RELEASE NOTES

STEP Trailblazer 8.3

Updated 31-January-2018

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Release Notes for STEP Trailblazer 8.3

Fall 2017 Release

Document Overview

Audience

This document is intended for use by active STEP users and serves to describe the new and enhanced features provided by the release. It does not serve as a replacement for the STEP online help, which includes additional information on previously existing system functionality, as well as more detailed explanations and step-by-step instructions for use when appropriate.

Content

This document describes the changes between the current and previous release.

Some functionality is controlled via licenses and may not be available on a particular system. Also, if an installation recipe is included or mentioned in a release note, the functionality described or being introduced is typically available via a licensed component. Questions regarding licensing for any customer should be directed to the Stibo Systems account manager or partner manager.

Release Overview

Stibo Systems has enhanced the STEP platform in a number of areas, for example:

- A new Acrolinx Sidebar integration is available. Acrolinx is a content-quality tool for users doing content authoring and editing in STEP.
- SDL translation integration is now available using new asynchronous service capabilities.
- The new Wiki Metadata management solution provides a way to capture configuration governance metadata on system setup objects.
- A new Adobe Illustrator integration is available. Now, designers who use Adobe Illustrator can integrate their work directly with STEP.
- STEP supports and has made updates to the STEP functionality associated with the handling of industry standard data exchange formats / classifications such as UNSPSC, BMEcat, ETIM, and eCl@ss.
- There are two new navigation options in Web UI. First, there is an icon-based task and collection-oriented Primary Navigation panel, specific to Customer MDM, that provides an alternative to more complex setups. And, second, guided navigation functionality offers users a way to break data-enrichment tasks down into more manageable steps.
- It is now possible to export STEP table types and STEP table definitions via the standard export tools and import the tables into another system.
- A new SPOT command is available that allows users to research component upgrades and new component installation options for their specific STEP system.
- This release introduces business functions to STEP, a new type of business rule.

- Web UI includes additional visual-design updates and the introduction of a number of components that support new functionality, including dynamic table layouts, visual indicators on nodes, and a global header search bar.

This document describes the above, as well as a long list of other new functionality and improvements, in greater detail.

As with every STEP release, some STEP components get deprecated, removed, or desupported for various reasons. Anything with a user impact has been called out in the applicable release note and may require special attention and user action before upgrading to STEP Trailblazer 8.3.

A summary list follows. Customers should also read the Platform and Software Support Changes release note for additional items not listed below.

- Corner Bar Simple Search is superseded and will be withdrawn in a future release. Users should instead use the Corner Bar Search component.
- The 'Name Or Id or Specific Attribute' search plugin available to use in the Corner Bar Search and the Search widget has been withdrawn. A new plugin, 'Name or ID or Attributes,' should be used in its place.
- Adobe InDesign CS6 is no longer supported, and Adobe InDesign CC 2015 will be desupported with the fall 2018 release.
- The following legacy features have been removed (or deprecated, as noted) with this release:
  - Legacy asset push functionality; the existing asset push option uses event queues.
  - Continuous Publishing functionality; it is replaced by event-based outbound integration endpoints.
  - The 'Synchronize.RunFilterAndGeneratorRulesAfterApproval' property has been deprecated. It temporarily allowed business rules used as event filters or generators to run prior to approval.
  - All REST resources relating to the Publication Manager (PM) and the STEP-director have been deprecated.
  - ODBC (Open Database Connectivity) has been removed as a Data Source within Import Manager.
- **Stibo Systems is officially ending support for STEP Trailblazer 7.0 - 7.2 and 7.3, effective 1-Aug-2018, and STEP Trailblazer 7.4, effective 1-Nov-2018. See the Platform and Software Support Changes release note for full details.**

In addition to the information above, if there are any known future deprecations or impending desupports planned, the information can also be found in the release note set.

Recipe

The baseline update can be installed with the following recipe:

```
to:step/trailblazer/step-8.3.spr
```

Please contact your Stibo Systems account manager or your partner manager for additional information on upgrading to or installing the Trailblazer 8.3 release.

New Automatic Service Capabilities for SDL Translations

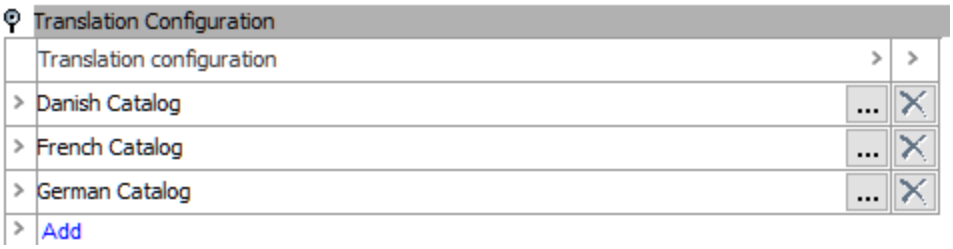
Summary

New asynchronous service capabilities have been added in STEP to support automatic SDL,a third-party translation software company, translations. Previously, SDL translations were handled via the standard STEP translation tool where a user would have to pick up the file and send it to SDL. Once SDL translated the file, the file had to be manually imported back into STEP.

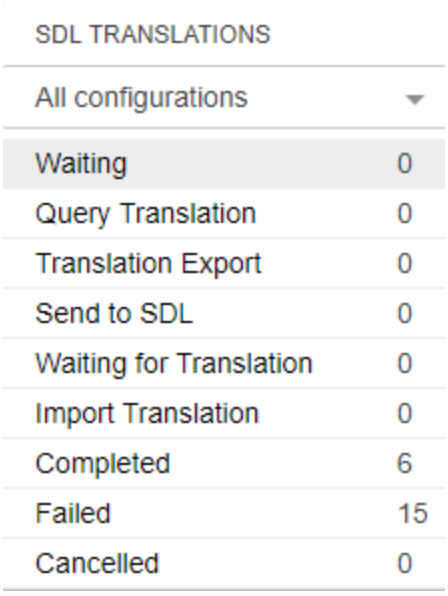
Details

SDL offers rich REST APIs that make it possible to create, monitor, and complete translation jobs using this API directly to SDL. STEP now offers an SDL service plugin which will invoke the SDL REST API directly without user intervention. Some of the features of the SDL service plugin are:

- It is possible to send and receive data to and from SDL via their REST API without human intervention.
- Translation jobs are initiated via a new business action which may be invoked via a STEP workflow.
- Multiple SDL translation configurations can be set up representing various source and target languages, job node selection definitions, and node filtering options. The nodes that should be sent for translation are defined in the business action that starts the SDL translation.



- For any given translation job, users can see the progress of the SDL translation status in STEP and see which job nodes are included in the SDL translation job via the Web UI.



- Translated data for the same product is imported in the same sequence that the translation jobs were initiated, thus avoiding 'translation overtaking.'
- Asynchronous SDL service configurations are created and maintained in the workbench, but a new Translation Status Widget in the Web UI is provided to show the steps of an asynchronous configuration and monitor the translations using the configuration.

Existing translation functionality will not be changed.

To access and use the functionality as described above, the following installation commands must be executed in addition to the normal update procedures for 8.3:

```
spot --apply=to:sdl-with-framework/8.3/sdl-with-framework-8.3.spr
```

It is best to contact your Stibo account manager or partner manager to verify that these install recipes are the latest available before installing.

For more information about asynchronous SDL translations in STEP, see the Asynchronous SDL Translations topic in the Data Integration documentation.

New Wiki Metadata Management Solution

Summary

Configuration governance involves capturing data that explains how your system works and how to use it. The new STEP Wiki Metadata solution provides a way to capture metadata for configuration objects, and offers additional wiki collaboration among users, allowing them to contribute configuration management information. For example, this could include metadata that documents the purpose of an attribute or integration endpoint, the owner of a List of Values (LOV), or the process to request a change to a workflow.

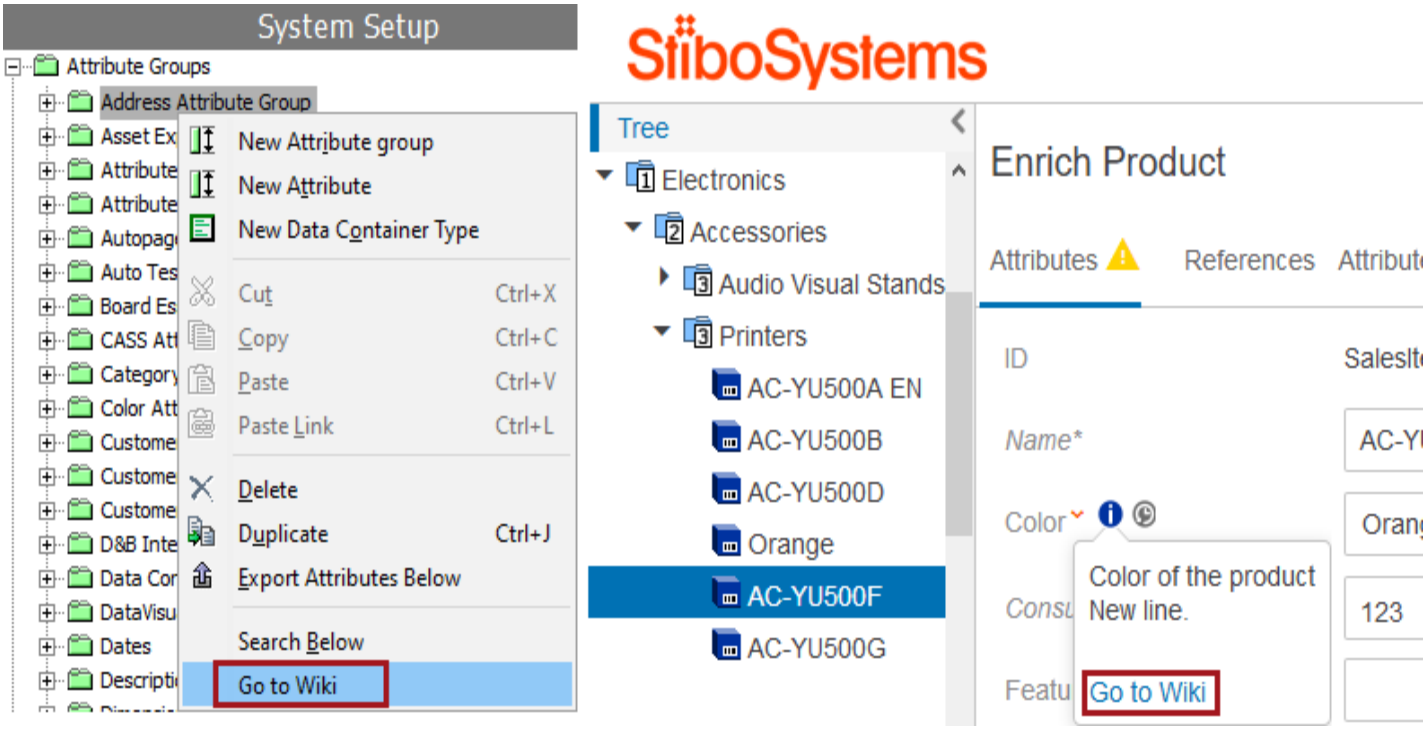
Details

To access and use the new Wiki Metadata functionality, the following installation command must be executed in addition to the normal update procedures for 8.3:

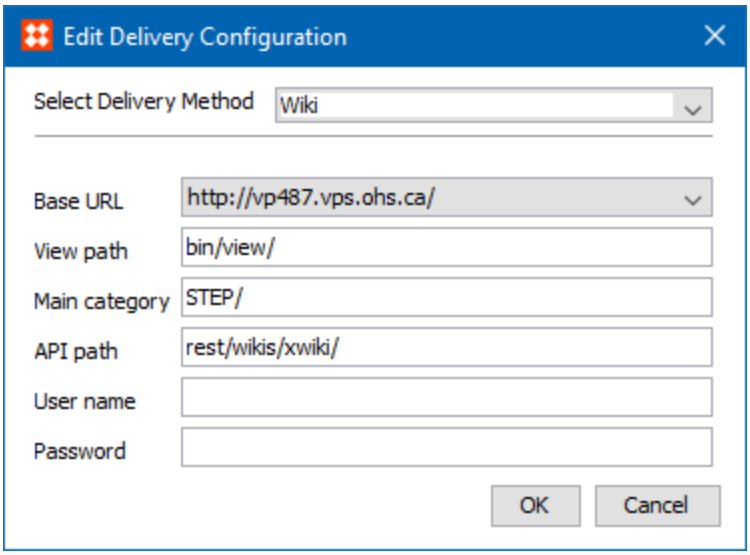
```
spot --apply=to:wikimetadata/7.0/wikimetadata-7.0.0.spr
```

It is best to contact your Stibo account manager or partner manager to verify that this install recipe is the latest available before installing. Additionally, the XWiki advanced open source enterprise wiki platform and database must be installed. The XWiki elements reside outside of STEP, but the content pages can be launched from the STEP Workbench and Web UI, and the content can also be searched.

Once installed, when viewing an object in STEP, clicking the 'Go to Wiki' link (typically via a right-click menu) displays the metadata page in the user's default browser. In Web UI, wiki links are in the attribute help text accessible by clicking the blue information icon. The availability of a wiki link is restricted only by the display of the system setup objects (e.g., attributes, LOVs, reference types, etc.), and no additional privileges are required.



The STEP installation for the Wiki Metadata component includes a pre-configured outbound integration endpoint (OIEP) that triggers create and/or update events for all supported configuration objects. The OIEP is configured to use the new 'Wiki' delivery method, which takes several parameters to define where pages are stored and the template that should be used. A translatable default template is included for the user-defined content displayed in the wiki.



The sharedconfig.properties file must be updated with two new case-sensitive properties: Wiki.OIEPID (which defines the ID of the STEP OIEP) and Wiki.WikiUrl (which defines the server where the wiki platform resides). These properties allow the same Wiki Metadata to be accessible when objects or the system is copied to a different server.

For more information, see the Wiki Metadata topic in the System Setup / Super User Guide documentation.

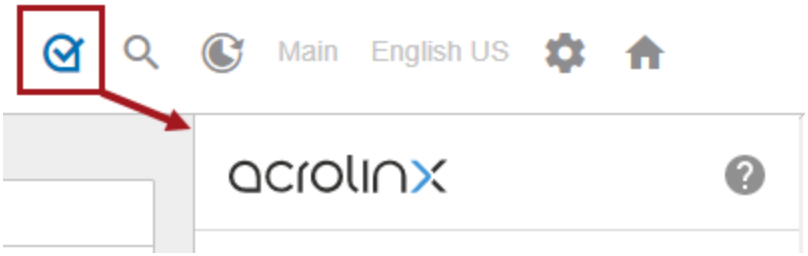
For more information on the new delivery method, see Wiki Delivery Method in the Outbound Integration Endpoint section of the Data Exchange documentation.

For information about XWiki platform, see the information found on the web at: https://www.xwiki.org/xwiki/bin/view/Documentation/.

New Acrolinx Integration

Summary

A new integration between STEP and Acrolinx, a third-party content standardization tool, is available that enables users to check and improve the quality of text-based content as it is being authored in the Web UI. This has been achieved by introducing the new Acrolinx Sidebar component to the Web UI Corner Bar. The Acrolinx Sidebar works with text fields in the Web UI and, with the click of a button, gives users guidance, feedback, and suggestions on their content. Acrolinx checks content for issues such as spelling, grammar, style, valid terminology, and tone of voice, then returns an Acrolinx Score that grades the overall quality of the content. Once configured in the Corner Bar, the Acrolinx Sidebar is accessed by clicking on the Acrolinx icon, as shown in the below screenshot.

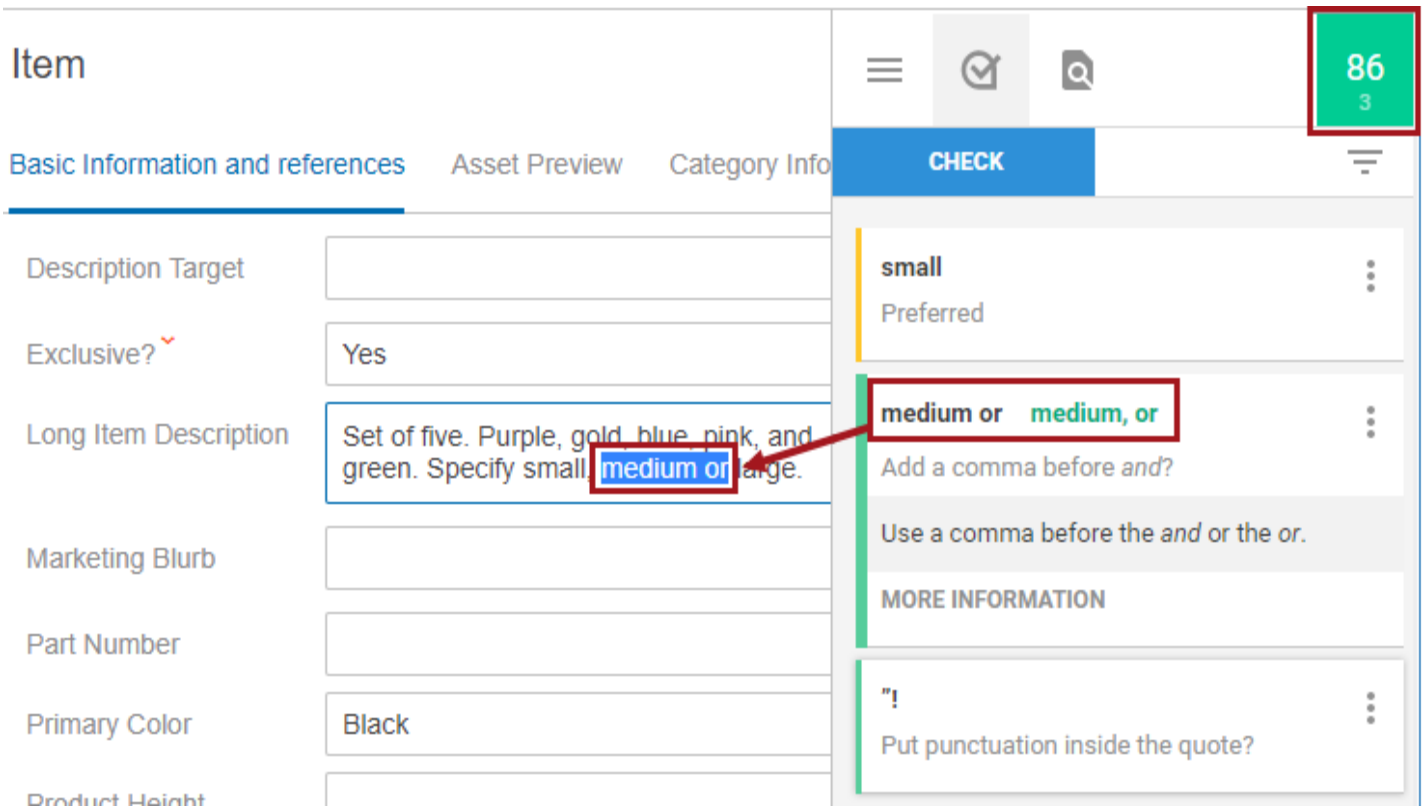


Details

Acrolinx is a third-party content quality and standardization tool that enables users to create accurate, consistent, and impactful copy through artificial intelligence technology. The Acrolinx platform uses an advanced linguistic analysis engine that 'reads' content and guides writers to make it better. With a click of the CHECK button, data is sent to Acrolinx for inspection. Acrolinx then analyzes the content and returns feedback to the Acrolinx Sidebar. Potential issues are displayed in ‘cards’ in the sidebar, and an overall Acrolinx Score displays in the upper right corner. Content with a higher Acrolinx Score is considered to be of greater quality, taking much of the guesswork out of content improvement. Acrolinx supports English, German, French, Swedish, Chinese, and Japanese.

Acrolinx gives users the opportunity to thoroughly analyze content on a per-product basis. This hands-on approach ensures that data is of the highest possible quality. Since direct user interaction is key to content improvement, the Acrolinx Sidebar does not handle batch or multi-node processing of products.

The below screenshot shows an example of an Acrolinx check run on product attribute values on a Node Details Page in the Web UI. The highlighted error is a prompt to add a comma. An Acrolinx Score of 86 is displayed in the upper right corner of the sidebar, with the number of located errors (3) beneath it.



The Acrolinx Sidebar is installed in the Web UI by adding the 'Corner Bar Acrolinx' component to the Corner Bar component. Once added, users can further configure the component, including limiting the visibility of the Acrolinx Sidebar to specific user groups.

To access the Corner Bar Acrolinx component and use the Acrolinx Sidebar, the following installation command must be executed in addition to the normal update procedures for 8.3:

```
spot --apply=to:acrolinx/7.0/acrolinx-7.0.0.spr
```

It is best to contact your Stibo account manager or partner manager to verify that this install recipe is the latest available before installing.

Both cloud and on-premise versions of Acrolinx are available, but users will need their own Acrolinx subscription / license to access the functionality and will need their own hardware for on-premise installs. Contact your Stibo account manager or partner manager for details.

For more information, see the Acrolinx Sidebar topic in the Main Properties Overview section of the Web User Interfaces documentation. For more information on Acrolinx and the functionality of the Acrolinx Sidebar, visit the 'Sidebar Essentials' help topic on the Acrolinx help center support website: https://support.acrolinx.com/hc/en-us/sections/115001109685-SIDEBAR-ESSENTIALS.

New Adobe Illustrator Integration

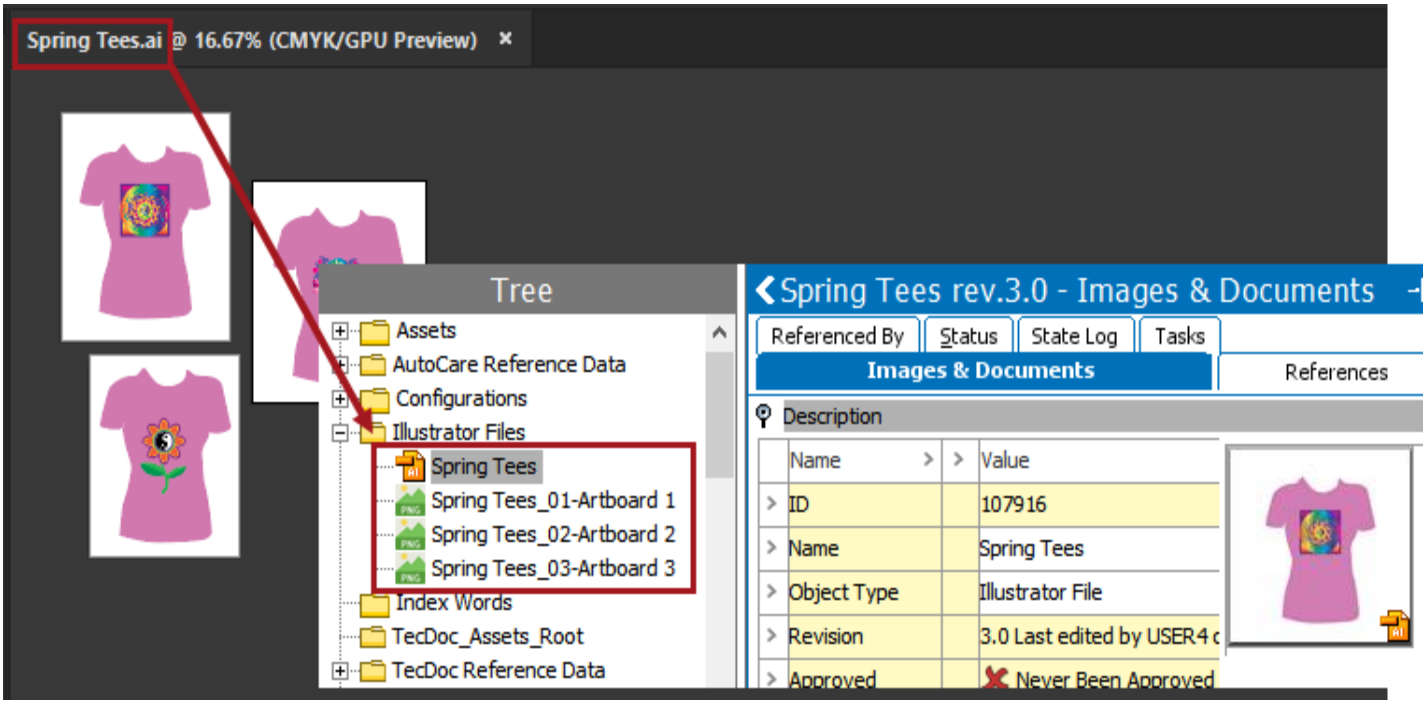
Summary

A new integration between STEP and Adobe Illustrator CC 2017, called STEP for Adobe Illustrator, is available that enables users to open and save Illustrator files from and to STEP, directly from Illustrator. This integration allows users to work exclusively in Illustrator without needing to open the STEP Workbench.

Adobe Illustrator is frequently used, for example, by product designers to make sketches of products, such as drawings of clothes and the details that are needed for clothing production. STEP for Adobe Illustrator supports these designers in their work, making PLM (Product Lifecycle Management) in STEP easier and faster. Other uses of Illustrator are also possible; any Illustrator user who needs to store Illustrator files (.ai) and their associated artboards in STEP can use this solution to gain these very same benefits.

STEP is integrated with Illustrator by installing the STEP for Adobe Illustrator plug-in, which is downloaded from the STEP WebStart page. Once installed, users can perform the following actions from within Illustrator:

- Access the STEP database from a STEP panel
- Search for products and entities in STEP that are linked to Illustrator files, then open the associated Illustrator files
- Save Illustrator files to STEP, which the system then automatically links to products or entities
- Automatically create PNG image representations of Illustrator artboards, which the system then stores alongside their associated Illustrator files



Additionally, a new Illustrator component model has been added in System Setup, and a new 'Illustrator Settings' flipper has been added under System Settings.

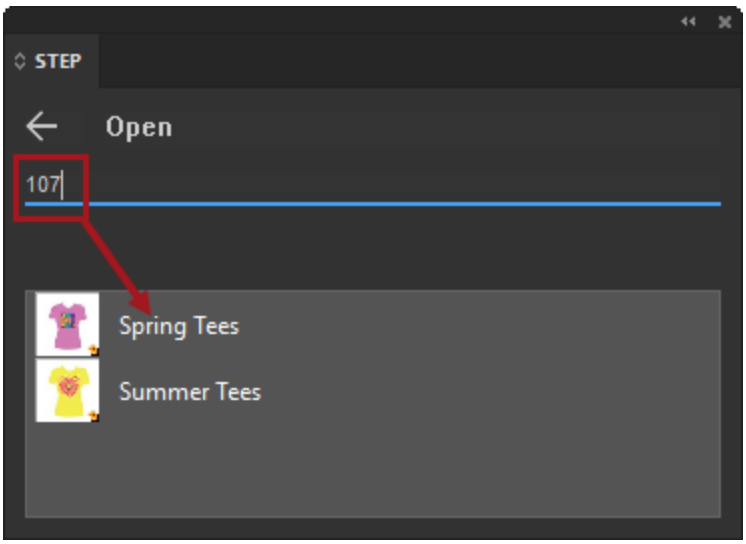
Details

New Adobe Illustrator Plug-In and STEP panel

The new STEP for Adobe Illustrator plug-in is accessed and downloaded from the STEP WebStart page. This plug-in is compatible with Adobe Illustrator CC 2017 and is available for both Windows and Mac platforms.

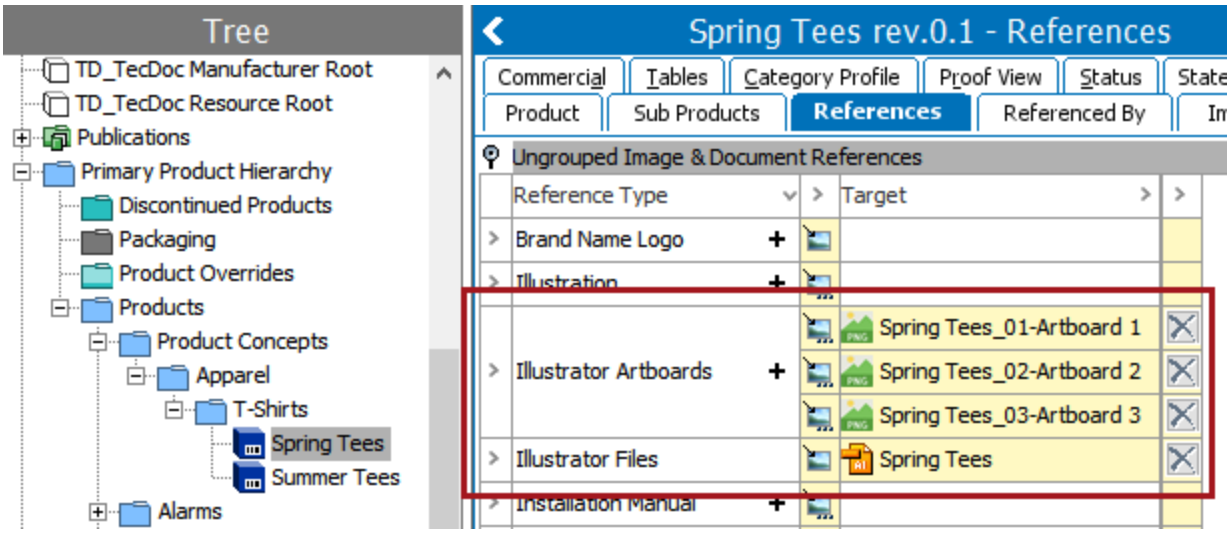
Once the plug-in is installed, STEP can be accessed by opening the STEP panel, which is located in the Illustrator 'Window' menu. The STEP panel provides options to open Illustrator files from STEP and save them back to STEP.

Both the Open and Save options employ a typeahead search that is used to locate products and entities in STEP that either already have a linked Illustrator file or that the user plans to link an Illustrator file to.



