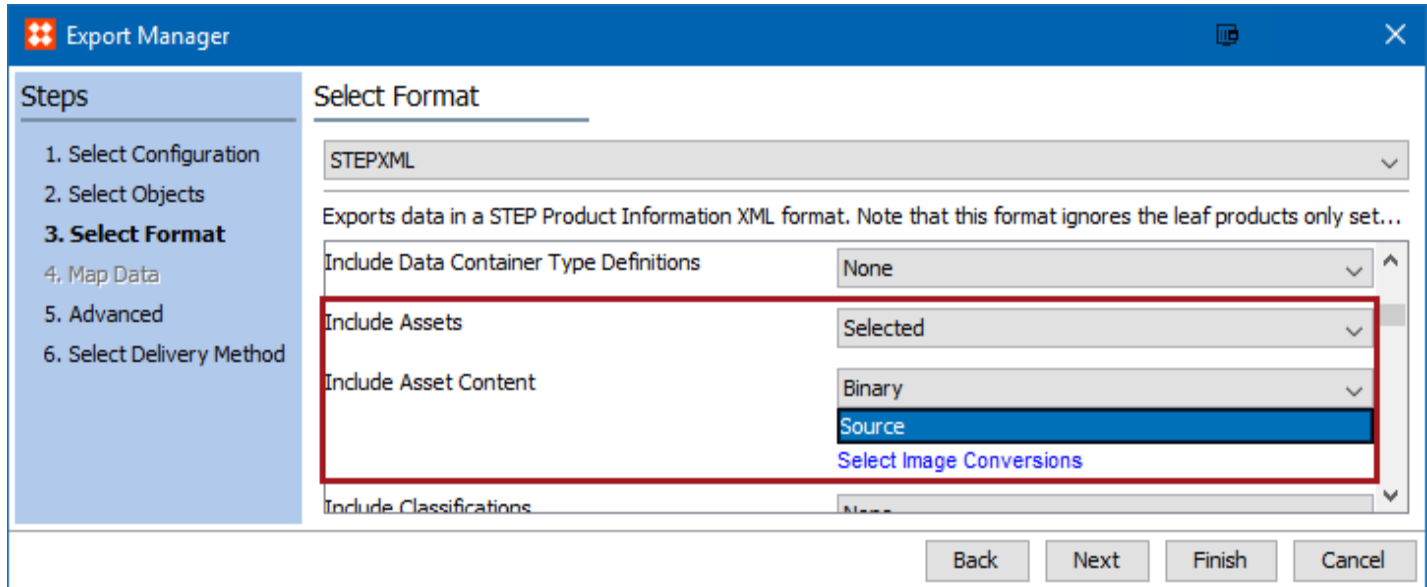
4. Click the **Select Image Conversions** link and select at least one conversion from the dialog to enable the Next and Finish buttons on the wizard. The list displayed includes user created image conversion configurations in STEP, excluding legacy system Image Pipeline or Script conversions.

The **Source** option exports the original asset content and no conversion is applied.



Note: Although selecting multiple conversions is allowed, it may increase export times and file size.

- To clear all selections from the list, click the **None** button.
 - To keep your selections and return to the wizard, click the **Select** button.
 - To cancel your selections and return to the wizard, click the **Cancel** button.
5. Verify the selected Image Conversion and Asset Content settings are displayed in the wizard:



- To change the displayed Image Conversion selection, click the **Select Image Conversions** link.
- For details about the other STEPXML format parameters shown in the wizard, see the **STEPXML Outbound Parameters** documentation.
6. Complete the last two steps of the **Export Manager** wizard. If needed, the following topics provide details:
- In **Advanced**, update parameters as required.
 - In **Select Delivery Method**, select the delivery method.
7. Click the **Finish** button to complete the configuration and choose the desired export option. For details, see the **Running a Data Export** section.

Assets and Content using an Event-Based or Select Objects OIEP

Creating an OIEP that generates assets and content involves the same format setup as is defined above for Export Manager. For STEPXML format, use the Include Assets and Include Asset Content parameters. For Advanced STEPXML, use the AssetContent tag.

All steps required to create an OIEP are outlined in the **Event-Based Outbound Integration Endpoint** section or the **Select Objects Outbound Integration Endpoint** section of the **Outbound Integration Endpoints** documentation.

The following XML attributes, belong to the **AssetBinaryContent** tag:

- **ImageConversionConfigurationID** indicates which image conversion has been used to convert the exported asset content

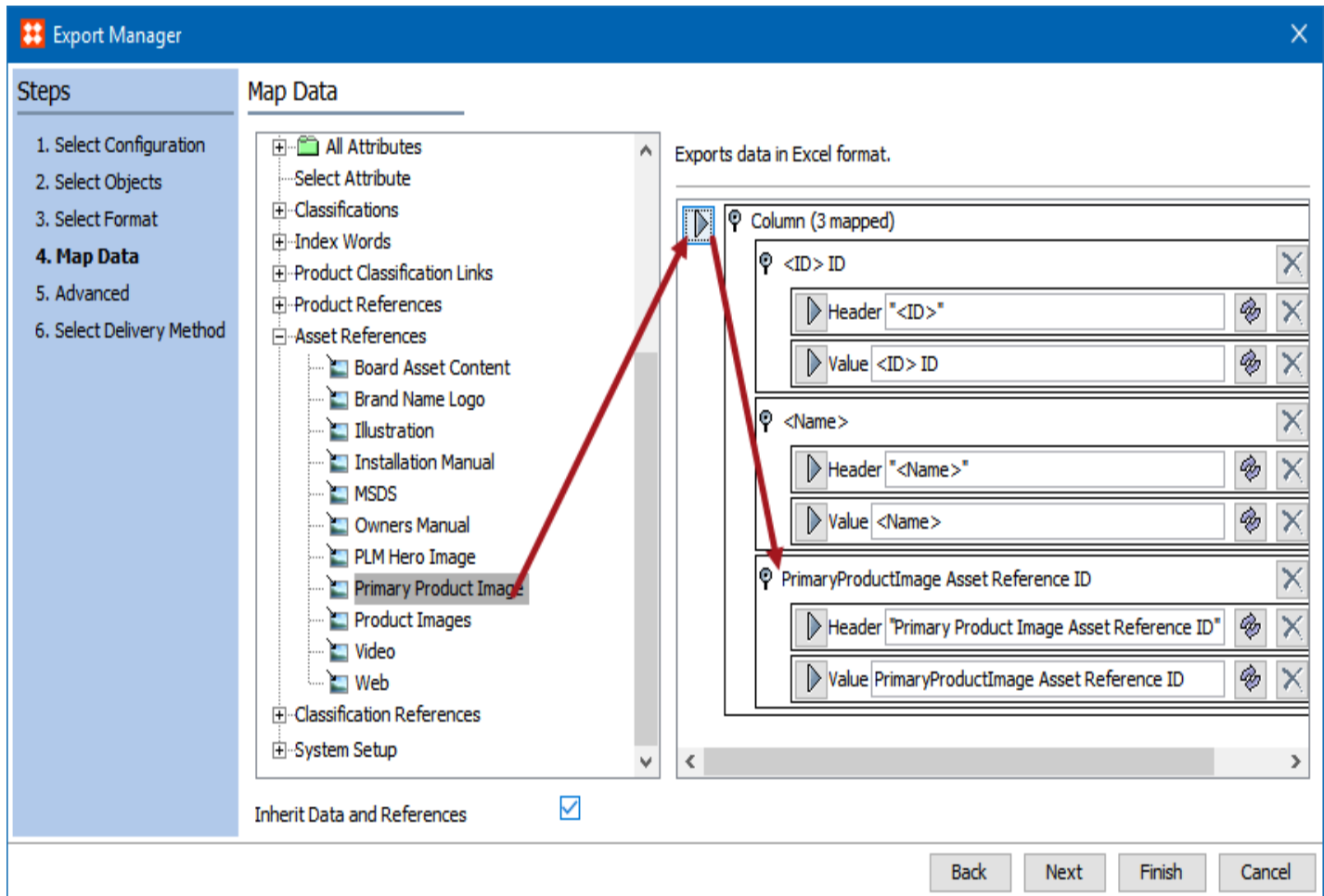
Referenced Assets in ZIP file with Excel or CSV

For on demand exporting, the Export Manager wizard Excel and CSV formats include the option to export referenced assets in a .ZIP file. For automatic exports based on events, an OIEP can be configured to listen for new, changed, and deleted assets. For automatic exports based on a static set of data, a Select Objects OIEP can be configured. All options are defined below.

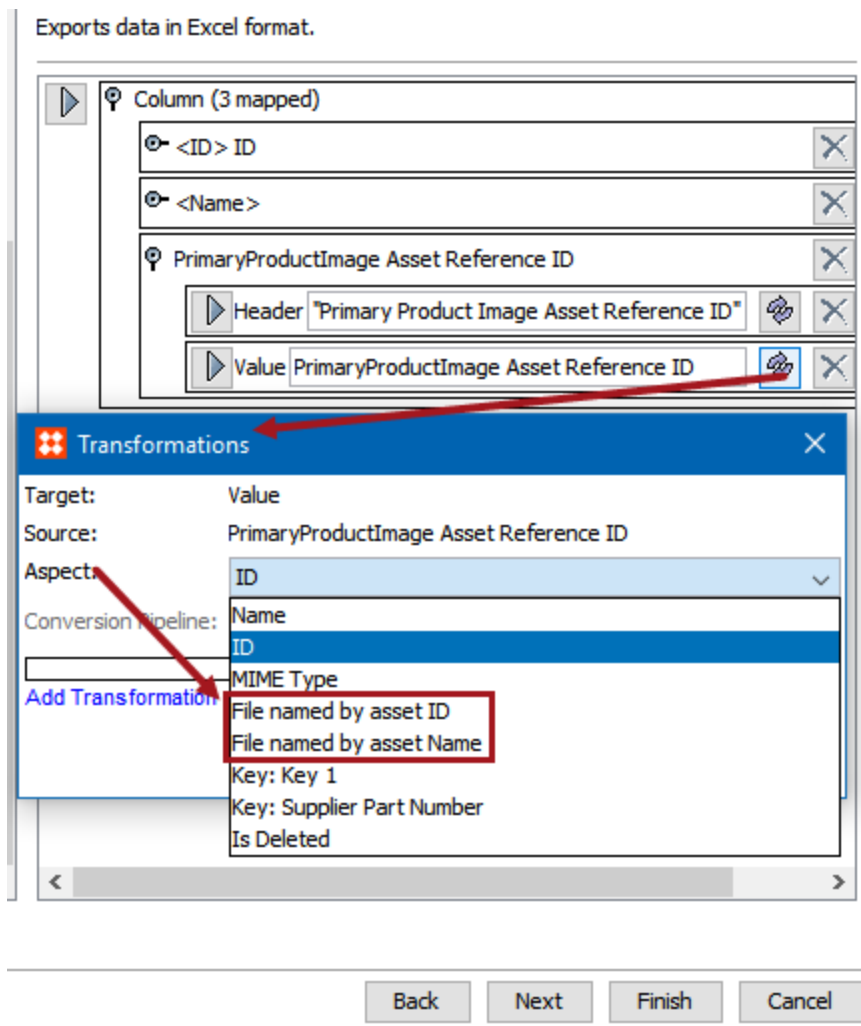
Image Conversion Configurations can be used to save image conversion settings when the same image will be used in a modified way for different use cases, for example on a web site or a printed catalog. Both export manager and the event processor enable the use of Image Conversion Configurations. Additionally, automatic caching of converted images can be achieved via the Image Cache event processor. For more information, see the **Image Conversion Configurations** section of the **Digital Asset Exchange** documentation and see **Image Cache Parameters and Triggers** section of the **Creating Event Processors** documentation.

Referenced Assets in ZIP file using an Export Manager

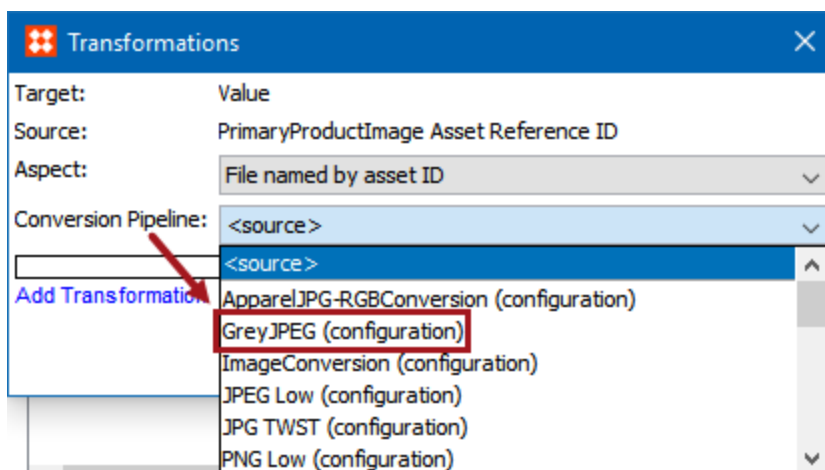
1. Complete the first three steps of the **Export Manager** wizard. If needed, the following topics provide details:
 - Launch the Export Manager wizard as described in **Creating a Data Export**.
 - In **Select Configuration**, create a new configuration.
 - In **Select Objects**, select the objects with referenced assets to export.
 - In **Select Format**, select Excel or CSV.
2. For the **Map Data** step, select the necessary data sources and move them to the right-hand column, including the asset reference.
 - For details about mapping data sources, see **Outbound Map Data - Data Source**.
 - For detail on how to map referenced assets, see the **Asset References - Data Source Outbound** documentation.



3. For the **Asset Reference Value** parameter, click the Transformation button and select the desired file name option for the asset files that will be included in the zipped export file.
 - **File named by asset ID** - uses the STEP ID as the asset file name for the exporting asset.
 - **File named by asset Name** - uses the STEPName as the asset file name for the exporting asset.

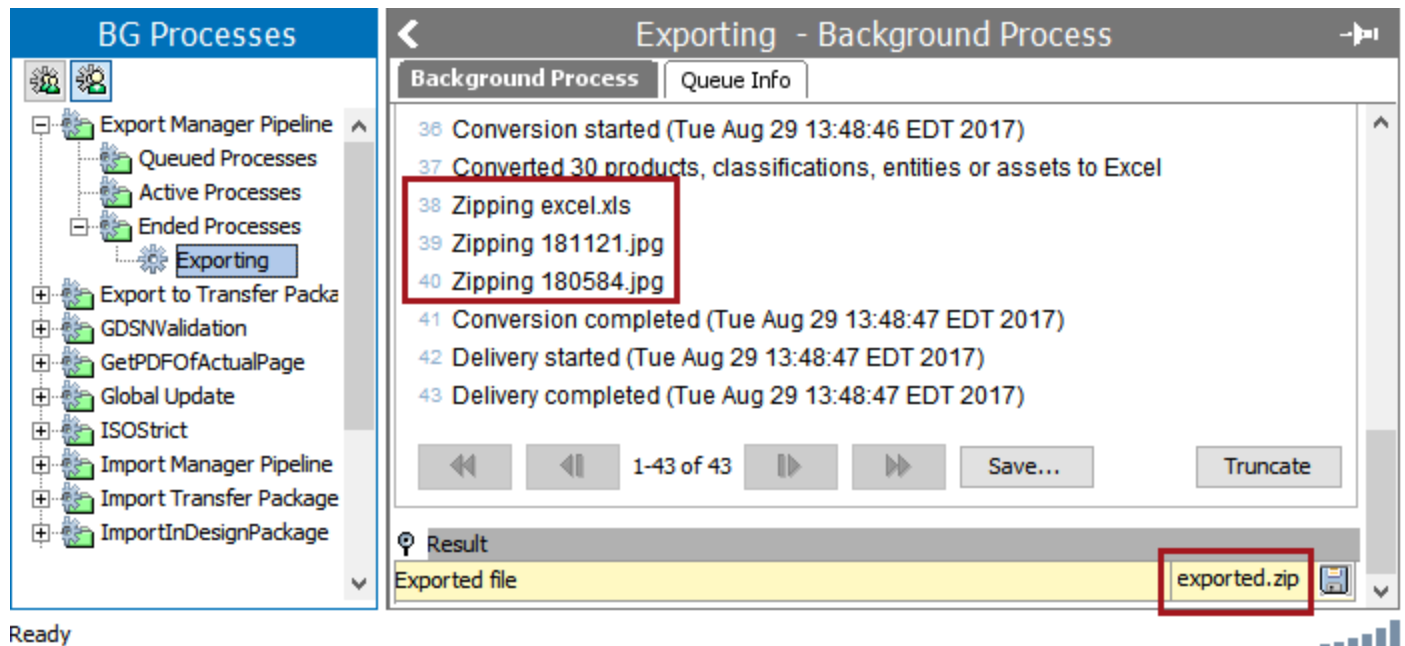


4. If needed, choose an image conversion configuration from the **Conversion Pipeline** field and click the **Save** button. The list displayed includes user created image conversion configurations in STEP. The **Source** option exports the original asset content and no conversion is applied.



5. Complete the last two steps of the **Export Manager** wizard. If needed, the following topics provide details:
 - In **Advanced**, update parameters as required.
 - In **Select Delivery Method**, select the delivery method.
6. Click the **Finish** button to complete the configuration and choose the desired export option. For details, see the **Running a Data Export** section.

The export file is displayed on the background processes tab under the Export Manager Pipeline node. The contents of the zip file are listed in the Execution Report flipper.



Opening the exported.zip file shows the contents reported in the Execution Report. The zipped asset files reflect the selected image conversion configuration.

step-8209076442888469147-exported



Referenced Assets in ZIP file using an Event-Based or Select Objects OIEP

Creating an OIEP that generates zipped referenced assets via Excel or CSV formats involves the same mapping setup as is defined above for Export Manager.

All steps required to create an OIEP are outlined in the **Event-Based Outbound Integration Endpoint** section or the **Select Objects Outbound Integration Endpoint** section of the **Outbound Integration Endpoints** documentation.

Use Cases

- For on-demand export, users can export referenced assets in a .ZIP file using the export manager wizard with Excel and CSV formats.
- For automatic export, based on events, an OIEP can be configured to listen for new, changed, or deleted assets. These events can be exported in Excel and CSV formats with asset content included in a .ZIP file.
- For automatic export, based on static set of data, a Select Object OIEP can be configured. Select objects can be exported in Excel or CSV formats with asset content included in a .ZIP file.
- Image conversion can be applied on export.
- The user can select the desired file name option for the asset files that will be included in the zipped export file.

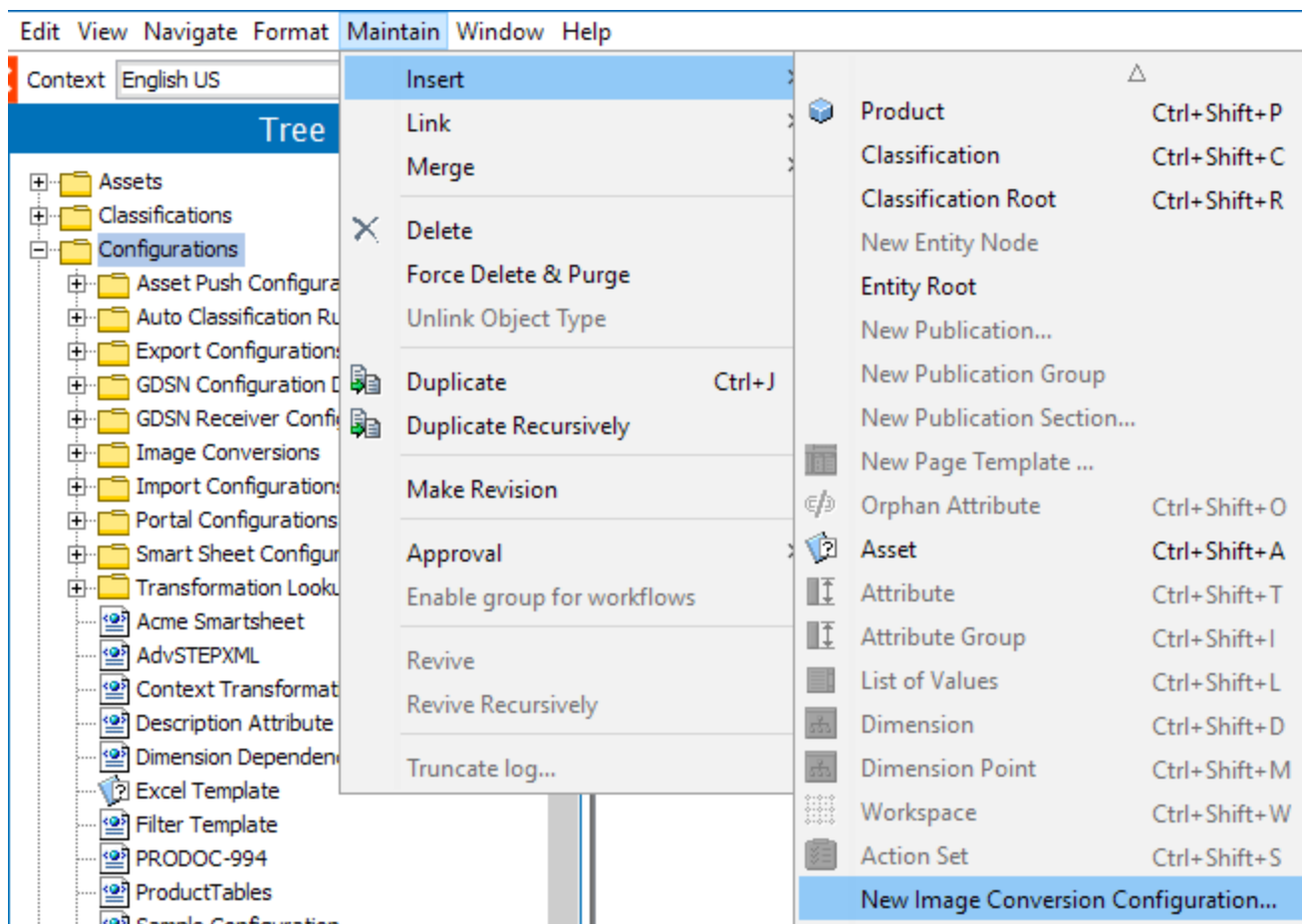
Image Conversion Configurations

Image conversion configurations define a group of image settings to be used during export to change the format, size, and/or color of an image. An image conversion configuration can also be used to ensure that the image is **not** changed upon export, meaning that the format, size, and color exported are identical to that stored in STEP.

After a one-time setup, an image conversion configuration allows a user to easily apply the same settings for multiple image exports. All methods of asset export allow selection of an image conversion configuration.

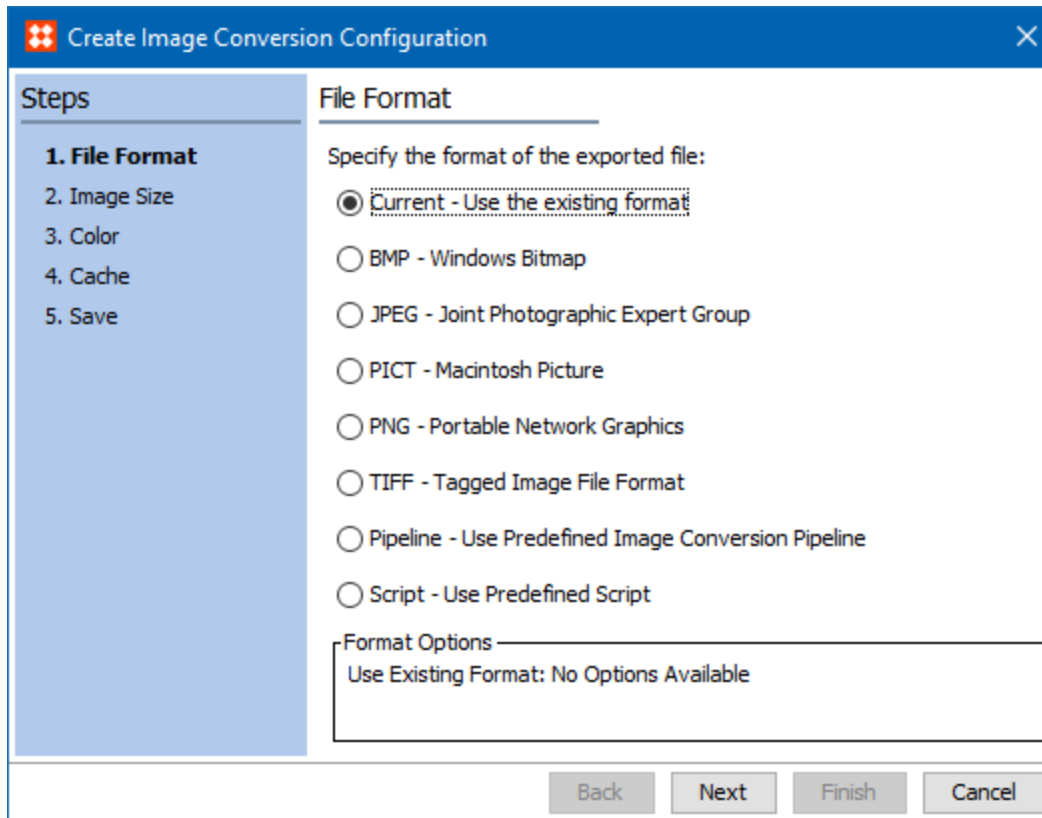
Creating an Image Conversion Configuration

1. In the **Tree**, select a classification folder to store the new configuration.
2. Click the Maintain menu > Insert > **New Image Conversion Configuration** to display the Create Image Conversion Configuration wizard.



3. For File Format, **Current** ensures that upon export, no changes will be made to the format. If changes are necessary, select the desired image format. Click **Next**.

For details about the individual format options, see the **File Format** section of the **Export Images and Documents Wizard** documentation.



Note: The '**Keep Colour Profile Information**' option available with some formats (JPEG, PNG, and TIFF) can override other selections made in the conversion configuration. If results of the conversion are not as expected, try disabling the selection (which is checked by default).

4. For Image Size, **Current** ensures that upon export, no changes will be made to the size. If changes are necessary, select **Resize Proportionally**, and then specify the dimensions, document size, resize type, and scale image settings. Click **Next**.

For details about the image size options, see the **Image Size** section of the **Export Images and Documents Wizard** documentation.

Create Image Conversion Configuration

Steps

1. File Format
- 2. Image Size**
3. Color
4. Cache
5. Save

Image Size

Specify the size of the exported image(s):

☐ Current - Do Not Resize the Image(s)

☒ **Resize Proportionally**

Resize Settings

Dimensions

Width: **Pixels** ▾

Height:

☐ Scale to Nearest Width or Height

☐ Fixed Canvas Size

Document Size

Width: **mm** ▾

Height: **mm** ▾

Resolution: **DPI**

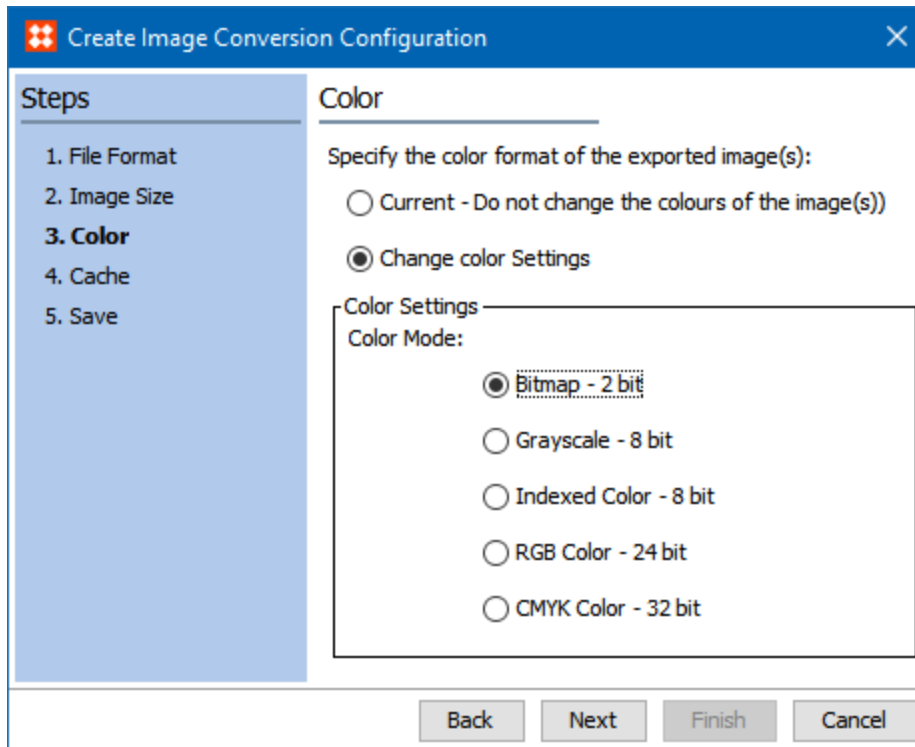
Resize Type: **cubic** ▾

Scale Image: **Always** ▾

Back **Next** **Finish** **Cancel**

5. For Color, **Current** ensures that upon export, no changes will be made to the color. If changes are necessary, select **Change color Settings** and specify the desired color mode. Click **Next**.

