RELEASE NOTES

Release 11.0

Updated May 27, 2022

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11.0 Release Notes

These release notes describe the new, enhanced, and changed features provided with the release. Some changes may require action, so review these notes carefully. These notes complement the Stibo Systems Enterprise Platform (STEP) Online Help, which includes in-depth information on previously existing and new system functionality, including detailed explanations and step-by-step instructions for use, when appropriate.

Some of the changes and highlights of the 11.0 release include updates in the following areas:

DAM integration — supporting enterprise requirements of a seamless PIM integration with external DAM optimized for CUE (Product MDM + Stibo DX)

Scheduled auto-submissions — addressing manufacturers' need to rely on automation to perform submissions to their various channels in PDX (Product Data Exchange)

Match recommendations through ML — improving operational efficiencies and productivity through automating repetitive and time-consuming data stewardship activities, e.g., clerical review (Customer MDM)

Simplified data exchange — addressing companies need to send and receive complete data in an efficient, reliable, consistent, and non-complicated manner (Platform)

Performance improvements and visibility — focusing on increasing confidence in our solutions (Product Data Exchange, Customer MDM, Platform)

Enhancement Requests — working to continuously address customer suggestions! While there is not a separate Enhancement Request release note for 11.0, many projects in the release are driven by and/or incorporate customer requests. Responding to customer feedback and delivering on enhancement requests continues to be a high priority and a key part of our strategic focus, and will continue to be in the future.

Information regarding the enhancements above and a wide variety of other enhancements and changes are included in this release note set.

> **Note:** Product Data Exchange (PDX) release notes are now available when you log into PDX. On the left navigation panel, go to Help Center > Documentation.

Upgrade Guide and Maintenance Patches

In addition to the individual release notes, upgrading customers should read the 11.0 Upgrade Guide. This guide provides information that existing customers need to know prior to upgrading. This includes actions required for deprecated components and unsupported functionality.

The Upgrade Guide includes information about actions that need to be taken prior to upgrading.

If / when applicable at the time of your installation, read the maintenance patch notes for 11.0 to understand the full scope of changes for the 11.0 release and subsequent patches.

Important: Some functionality described within these notes is controlled via licenses and/or component installations and may not be available on your system. Questions should be directed to your Stibo Systems account manager or partner manager.

Academy and Community Resources

Stibo Systems Academy

Stibo Systems Master Data Management (MDM) Academy offers customer and partner hands-on training options to expand your knowledge on Stibo Systems MDM solutions. Information regarding our certification programs and specific classes can be found on our website: https://www.stibosystems.com/services-support/mdm-academy.

Stibo Systems Communities

All customers and partners are encouraged to join their respective Stibo Systems Communities to collaborate with other users. These release notes and other release materials, including videos, are also available within each Community.

Customers: https://www.stibosystems.com/online-community

Partners: https://www.stibosystems.com/partners/partner-community

Installation Recipe

The baseline can be installed using this command:

```
spot --upgrade=step:11.0
```

See the SPOT Program documentation for help doing the STEP upgrade and installing add-on components. For customers that have custom add-on components and/or if Stibo Systems Support is deploying your system upgrades and patches, please submit an upgrade request via the Customer Portal (Jira).

This document is intended for use by active Stibo Systems Enterprise Platform (STEP) users and partners and describes the above and other new functionality and improvements in greater detail. It does not serve as a replacement for the Online Help, which includes additional information on previously existing and new system functionality, as well as more detailed explanations and step-by-step instructions for use, when appropriate.

11.0 Upgrade Guide

Summary

There are many benefits to keeping your system updated, including:

- Expanded solutions to support new business initiatives
- Enhanced user experience and increased efficiency
- Up-to-date security and supportability
- SaaS option available

Customer action may be required. Before upgrading the platform and its add-on components, there are certain system changes that customers need to be aware of when moving to 11.0 from an earlier version. The list that follows may not be comprehensive; however, along with the full release note set, it provides a starting point for upgrade evaluation.

Note: It is always recommended to use the latest released version of SPOT (regardless of the STEP version you are on). If upgrading via the --upgrade command, using the latest SPOT version is required.

Details

Customer-driven branding flexibility

Customers now have more Web UI Styling Options for the Web UI. These options include choosing a brand color, action button color, and overall Web UI color theme. Additionally, to better serve customers and their branding guidelines / preferences, there is a new option to choose a white background for the logo displayed at the top of the Global Navigation Panel. For more information, go to the Web UI Enhancements and Changes release note for 11.0.

New saved searches functionality for faceted search / Elasticsearch

The saving and sharing of searches is now part of the faceted search experience in the Web UI Search Screen. This allows administrators and privileged users to share default searches with user groups and eliminates users having to spend time creating their own default searches. Favorite Views are migrated to Saved Searches allowing users to retain those custom views.