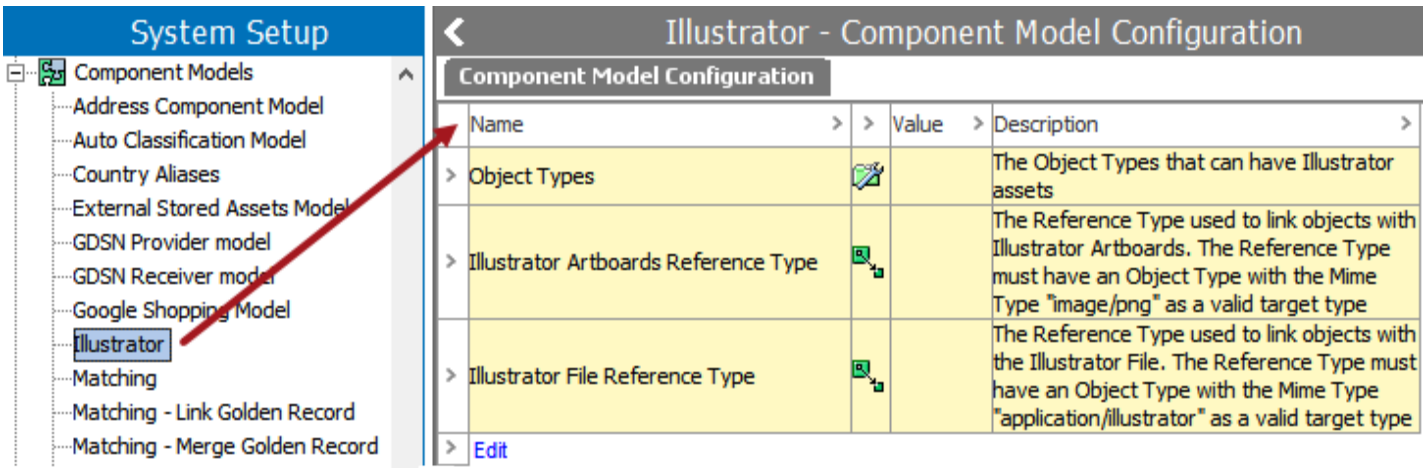
Automatic Illustrator File Linking

When an Illustrator file is saved to STEP from the STEP panel, the artboards are automatically generated as .png image files. The file and artboards are then simultaneously placed into a classification folder and linked to the relevant product / entity through asset references types.

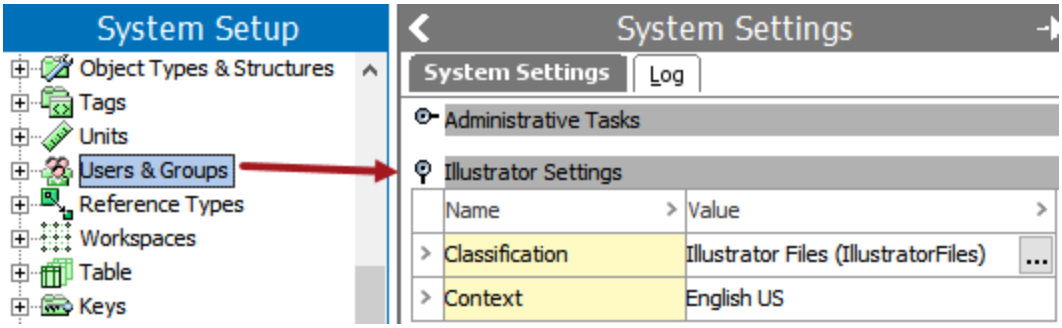


Component Model and System Settings

The new Illustrator component model is where the valid object types for Illustrator file linking (products and/or entities) are designated. The asset reference types that are used to link Illustrator files and artboard images to the specified object types are also selected here.



The new 'Illustrator Settings' flipper in System Settings is where the classification folder is designated. This folder is where the Illustrator files and artboard images are saved. The context from which the product and/or entity names will display in the STEP panel in Illustrator is also chosen here.



System installation command

To access the Illustrator plugins, component model, and Illustrator options in System Settings, the following installation command must be executed in addition to the normal update procedures for 8.3, and after the STEP 8.3-mp1 or later maintenance patch is applied:

```
spot --apply=to:illustrator/7.0/illustrator-7.0.0.spr
```

For more information, see the STEP for Adobe Illustrator section of the STEP online help.

New Customer MDM Functionality

Summary

A number of enhancements and new features have been added that, while available for use with any data type (unless noted), have specific benefits for those working with customer data. Each is briefly listed below, with additional details available in the STEP Trailblazer 8.3 Release Notes as indicated.

Details

New option to create entity references by source record ID upon import

Importing entities with cross references to other entities via the target entity's Source Record ID is possible with this release. This allows incoming objects to reference other objects that either already exist in STEP or are available in the same import. For more details, see the Data Exchange Enhancements release note.

New navigation panel for Web UI

A new icon-based Primary Navigation panel has been added to the Web UI for those working with Customer MDM functionality, offering users a streamlined alternative to the more complex Stack Panel menu. This new menu can be configured with a centralized task menu and a collection navigator. For more information, see the Enhanced Web UI Performance and Navigation release note.

New summary components for entities and collections in Web UI

It is now possible to add summaries to entity objects and collections in Web UI. Two new components, Entity Summary and Collection Summary, can be added to a node details screen. When added, these components display the most relevant information about the entity / collection in a brief summary at the top of the screen. If working with customer data, this component fits nicely with the Primary Navigation panel mentioned above. Refer to the Enhanced Web UI Performance and Navigation release note for more information.

New component for displaying and editing data containers in Web UI

A new data container component has been added to the Web UI that offers users an improved method of displaying and editing data containers. The Data Container Popup Editor is intended to enhance the overall user experience of editing data containers and improve how they are displayed. This new component is optimized for customer data such as addresses, emails, and phone numbers. For more details, see the New and Enhanced Web UI Functionality and Features release note.

New option to import data containers without IDs

It is now possible to import data containers into STEP when using Excel and CSV files that do not contain Data Container IDs. To achieve this, the new 'Use Auto-ID' parameter has been added to the 'Map <ID> to' screen of the Import Manager when Data Container Attribute is selected. For details, see the Data Exchange Enhancements release note.

Data Exchange Enhancements

Summary

The following updates have been made within the Data Exchange functionality:

- Export Manager includes updated parameters for FTP and SFTP delivery methods, including the file name template and zip before upload options.
- Inbound integration endpoints (IIEPs), outbound integration endpoints (OIEPs), event processors (EPs) include a monthly scheduling option, allowing for better control of integrations and event processing within STEP.
- The STEPXML format parameter page in Export Manager and OIEP has been updated to include new categories for the available parameters, which makes it easier to find the desired parameter. Additional updates include renaming of some parameters, removal of legacy parameters, and alignment of parameter options.
- The new Amazon SQS delivery method is available in OIEP. This enables STEP data to be delivered via an outbound integration endpoint to the Amazon Simple Queue Service.
- A new Excel Custom Template option is available in Export Manager. This new component enables users to apply custom Excel templates capable of outputting polished, presentation-ready Excel files.
- REST gateway integration endpoints support configurable preemptive basic authentication.
- Several enhancements have been added to the 'REST Direct' OIEP delivery plugin.
- Minor changes to the naming convention within the GDSN Provider solution.
- It is possible to import data containers into STEP without providing IDs in the import file.
- Entity-to-entity references can be created upon import of entities via the target's Source Record ID.
- Both the BMEcat 1.2 and BMEcat 2005 formats now allow mapping Product Attribute Link metadata from attributes and attributes within entire attribute groups on exported products.
- New support for eCl@ss 10.0.1, ETIM 7 IXF format, and UNSPSC version 20.
- STEP supports pre-release versions of ETIM files as well as the ETIM change codes.
- New option for mapping an LOV Value ID in the feature field when exporting ETIM files via BMEcat2005.
- STEP Smartsheets can be exported from Web UI based on the user-defined sorting order.
- A new plugin-based solution is available for including supplier-specific LOV filters in Smartsheets exports.

Details

Export Manager FTP and SFTP parameters updated

Previously, the FTP and SFTP delivery options in Export Manager did not include the 'File name template' or 'Zip before upload' options, although they did exist in outbound integration endpoints (OIEPs). Now the same options are available in both outbound tools.

For more information, see the Export Manager topics FTP Delivery Method and SFTP Delivery Method, or the OIEP topics FTP Delivery Method and SFTP Delivery Method.

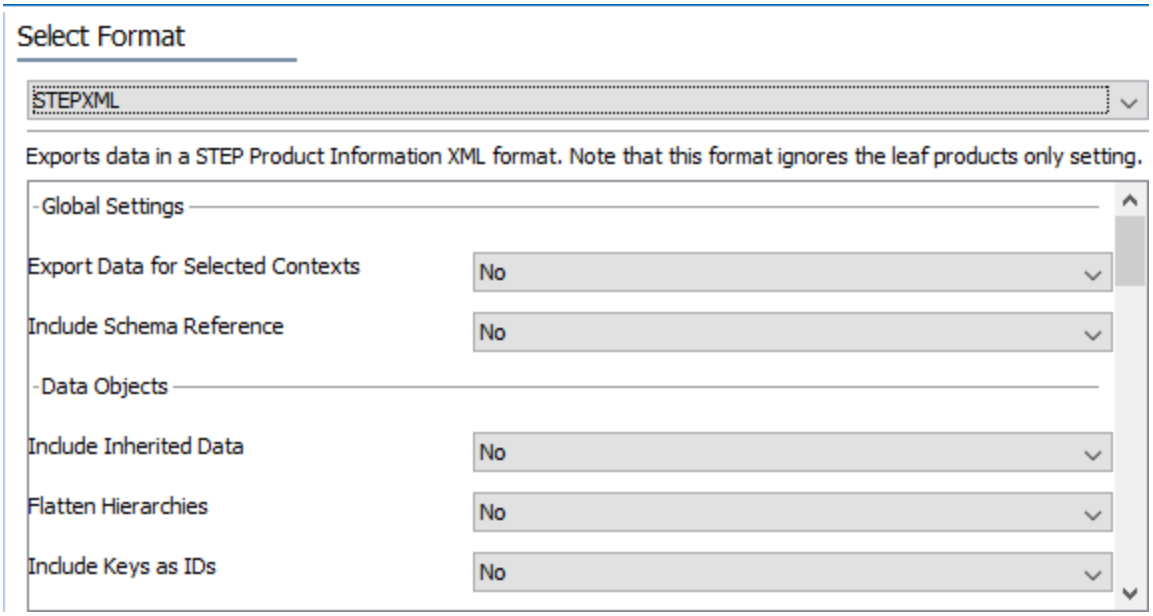
Monthly schedule option now available in IEPs and EPs

The scheduling options for inbound integration endpoints (IIEPs), outbound integration endpoints (OIEPs), and event processors (EPs) have been improved to include monthly scheduling. For existing IIEPs, OIEPs, and EPs, simply modify the current schedule to take advantage of this new functionality.

For more information, see the IIEP - Schedule Endpoint topic and the Schedule section of the OIEP - Configuration Flipper topic in the Data Exchange documentation, and the EPW - Schedule Event Processor topic in the System Setup / Super User Guide documentation.

Improved organization of STEPXML export parameters

The STEPXML data format is available in both outbound tools: Export Manager and Outbound Integration Endpoints. Until now, the parameters available for configuring a STEPXML export were not listed in any particular order, making it difficult to find the right one. The following improvements are included in this release:



- The export parameters have been organized into four groups:
    1. Global Settings
    2. Data Objects
    3. Configuration
    4. Publishing
- The 'Include System Setup' parameter has been renamed to 'Include System Settings,' and now also includes the functionality of the setting named 'Include Global Setting' in earlier releases. For backwards compatibility, if a saved configuration had 'Include Global Settings' set to 'All' and 'Include System Setup' set to 'None,' then after upgrading, both global settings and system settings are exported. The upgraded configuration will display 'Include System Settings' set to 'Yes.'

- The following legacy parameters did not export any data or change the export behavior and have been removed: Include Data Pools, Include GDSN Packaging Hierarchy, Put product values before child products, and Include Custom Attribute Values.
- Parameters that previously only included 'None' and 'All' settings have been updated to 'No' and 'Yes' settings. The default selection effect has not changed.
- The following parameters have been renamed but continue to provide the same functionality:

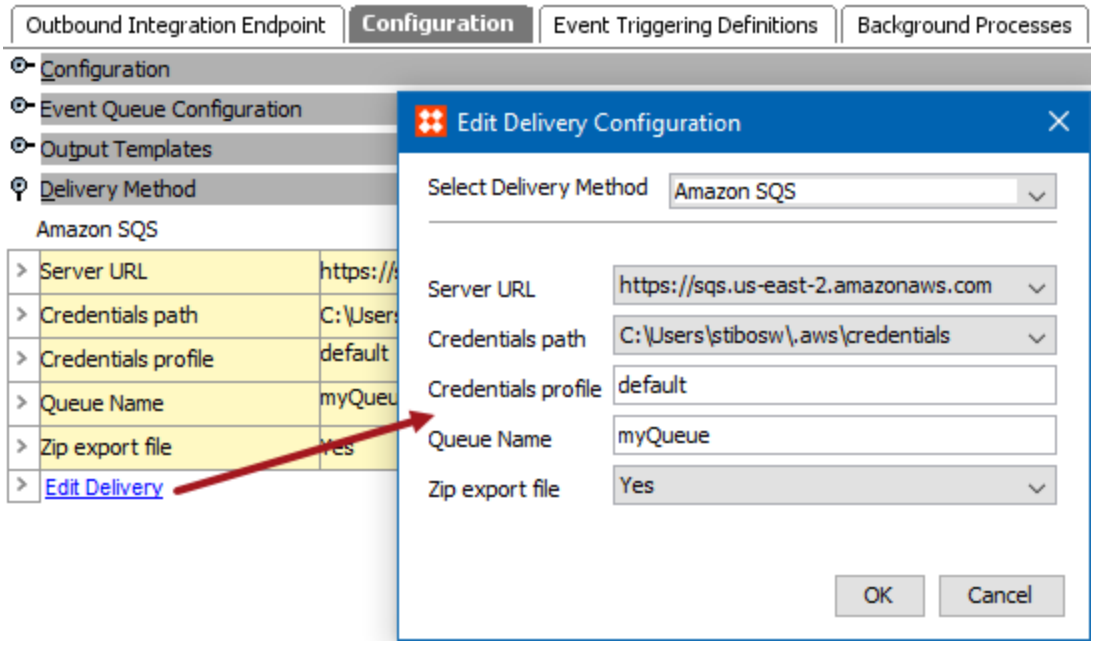
Previous Parameter Label	New Grouping and Parameter Label
Include Validation	Global Settings > Include Schema Reference
Use Cross-Context Export	Global Settings > Export Data for Selected Contexts
Export inherited values and references	Data Objects > Include Inherited Data
Flatten hierarchy	Data Objects > Flatten Hierarchies
Include Unique Keys as Ids	Data Objects > Include Keys as IDs
Include STEP Workflow Task Info	Data Objects > Include Workflow Tasks
Include Attribute Definitions	Configuration > Include Attributes
Include Attribute Group Definitions	Configuration > Include Attribute Groups
Include Context Definitions	Configuration > Include Contexts
Include Data Container Type Definitions	Configuration >Include Data Container Definitions
Include E-Catalogs	Configuration > Include eCatalogs
Include Event-Queues	Configuration > Include Event Queues
Include Global Business Rules	Configuration > Include Business Rules (Global) and Libraries
Include List Of Value Definitions	Configuration > Include List of Values
Include Integration End Points	Configuration > Include Integration Endpoints
Include Key definitions	Configuration > Include Key Definitions
Include Privilege Definitions	Configuration > Include Action Sets

Previous Parameter Label	New Grouping and Parameter Label
Include STEP Workflows	Configuration > Include Workflows
Include System Setup	Configuration > Include System Settings
Include Global Settings	Configuration > Include System Settings
Include Table Type Definitions	Configuration > Include Table Types
Include Tag Definitions	Configuration > Include Tags
Include Transformation Lookup Table Configurations	Configuration > Include Transformation Lookup Tables
Include Type Definitions	Configuration > Include Link, Reference and Object Types
Include Unit Definitions	Configuration > Include Units
Include User Definitions	Configuration > Include Users and User Groups
Include Web-Sites	Configuration > Include Websites

For more information, see the STEPXML Outbound Parameters topic in the Data Format section of the Data Exchange documentation.

New Amazon SQS delivery method for OIEP

A new delivery method is available for sending outbound data to Amazon SQS using an outbound integration endpoint. This allows STEP data to be delivered to the Amazon Simple Queue Service.



To access and use the Amazon SQS functionality, the following installation command must be executed in addition to the normal update procedures for 8.3:

```
spot --apply=to:integration-amazon-sqs/7.0/integration-amazon-sqs-7.0.0.spr
```

It is best to contact your Stibo account manager or partner manager to verify that this install recipe is the latest available before installing.

For more information, see the Amazon SQS Delivery Method topic in the Data Exchange documentation.

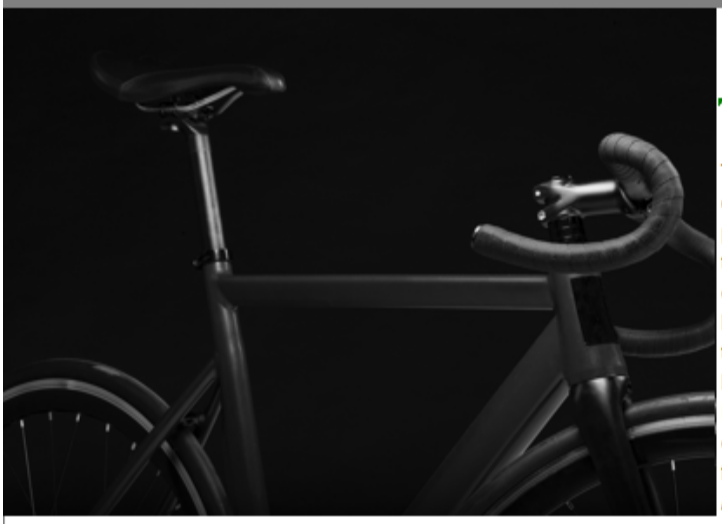
Formatted Excel

STEP now enables users to export STEP object data directly into a presentation-ready Excel file. This feature is an enhancement to existing export functionality in that STEP's new Formatted Excel feature can take full advantage of Microsoft Excel's formatting capabilities. Experienced Excel users may automate export of STEP data and images into polished documents. Prior to this release, users could also export STEP data into an Excel file, but the template could not be configured to output formatted content. This feature expands the flexibility of STEP so data and images in STEP can now more easily be presented to stakeholders who may not have (or need) access to the STEP Workbench or the Web UI.

Stibo Systems Bike Shop

Product Sheet

Men Road Bike



Flusdale FLU12 105 2017 Road Bike

1216 €

This is for the core, the local heroes, the crit assassins, the working-man racers with chiseled legs and dreams of glory, because they know that when it comes to pure performance for the buck, nothing can touch FLU12. Lighter, stiiffer and smoother than most carbon frames, it's not just the finest alloy racing bike ever made, it's the only choice for those who know.
Lorem ipsum dolor sit amet, proin potenti in a pellentesque at eu, eget elit amet ut turpis excepturi risus, porta sollicitudin felis phasellus wisi purus. Ut wisi tellus bibendum quis in, urna praesent ipsum eu placerat, pulvinar minima vestibulum leo augue elementum, nisl odio ad at condimentum aspernatur arcu, ut fermentum eget. Integer adipiscing fusce, suscipit in, nam pellentesque risus, nulla dictum fermentum auctor, nulla nulla est in. Nulla a morbi, urna purus etiam mauris dolor. Adipiscing nunc labore eros elit donec, lorem varius amet nisl magna rutrum odio,

Product Details

Frame:	FLU12, SmartForm C16069 Alloy, SPEED SAVE, BB30a, Di2 Ready	**Brakeset:**	Shimano 105 5800 caliper
Fork:	FLU12, SPEED SAVE, BallisTec full carbon, 1-1/8" to 1-1/4" steerer, integrated crown race	**Handlebar:**	Flusdale C3, butted 6061 Alloy Butted 6061 Alloy, Compact
Front Derailleur:	Shimano 105, braze-on	**Stem:**	Flusdale C3, 6061 Alloy, 31.8, 6 deg
Rear Derailleur:	Shimano 105	**Bar Tape:**	Flusdale Bar Tape w/Gel 2.5mm
Number of Gears	22	**Wheelset:**	Mavic Aksium WTS

To access and use the formatted Excel functionality, exports can be done via the new Excel Custom Template format option. To get this option in STEP, the following installation command must be executed in addition to the normal update procedures for 8.3:

```
spot --apply=to:formatted-excel/7.0/formatted-excel-7.0.0.spr
```

It is best to contact your Stibo account manager or partner manager to verify that this install recipe is the latest available before installing.

For more information on formatted Excel, see the Excel Custom Template section of the Data Exchange documentation.

Preemptive basic authentication for REST gateway integration endpoints

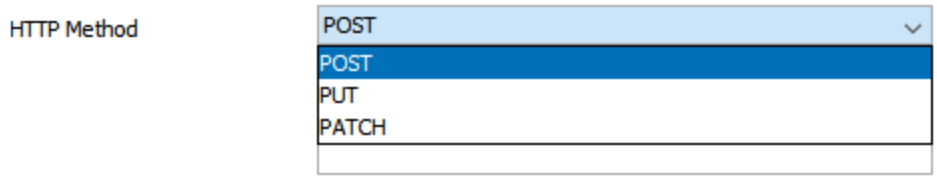
REST gateway integration endpoints now support configurable preemptive basic authentication. This enables the endpoints to function with REST services that only support this authentication type.

For more information, see the Configuring a Gateway Integration Endpoint topic in the Data Exchange documentation.

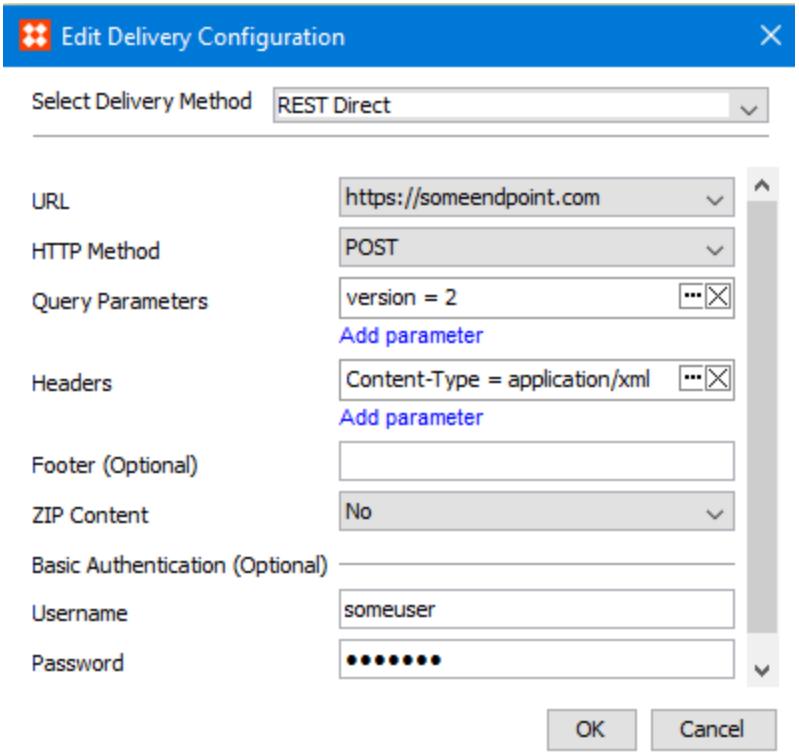
REST Direct OIEP plugin enhancements

Several new enhancements have been added to the 'REST Direct' OIEP delivery plugin. These enhancements include the following:

- The delivery plugin now supports the HTTP PUT and PATCH method in addition to the HTTP POST method.



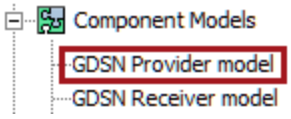
- It is possible to specify 'query parameters' for the REST Direct request.
- All '200' range responses are accepted as valid.



For more information about the REST Direct delivery method, please see the Rest Direct Delivery Method section of the Outbound Integration Endpoints documentation.

Minor changes to the naming convention within the GDSN Provider solution

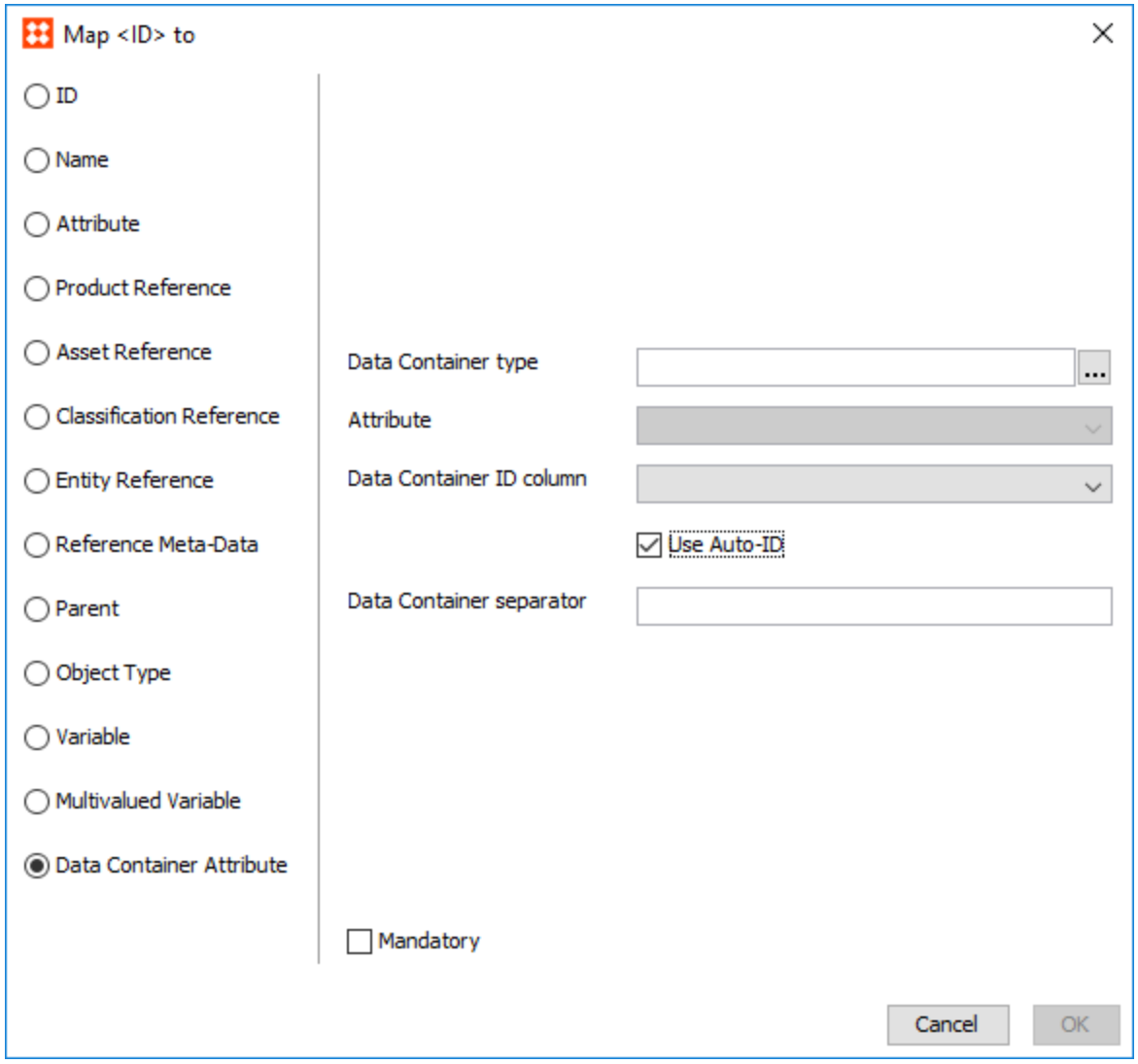
Minor changes have been made to the GDSN Provider solution to bring parity between the GDSN Receiver solution and the GDSN Provider Solution and to define more clearly where each of the components are used. Current users of the GDSN Provider solution will not see the name changes, except to the name of the Component Model as shown in the image below.



New option to import data containers without IDs

It is now possible to import data containers into STEP when using Excel and CSV files that do not contain Data Container IDs. To achieve this, the new 'Use Auto-ID' parameter has been added to the 'Map <ID> to' screen of the Import Manager when Data Container Attribute is selected.

When enabled, this parameter makes use of the Auto-ID pattern provided by the data container type in question. If not enabled, the configuration wizard will insist that a Data Container ID column be available in the Excel / CSV file to map the Data Container ID.

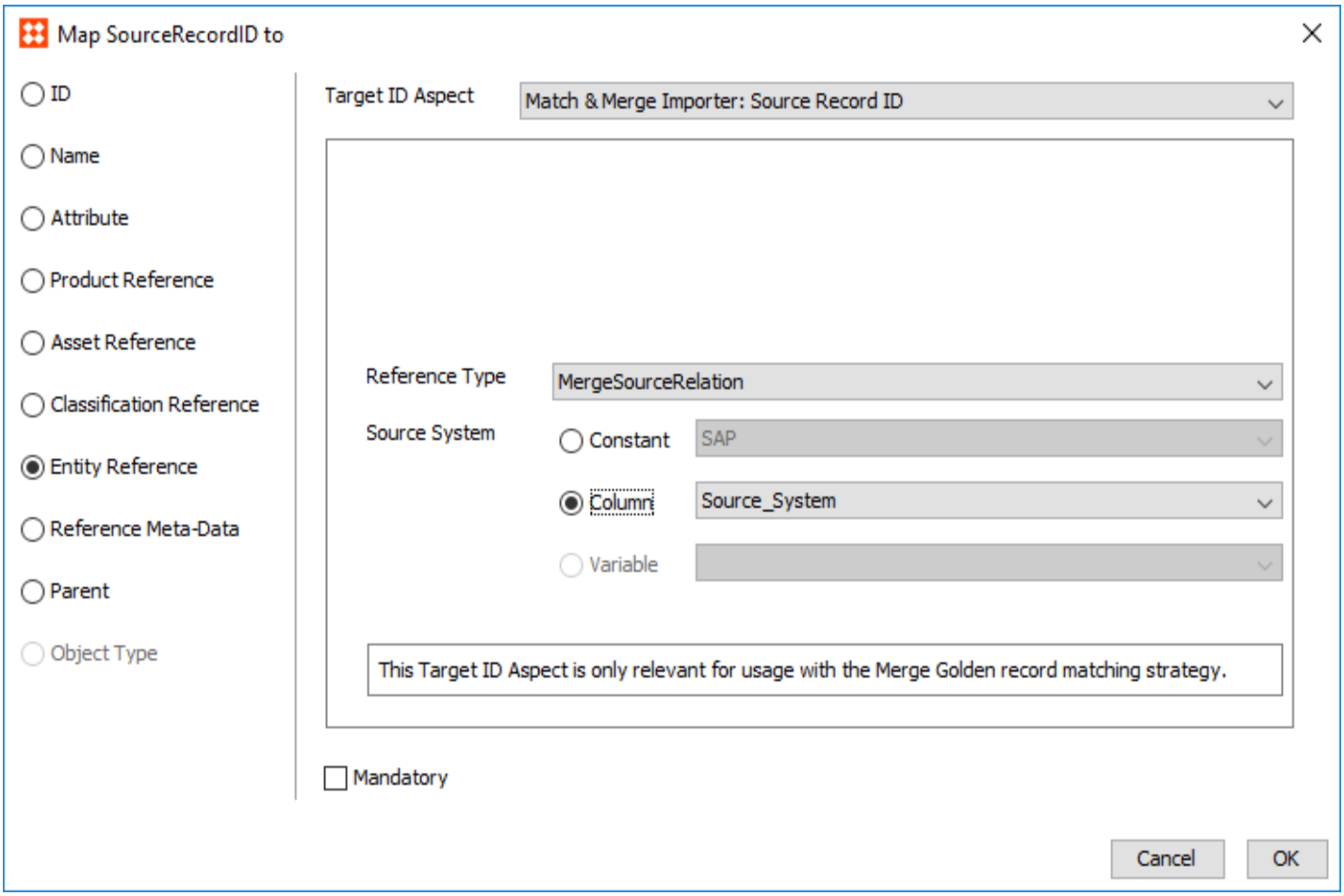


It is also possible to use variables when mapping data container attributes if data container IDs are not provided as a source column in the imported file. This is especially helpful when importing and updating single-instance data containers.