For details about the color options, see the **Color** section of the **Export Images and Documents Wizard** documentation.



6. For Cache, the checkbox enables the ability to cache, and the radio buttons determine when the caching will occur. Caching is available via the Export Manager or asynchronously based on events via the Image Cache event processor. For more information, see the **Assets and Content with STEPXML** section of the **Digital Asset Exchange** documentation or the **Image Cache Processing Plugin Parameters and Triggers** section of the **Event Processors** documentation.

Additionally, a new cache step has been added to the 'Image Conversion Configuration' wizard to define when a configuration is cached. Existing image configurations are not changed by this new feature, but can be modified to include caching if desired.

- **Cache on first use** - the converted image is not cached until the first time it is accessed for viewing, exporting, or in an image preview.
- **Cache on import** - the converted image is cached when it is imported.

Create Image Conversion Configuration

Steps

1. File Format
2. Image Size
3. Color
- 4. Cache**
5. Save

Cache

Select caching for image conversion configuration

Caching options

- ☒ Cache generated images
 - ☒ Cache on first use
 - ☐ Cache on import

Back Next Finish Cancel

Note: For optimal system performance, it is important to configure the new 'Image Cache Event Processor' to listen for incoming selected asset object types and to apply the selected conversions automatically. All user configured image conversions that have been set to 'cache on import' are available.

7. For Save, enter a name for the Image Conversion Configuration. Click **Finish** to save the configuration in the originally selected classification folder.

Create Image Conversion Configuration

Steps

1. File Format
2. Image Size
3. Color
4. Cache
- 5. Save**

Save

Enter name of saved image conversion configuration

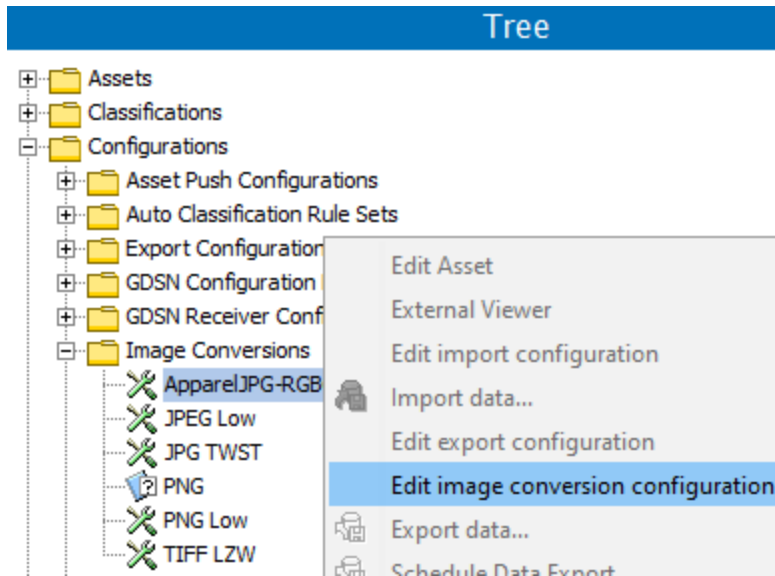
Name

Name New Image Conversion Configuration

Back Next Finish Cancel

Editing an Image Conversion Configuration

1. In Tree, expand the classification folder that holds the image conversion configuration to edit, right-click the configuration, and select **Edit Image Conversion Configuration**.



2. Use the Edit Image Conversion Configuration wizard to modify the configuration settings that appears. The options are identical to those in the Create Image Conversion Configuration wizard.

Use Cases

- The user can predefine a configuration which includes changes to format, size, and / or color of an image upon export.
- The user can also set the configuration to export the image as is in STEP.
- Image conversion configurations can be reused after one time set up.
- The user is provided with the ability to cache images and also specify when to cache.

Importing Assets

There are two methods of importing assets into STEP:

- **Asset Importer** - Primary method of importing assets via Web UI and/or hotfolders configured with an Inbound Integration Endpoint. It can, among other things, be configured to run business rules, interact with STEP workflows, convert image files to other formats, and make quality checks on images to make sure that they meet any minimum requirements.

For more information, see the **Asset Importer** section of the **Digital Asset Exchange** documentation.

- **Manual Asset Importer** - The only method of importing assets via STEP Workbench. This functionality offers a simpler solution for quickly importing assets with on-the-fly manual configurations. Unlike Asset Importer, this functionality cannot be configured for scheduled imports.

For more information, see the **Manual Asset Importer** section of the **Digital Asset Exchange** documentation.

Asset Importer

Asset Importer is a robust tool that offers users a wide variety of options for mass loading images, documents, and other digital assets into STEP.

The Asset Importer is core functionality used to import and update asset data in STEP. It was inspired by the previous hotfolder-based add-on component known as the 'Enhanced Image and Document Uploader.'

Additionally, the importer can be configured to run business rules, interact with STEP workflows, convert image files to other formats, create classification hierarchies, link assets to products, purge old revisions, and perform quality checks on images during the import to ensure that they meet any minimum requirements.

To access the Asset Importer functionality, the 'Asset Import Compatibility Mode' parameter (located under Users & Groups > System Settings > Image & Document Settings) must be set to 'Advanced.' For information on this and other configuration steps, see the **Asset Importer Configuration Overview** section of this documentation.

Once an Asset Importer configuration has been created in STEP Workbench, assets can be loaded via hotfolders configured with an Inbound Integration Endpoint (using the Asset Importer processing engine), or through various means in Web UI. Note that STEP Workbench handles asset imports differently and does not use asset import configurations.

For more information on importing assets via workbench, see the **Manual Asset Importer** section of the **Digital Asset Exchange** documentation.

Importing Assets via Web UI

Assets can be imported / updated in a number of ways via Web UI. Assets importing methods include:

- Asset Importer Widget - Users can upload assets using a simple drag-and-drop interface from the Web UI homepage
- Upload Asset action - Assets can also be added via the Upload Asset action, or if one needs to be updated
- Replace Asset Content - Assets can be replaced via the Replace Asset Content icon (configurable on any Asset Mid Sized or Asset Image Value screens)

For details about importing assets via Web UI, see the **Asset Importer in Web UI** section of the documentation.

Importing Assets via an Inbound Integration Endpoint

Inbound Integration Endpoints (IIEP) can be configured to utilize the Asset Importer functionality, allowing users to apply the rules and quality checks associated with an importer configuration(s) to any number of asset hotfolder imports. An IIEP can be configured for each hot folder, or to control a hierarchy of hot folders. When configured with a hierarchy of hotfolders, global configurations can be set on the highest level hotfolder and inherited down to all lower level hotfolders. Each of these lower level hotfolders can have their own unique variation of the base configuration (e.g. Logos, Product Images, Web Images, etc.).

For more information, see the **Asset Importer Configuration Overview** section of the documentation.

For more information on configuring inherited hotfolder settings, see the **IIEP - Configure Asset Importer Processing Engine** section of the **Inbound Integration Endpoints** documentation.

Miscellaneous Notes

Whatever the interface, the asset importer includes functionality allowing users to:

- Import digital assets in STEP, as well as update them when updated versions are received
- Upload loose asset files or a zip file containing multiple asset files
- Use metadata files to control the way digital assets are uploaded
- Locate the correct folder in which to categorize assets, and generate the asset hierarchy if it doesn't exist
- Approve new folders, assets, and product-to-asset references
- Launch a new workflow or trigger a transition in an active workflow
- Run business rules after the assets have been imported
- Examine the assets and reject file formats, color spaces, DPI, physical sizes, and file sizes that don't meet minimum requirements
- Import metadata from an asset file and/or import EXIF information stored within assets
- Create references between products and digital assets based on configurable match criteria
- Purge old, unused revisions of assets in STEP to prevent the database from growing larger than needed
- Set global configurations on the highest level hotfolder that are inherited to all lower level hotfolders, each of which can have their own unique variation of the base configuration (e.g. Logos, Product Images, Web Images, etc.)

Asset Importer Configuration

The Asset Importer provides a wide array of configuration options, allowing users to address both simple and complex requirements.

Prerequisites

The Asset Importer functionality requires a new Setup Group called 'Asset Import Configurations,' which will hold all import configurations at a central place in the STEP system. A child setup group for storing the actual import configuration will need to be created as well and should be named 'Asset Import Configuration Type.' This allows storing asset import configurations as setup entity in STEP.

Before importer configurations can be created, it may be required to create a setup group for the configurations if they don't already exist, and to set up user privileges for viewing and maintaining the configurations. Additionally, 'Asset Import Compatibility Mode' must be set to 'Advanced' on the Users and Groups node.

For more information on this and other initial setup steps, see the **Asset Importer Initial Setup** section.

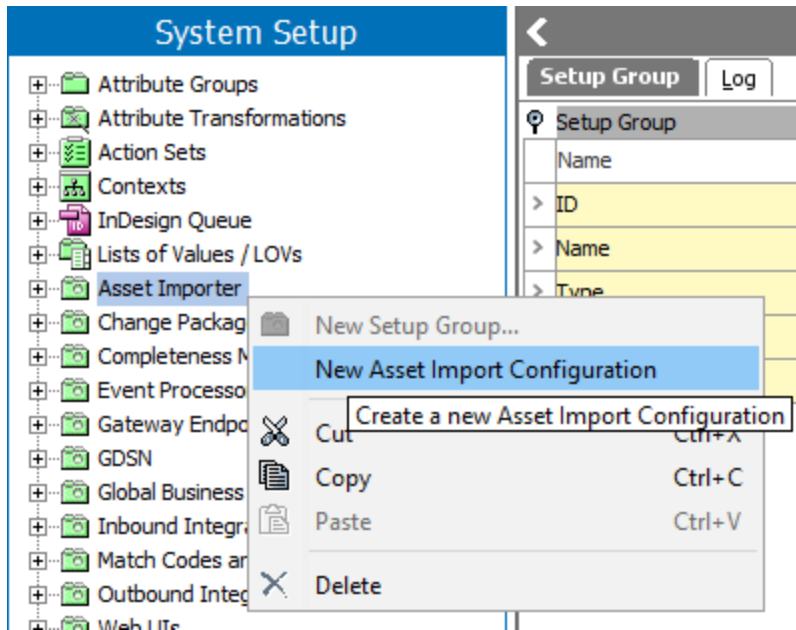
Important: It is highly recommended to enable the asset caching functionality to optimize future export performance. For more information, see the **Event Processors** section of the **System Setup / Super User Guide** documentation.

Creating Asset Importer Configurations

Once the necessary setup tasks have been completed, asset importer configurations can be created via the configuration wizard.

To create new Asset Importer Configurations:

1. Navigate to the System Setup tab.
2. Right-click the appropriate setup group root node from **System Setup**
3. Select 'New Asset Import Configuration'.



A series of standard setup configurations are available by default, however custom plugins can be created by custom development to extend and customize the functionality further.

See the individual wizard step topics for additional information:

- Identify Configuration
- Import Validator
- Hierarchy Builder
- Asset Matcher
- Content Importer
- Metadata Importer
- Product Linker
- Approver
- Auto Purger
- Workflow Handler
- Business Rules

Configuring IIEP and Web UI

It is also necessary to set up an IIEP and/or Web UI in order to use Asset Importer.

For more information on asset importer in Web UI, see the **Asset Importer in Web UI** section of the documentation.

For more information on configuring an IIEP for asset importer, see the **Asset Importer Inbound Integration Endpoint Configuration** section of the documentation.

Asset Importer Initial Setup

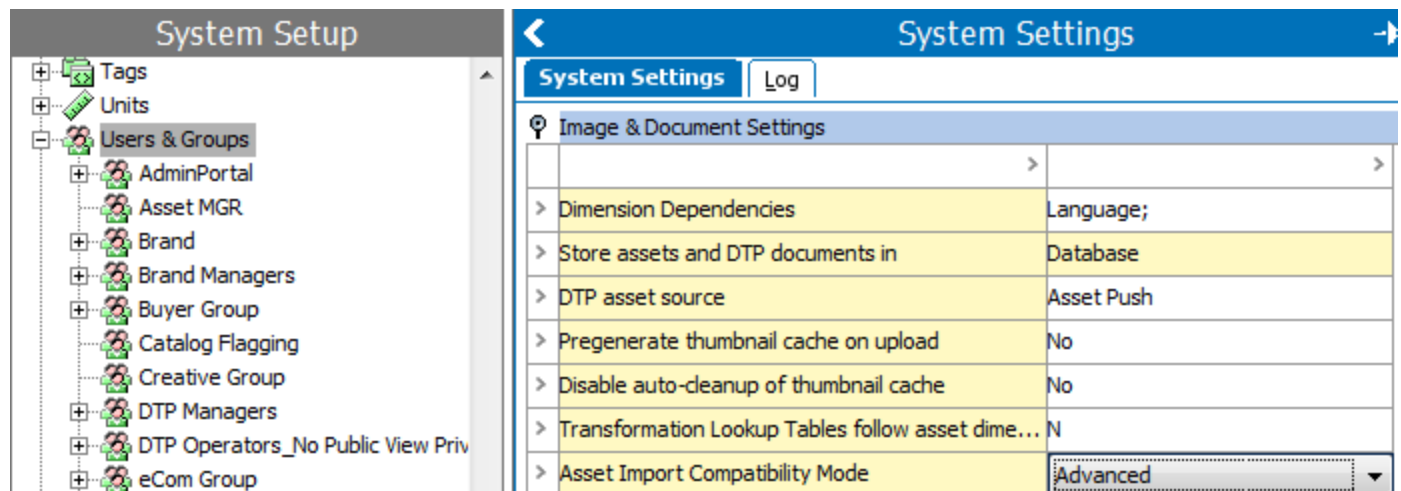
Some initial setup may be required before Asset Importer configurations can be created. The Asset Import Compatibility Mode must be set to advanced, a setup group must be created to hold the Asset Importer configurations, and user permissions must be established for viewing and maintaining import configurations.

Advanced Asset Import Compatibility

To enable the Asset Importer functionality, the 'Asset Import Compatibility Mode' setting must be set to 'Advanced.'

To set the 'Asset Import Compatibility Mode':

1. Navigate to System Setup > Users & Groups, and click the **System Settings** tab.
2. Under the 'Images & Documents Settings' flipper, select 'Advanced' from the 'Asset Import Compatibility Mode' dropdown list.



Important: If enabled, the old asset import functionality will become disabled. This will insure a consistent method to import and update assets in STEP.

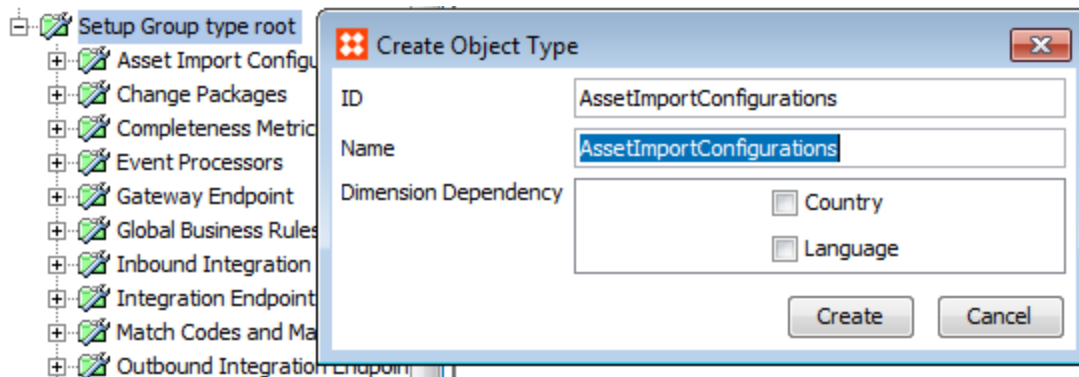
Asset Import Compatibility mode contains two options:

- The option **Simple** is the default setting which deactivates the AI functionality and ensures that the legacy image import is still being the default on existing STEP systems.
- However, on the STEPBASE system this setting will be set to **Advanced** which enables the new functionality for all new STEP installations.

Setup Group

A setup group must be created to hold the Asset Importer configurations.

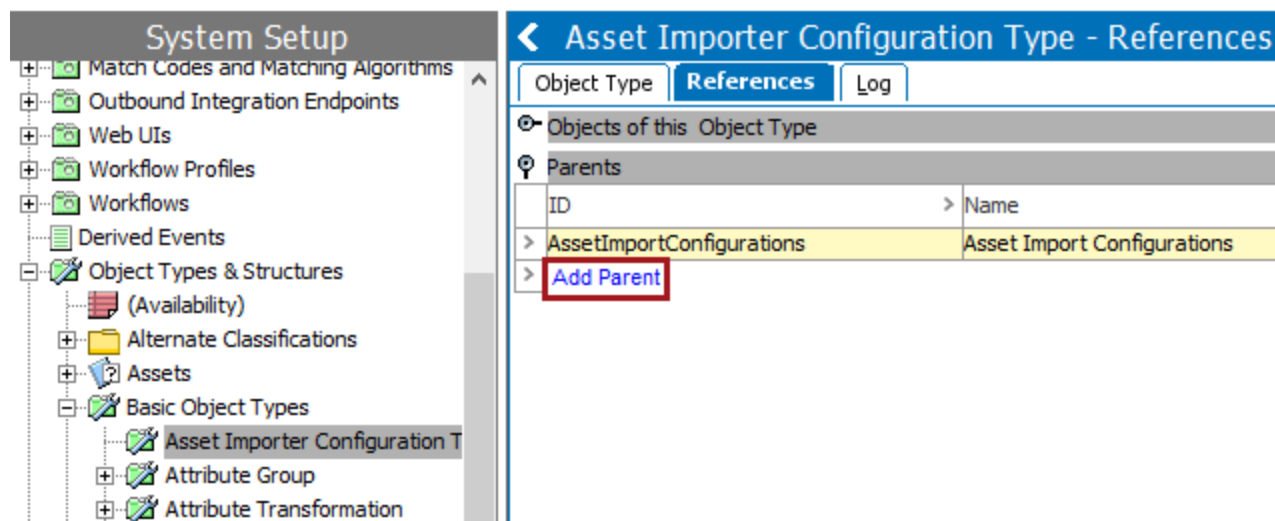
1. Navigate to System Setup > Object Types & Structures, right-click the 'Setup Group type root' node and select **New Object Type**.
2. In the window that appears, enter 'AssetImportConfigurations' in the ID parameter, then click **Create**. This creates a setup group for which all import configurations will reside.



Once the setup group is made, the 'Asset Import Configuration Type' basic object type must be linked to this newly created node as a child. Later, when new asset configurations are created and added to the system, they will use this object type.

3. Navigate to 'Object Types and Structures' > 'Basic Object Types' > 'Asset Import Configuration Type', and click the 'References' tab.

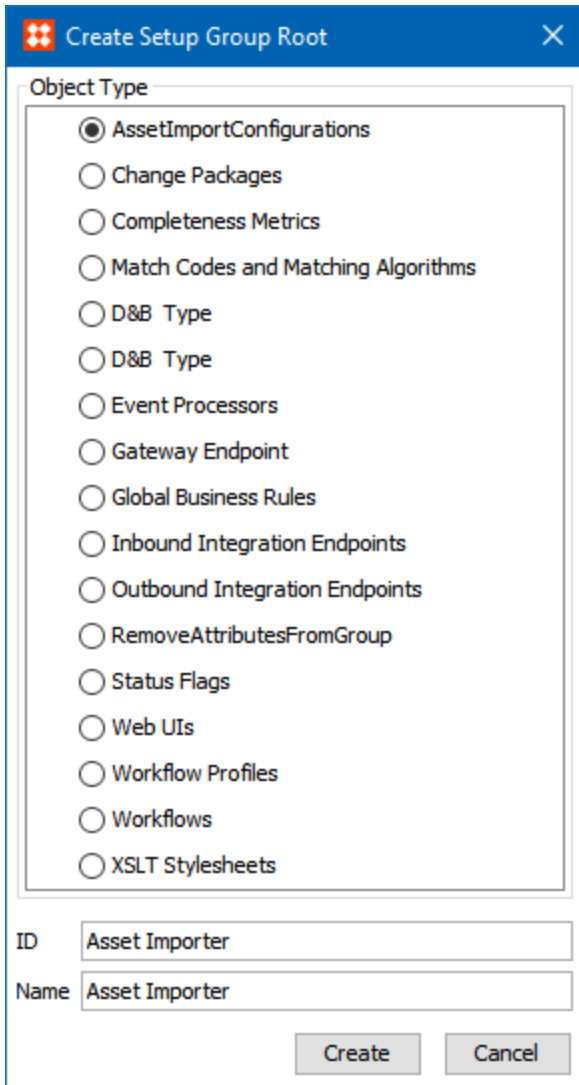
Under the 'Parents' flipper, click **Add Parent**, and in the node selector dialog, specify the 'AssetImportConfigurations' node created in the above step.



The next step is to create a new setup group root, where all importer configurations are to be added upon creation.

1. To create the setup group root, navigate to Maintain > Insert > Setup Group Root
2. Select the 'AssetImportConfigurations' setup group.

3. Specify 'ID' and 'Name.'



Create Setup Group Root

Object Type

- ☒ AssetImportConfigurations
- ☐ Change Packages
- ☐ Completeness Metrics
- ☐ Match Codes and Matching Algorithms
- ☐ D&B Type
- ☐ D&B Type
- ☐ Event Processors
- ☐ Gateway Endpoint
- ☐ Global Business Rules
- ☐ Inbound Integration Endpoints
- ☐ Outbound Integration Endpoints
- ☐ RemoveAttributesFromGroup
- ☐ Status Flags
- ☐ Web UIs
- ☐ Workflow Profiles
- ☐ Workflows
- ☐ XSLT Stylesheets

ID

Name

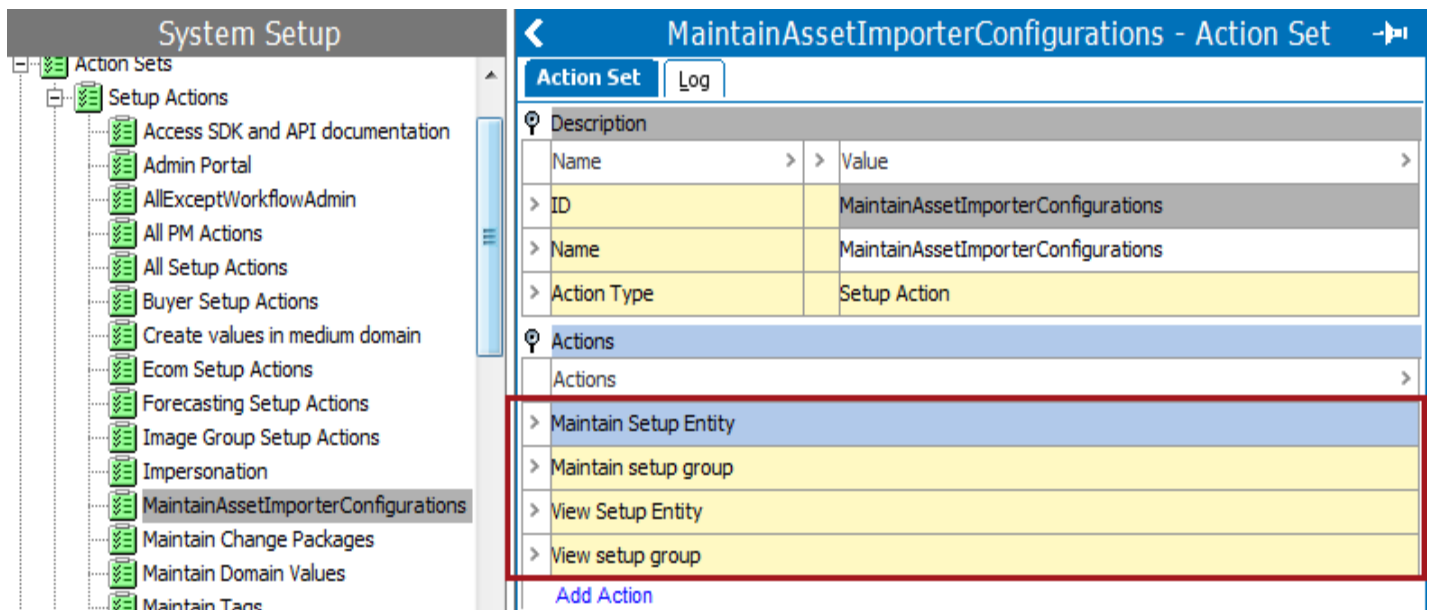
4. Click **Create**.

The setup group 'Asset Importer' of the type 'AssetImportConfigurations' is created. From this newly created node, users can right-click and add new Asset Importer configurations.

User Privileges

User permissions must also be established for viewing and maintaining import configurations.

1. Navigate to System Setup > Action Sets, right-click 'Setup Actions.'
2. Select 'New Action Set'. In the window that appears, enter 'MaintainAssetImporterConfigurations' in the ID parameter, then click **Create**.

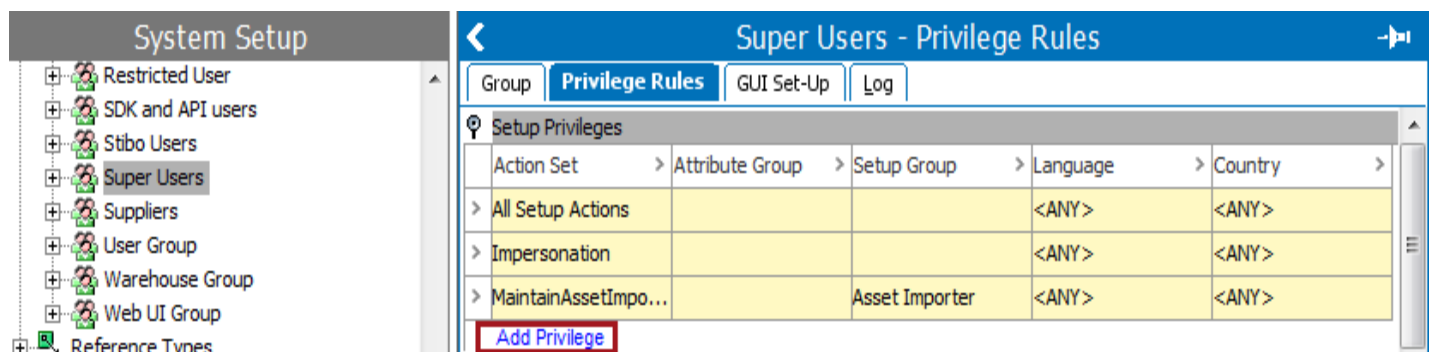


3. In the 'MaintainAssetImporterConfigurations' node created in the previous step.
4. Navigate to the 'Action Set' tab and click **Add Action** found under the 'Actions' flipper.

From the list that appears, choose the follow actions and click **Select**:

- 'View Setup Entity'
- 'View setup group'
- 'Maintain Setup Entity'
- 'Maintain setup group'

5. Finally, navigate to System Setup > Users & Groups, and right-click the relevant user group.
6. Navigate to the 'Privilege Rules' tab, and under the 'Setup Privileges' flipper, click **Add Privilege**.



7. In the window that appears, click the ellipsis button (...) next to the 'Action Set' parameter.
8. Select the action set created in the above step. Alternatively, enter the name of the action set directly into the parameter.