Important: Additional changes were made for the faceted search solution. The updates include user interface changes. Some changes require reindexing and/or republishing to take effect. Read the Faceted Search Enhancements and Changes release note in the 11.0 release note set thoroughly before upgrading.

Updated User List screen

The User List screen has been updated for all users who upgrade to 11.0. Without additional configuration, the User List screen now features the ability to sort and filter table data, resize columns, and create new users. The table can also be configured to include additional columns of information about the system users and additional toolbar action buttons. For more information, go to the Web UI Enhancements and Changes release note for 11.0.

Empty fields export for CSV

When using the export empty values option for CSV exports, the output will be different than previous releases due to a bug fix. Exporting reference metadata when multiple references are present will now be exported correctly. Full details can be found in the Data Exchange Enhancements and Changes release note.

Performance improvements

A new Efficient mode for event handling is available for OIEPs and event processors. For some configuration scenarios, primarily long-running OIEPs and/or where downstream systems have trouble keeping up with message processing, it is advised that customers change existing configurations to use Efficient mode. New configurations use the Detailed mode by default and for backward compatibility, existing OIEPs and event processors continue to run in the Detailed mode until changed. In scenarios where the time required to remove redundant events is not beneficial, using Detailed mode will perform better. For benefit details and suggested mode settings for configuration scenarios, refer to the Data Exchange Enhancements and Changes release note in the 11.0 release note set. Additional information about performance updates can be found in the Performance Improvements release note.

Support, platform, and system admin information

The following items are desupported or removed with the 11.0 release (or as indicated):

- Adobe InDesign CC 2019 and CC 2020 are no longer supported and have been removed as options within the STEP InDesign Plugins.
- Support for the 9.1 version of STEP ended January 1, 2022.

Note: Support for the 9.2 version of STEP ends August 1, 2022, and support for 9.3 ends November 1, 2022. Support for the 10.0 version ends May 1, 2023, and support for 10.1 ends December 1, 2023.

Support for the following was added in the 11.0 release:

- Windows 2022
- RHEL / Oracle Linux 8.5
- Adobe InDesign CC 2022 is available with 11.0 and also with 10.3 (MP4). Support for Adobe InDesign CC 2021 continues.

Platform and Software Support information can be found in the Platform Support section. And, 11.0 Platform and Software Support changes can be found in the 11.0 release note set.

Superseded, Withdrawn, and Deleted components

Some components are moving into a new stage within the component removal lifecycle with the 11.0 release. The purpose of these component status changes is to simplify the component list, minimize support on components that have an improved substitute, and to remove clutter and uncertainty as to which component (s) to use. **For users, this means that after components are superseded, they are later withdrawn (also referred to as deprecated). Previously withdrawn components are now being removed (status = deleted). Alternate components have previously been announced, and it is very important for customers to make sure they are using those recommended components prior to upgrade.**

- The Web UI Data Container Table View Editor component is superseded and will be withdrawn in a future release. Refer to the 'New table-based data container editor supports editing multivalued attributes' section of the Web UI Enhancements and Changes release note.
- The Embedded Analytics Platform (EAP) Web UI components are withdrawn. Details can be found in the 'Embedded Analytics Platform components withdrawn' section of the Web UI Enhancements and Changes release note.
- The 'Detailed' Event Mode option in workbench is withdrawn. It will be removed in a future release. Refer to the 'New Efficient processing mode for OIEPs and event processors' section of the Data Exchange Enhancements and Changes release note.

Important: Prior to upgrade, customers should be aware of any maintenance patch updates that came out in earlier releases. The projects below were covered in the maintenance patch notes for 10.3, which can be accessed via the 10.3 Release > 10.3 Maintenance Patch notes section of the documentation.

New features incorporated via 10.3 maintenance patches

- Proxy support available for Lionbridge V1 and SDL Asynchronous translations (10.3-MP4)
- Proxy support available for Faceted Search (10.3-MP4)
- Faceted Search enhancements and changes (10.3-MP4)
- REST API V2 added to baseline (10.3-MP4)
- InDesign CC 2022 (CC17) support added (10.3-MP4)
- Dun & Bradstreet (D&B) end-of-life for Direct 2.0 API (10.3-MP4)
- DSA key support update / Cluster SSH Configuration topic updates (10.3-MP2)
- New List Processing 'Find Similar Master Data' operation (10.3-MP2)
- Workbench latency improvements (10.3-MP2)
- Profiling performance improvements (10.3-MP2)
- New 'Select None' button for 'Classification roots for inherited attributes' field (10.3-MP2)
- 'Classification roots for inherited attributes' improvements for Smartsheets (10.3-MP2)