For more information, see the Data Container Attribute - Map Inbound section of the Data Exchange documentation.

Customer Data: New option to create entity references by source record ID upon import

It is now possible to import entities with cross references to other entities via the target entity's Source Record ID. This allows incoming objects to reference other objects that either already exist in STEP or are available in the same import. Previously, it was only possible to import entity-to-entity references via an object's STEP ID, which an upstream system may not have access to.



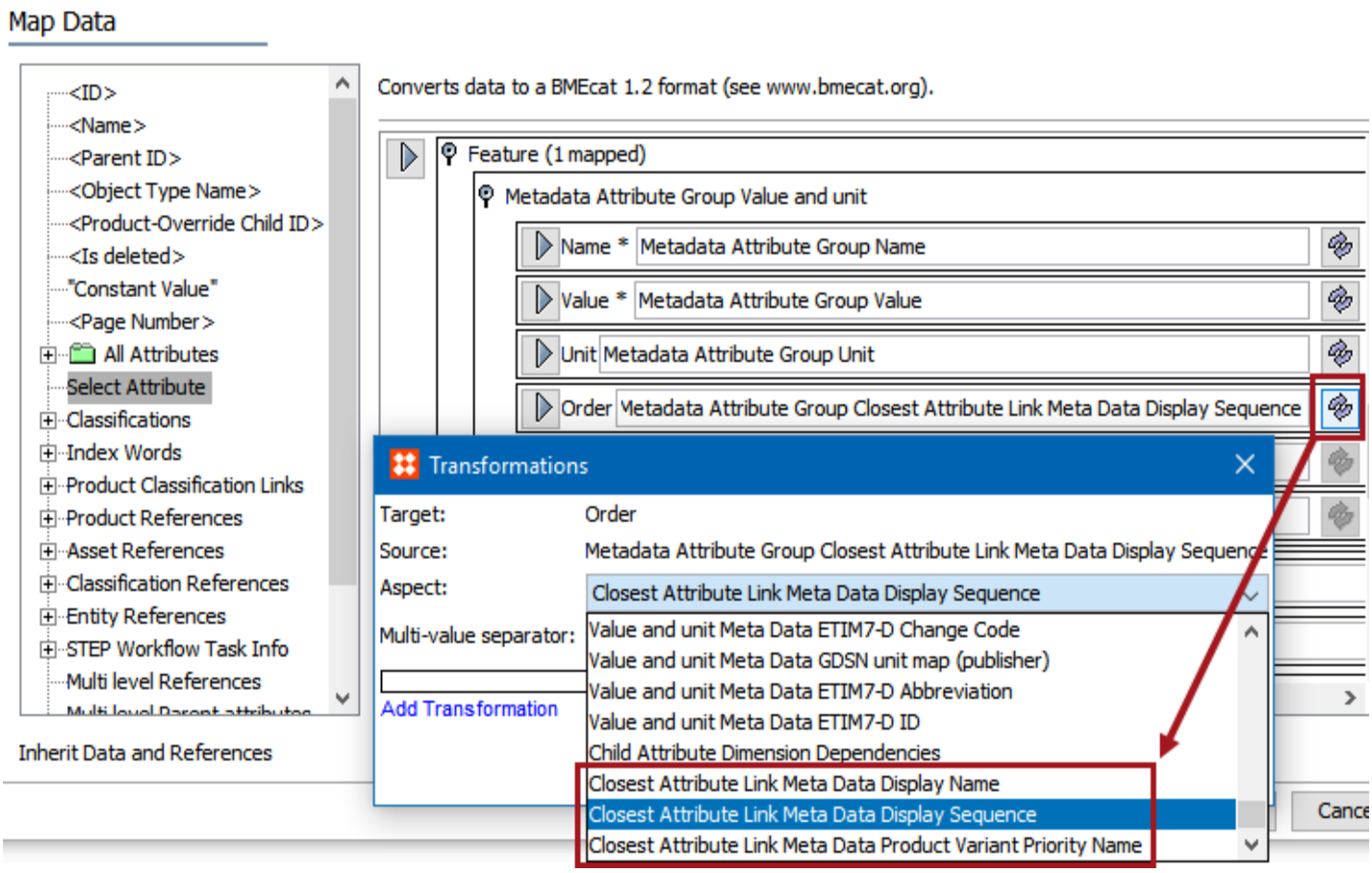
This new feature provides enhanced support for business-to-business customer data solutions that utilize a Match and Merge strategy, and can be included in an Inbound Integration Endpoint used by a Match and Merge configuration.

For more information, see the Entity Reference via Source Record ID - Map Inbound section of the Data Exchange documentation.

Industry standard data exchange formats / classifications updates for BMECat 1.2, BMECat 2005, eCl@ss, ETIM, and UNSPSC

BMEcat 1.2 and BMEcat 2005 export mapping allows for Product Attribute Link metadata for attributes and attribute groups

Previously, the BMEcat 1.2 format did not allow exporting Product Attribute Link metadata attribute values; this functionality was only available for BMEcat 2005. Additionally, the BMEcat 2005 format did not allow exporting Product Attribute Link metadata attribute values for entire attribute groups at once. Now, in Export Manager and OIEP, when mapping data for the BMEcat 1.2 format and BMEcat 2005 formats, the transformation aspect 'Closest Attribute Link Meta Data' is available when mapping both individual attributes and entire attribute groups. This aspect provides access to all Product Attribute Link metadata attribute values and is a way to export metadata located on the link between a product and attribute, such as display sequence or contextual description, and provides additional information about the link relationship. The 'closest' value is defined as the first value encountered, either added directly on the product being exported, or via inheritance by moving up through the hierarchy from the product being exported. When choosing an entire attribute group, the same metadata attribute will be selected for all attributes in the group, e.g., Display Sequence. This data cannot be mapped for formats other than BMEcat 1.2 and BMEcat 2005, nor is it available during import. Additionally, it is only available for links from attributes to product hierarchy nodes and is not valid on attributes inherited from classification nodes.



For more information, see the Aspect - Transform Outbound topic of the Mapping section of the Data Exchange documentation.

STEP now supports eCl@ss 10.0.1, the new ETIM version 7 IXF format, and UNSPSC version 20

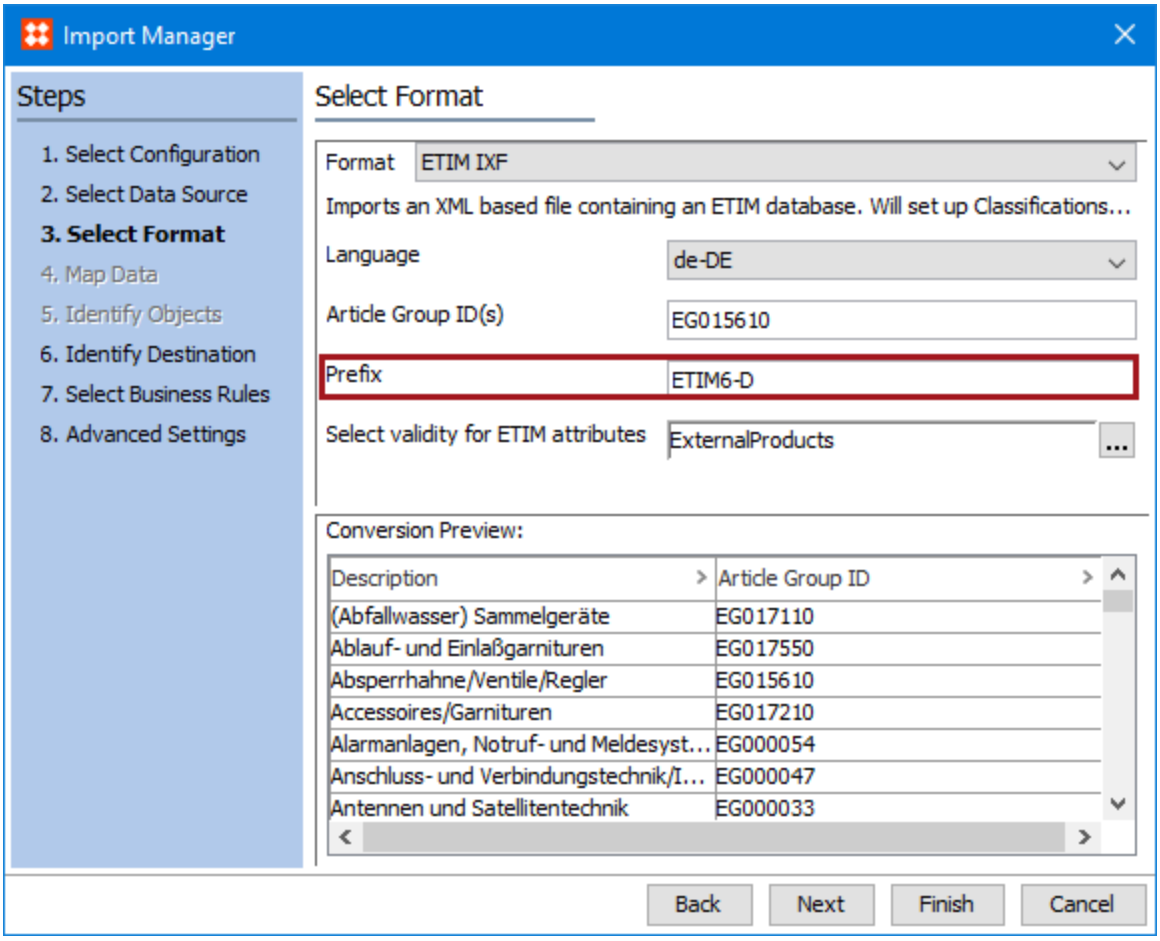
STEP Trailblazer now supports the new eCl@ss 10.0.1 Basic XML format, that includes the six new segments and the new classes, properties, blocks, keywords, and values. For more information about the eCl@ss format, please see the eCl@ss Format section of the Data Exchange documentation.

STEP also now supports the new ETIM version 7 IXF file format. IXF is the ETIM International XML file format. Because STEP supports ETIM 6 and ETIM 7 in the same integration endpoint or file import manager, the ETIM 6 section of the online help has been changed to ETIM IXF and the format plugin has been renamed from ETIM6 to ETIM IXF. For more information, please see the ETIM IXF Format topic in the Data Exchange documentation.

Additionally, STEP supports UNSPSC version 20. There are no changes to the way version 20 is imported versus previous versions. For more information about the UNSPSC format, see the UNSPSC Format topic.

New support for dynamic pre-release ETIM files and support for change codes

In between ETIM major releases, ETIM International releases pre-release or, dynamic versions of their taxonomy structure. STEP now supports pre-release ETIM IXF files and can create a separate taxonomy structure in between major releases. These pre-release files can be loaded one on top of the other so that there are not multiple versions of ETIM pre-release taxonomies or, if a user chooses, multiple taxonomies can be created based on the prefix. For example, a customer can have an ETIM 6 major release taxonomy, an ETIM 7 major release taxonomy, and an ETIM 6 pre-release v1, v2, and v3 taxonomy where each version of the ETIM 6 pre-releases is treated as one structure. Alternatively, each ETIM pre-release file can have its own taxonomy structure. This is controlled by adding a 'Prefix ' option in the Import Manager and in the Inbound Integration Endpoint.



Additionally, STEP now supports the use of change codes sent over in the ETIM IXF files. These change codes will be stored as a metadata attribute and will allow users to search for change codes and keep track of changes or take action on the changes that were made in the file.

For more information about the ETIM IFX format, please see the ETIM IXF documentation.

New option for mapping an LOV Value ID when exporting ETIM files via BMEcat2005

When exporting an ETIM file via BMEcat2005, attribute groups are mapped to the FEATURE field in the Map Data step of the Export Manager. The FEATURE tag has a ?multitarget? annotation so it will iterate through all of the attributes in the mapped attribute group, and extract the values from those attributes. It is a requirement for ETIM that when an LOV Value ID is present, it must be sent instead of the actual value. Previously STEP did not accommodate this. Now, LOV based attributes can be mapped in the Export Manager so that if a LOV Value ID is present the LOV Value ID will be sent, and when a LOV Value ID is not present, the actual value would be sent.

For more information about BMEcat2005, see the BMEcat2005 Format documentation.

For information about the ETIM format, see the ETIM Format documentation.

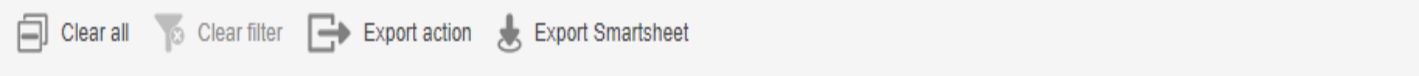
Improved Smartsheet exporting solutions

Smartsheets can be exported based on the sorting order defined by the user for component headers in the Web UI

Previously, STEP Smartsheets were exported based on the order of the first column listed in a details screen and not exported based on the way the user sorted the data in the Web UI. Now a user can sort the data within the Web UI and when the data is exported, the Smartsheet maintains this sorting order. While all component headers are sortable, not all can be sorted and then exported into a Smartsheet. Compatible sortable headers are:

- ID
- Title
- Name
- Attributes
- Attribute Groups
- References

Select the sorting function at the top of the column you want the Smartsheet data sorted in as shown in the image below.



	ID	Name	Brand	GTIN	Description Long	GTIN Name
Acme 8oz Che...	230810	Acme 8oz Cheddar Cheese cs		00021000625055		
Acme 8oz Che...	230812	Acme 8oz Cheddar Cheese pk		00121000625052		
Acme 8oz Che...	230809	Acme 8oz Cheddar Cheese pl		00221000625059		

The STEP Smartsheet will remain sorted this way when exported and throughout its use.

* <Name>	<ID>	Brand	GTIN	GTIN Name	Description Long
Acme 8oz Cheddar Che	230810		00021000625055		
Acme 8oz Cheddar Che	230812		00121000625052		
Acme 8oz Cheddar Che	230809		00221000625059		

If a multi-level Smartsheet is exported, only the top level nodes will reflect the sorting order.

For customers that prefer to keep the previous Smartsheet export functionality, the following property in the sharedconfig.properties' file should be set to false (as shown).

```
SmartsheetConverter.SmartsheetWebUISortOrder=false
```

For more information about Smartsheets in Web UI, see the Web User Interfaces documentation.

New Smartsheet export solution for including supplier-specific LOV filters

A new plugin system has been introduced that allows List of Values (LOV) values filtering to be included when exporting Smartsheets. The filter from such a plugin is then combined with the normal LOV filters on attributes and attribute links in the product hierarchy. The resulting LOV in the filter Smartsheet is then the intersection LOV values from all applicable filters, which is standard behavior in STEP.

A plugin of this type has been created providing supplier-specific LOV filtering. The plugin supports LOV filtering associated with the attribute links between the special supplier classification and LOV attributes and applies if a Smartsheet is exported by a supplier user in the Web UI. The filter will have no effect if the user is member of multiple supplier groups and supplier “all-view” is enabled in global settings. This plugin ID is SmartsheetSupplierLOVFilter.

The use of a filter plugin is optional and not configured by default. A filter plugin can be developed by custom development and then applied by setting SmartSheet.ExternalLOVFilter.Plugin=[plugin ID] in the sharedconfig.properties file where [plugin ID] is the actual ID of the custom-developed plugin. There can only be ONE active plugin at any time.

For more information, see the Excel Smartsheet Format section of the Data Exchange documentation.

New Business Rule Type: Business Functions

Summary

Trailblazer 8.3 introduces a new type of business rule called business functions. Business functions are basic units of logic that produce an output from an input without affecting the state of data in STEP. Business functions will typically serve as 'helpers' for business logic, allowing other rules to delegate a part of their logic to reusable business functions.

With 8.3, it will be possible to use business functions from:

- JavaScript business action plugins
- JavaScript business condition plugins
- JavaScript business function plugins
- Business rule plugins developed via the Extension API (conditions, actions, and functions)
- Integration endpoint plugins developed via the Extension API
- Event processor plugins developed via the Extension API

In Trailblazer 8.3, business functions are restricted to produce Java String output.

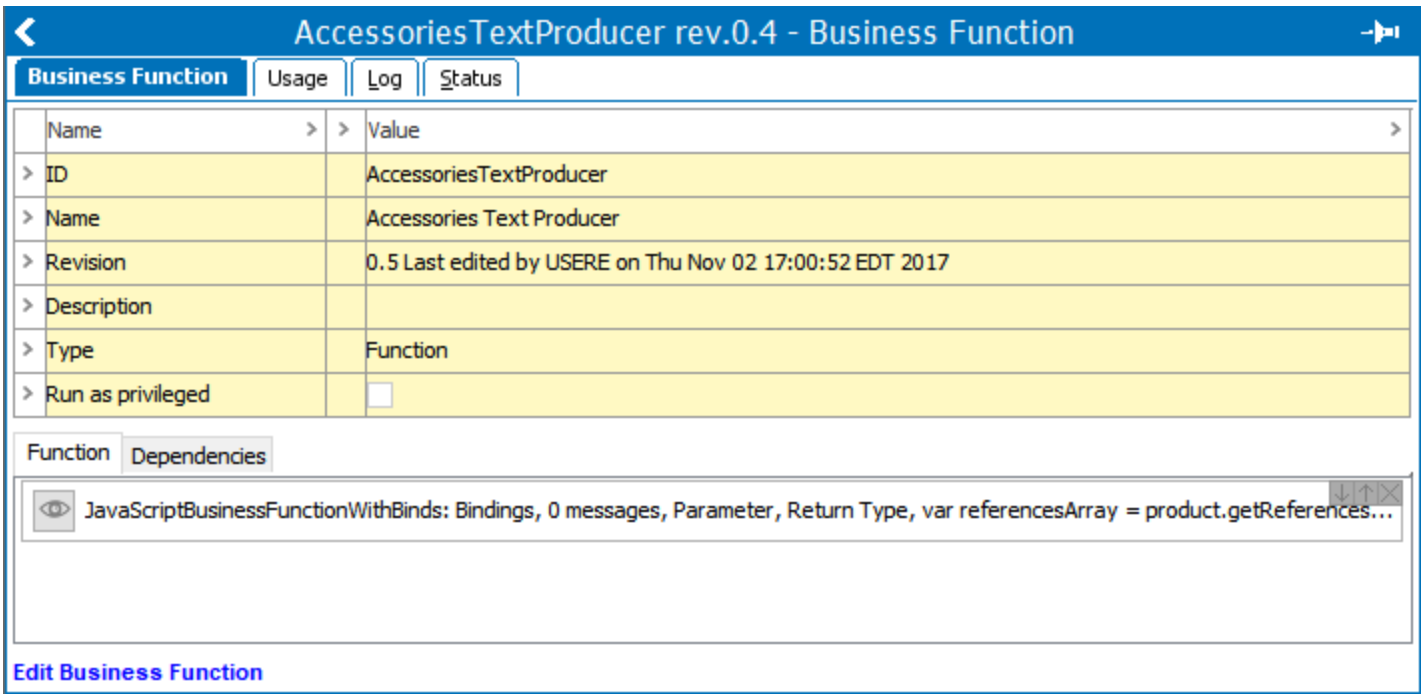
Details

Configuration

The business function business rule option is available for creation in System Setup. To create a new business function, a setup group type must have been configured for this object type. For information on setup, see the Initial Set Up for Business Rules topic in the Business Rules documentation.

Unlike actions and conditions, business functions are not made valid for specific object types. This is because there is no 'Current Object' concept with business functions. Business functions also lack the 'Applies If' precondition that is available on business actions and conditions. Finally, business functions only allow for a single plugin to be configured per business function object.

The ability to create and maintain business functions is controlled via the existing 'Maintain business-rule' setup action.



The JavaScript business function operation

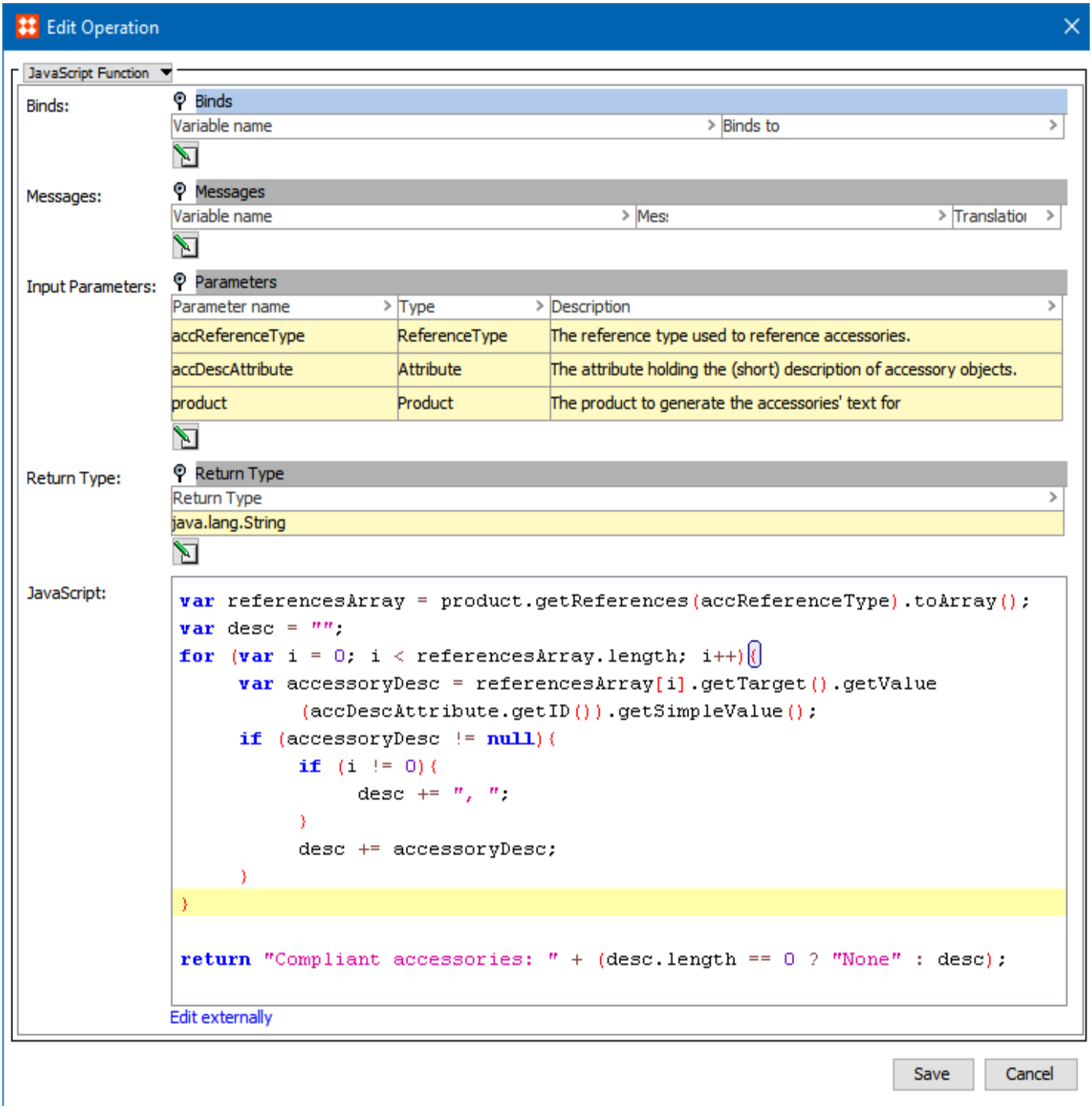
While configurable business functions can be created via the Extension API, the only plugin type available out-of-the-box is the 'JavaScript Function' operation. For information on these configurable business functions, see the STEP API Enhancements and Updates release note.

As illustrated in the screenshot below, the 'JavaScript Function' operation allows users to define a set of input parameters that must be populated by the functionality evaluating the business function. The input parameters are like 'binds' that are bound to variables available in the JavaScript code. These binds are dynamic binds which will resolve in the context that they are called whereas static binds are set ahead of time and unchanging.

A JavaScript business function produces its output via the 'return' statement. The return type must match the declared return type. For STEP Trailblazer 8.3, only String types are available.

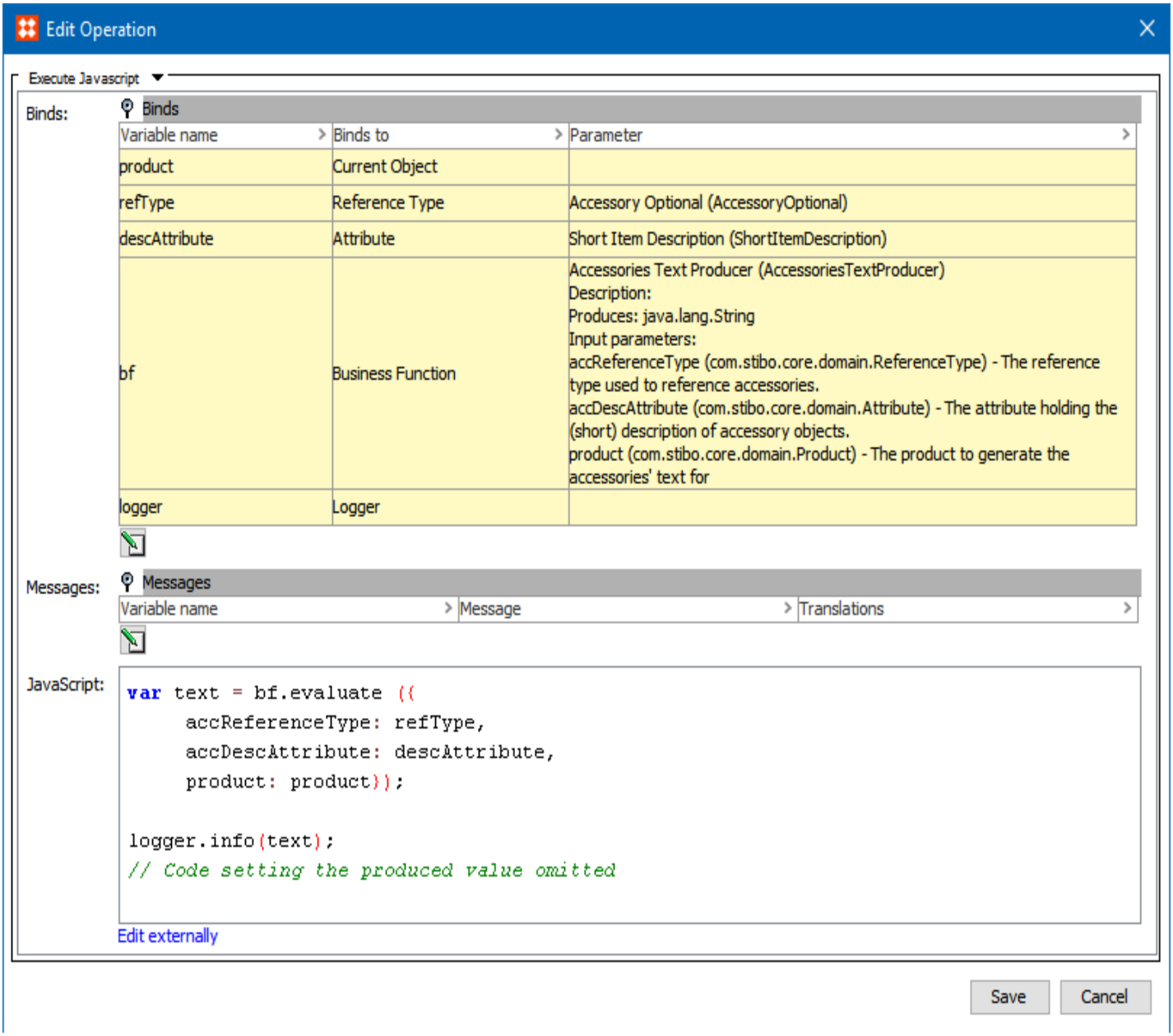
Business functions, like business actions, can define error messaging with the 'Message' objects.

Since all the data for a business function is provided with input parameters, there are fewer bind options available to functions compared to conditions and actions. Thus, the only dynamic binds available are 'STEP Manager' and 'Logger.'



Evaluating a business function from a JavaScript business rule

Business functions are made available to other business rules via a new 'Business Function' bind option. As illustrated below, when a business function is bound to another business rule, the calling business rule will show the needed input and expected output of the business function.

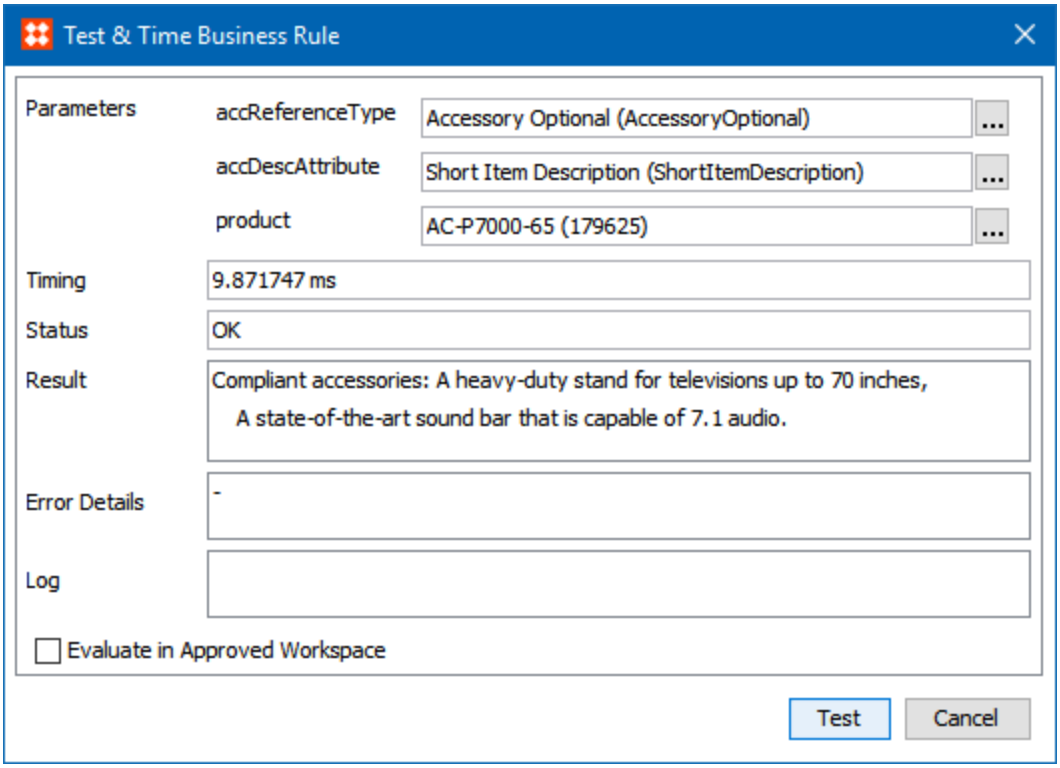


The business function bind provides access to an object implementing the BusinessFunctionScriptingProxy interface. For more information on the Extension API, see the 'BusinessFunctionScriptingProxy' interface in the Public Scripting API JavaDoc.