Add Privilege Rule

Action Set: tImporterConfigurations ...

Attribute Group: ...

Setup Group: mporter (Asset Importer) ...

Valid for Object Type: ...

Apply to Group: Super Users (Super user) ...

Dimensions:

Language: <ANY>

Country: <ANY>

Save Cancel

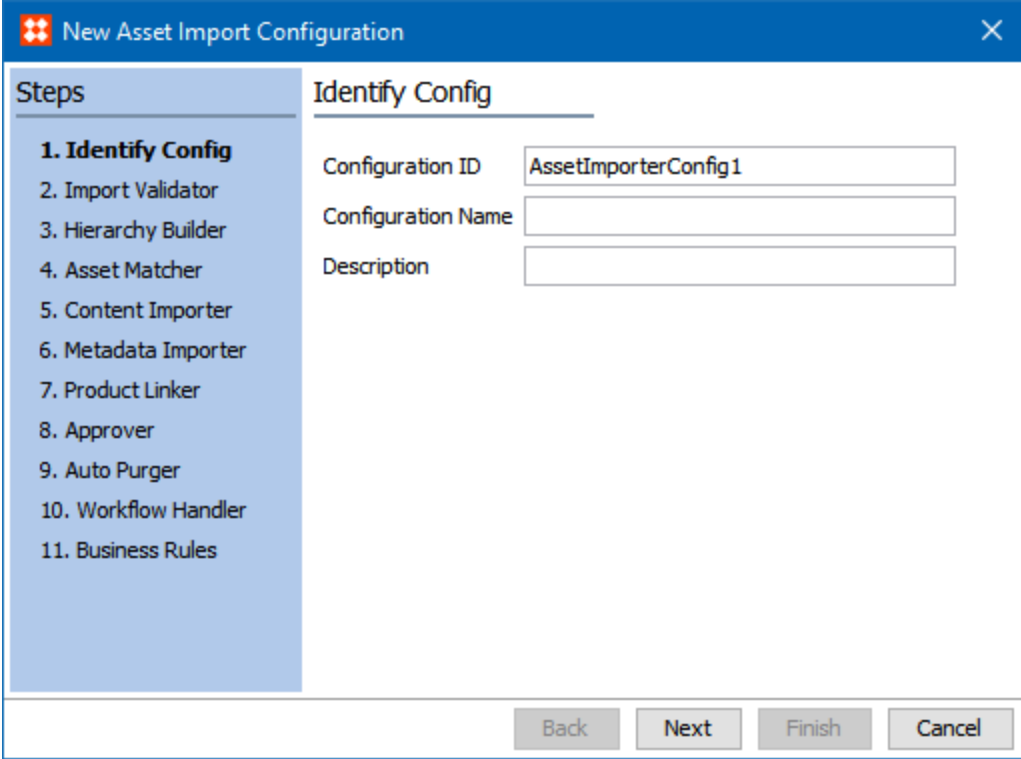
9. For the 'Setup Group' parameter, specify the setup group root created in 'Setup Group' section. In this example, 'Asset Importer' to be specified.
10. Click **Save** when finished.

Identify Configuration

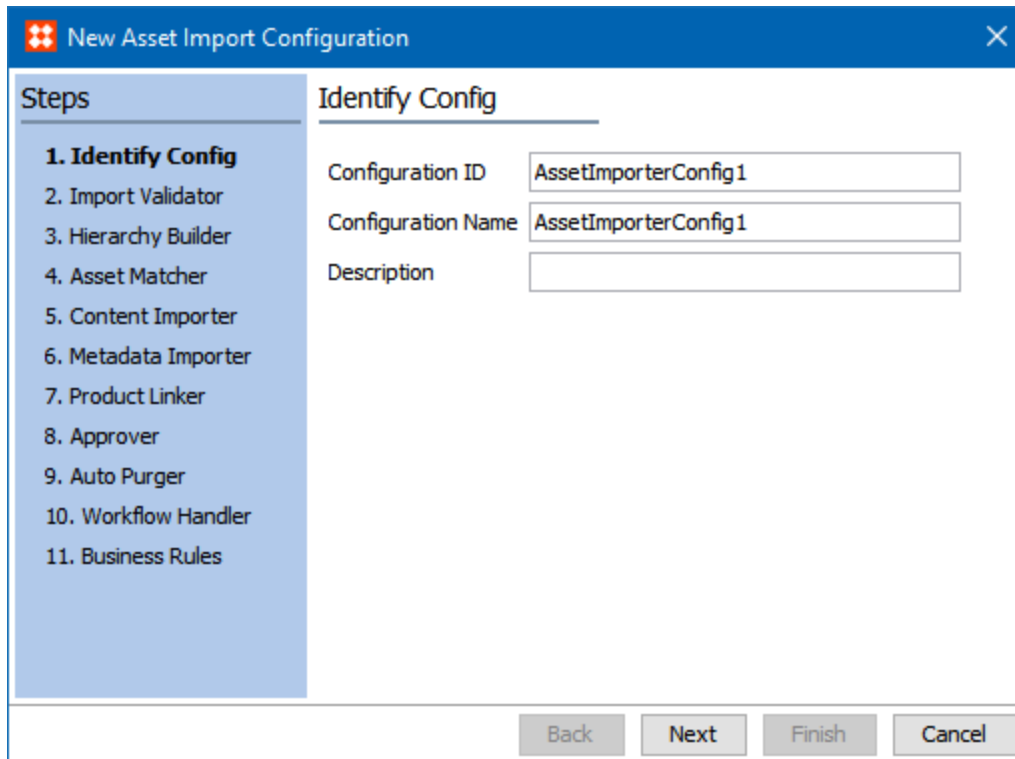
New import configurations can be created directly in the System Setup tree, by right-clicking on the 'Asset Import Configuration' setup group and then selecting 'New Asset Import Configuration.'

A configuration wizard with further options will appear to allow the creation of a new configuration.

1. The 'Configuration ID' field is a mandatory field that specifies the ID for the image import configuration. The ID must be unique among other configurations.
 - A check will be performed that prevents the user from using an already existing image import configuration ID.



2. The 'Configuration Name' field is an optional field that specifies the name for the configuration. Though a name doesn't need to be specified, it is suggested to add a name to distinguish each configuration from the other.
 - The configuration Name should be pre-populated with the ID when switching to the field.



New Asset Import Configuration

Steps

- 1. Identify Config**
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Identify Config

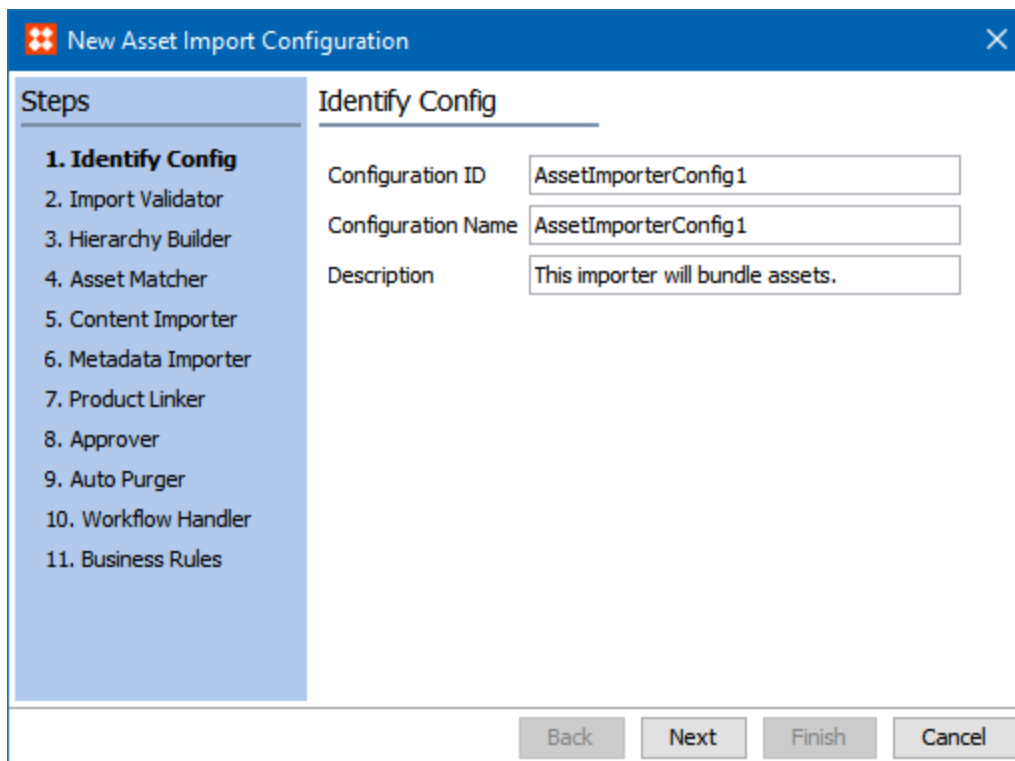
Configuration ID: AssetImporterConfig1

Configuration Name: AssetImporterConfig1

Description:

Back Next Finish Cancel

- The 'Description' field is an optional field that provides a space for the user to describe the asset import configuration in more detail.



New Asset Import Configuration

Steps

- 1. Identify Config**
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Identify Config

Configuration ID: AssetImporterConfig1

Configuration Name: AssetImporterConfig1

Description: This importer will bundle assets.

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Import Validator

If needed, configure the Import Validator to control the allowable physical size of images, allowable color spaces, valid file types, DPI, and maximum file size. All settings within this step are optional and may be left blank.

New Asset Import Configuration

Steps

1. Identify Config
- 2. Import Validator**
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Import Validator

Import Validator: Import Validator

Width Dimension (Pixels): 500 Min 1000 Max

Height Dimension (Pixels): 500 Min 1000 Max

Valid Color Spaces: RGB color - 24 bit

Valid MIME Types: image/jpeg,image/tiff

DPI: 100 Min 500 Max

Max File Size (MB): 50

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Besides the Import Validator, custom validators can be created to extend and change the validation functionality further.

If any of these fields are populated, assets not meeting the validation requirements will not be imported. In this case, an error will be reported explaining why validation has failed.

The validation configuration options are as follows:

1. The 'Width Dimensions (pixels)' and 'Height Dimensions (pixels)' fields dictate the minimum and maximum dimensions of an imported image asset.
2. This setting is ignored if a non-image file (MIME type other than image/* or Application / postscript) is imported that does not have a DPI property.
3. Populate either or both fields if the size of the imported images must be above, below, or within a specific range.
4. If populated, enter a whole number defining the maximum / minimum dimensions (in pixels).
 - An error will be displayed if the user tries to enter a non-integer into this field.
5. If minimum and maximum values are populated, check if the minimum value of each property does not exceed its corresponding maximum value or vice versa.
6. If a field is left empty, the entry for this particular field will be ignored as part of the validation.

Examples:

- The maximum width has been set to be 600 pixels, if the values for height have been left empty, the height of the image will be ignored as part of this validation. The image cannot be larger than 600 pixels in width to pass validation.
- The minimum height has been set to be 500 pixels, if the values for width have been left empty, the width will not be validated at all. The image has to be at least 500 pixels in height in order to pass validation.
- The minimum height has been set to 300 pixels and the minimum width has been set to be 600 pixels, in this case the image has to be at least 300 pixels in height and 600 pixels in width, larger images will pass validation as well but smaller images will not.
- The minimum height has been set to 300 pixels and the maximum width has been set to 600 pixels, in this case the image has to be at least 300 pixels in height and cannot exceed the width of 600 pixels in order to pass validation.

Valid Color Spaces:

The 'Valid Color Spaces' field determines which color spaces are valid for imported image assets.

1. This setting will be ignored if a non-image file (MIME type other than image/* or Application / postscript) is imported.
2. If left empty, no color space check will be performed on imported image assets.
3. Choose from the default color spaces, a multi-selection is possible.

Valid MIME Types:

The 'Valid MIME Types' field determines which MIME types are valid for imported assets.

1. Populating this field is recommended, regardless of the type of assets being handled by the importer, but may be left empty if no validation is desired.
2. All valid values should be populated in the field, separated by a comma (no spaces).
3. Wildcards are allowed. For example, image/*, application/postscript.

DPI (Min / Max)

The 'DPI (min / max)' fields determine the minimum and maximum DPI of imported image assets.

1. This setting is ignored if a non-image file (MIME type other than image/* or Application / postscript) is imported that does not have a DPI property.
2. Populate either or both if the DPI of the imported images must be above, below, or within a specific range.
 - Ranges greater than, less than, or an exact match by filling out one of the two or both fields are excepted.

Examples:

- To only accept images with a minimum required DPI, fill out only the “min” field (e.g. “300 min” will only accept images with 300 or greater DPI).
 - To only accept images up to a maximum allowed DPI, fill out only the “max” field (e.g. “400 max” will only accept images up to 400 DPI).
 - To specify a DPI range, fill out both fields (e.g. 72 min – 300 max will only accept images with a minimum of 72 DPI but not more than 300 DPI).
 - For an exact match fill out both fields (e.g. 300 max and 300 min will only accept images with exactly 300 DPI).
3. If a field is left empty, the entry for this particular field will be ignored as part of the validation.
 4. If populated, enter a whole number defining the min or / and max allowed DPI.
 - An error will be displayed if the user tries to enter a non-integer into the min / max DPI fields.
 5. If minimum and maximum values are populated check, the minimum value does not exceed the maximum value or vice versa.

Max File Size (MB)

1. The 'Max File Size' field determines how large the imported asset file can be (in megabytes).
2. If left empty, no file size restriction will be applied.

Hierarchy Builder

By configuring the Hierarchy Builder, users can create classification folders in which the imported assets are stored in STEP (if they don't already exist).

By default, 'File Name Hierarchy Builder' is the only configuration option available for the Hierarchy Builder.

The 'File Name Hierarchy Builder' configuration uses the names of the assets being loaded to generate a multi-level hierarchy in STEP and is the most commonly selected Hierarchy Builder option.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
- 3. Hierarchy Builder**
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Hierarchy Builder

Hierarchy Builder: File Name Hierarchy Builder

Asset Hierarchy Root *: 9 (20138) ...

Use Selected Classification For Manual Imports: ☒

Number Of Folder Levels To Be Created *: 0

Zero (0) places assets directly in the hierarchy, while any higher value will result in a pattern of sub folders where the assets will be placed in.

* Mandatory Fields

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Besides the default hierarchy builder plugin, custom ones can be created to extend and modify the hierarchy builder functionality further.

Note: Parameters marked with an asterisk (*) are mandatory.

When selecting the 'File Name Hierarchy Builder' option, the following parameters must be specified:

1. Asset Hierarchy Root

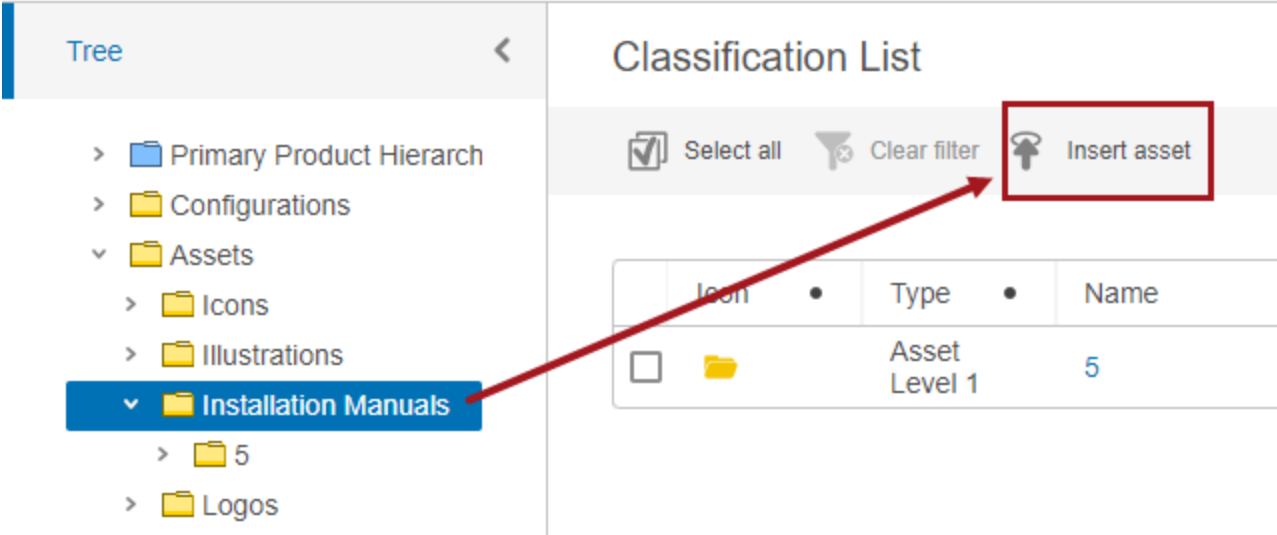
In the 'Asset Hierarchy Root' field, click the ellipsis button (...) and select the STEP ID of the root classification folder under which all asset hierarchy folders will be created.

- The user can select or search for classifications in STEP.

2. Use selected classification for manual imports

If the 'Use selected classification for manual imports' checkbox is enabled, the asset hierarchy root selection made above will be overwritten by a classification hierarchy selected during manual import (via Web UI).

Example of selected classification context in Web UI:

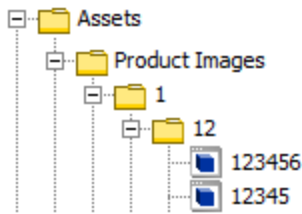


3. Number of Folder Levels to be Created

In the 'Number of folder levels to be created' field, specify the number of hierarchy levels to be generated.

By default this parameter is set to '0', which results in placement of the asset(s) directly into the indicated Asset Hierarchy folder. Any numbers exceeding '0' or non-zero whole number create a pattern of hierarchy folders under the root. The first level is named after the first character of the asset name, the second level uses the first two characters, and so on.

For example, population with two (2) results in the following:



It is recommended to set up a classification structure of repeating asset sub-folders via the object type setup. Doing so will allow for the creation of sub-classification folders during import. These asset hierarchy classification object types should use auto generated IDs to avoid potential errors.

Folder Identification and Creation

In creation of the classification structures, the system searches for a classification in STEP under the indicated Asset Hierarchy Root with a STEP name matching that indicated by the filename.

- If a match is found, the asset is placed under it.
- If a match is not found, the system attempts to create a new folder based on the file name using the first available classification child object type. If the folder cannot be created due to either no available sub-classification object types or missing permissions, then the system logs an error and the asset is not uploaded.

Note:

- Supplier users are only allowed to have access to their specified classification structure in the yellow supplier hierarchy under the suppliers sub folder 'assets.' This will ensure protection from other suppliers.
- For this special scenario, we need to ensure that the Asset Hierarchy Root property will be adjusted to match with the dedicated classification root folder for the particular supplier user.
- It is strongly recommended to set up a repeating asset sub-hierarchy classification structure via the object types setup to allow the creation of sub-classification folders.
- It is strongly recommended to set asset hierarchy classification object types to use auto generated IDs to avoid the potential error described above.
- Usage of STEP ID:

Auto generated if the object type is set to have an ID pattern of [id]

As with the STEP Name, if the IDs are not set, the name will be auto generated.

If ID is already in use, folder creation fails, the system logs an error, and the asset is not uploaded.

Asset Matcher

Based on criteria defined in the Asset Matcher configuration, the asset importer can determine when an asset is new to STEP or is a replacement for an existing asset. It also indicates whether or not new assets are allowed to be created, and if so, allows for the use of regular expressions or metadata to control how the STEP Names and IDs of those assets are set.

The Asset Matcher comes with one default option, the Standard Asset Matcher, which lets you define how new and existing assets will be handled, using a series of configuration options and regular expressions.

A number of the parameters on this step require the use of regular expressions. For more information, see the **Regular Expression** section of the **System Setup / Super User Guide** documentation.

Besides the default Asset Matcher plugins, custom ones can be created to extend and modify the asset matcher functionality further.

An asset matcher selection must be made, and the corresponding configuration options populated.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
- 4. Asset Matcher**
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Asset Matcher

Asset Matcher: Asset Matcher

Asset Matcher Hierarchy Root *: 9 (20138) ...

Match on *: File Name

File Name Match Expression *: (.*)\.*

Match Template *: \$1

ID Template: \$1

Name Template: \$1

Multiple Matches Found: Error on record

* Mandatory Fields

Back Next Finish Cancel

Note: Parameters marked with an asterisk (*) are mandatory.

1. Asset Matcher Hierarchy Root

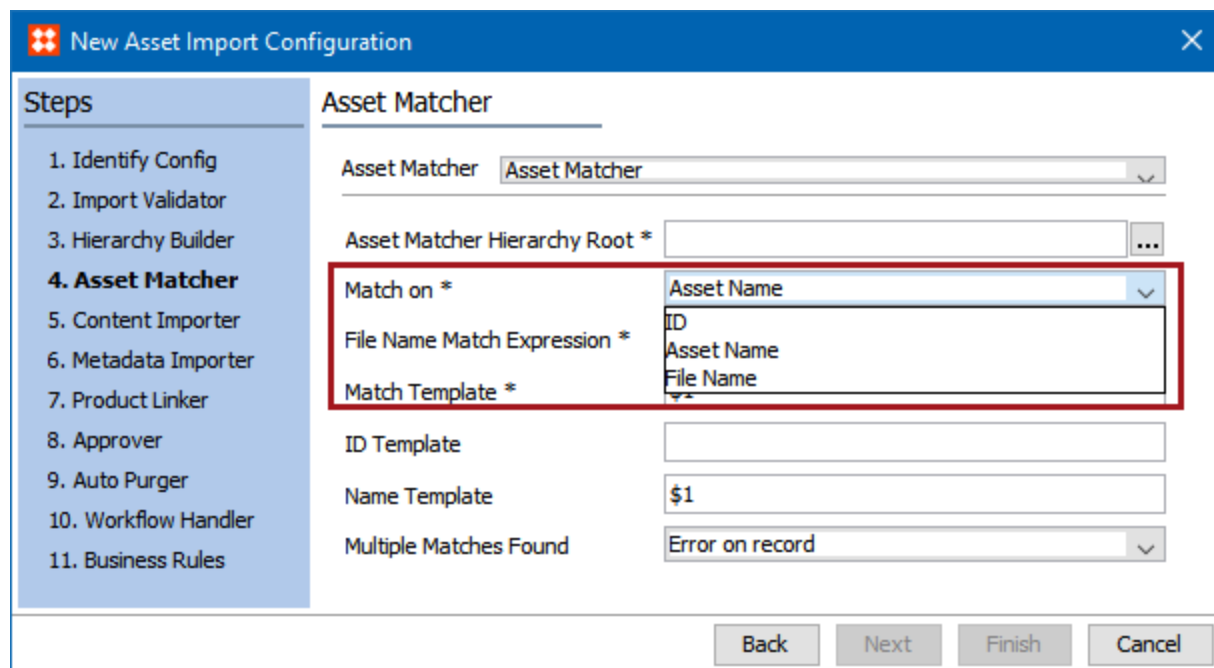
In the 'Asset Hierarchy Root' field, click the ellipsis button (...) and select the STEP ID of the root folder under which the asset importer will look for asset matches. This field is **mandatory**.

If left empty, the 'Next' button will be disabled to indicate this field will need to be filled out.

This option is based on a node picker where the user can select or search for a classification in STEP or type the name in the field and typeahead search will be displayed.

2. Match on

In the 'Match on' field, define how to match assets to existing assets via the dropdown list. The default value 'Asset Name' will be selected from the dropdown list. This field is **mandatory**.



New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
- 4. Asset Matcher**
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Asset Matcher

Asset Matcher: Asset Matcher

Asset Matcher Hierarchy Root *

Match on *
 ID
 Asset Name
 File Name

File Name Match Expression *

Match Template *

ID Template

Name Template: \$1

Multiple Matches Found: Error on record

Back Next Finish Cancel

Options include:

- ID: Match asset filename to STEP ID
- Asset name: Match asset file name to STEP Name
- File Name: Match asset file name to Filename metadata attribute in STEP

Images & Documents			References	Referenced By
Description				
Name		>	>	Value
>	ID	111683		
>	Name	Acme Anvil		
>	Object Type	Product Image		
>	Revision	1.2 Last edited by USER4		
>	Approved	✔ Approved on Mon Jan		
>	Translation	Not Translated		
>	Path	Classification 1 root/Asset		
System Properties:				
Name		>	>	Value
>	Filename	abc Acme Anvil.png		

Note: If the Match template filters out the file extension, matching by File Name is not possible.

3. File Name Match Expression

The 'File Name Match Expression' field is used in conjunction with the 'Match Template' field to match assets based on their file names via a regular expression. The default value with a regular expression – `(.*)\.*` will be populated for this field. This option is used to define match groups to be referenced in the Match Template, defined by the parentheses. This field is **mandatory**. If left empty, the 'Next' button will be disabled to indicate this field will need to be filled out.

Note: Each group of parenthesis indicates a match group. For more information on match groups, see the **Grouping** section of the **Regular Expression** topic.

Examples:

`(.*)\.*`

Indicates that asset file name contains any characters, followed by a period (`.`), followed by any characters

Used to isolate the file name and exclude the extension - 12345.jpeg

Finds any file with any extension

Indicates a single match group, which would necessitate a corresponding Match Template entry of '\$1'

4. Match Template

In the 'Match Template' field, specify which match group(or combination of match groups) to use for matching assets via a regular expression. Populate with a dollar sign symbol (`$`), followed by a whole number to indicate a match group. The default value with a regular expression \$1 is populated for this field. The first set of parentheses in the File Name Match Expression field is assigned '1,' the second '2,' and so on. This field is **mandatory**. If left empty, the 'Next' button will be disabled to indicate this field will need to be filled out.

Examples:

- \$1 - Match only on the first match group identified in the regular expression
- \$1.\$2 - Match on the first match group identified in the regular expression, followed by the second match group, with the two match groups separated by a period (`.`)

5. ID Template

In the 'ID Template' field, use a regular expression to specify how the STEP ID of an asset should be set if no match can be found and creation of new assets is allowed.

- This is an **optional field** that should be left blank if you want STEP to auto generate the ID.
- Populate with '\$' plus the number of the match group (parentheses set in the File Name Match Expression) that should be used to create the STEP ID.
- Can be combined with static text to form the template

Examples:

- \$1 - Create the STEP ID using the value identified in the first match group from expression
- asset-\$1 - Create the STEP ID using the value identified in the first match group from the expression, prefixed with 'asset-'

6. Name Template

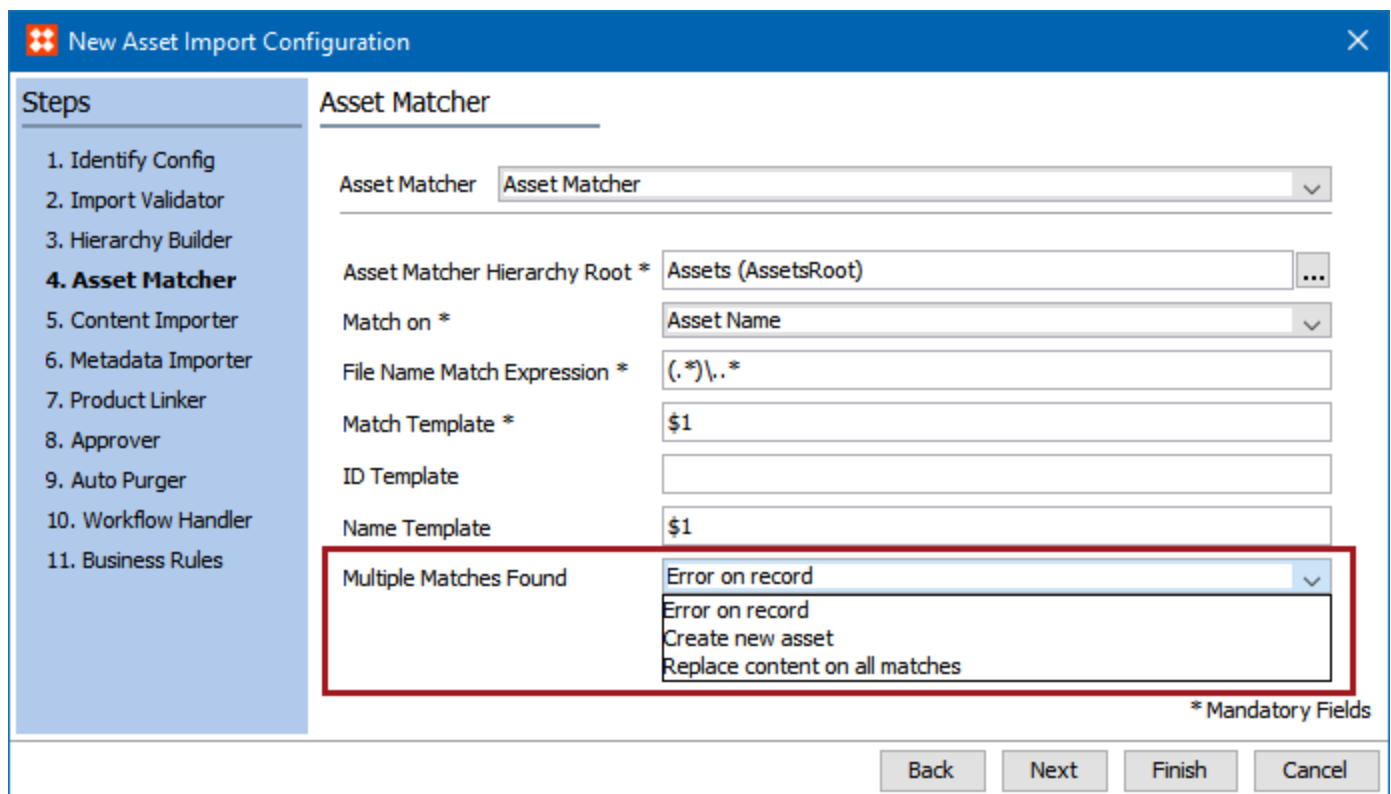
- In the 'Name Template' field, use a regular expression to specify how the STEP Name of an asset should be set if no match can be found and creation of new assets is allowed.
- Though optional, it is recommended to populate this field. Otherwise, the STEP Name of the asset will be left blank.
- Populate with '\$' plus the number of the match group (parentheses set in the File Name Match Expression) that should be used to create the STEP Name.