- New Browse Tab business function (10.3-MP2)
- Updates to password security for users (10.3-MP2)
- Updates to table header filters (10.3-MP2)
- Updates to working in the Approved workspace (10.3-MP2)
- Machine Learning Matching Agent (MLMA) allows downloadable ML scores (10.3-MP1 / 10.3-MP2)
- Faceted search now available for Asset Content and Asset References (10.3-MP1)
- Ability to restrict display of basket in Global Navigation Panel (10.3-MP1)
- Introduction of the 'Classification roots for inherited attributes' parameter (10.3-MP1)
- Support for version 7.14 for Elasticsearch and Kibana (10.3 / 10.3-MP1)

Performance Improvements

The following improvements have been made that positively impact performance throughout STEP:

For details on these topics, see the Customer MDM and Supplier MDM Enhancements and Changes release note.

- Performance for Match and Merge is improved when processing overly large match code groups, by using multiple CPU cores on application servers more efficiently. This functionality is used in Matching, Profiling, and Automotive solutions.
- Performance is improved for profiling large data sets. This functionality is used in Matching and Profiling solutions.
- The impact of business rules used in matching and data profiling is improved. This functionality is used in Matching and Profiling solutions.
- Performance is improved when using Loqate address standardization with CASS validation for US addresses.

Workbench users will notice faster response times when managing business rule configurations, specifically when mapping data in imports and exports, and navigating hierarchies in the Tree. This faster response time increases user efficiency.

The Workbench Launcher has new troubleshooting options when errors occur, allowing the user to clear their cache when encountering an error in either the bootstrap or launcher phase, or to update the launcher to the newest available version. This will result in faster resolutions to errors when launching.

For details on prioritizing queued BGPs execution for better utilization of server resources, see the General Enhancements and Changes release note.

For details on improvements made to resiliency for In-Memory databases, see the General Enhancements and Changes release note.

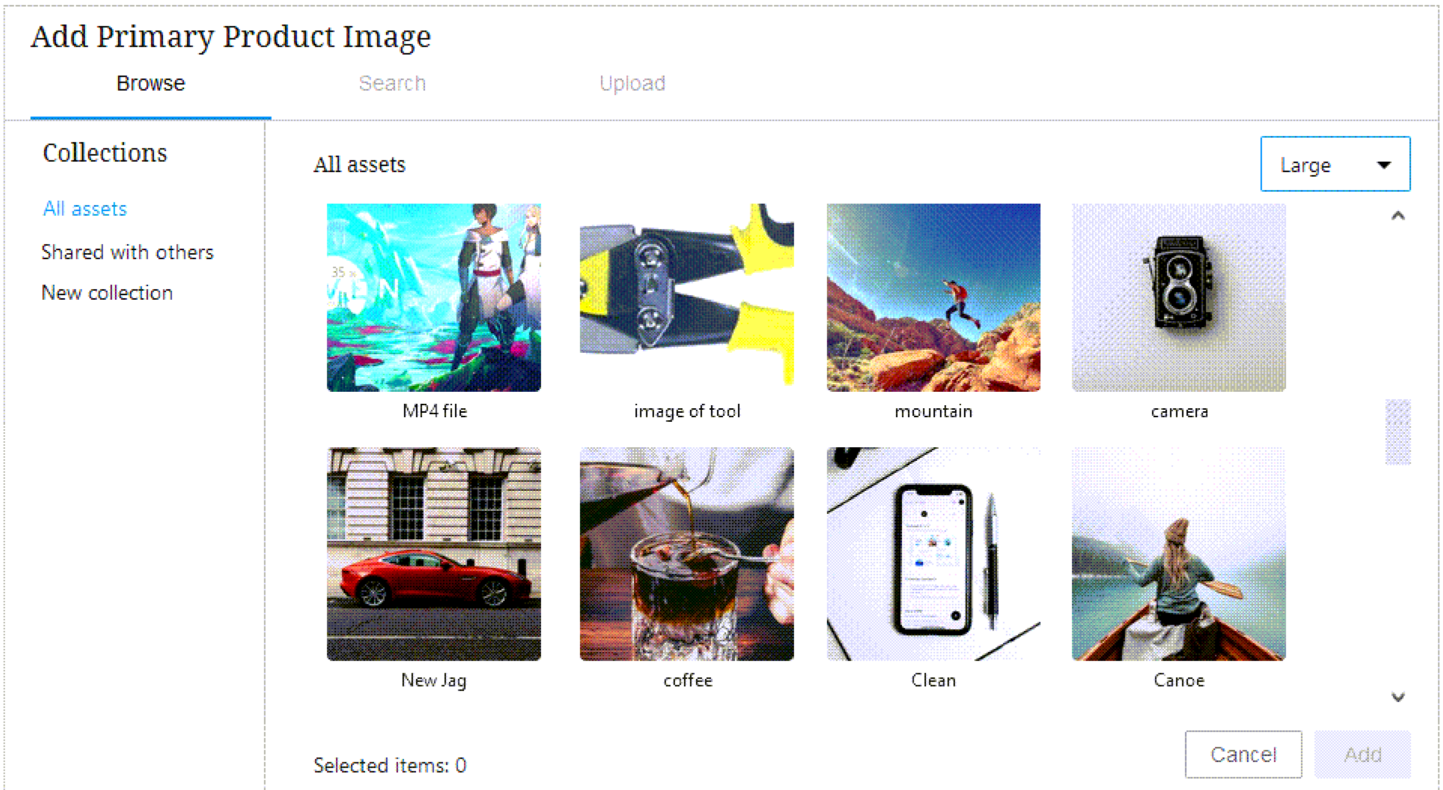
A new 'Efficient' Event Mode option has been added to the OIEP and event processor configurations, which will provide more efficient event handling. Events are only added to a given queue for object and event type combinations that do not already exist on the queue. This enhancement reduces redundant processing, which saves time and increases performance. For more information, refer to the Data Exchange Enhancements and Changes release note.