'Test Business Rules' dialog for business functions

In the business function test dialog, it is possible to specify the different types of input parameters required to evaluate the business function.

The result field will show the string representation of the output, and if there's an error, the 'Status' will show an error, with the 'Error Details' providing a stacktrace.



For more information on business rules and business functions, see the Business Rules topic, as well as the Business Functions topic, in the Business Rules documentation.

Enhanced Web UI Performance and Navigation

Summary

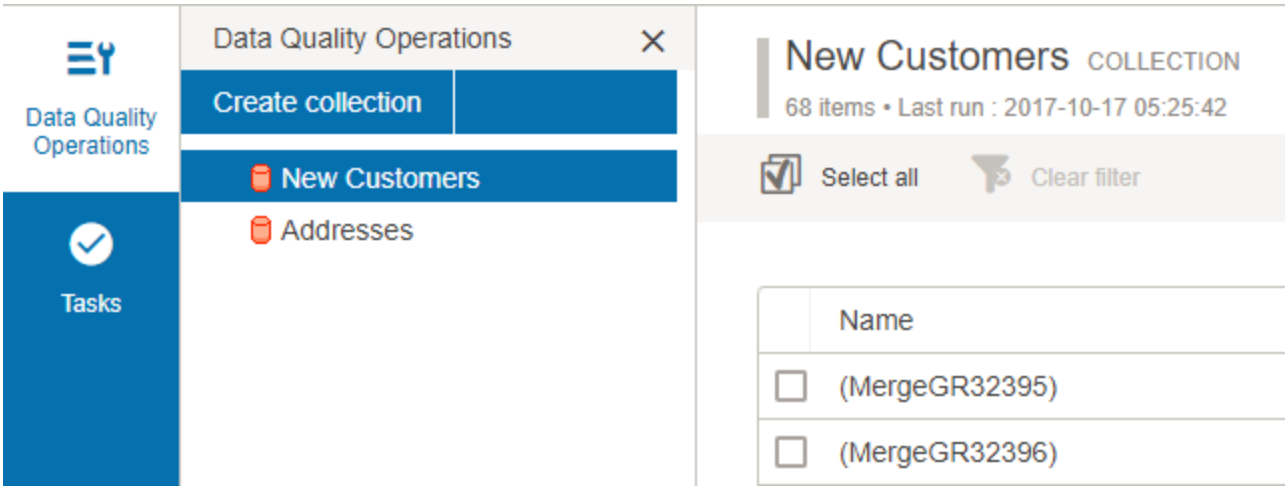
The following changes and additions have been made to improve the overall performance and/or navigation in Web UI:

- A new Customer MDM-specific navigation panel has been added to the Web UI that provides a centralized location for reviewing user tasks and handling collections.
- Two new components have been added to the Web UI, each of which display the most relevant information about entities / collections in a brief summary at the top of the node screen.
- Web UI navigation using the browser's 'Back' button has been updated to improve accurate movement through the sequence of pages viewed.
- System performance has been improved when working with large attribute groups.
- Typeahead is now the default control type for large, multi-valued LOVs.
- Guided Navigation, a new feature that breaks the enrichment process into more manageable steps, is now available to be added on Node Lists.

Details

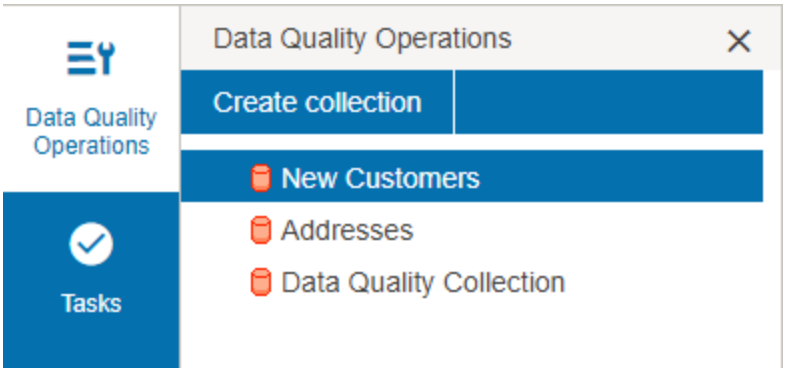
Customer Data: New navigation panel for Web UI

A new icon-based navigation panel has been added to the Web UI for those working with Customer MDM functionality, offering users a streamlined alternative to the more complex Stack Panel menu. This new Primary Navigation panel menu can be configured with a centralized task menu and a collection navigator. Like the Stack Panel, the Primary Navigation panel is present on all screens and will remain available while navigating the Web UI and browsing content.

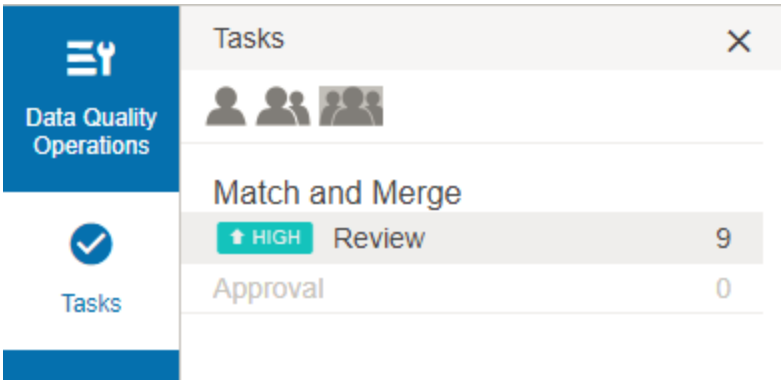


While the Stack Panel menu may serve a larger variety of functions, the Primary Navigation panel menu offers a sleeker and more consistent UI, and a tighter focus on end-user tasks. In addition, both the collection navigator and task menu offer enhanced functionality.

The Data Quality Operations child component can be configured to display specific collections. Collections can also be created via this component.



The Task child component provides an overview of a user's workflow tasks by organizing them into related groups, and displays them together in one centralized location within the Primary Navigation panel menu. With these configurable groups, users can create logical subdivisions of related tasks, providing them quick access to other workflow states without needing to navigate back to the homepage. Additionally, configured states can be filtered by assignee or even hidden if there are no tasks in a given workflow state. Task priority is driven by Status Flags and can be indicated if applicable.



For more information on the Primary Navigation panel, see the Primary Navigation Panel Component section of the Web User Interfaces documentation.

Customer Data: New summary components for entities and collections in Web UI

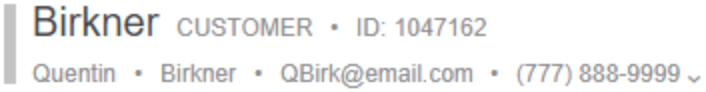
It is now possible to add summaries to entity objects and collections in Web UI. Two new components, Entity Summary and Collection Summary, can be added to a node details screen. When added, these components display the most relevant information about the entity / collection in a brief summary at the top of the screen. If working with customer data, this component fits nicely with the Primary Navigation panel mentioned above.

Previously, the only component that could be configured underneath the title was the Breadcrumb component. With the introduction of these two new components, the 'Breadcrumb' parameter on Node Details has been renamed to 'Below Title,' and the Breadcrumb component itself has been changed to a selectable option within 'Below Title,' alongside the Entity Summary and Collection Summary components. The Collection Summary component is also available on Collection Content screens.

The Collection Summary component is not configurable and automatically displays:

- The name of the collection node
- The number of items in the collection
- The last time the collection was updated

The Entity Summary component can be configured to display relevant attributes and data container attributes. If multiple values are present, such as in the case of a multi-instance data container, a dropdown is provided for the attribute that displays all values.



For more information on the Entity and Collection Summary components, see the Below Title Component section of the Web User Interfaces documentation.

For a more streamlined overall experience, customer MDM users should consider using these components alongside the Primary Navigation Panel described in the above section.

Improved support for using browser's 'Back' button

An improvement has been made to how effectively users can navigate in the Web UI using the browser's 'Back' button. Previously, some users experienced a disconnect between the actual last screen they viewed in the Web UI and the page the browser's back button took them to. For instance, users working in a workflow task list would click into an item, then on an ID referenced in that item, which then took them to a third screen specific to the clicked object. In instances when the 'Use Details Overlay' parameter was enabled on the node list, clicking the browser's 'Back' button at this point would take the user not to the screen specific to the task list item, but all the way back to the task list, in effect skipping a screen. Now, regardless of the setting for 'Use Details Overlay,' the chain of Web UI pages viewed is assessed correctly in the Web UI, enabling the browser's 'Back' button to take users to the actual last page viewed.

Web UI performance improvements for Attribute Value Group Components

Users with STEP systems featuring large attribute groups (1,000+ attributes) may see appreciable increases in performance (load time) when working in the Web UI via the Attribute Value Group Component. Improvement is

especially seen when working with deeply nested groups (not just single large ones).

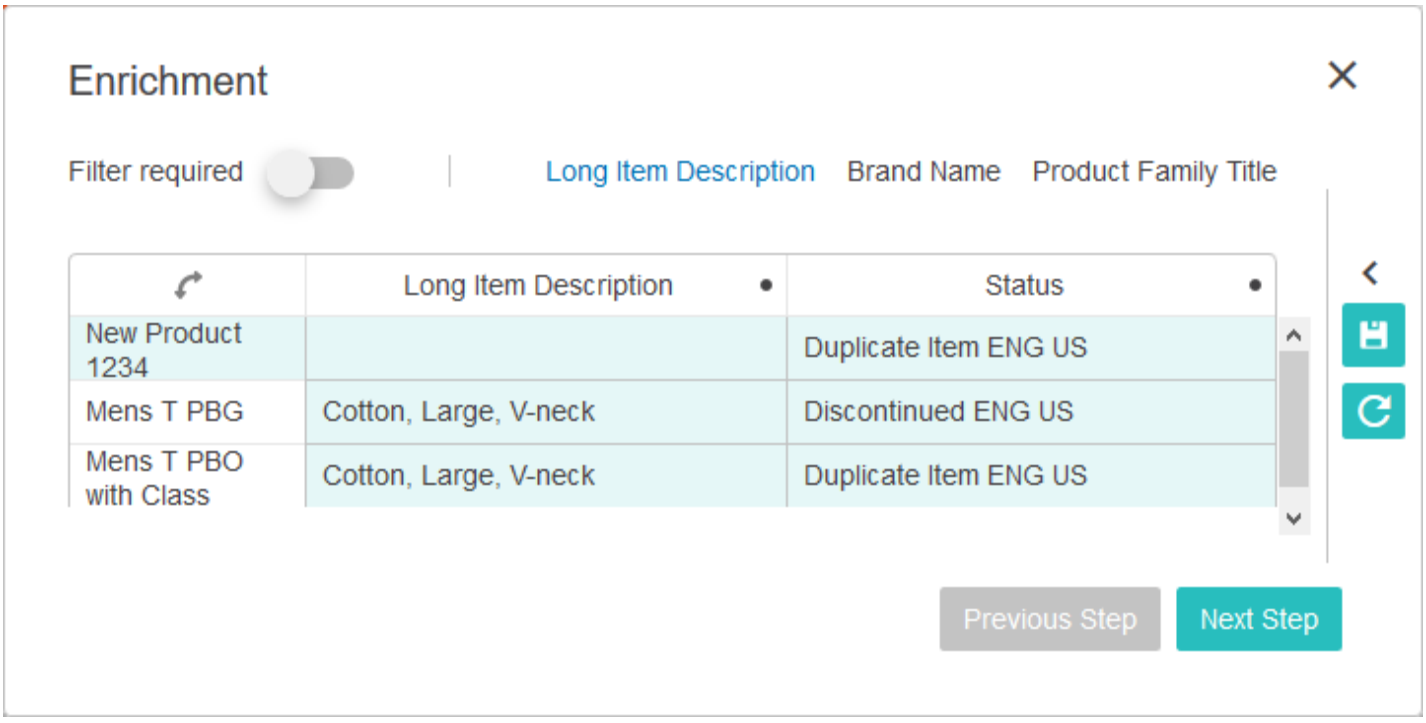
Typeahead default control type for large, multi-valued LOV attributes

In order to help improve Web UI performance, the override control type for multi-valued List of Values (LOVs) attributes that use LOVs with 5,000 or more values will now automatically default to typeahead, regardless of the override control type selected. Previously, this automatic default was only applicable to single-valued LOV attributes. To illustrate, if a user selects 'Checkbox' as the override control type for List of Values, but an LOV has 5,000 or more values in it, the system will disregard the 'Checkbox' selection and revert to 'Typeahead.' This means users will only be able to select a value from that LOV by beginning to type the desired value and then selecting the appropriate value from the list that displays. This enhancement will improve system performance because display of some LOV control types on large LOVs, like checkbox and radio buttons, can be taxing to system resources, resulting in appreciable performance issues. It is important to note that this reversion to the typeahead default applies whether the large multi-valued LOV attribute is configured at the screen level or through a global Override Control Type Rule.

For more information on override control types, see the Override Control Type Rule section in the Using a Web UI documentation.

Guided Navigation in Web UI

Enriching large numbers of products and entities with useful information can be a daunting and complex task. To address this challenge, admin users may now enable Guided Navigation in the Web UI, a new feature that breaks the enrichment process into smaller, more manageable steps. Guided Navigation can be configured to help users through the process of enriching products and entities through a step-by-step, screen-by-screen progression.



Primary configuration of Guided Navigation is done via a wizard in the workbench. Once the 'stepper' has been created, the Web UI can then be configured to connect the 'stepper' to a new Guided Navigation toolbar action in Web UI. This toolbar action enables users to move all items selected on a Node List into the Guided Navigation where the items will display in a Multi Edit view. When the mandatory tasks configured for the first step have been completed, the user may then move to the next step by clicking a 'Next' button. The tasks users will do for each step include adding attribute values or creating references.

As an example, if a customer wants to set up Guided Navigation to enrich a series of alarm clock products, an admin would first create a 'stepper' object in workbench that records which steps are included in the Guided Navigation, and also which tasks within each step are mandatory. In the Web UI, an end user would select the products to enrich from a Node List, click the Guided Navigation toolbar action button, and be taken directly into the first step of Guided Navigation where a set of mandatory attributes requiring values are displayed. Products would then be enriched by the end user in the order determined by the Guided Navigation configuration.

For more information, see the Guided Navigation section of the Web User Interfaces documentation.

New and Enhanced Web UI Functionality and Features

Summary

The STEP Trailblazer Web UI features a number of improvements for the 8.3 release. These include:

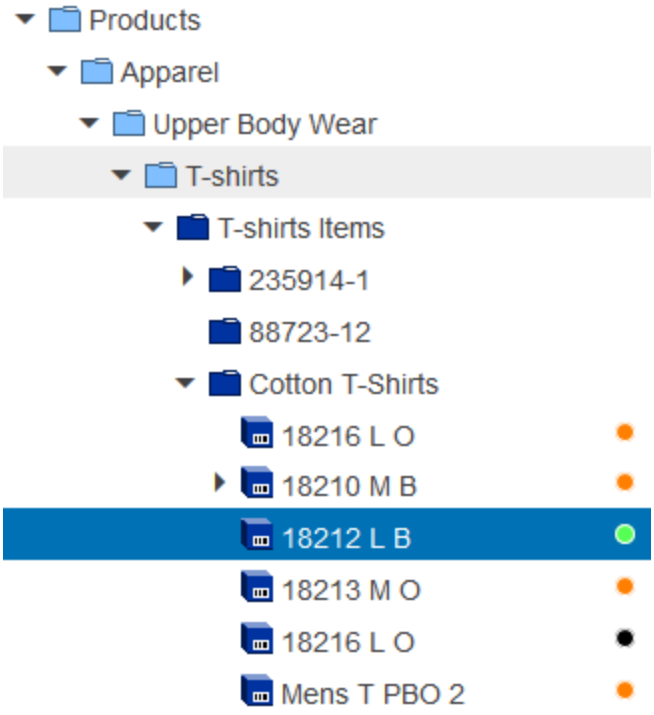
- Colored dots that visually indicate content on an object may now be configured to appear on nodes and objects in Tree Navigator, Node Pickers, and in typeahead
- Tables in Web UI may now be configured to dynamically format their dimensions based on cell content
- The experience of accessing multiple Web UIs in the same browser has been enhanced
- New enhancements to STEP Data Visualization in the Web UI
- The new File Loading homepage widget allows users to select, or drag and drop, one or more files from their local machine for asynchronous transfer into a STEP hotfolder
- A new component has been added to Web UI that enhances the overall user experience of editing data containers and improves how they are displayed
- The root nodes that display in the Add Reference action in Multi Reference Editor are now configurable
- Attributes can now be linked to products and classifications from the Attribute Management screen
- Attributes inherited through context are now indicated visually in Web UI
- New search bar for global header may now be added that enables users to search instantly
- Asset preview pop-ups can now be closed by clicking outside the pop-up
- The display of secondary tabs is now streamlined to aid usability
- The availability of headers to add to various components is now based on relevance to the component
- The display of attribute groups and values sections has been updated for clarity
- The List of Values Management screen has been updated, both visually and functionally, to enhance usability
- The Collection List Screen now provides full display of Collection Groups
- The '<' and '>' characters now display correctly throughout Web UI
- Additional visual updates to the look and feel of Web UI have been added to enhance the user experience
- Smartsheets can be exported based on the sorting order defined by the user in the Web UI
- Updates to the labels and the documentation of parameters in the Web UI designer theme tab

Details

New visual indicators on nodes in Web UI

Users may now configure nodes in the Tree Navigator to display with a colored dot to indicate objects containing a specific attribute value on a particular attribute. This allows users to identify, at a glance, a specific object structure

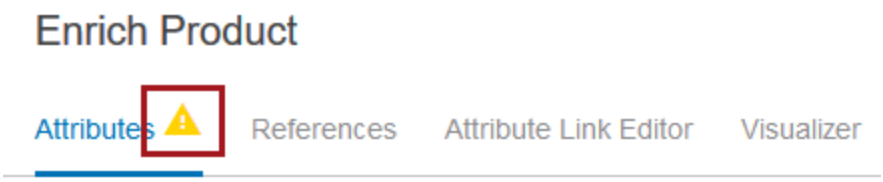
that has some meaning to the user, e.g., red dots to indicate which objects need user attention or various color dots to identify objects based on specific statuses. Hover text can also be configured for each trigger value so that users know more about the meaning of each indicator.



Configuration allows for one attribute per Web UI to be configured under multiple object types with a variety of value / color / hover text combinations. Set up is done via the new 'Alternate Node Appearance' component (located on Main > Global Representation List). Once configured, these colored dot visual indicators will appear not only in the Tree Navigator, but also in the 'Browse' and 'Search' tabs in a Node Picker dialog, as well as in typeahead dropdowns.

To ensure the colored dot is always visible regardless of the width of the Tree Navigator, the appearance of all node titles in the Tree Navigator has also changed. Previously, when the Tree Navigator was manually narrowed to the point where the ends of the longer node titles were obscured, a horizontal slider would display at the bottom of the Tree Navigator that allowed the user to view all parts of the node titles. Now, when the Tree Navigator is narrowed to the point where parts of the node titles are obscured, the titles will truncate into an ellipsis, like this:

Also as a result of this new feature, the tab page data error indicator has been updated. This indicator displays beside a tab title when there is any type of error that impacts the data displayed on a tab (a validation error or missing mandatory value). As the previous yellow warning dot / circle could be confused with one of the visual indicator dots that is part of this new feature, the warning icon has been changed to a yellow triangle with an exclamation point in the center:



For more information on how to configure the Tree Navigator to display nodes with visual indicators, please see the Main Properties Overview section of the Web User Interfaces documentation.

Dynamic table layout

Tables that display on a Node List screen can now be configured to automatically resize columns and rows based on the amount of content appearing in a cell. Previously, the dimensions of rows and columns could be set, but these settings were rigid and could not automatically adjust to cell content of varying lengths. If the dimensions of columns and rows were set too narrowly, cells with content exceeding those dimensions would truncate, and their content could only be viewed by either manually resizing the columns and rows, or via a hover-over dialog. Now, tables appearing on a Node List in either the Multi Edit or Compare View display modes will expand (or contract) dynamically based on the content in the cell. The dynamic formatting will be done both to accommodate existing table content and new content added in real-time.

To use this new functionality, the Dynamic Table Layout Settings component must be added in the Global Representation List, located on the Main screen in the designer. When added, the tables will dynamically adjust row width until hitting either a default (or configured) maximum width, and then expand row height as needed. This 'First out, then down' logic helps ensure dynamically formatted tables do not expand to the point where readability is negatively impacted. Enabling the Dynamic Table Layout Settings component and any settings configured therein apply to Web UI tables across the Web UI. Configuration of the minimum and maximum row / column height parameters allows users to further define how much the tables will flex to suit the cell content.

For more information on configuring the Dynamic Table Layout component, see the Dynamic Table Layout section of the Web User Interfaces documentation.

Improved handling of multiple Web UIs in the same browser

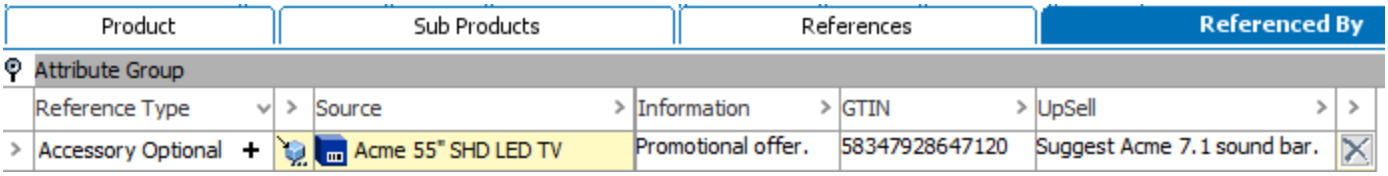
Users may now access multiple Web UIs in the same browser. When logged in to a Web UI, additional Web UIs may be opened in the same browser (in new tabs or windows) using the same username, without having to re-enter login information. If the user must then log in to a Web UI with a different username, he or she must first log out of one of the open Web UIs. Once logged out of any open session, all other sessions will automatically end, revert to the login screen, and display a notification that reads, 'You are now logged out of the Web UI.'

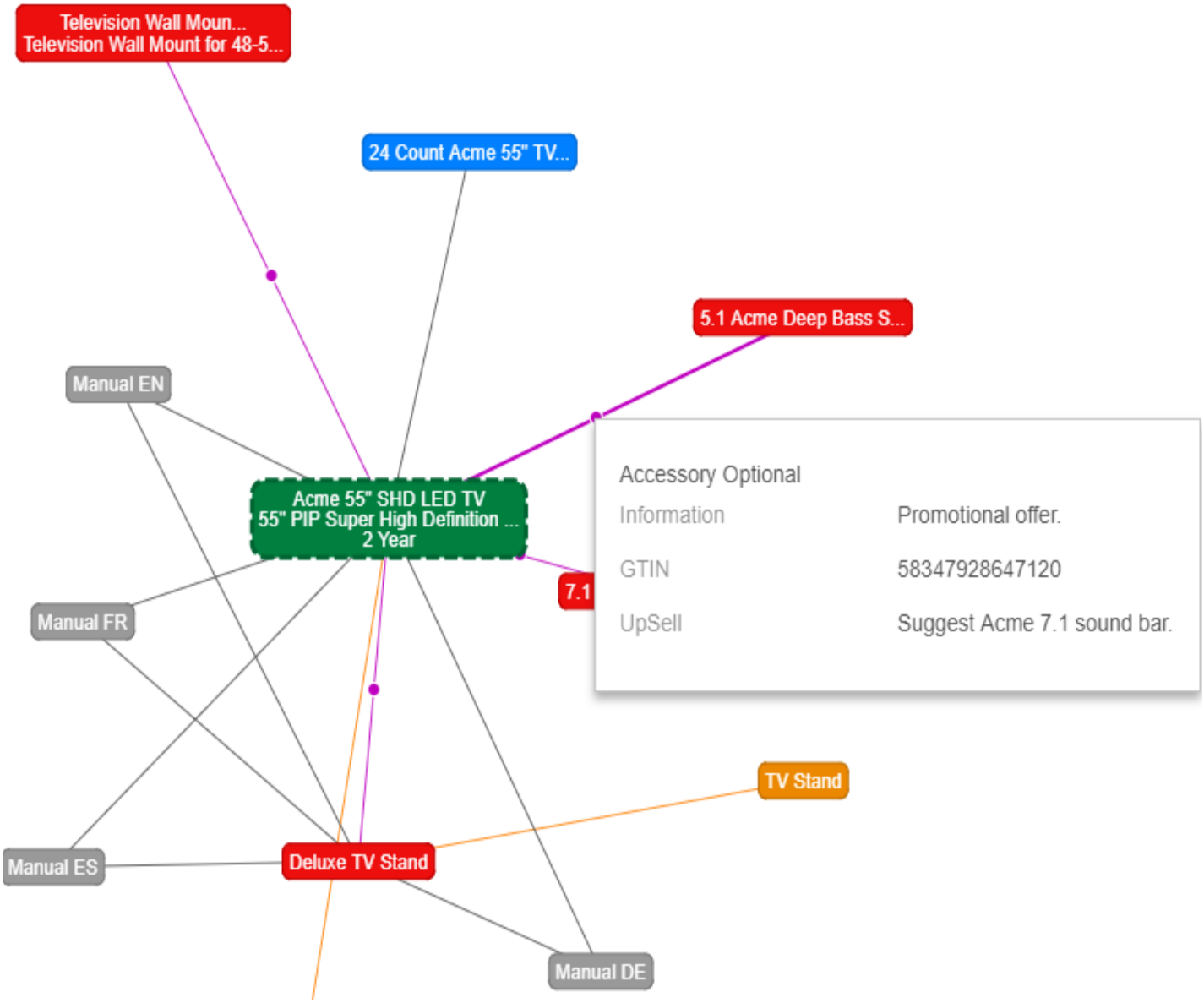
Once logged out of all open sessions, users are able to log in to a Web UI using a different username.

For more information on accessing a Web UI, please see the Accessing a Web UI section of the Web User Interfaces documentation.

STEP Data Visualization enhancements

Users of Data Visualization can now see the attribute metadata on the references between objects and the reference type by hovering over the dot on the references between objects.





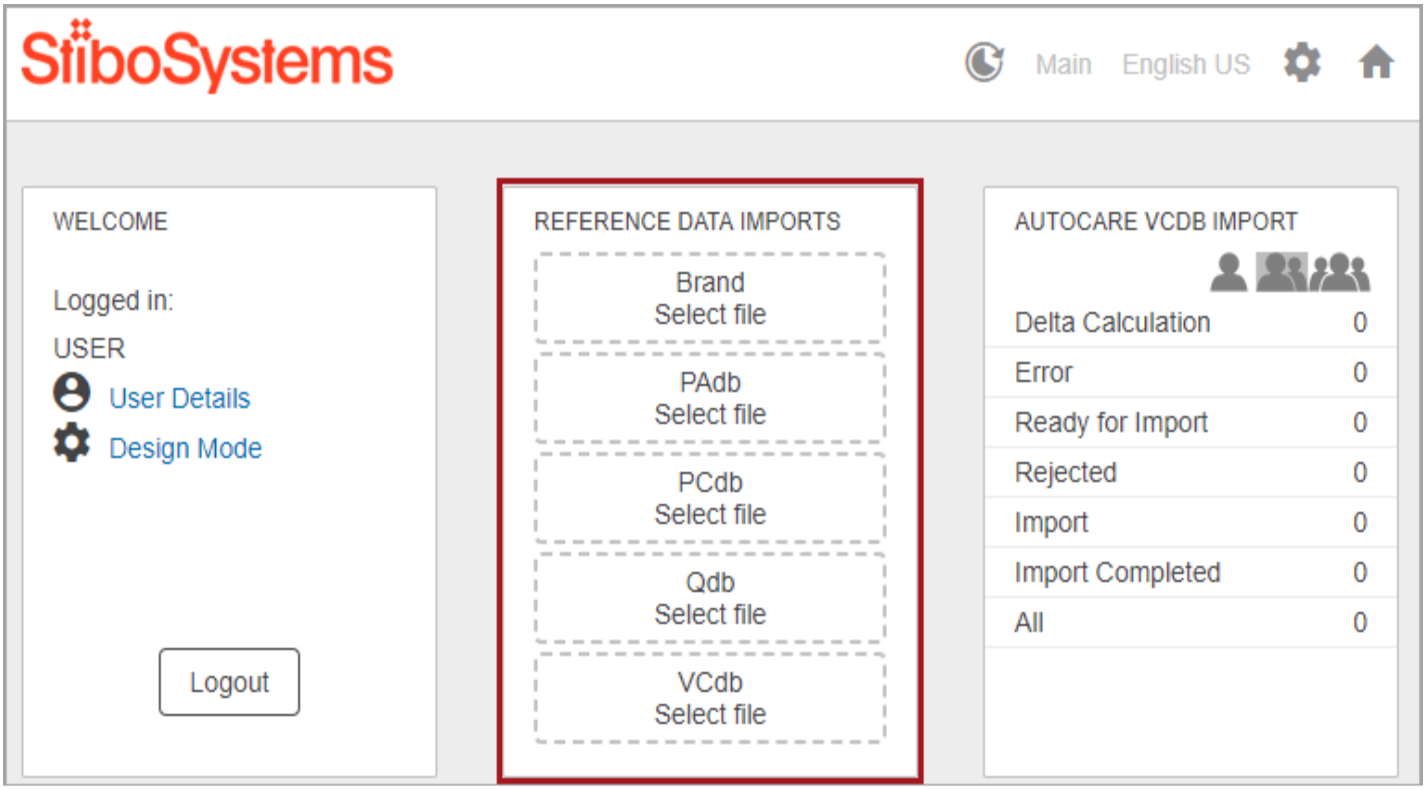
Additionally, the data visualizer now has a color picker in the color property fields so that the user can choose a color instead of entering the value. Previously, when choosing a color for object types and references, the hexadecimal color values had to be entered. This ability to enter the hexadecimal color value is still available for users who prefer to enter the value manually in the designer in the popup dialog.

For more information about STEP Data Visualization, please see the Data Visualization documentation.