Example:

- \$1 - Create the STEP Name using the value identified in the first match group from the expression
- Logo.\$1 - Create the STEP Name using the value identified in the first match group from the expression, prefixed with 'Logo'.

7. Multiple Matches found

In the 'Multiple Matches found' dropdown field, select which method to use when dealing with multiple matches.



New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
- 4. Asset Matcher**
5. Content Importer
6. Metadata Importer
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8. Approver
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10. Workflow Handler
11. Business Rules

Asset Matcher

Asset Matcher: Asset Matcher

Asset Matcher Hierarchy Root *: Assets (AssetsRoot)

Match on *: Asset Name

File Name Match Expression *: (.*)\.*

Match Template *: \$1

ID Template:

Name Template: \$1

Multiple Matches Found: Error on record

* Mandatory Fields

Back Next Finish Cancel

Default value 'Error on record' will be populated for this field. Options include:

- 'Error on record' - This option will log an error for the current asset and the asset importer will proceed to the next asset for import.
- 'Create new asset' - This option will cause the Asset Importer will attempt to create a new asset.
- 'Replace content on all matches' - This option will cause the Asset Importer will attempt to replace the content on all matching assets with the content of the file being imported.

Note:

- This requires 'Allow content replace' to be set to 'Yes' in the Content Importer settings (next wizard step).
- Using this setting can potentially change a large number of assets and should be considered carefully.
- If "Allow content replace" to be set to "No" an error will be logged and the asset importer will proceed with the next file to import

Example:

To further clarify, an example is provided to demonstrate how the File Name Match Expression, Match By, and Match Template fields are used in combination to yield the desired match results.

Consider the following configuration loading an asset with the file name 12345.tif.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
- 4. Asset Matcher**
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Asset Matcher

Asset Matcher: Asset Matcher

Asset Matcher Hierarchy Root *: Assets (AssetsRoot)

Match on *: Asset Name

File Name Match Expression *: (.*)\\..*

Match Template *: \$1

ID Template: \$1

Name Template: \$1

Multiple Matches Found: Error on record

* Mandatory Fields

Back Next Finish Cancel

The Asset Importer will identify '12345' as the match group and will search STEP for an existing asset with the STEP Name of '12345' within the Assets hierarchy.

If asset is found, the existing asset will be replaced by the new file.

If no asset exists under the Assets folder (or any child folders) with the STEP Name '12345', a new asset will be created. The STEP Name and ID of this asset will be '12345'.

Placement of the asset in STEP is determined by the Hierarchy Builder configuration.

Content Importer

By configuring the Content Importer, users can define basic rules for importing assets and their content. The default (and only) option is 'Standard Asset Content Importer'.

Note that some fields are optional.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
- 5. Content Importer**
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Content Importer

Content Importer: Asset Content Importer

Allow Create Asset: ☒

Allow Content Replace: ☒

Apply Image Conversion: JPG TWST (conversion)

Asset Object Type: Product Image (ProductImage)

Import Independently of Dimension: ☐

Back Next Finish Cancel

Besides the **Standard Asset Content Importer**, custom content import plugins can be created to extend and modify the content import functionality further.

When selecting the Standard Asset Content Importer, the following must also be specified, noting that some fields are required while others are optional.

1. Allow Create Asset

'Allow Create Asset' is a required parameter that determines whether or not the importer can create new assets.

- **Select the checkbox** if creation of new assets and replacement of existing assets should be allowed
- **Uncheck the checkbox** if replacement of existing assets is allowed but creation of new assets is not allowed

2. Allow Content Replace

'Allow Content Replace' is a required parameter that determines whether a new asset can replace the content of an existing asset in STEP when a match is found via the Asset Matcher configuration.

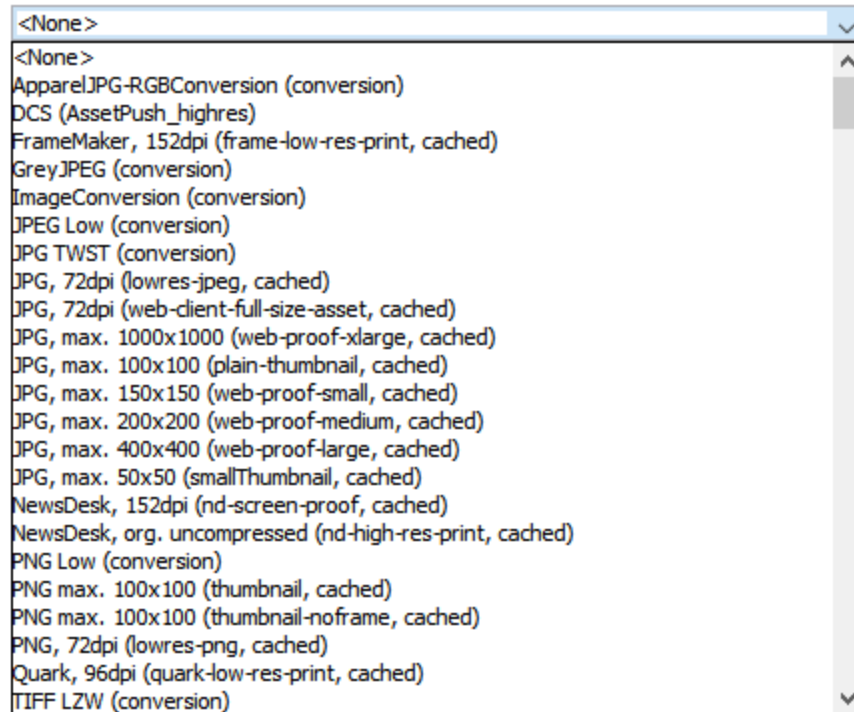
For more information, see the **Asset Matcher** section of the documentation.

- **Select the checkbox** if the content of an existing asset in STEP should be replaced when a new asset is provided that meets the matching criteria.
- **Uncheck the checkbox** if the content of an existing asset in STEP should not be replaced when a new asset is provided that meets the matching criteria. This option will create an error log whenever a replacement is attempted and fails.

3. Apply Image Conversion

The 'Apply Image Conversion' field indicates if the image content should be converted into a different format. Use the dropdown selector to choose the desired image conversion configuration in STEP:

Apply Image Conversion



- By default this parameter is set to **None**, as it does not apply to non-image files. The asset content will be imported as the original import file.
- The available image conversion configurations will be listed next which indicate which image conversion should be applied during import.

User created image conversion configurations are located throughout the classification structure as well as custom image conversions need to be accounted for which are located as configuration files on the STEP server.

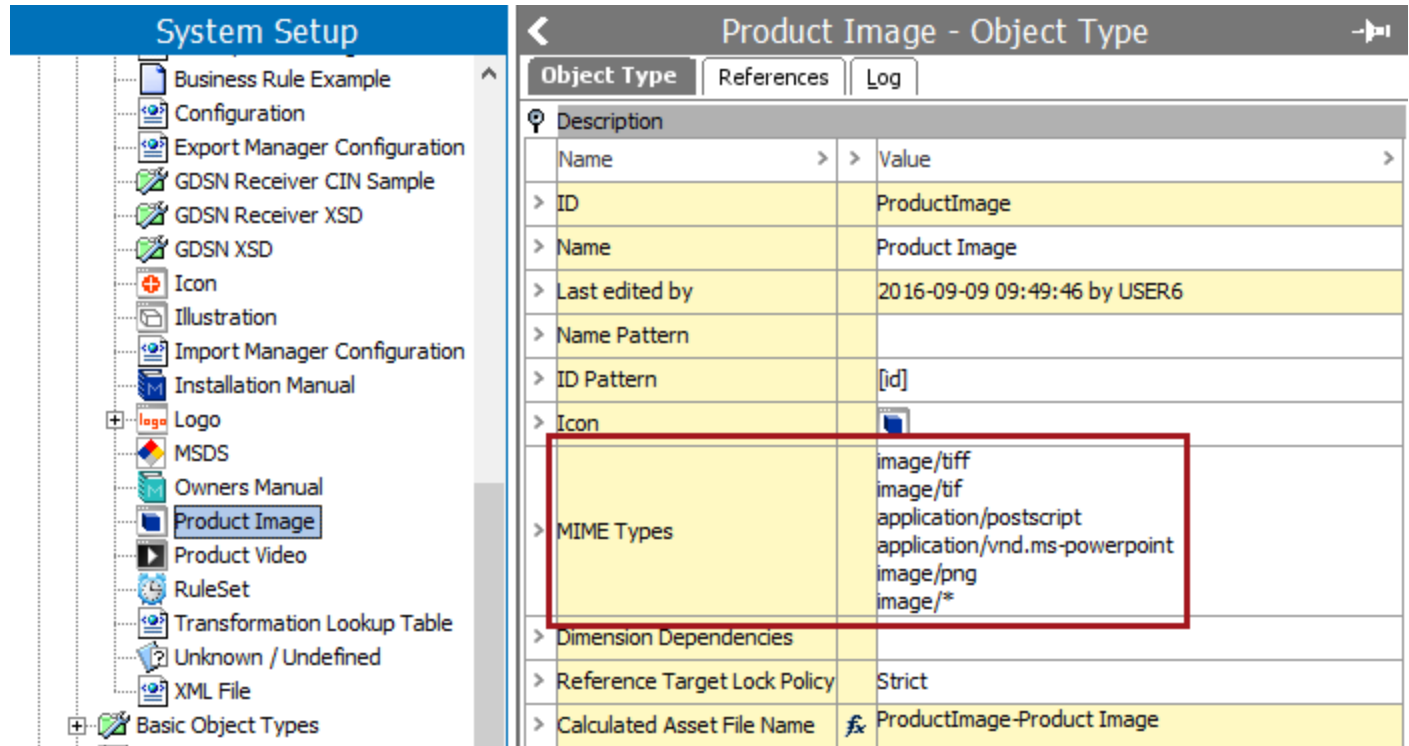
User created as well as custom image conversions will be displayed as one list similar as we do as part of the image event queues setup today. This option only applies to image files and will be ignored during the import of any non-image assets which cannot be converted into a different format

4. Asset Object Type

'Asset Object Type' is an optional field that assigns a specific object type to imported assets.

If left blank, STEP will automatically provide imported assets with an appropriate object type; however, it is recommended that this parameter be set so that there is no room for error. If utilized, select from the asset object types in STEP.

Note: The object type must be configured to accept the MIME Types included in the import.



The screenshot displays the 'System Setup' sidebar on the left, listing various object types. The 'Product Image' object type is selected. The main window shows the configuration for 'Product Image - Object Type'. The 'MIME Types' field is highlighted with a red box, showing a list of supported MIME types: image/tiff, image/tif, application/postscript, application/vnd.ms-powerpoint, image/png, and image/*.

Object Type	References	Log
Description		
Name	>	> Value
ID		ProductImage
Name		Product Image
Last edited by		2016-09-09 09:49:46 by USER6
Name Pattern		
ID Pattern		[id]
Icon		
MIME Types		image/tiff image/tif application/postscript application/vnd.ms-powerpoint image/png image/*
Dimension Dependencies		
Reference Target Lock Policy		Strict
Calculated Asset File Name		ProductImage-Product Image

5. Import Independently of Dimensions

'Import Independently of Dimensions' is a required field that determines whether dimension dependencies on images should be ignored or honored during import.

Note: This field is unavailable if the images and documents do not have dimensional dependencies.

The screenshot displays the Stibo Systems configuration interface. On the left, the 'System Setup' tree shows a hierarchy starting with 'Units', followed by 'Users & Groups' (which is expanded to show roles like AdminPortal, Asset MGR, Brand, etc.). On the right, the 'System Settings' window is open, showing the 'Image & Document Settings' tab. A table of settings is visible, with the 'Dimension Dependencies' row highlighted by a red rectangle. The value for this setting is 'Language;'.

Setting	Value
Dimension Dependencies	Language;
Store assets and DTP documents in	Database
DTP asset source	Asset Push
Pregenerate thumbnail cache on upload	Yes
Disable auto-cleanup of thumbnail cache	No
Transformation Lookup Tables follow asset dimension dependency	N
Asset Import Compatibility Mode	Advanced

This setting is only relevant if the above configuration is populated with a dimension dependency, and may be populated with either Yes or No if no dependencies exist.

- This field should become **disabled**, if the dimension dependency for images and documents in the system settings is not populated
- **Select the checkbox** if assets should be imported independently of dimension specifications meaning that all assets will be available in all contexts
- **Uncheck the checkbox** if assets should be imported only into the context set in the Configure Endpoint context selection

Metadata Importer

When importing assets, STEP captures a pre-defined set of metadata in the asset file (which varies by file type). By configuring the Metadata Importer, user can define rules for importing additional asset system metadata, as well as EXIF (Exchangeable Image File Format) and XMP (Extensible Metadata Platform) metadata from asset files (e.g. images, movies, sound files, etc.). Open source third party tools / libraries such as EXIFTool can be used, and support a wide range of metadata formats.

Note:

- Asset metadata attributes can be found in System Setup Tab > Attributes > System Attributes (ID=Uncategorized).
- By default, no mapping fields are defined, meaning that no additional metadata import is required. In the image below, additional metadata is mapped to the configuration.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
- 6. Metadata Importer**
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Metadata Importer

Metadata Importer: Metadata Importer

Metadata Source	Field	STEP Attribute
> Asset Metadata	... Caption 1	... Caption 1
> Asset Metadata	... Caption 2	... Caption 2
> Add Field Mapping		

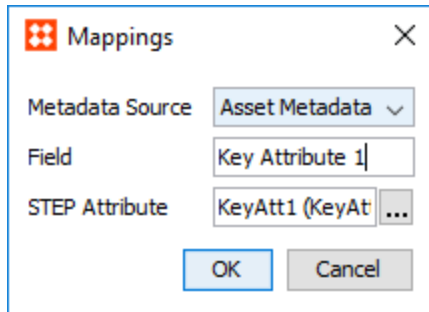
Back Next Finish Cancel

- If you are not importing additional metadata and/or EXIF/XMP data, there is no need to change the default configuration, which contains no field mappings.

In the 'Metadata Importer' field, the default (and only) option is 'Standard Metadata Import.' Custom metadata importer plugins can be created to extend and modify the metadata import functionality further.

- To map metadata fields to STEP attributes, click **Add Field Mapping** link.
- A new row of options appears which allows the user to specify a new field mapping.
- Metadata Source**

In the window that appears, select a metadata source from the 'Metadata Source' dropdown. Options for this field include: a **metadata import file** or a **metadata property** contained within the asset file itself (from EXIF or XMP data).



- Select 'Metadata file' to map a field specified in the metadata import file to a STEP attribute.
- To use this option, the Metafile Receiver or Zip with Metafile Receiver option must also have been selected as the Receiver part of the corresponding IIEP configuration.

For more information, see the **IIEP - Configure Asset Importer Processing Engine** documentation.

Select 'Asset Metadata' to map a metadata property of the asset to a STEP attribute.

3. Field

In the 'Field' parameter, specify the name of the field to map. This field is **required**, and an empty value will result in an error message.

4. STEP Attribute

In the 'STEP Attribute' parameter, click the ellipsis button (...) and select a valid attribute for which the specified metadata info will be inserted. This field is **required**, and an empty value will result in an error message.

When configuring this step for the first time, consider setting the 'AssetImporter.MetaDataImporter.DumpAssetMetaData' property in sharedconfig.properties to 'true'. This property enables the Metadata Importer to dump the metadata from imported assets into the server log and into the execution report of background processes started by the IIEP, allowing users to see metadata on the image. It is not recommended to keep this property set to true once the configuration has been properly tested, as it can eventually create a large amount of entries in the step.0.log.

Note: The meta data is not reported in background processes started from Web UI.

To Remove Field Mapping

To remove any field mapping configurations, right click on the configuration and select Remove Field Mapping (Ctrl+Minus) option as shown in below.

New Asset Import Configuration

Steps

1. Identify Config

2. Import Validator

3. Hierarchy Builder

4. Asset Matcher

5. Content Importer

6. Metadata Importer

7. Product Linker

8. Approver

9. Auto Purger

10. Workflow Handler

11. Business Rules

Metadata Importer

Metadata Importer Metadata Importer

Metadata Source	Field	STEP Attribute
Asset Metadata	Photo	Part Number

Add Field Mapping Ctrl+Plus

Remove Field Mapping Ctrl+Minus

Back

Next

Finish

Cancel

Product Linker

By configuring the Product Linker, users can determine if and when imported assets should be linked to related products in STEP, how those products should be identified, and which reference type should be applied.

The Product Linker configuration has three options: Asset Filename Linker, Metadata Product Linker, and No Product Link (which is the default selection). If no product linking is required, no adjustments need to be made to the default configuration.

The screenshot shows a window titled "New Asset Import Configuration" with a close button (X) in the top right corner. On the left is a "Steps" sidebar with a list of 11 steps. Step 7, "Product Linker", is highlighted in blue. The main area of the window is titled "Product Linker" and contains a dropdown menu labeled "Product Linker" with the text "No Product Link" and a downward arrow. At the bottom of the window are four buttons: "Back", "Next" (which is highlighted with a dashed border), "Finish", and "Cancel".

Custom product linker plugins can be created to extend and customize the product linking functionality further.

Note: Parameters marked with an asterisk (*) are mandatory.

If product linking is required, it can be done via regular expressions or metadata, and the appropriate option should be selected and all corresponding configuration options completed.

A number of the parameters on this step may require the use of regular expressions. For more information, see the **Regular Expression** section of the **System Setup / Super User Guide** documentation.

No Product Link

If assets should not be matched to products, select 'No Product Link' from the 'Product Linker' dropdown. This is the default selection, and no additional configuration is required.

Asset Filename Linker

By configuring the Asset Filename Linker, imported assets can be linked to products using a series of configuration options and regular expressions in STEP by matching the asset's file name to the STEP ID, Name, or Unique Key of the existing product.

Note: Take care in considering how the File Name Match Expression, Match On, and the Match Template parameters work together.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
- 7. Product Linker**
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Product Linker

Product Linker: Asset Filename Linker

File Name Match Expression *: (.*)\.*

Match On *: Key

Key: Key 1

Match Template *: \$1

Match Below Product Root *: Head Wear (20433)

Reference Type *: Primary Product Image

Allow Multiple Products: ☒

* Mandatory Fields

Back Next Finish Cancel

Asset Filename Linker dropdown option should be specified with following parameters noting some are mandatory.

1. File Name Match Expression

In the 'File Name Match Expression' parameter, write a regular expression that defines which match groups should be used to identify existing products. These same match groups should be specified in the 'Match Template' parameter detailed below. This is a **required** field. Default value with a regular expression – (.*)\.* will be populated for this field. Used to define match groups to be referenced in the Match Template, defined by the parentheses (e.g. each set of parentheses indicates a match group).

Example:

- (.*)\.*
- Indicates that asset file name contains any characters, followed by a period (.), followed by any characters
- Used to isolate the file name and exclude the extension - 12345.jpeg

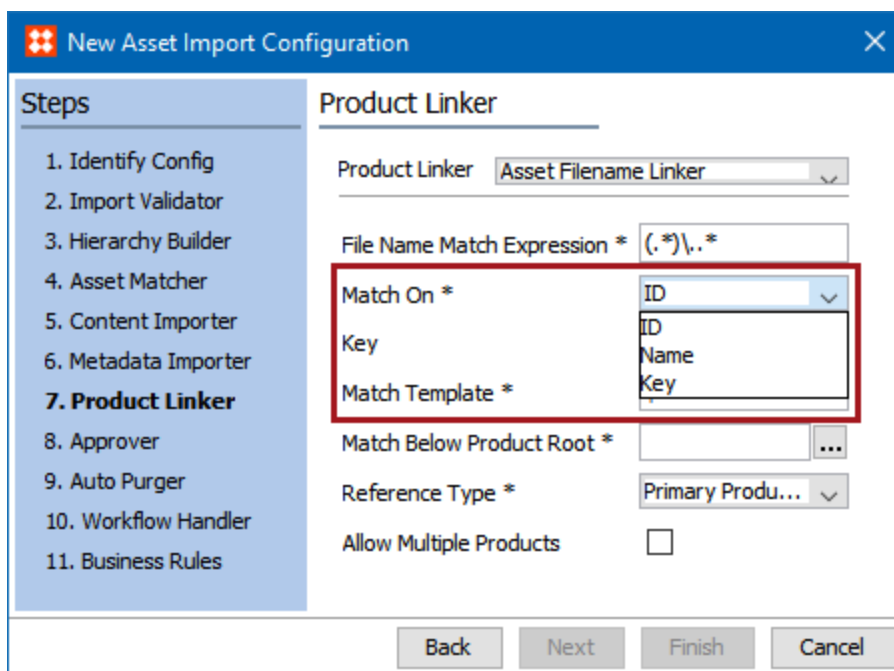
- Finds any file with any extension
- Indicates a single match group, which would necessitate a corresponding Match Template entry of '\$1'

2. Match On

In the 'Match On' parameter, specify how the system identifies existing products in STEP. Options include: ID, Name, and Key (requires the Key field to be populated). This is a **required** field. The default value ID will be selected from the dropdown field.

Options include:

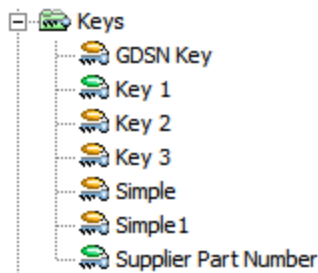
- ID: Match template value to the STEP ID of a product
- Name: Match template value to STEP Name of a product
- Key: Match template value to a particular Key value on a product



The screenshot shows the 'New Asset Import Configuration' window with the 'Product Linker' step selected. The 'Match On' dropdown is open, showing a list of options: ID, ID, Name, and Key. The 'Match Template' field is also highlighted with a red box. The 'Match Below Product Root' field is empty, and the 'Reference Type' is set to 'Primary Produ...'. The 'Allow Multiple Products' checkbox is unchecked. The 'Back', 'Next', 'Finish', and 'Cancel' buttons are at the bottom.

3. Key

In the 'Key' parameter, select the STEP ID of the key from the dropdown selector for use in matching. The dropdown menu will list STEP ID of all Keys available in that specific system. This field is only required if 'Key' was selected in the previous step. This field will be disabled if Match On is Name or ID.



4. Match Template

In the 'Match Template' parameter, specify which match group(s) to use for identifying products via a regular expression. These match groups must also appear in the 'File Name Match Expression' field. This is a **required** field. Default value with a regular expression \$1 is populated for this field. Populate with a dollar sign symbol (\$), followed by a whole number to indicate a match group. The first set of parentheses in the File Name Match Expression field is assigned '1', the second '2', and so on.

Example

- \$1 - Match only on the first match group identified in the regular expression
- \$1.\$2 - Match on the first match group identified in the regular expression, followed by the second match group, with the two match groups separated by a period (.)

5. Match Below Product Root

In the 'Match Below Product Root' parameter, click the ellipsis button (...) and select the STEP ID of the root folder under which the importer will search for product matches. This is a **required** field. A node picker dialog

will be presented to help the user choose a product hierarchy folder. Only product objects will be presented in the node picker

Note: For Supplier Users

- Supplier users are only allowed to have access to their specified product structure in the supplier hierarchy. This will ensure protection from other suppliers.
- For this special scenario we need to ensure that the Match Below Product Root property will be adjusted to match with the dedicated root supplier product folder for the particular supplier user.

6. Reference Type

In the 'Reference Type' parameter, specify the reference type that links the imported asset with the product via the dropdown selector. This is a **required** field.

- Default value - Primary Product Image will be chosen from dropdown selector. Populate with the STEP ID of the reference type. Only asset to product reference types will be presented in the dropdown selector.

7. Allow Multiple Products

The 'Allow Multiple Products' parameter determines whether or not the asset importer can link the same asset to multiple products. Checking the box indicates that the importer can make such a link. Leaving the box unchecked indicates that an imported asset should only be linked to one product. Checking the checkbox indicates that the importer can make such a link – asset can be linked to multiple products if more than one match is found.

Keep in mind that there can be more than one result since more than one product can have the same name.

Note: The 'Allow multiple references' setting on the reference must be set to 'Yes'.

The screenshot shows the 'System Setup' window with a tree view on the left and a configuration table on the right. The tree view includes folders like 'XSLTStylesheets', 'Derived Events', 'Object Types & Structures', 'Tags', 'Units', 'Users & Groups', 'Reference Types', 'Product Reference Types', and 'Image and Document Reference Types'. Under 'Image and Document Reference Types', 'Installation Manual' is selected. The configuration table on the right has tabs for 'Reference Type', 'Validity', and 'Log'. The 'Reference Type' tab is active, showing a table with columns 'Name' and 'Value'. The 'Allow multiple references' row is highlighted with a red box, showing its value is 'Yes'.

Name	Value
ID	InstallationManual
Name	Installation Manual
Last edited by	2017-08-15 12:39:54.0 by USER
Externally Maintained	No
Dimension Dependencies	Language;
Allow multiple references	Yes
Mandatory	No
Inheritance	Inherited
Completeness Score	123
Purpose	abc

Metadata Product Linker

By configuring the Metadata Product Linker, imported assets can be linked to products in STEP via information stored in a metadata file. Note that to use this option, the Metafile Receiver or Zip with Metafile Receiver option must also have been selected as part of the corresponding IIEP configuration.

For more information, see the **IIEP - Configure Asset Importer Processing Engine** documentation.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
- 7. Product Linker**
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Product Linker

Product Linker: Metadata Product Linker

Match Metadata Field *: Product

Match On *: ID

Key:

Match Below Product Root *: Head Wear (20433)

Reference Type Field *:

Default Reference Type *: Primary Product Image

Allow Multiple Products: ☐

* Mandatory Fields

Back Next Finish Cancel

When selecting the Metadata Product Linker option, the following parameters need to be specified, noting that some fields are required while others are optional.

1. Match Metadata Field

In the 'Match Metadata Field' parameter, enter the column heading of the metafile field which contains the value for the product match criteria. The specified heading must contain either the STEP ID, STEP Name, or Key value of a product. This is a **required** field.

2. Match On

In the 'Match On' parameter, specify how the system identifies existing products in STEP. The default value for this dropdown field is ID. This is a **required** field. Options include:

- ID: Match template value to the STEP ID of a product
- Name: Match template value to STEP Name of a product
- Key: Match template value to a particular Key value on a product

3. Key

In the 'Key' parameter, choose the STEP ID of the key from the dropdown selector for use in matching. This field is only required if 'Key' was selected in the previous step. This dropdown will list the STEP IDs of all Keys available in the STEP system. This key is used when the metafile does not contain a key indicator.

4. Match Below Product Root

In the 'Match Below Product Root' parameter, click the ellipsis button (...) and select the STEP ID of the root folder under which the importer will search for product matches. This is a **required** field. A node picker dialog will be presented to help the user choose a product hierarchy folder. Only product objects will be presented in the node picker.

5. Reference Type Field

In the 'Reference Type Field' parameter, enter the column heading of the metafile field which contains the STEP ID of the reference used to link the imported asset to the product. This parameter is **mandatory**. If the specified reference type is missing in the metadata file, the default reference type (set in the next step) will be used.

6. Default Reference Type

In the 'Default Reference Type' parameter, specify the reference type that links the imported asset with the product. A default value 'Primary Product Image' is populated from the dropdown selector. This field is **mandatory**. As indicated in the previous step, this parameter is used when the metafile **does not** contain a reference indicator. The dropdown selector will be presented to help the user choose a reference type. Only reference types will be presented in the node picker.

7. Allow Multiple Products

The 'Allow Multiple Products' parameter determines whether or not the asset importer can link the same asset to multiple products. Leaving the box unchecked indicates that an imported asset should only be linked to one product. In this case, if multiple product matches are found, an error will be logged, and the asset will not be linked to any products. Checking the box indicates that the importer can make such a link; asset can be linked to multiple products if more than one match is found.

Keep in mind that more than one product can reference the same asset.

The Asset Importer will support multiple line entries in the metadata file to link an asset to products. Or in other words, an asset can have multiple line entries in the metadata file, which can link to a different product(s) per line entry.

Note: The 'Allow multiple references' setting on the reference must be set to 'Yes'.

System Setup

XSLTStylesheets

Derived Events

Object Types & Structures

Tags

Units

Users & Groups

Reference Types

Product Reference Types

Image and Document Reference Types

Board Asset Content

Brand Name Logo

GDSNFormat

GDSN Receiver CIN Sample

GDSN Receiver Format

Illustration

Installation Manual

more

<

Reference Type

Validity

Log

Description

Name	>	>	Value
> ID			InstallationManual
> Name			Installation Manual
> Last edited by			2017-08-15 12:39:54.0 by USER
> Externally Maintained			No
> Dimension Dependencies			Language;
> Allow multiple references			Yes
> Mandatory			No
> Inheritance			Inherited
> Completeness Score			123
> Purpose			abc

Approver

By configuring the Approver, users can determine whether assets, references between products and assets, and new asset folders should be automatically approved by the asset importer. By default, 'Standard Asset Approver' is the only configuration option available for the Approver.

1. Approve Imported Asset

- If the 'Approve Imported Asset' parameter checkbox is selected, the asset should be approved upon import.

As the parental classification is already approved (or 'Approve Created Classifications' box is checked), the asset will be approved.

If the parental Classification has never been approved, the asset will not be approved. An error will be logged with an explanation as to why the asset could not be approved.

- If the 'Approve Imported Asset' checkbox is left unchecked, the asset will not be approved upon import. This option is typically used when the asset is initiated into a workflow upon import.

2. Approve Created Classifications

- If the 'Approved Create Classifications' checkbox is checked, the classification in which the asset is placed should be approved upon creation. Additionally, if imported assets should be approved, this should be checked.

- If the box is left unchecked, the classification in which the asset is placed will not be approved upon import. Assets may not be approved as part of the import if this is unchecked.

3. Approve References

- Check the 'Approve References' parameter checkbox, if the imported asset has a product-to-asset reference(s) to be created and references should be approved upon import.

Newly created assets must be approved upon import for this configuration to take effect. Additionally, this acts as a partial approval for the products being linked.

Note: The referred product must have been approved at some point in the past, otherwise the reference cannot be approved.

- If the referred product has never been approved, the reference will not be approved as well. An error will be logged with an explanation as to why the reference could not be approved.

Trying to re-import an existing asset with the same reference and same product will succeed; however the reference will not be approved. This limitation is due to the fact that the reference is not recreated and users are only allowed to approve links that they created themselves. In this case, STEP cannot differentiate between a link that was created by the asset importer previously and a link which was created by the user manually.

- If the **Approve References** checkbox is left unchecked, the product to asset references will not be approved upon import. This option is typically used when the asset is initiated into a workflow upon import.

Note: The approving STEP user should be the same user who is performing the import via Web UI, or the user that has been authenticated through Web API. If importing via integration endpoint, the executing user specified by the IIEP will be used.

Auto Purger

By configuring the Auto Purger, users can define how many revisions of a particular asset should be retained. By default, the standard 'Asset AutoPurger' is the only configuration option available for the Auto Purger.

Custom asset purger plugins can be created to extend and modify the automatic asset purge functionality further if required.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
- 9. Auto Purger**
10. Workflow Handler
11. Business Rules

Auto Purger

Auto Purger: Asset AutoPurger

Max Revision Count: 10000000

Back Next Finish Cancel

The only configurable parameter for this step is the 'Max Revision Count.'

Max Revision Count

- This field determines how many revisions of an asset can be retained.
- If the number of revisions exceeds the number specified in this parameter, older versions will begin to get deleted every time a new revision is made.
- By default, this value is set to '10000000.'
- If previous revisions should be purged, set to any integer value indicating the number of revisions that should be retained. All earlier versions of the asset will be automatically deleted from STEP.

Workflow Handler

By configuring the Workflow Handler, imported assets can be automatically initiated into a workflow. Additionally, imported assets can trigger a transition in an existing workflow for either the asset itself or the product that is linked to the imported asset. By default, 'Standard Asset Workflow Handler' is the only configuration option available for the Workflow Handler.

Custom workflow handler can be created to extend and modify the workflow functionality during asset import if required.

Because this is an optional step, all configuration options are left blank by default, meaning that no workflows or transitions will be initiated via the import. All parameters detailed below are **optional**.

The screenshot below shows an example of a configuration involving both asset and product workflows.

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
- 10. Workflow Handler**
11. Business Rules

Workflow Handler

Workflow Handler: Asset Workflow Handler

New Asset Workflow: NewAssetWorkflow

Asset Update Workflow: UpdateAssetWorkflow

Transition from Asset Workflow State: NewAssetWorkflow.ReviewAsset

Product Update Workflow: NewProductWorkflow

Transition from Product Workflow State: NewProductWorkflow.ReviewAsset

Back Next Finish Cancel

Note: If no workflow initiations or transitions are required for products or assets as part of the import, there is no need to change the default (blank) configuration.

When selecting the Standard Asset Workflow Handler, the following may also be specified, with each field being **optional**.

1. New Asset Workflow

In the 'New Asset Workflow' parameter, click the ellipsis button (...), and select the STEP ID of a workflow that handles new asset onboarding.

- The workflow specified will be initiated for each new asset created as part of an upload.
- The node picker dialog with Workflow objects will be presented for the user to choose required workflow.

2. Asset Update Workflow

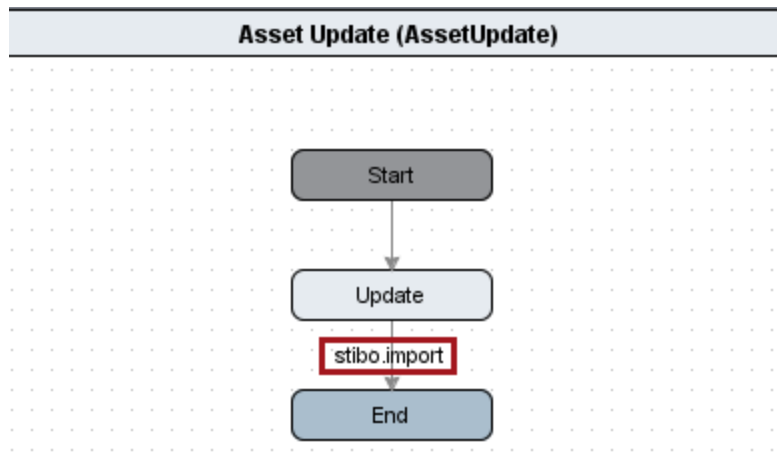
In the 'Asset Update Workflow' parameter, click the ellipsis button (...), and select the STEP ID of a workflow that handles updates to existing assets.

- The workflow specified will be initiated for each **existing asset** included in the upload.
- Node picker dialog with Workflow objects will be presented for the user to choose required workflow.

3. Transition from Asset Workflow State

In the 'Transition from Asset Workflow State' parameter, click the ellipsis button (...), and select the STEP ID of the desired workflow state.

- The value must be formatted as such: [workflow ID].[State ID].
- Any asset in the specified workflow state that is included in an upload will transition from that state to the next, via the 'stibo.import' transition.
- Example: The asset is in the 'Update' state and should be transitioned to the 'End' state upon import of the asset. Asset update event field is populated with 'AssetUpdate.Update.'



4. Product Update Workflow

In the 'Product Update Workflow' parameter, click the ellipsis button (...), select the STEP ID of a workflow that handles products.

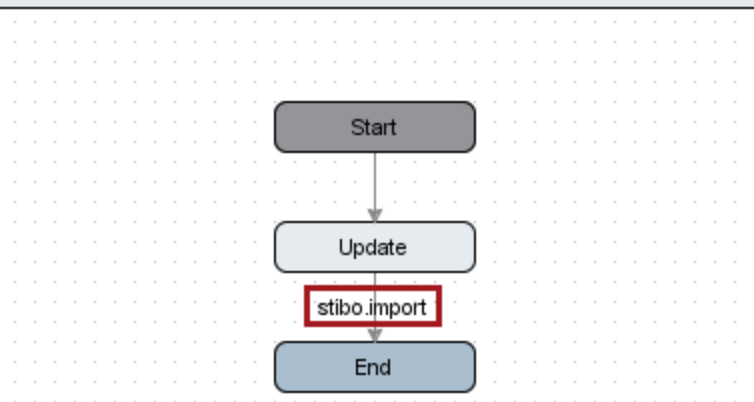
- When a new product to asset link is created via an asset upload, the product which owns the newly created link will be initiated into the specified workflow.
- If such a link already exists, no action will be taken.
- The node picker dialog with Workflow objects will be presented for the user to choose the required workflow that handles products.

5. Transition from Product Workflow State

In the 'Transition from Product Workflow State' parameter, click the ellipsis button (...), and select the STEP ID of the desired workflow state.

- The value must be formatted as such: [workflow ID].[State ID].
- When a new product to asset link is created via an asset import for a product in the specified state, the product will be transitioned from that state using the stibo.import transition.
- Example: The product is in the 'Update' state and should be transitioned to the 'End' state upon successful import of a linked asset. The product update event field is populated with 'ProductAssetUpdate.Update.'

Product Awaiting Asset (ProductAssetUpdate)



Business Rules

By configuring the Business Rule Handler, business conditions can be set to run during an asset import and may reject assets that fail to meet one or more of the specified conditions (any structure created to support the asset will also get rejected, e.g. a new classification folder to store the asset). Additionally, a business action can be set that performs additional work following import of the asset. By default, 'Standard Business Rule Handler' is the only configuration option available for the Business Rules configuration.

Custom business rule handlers can be created to extend and modify this functionality if required

Because this is an optional step, all configuration options are left blank by default, meaning that no business rules will be called as part of the asset upload.

All parameters detailed below are **optional**.

The screenshot below shows an example of a configuration involving both Business Conditions and Business Actions.

Note: If no business rule conditions or actions should be called as part of the import, there is no need to change the default (blank) configuration.

When selecting the Standard Business Rule Handler, the following parameters can be specified:

1. Business Conditions

In the 'Business Condition' parameter, click the ellipsis button (...) and select one or more business conditions that are to be run during asset import.

- Though multiple business condition IDs can be specified, it is best practice to include all relevant conditions in *one* business condition.

Error Handling

- If one specified condition fails by returning 'FALSE' or null pointer exception, an error is logged, and the transaction is rolled back. This error handling includes the asset import, as well as creation of any structures supporting it.

2. Business Action

In the 'Business Action' parameter, click the ellipsis button (...) and select one or more business actions that are to be run following the import of an asset.

- Though multiple business action IDs can be specified, it is best practice to include all relevant conditions in *one* business action.
- Business actions are invoked following an approvals carried out via the Approver configuration. Because of this, if any changes to data need to be approved, the rule itself must include an approval step.

For more information on the Approver, see the **Approver** section of the **Asset Importer Configuration** documentation.

Error Handling

- Errors from all executed business actions will be passed on and logged.
- Null pointer exceptions and other errors caused by business actions will result in the transaction to be rolled back. This error handling includes the asset import, as well as creation of any structures supporting it.

Maintaining Asset Importer Configurations

Asset importer configurations allow users to select previously set up configurations to keep consistent imports. Once created, an asset importer configuration can be modified at any time. Asset importer configurations are maintained by:

- Going to System Setup
- Navigate to relevant configuration
- Select the 'Asset Importer Configuration Type' tab.

The full configuration can be viewed and edited from this tab.

The screenshot displays the 'System Setup' interface. On the left is a tree view of system components, with 'Asset Importer' expanded to show 'Image Importer', 'Image Importer Icons', and 'JPEG Importer'. The main panel shows the configuration for 'Image Importer rev.0.5 - Asset Importer Configuration Type'. It includes a table for configuration details and a list of associated components.

Asset Importer Configuration Type	
Name	Value
ID	Image Importer
Name	Image Importer
Object Type	Asset Importer Configuration Type
Revision	0.5 Last edited by USER3 on Tue Oct 11 14:10:22 EDT 2016
Path	Asset Importer/Image Importer
Description	

Below the table, a list of components is shown, each with a toggle icon:

- Import Validator
- Hierarchy Builder
- Asset Matcher
- Content Importer
- Metadata Importer
- Product Linker
- Approver
- Auto Purger
- Workflow Handler
- Business Rules

A Standard Asset Import configuration should be preconfigured on the STEPBASE system which mimics the old asset and document import.

Import Validator

The Import Validator controls the allowable physical size of images, allowable color spaces, valid file types, DPI, and maximum file size. All settings under this flipper are optional and may be left blank.

For more information, see wizard step 2 in the **Import Validator** section of the documentation.

Import Validator

Import Validator

> Width Dimension (Pixels)	500	Min	1000	Max
> Height Dimension (Pixels)	500	Min	1000	Max
> Valid Color Spaces	Bitmap - 2 bit, CMYK color - 34 bit, Grayscale - 8 bit, Indexed colo... ...			
> Valid MIME Types	image/*			
> DPI	100	Min	500	Max
> Max File Size (MB)	50			

Hierarchy Builder

The Hierarchy Builder creates classification folders in which the imported assets are stored (if they don't already exist). The 'File Name Hierarchy Builder' configuration is the default option, and uses the names of the assets being loaded to generate a multi-level hierarchy in STEP. Ultimately, parameters under this flipper define the root classification folder, number of folder levels to be created, and whether or not to overwrite the asset hierarchy root with the selected classification hierarchy during manual import.

For more information, see wizard step 3 in the **Hierarchy Builder** section of the documentation.

Hierarchy Builder

File Name Hierarchy Builder

> Asset Hierarchy Root	9 (20138) ...
> Use Selected Classification For Manual Imports	☒
> Number Of Folder Levels To Be Created	0

Asset Matcher

Based on criteria defined in the Asset Matcher section, the asset importer can determine when an asset is new to STEP or is a replacement for an existing asset. It also indicates whether or not new assets are allowed to be created, and if so, allows for the use of regular expressions or metadata to control how the STEP Names and IDs of those assets are set.

For more information, see wizard step 4 in the **Asset Matcher** section of the documentation.

Asset Matcher

Asset Matcher

> Asset Matcher Hierarchy Root	9 (20138)	...
> Match on	ID	▼
> File Name Match Expression	(.*)\.*	
> Match Template	\$1	
> ID Template	\$1	
> Name Template	\$1	
> Multiple Matches Found	Error on record	▼

Content Importer

The Content Importer defines basic rules for importing assets, such as whether to allow for the creation of new assets upon import, replacement of assets during import, apply image conversions upon import, etc.

For more information, see wizard step 5 in the **Content Importer** section of the documentation.

Content Importer

Asset Importer

Asset Content Importer

> Allow Create Asset	☒
> Allow Content Replace	☒
> Apply Image Conversion	<None> ▼
> Asset Object Type	Product Image (ProductImage) ...
> Import Independently of Dimension	☐

Metadata Importer

The Metadata Importer defines rules for importing additional asset system metadata, as well as EXIF (Exchangeable Image File Format) and XMP (Extensible Metadata Platform) metadata from asset files (e.g. images, movies, sound files), and inserts them into attributes in STEP.

For more information, see wizard step 6 in the **Metadata Importer** section of the documentation.

Metadata Importer

Metadata Importer

Metadata Source	>	Field	>	STEP Attribute	>
> Asset Metadata	...	Color	...	Primary Color	...
> Add Field Mapping					

Product Linker

The Product Linker determines if and when incoming assets should be linked to related products in STEP, how those products should be identified, and which reference type should be applied.

The Product Linker configuration has three options: Asset Filename Linker, Metadata Product Linker, and No Product Link (which is the default selection). If no product linking is required, no adjustments need to be made to the default configuration.

For more information, see wizard step 7 in the **Product Linker** section of the documentation.

Product Linker

Product Linker
Asset Filename Linker

> File Name Match Expression	(.*)\.*
> Match On	Key
> Key	Key 1
> Match Template	\$1
> Match Below Product Root	Apparel (18200)
> Reference Type	Primary Product Image
> Allow Multiple Products	☐

Approver

The Approver determines whether assets, references between products and assets, and new asset folders should be automatically approved by the asset importer.

For more information, see wizard step 8 in the **Approver** section of the documentation.

Approver

Approver
Asset Approver

> Approve Imported Asset	☐
> Approve Created Classifications	☐
> Approve References	☐

Auto Purger

The Auto Purger defines how many revisions of a particular asset should be retained.

For more information, see wizard step 9 in the **Auto Purger** section of the documentation.

Auto Purger

Auto Purger
Asset AutoPurger

> Max Revision Count	10000000
----------------------	----------

Workflow Handler

By configuring the Workflow Handler, incoming assets can be automatically initiated into a workflow. Additionally, incoming assets can trigger a transition in an existing workflow for either the asset itself or the product that is linked to the imported asset.

For more information, see wizard step 10 in the **Workflow Handler** section of the documentation.

 Workflow Handler

Workflow Handler Asset Workflow Handler

> New Asset Workflow	Sample Workflow with Parallels (SampleWorkflow)	...
> Asset Update Workflow		...
> Transition from Asset Workflow State	SampleWorkflow.AssetUpdate	...
> Product Update Workflow		...
> Transition from Product Workflow State	SampleWorkflow.ProductUpdate	...

Business Rules

By configuring the Business Rule Handler, business conditions can be set to run during an asset import and may reject incoming assets that fail to meet one or more of the specified conditions (any structure created to support the asset will also get rejected, e.g. a new classification folder to store the asset). Additionally, a business action can be set that performs additional work following import of the asset.

For more information, see wizard step 11 in the **Business Rules** section of the documentation.

 Business Rules

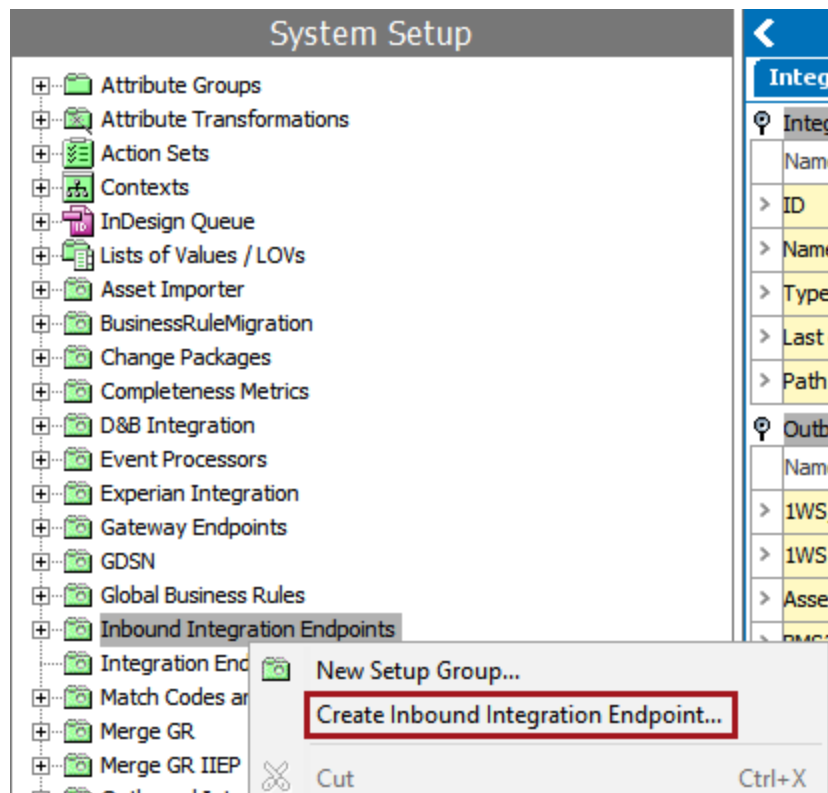
Business Rules Business Rules

> Business Condition	Mass Create (MassCreate1)	...
> Business Action	JavaAction (JavaAction)	...

Asset Importer Inbound Integration Endpoint Configuration

The Asset Importer can be configured using one IIEP for each hotfolder, or using one IIEP to control a hierarchy of hot folders.

On the System Setup tab, right-click on the inbound integration endpoints node to create an endpoint.



It may also be necessary to set up an Inbound Integration Endpoint (IIEP) for some of (if not all) of your importer configurations. In order to use an IIEP with Asset Importer, it is recommended to configure the endpoint in the following ways:

1. Identify Endpoint

On the 'Identify Endpoint' step, select a user that has privileges to perform the required functions defined by the hot folder configuration. It is recommended to create a dedicated STEP user for this purpose so that audit trails can log activity associated with the hot folder(s). Typically this user should be created with a non-restricted privilege set (e.g. a super user).

The screenshot shows the 'Identify Endpoint' step of the Inbound Integration Endpoint Wizard. On the left, a 'Steps' sidebar lists eight steps, with '1. Identify Endpoint' highlighted. The main area contains four input fields: 'Endpoint ID' (Asset Importer IIEP), 'Endpoint Name' (Asset Importer IIEP), 'Description' (IIEP to import assets using asset importer), and 'User' (USER). At the bottom are 'Back', 'Next', 'Finish', and 'Cancel' buttons.

The system user who is configured to run the integration endpoint will need network security privileges to the application server area where the hot folder will exist, as well as to the background process area.

For more information on the Identify Endpoint step, see the **IIEP - Identify Endpoints** section of the **Inbound Integration Endpoints** documentation.

2. Choose Receiver

On the 'Choose Receiver' step of the IIEP configuration wizard, select 'Hotfolder Receiver' as the receiver. All the fields must be specified when hotfolder receiver is chosen as receiver.

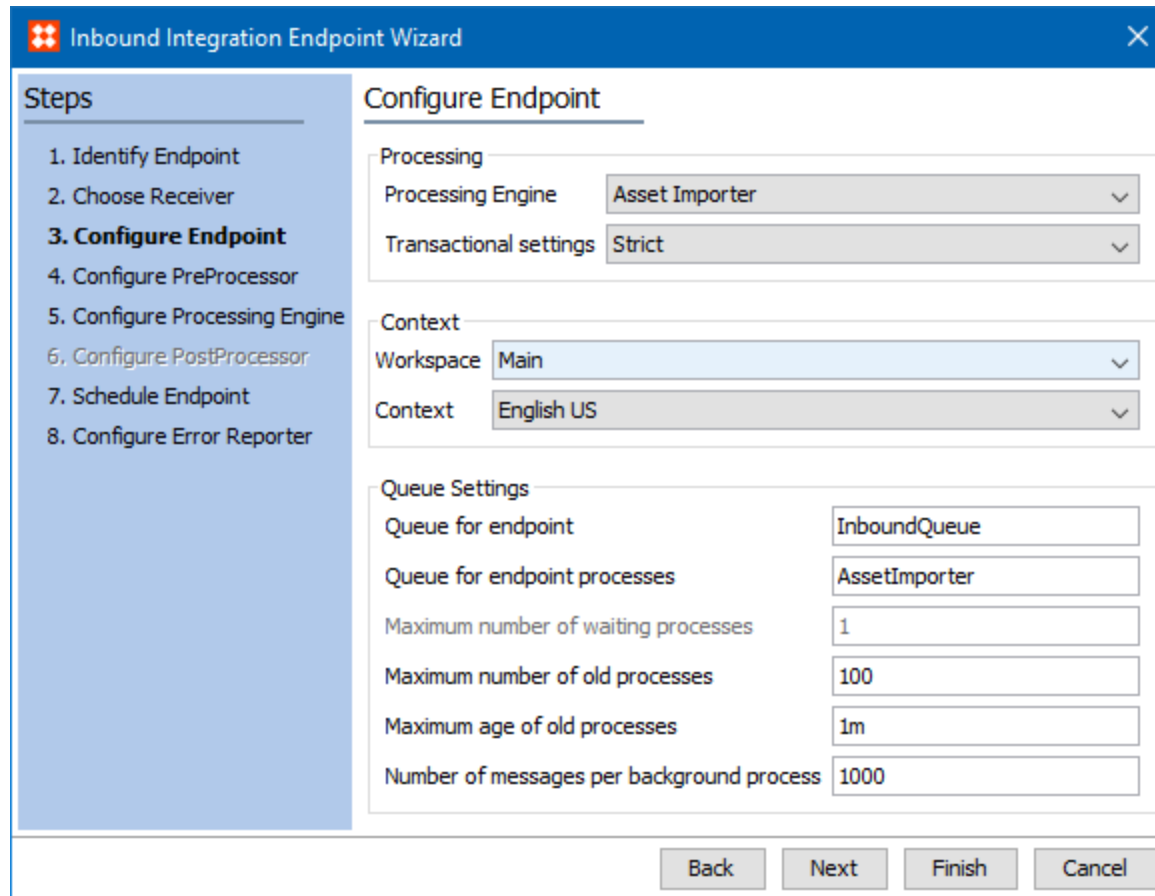
The screenshot shows the 'Choose Receiver' step of the Inbound Integration Endpoint Wizard. The 'Steps' sidebar highlights '2. Choose Receiver'. The main area features a 'Receiver' dropdown menu set to 'Hotfolder Receiver'. Below it are four fields: 'Hotfolder' (Asset Import), 'Keep file after load' (Yes), 'Ignore sub folders' (No), and 'In folder' (in). 'Back', 'Next', 'Finish', and 'Cancel' buttons are at the bottom.

Note: The integration endpoint receiver is not the same as the receiver options of the asset importer engine.

For more information on the 'Choose Receiver' step, see the **IIEP - Choose Receiver** section of the **Inbound Integration Endpoints** documentation.

3. Configure Endpoint

On the 'Configure Endpoint' step of the wizard, select 'Asset Importer' as the processing engine and consider the following recommended configurations:



Inbound Integration Endpoint Wizard

Steps

1. Identify Endpoint
2. Choose Receiver
- 3. Configure Endpoint**
4. Configure PreProcessor
5. Configure Processing Engine
6. Configure PostProcessor
7. Schedule Endpoint
8. Configure Error Reporter

Configure Endpoint

Processing

Processing Engine: Asset Importer

Transactional settings: Strict

Context

Workspace: Main

Context: English US

Queue Settings

Queue for endpoint: InboundQueue

Queue for endpoint processes: AssetImporter

Maximum number of waiting processes: 1

Maximum number of old processes: 100

Maximum age of old processes: 1m

Number of messages per background process: 1000

Buttons: Back, Next, Finish, Cancel

- The **Transactional settings** parameter should be set to 'Strict' in most cases, which is the most efficient way to process large batches of images.