New File Loading widget and background process notification improvement

The new File Loading widget is accessible from a Web UI homepage, and allows users to select, or drag and drop, one or more files from their local machine for asynchronous transfer into a STEP hotfolder. Previously, other import widgets could only be configured to use a preexisting import configuration. Now, the new file loading widget can be linked to hotfolder-based Inbound Integration Endpoints (IIEPs). Ideally, the IIEPs configured for use with the file loading widget should be scheduled to automatically pick up import files within a desired interval. This allows users to use the Web UI to easily transfer files into the application server hotfolders.

In the example below, a file loading widget has been configured with the title 'REFERENCE DATA IMPORTS,' and allows for five different IIEP drop zones.



Additionally, a new section has been added to the Background Process Notification component. When the file loading widget is used to transfer files, then the Background Process Notification side panel will display a separate section titled 'File Uploads,' allowing users to follow the progress of their file transfers while continuing to use the Web UI.

More than one File Loading widget can be added to a Web UI homepage, and more than one IIEP can be configured within each File Loading widget. Depending on how the IIEP is configured, users can transfer either zipped files less than 50GB or standard files less than 600MB. Subsequent handling of files will occur only if supported by the corresponding IIEP. For example, if the IIEP is configured to process a .ZIP file, and a standard file is selected for import, then the IIEP will error out.

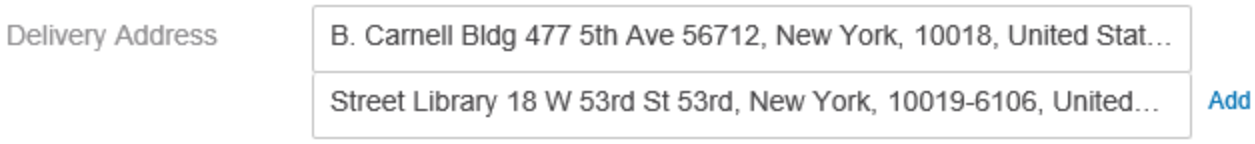
This widget is only compatible with hotfolder-based IIEPs, and users should be aware that Microsoft Internet Explorer and Edge browsers do not support drag and drop, therefore when those browsers are used, and a file is drag and dropped onto the widget, STEP displays a message indicating that drag and drop is not supported, and a file browser window is automatically displayed for the user to select a file for import.

For more information, see the File Loading Widget topic within the Homepage Widgets section of the Using a Web UI documentation.

New component for displaying and editing data containers in Web UI

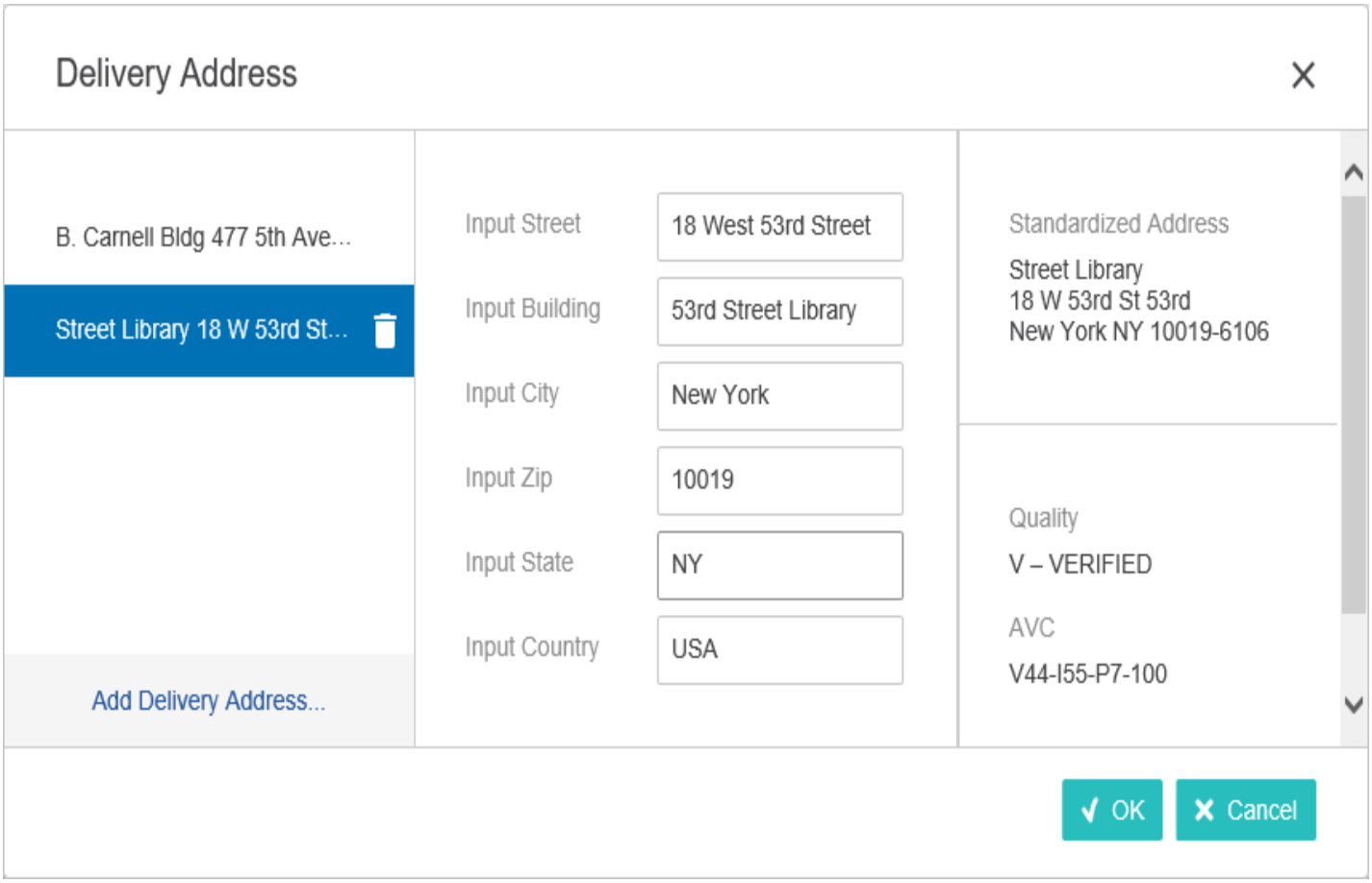
A new data container component has been added to the Web UI that offers users an improved method of displaying and editing data containers. Previously, data containers could only be edited and displayed in the Web UI via the Data Container Editor component. Now, a replacement component, the Data Container Popup Editor, has been introduced to enhance the overall user experience of editing data containers and improve how they are displayed. This new component is optimized for customer data such as addresses, emails, and phone numbers.

The new Data Container Popup Editor can be configured on a Node Details component and can display both single-valued and multi-valued data container types in a similar manner to how attribute values are displayed.



In addition, data containers can be added and edited with the Data Container Popup Editor, which provides an overview of all data containers within the configured multi-valued data container type. The editor also separates the relevant data into different sections, which include:

- Editable values: This is a mandatory section that provides users with the attributes that should be edited.
- Standardized attributes: This section is relevant for a data model where addresses, phone numbers, and emails are modeled with data containers that contain standardized attributes for storing, for example, address values received from third-party address standardization services, such as Loqate. This section is an optional configuration.
- Metadata attributes: This section is relevant for a data model where addresses, phone numbers, and emails are modeled with data containers that contain attributes for storing the validation status received from third-party validation services. This section is an optional configuration.

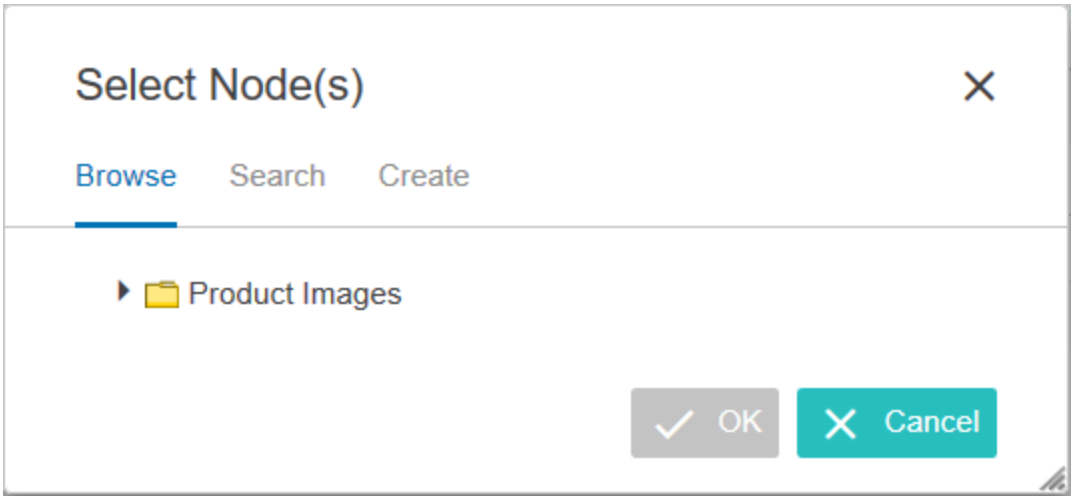


For more information on using and configuring the Data Container Popup Editor, see the Working with Data Containers in Web UI section of the Web User Interfaces documentation.

The Data Container Popup Editor can also be used during the clerical review step of the Match and Merge process in order to edit data containers that appear within Advanced Merge Data Container header component of the Advanced Merge Dialog. For more information on the Golden Record Advanced Merge dialog, see the Golden Record Advanced Merge Dialog section of the Web User Interfaces documentation.

Define root node for Add Reference action in Multi Reference Editor

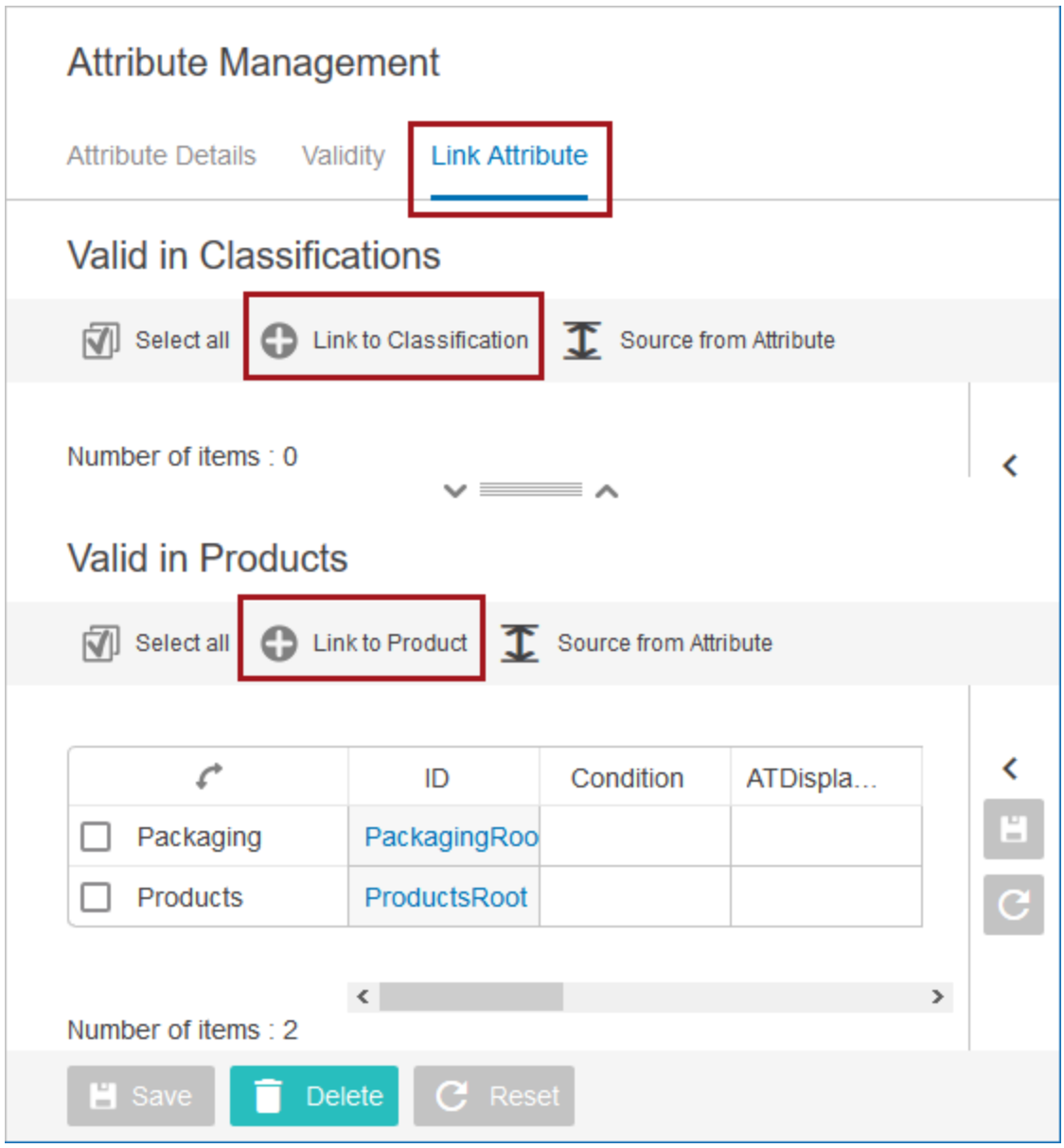
A new 'Root Node URLs' parameter provides an additional level of configurability to the Add Reference action in the Multi Reference Editor. Previously, users executing the Add Reference action in the Multi Reference Editor were required to select from all user-privileged nodes when choosing a target or source object to reference. Particularly in cases in which the user is likely to select a reference object from just one or two nodes, selecting from all user-privileged nodes for each Add Reference action could be needlessly time-consuming. Now, the Web UI supports configuration of the Add Reference action so that only those nodes the user needs to see will be available in the node picker. In the screenshot below, the Root Node URLs parameter has been configured to show only one classification node (Product Images) from which users may choose their reference objects.



Link attributes to products and classifications from Attribute Management screen

The Attribute Management screen now offers a more complete attribute creation and maintenance experience in the Web UI.

In addition to configuring an attribute and selecting which object types an attribute is valid for, users may now also link specification attributes to products and classifications using a new 'Link Attribute' tab. Previously, links between specification attributes and products (and classifications) could only be created while working on the product or classification using the Attribute Link Editor screen. With this enhancement to the Attribute Management screen, users can now link products and classifications to attributes in the Web UI while working in either the attribute or the product / classification.



The Attribute Management screen now features the following elements:

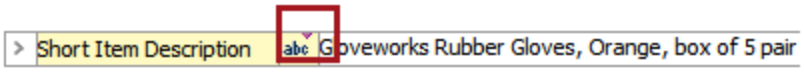
- A new 'Link Attribute' tab featuring two tables, one listing all products to which the attribute is linked, and one listing all classifications to which the attribute is linked
- A new 'Link to' toolbar action, ('Link to Classification' for new links to classifications and 'Link to Product' for new links to products) that enables users to add references from the attribute to products and classifications
- A new 'Source from Attribute' toolbar action that allows users to duplicate all product or classification links from a different attribute into the current attribute

For those users who have already configured and mapped the Attribute Management screen in their Web UI, it is important to note that a new Attribute Management screen must be created and re-mapped in order to access these new pre-configured features.

For more information, see the Attribute Management Screen section of the Web User Interfaces documentation.

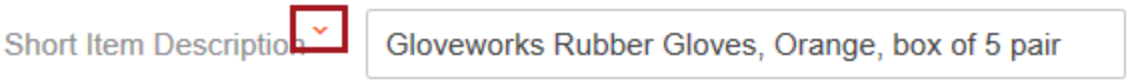
Visual indication of attribute values inherited through context

In the STEP Workbench, to help users determine from which context a dimension-dependent attribute's values originate, attributes with a value inherited from a different context are indicated by a small purple arrow, like the one shown below:



In this example, the arrow appears on a language-dependent attribute (that also contains a value) viewed in the UK English context in which language-dependent attributes have been configured to inherit their values from the US English context.

This functionality has now been extended to Web UI, and attributes with values inherited from another context are also called out with a red downward-pointing arrow, like the one shown:



For more information on attributes inherited by context, see the Value Inheritance in Dimension Dependent Attributes section of the Attributes documentation in the System Setup / Super User Guide documentation.

Global Header Search

Web UI users may now add and configure a search bar located in the Web UI's global header. The new Global Header Search, a component available to configure in the Corner Bar Properties in Main, enables users to configure multiple search types that can then be selected via a dropdown directly to the left of the search bar. Because of the search bar's placement in the global header, the search is both visible and accessible anywhere in the Web UI, regardless of the screen being viewed. Additionally, users no longer have to click on an icon to use a search field.

The Global Header Search differs from the existing search components in the Web UI, like the Corner Bar Search component and the Search homepage widget, in that a user can select from any number of pre-configured search options by selecting from a dropdown anchored to the left of the search bar. This eliminates the need to have multiple search components added to the screen, each configured to perform its own specific search.

To unify the Web UI search functionality, the search plugins available to use in the Corner Bar Search and the Search widget match the search plugins available in the new Global Header Search. One of the search plugins available in the previously existing search components, 'Name Or Id or Specific Attribute,' has been withdrawn. For customers with this search plugin added who are upgrading to 8.3 from a previous STEP version, nothing will change. The plugin will remain in the configuration but display as grayed out to indicate it has been deprecated. However, if the plugin is removed and changes are saved, the plugin cannot be restored. A new plugin, Name or

ID or Attributes, should be used in its place as it encompasses existing functionality and expands it by allowing for one or multiple attributes to be searched for.

For more information on configuring the search bar see the Global Header Search Component section of the Web User Interfaces documentation.

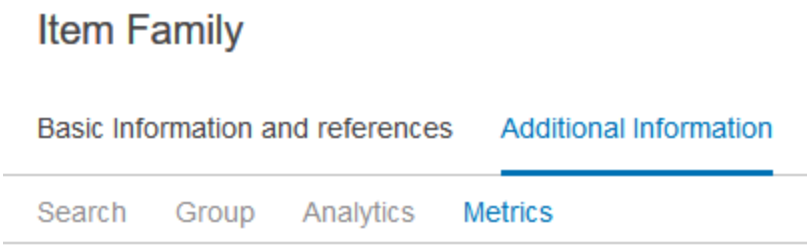
Close asset preview by clicking outside image pop-up

When configured appropriately, clicking an asset thumbnail in the Web UI can generate a pop-up of that image. Previously, the only way to close the pop-up was to click the 'X' in the upper right-hand corner. Now, users may simply click outside the pop-up to close it. A click on the 'X' will still close the window, but it is no longer the only way to do so. This change affects the following components: Thumbnail Header, Asset Image Value, and Asset Mid Sized.

Streamlined secondary tabs

The concepts outlined in Google's Material Design, which formed the foundation of the Web UI redesign effort implemented in the last release, are now being incorporated into Web UI secondary tabs. These tabs are often referred to as nested tabs (tabs within tabs) and are accessed by clicking a higher-level tab.

Previously, the tabs could be configured in such a way that the eventual display could present as confusing. To address this, the Material Design principle of streamlined design has been applied to secondary tabs. Now, the white space between the primary and secondary tab rows has been reduced, and the bold underline that appears beneath the selected secondary tab has been removed; the text color change of the selected tab's title is now the prime indicator as to which non-primary tab has been selected.



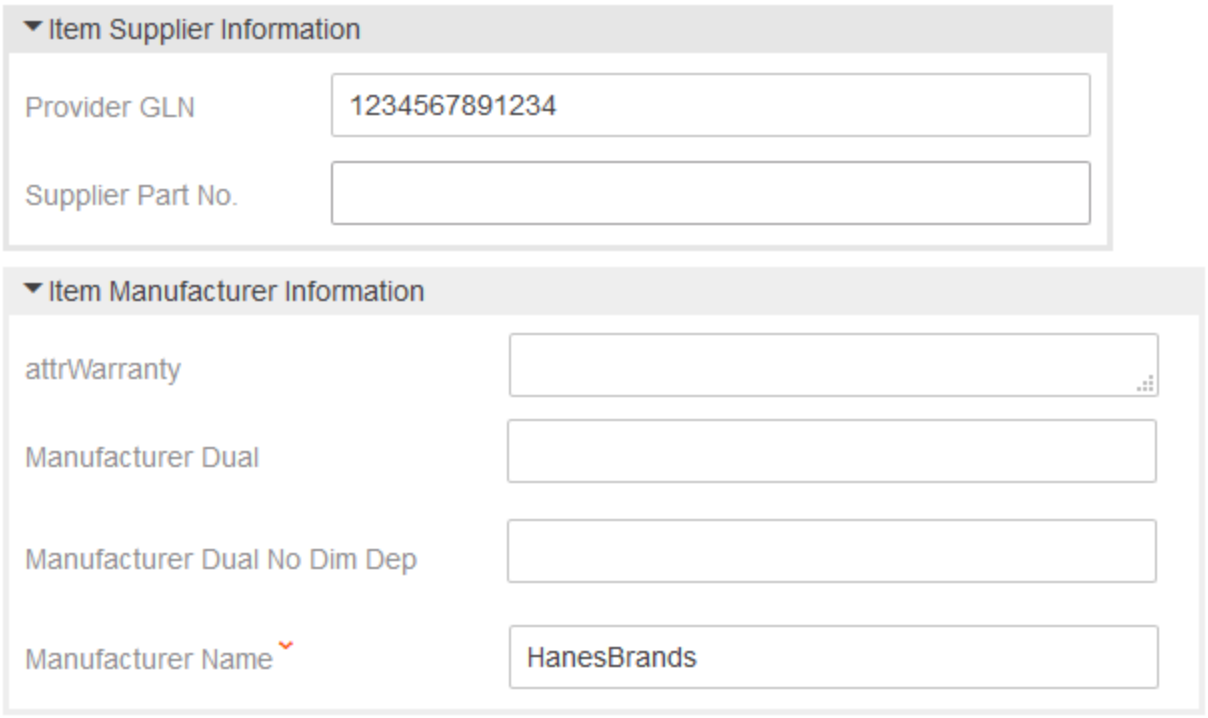
Availability of table headers now based on relevance

The Web UI designer now more accurately limits the table headers available for screens so that only those headers appropriate for the screen may be added. Previously, regardless of license or relevance, headers were available to be added on some screens and components that enabled users to create tables (Node List, Multi Editor, etc.). Incorrect configuration of headers could result in tables that threw errors or displayed columns that showed either irrelevant information or none at all. Users who upgrade to the 8.3 version of STEP will retain all headers in the Web UI as previously configured. However, if a header is not valid for a specific screen, it cannot be added again once removed.

Display restyling of attribute groups and value sections

In keeping with the ongoing effort to streamline the Web UI and focus on clean, simple layouts, the display of groups of attributes in the Web UI has been improved. When attributes display via the Attribute Value Group Component in the 'Sectioned' view mode style, or by way of the Value Section component, all valid attributes

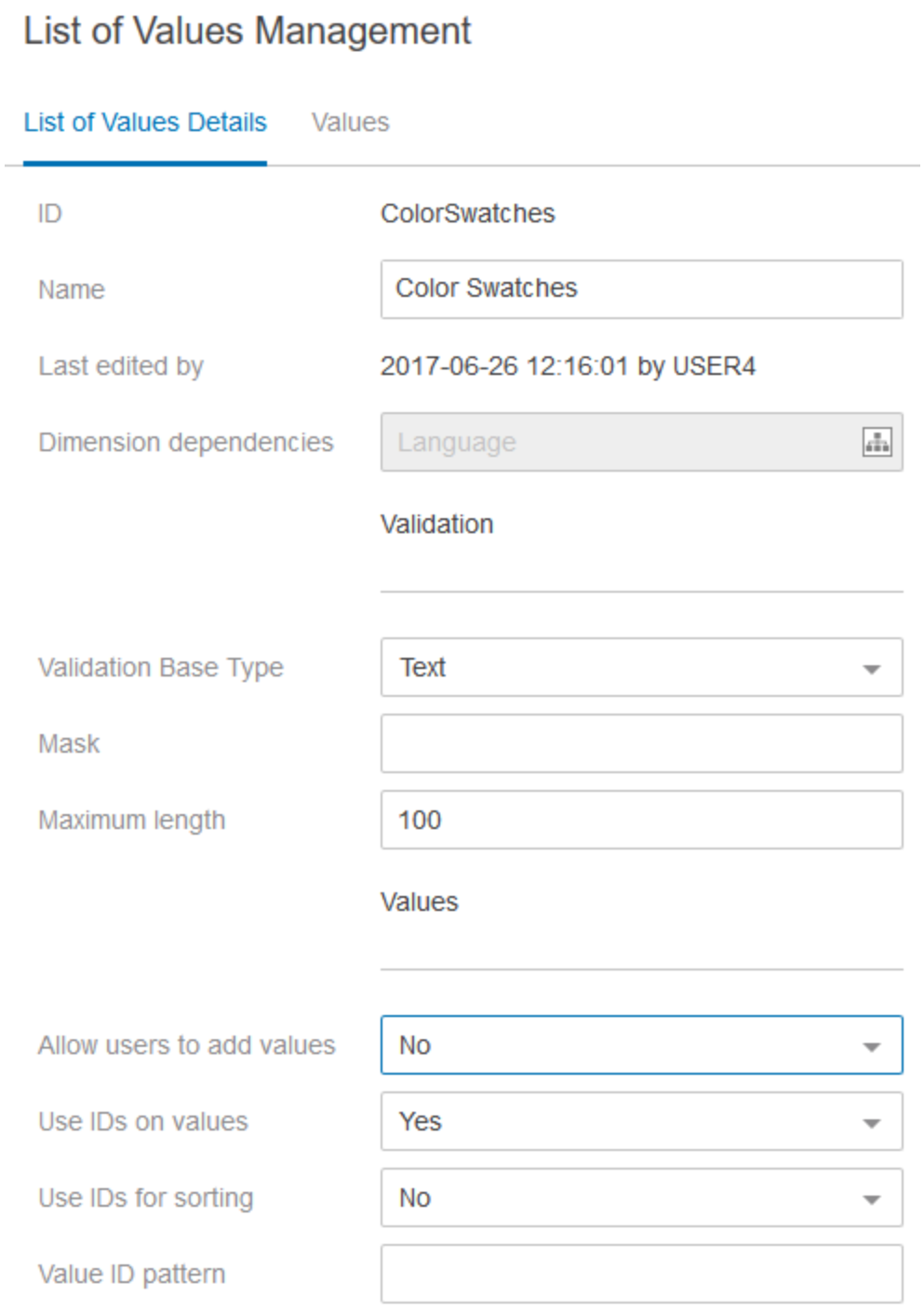
appear together inside a box beneath a header. The header can be either the attribute group's title or the user-entered title, depending on the component. To the left of the header is an arrow that indicates whether the attribute group is expanded (pointing down) or collapsed (pointing right). Clicking anywhere on the header will collapse or expand the group, depending on the requirement.



For more information on displaying attribute groups in the Web UI, see the Attribute Value Group Component section of the Web User Interfaces documentation. There are other attribute-related topics within the Using a Web UI section that may also be of use.

Streamlined List of Values Management Screen

The List of Values Management screen, specifically the List of Values Details tab, has been updated to increase consistency and enhance the screen's functionality.



- All labels for the configured child components are now flush left.
- The validation rules section has been updated so that the 'Validation Base Type' field is now accurately labeled.
- Headings have been added to the screen's default configuration to break out which settings pertain to the 'Validation' of the values contained in the List of Values, and to the 'Values' that comprise the List of Values.

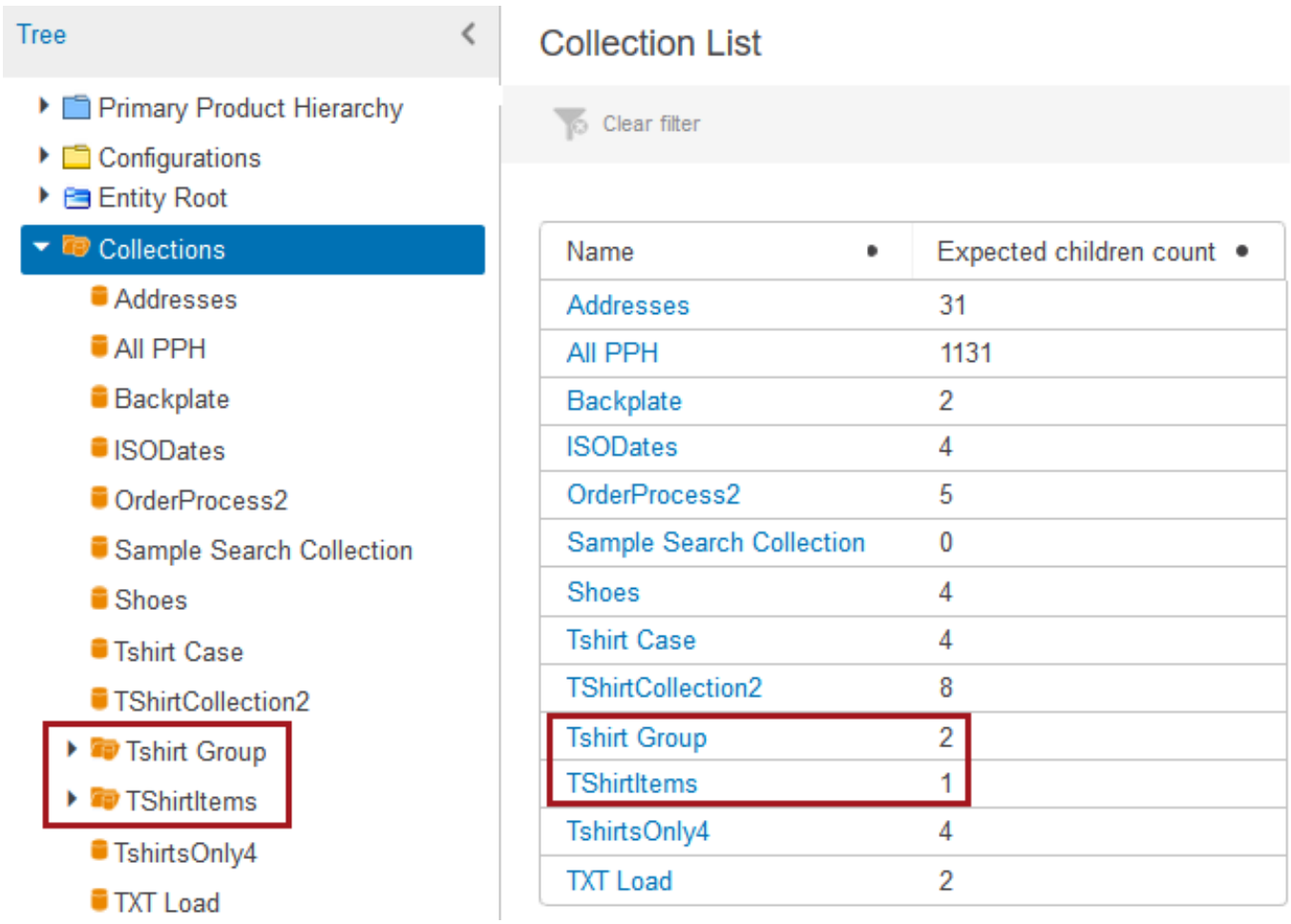
- IDs cannot be set or configured for values in an LOV if that LOV has also been configured to allow users to add values to it. Previously, the ‘Allow users to add IDs’ field displayed without regard to how the 'Use IDs on values' field had been set. This could result in a configuration error on an LOV when users set both ‘Allow users to add values’ and 'Use IDs on values' to ‘Yes.’ To correct and prevent this error, the ‘Allow Users To Add Values’ component has been merged into the default ‘List of Values Value IDs’ component, which now contains all related fields. Now, when a user selects ‘Yes’ for ‘Allow users to add values’, the ‘Use IDs on values,’ ‘Use IDs for sorting,’ and ‘Value ID pattern’ fields will not display.