Strict setting disables the **Maximum number of waiting** processes selection as this must be '1' when transactions are Strict.

When you select Strict, also set the **Number of messages per background process** to a high number (e.g. 1000 or greater) to cut down on the overhead of launching multiple background processes.

- The **Workspace** parameter should always be set to 'Main' as data cannot be imported directly into the 'Approved' workspace.

If assets should be automatically approved upon import, that can be set as part of the configuration, resulting in the data being imported into the Main workspace, then automatically being reflected in the 'Approved' workspace.

- The configuration of the **Context** parameter largely depends if assets are dimensionally dependent. Dimension dependency of assets is a global setting determined in **System Setup** on the Users & Groups System Settings editor:

System Settings		Log
Classification Hierarchy Settings		
	>	
>	Dimension Dependencies	
Image & Document Settings		
	>	
>	Dimension Dependencies	
>	Store assets and DTP documents in	Database
>	DTP asset source	Asset Push

If assets are not dimension dependent (e.g. the above is blank), the selection of context has no impact on the import. Asset content will be identical in all contexts, regardless of the selection made in the Configure Endpoint screen.

If assets are dimension dependent, and asset content should be imported into one specific context only, select that context. This requires a corresponding selection of **No** in the **Import Independently of dimensions** configuration option within the Content Importer configuration.

If assets are dimension dependent, and asset content should be imported independently of context (e.g. available to all contexts rather than only a single one), the selection of context has no impact on the import. This requires a corresponding selection of **Yes** in the **Import Independently of dimensions** configuration option within the Content Importer configuration.

Additionally, ensure that the 'Import Independently of dimensions' setting on the relevant Asset Importer configuration corresponds with the selection made. For more information, see the **Content Importer** section.

- Queue for endpoint:** It is recommended to leave the Queue for endpoint parameter as 'InboundQueue', as there is typically no reason and/or performance benefit to changing this setting. This is used to pick up the message (e.g. initiate processing per schedule).
- Queue for endpoint processes:** It is recommended to set the Queue for endpoint processes parameter to something indicative of asset processes (e.g. AssetImporter), as loading of assets can be intensive. This selection does the actual processing of each message (e.g. load the data into STEP).

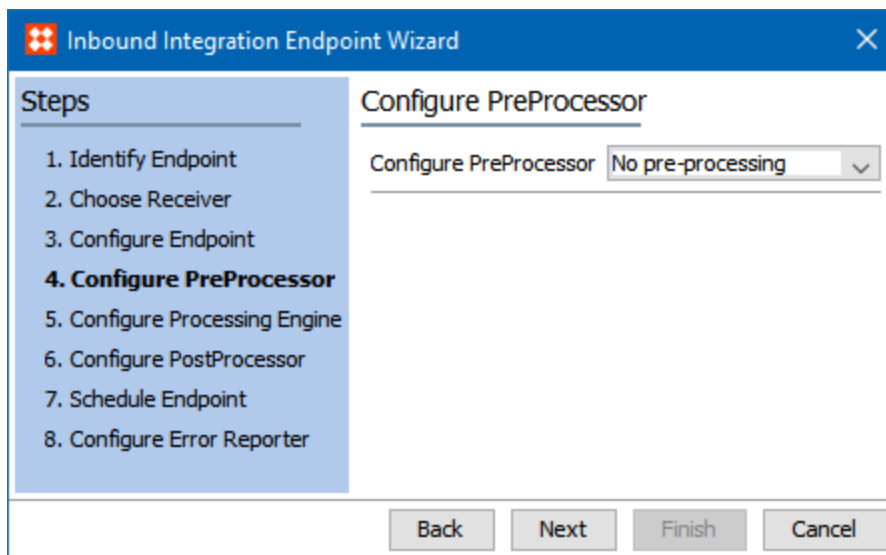
Note: Setting this as a separate queue prevents competition of resources between asset loading and other inbound processes.

- **Maximum number of waiting processes:** The maximum number of waiting processes parameter is automatically set to '1' for Strict transactional settings.
- **Maximum number of old processes:** It is recommended to set the Maximum number of old processes parameter to a reasonable number based on the number of processes expected. Setting it too high may cause eventual performance issues. Oldest processes above this number set are automatically deleted.
- **Maximum age of old processes:** It is recommended to set the Maximum age of old processes parameter to '1M' (one month) unless requirements dictate otherwise. Setting too long may cause eventual performance issues.
- **Number of messages per background process:** It is recommended to set the Number of messages per background process parameter to a high number (e.g., 1000 or greater) to cut down on the overhead of launching multiple background processes.

For more information on the Configure Endpoint step, see the **IIEP - Configure Endpoint** section of the **Inbound Integration Endpoints** documentation.

4. Configure PreProcessor

On the 'Configure PreProcessor' step of the wizard, select 'No pre-processing'.



Note: No PreProcessor Configuration is required or supported for the Asset Importer as the component itself is a specific processing engine. Depending on the STEP release, there may or may not be PreProcessor options available.

5. Configuring the Processing Engine

On the 'Configure Processing Engine' step of the wizard, select the relevant asset importer configuration. The Configure Processing Engine screen allows the user to select a receiver option, asset import configuration and allows users to create folder overrides, which replace certain aspects of the asset import configuration for sub folders within the hotfolder if desired.

Detailed configuration instructions can be found in the **IIEP - Configure Processing Engine** section of the **Inbound Integration Endpoints** documentation.

6. **Configure PostProcessor**

On the 'Configure PostProcessor' step of the wizard, select 'No post-processing'.

7. **Schedule Endpoint**

There are no required or recommended settings for the 'Schedule Endpoint' step.

All parameters in the Schedule Endpoint screen are part of the standard Inbound Integration Endpoint configurations. The endpoint should be scheduled to run regularly, and as often as is needed to efficiently process incoming data.

8. **Configure Error Report**

The Configure Error Reporter screen is used by some endpoint configurations to handle error reporting.

Since the Asset Loader uses a dedicated Notification Handler the general error reporter is not required and should typically be set as 'Not Defined'.

Asset Importer in Web UI

Web UI can utilize Asset Importer for uploading asset content in a number of ways:

- The Upload Asset Action
- The Replace Asset Content button (via the Asset Mid Sized or Asset Image Value screens)
- The Asset Importer Widget

For more information about the Asset Importer Widget, see the **Asset Importer Widget** section of the **Web User Interfaces** documentation.

Note: Asset Importer configurations can not be used with the Asset Value component.

Upload Asset Action

When uploading assets via the Upload Asset action, an asset importer configuration must be selected. The configuration will apply its rules against the imported asset and make any necessary changes (or reject it if it fails to meet minimum requirements).

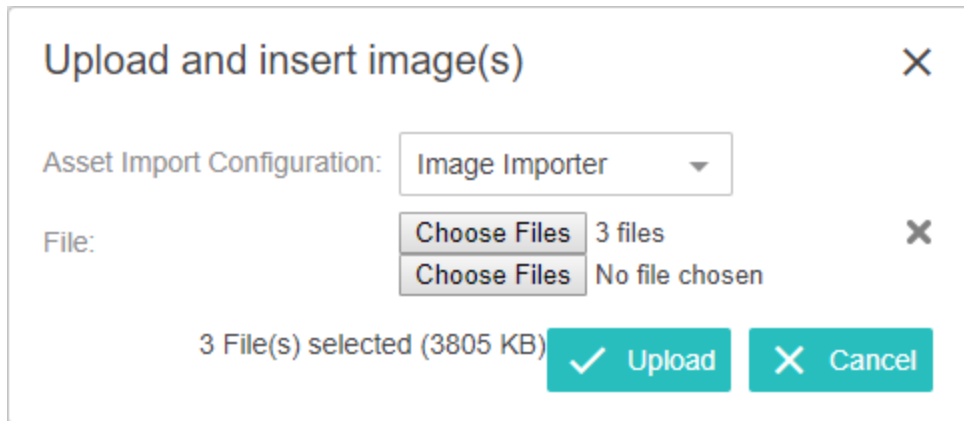
1. Navigate to the relevant Classification folder in Web UI and click the 'Insert asset' button (the Upload Asset action).

Classification List

☒	Select all	☐	Clear filter	☒ Insert asset	☐ List view
Icon	Type	Name			
☐ 	Product Image	Acme Napkins and Holder			
☐ 	Product Image	Acme Plates and Cups			

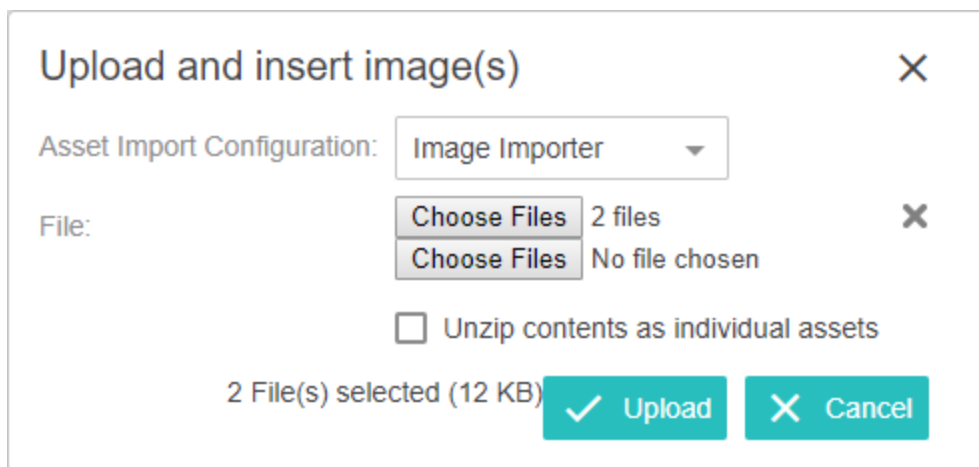
Note: The node this action is performed on does not matter unless the 'Use selected classification for manual imports' option is enabled in the Hierarchy Builder configuration.

2. In the 'Upload and insert image(s)' dialog, select the desired importer configuration from the dropdown menu.

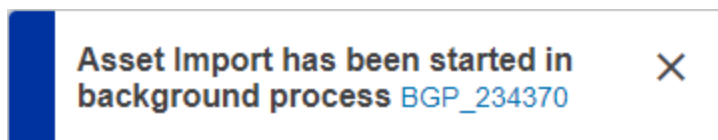


Note:

- Upload button will be activated only upon choosing the asset for importing.
- An asset importer configuration can be specified in the component's configuration, meaning it will not need to be selected upon import.



3. Next, click **Choose File** and select a file to import.
4. Click **Open** once the selection is made. Multiple files can be added by repeating this step. Additionally, these files can be removed by clicking the red 'X' icon.
5. Click **Upload** to initiate the import. A dialog will appear, providing a link to the background process.



Important: Ensure that the Asset Importer configuration allows for the selection of classification folders *when importing assets manually*, otherwise the import will ignore which node this action was performed on and follow

the Hierarchy Builder configuration instead. For more information, see the **Hierarchy Builder** section of the **Asset Import** documentation.

Configuring the Asset Import Action in WebUI

UploadAssetParameters

- **<Select an option>** (default): No predefined asset import configuration will be used for the import, the end-user will be presented with a dialog to choose one of the available asset import configurations
- **Use asset import configuration** (NEW): Allows the web UI designer to specify an asset import configuration to use for the UploadAssetAction.

Upload Asset Action Properties

[go to parent](#)

Component Description This action can be added to a FolderScreen or AssetFolderScreen. It lets the user upload and create an asset in the current classification for the screen e.g. when the screen is shown because a classification is selected in tree for instance.
PLEASE NOTE: this control does NOT make it possible to determine asset-id (uses auto-id), name (taken from uploaded file) or object type (determined by mime-type of uploaded file - when possible). In addition it does per default NOT use the vendor system for asset classifications

Custom Icon		... Reset
Button Label	i18n.stibo.UploadAssetAction.Label	
Process Description	{Configuration} ({ItemCount} files)	
Context Help	i18n.stibo.UploadAssetAction.ToolTip	
Upload Asset Parameters	Upload Asset Parameters	Edit...
Use Asset Import Configuration	<Select an option> Upload Asset Parameters	

Note: If an existing Web UI configuration uses the UploadAssetParameter and the asset importer is enabled, the UploadAssetParameter should reset to the default option in the dropdown menu.

If no asset import configuration is selected (<Select an option>, which is the default), the end user will be asked to choose one of the existing asset import configurations during the import as well with the desired file(s) for import.

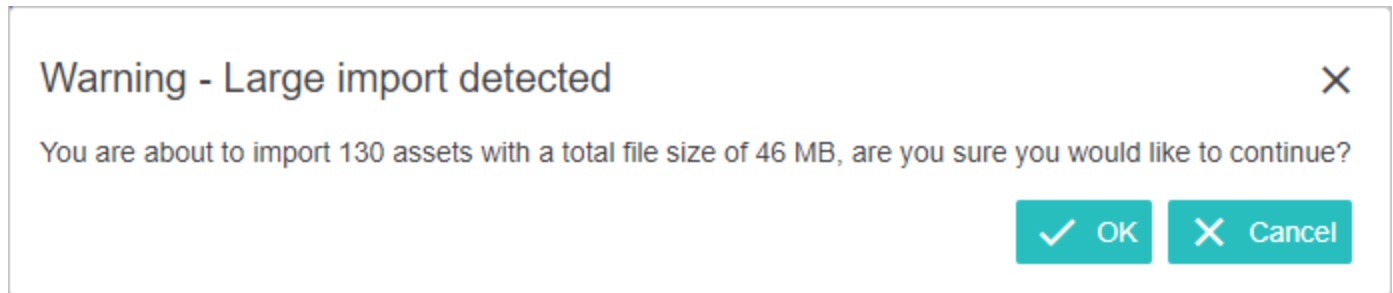
Asset Import post file selection

This section describes the file selection and confirmation regardless how files and folders have been selected via Web UI via Asset Import Action.

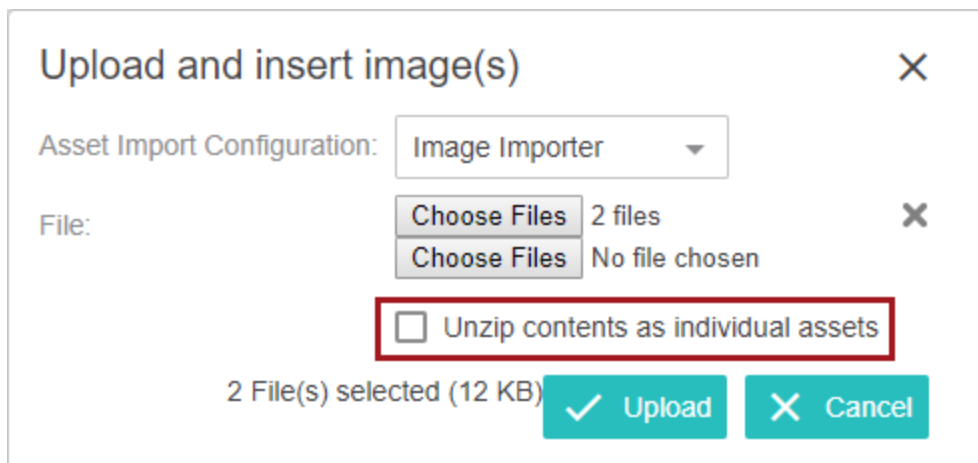
File selection check

A preliminary check based on the files and folder selection executed on the client side will be performed to inform of specific scenarios:

- If the threshold of 100 files or the total import size exceeds more than 100MB, a warning will be displayed informing the user about the magnitude of the import, asking for confirmation to continue the import process



- If a ZIP file is included in the file selection, allow the user to select if its contents should be imported as separate assets or if the ZIP file should be handled as one asset file to be imported



Unzip contents as individual assets:

- Unchecked (default) will import the ZIP file as one asset into STEP
- Checked will extract all of the contents of each ZIP file into a temporary folder on the file server and import each of the containing files separately as asset into STEP

Replace Asset Content

Replace Asset Content behaves similar to the asset import as described in other sections, with the main exception that it does not make sense to execute certain parts of the asset import configuration since the operation will be executed on an existing asset in STEP. Therefore, the Hierarchy Builder and Asset Matcher steps should be neglected during the replace asset content procedure.

Configuring the Replace Asset Content in WebUI

When configured on an Asset Mid Sized or Asset Image Value screen, the Replace Asset Content button () will appear on the asset thumbnail, which when clicked, allows users to replace the content of the asset. An asset importer configuration must be specified so that its rules can be applied against the new content.

To replace asset content with the Replace Asset Content action:

1. Navigate to the relevant asset node and click the 'Replace content' icon () found next to the asset thumbnail.
If the asset is dimensionally dependent, the Create Local Content button () may need to be clicked first.

Image



2. In the 'Replace asset content' dialog, select the desired importer configuration from the dropdown menu.

Note: An asset importer configuration can be specified in the component's configuration, meaning it will not need to be selected upon import. Replace asset content enables the user to select one single file to replace the content with.

3. Next, click **Choose File** and select a file to import. Click **Open** once the selection is made.

Replace Asset Content

×

Please select an asset configuration and the replacement asset file.

Asset Import Configuration

Image Importer

File

Choose Files

Acme Anvil.png

✓ OK

✗ Cancel

4. Select **OK** on the Replace Asset Content dialog to process the replacement. A dialog will appear, providing a link to the background process.

Asset Import has been started in background process BGP_234406

×

For more information on the Asset Mid Sized component, see the **Asset Mid Sized** section of the **Web User Interfaces** documentation.

For more information on the Asset Image Value component, see the **Asset Image Value** section of the **Web User Interfaces** documentation.

Asset Importer Migration Guide

The purpose of this guide is instruct users on how to migrate configurations to use the Asset Importer released in Trailblazer 8.1 for implementations that previously used the Enhanced Image and Document Importer add-on component.

The original Enhanced Image and Document Importer (EIDI) was designed around an Inbound Integration Endpoint (IIEP) solution, and was configured entirely within one IIEP. By contrast, the more advanced Asset Importer can be configured to function with both IIEPs and Web UI, and exists independently from both interfaces.

Before the migration is performed, ensure that the initial setup steps have been performed. For more information, see the **Asset Importer Initial Setup** section of the documentation.

A basic understanding of how to configure Asset Importer is necessary to complete this migration. For more information, see the **Asset Importer Configuration Overview** section of the documentation.

Note that a small number of EIDI features are not available in Asset Importer. These features include:

- The Folder Builder and Metadata Builder options of the Hierarchy Builder
- The Metadata Matcher option of the Asset Matcher
- The ExtraFile option for Meta File and Zip Metafile configurations

Important: These migration instructions only apply to those that used the standard EIDI configuration options for and no custom extensions.

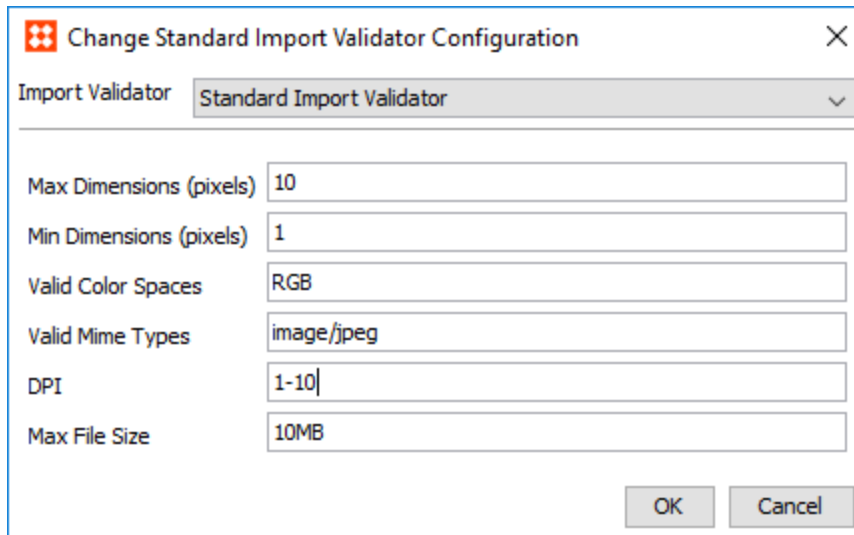
Because the configuration process varies between the two, this guide will follow the logic of an Asset Importer configuration, starting with importer configuration itself and the IIEP after.

Asset Importer Configuration

Step-by-step configuration instructions for the asset importer configuration wizard are detailed below. Note that the asset importer configuration wizard steps correspond with those found on the 'Configure Processing Engine' step of the (EIDI) IIEP configuration wizard.

1. **Identify Config** - Create an ID, Name, and an (optional) description for the configuration.
2. **Import Validator** - The fields for this wizard step and its EIDI counterpart are nearly identical. The format is slightly different, but it otherwise provides the same options.

EIDI configuration:



Change Standard Import Validator Configuration

Import Validator: Standard Import Validator

Max Dimensions (pixels): 10

Min Dimensions (pixels): 1

Valid Color Spaces: RGB

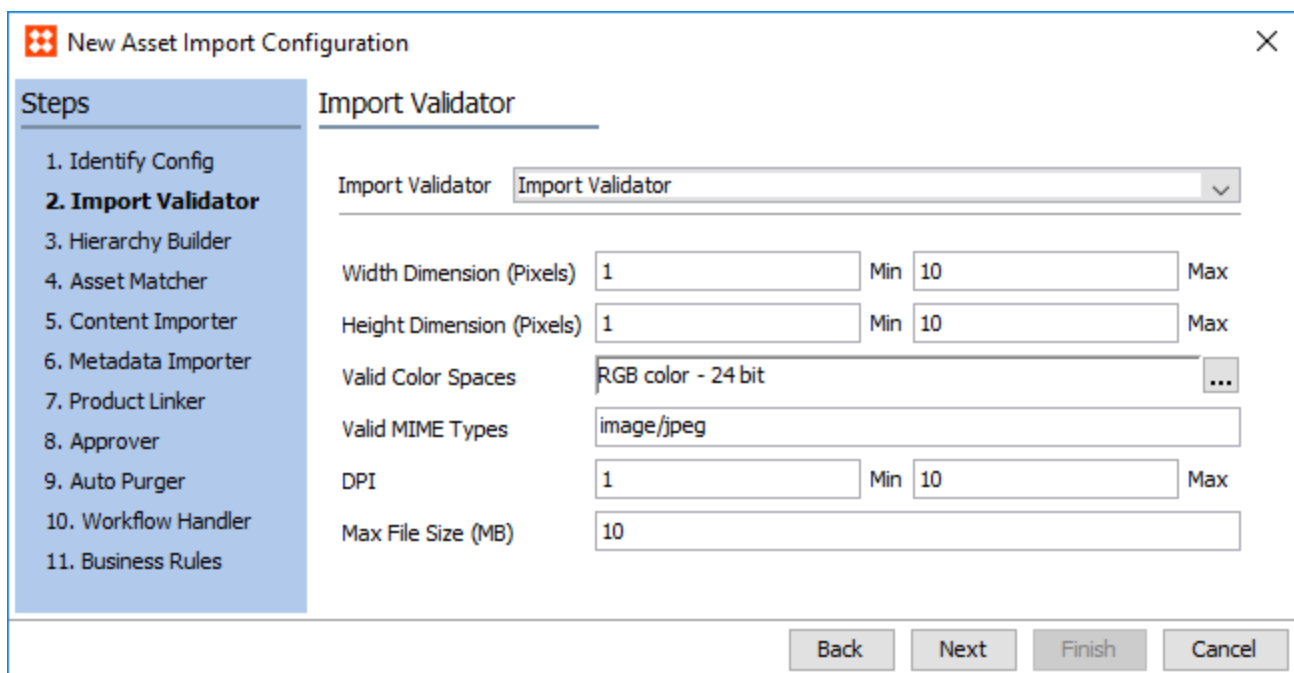
Valid Mime Types: image/jpeg

DPI: 1-10

Max File Size: 10MB

OK Cancel

Asset Importer configuration:



New Asset Import Configuration

Steps:

1. Identify Config
- 2. Import Validator**
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Import Validator

Import Validator: Import Validator

Width Dimension (Pixels): 1 Min 10 Max

Height Dimension (Pixels): 1 Min 10 Max

Valid Color Spaces: RGB color - 24 bit

Valid MIME Types: image/jpeg

DPI: 1 Min 10 Max

Max File Size (MB): 10

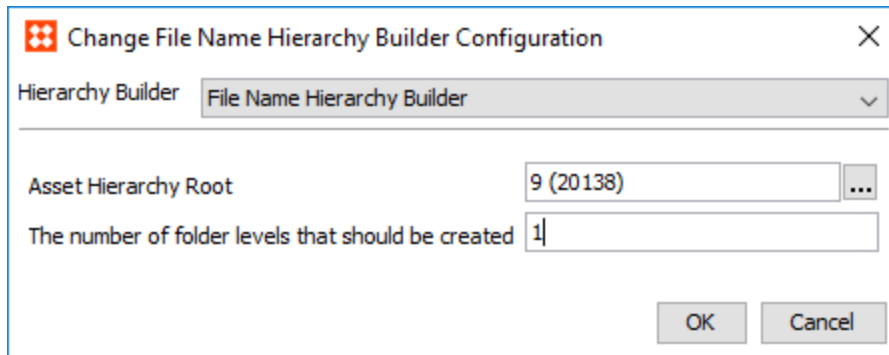
Back Next Finish Cancel

Note: With Asset Importer the min / max dimensions can differ between width and height.

- Hierarchy Builder** - The 'File Name Hierarchy Builder' is the only configuration option available for Asset Importer (outside of custom extensions).

When migrating your EIDI configuration note that an additional option is available: 'Use Selected Classification For Manual Imports'. If this box is checked the asset hierarchy root selection made on this step will be overwritten by a classification hierarchy selected during manual import (via Web UI).

EIDI configuration:



Change File Name Hierarchy Builder Configuration

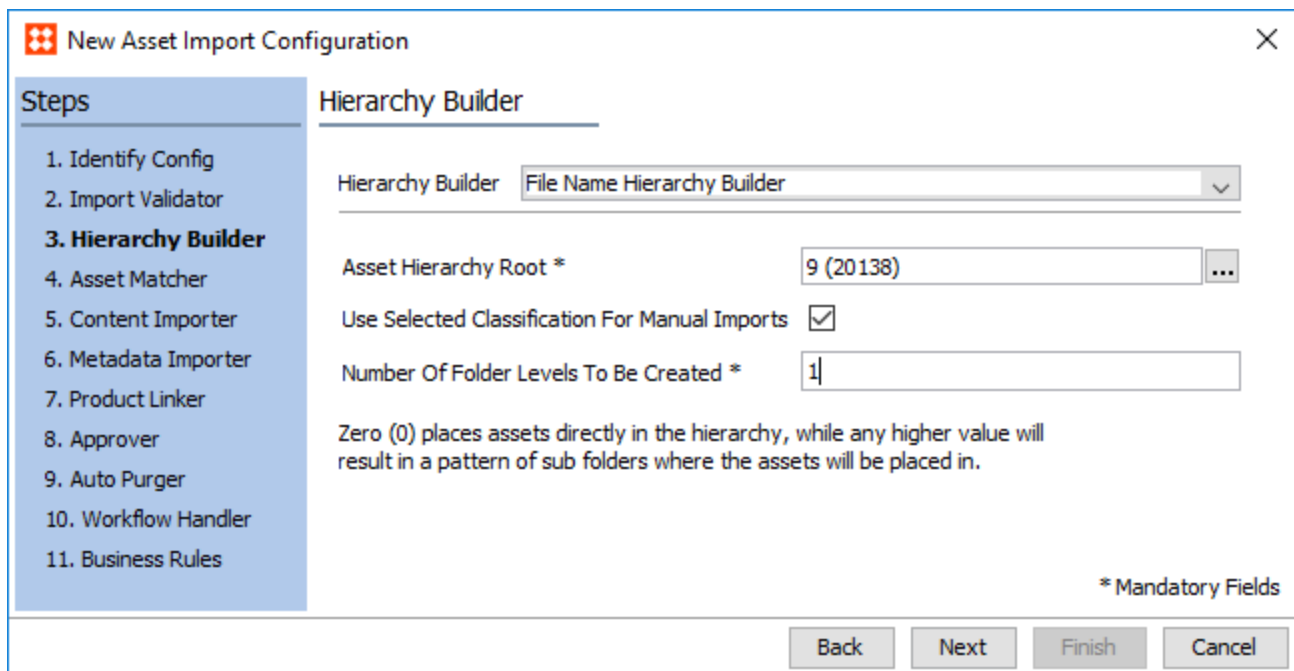
Hierarchy Builder: File Name Hierarchy Builder

Asset Hierarchy Root: 9 (20138)

The number of folder levels that should be created: 1

OK Cancel

Asset Importer configuration:



New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
- 3. Hierarchy Builder**
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Hierarchy Builder

Hierarchy Builder: File Name Hierarchy Builder

Asset Hierarchy Root *: 9 (20138)

Use Selected Classification For Manual Imports: ☒

Number Of Folder Levels To Be Created *: 1

Zero (0) places assets directly in the hierarchy, while any higher value will result in a pattern of sub folders where the assets will be placed in.

* Mandatory Fields

Back Next Finish Cancel

4. **Asset Matcher** - The 'Asset Matcher' is the only configuration option available for Asset Importer (outside of custom extensions).

Though organized in a different order, most of the parameters are identical between the two wizards.

An important difference to note is that the 'Allow Create Asset' and 'Multiple Match Handling' parameters found in the EIDI configuration are handled by a single parameter for Asset Importer: 'Multiple Matches Found'. The 'Yes' / 'New' and 'No' / 'Error' combinations of the two EIDI options can be replicated by the 'Create new asset' and 'Error on record' Asset Importer options, respectively.

EIDI configuration:

Change Standard Asset Matcher Configuration

Asset MatcherStandard Asset Matcher

File Name Match Expression

(.*)\.*

Match By

AssetName

Asset Hierarchy Root

9 (20138)

Match Template

\$1

ID Template

\$1

Name Template

\$1

Allow Create Asset

Yes

Multiple Match Handling

New

OK

Cancel

Asset Importer configuration:

New Asset Import Configuration

Steps

1. Identify Config

2. Import Validator

3. Hierarchy Builder

4. Asset Matcher

5. Content Importer

6. Metadata Importer

7. Product Linker

8. Approver

9. Auto Purger

10. Workflow Handler

11. Business Rules

Asset Matcher

Asset Matcher

Asset Matcher

Asset Matcher Hierarchy Root *

9 (20138)

Match on *

Asset Name

File Name Match Expression *

(.*)\.*

Match Template *

\$1

ID Template

Name Template

\$1

Multiple Matches Found

Create new asset

Back

Next

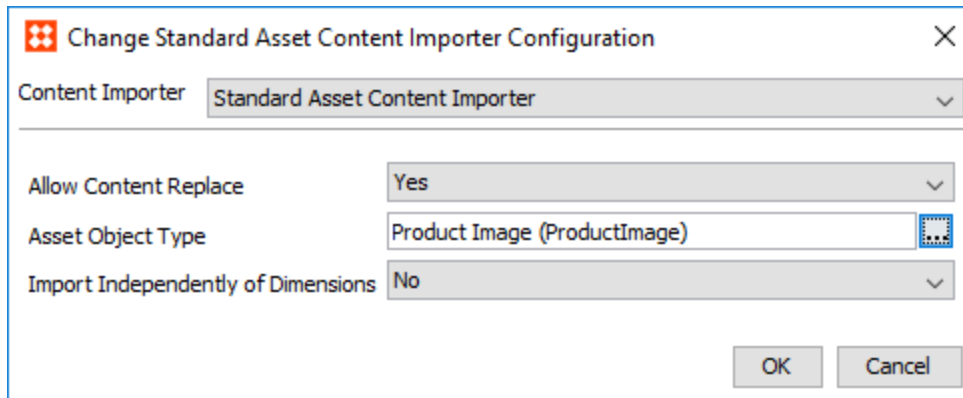
Finish

Cancel

5. **Content Importer** - The fields for this wizard step and its EIDI counterpart are nearly identical. The only difference is that two new options are available: 'Allow Create Content' and 'Apply Image Conversion'.

Important: Asset Importer cannot create new assets unless the 'Allow Create Content' box is checked.

EIDI configuration:



Change Standard Asset Content Importer Configuration

Content Importer: Standard Asset Content Importer

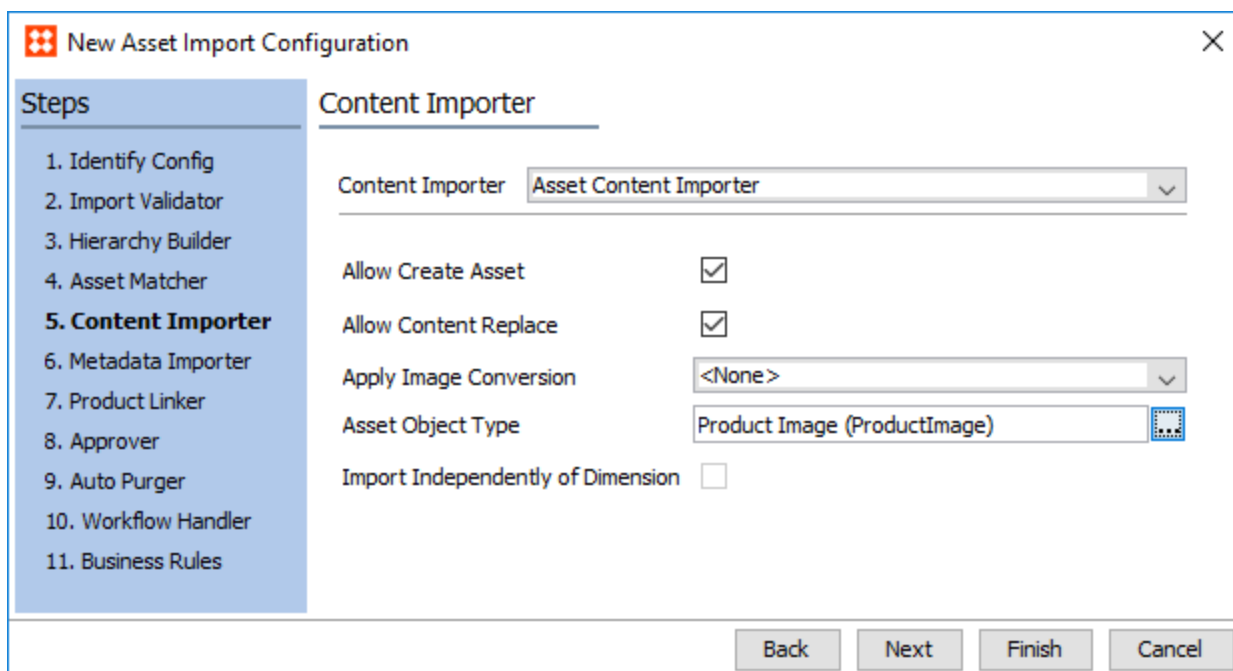
Allow Content Replace: Yes

Asset Object Type: Product Image (ProductImage)

Import Independently of Dimensions: No

OK Cancel

Asset Importer configuration:



New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
- 5. Content Importer**
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Content Importer

Content Importer: Asset Content Importer

Allow Create Asset: ☒

Allow Content Replace: ☒

Apply Image Conversion: <None>

Asset Object Type: Product Image (ProductImage)

Import Independently of Dimension: ☐

Back Next Finish Cancel

6. **Metadata Importer** - Though formatted completely differently, this step has nearly identical options in both wizards. The below points / images illustrate how the parameters correspond between the two wizards:
- The 'Metadata field mapping' parameter from the EIDI wizard corresponds to the Metadata Source option 'Metadata file' (1).
 - The 'EXIF Metadata Map' EIDI parameter corresponds to the Metadata Source option 'Asset Metadata' (this parameter also supports XMP data) (2).
 - The 'Field' and 'STEP Attribute' parameters in the Asset Importer wizard correspond to the '[Column / Property] = [STEP metadata attribute ID]' (3 & 4).

EIDI configuration:

Change Standard Metadata Import Configuration

Metadata ImporterStandard Metadata Import

1 Metadata field mapping

Color = PrimaryColor

34

2 EXIF Metadata Map

Series = ModelSeries

OK

Cancel

Asset Importer configuration:

New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Metadata Importer

Metadata Importer

	Metadata Source	>	Field	3	>	STEP Attribute	4	>
1	Metadata file	...	Color	...	Primary Color	...		
2	Asset Metadata	...	Series	...	Model Series	...		
	> Add Field Mapping							

Back

Next

Finish

Cancel

7. **Product Linker** - As this is an optional step for both configurations, the 'No Product Link' option is available in both wizards.

The EIDI's 'Product Name Match Linker' configuration corresponds to the 'Asset Filename Linker', and offers identical configuration options.

EIDI configuration:


Change No Product Link Configuration

Product Linker

Product Name Match Linker

File Name Match Expression

(.*)\.*

Match By

Key

Unique Key

Key 1

Match Template

\$1

Match Below Product

Apparel (18200)

Reference Type (ID)

Primary Image

Allow Multiple Products

No

OK

Cancel

Asset Importer configuration:


New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Product Linker

Product Linker

Asset Filename Linker

File Name Match Expression *

(.*)\.*

Match On *

Key

Key

Key 1

Match Template *

\$1

Match Below Product Root *

Apparel (18200)

Reference Type *

Primary Product Image

Allow Multiple Products

☐

* Mandatory Fields

Back

Next

Finish

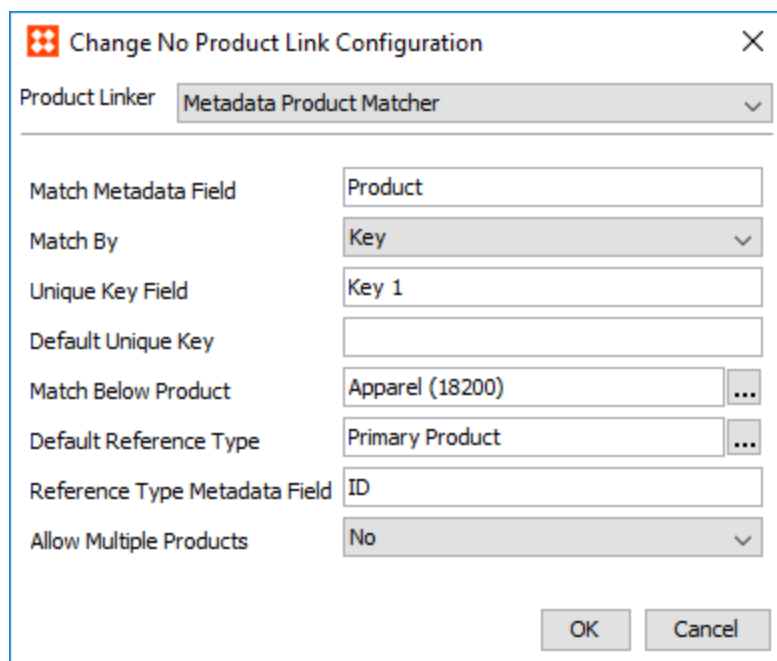
Cancel

The EIDI's 'Metadata Product Matcher' configuration corresponds to the 'Metadata Product Linker', and offers nearly identical configuration options. The EIDI's 'Unique Key' and 'Default Unique Key' parameters were merged into the 'Key' parameter.

EIDI configuration:

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Change No Product Link Configuration

Product Linker: Metadata Product Matcher

Match Metadata Field: Product

Match By: Key

Unique Key Field: Key 1

Default Unique Key:

Match Below Product: Apparel (18200)

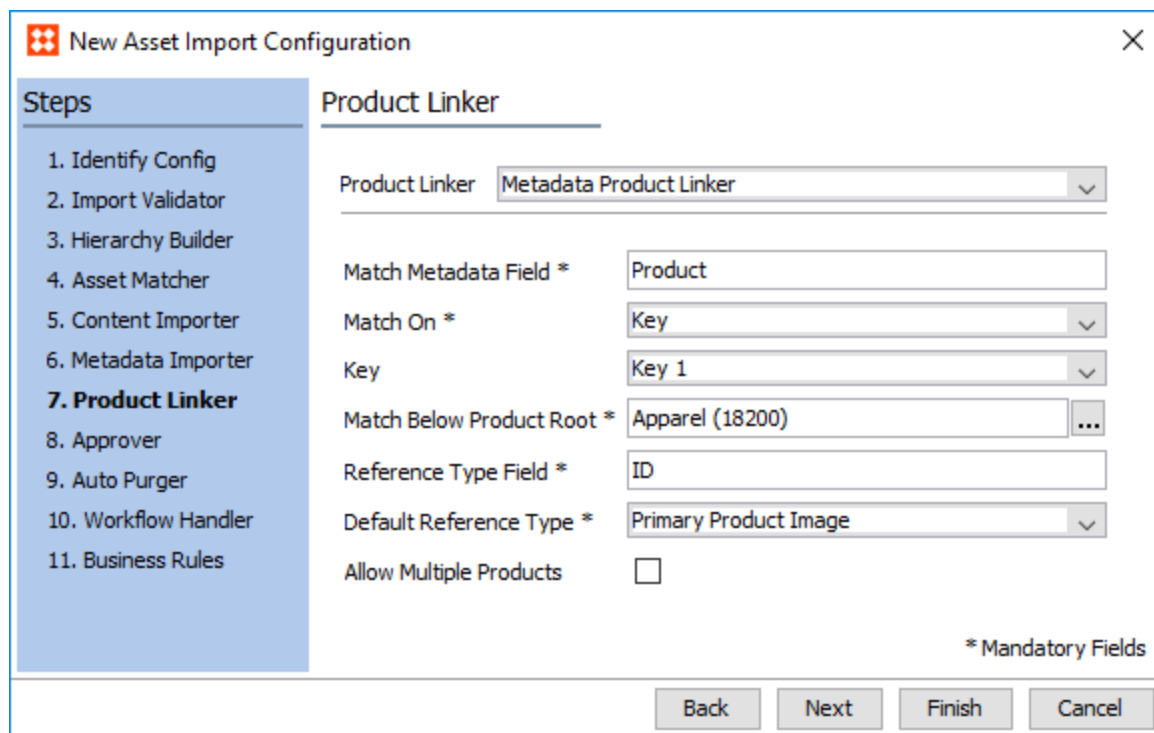
Default Reference Type: Primary Product

Reference Type Metadata Field: ID

Allow Multiple Products: No

OK Cancel

Asset Importer configuration:



New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
- 7. Product Linker**
8. Approver
9. Auto Purger
10. Workflow Handler
11. Business Rules

Product Linker

Product Linker: Metadata Product Linker

Match Metadata Field *: Product

Match On *: Key

Key: Key 1

Match Below Product Root *: Apparel (18200)

Reference Type Field *: ID

Default Reference Type *: Primary Product Image

Allow Multiple Products: ☐

* Mandatory Fields

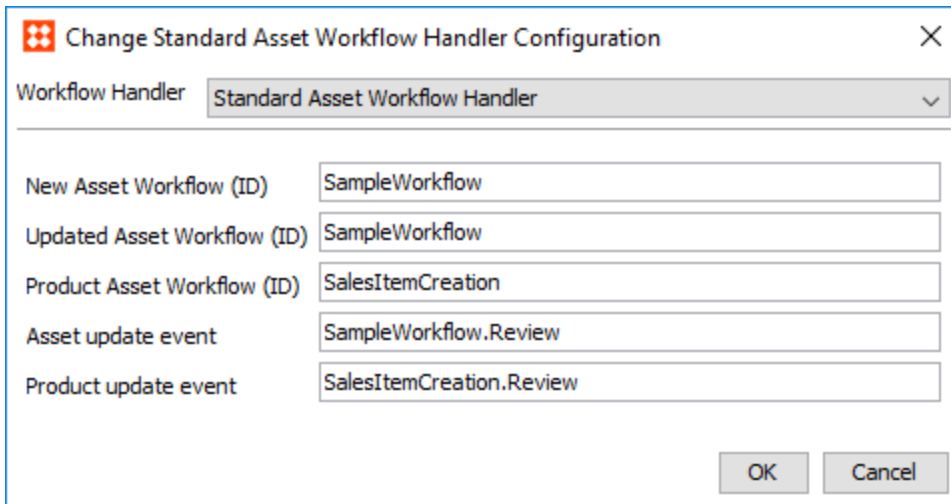
Back Next Finish Cancel

8. **Approver** - The Approver step is identical between both interfaces.
9. **Auto Purger** - The Auto Purger step is identical between both interfaces.

10. **Workflow Handler** - The Workflow Handler step offers the same options for both configurations, but has slightly different parameter names.

- 'Product Asset Workflow (ID)' corresponds to 'Product Workflow'
- 'Asset update event' corresponds to 'Asset Update Workflow.State'
- 'Product update event' corresponds to 'Product Update Workflow.State'.

EIDI configuration:



Change Standard Asset Workflow Handler Configuration

Workflow Handler: Standard Asset Workflow Handler

New Asset Workflow (ID): SampleWorkflow

Updated Asset Workflow (ID): SampleWorkflow

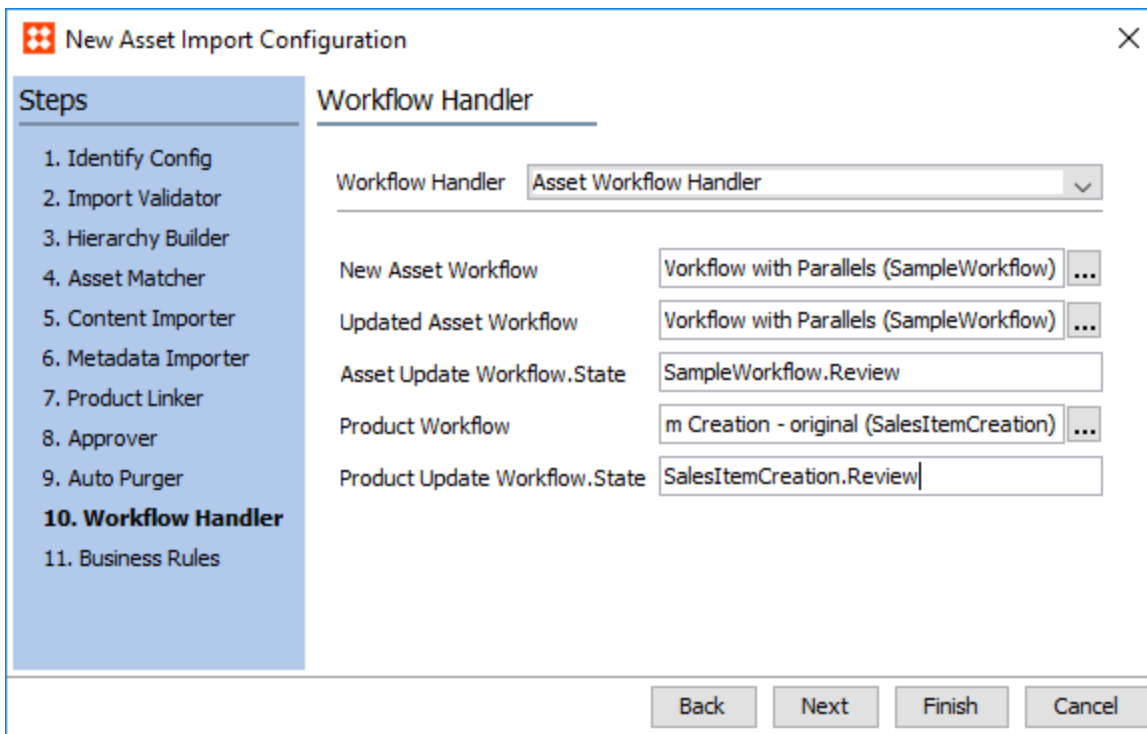
Product Asset Workflow (ID): SalesItemCreation

Asset update event: SampleWorkflow.Review

Product update event: SalesItemCreation.Review

OK Cancel

Asset Importer configuration:



New Asset Import Configuration

Steps

1. Identify Config
2. Import Validator
3. Hierarchy Builder
4. Asset Matcher
5. Content Importer
6. Metadata Importer
7. Product Linker
8. Approver
9. Auto Purger
- 10. Workflow Handler**
11. Business Rules

Workflow Handler

Workflow Handler: Asset Workflow Handler

New Asset Workflow: Workflow with Parallels (SampleWorkflow) ...

Updated Asset Workflow: Workflow with Parallels (SampleWorkflow) ...

Asset Update Workflow.State: SampleWorkflow.Review

Product Workflow: m Creation - original (SalesItemCreation) ...

Product Update Workflow.State: SalesItemCreation.Review

Back Next Finish Cancel

11. **Business Rules** - The Business Rules step is identical between both interfaces.

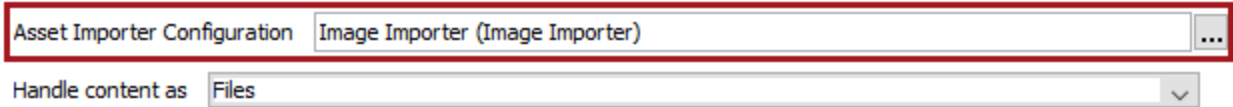
Inbound Integration Endpoint Configuration

Once the Asset Importer configuration has been created it can be used as the processing engine for an IIEP. To complete the migration, see the step-by-step configuration instructions for the IIEP detailed below.

1. **Identify Endpoint** - Does not require adjustments.
2. **Choose Receiver** - This should already be configured with a Hotfolder receiver, and therefore does not require any adjustments.
3. **Configure Endpoint** - This should already be configured with an Asset Importer processing engine, and therefore does not require any adjustments.
4. **Configure PreProcessor** - This should already be set to 'No pre-processing', and therefore does not require any adjustments.
5. **Configure Processing Engine** - As the core of the Asset Importer solution now resides within its own configuration, this step only contains those original configuration options specific to an IIEP solution: 'Receiver' and 'SubFolder Override'.

Before configuring these two options, ensure that the relevant Asset Importer configuration is selected.

Configure Processing Engine : Configuration



- **Handle content as** - This parameter is nearly identical to the original Receiver configuration, and provides the same four receiver options (albeit renamed): 'Files', 'Meta File', 'Zip File', and 'Zip Metafile'.
 - **Files** - Exactly the same as the EIDI option 'File Receiver'.
 - **Meta File** - A few options differ between the two interfaces. To begin, the 'Image Root' parameter is no longer necessary, and is not included in the Asset Importer configuration. Additionally, the 'Metafile Error Handling' parameter is the same except that the 'ExtraFiles' option is not available for Asset Importer. The Asset Importer 'Column Delimiter' parameter is required field that specifies what character should be used to separate each of the columns in the metadata file.

See below images for how the parameters correspond between the two interfaces:

EIDI configuration:

Change File Receiver Configuration

Receiver: Metafile Receiver

Images Root Folder:

1 Metafile Error Handling: None

2 File Name Field: Filename

OK Cancel

Asset Importer configuration:

Handle content as: Metafile

1 Metafile Error Handling *: Report missing files

2 Filename Column Header *: Filename

Column Delimiter *: ,

- **Zip File** - Exactly the same as the EIDI option 'ZIP Receiver'.
- **Zip Metafile** - A few options differ between the two interfaces. To begin, the Asset Importer's 'Metafile Error Handling' parameter is the same except that the 'ExtraFiles' option is not available for Asset Importer. The Asset Importer 'Column Delimiter' parameter is required field that specifies what character should be used to separate each of the columns in the metadata file.

See below images for how the parameters correspond between the two interfaces:

EIDI configuration:

Change File Receiver Configuration

Receiver: Zip with Metafile Receiver

1 The filename plus .csv or .txt extension.: assetfiles.csv

2 Metafile Error Handling: MissingFiles

3 File Name Field: Filename

OK Cancel

Asset Importer configuration:

Handle content as ZIP Metafile

1 Name of metafile within ZIP file * assetfiles.csv

2 Metafile Error Handling * Report missing files

3 Filename Column Header * Filename

Column Delimiter * ,

- **Override configuration options for subfolders** - The same options exist between both interfaces, but are arranged slightly differently.

See below images for how the parameters correspond between the two interfaces:

EIDI configuration:

Change Folder Overrides

Folder Plugin Override Add Folder Override 1

Folder	Configuration Step	Configure
2 JPEG	3 Import Validator	4 Change Standard Import Validator Configuration

OK Cancel

Asset Importer configuration:

Inbound Integration Endpoint Wizard

Steps

1. Identify Endpoint
2. Choose Receiver
3. Configure Endpoint
4. Configure PreProcessor
5. **Configure Processing Engine**
 - 5.1. **Configuration**
6. Configure PostProcessor
7. Schedule Endpoint
8. Configure Error Reporter

Configure Processing Engine : Configuration

Asset Importer Configuration Image Importer (Image Importer)

Handle content as Files

Override configuration options for subfolders:

Folder	Configuration Step	Configuration
2 JPEG	3 Import Validator	4 Override parameters

> Add Folder Override 1

Back Next Finish Cancel

6. **Schedule Endpoint** - Does not require adjustments.
7. **Configure Error Reporter** - The Log Handler and Notification Handler configurations do not apply in Asset Importer and are instead handled by the default IIEP Error Reporter.

For more information on configuring IIEP's for Asset Importer, see the **Asset Importer Inbound Integration Endpoint Configuration** section of the **Asset Importer** documentation.

Manual Asset Importer

Import Images and Documents wizard is used to import assets. Images are the most frequently imported asset, however, it is possible to import any electronic file using the same procedures as the ones used for images.

We recommend that users of the Import Images and Documents wizard have the following skills:

- An understanding of the basic concepts of STEP, of maintaining attributes and their values, and of creating and maintaining products, classifications or entities.
- Knowledge of the STEP system equivalent to basic STEP training
- Thorough knowledge of the files that are imported.
- Knowledge of dimensions and dimension points and whether or not you require assets to be dependent on dimensions, and how you would use such a set-up.
- Knowledge of MIME types and asset object types.
- Knowledge of asset reference types and its validity.

Also, ensure that your system is set up to accept appropriate file formats for imports of assets, and ensure that each of these formats is assigned an appropriate icon.

Preparing to Import Assets

Before starting the import process, be aware of the following:

- You can load assets and use either the file name as ID or use an automatically generated number. In either case, the file name is used as the name of the asset in STEP.

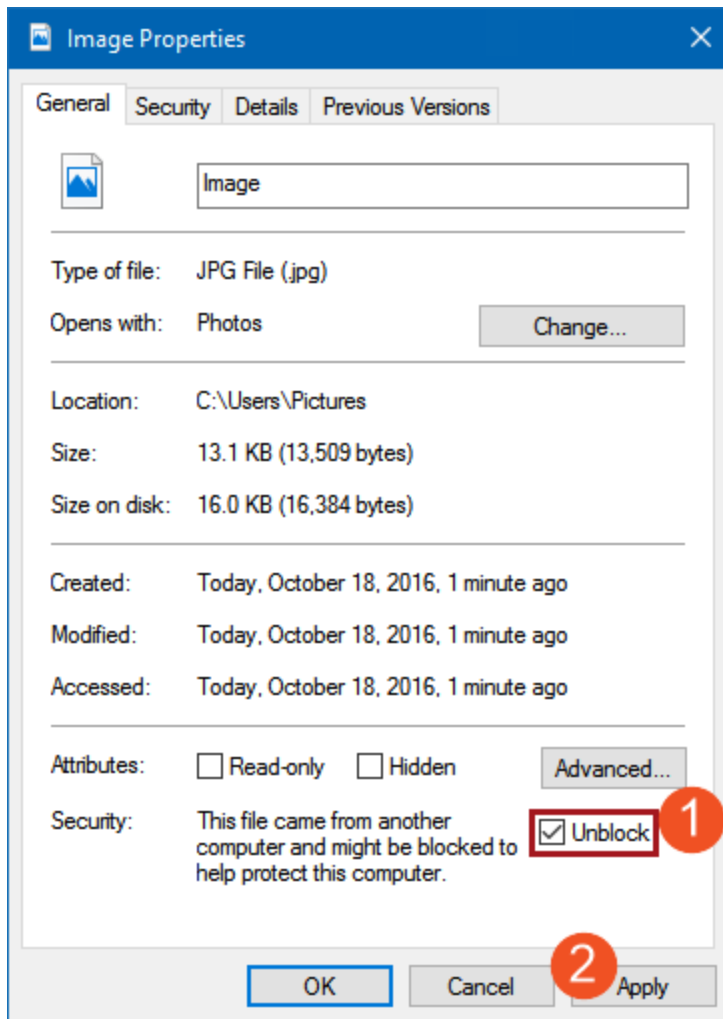
Note: Asset IDs have a maximum length of 40 bytes, and names have a maximum of 80 bytes.