Following an 8.3 upgrade, existing Web UIs that have the 'Allow User To Add Values' component configured will retain the component, but should remove it to ensure proper display of the fields related to setting IDs on LOV values. Once the old component has been removed, it may not be added again.

For more information on the List of Values Management screen, see the List of Values Management Screen section of the Web User Interfaces documentation.

Updated view for child collection groups on Collection List Screen

In previous versions of the STEP Web UI, the Collection List screen would not list collection groups. This would result in a full display of collections (both collections and collection groups) in the Tree, but an incomplete list of collections on the Collection List Screen. Now, all collections under the Collections node, including collection groups, display on the Collection List Screen in the Web UI. This gives users a full overview of collection nodes residing under the Collections root.



Improved use of '<' and '>' characters in Web UI

The 'greater than' (>) and 'less than' (<) symbols now display correctly in the Web UI, mirroring workbench functionality. Previously, these symbols appeared in their encoded forms '<gt/>' and '<lt/>', which caused validation errors and created a sub-optimal display of data. While the issue was partially addressed in an earlier release via changes to the Attribute Value and Attribute Value Group components' default behavior, now the '<' and '>' symbols display correctly in tables and typeahead searches.

Visual enhancements in Web UI

A number of updates to the Web UI's look and feel have been implemented for the Trailblazer 8.3 release. The three primary updates center around the visual aspect of the toolbar actions, the icons for the toolbar actions, and the tab styling.

- Continuing with the release enhancements applied to the Web UI's 'look and feel' in 8.2, the Web UI now features updated icons that either align with or come directly from Google's Material icon library. The updated Web UI icons now remain sharp regardless of the zoom setting on a browser or the resolution configuration of the monitor being used to view the Web UI, providing greater image clarity and easier color control. Below is a comparison chart of the old icons versus the new icons.

	Old Icon	New Icon
Basket		
Business action		
Clips		
Date		
Document		
Download		
Folder		
Indent		
Outdent		
Reset		
Save		
Search		
Upload		
User view		

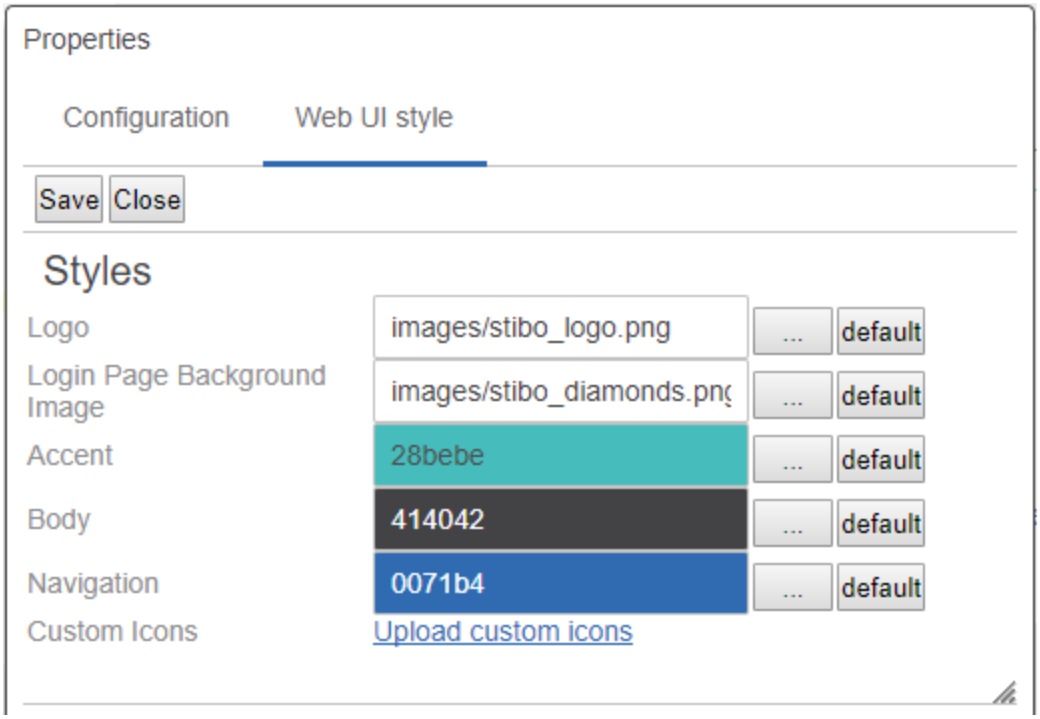
- The contrast between enabled and disabled toolbar actions has been enhanced, with icons and labels for enabled actions appearing darker, and icons and text for disabled actions appearing lighter.
- The distance between the toolbar action buttons has been increased to make the correlation between the button icon and its corresponding label more apparent.
- Web UI is now more closely aligned with the Material Design recommendations for tab styling and spacing by adding space between tabs and increasing the darkness of the tab text to aid readability.

Smartsheets can be exported based on user defined sorting order in the Web UI

Users can sort data within the Web UI and when the data is exported, the Smartsheet maintains this sorting order. While all component headers are sortable, not all can be sorted and then exported into a Smartsheet. For more information about this new functionality, see the Data Exchange Enhancements release note.

Updates to the Web UI designer theme / style tab

The parameters in the Web UI designer theme tab (Web UI style) have been updated, and the documentation available when hovering on the labels has been updated to be more informative, including examples on where the parameter effects the Web UI.



For more information, see the Design Mode Basics topic in the Web User Interfaces documentation.

New Survivorship Rule Options for Matching and Linking

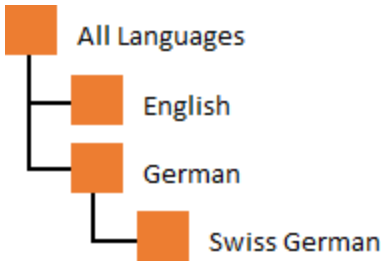
Summary

For customers using the matching and linking functionality (where source records are stored in STEP) to create golden records for product data, three new survivorship rules have been introduced. The new rule options for names, values, and references / links are of the 'trusted source' variant and offer improved functionality for handling dimension-dependent and inherited data.

Details

Using the matching and linking golden record strategy for product data, previous functionality could promote dimension-dependent data, but only performed analysis once, in the context / workspace specified on the algorithm. The same logic was applied to all contexts / qualifiers (combination of dimension points from different dimensions). Also, it was not possible to promote inherited values, inherited references, or accumulative references (the combination of references / links from multiple sources) to the golden record.

The new plugins make it possible to do analysis to determine what data to promote for each context / qualifier. To illustrate, assume there is a 'Language' dimension setup (like what is shown below) and we are promoting language dimension-dependent data.



Further assume the following data that is to be promoted to the same golden record is coming from two sources: 'Most Trusted Source' and 'Second Most Trusted Source'. The 'MTS-German' text is shown in italics and in a lighter color since it is being inherited to the Swiss German dimension point.

	Most Trusted Source	Second Most Trusted Source
English		SMTS-English
German	MTS-German	SMTS-German
Swiss German	*MTS-German*	SMTS-SwissGerman

With the previously existing trusted source plugins, if the matching algorithm was configured to run in a context using the English dimension point, only values from the second most trusted source were promoted as there is no English value from the most trusted source and the result of the 'English analysis' would be applied across all contexts / qualifiers.

	Most Trusted Source	Second Most Trusted Source	Golden Record
English		SMTS-English	SMTS-English
German	MTS-German	SMTS-German	SMTS-German
Swiss German	*MTS-German*	SMTS-SwissGerman	SMTS-SwissGerman

With the new plugins, since the analysis is conducted per context / qualifier and with the default plugin settings (see configuration options below), the most trusted value for each context / qualifier is promoted, as illustrated below.

	Most Trusted Source	Second Most Trusted Source	Golden Record
English		SMTS-English	SMTS-English
German	MTS-German	SMTS-German	SMTS-German
Swiss German	*MTS-German*	SMTS-SwissGerman	SMTS-German

The following new rules make it possible to control the data that is promoted to the golden record:

- Name: Multi Context Trusted Source
- Reference: Multi Context Trusted Source (also applies to links)
- Value: Multi Context Trusted Source

Within these rules, the following additional configuration options are available to further define the data promoted to the golden record.

These options apply to all three new trusted source rules: names, references / links, and values:

- Using the 'Promote single source only' option allows the content from the most trusted source to be promoted for all contexts / qualifiers when setting the selected names, references / links, or attribute / attribute group values. This option allows data to be promoted from only the most trusted source that has data in just one qualifier. Using the example from above, selecting the option to 'Promote single source only,' our result would be:

	Most Trusted Source	Second Most Trusted Source	Golden Record
English		SMTS-English	
German	MTS-German	SMTS-German	MTS-German
Swiss German	*MTS-German*	SMTS-SwissGerman	MTS-German

  Thus, since a value is found for the most trusted source in 'German,' only values from this source are promoted.

- Using the 'Prefer dimension point specific {name / reference / value}' option indicates that local content is promoted for the selected names, references / links, or attribute / attribute group values. Alternatively, content inherited through qualifiers is promoted.

  Using the example from above again, with the option to 'Prefer dimension point specific {names / references / values},' the result would be:

	Most Trusted Source	Second Most Trusted Source	Golden Record
English		SMTS-English	SMTS-English
German	MTS-German	SMTS-German	MTS-German
Swiss German	*MTS-German*	SMTS-SwissGerman	SMTS-SwissGerman

Thus, the local value for 'Swiss German' is promoted instead of the inherited value from a more trusted source.

Note that this option will not work together with 'Promote single source only' and will be ignored when that option is selected.

This option applies to references and values:

- Using the 'Promote inherited {references / values}' option indicates hierarchically inherited content is promoted to the golden record when the selected reference type or selected names or references / links are valid for the golden record object type.

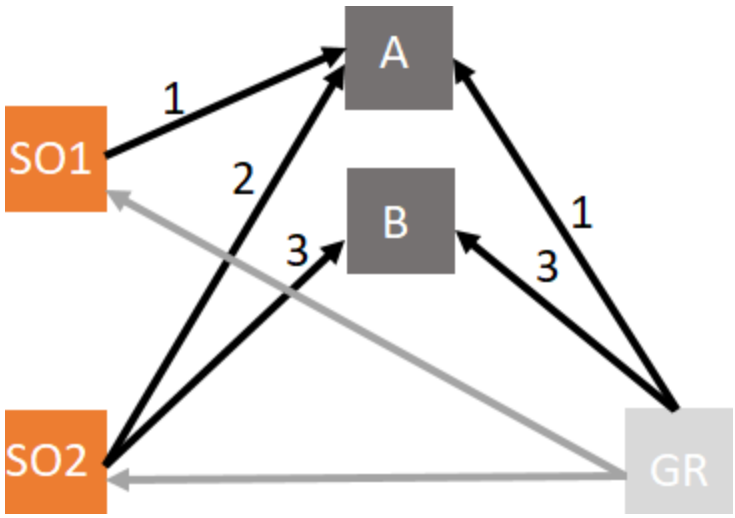
These options apply only to references:

- If the 'Promote reference suppressions' option is selected, suppressions will be promoted to the golden record. If not, suppressions are ignored.
- The 'Accumulative promotions' option for multi-valued references / links, indicates if all references / links and their metadata from multiple source records are promoted to the golden record. This option is available for the reference rule.

  In the following image, two source objects (SO1 and SO2) reference other objects (A and B) using the same reference types (lines 1, 2, and 3). After the promotion, the results is a single golden record referencing the two source objects.

  When the accumulative promotions option is used, the following actions are taken for references:

  - Reference 1 to object A from the most trusted source is promoted to the golden record.
  - Reference 2 to object A is ignored since it is a duplicate of the most trusted source reference.
  - Reference 3 to object B from the second most trusted source is promoted to the golden record.



This option does not work together with 'Promote single source only,' which takes precedence.

For more information, see the Golden Record Survivorship Rule Types topic in the Matching, Linking, and Merging documentation.

STEP API Enhancements and Updates

Summary

The STEP APIs have been enhanced with both new features and improved functionality. Users should be aware of the changes now so that they can plan accordingly.

Additional information, as indicated in this release note and when applicable to the enhancements outlined below, is available in the STEP API documentation at [your system URL]/sdk or access the STEP API Documentation from the WebStart page.

Details

General Scripting and Extension API improvements

Several new features have been made available in the Scripting and Extension APIs. For a full overview of changes, see the 'Change History' links on the STEP API Documentation page accessible as described above.

Highlights for Trailblazer 8.3 include:

Creating lists of values with the Extension API: New ListOfValuesBuilder can be obtained via ListOfValuesHome.createListOfValues(). A new text based list of values could be created like:

```
listOfValuesHome
    .createListOfValues()
    .id("ExampleLOV")
    .name("Example LOV")
    .valueIDPattern("ELOV-[id]")
    .withValidator(validatorHome
        .createTextValidator()
        .maxLengthInBytes(50)
        .create()
    )
   .create();
```

Note that lists of values created via the Extension API always will use value IDs.

Creating event processor plugins with the Extension API: By implementing the 'EventProcessorPlugin<P>' interface, it is now possible to create configurable event processor plugins via the Extension API.

For a simple implementation code example, see the web version of this release note, STEP API Enhancements and Updates for Trailblazer 8.3.

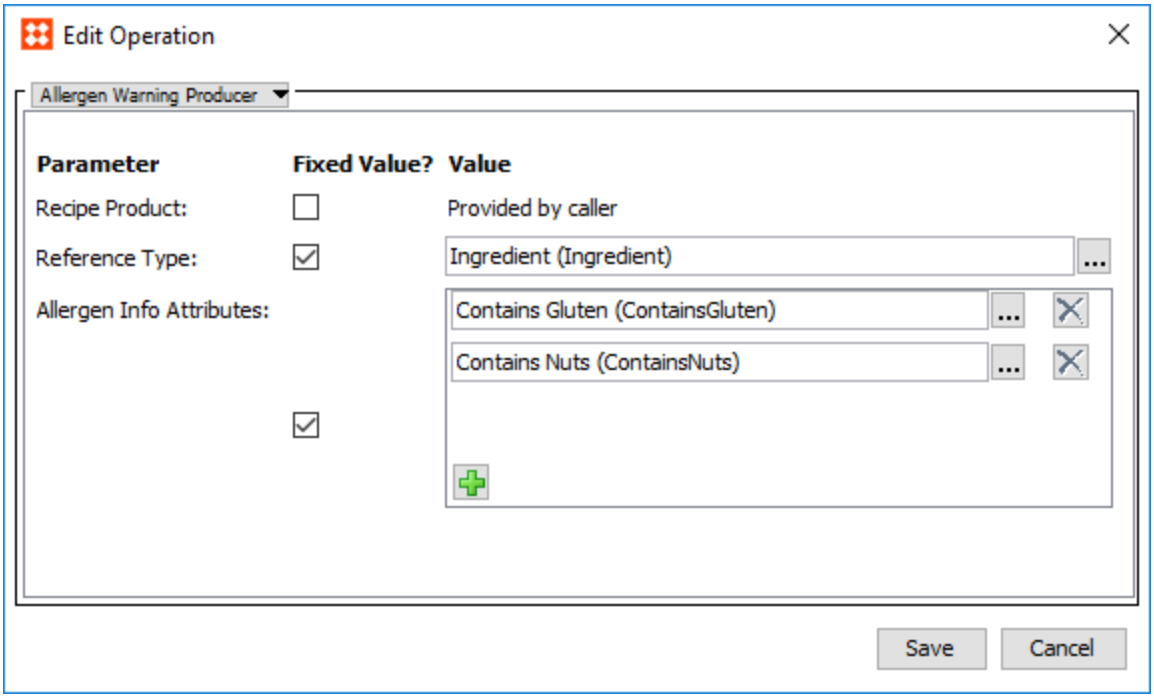
Creating business functions plugins with the Extension API: Business functions are a new type of side-effect free business rule that basically produce an output from an input. For more information on business functions, see the Business Functions topic in the Business Rules documentation.

With the Extension API, it is possible to create Java operations for business functions.

Note that business functions with Trailblazer 8.3 are restricted to produce output of the type String.

For a simple implementation of the business function code example, see the web version of this release note, STEP API Enhancements and Updates for Trailblazer 8.3.

The following screenshot shows the UI for the plugin code above. Through this UI, it is possible to select which parameters are passed to the business function for evaluating and which are fixed values. This configuration means that the same business function plugin can be used by multiple business function objects in different scenarios.



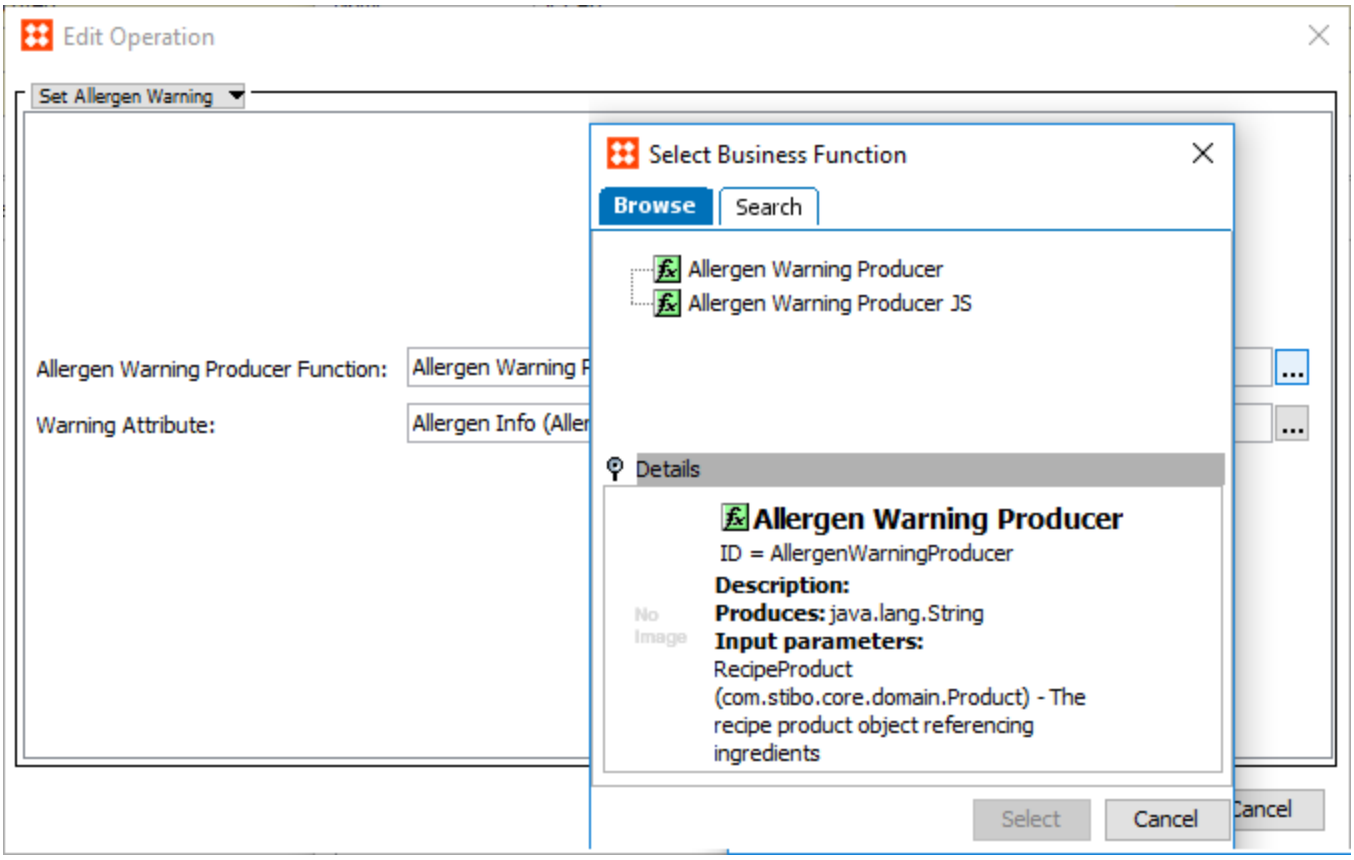
Evaluating business functions from other extensions developed via the Extension API: It is possible to reference and evaluate business functions from other business rules, integration endpoints, and event processor plugins developed via the Extension API thereby making it possible to delegate part of the plugin logic to configurable business functions.

To evaluate a business function, the caller code must define an interface extending '`BusinessFunctionProxy<T>`.' When this interface is used as a return type for a user configurable parameter, the interface will, with regards to input parameters and output for the function, act as a contract that must be met by a business function for it to be selectable.

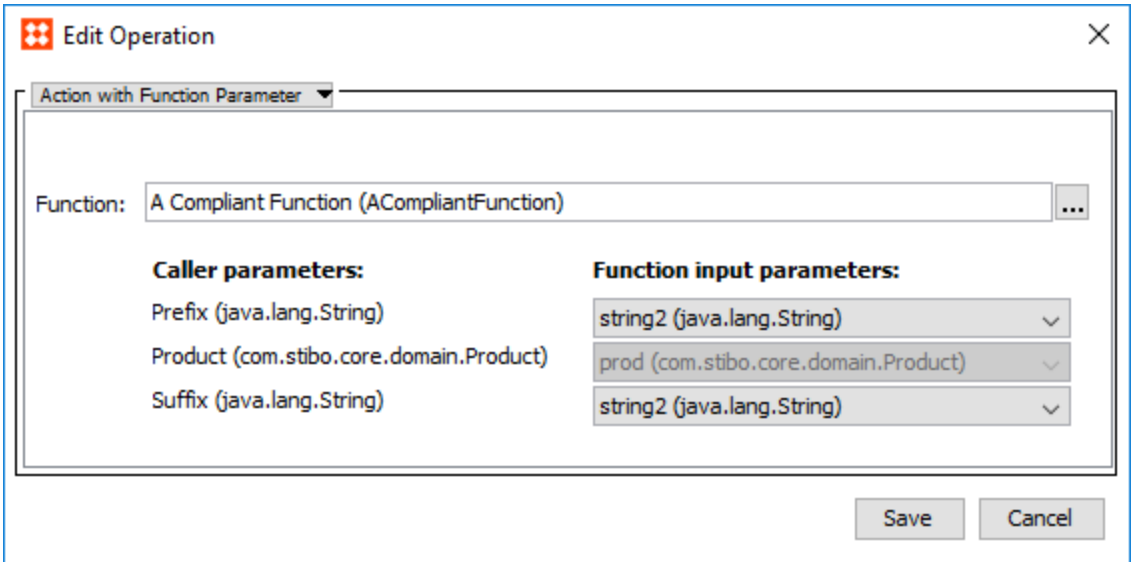
In the example below, the 'AllergenWarningProducerFunction' interface defines the business function that a user can select via the configuration. It must take a Product as input and produce a String output.

For the code example of the business function configuration, see the web version of this release note, STEP API Enhancements and Updates for Trailblazer 8.3.

The screenshot below shows the UI for the business action plugin. As mentioned above, only business functions matching the defined contract will be selectable for the 'Allergen Warning Producer Function' parameter.



If caller parameters and business function input parameters cannot be unambiguously mapped, as shown below, the UI will allow parameters to be mapped manually.



A complete list of all added and updated elements in the Scripting and Extension APIs from Trailblazer 8.2 to 8.3 is available from the STEP API Documentation page (via the Change History links).

REST API Improvements

A number of resources for monitoring and invoking event processor plugins have been exposed. These are:

- /eventprocessors
- /eventprocessors/{eventProcessorID}
- /eventprocessors/{eventProcessorID}/log
- /eventprocessors/{eventProcessorID}/errorexcerpts
- /eventprocessors/{eventProcessorID}/backgroundprocesses
- /eventprocessors/{eventProcessorID}/invoke

A complete list of all added and updated elements in the REST APIs from Trailblazer 8.2 to 8.3 is available from the STEP API Documentation page (via the Change History links).

New Query API

New functionality for constructing and executing queries has been exposed in the Scripting and Extension APIs.

The new fluent API provides support for value, ID, name, super type, object type, and 'below' conditions, and allows for complex queries to be constructed using 'and,' 'or,' and 'exclude' constructs. The query API should be used with caution for complex queries, as performance may be impacted. Additionally, the new API has not been optimized for In-Memory yet.

Queries always have the form queryFor([class type extending BaseObject]).where([condition]) and return a query specification from which a result containing matching objects of the specified type can be obtained.

For example, in Java code, a query that matches entities of object type 'location' with the value 'No' for attribute 'active' could be formulated as follows:

```
import static com.stibo.query.condition.Conditions.*;
```

```
...
QueryHome qh = manager.getHome(QueryHome.class);
QuerySpecification<Entity> querySpecification = qh.queryFor(Entity.class).where(
valueOf(active).eq("No")
.and(objectType(location))
);
Query<Entity> queryResult = querySpecification.execute();
```

In JavaScript business rules, QueryHome can be accessed via the 'QueryHome' bind and must be bound to a variable, while static methods on the Conditions interface must be accessed as illustrated below ('QueryHome' bound to variable 'qh,' and 'STEP Manager' bound to 'manager'):

```
var c = com.stibo.query.condition.Conditions;
var querySpecification = qh.queryFor(com.stibo.core.domain.entity.Entity).where(
c.valueOf(active).eq("No")
.and(c.objectType(location))
);
var queryResult = querySpecification.execute();
```

To access and use the new Query API functionality, the following installation command must be executed in addition to the normal update procedures for 8.3:

```
spot --apply=to:query/7.0/query-7.0.0.spr
```

It is best to contact your Stibo Systems representative to verify that this install recipe is the latest available before installing.

Usage of functionality outside the Scripting API in business rules

Long-standing customers have historically not been restricted to the public Scripting API when writing JavaScript business rules. To secure the robustness of business rules, this option will, from 8.3, no longer be available.

In order to not prevent customers from upgrading, existing business rules using functionality outside the public Scripting API will continue to work in 8.3. It will, however, not be possible to start using new functionality outside the public API.

STEP Tables Import and Export Enhancements

Summary

New functionality has been introduced in STEP Trailblazer 8.3 that allows STEP tables to be exported from one STEP system and imported onto another. To enable this new functionality, a number of workbench enhancements have been made in System Setup and the Export Manager. These enhancements include the ability for users to specify an ID for table type objects and a new option in the Export Manager that allows for the export of table definitions for unresolved tables. An expanded amount of information is also now available in the STEPXML export files for table types and table definitions.

Previously, all table types and table definitions had to be manually rebuilt on target systems, as there was no way to import them into STEP. Limited STEPXML export functionality was available for table types and table definitions, but these files could not be imported into a STEP system. These table export files were only used for downstream purposes such as translating the free text contained within table cells.

This enhancement greatly eases the duplication of table types and table definitions from one system onto another. For users with complex table definitions, which can contain as many as 50 or more table transformations, the manual replication of table types and table definitions was an extremely cumbersome task. Additionally, the meticulous nature of this process made it very error prone. Since minute details could be easily overlooked, users could spend large amounts of time troubleshooting and reexamining their manual setups. The enhancements introduced with 8.3 bring the export and import functionality of STEP Tables more in line with that of other System Setup and Tree hierarchies in STEP.

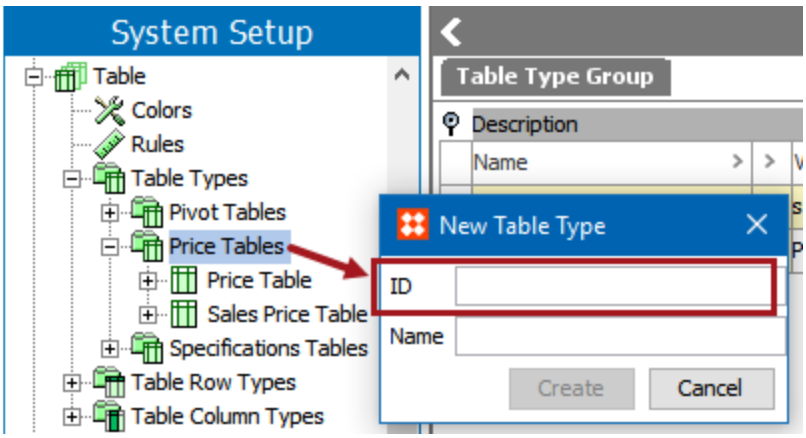
Details

Table exports and imports cover two sets of definitions: table *types* in System Setup, and table *definitions* that are created on the Tables tab of product and/or classification objects in the Tree. Table definitions are further broken down into two areas—local table definitions, and definitions for resolved tables, i.e., tables that contain data and can be previewed on the selected product or classification object.

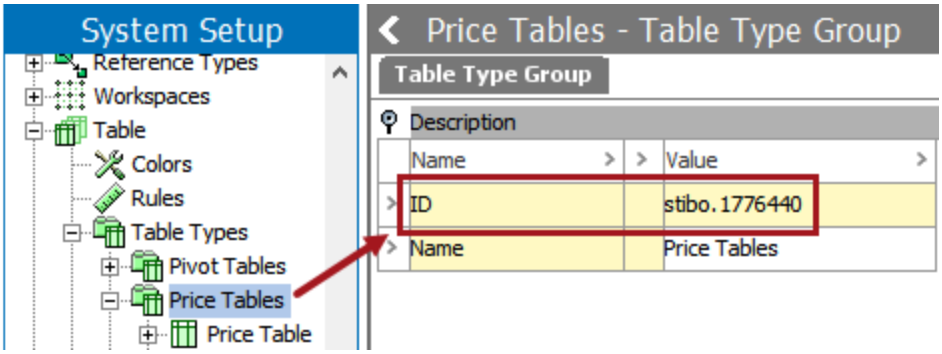
System Setup enhancements

Enhancements within System Setup are as follows:

- Users can specify STEP IDs when creating any table object in System Setup (table types and table type groups; row types and row type groups; and column types and column type groups). User-defined IDs allow for unique identification across STEP systems and enable the ability to export and import table type definitions, which was not possible before.

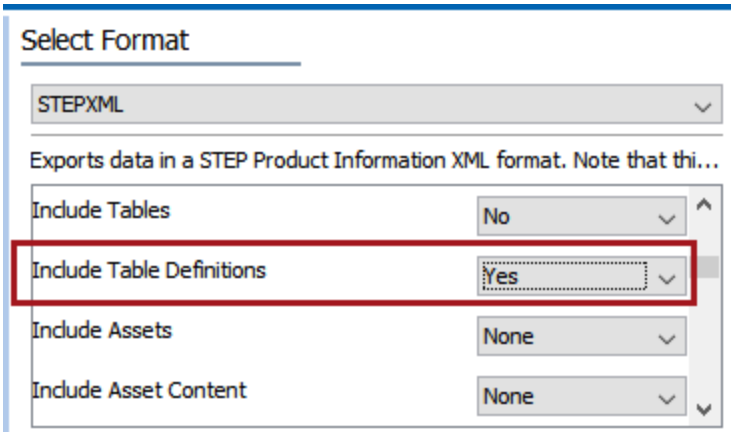


- STEP IDs are now visible for all table objects. Previously, the only way to determine the STEP ID of a table object was to look within the object's STEP URL or by hovering over the STEP name with the cursor to see the ID in popup text.



Export Manager enhancements

Previously, only two STEPXML dropdown options were available for tables on the Select Format screen of the Export Manager—'Include Table Type Definitions,' which only pulled information about table types, row types, and column types from System Setup; and 'Include Tables,' which only pulled information from resolved tables on product and/or classification objects in the Tree. 'Include Table Type Definitions' has been renamed to 'Include Table Types' and expanded to include additional information. A third option has also been added, 'Include Table Definitions,' which pulls table definitions from product and/or classification objects but not information from resolved tables. This option is located within the Data Objects section of the STEPXML dropdown options.



Expanded information in STEPXML table export files

For the aforementioned dropdown options in the Export Manager, the new information included in the STEPXML export files is as follows. (No changes have been made to the information contained in the file when 'Include Tables' is chosen.)

- **Include Table Types:** Previously, this file only contained information on table types, row types, and column types. Now, the following information is also included, which allows for a complete table types hierarchy to be built in System Setup on import:
  - Table colors and table rules
  - Table type groups, column type groups, and row type groups
  - Default table transformations
  - Table pagination plugins
  - Table type dimension dependencies
  - Heading / footer information and valid publication types for row and column types
- **Include Table Definitions:** This new export option allows for table definitions to be exported from a product or classification object on which a table has been defined but is not necessarily resolved. This is useful because table definitions are often built at a higher level of a hierarchy for inheritance purposes and resolved on lower levels. To include both local and inherited table definitions, select 'Include Inherited Data' when configuring the export.

  The configuration of table definitions and table free text is an internal format, which prevents users from making modifications to the definitions before importing the file into STEP. Thus, the file serves solely as a way to transfer table definitions from one system to another.

```
<Product ID="121189" UserTypeID="ItemFolder">
  <Name>Pet Hats</Name>
  <Tables>
    <TableDefinition>
      <TableXML ID="stibo.1776444">
        <Configuration>
        H4sIAAAAAAAAAL1W31PiMBB+96/I9P2gFaQ6Y53hhwzMcOgBp49OaBfIXZp001TF
        v95NW0oryHnK3QNTdrPZ/Xbz7SaXMzrn0JHBmvSlCqm+AxUzKTzr1CJjeNZ9BTDD
        77DnWU6zeeG4tnveajmudXVCyGW6fSgWsp6KXcmTUJDsM1tHYLbFms1lzXHdVvOs
        aZF7FugV+q/ZJBHgQy0RTNeG44FFJgmHCVuuNMYikU5DoNe21orNEw1T4OBrqUih
        Mf4LwUHnK6pn8jbh3LMaFunBgiZcl7WOlUGtZyD/FrbzFdgGwfWzBiUoNyFmKoEq
        /YppHKFVh541MuObdLgZr8OlwBh9KdEEoyzKl/ROZqjavB2vTl4BivwRlUgKAAA=
        </Configuration>
      </TableXML>
      <TableFreeTextXML ID="stibo.1776444">
        <Configuration>
        H4sIAAAAAAAAALMJSa0oKVZwyy/KTSwJSy0qzszPs1Uy1DNUsuNSULABySp4ugBF
        TEwsDc0NzC3MzAwslewCEotKFPzy9Wz0QSpwKjUEGuOZm5ieqpACUwmhi+24ADx8
        tGZ6AAAA</Configuration>
      </TableFreeTextXML>
    </TableDefinition>
```

For more information, including considerations and limitations, see the Exporting and Importing Tables section of the Tables documentation.

STEP Publisher Enhancements

Summary

A number of usability enhancements and functionality improvements have been made to the STEP Publisher component, both in the STEP Workbench and within the InDesign interface.

These enhancements include:

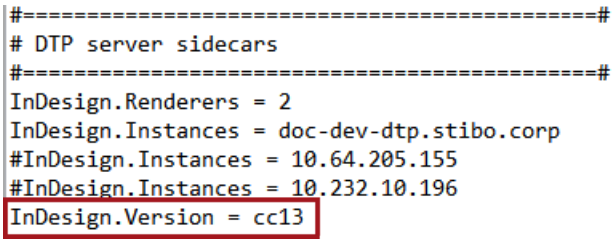
- Support for the latest version of Adobe InDesign Creative Cloud
- Updated sorting capability for tables of contents / section indexes

Details

Updated InDesign version support

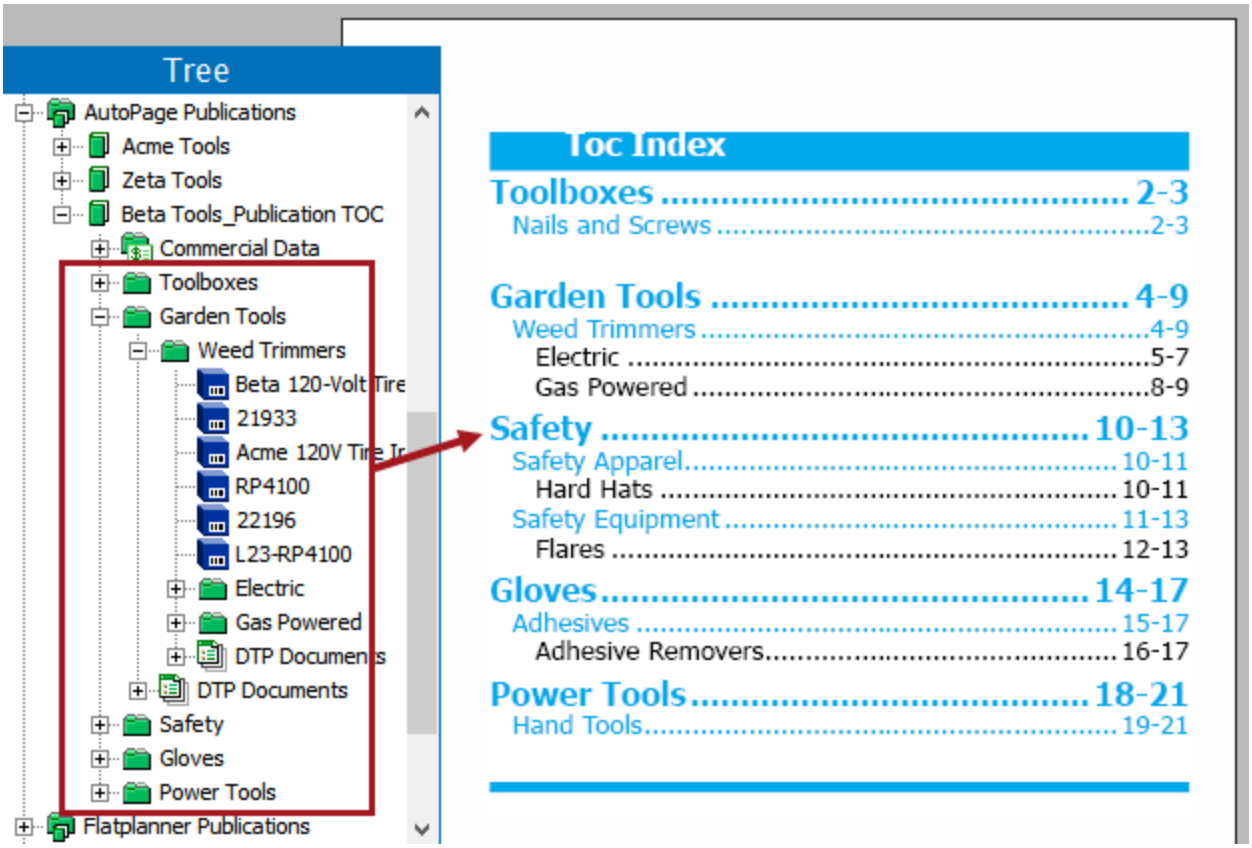
As Adobe continually releases new versions of InDesign through its Creative Cloud subscription service, STEP'n'design plugins must continually be updated to support these versions.

- Support for Adobe InDesign CC 2018 (CC13) is now available
- Support for Adobe InDesign CC 2017 (CC12) continues
- Support for Adobe InDesign CC 2015 (CC11) continues; support will end with the fall 2018 STEP release
- Adobe InDesign CS6 is no longer supported starting with the STEP Trailblazer 8.3 release. Due to this, all users upgrading from CS6 to Creative Cloud *and* who use an InDesign server (e.g., for Proof View or autopagination) must update the 'InDesign.Version' property in the sharedconfig.properties file to reflect a supported version of InDesign. The below screenshot shows this property with CC13, which is the default server version as of 8.3.

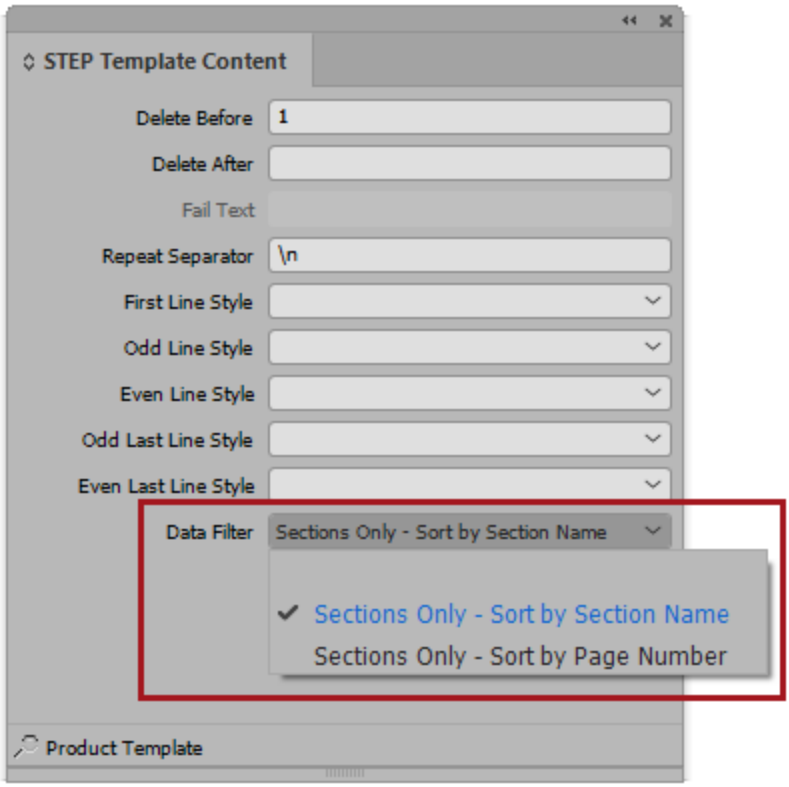


New functionality to sort publication tables of contents by page number

New functionality has been added in STEP'n'design that allows for tables of contents mounted from publication and section objects to be sorted by page number. Previously, tables of contents could only be sorted alphabetically by section name, making them function as 'section indexes' instead of true tables of contents.



This functionality has been achieved by adding a second option to the Data Filter dropdown, which appears in the STEP Template Content palette and the Repeat Selection dialog in InDesign. The new option, 'Sections Only - Sort by Page Number,' allows the table of contents to be sorted by page number. 'Sections Only - Sort by Section Name' is the new label for the option previously named 'Limit to Section Object Types.' Users upgrading to STEP 8.3 who are currently using product templates with the 'Limit to Section Object Types' tag do not need to update their templates, as the system will recognize this tag as being the same as 'Sections Only - Sort by Section Name.' However, users who wish to sort their tables of contents by page number must update their templates with the new 'Sections Only - Sort by Page Number' tag.



For more information, see the Creating a Table of Contents Product Template section of the STEP'n'design documentation and the Creating Tables of Contents in AutoPage section of the AutoPage documentation.

Future Updates

As first stated in the Trailblazer 8.2 release notes, the Print on Demand package is being phased out. No new features will be added to the package and support for the package will be discontinued by the end of 2019.

Reminders will be included in future release notes and communications.

Workflow Enhancements

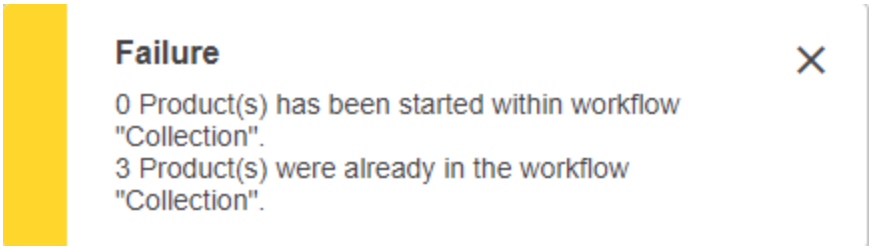
Summary

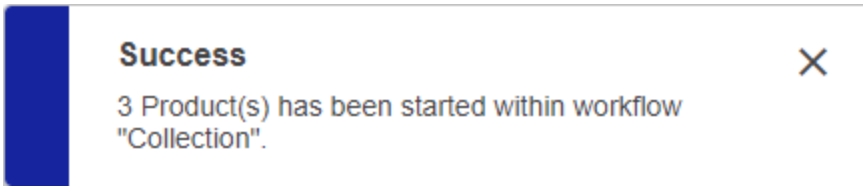
- Improved messaging when initiating or submitting products into a workflow.
- The combined use of the Details Overlay functionality with the Deduplication header in Node Lists has been enhanced to eliminate redundant resetting of filters and ensure automatic refreshing when taking action on Node List objects.
- Improvements have been made to how users may claim, assign, and release workflow tasks in Web UI.

Details

Improved messaging when initiating products into a workflow

Previously, when initiating a product into a workflow within the Web UI, the messages were not very informative. For example, notification messages might be: '1 nodes(s) were started', or '1 node(s) were already in the workflow.' Now, success and failure messages are more meaningful to the user as shown in the images below.





For more information about working with workflows in the Web UI, see Working with Tasks in Workflows topic of the Workflows in the Web UI documentation.

Updated Web UI functionality when using the Deduplication header

The improvements in the Deduplication header functionality make it faster for a user to process a Clerical Review Task List. Working through potential duplicates previously included unnecessary redirection back to the homepage, meaning the task list refreshed and lost applied filters and sorting. This could be both frustrating and confusing to users.

Now, when users work with Node Lists (e.g., Task Lists) in Web UI, they can enable the 'Use Details Overlay' functionality so that when clicking on an object link in a table, they see details about the object in a screen overlay rather than being navigated to a separate screen. When a Node List is filtered, with 'Use Details Overlay' enabled,

and a user clicks on an object ID within the table, after viewing the object details and returning to the table, the user will notice that the list remains filtered. This same functionality has been extended to the Deduplication header. When a user clicks on one of the clickable value links within the Deduplication column with 'Use Details Overlay' enabled and the table filtered, the filter selection is retained even when leaving and returning to the Node List.

Additionally, enabling the 'Use Details Overlay' option on a Node List changes the behavior of the Web UI when a user clicks on a Deduplication column value in the following ways: After clicking a link and selecting either the Confirm Duplicate or Reject Duplicate buttons from the deduplication screen, the Node List is refreshed after each confirm or reject action, removing items that have been addressed.

For information regarding setup specific to Clerical Reviews, see the Configuring a Duplication Clerical Review topic in the Web User Interfaces documentation.

For information on Task Lists and their usage, see the Workflows in Web UI section of the Web User Interfaces documentation. Node List information can also be found in the Web User Interfaces documentation.

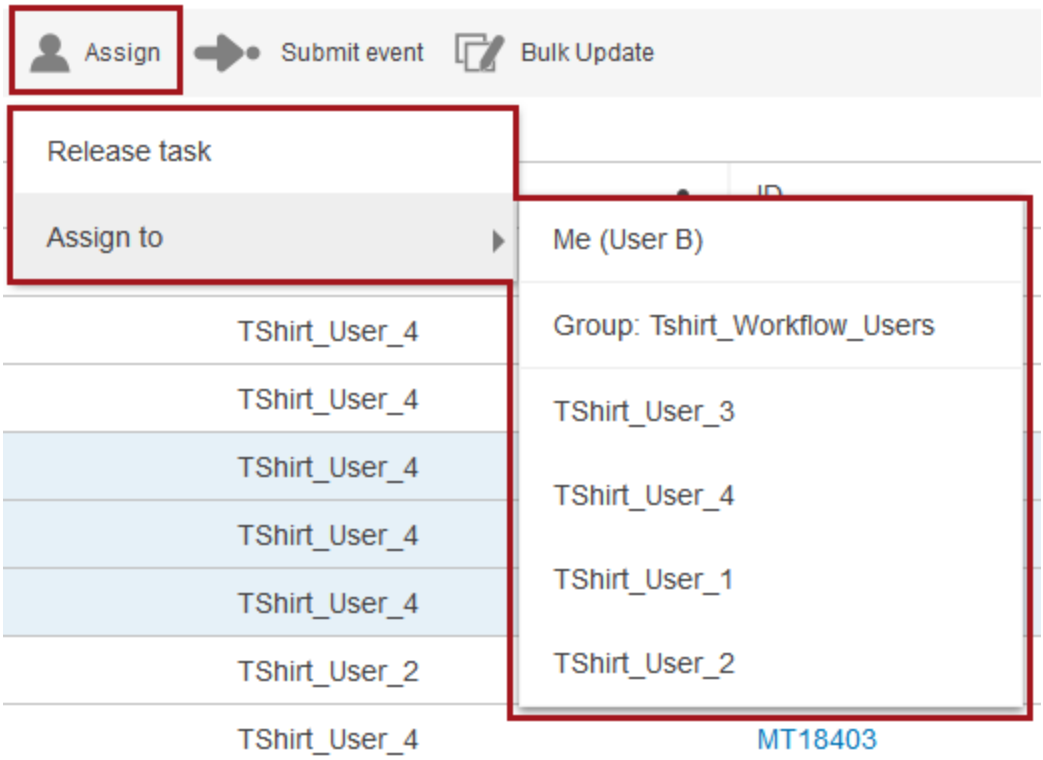
Improved ability to assign workflow tasks in Web UI

A series of improvements have been made to how users can assign workflow tasks in the Web UI. Previously, when viewing workflows in the Web UI via Task List screens, users could only assign tasks to themselves one at a time. For users who manage workflows with multiple users and large numbers of tasks per state, this click-by-click ticking of checkboxes was experienced as time-consuming and needlessly tedious. Now, users with the appropriate privileges may:

- assign tasks in bulk to themselves
- assign tasks in bulk to other users (of the same group)
- unassign tasks in bulk

To accomplish this, two new elements are now available in STEP Web UI: an Assign toolbar action and a new setup action.

First, a new 'Assign' toolbar action can be applied to a Task List in the Web UI. The 'Assign' toolbar action allows users to easily assign one or many tasks either to themselves or to other configured users. By clicking the 'Assign' button, users are shown a dropdown with all available users to which the tasks can be assigned.



Tasks can be assigned to either the current user ('Me'), to the group (which effectively unassigns the task), or to any appropriately privileged user with access to the workflow. Additionally, the selected tasks can be released by selecting the 'Release task' option, which means the tasks are mass-assigned to the workflow's default assignee or assignee group.

Second, a new setup action called 'Re-Assign STEP Workflow Tasks' is now available. This setup action, which is configured in the workbench, allows users that are not necessarily privileged to work in workflows the ability to administer tasks in a workflow. Previously, the limitations of working in a workflow in the Web UI hindered collaboration. Now, multiple users can more easily work together in a workflow as the Web UI supports streamlined task-handling among various stakeholders.

For more information on claiming and assigning workflow tasks in the Web UI, see the Assigning Workflow Tasks in Web UI section of the Web User Interfaces documentation.

Enhanced Authentication Functionality

Summary

The authentication functionality now includes a new configuration property which determines the time limit for renewing workbench tokens. This enables control of automatically logging off inactive users from workbench.

Details

A new configuration property can extend the workbench renew token timeout from the default of four hours up to 72 hours. This prevents the workbench from timing out (and logging off) inactive users within the configured time limit. **As token-related security risks are proportional to the token lifetime, using this configuration to increase the timeout hours to more than four is not advised.**

Modifying the token timeout requires that the sharedconfig.properties file includes the case-sensitive property text 'Step.Token.ExpiryTimeInHours=[hours]' with the hours set as a number from 5 to 72. If the default of four hours is preferred, as recommended, no action is needed.

In-Memory Enhancements

Summary

In an effort to increase performance in STEP, In-Memory updates have been made that include faster read-up for clustered setups and a number of optimizations for improved performance.

Details

Faster parallel read-up for In-Memory

In-Memory enabled STEP servers have to load a large part of the data into the memory when starting.

For clustered setups, previously, this read-up process loaded the data into one server and then afterwards distributed it to other servers in the cluster.

A new parallel read-up process makes the servers in the cluster share the read-up work between them and simultaneous send it to the other servers. This should decrease the read-up time to approximately half the time for multi-server STEP clusters.

In-Memory optimizations

The following search features have been optimized to improve performance for In-Memory customers:

- Web UI 'Name Or Id Or Attributes' search (which can be configured inside another search component)
- Web UI 'Multi line hierarchy' search (which can be configured inside another search component)
- Workbench and Web UI 'Referenced by' searches. For source and metadata searches, the normal In-Memory value search limitations apply.
- Context-specific missing value searches (single exclamation mark "!")

Additionally, a change has been made to significantly improve the performance of attribute specific value searches. As a consequence of the change, customers may experience a slight performance decrease for value searches where no attribute has been specified.

Such searches can be executed from the workbench and in Web UI. For workbench using the Search tab and the generic Search criterion, the search should specify the attribute whenever it is known, for example, 'Color = Black' instead of just 'Black'. For Web UI using the 'Corner Bar Search' and 'Corner Bar Simple Search' components, configure the components with a 'Name Or Id Or Attributes' search plugin and specify the attributes required to have a value.

Minor Enhancements and Changes

STEP has received a number of minor enhancements in various areas of the software as part of the Trailblazer 8.3 release. These are listed below.

Increased Security

Stibo Systems is dedicated to the task of continuously improving the security level of STEP. With Trailblazer 8.3, several security enhancements have been made that, while improving the security of the STEP application, have no impact to end users. Those no-impact enhancements are not described in detail in the release notes.

New setup action and privilege changes for Attribute Group filters

A new setup action (View table types) has been introduced to allow users to view tables and table types in STEP. All existing global setup privilege action sets will also include the new 'View table types' action, so that all users having a global privilege are now able to see tables by default.

Previously, the 'View attribute group' action could be used in conjunction with the table type designated via the Add Privilege Rule > Attribute Group setting. However, in some circumstances, setting up privilege rules with the Attribute Group filter prevented users from seeing everything they were privileged to view. Due to this, the option of adding table type groups to privilege rules has been removed. This removal also impacts privilege rules already restricted by table type group.

It is recommended that administrators check privilege rules to verify that users have not received too many access privileges with either of these changes, and they should update privileges accordingly.

For more information on Setup Actions, see the Action Sets section of the System Setup documentation.

Legacy asset push functionality has been removed

The legacy asset push functionality that works without event queues and was available prior to STEP 5.1 has been removed. **Before upgrading to Trailblazer 8.3, customers using the legacy functionality should contact Stibo Systems to determine a migration plan.**

For information about the improved asset push, see the Asset Push section of the Digital Asset Exchange documentation.

Continuous Publishing functionality has been removed

As announced in the Trailblazer 8.2 release notes, the Continuous Publishing functionality has been removed. This functionality has been replaced by event-based outbound integration endpoints.

For more information, see the Creating an Event-Based Outbound Integration Endpoint section of the Data Exchange documentation.

Business rules used as event filters and event generators always run after approval

In Trailblazer 8.2, business rules that were used as event filters or generators were modified to run after approval. This potentially affected both outbound integration endpoints (OIEPs) and event processors (EPs). However, adding the property 'Synchronize.RunFilterAndGeneratorRulesAfterApproval = false' in the sharedconfig.properties file temporarily enabled the previous functionality, and allowed this type of business rule to continue to run prior to approval.

The 'Synchronize.RunFilterAndGeneratorRulesAfterApproval' property has been deprecated and no longer has any effect. **It must be removed from the sharedconfig.properties file in order to start STEP after the update.** In Trailblazer 8.3, business rules used in OIEPs and EPs will automatically run after approval.

For more information, see the OIEP - Event-Based - Event Triggering Definitions Tab section of Data Exchange, the Creating an Event Processor section of System Setup / Super User Guide, and the Approve Context Bind section of Business Rules Actions documentation.

REST resources relating to the Publication Manager and the STEP-director have been removed

As announced in the Trailblazer 8.2 release notes, all REST resources relating to the Publication Manager (PM) and the STEP-director have been deprecated. This includes the following REST resources:

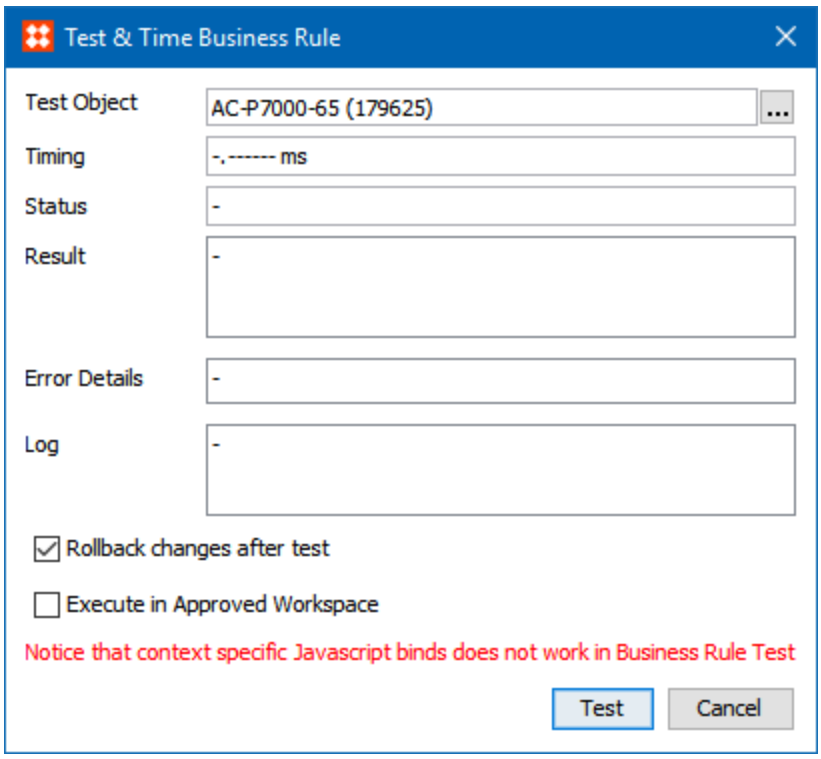
- /pm-director/
- /pm-director/classifications/{id}
- /pm-director/createDirectorAsset/{parentId}
- /pm-director/uploadContent/{assetId}
- /pm-director/queryNodes
- /pm-director/queryAttributeSearch

STEP log files no longer breaks long lines

Previously, long entries in the step.*.log files were being split into two lines. This made it difficult to automatically search for specific lines in a log file since part of the message is sometimes on a different line. In some cases, the same type of lines appeared in both variants of the log file. Now, the log file format has been updated to no longer break long lines, which makes it easier to find specific entries with the search.

Improvements to the Test & Time Business Rule dialog

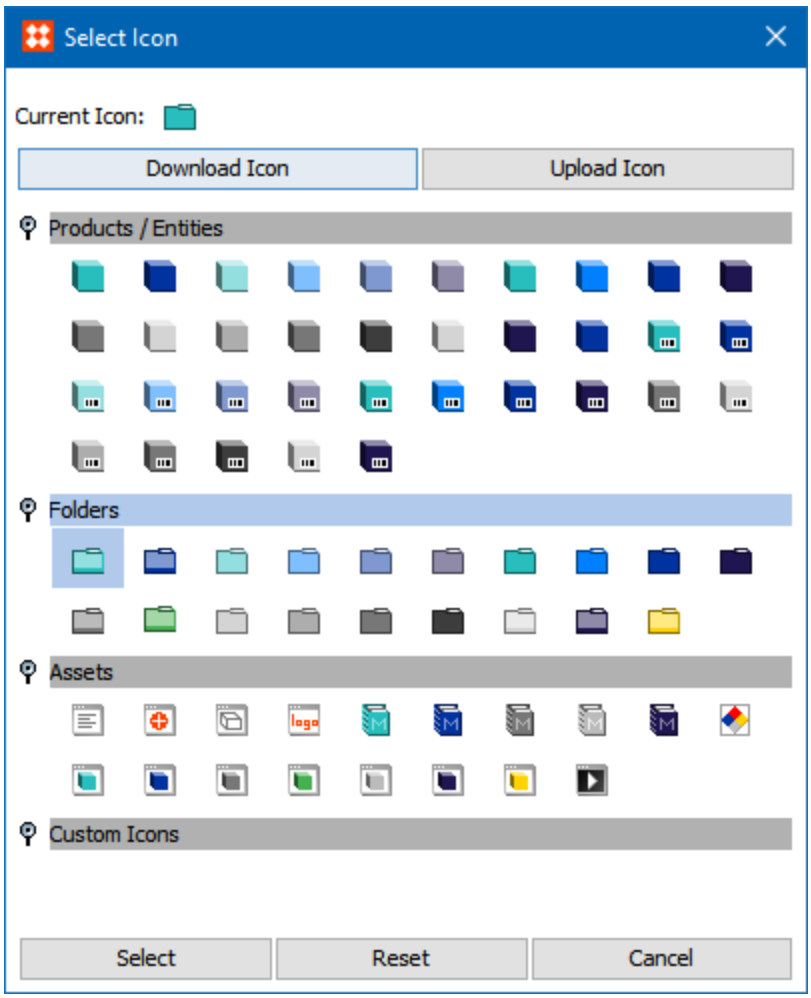
To make the business rule test dialog more user friendly, new fields were added to the Test & Time Business Rule dialog. For business actions and business conditions, the status may be 'OK,' 'Error,' or 'N/A.' For business conditions, the result field will show if the evaluated business logic on the selected test object is 'True' or 'False' and with any local messaging set for those results. With business actions, the Result field is disabled. Finally, the 'Error Details' screen will show the stacktrace information if there is an error in the logic.



Business function tests dialogs are different from the business actions and conditions. See the New Business Rule Type: Business Function release note for information on this difference.