- Do not to use special characters or spaces in asset IDs or names.
- Although you can upload images of almost any file format, print publications in the system accept only TIFF or EPS file formats. You can upload other formats for non-print applications.
- You should check all images for accuracy and suitability before uploading them to STEP. This includes file size, resolution, one clipping path maximum, compression type, actual image size at 100 percent, if there are embedded low-res TIFF or EPS images, and so on.
- If you have a Photoshop image that has text in it, you must outline that text. You cannot have text with font calls within an image. For Illustrator files, you can also outline the text. If you choose not to do so, you must select the option to embed the font(s) within the EPS file.
- To ensure a smooth upload of images of different file types, you are strongly advised to use extensions to the image file names that match the file type, for example, .TIFF or .EPS.
- Avoid having assets in STEP that have different IDs but the same name. Technically, IDs must be unique, but names do not have to be unique. However, having different images with the same name can be confusing with the exception of country- or market-specific assets. In this case, you can import assets with the same ID and name into different contexts.

- Depending on your system security, downloaded images may be blocked. Blocked files will generate an asset creation failure when imported.

Unblocking Downloaded Image Files

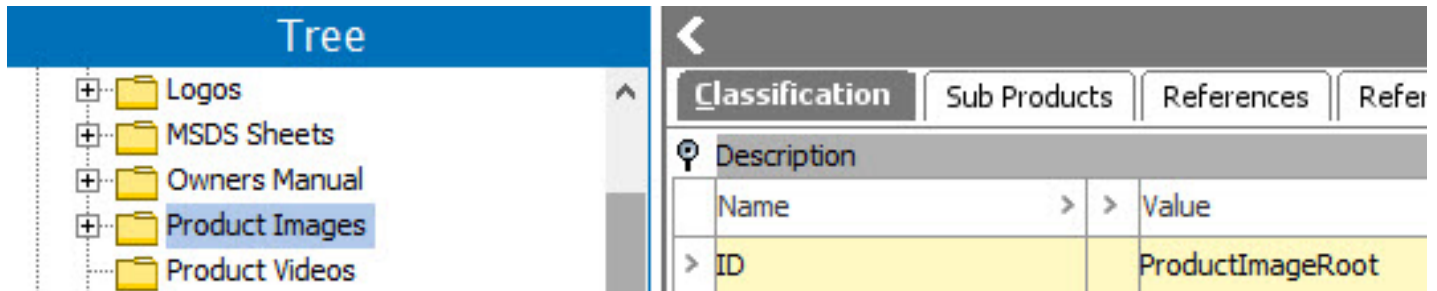
- Right-click on the image, and select **Properties**.
- In the Image Properties dialog, under Security, ensure that the **Unblock** checkbox is selected.
- Select **Apply** to save the change.



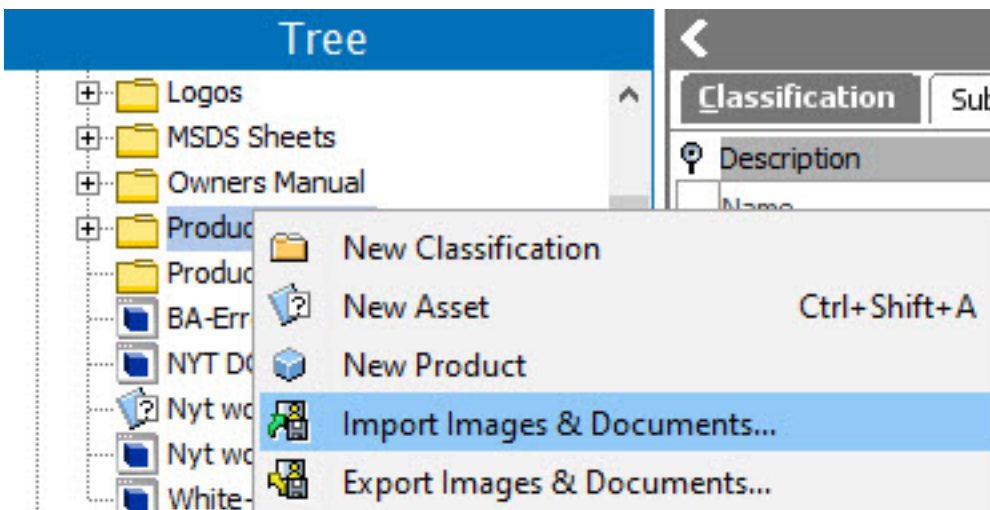
Import Images and Documents Wizard

Import of Images and Documents can be initiated in different ways.

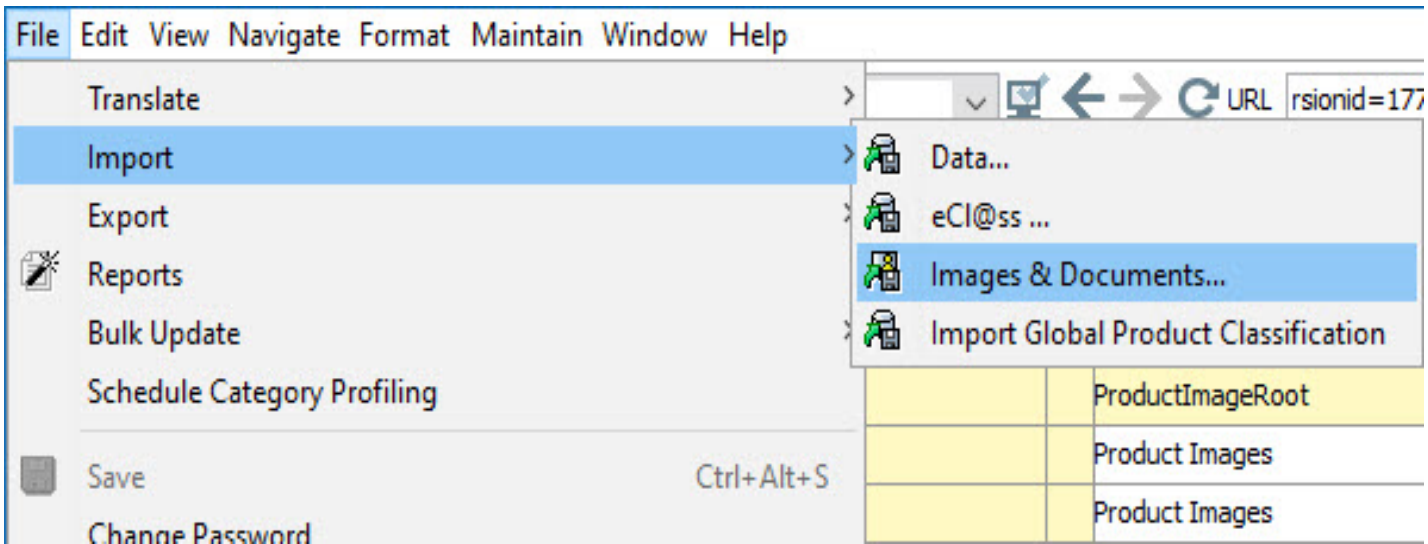
1. Determine the location of the assets that you want to import.
2. In **Tree > Classification** hierarchy, select the folder that will house the imported asset files.



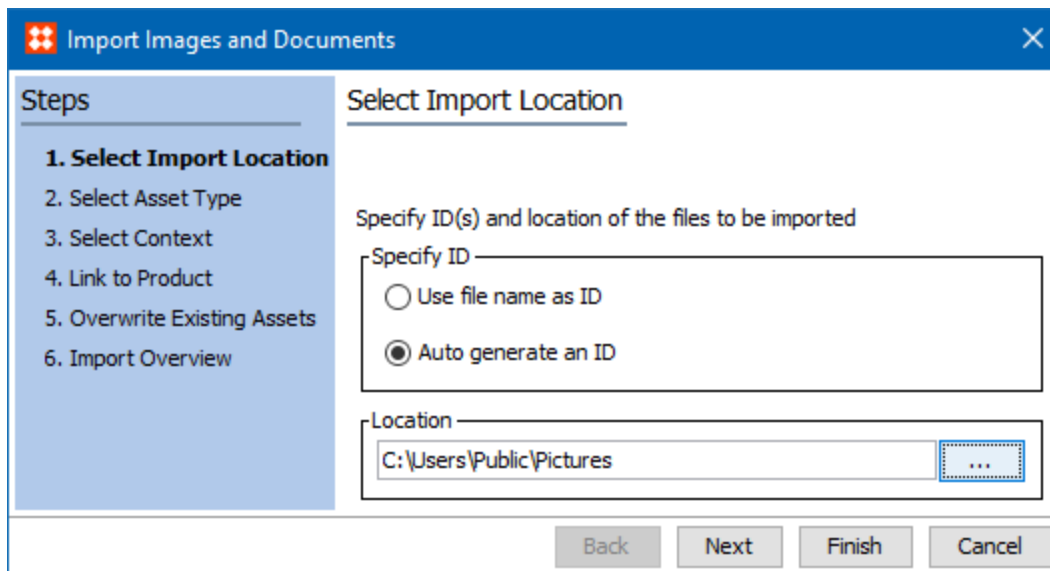
3. Choose one of the following options to start the wizard:
 - Either right-click the classification folder and select **Import Images & Documents** from the menu.



- Or from the **File** menu, point to **Import**, and then select **Images & Documents**.



- The **Import Images and Document** wizard opens. The wizard guides you through the required steps. Not all steps are necessary for every import. Often you can skip the later steps and proceed to the end to launch the import process.



- **Select Import Location** allows you to determine the asset ID and choose the location of the objects to import.
- **Select Asset Type** allows you to set the asset object type to be used.
- **Select Context** allows you to set dimension dependencies.
- **Link To Product** allows you to create reference links between the imported assets and existing objects.
- **Overwrite Existing Assets** allows you to determine if the imported assets replace existing assets.
- **Import Overview** allows you to review a sampling of the assets to be imported.

5. The 'Asset Import Process' starts after clicking on **Finish** button in 'Import Images and Document' wizard. For more information on the asset import process, see the Manual Asset Importer topic in the Digital Asset Exchange documentation.

Select Import Location

In 'Select Import Location' screen, you specify where the file or folder is located that contains the assets to be uploaded into STEP. This is also where you specify whether or not the asset file name should be used as the asset's ID in STEP (as well as the name).

1. For **Specify ID**, select to use the asset's file name as the asset's ID in STEP or auto generate the STEP ID.

Note: By default, "Auto generate an ID" is selected and once the Asset is imported, an automated ID is specified as an ID whereas the name will be the Asset file name itself.

When selecting your ID specifications:

- When 'Use file name as ID' option is selected, we can avoid duplicate of assets of same name being uploaded to STEP.
 - When 'Auto generate an ID' is selected, we cannot identify the duplicate assets being uploaded since the same asset will be present in STEP but with a different STEP ID.
2. For **Location**, click the ellipsis button (...) and use the file browser to navigate to the location of the assets that will be uploaded. You can upload multiple assets by selecting a folder and not just an individual asset. All assets in the selected folder, and any assets in any child folders to the selected folder are uploaded. All assets within the selected folder are loaded to the location you specified before starting the wizard.
 3. Click **Next** to continue.

Note: The user will be able to select an asset which is either in the local desktop or in a network to which the local desktop has access.

Select Asset Type

In step '2. Select Asset Type', you specify whether you want to manually apply an asset type to a specific object type, or if you want the system to determine each asset's object type.

Import Images and Documents

Steps

1. Select Import Location

2. Select Asset Type

3. Select Context

4. Link to Product

5. Overwrite Existing Assets

6. Import Overview

Select Asset Type

☐ Automatically Apply Object Type

☒ Select Asset Type:

Installation Manual

Transformation Lookup Table

Business Rule Example

Product Video

Installation Manual

GDSN Receiver CIN Sample

GDSN Receiver XSD

XML File

Logo

Owners Manual

Icon

Match Tuning Asset

Unknown / Undefined

Auto Classification Rule Set

Illustration

PLMImage

Image Conversion Configuration

Configuration

RuleSet

Assets

Import Manager Configuration

Export Manager Configuration

Product Image

MTC-CSV

Bulk Update Configuration

MSDS

CASS Certification Report

GDSN XSD

Back

Next

Finish

Cancel

- 1. Choose an option to determine how the object type is assigned:

- **Automatically Apply Object Type** assigns a STEP object type automatically based on the MIME types allowed. For more information, see **MIME Types** in the **System Setup / Super User Guide** documentation.
- **Select Asset Type** allows you to manually apply the selected object type to all imported assets. The list of available asset types is determined by your system setup.

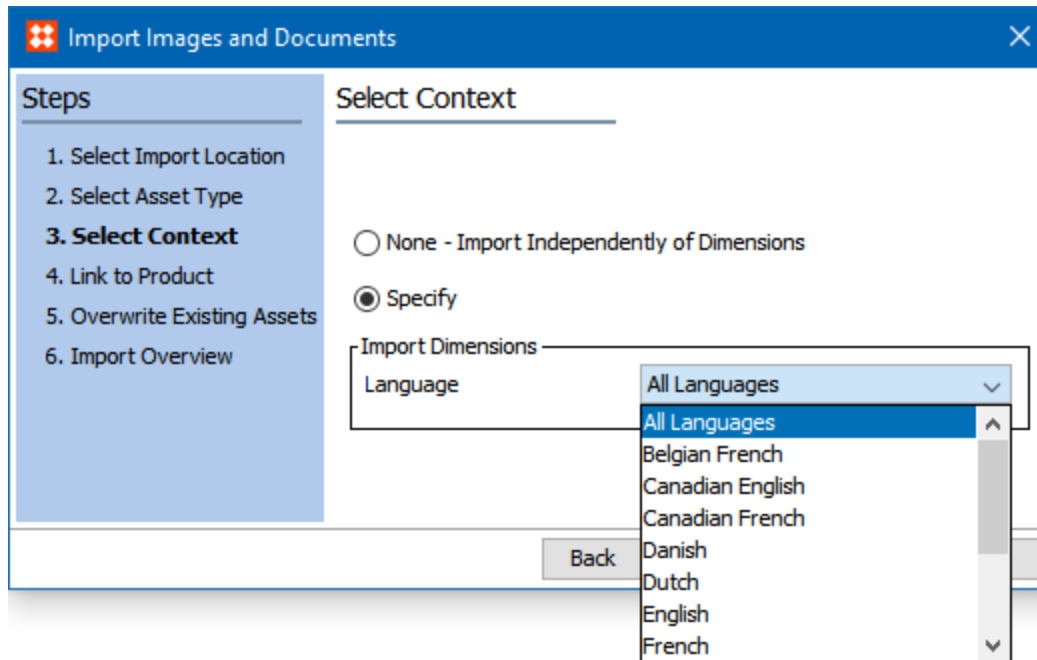
Object types are supposed to be created under the Object Types and Structures -> Assets in the System Setup Tree and only these object types will be available for the user to select under the dropdown list as shown in the above screenshot. For more details on how to create or maintain an Object type, see the **Object Maintenance in Tree** topic of the **Getting Started** documentation.

Note: STEP Workbench may be configured to automatically recognize the file type. However, selecting the Asset Type ensures the item can be assigned to your product successfully.

2. Click **Next** to continue or click **Finish** to start the import process without specifying any further parameters.

Select Context

In 'Import Images and Documents' wizard, step '3. Select Context' you to specify any dimension dependencies. This is useful when loading illustrations that are essentially the same but are, for example, language or country specific. You might also specify a context when publishing a catalog that includes illustrations with embedded texts, which requires different language versions of the illustration.



1. Determine if dimensions should be considered for assets being imported:
 - **None - Import Independently of Dimensions** means the assets are loaded in a global context.
 - **Specify** allows you to select the one or more dimensions from the list in the **Import Dimensions** area.

Note: Common setup for assets is to use the language dimension. The available options are based on your system setup which may allow selection of more than one dimension.

Dimensions should be set up in the System Setup tab, so that the same is available in the dropdown list. To know more on how to set up Dimensions, see the **Contexts** topic in the **System Setup** documentation.

2. Click **Next** to continue or click **Finish** to start the import process without specifying any further parameters.

Creating Context-Sensitive Assets

For example, to load an asset which is dependent on a country dimension when your system is only set up to have the language dimension for assets, you can upload that image for a context using a specific country. From the asset's right-click menu, use the **Create Local Content of Asset** and then use the **Replace Asset Content**. This is done on an individual basis. It keeps the image IDs the same, and all the links from modules and/or products are maintained to the appropriate version of the image.

When an asset has been replaced, a major revision will be created with the changed image. The major revision enables the option to revert to an older revision of the asset.

Note: Loading context-sensitive assets using the same asset ID allows publication swaps in STEP'n'design, for example, to swap both product data and language-relevant images.

When an asset is imported for the first time with language dependency, then the asset will be available only for the context in which it was imported. When the same asset is viewed in a different context, then the message will show which says “Asset has no content”. Similarly, the System Properties flipper in the right pane will show no attribute values which eventually means that the asset is empty.

Link To Product

In 'Import Images and Documents' wizard, step '4. Link To Product' you to specify a link to product via a number of matching options.

The screenshot shows the 'Import Images and Documents' wizard with the 'Link to Product' step selected. The 'Steps' panel on the left lists the following steps: 1. Select Import Location, 2. Select Asset Type, 3. Select Context, 4. Link to Product (highlighted), 5. Overwrite Existing Assets, and 6. Import Overview. The main area is titled 'Link to Product' and contains the following options:

- ☒ Link to Product
- ☐ Match on Full Name
- Enter a Delimiter:
- ☐ Match Before Delimiters
- ☐ Match After Delimiters
- ☒ Match the First Characters After the Delimiter
- ☐ Match Between Position and
- ☐ Match Between Delimiter and
- Select Reference Type:

At the bottom of the wizard are four buttons: Back, Next, Finish, and Cancel.

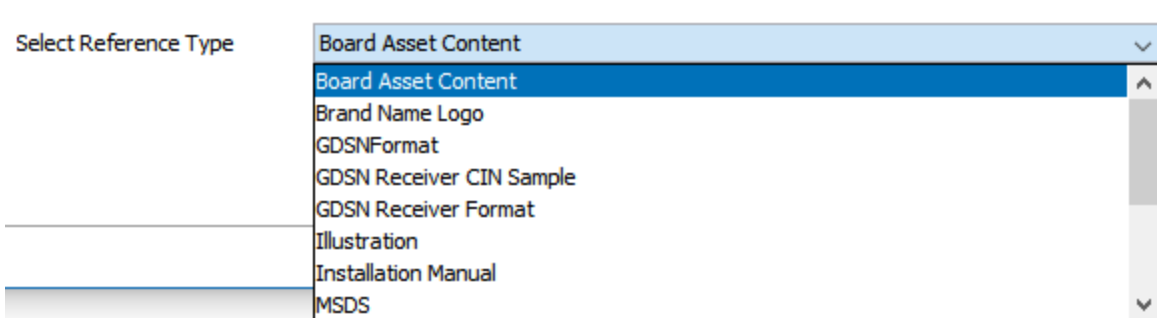
1. Check **Link to Product** to create links and then select an option to determine the required reference / link type. All other fields of this STEP are activated only when Link to Product option is checked.
 - **Match on Full Name** means the system attempts to match the file name of the asset (minus the extension) to a STEP ID. For all successful matches, a link is created.
 - **Enter a Delimiter** allows you to add one or more delimiter characters in order to find a match between STEP ID and the asset file name. This field is enabled only when selecting one of the option 'Match Before Delimiters', 'Match After Delimiters' or 'Match the First Characters After the Delimiters.'

Note: Leaving Link to Product unchecked means no references / links are created.

2. Determine the how to use the delimiter by choosing one of the following options:
 - **Match Before Delimiters** If the asset's file name is 17268_AS-56, and the delimiter is set to the underscore character (_), then the system tries to find the product with the ID of 17268.
 - **Match After Delimiters** If the asset's file name is UK_177628, and the delimiter is set to the underscore character (_), then the system tries to find the product with the ID of 177628.

- **Match the First Characters After the Delimiter** If the asset's file name is UK_9014514-ASH, and the delimiter is set to the underscore character (_), and the number of characters to match is set to 7, then the system tries to find the product with the ID of 9014514.
 - **Match Between Position** Enter the start and end character positions to use for making the match to the STEP ID. If the asset's file name is UK_447628ASP, and the starting position is set to 4 and the ending position is set to 11, then the system tries to find the product with the ID of 447628AS.
 - **Match Between Delimiter** Enter the start and end delimiters to use for making the match to the STEP ID. If the asset's file name is UK_44762877_EAS, and the starting delimiter is set to an underscore (_), and the ending delimiter is also set to the underscore, then the system tries to find the product with the ID of 44762877.
4. **Select Reference Type** to determine a single reference type to use for the link between the asset and the object. The content of the list varies depending on the system setup. All assets loaded in this session use the same selected reference type.

For more information on creating a reference types, see the **Reference and Link Types** topic of the **System Setup / Super User Guide** documentation.



5. Click **Next** to continue or click **Finish** to start the import process without specifying any further parameters.

Creating Additional Reference Links

When more references are required, use one of the following ways to create them:

- Manually link any asset to any existing object via any existing reference type in STEP on the asset's References tab.
- Create a STEPXML file to create links between assets and products and load that file via the Data Import Manager wizard.
- Create a tab delimited or Excel file that holds the object ID and the asset ID, and create multiple reference links and load that file via the Data Import Manager wizard.

For more information on the Data Import Manager wizard, see the **Creating a Data Import** documentation.

Overwrite Existing Assets

In 'Import Images and Document' wizard, step '5. Overwrite Existing Assets' allows you to specify how replacement of assets on import should be handled.

Import Images and Documents

Steps

1. Select Import Location
2. Select Asset Type
3. Select Context
4. Link to Product
- 5. Overwrite Existing Assets**
6. Import Overview

Overwrite Existing Assets

☒ **Overwrite Existing Assets** ☐ **Allow other type**

☒ **in selected classification: Assets**

☐ **in all classifications where ID match filename, regardless of classification**

☒ **Show Resolution Warnings**

Back **Next** **Finish** **Cancel**

1. **Overwrite Existing Assets** replaces assets that already exist in STEP with assets being imported. Selecting to overwrite enables the following options:

- **Allow other type** enables replacing assets when the file extension of the imported asset does not match extension of the asset in the database. This option is unchecked by default.

Example: An image with ID: Art123 exists in the database as png image. An image is being imported with name Art123.jpg. The image will be replaced if Allow other type is checked, else it will be ignored.

- **in selected classification** means exiting assets are only overwritten when they are located in the originally selected classification folder.

If 'Assets' is a selected classification, while importing an image Art123.jpg with replacement option, then process searches for an image Art123 only in classification 'Assets.'

- **in all classifications where ID match filename, regardless of classification** means existing assets are overwritten wherever they are found in STEP.

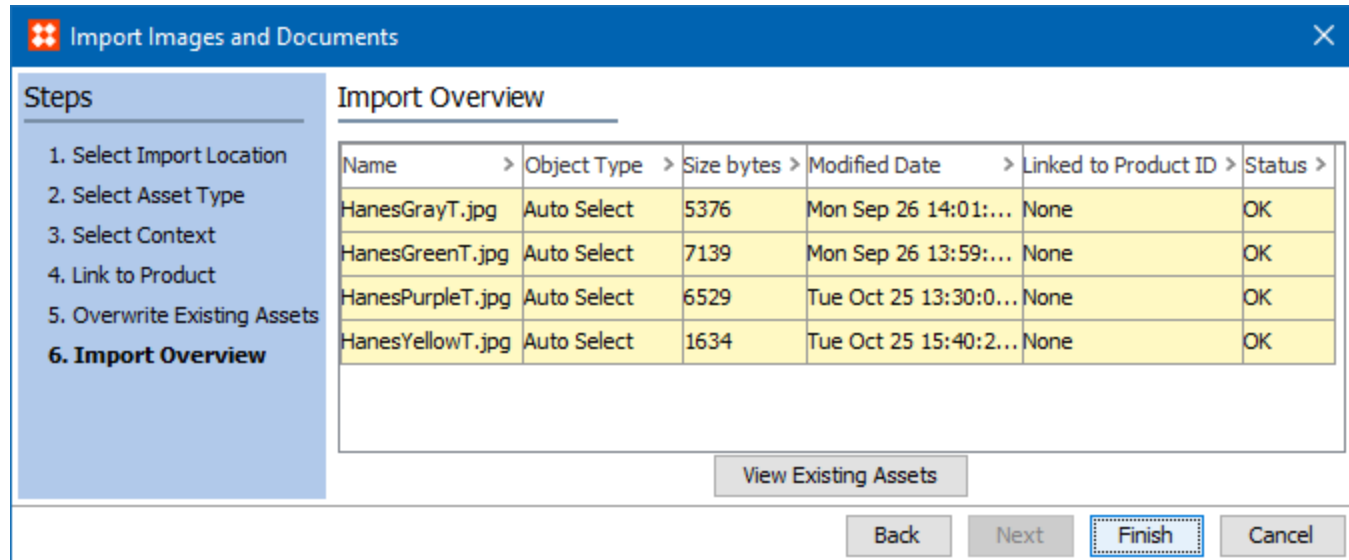
While importing an image Art123.jpg with replacement option, then process searches for an image Art123 in all classification available.

2. **Show Resolution Warnings** determines the minimum resolution requirement of the imported assets. All assets are imported, but if the resolution of an image is lower than specified, a warning is reported.

3. Click **Next** to continue.

Import Overview

In 'Import Images and Documents' wizard, step '6. Import Overview' you can review some of the assets that you are about to load - provided that you selected a folder and not an individual file.



1. Review a sample of the assets to be imported. Depending on the number of assets found in the selected folder, not all will be displayed. When importing only a few, all are displayed.

The Import Overview shows you the following information about the file about to be imported:

- Name
- Object type
- Size bytes
- Modified Date
- Linked to Product ID: File Name / Product ID is displayed if a match exists. "None" is displayed when no match is found.
- Status:
 - Status = Skipping when the image already exists and you selected not to overwrite
 - Status = Overwriting when you chose to overwrite existing images and an image with the same name exists

2. Click the **View Existing Assets** button to view any existing assets that may be overwritten. Click **Close** to close the report window.

Report							
	Asset Type	Asset ID	Filename	Status	Thumbnail	Classification Links	Referenced By Products
1/4			HanesGrayT.jpg	OK			
2/4			HanesGreenT.jpg	OK			
3/4			HanesPurpleT.jpg	OK			
4/4			HanesYellowT.jpg	OK			

Close Previous Page Next Page

Note: If there are more than 20 assets that are being imported, then the Next Page and Previous Page buttons are activated. By default there are totally 20 images that are shown in one page and the remaining in the next page.

- If necessary, use the **Back** button to correct any errors displayed.
- Click **Finish** to start the asset import process.
- The **Import Status** window displays the progress of the import. As each asset is loaded, the screen updates with the percentage complete and the number of warnings.

Uploading - 100 %

HanesYellowT

Time remaining: 00:00:00

Details

Name	Object Type	Size (bytes)	Modified Date	Linked to Product...	Import Status
HanesGrayT	Product Image	5376	Mon Sep 26 14:01:02 EDT 2...	None	Imported - Low Resolution
HanesGreenT	Product Image	7139	Mon Sep 26 13:59:58 EDT 2...	None	Imported - Low Resolution
HanesPurpleT	Product Image	6529	Tue Oct 25 13:30:09 EDT 2016	None	Imported - Low Resolution
HanesYellowT	Product Image	1634	Tue Oct 25 15:40:29 EDT 2016	None	Imported - Low Resolution

Imported Assets: 4 of 4

Warnings: 4

Total Size: 20 Kb

OK

Show Assets

Stop

- Click the **Details** flipper to view the status of and any warning for each imported asset.
- Click **Show Assets**, to see a multi-view display of the imported assets and their location in the hierarchy.

- Click **Stop** to halt the import process.
- Click **OK** to close the import process dialog.