Assignment of icons to both STEP-specific and non-system object types has been improved

Users can now more easily assign a wider selection of icons to non-system object types in STEP. Previously, both STEP-specific and non-system object type icons were available in the same 'Select Icon' dialog. This allowed icons for STEP-specific object types, such as 'User' or 'Reference type', to also be assigned to non-system objects. This could result in a confusing array of icon assignments. Additionally, custom icons were not accessible once assigned.



Now users are able to:

- Select icons in a more user-friendly 'Select Icon' dialog (shown above).
- Select icons from a categorized list where icons are grouped into 'Products / Entities,' 'Folders,' 'Assets,' and 'Custom Icons.'
- Choose from a broader range of options when assigning icons to user-generated object types.
- Download any icon, assigned or unassigned, or upload custom icons using the 'Download Icon' and 'Upload Icon' buttons, which are located at the top of the 'Select Icon' dialog.

Users can now expect to see:

- Icons associated with STEP-specific object types to no longer be available in the 'Select Icon' dialog.
- All custom icons uploaded to STEP following an update to 8.3 will now appear grouped in the 'Custom Icons' section of the 'Select Icon' dialog, making them easily accessible to users via the Select Icon dialog.

For users upgrading to 8.3, it is important to note that:

- All existing custom icons will stay assigned to their respective object types post-upgrade, and will also be available in the 'Custom Icons' section in the 'Select Icon' dialog.
- Some STEP-specific icons have been updated as part of the release and will appear differently regardless of the current system's icon assignment. The list of icons that have changed are: Classification Folder, Product Folder, Entity, Publication Folder (Group and Section), Collection Folder, Collection, and eCatalogs.

For more information on assigning icons to object types, see the Object Type Icons section of the System Setup documentation.

New Solution Enablement section added to STEP online help

A new Solution Enablement section has been added to the STEP online help. This section currently contains topics covering the STEP Automotive solution. Since enhancement of the STEP online help documentation is continuous, with updates released with each release and maintenance patch, more information will be added to this section in the future.

Changed adding events to an EventQueue

Previously, when putting events on an EventQueue via the JavaScript API or via the Publish Event Business Action, it was not necessary to do any setup. No triggering definitions were needed.

In STEP 8.3, it has been decided to make the publishing of events more 'intentional.' Therefore, you must now add the Object Types of the Nodes you wish to put onto the queue using the JavaScript API or the Publish Event Processor in the Object Type triggering definitions.

Approval-based event generation is not affected by this.

Miscellaneous Bugfixes

A number of bugfixes have been applied to STEP as part of the Trailblazer 8.3 release.

ISSUE-251672 - Corrected issue with the Web UI Multi Reference component

Fixed Multi Reference component to display only valid target types when searching for a reference target.

ISSUE-266137 - Corrected an issue with Excel exports of CAD images

An issue was occurring with Excel exports of CAD images. When the assets were linked via a mapping rule to be included in the export result as files, the file name extension of the CAD files was not being included. This has now been fixed.

ISSUE-268233 - Fixed an import issue for LOV-validated attributes with a unit applied

An issue was occurring when importing LOV-validated attributes when 'Match value ID in LOV' was checked in the import manager on the Map Data screen. Users were receiving a message in the background process execution report that the value for the attribute was not valid. The issue was occurring for attributes with a unit applied. This has now been fixed so that the import works as expected.

ISSUE-270480 - Improved logging for information about calculated attributes that cause performance problems

When a background process was started for an export and the export was aborted, the execution report did not contain any information about the time spent on calculated attributes. The solution is to add this information to the main STEP log file (not the execution report) when the background process is aborted. Configuration properties have also been added to control the amount of information being written about calculated attributes. This configuration is meant for debugging.

ISSUE-273715 - Fixed a problem with localized messages in Web UI

Some localized messages in the Web UI were showing with incorrect formatting and displayed {0} parameters instead of the actual value that came from the server. This has now been fixed.

ISSUE-276027 - Fixed Multi Edit Display Mode data entry issue

When a user started typing in a Multi Edit Display Mode table cell with unit, the cell would only take one character. The cursor didn't move to the end of of the input field, as expected. This has now been fixed.

ISSUE-278728 - Fixed a bug with 'Approve Visible Contexts' being disabled in Context Mode

An error was occurring in the workbench when browsing from object to object in Context Mode with the References tab selected. When on the References tab, the option to Approve Visible Contexts in the right-click menu was grayed out, but the option displayed and worked correctly when on the Compare Contexts tab. This has been corrected so that the Approve Visible Contexts option remains available at all times.

ISSUE-280125 - Corrected an issue in Web UI with intermittent redirects to home page

In Web UI, when browsing the Tree and clicking on folder titles, product names, etc., users would be intermittently redirected back to the home page, forcing them to click back on the Tree or redo the search. This was determined to be caused by the collapsed Web UI Tree Navigator redirecting users after using breadcrumb navigation. This has now been fixed so navigation works as expected.

ISSUE-280263 - Hyperlinks are now enabled for Web UI context help

Hyperlinks are now enabled for Web UI context help, which are displayed for various components on a Node List and Node Editor. Note that links are only working correctly with the tag because of HTML rules in browsers.

ISSUE-281095 - Fixed an optimistic lock problem with simultaneous translation background processes

When two (or more) translation background processes were started at the same time, an optimistic lock problem sometimes occurred, as both processes were trying to update the same process object. This has been solved by handling the optimistic lock error and retrying the update.

ISSUE-281975 - Fixed an issue with multiple objects not being deleted from a workflow with a single business action

An issue was occurring with a business rule responsible for the deletion of multiple objects from the end state of one workflow on transition to a second workflow. The business rule was only able to delete the first object instead of all of them. This has now been fixed so the business action removes all objects from the workflow.

ISSUE-282065 - Mapping using multi-level sources in export manager BMEcat is now fixed

Previously, mapping using multi-level sources in export manager BMEcat would only work well for products and not all other types. This has now been fixed.

ISSUE-282400 - Corrected an error with the cleanup of reportdata

Removing a report ID deleted only the first 10,000 rows for the report in the reportdata table. The remaining data for the removed ID was never deleted, which meant the size of the reportdata table would grow forever. With this correction, all rows for a given report are deleted when the report is removed.

ISSUE-283754 - Fixed a 'FileNotFoundException' issue with IIEPs using the metadata receiver option

An issue was occurring with inbound integration endpoints (IIEPs) using the metadata receiver option. A 'FileNotFoundException' error was being thrown when the input file contained errors. A restart of the import required that a manual file copy be placed into the hotfolder location. Now, when the background process fails, it is possible to correct the errors in the application server background process area location so that the process can restart without any issue.

ISSUE-286476 - Fixed a bug with In-Memory 'search below' functionality

An issue was occurring with the In-Memory 'search below' functionality related to product overrides. Product overrides were not being found when nested under another product override. This has been fixed so the search now works correctly.

ISSUE-286755 - Corrected an issue with the Run Bulk Update Template Action in Web UI

An exception error was being thrown when running bulk updates in the Web UI that involved an Attribute Validated Parameter bind on a business rule. The Run Bulk Update Template Action has been fixed so that the bulk updates work as expected.

ISSUE-286962 - Inherited attributes now display correctly in the Attribute Value Group Component in Web UI

A problem was occurring with inherited attributes not being shown in the Web UI Node Editor's Attribute Value Group Component. Inherited attribute values were not displaying when the attribute was valid for the parent object type but not valid for the object type of the selected object. The Attribute Value component displayed them correctly, but the Attribute Value Group component was hiding attributes of this kind.

ISSUE-287079 - Replaced spaces with underscores in all HTML element IDs in Web UI

In STEP 8.2, automated testing of Web UI was enhanced with the expanded use of individual IDs on more elements and components. However, some of these IDs contained spaces, which presented issues for users. This has been solved by replacing all spaces with underscores in all HTML element IDs in the Web UI.

ISSUE-287615 - Improved performance when deleting references

An issue was occurring in the STEP Workbench that was causing the deletion of references from products to take as long as 20 seconds. This is been fixed so that less information is reloaded when deleting a reference in the product reference editor (References tab).

ISSUE-288363 - Fixed an issue with the Run Bulk Update Template Action in Web UI

When a Run Bulk Update Template Action was set up on a Node List which was a part of a packaging screen in the Web UI, the system was not able to reload Node Details after performing the bulk update. This has now been fixed.

ISSUE-288392 - Fixed a problem in the STEP Workbench reference editor

A problem was occurring in the STEP Workbench reference editor where, in some cases, an error would occur when the screen was refreshed after adding a new reference. This has been corrected so that the error no longer occurs.

ISSUE-288412 - Fixed an issue with duplicated LDAP domains in the workbench login window

An issue was occurring in the STEP Workbench login window that was causing duplicate LDAP domain IDs to display. This has now been fixed so that each LDAP domain ID is only shown once.

ISSUE-289388 - Corrected an issue with workbench users experiencing random logouts

On some setups, workbench users were experiencing a checkPassword error and random logouts after a period of inactivity. This has been fixed so the error no longer occurs.

ISSUE-290057 - Improved stability of sending command to GDSN in a STEP environment were more users were sending messages in a fast pace

The GDSN Publisher and GDSN Receiver would fail to generate an outbound GDSN message if the GDSN outbound integration endpoint was invoked multiple times in a row with short internals. This could be caused by many users registering products at the same time. This has now been fixed.

ISSUE-290092 - Corrected an issue with asset uploads using the Web UI Asset Importer Widget

Importing a number of assets using the Asset Importer Widget could, in some cases, fail in a clustered environment. The assets were upload to the tmp file system on one application server, but the background process importing the assets could be executed on an other application server. This has been fixed so that the assets are uploaded to the background process working directory before the asset importer background process is started.

ISSUE-290308 - SOAP Webservices (GetSimilarObject) was missing <Value> elements

The SOAP WebServices call GetSimilarObject was missing the opportunity to specify that only a certain attribute in a data container was fetched. This has been fixed so that the PIMRecorder.xsd used in SOAP Webservices (GetSimilarObject) is no longer missing the <Value> elements.

ISSUE-290435 - Corrected an issue with number of items in a workflow state not showing correctly in Web UI

An issue was occurring in the Web UI that was incorrectly showing the number of tasks in a workflow state. For example, in the STEP Workbench the number of tasks would be 7 but in the Web UI it would be 46. It was discovered that the Status Selector Sidebar component was incorrectly filtering items in the workflow considering suppliers. This has been fixed so that suppliers now see the correct number of tasks.

ISSUE-290577 - Fixed a problem with incorrect display of 'Results by Value' search results in the workbench

In the Search tab of the STEP Workbench, the 'Results by Value' section of the search results page was displaying an incorrect number of results per value in parentheses after the value. The total number of search results was displaying instead of the number of results per value. This has been corrected so that the attribute value count now correctly displays in the parentheses.

ISSUE-290578 - Fixed flickering node pickers

There was an issue where workbench node pickers could flicker if the user did not have permission to see the root product. This has been fixed, and node pickers should function as expected.

ISSUE-290789 - Table transformations now save row / column type IDs as well as names

Row / column identifiers, which are used to identify a row or column in table transformations, now store the ID of the row / column type in addition to the name. There is no conversion; this new format is only used when the specific row / column identifier is changed on the specific table, and on all new tables. This solves an issue where, if the name of a row or column type was changed, it would cause all transformations using these particular rows or columns to function incorrectly.

ISSUE-290874 - Fixed Advanced STEPXML export issue

Exporter could, in some Advanced STEPXML cases, export too much data (for instance, all values for some products). This issue has been fixed so that the right data is exported.

ISSUE-290889 - Corrected an import issue with deferred circled cross reference handling with unique keys

An issue was occurring where imports were unable to create all references between loaded entities. If there was no object by reference during the creation of another one, an error appeared. Now, users can import data with circled cross references that have unique keys instead of target IDs. Note that deferred circled cross reference handling with unique keys is only supported if the import is in domain mode and the imported cross reference has one value in the key.

ISSUE-290920 - Fixed issues with incorrect height calculation of split tables on InDesign pages

Issues were occurring with mounted tables in InDesign that split across pages. The height calculation of split tables was including repeated table headers, so that the table was not splitting even when the space without the repeated header was sufficient. The problem was caused by the table containing body rows that had 'Keep With Next' set. The logic behind where to split the table did not take into account the 'Keep With Next' setting. Another issue was occurring with the logic that works out if a table can split when the table contains cells that span multiple rows. The logic always included the row immediately after a span instead of allowing the split as soon as the span is complete. These issues have now been fixed so that the tables split correctly.

ISSUE-290953 - Extension API has been updated so a link can be opened in a new browser tab / window

For Web UI Extension API Links, it is now possible to set the target attribute to _blank and _top via newly added methods. This allows for any URL that links to an external web page in the task list page to open in a new browser tab or window. Previously, when the URL was clicked, it directed to the target web page in the same window. If the user wanted to act on the items, they had to click BACK to return to the task list page. This has been corrected by adding support to open links in a new tab (using the target attribute) on the class com.stibo.portal.widget.text.link.Link.

ISSUE-291071 - Fixed a problem that occurred when trying to recreate an asset push queue

An error was occurring when an asset push queue was created if the queue had previously existed in STEP. Now, a deleted asset push queue will be revived if one is found with the same ID.

ISSUE-291551 - Corrected error with sending emails using the Mail Home binder in JavaScript

The Mail Home binder in JavaScript business actions regarding the Mail.UseTLS property value has been fixed so that emails can now be sent without an authorization error.

ISSUE-291791 - Fixed a display issue with with the Pivot Transformation wizard

An issue was occurring with the Pivot Transformation wizard that was causing it to display too large for the screen, causing the most used buttons on the window to be hidden. This has been corrected so the buttons are now always visible.

ISSUE-291895 - Fixed a JavaScript issue concerning privileged business rules

An issue was occurring where a business rule script, invoked by a supplier user, was unable to access objects exterior to their realm of influence within a privileged business rule. A script invoked by a supplier should have the ability to retrieve objects not visible to the vendor. This was not permissible when using the executeInContext and executeInWorkspace callback functions. This has now been fixed so that the script behaves as expected.

ISSUE-291992 - Fixed a problem where the workbench dashboard editor would throw an exception

An issue was occurring in the workbench that caused an 'Error showing global dashboard null' message to display immediately upon startup. The error message also displayed when the Global Dashboard icon in the workbench was clicked. This has been corrected so that the error no longer displays.

ISSUE-292237 - Fixed a problem with republishing events for revisions no longer in the approved workspace

A problem was occurring when attempting to republish events for revisions that no longer existed in the approved workspace. This has now been fixed so that the events republish correctly.

ISSUE-292253 - Fixed a problem with packaging hierarchy links

A problem was occurring, in rare cases, with packaging hierarchy nodes not showing the links to the lower level. This has been fixed.

ISSUE-292334 - Fixed problems with new GDSN operations

The following new GDSN business rule operations were causing the STEP Workbench business rule editor to become very slow on systems using GDSN: RFCIN Message Completed, RFCIN Message

Failed, RFCIN MessageSend, Remove Subscription Status, and Set Subscription Status. These issues have now been fixed.

ISSUE-292472 - Fixed an issue with splitting of golden records

When using matching and linking with linked golden records, a source object losing its match code value (for example, because of an update to its data) would not be removed from its golden record when processed. This was inconsistent because if the source object was introduced without a match code value, it would not have been linked to any golden record. This has now been fixed so that the source is correctly separated into a new golden record.

ISSUE-292478 - Limited the amount of space for SPOT storage

SPOT stores several different kinds of backups and traces of its work in the directories under admin/spot. In some situations this has become a problem, as there has not been any upper limit on how much space would be used. SPOT has now been changed to limit itself to more reasonable amounts of storage.

ISSUE-292586 - Toolbar icons in Web UI have been changed from PNG to font icons

The customized material font has been heavily updated to support the relevant toolbar icons in the Web UI. A number of components needed special attention to assure the use of materials icons. Changing these toolbar icons from PNG images to the icon font enables better control over the color of the icons.

ISSUE-292867 - Added support for In-Memory searches that hit more than one attribute

Support has been added for In-Memory searches that hit more than one attribute, for example, attr* = value searches. Previously, searches that hit more than one attribute were not accelerated for systems running the In-Memory Database Component.

ISSUE-292948 - Fixed issue with publication section deletions

A customer-specific fix was made regarding an issue with a custom background process. The background process deleted publication sections. When those publication sections were deleted, events on all queues were deleted. This issue solves the delete events on all event queues issue.

ISSUE-292967 - Fixed a problem with upgrading directly from a pre-STEP 5.2 system to STEP 8.2 or later

An autoupgrader failure was occurring for a user attempting to upgrade from a STEP 5.0.2 system to an AWS cloud-based Trailblazer system. The scripting has been fixed so that the autoupgrader can complete without problems.

ISSUE-293020 - Fixed an issue with Adobe Illustrator EPS imports

Imports of Adobe Illustrator EPS files were failing due to a bug in the EPS parser. The EPS format had the wrong size for the %%BeginBinary comment, which was always written as %%BeginBinary: 1, no matter what the actual size of the binary data was. This has now been fixed.

ISSUE-293296 - Improved Web UI caching

It is now possible to have optimization in Web UI caching. After this fix, some files can be cached without making a request to the server to ask if it has changed.

ISSUE-293367 - Improved In-Memory search performance

Searches using the string *value* were very slow in In-Memory. This has now been improved.

ISSUE-293548 - Added a 'Show Title' parameter to the designer for Advanced Search Screen Properties in Web UI

A 'Show Title' parameter has been added to the designer for the Advanced Search Screen component of the Web UI. The parameter defaults to 'true,' which will show the title the same way as before the parameter was added. With the addition of the checkbox, it is now possible to set this to 'false' to hide the title area and reclaim the space used for the title area.

ISSUE-293634 - Fixed an issue with Multiline Hierarchy search criterion in the Web UI

A ClassCastException error was occurring on the Web UI Advanced Search screen when a user added two Multiline Hierarchy searches and attempted to perform a search. This has been fixed so that the search functions as expected.

ISSUE-293640 - Fixed an issue with scheduled bulk update processes

When performing scheduled bulk updates, and the time it took to execute the previously spawned process exceeded the next schedule time, two bulk update processes would run at the same time. Now, a scheduled background process will not be created if the last created bulk update process is still running

ISSUE-293707 - Corrected an issue with export failures from STEP to MongoDB

Exports from STEP to MongoDB through OIEPs were failing if the STEP data contained illegal Unicode characters. This has been fixed so that the error is reported in the server log but the endpoint is not disabled.

ISSUE-293736 - Fixed an issue with legality of row and column types for STEP tables

Removing a table type from the list of legal table types for a table row type or a table column type would cause the row type or column type to be removed from all table types. This has now been fixed.

ISSUE-293824 - Corrected an issue with global view permissions

An internal check for global view permissions was a bit too permissive, which led to exports with more data than permitted by the active permissions. The issue was fixed by forcing a more strict check.

ISSUE-293877 - Fixed a null pointer exception in Web UI Multi Edit Display mode on empty node lists

A null pointer exception was being thrown in Web UI Multi Edit Display mode if an empty node list was displayed. The error has been corrected so that the null pointer exception no longer appears when Multi Edit Display Mode tries to display an empty node list.

ISSUE-294088 - Fixed problem with images splitting onto next page during autopagination

An issue was occurring in Proof View and AutoPage that caused images to start on the top of the next InDesign page even though there was enough space for them at the bottom of the previous page. The problem was found to be caused by rounding errors within the InDesign plugin. This has now been corrected so the images mount correctly.

ISSUE-294157 - Fixed a STEP Template Content palette issue in InDesign for asset references

When editing a product template in InDesign using the STEP Template Content palette, an issue was occurring when using an attribute for a reference. Once a data source was set on an attribute, it could not be removed via the palette. It had to be removed directly from the tag. Additionally, even when creating a new frame, the attribute was set as default and could not be removed from the palette. The error has been corrected so that the attribute may be removed by selecting 'Asset Reference' and adding another source reference type or selecting 'Object.'

ISSUE-294160 - Fixed button and scrollbar issues with the Web UI Target Hierarchy node selector popup window

In the Web UI, an issue was occurring for users when clicking the 'Show Hierarchy' icon on the Classification Product Links Properties component. In the resultant Target Hierarchy popup window, the 'Go to selected object' button was half hidden and the horizontal scroll bar would jump to the right automatically. This has been fixed so that the Target Hierarchy window now behaves as expected.

ISSUE-294217 - Fixed an issue with In-Memory searches using the 'today' keyword

An issue was occurring with In-Memory searches for end date values less than 'today.' Incorrect results were returned. This has now been fixed so the correct values are returned.

ISSUE-294314 - Fixed an issue with editable inherited reference values in Web UI

An issue was occurring in the Web UI with inherited reference values viewed in the Multi Reference component with the Multi Edit view. It was not possible to determine if references were inherited or not since all references appeared to be local. Users could change the values of inherited values, which would cause the value of a metadata attribute to be changed on the higher level where the reference was created, not just on the selected object. Now, inherited reference values appear inside the Reference Metadata Value Header as read only. To edit a value, a local reference must be created.

ISSUE-294389 - Fixed a setback with the Import Manager wizard incorrectly deleting the local input XML file

When a STEP XML file is imported through the import manager, the file imports normally and remains on the user's computer. However, once the workbench is closed, the file is removed from the user's computer. The information was not removed from STEP but rather from the user's computer. This has now been fixed so that the file is not removed.

ISSUE-294484 - Removed the ODBC retriever

The ODBC retriever has been removed, as it does not work with Java 8 in the workbench.

ISSUE-294488 - Corrected an issue with missing default units for values in Web UI Multi Edit Display Mode

In the Web UI Multi Edit Display Mode, when on a Node List, users were able to select values without a unit in the typeahead suggestion field even if a default unit was set on the attribute. When the Enter key was pressed on the keyboard, the unit was not added to the value. This has now been fixed so that the unit is added to the value entered.

ISSUE-294751 - Fixed expired credentials issues upon import of assets

When an import of assets via workbench took more than 15 minutes, the import stopped due to expired credentials. The solution for this issue is for credentials to be renewed before upload of each asset, which means that the import does not stop and should work as expected.

ISSUE-295087 - Added a new property to prevent 'The node could not be expanded' popup in the workbench

It is now possible to suppress the display of the popup window containing the message 'The node could not be expanded as it has more than the configured maximum of displayable children.' To avoid the popup message, insert this property into the sharedconfig.properties file: Workbench.TreeNode.HideTooManyChildrenMessage=true.

ISSUE-295088 - Fixed an issue with OIEP using an event queue data source

Exports of products using an outbound integration endpoint using an event queue data source could in some cases fail if the exported node had a deleted reference, or if a deleted node was referred by the node. This has now been fixed so that the OIEP no longer fails.

ISSUE-295233 - Fixed styling for Web UI Node List headers

In Web UI, long headers on a Node List were being cut and shown with "...". This has been fixed and headers are now shown as full text.

ISSUE-295322 - Fixed a Flatplanner issue where frames with links to products could not be edited if the product was removed form the hierarchy

An issue was occurring in Flatplanner if a product was linked to a Flatplanner page frame and the product was subsequently deleted from STEP. This would cause the frame color to change to yellow and render it

uneditable. This has now been fixed so that the Flatplanner frame is still editable even if the product that was previously linked to it was deleted.

ISSUE-295328 - Corrected issue with Display Mode Height in Web UI

An issue was occurring in Web UI where only the first two search results were shown, with the rest of the results being hidden below the scrollbar. This was caused by the default value for Display Mode Height in the different display modes being too low. This has now been corrected.

ISSUE-295606 - Corrected classification translation export issue

Previously, when attributes used for calculated attributes on classification appeared in translation.xml, if the classification had an attribute link with meta attribute and the user translates this classification, sometimes an extra attribute was exported. This has now been fixed.

ISSUE-295665 - Fixed issue with table renaming

There was a problem where the system was not allowing table name changes if changing the name a second (or more) time. Names are updated as expected now.

Platform and Software Support Changes

This section lists current and future planned changes to platform and software support.

Current Updates

The changes in platform and software support from Trailblazer 8.2 to Trailblazer 8.3 are listed below.

- Windows Server 2016 is now supported on Database, Application, and InDesign servers.
- Windows Server 2008 R2 is desupported.
- Oracle Database 11.2.0.4 is no longer supported.
- Adobe InDesign CS6 is desupported.
- Support for Adobe InDesign CC 2018 is now available (Client and Server).

The complete list of platform and software support is available in the Platform and Software Support for Trailblazer 8.3 section of the System Release and Patch Notes documentation.

Future Updates and End of Life Notifications

The changes in platform and software support expected in the future include the following:

- **Support for STEP Trailblazer 7.0 - 7.2 and 7.3 is ending, effective 1-Aug-2018.**
- **Support for STEP Trailblazer 7.4 is ending, effective 1-Nov-2018.**

  The purpose of the support notifications above is to officially communicate desupport / end of life for these systems and request that customers update as soon as possible to the latest release of STEP. Please contact your Stibo Systems account manager or partner manager, or the support department, to receive help and guidance on how to update to a supported release.

  Software errors reported on versions 7.0 - 7.2 and 7.3 may be rejected after 1-Aug-2018, and after 1-Nov-2018 for version 7.4. Application support issues in progress for the STEP releases being desupported will be closed on the desupport date. It is not possible to extend the support services for desupported versions.

  If you have any questions or would like to be contacted to receive help on updating the STEP application, please contact: STEP-updates@stibosystems.com.

- Support for Adobe InDesign CC 2015 (Client and Server) will end with the fall 2018 STEP release.
- As first mentioned in the Trailblazer 8.2 release notes, older versions of Excel will be desupported in an upcoming STEP Trailblazer release. This includes Office versions prior to 2010 for Windows users and 2011 for Mac users. Using an older version of Excel could cause problems with files. It is best to always choose the newest, supported version of Microsoft Excel. Additional information on supported MS Excel versions can be found in the Platform and Software Support for Trailblazer 8.3 section of the System Release and Patch Notes documentation.

STEP Installation and Update Enhancements

Summary

STEP components can have complicated version dependencies that make it hard to determine which component versions can be used together. To help simplify the analysis process and make it easier to work with components, the Stibo Patch Operations Tool (SPOT) has a new `--upgrade` command, which can be executed to look for possible upgrades to the components installed on a STEP system. Users can also run the command to search for a component not already installed to verify availability and compatibility with their version of STEP.

The `--upgrade` (or `-u`) command is used to calculate the newest possible version of the listed components that can be installed given different restrictions on how large of an upgrade is allowed. This command never changes the STEP system or performs any automatic upgrading.

To further facilitate the process, the upgrade options output that is displayed upon running the `--upgrade` command includes a recipe file that can later be applied to the system.

Details

There are a number of ways to use the upgrade command, and there are different levels of information returned.

Using the Upgrade Command

Outlined below are the different upgrade command options with examples. The name of the actual component(s) should be used in place of what is shown in the examples.

Upgrade Options	Examples
Upgrading one component	To upgrade the Experian component, use: `--upgrade=experian`
Upgrading several components	To upgrade both Experian and Loqate, use: `--upgrade=experian,local-loqate`
Upgrading the baseline (the STEP version such as 8.1, 8.2, 8.3)	The baseline can also be upgraded by using the component name *step*: `--upgrade=step` Pick the release of the baseline by specifying a prefix: `--upgrade=step:8.3` When a prefix is specified, the newest version matching the prefix will be tried.

Installation candidates (components that have not yet been installed) can also be found by using the --upgrade command, as described above.

Upgrade Levels

The calculation used to determine upgrades can potentially produce suggestions for up to five levels of upgrade. Only the upgrades that bring newer versions of the listed components will be shown in the result. Below, the options shown are sorted by how aggressive the update would be with regard to introducing new component versions.

Level	Description
Listed	This is the most conservative upgrade possible where only the listed components are touched.
Dependents	This level allows upgrading of: • The listed components • The components that depend on the listed components
Dependencies	This level, listed with `DEPENDENCIES_BUT_NOT_BASELINE` in the file name, allows upgrading of: • The listed components • The components that depend on the listed components • The components that the listed components depend on, but not STEP baseline
Baseline within Maintenance Patch	This level, listed with `BASELINE_WITHIN_MP` in the file name, allows upgrading of all components, including the STEP baseline, but only to the latest maintenance patch of the same release as the one currently installed. For example, if the system has step-8.2-mp1 installed, then this level would look for the newest MP of that release, possibly 8.2-mp3, but not 8.3.
Baseline	This is the least conservative upgrade level, which allows upgrading of all components, including the STEP baseline to the latest released version.

The upgrade options are shown on screen with the upgrade file recipes listed. Users can use standard commands to view a detailed change log, prepare for an installation, and to apply changes to their STEP system.

For example: `--upgrade=inmemory`

```
Found 3 possible upgrades to choose from:
================================================================================
Option 1: Upgrade only the listed components
Components:
       * assetloader: Keep at 7.0.14 (newest available: 7.0.24)
       * inmemory: Upgrade from 7.0.10 (newest available: 7.0.23)
       * spot: Keep at 7.0.48 (newest available 7.0.65)
File: /home/step/admin/spot/recipes/upgrade/upgrade.LISTED.2017-11-01-15-24-
28.spr
================================================================================

Option 2: Upgrade to latest maintenance patch within the same STEP release
+ All components
Components:
       * assetloader: Keep at 7.0.14 (newest available: 7.0.24)
       * inmemory: Upgrade from 7.0.10 to 7.0.15 (newest available: 7.0.23)
       * spot: Keep at 7.0.48 (newest available 7.0.65)
       * step: Upgrade from 8.0-mp3-2016-09-06-14-12-00 to 8.0-mp4-2016-10-04-10-10-
27 (newest available: 8.2-mp3-2017-11-02-07-39-51)

File: /home/step/admin/spot/recipes/upgrade/upgrade.BASELINE_WITHIN_MP.2017-11-
01-15-24-28.spr

================================================================================

Option 3: Upgrade to latest STEP release (full upgrade)
+ All components
Components:
       * assetloader: Keep at 7.0.14 (newest available: 7.0.24)
       * inmemory: Upgrade from 7.0.10 to 7.0.14 (newest available: 7.0.23)
       * spot: Keep at 7.0.48 (newest available 7.0.65)
       * step: Upgrade from 8.0-mp3-2016-09-06-14-12-00 to 8.1-mp5-2017-10-02-16-10-
00 (newest available: 8.2-mp3-2017-11-02-07-39-51)

File: /home/step/admin/spot/recipes/upgrade/upgrade.BASELINE.2017-11-01-15-24-
28.spr
```

If the system is ignoring any components or if the system cannot find a way to upgrade the components specified, the applicable messaging will be shown on the screen. All ignored versions will not be considered when trying to find an upgrade.

After upgrading to 8.3, the `--upgrade` command can be used in place of the installation commands given in the various release notes for STEP Trailblazer 8.3. For example, `--upgrade=wikimetadata` or `--upgrade=acrolinx`.

For more information regarding STEP installation and update procedures, contact your Stibo Systems representative.