Running JavaScript when using a business action or condition operates much faster. For more information, see the Business Action: Execute JavaScript topic in the Business Rules documentation.

A new STEP Performance Analysis interface gives users three analysis tools: Health Checks, Activity Tree, and Events. Using these tools can help to identify slow-running processes and correlate issues with event queue activity to identify whether business rule logic, data objects, and/or event handling are contributing to poor system performance. For more information, refer to the New STEP Performance Analysis Tools release note.

New Integration with Stibo DX's Content Hub DAM

A new integration between the Stibo Systems Enterprise Platform (STEP) and Stibo DX's Digital Asset Management (DAM) tool, the Content Hub DAM, provides users with robust out-of-the-box asset management capabilities. The integration is optimized for customers with access to both tools, enabling them to bring assets stored in the Content Hub DAM directly into product information stored in STEP. Additionally, the capabilities offered with this feature can also be applied via integrations with other DAMs, dependent on the API and a customer-built integration.



When either the Referenced Asset Representation component or References component is configured on a Node Editor, the connection between the STEP Web UI and the Content Hub DAM enables users to:

- Perform fast, real-time searches of assets in the Content Hub DAM to link to objects in STEP.
- Browse through all the Content Hub DAM assets or specific collections built in the Content Hub DAM to find the desired asset while in the Web UI.
- Create asset references from the Content Hub DAM to product information in the Web UI.
- Upload assets from your personal machine to both the STEP object and the Content Hub DAM.

For more information on configuring this connection and using it in the Web UI, see the Integration with Content Hub DAM topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

Web UI Enhancements and Changes

Summary

The following enhancements and changes have been made to the Web User Interface:

- Customer-driven branding customization options have been expanded in the Web UI.
- The User List screen now supports management of configured users, including adding, editing, and deleting system users.
- New header components have been added to enable more powerful user searches.
- The look and feel for workflow states in Tasks on the Global Navigation Panel is now in alignment with styling throughout Web UI.
- Typeahead List Of Values are now dynamic when users can add values, and a scroll bar appears for ten or more values in a list.
- On a Node Details, the breadcrumb is now blue to indicate they are links.
- A new table-based editor for Data Containers is now available that improves upon and supersedes the Data Container Table View Editor.
- A new Browse tab on a Node Picker Dialog called 'Node Selector Function' enables users to select a business function.
- The Embedded Analytics Platform solution is no longer available for STEP.
- Summary cards can now have a thumbnail of an image referenced by the object.

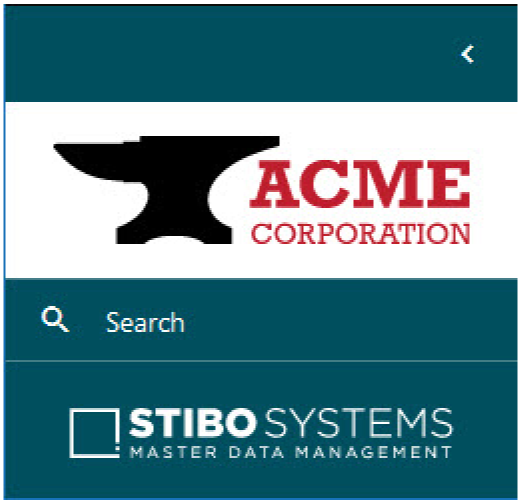
Details

Customer-driven Web UI branding

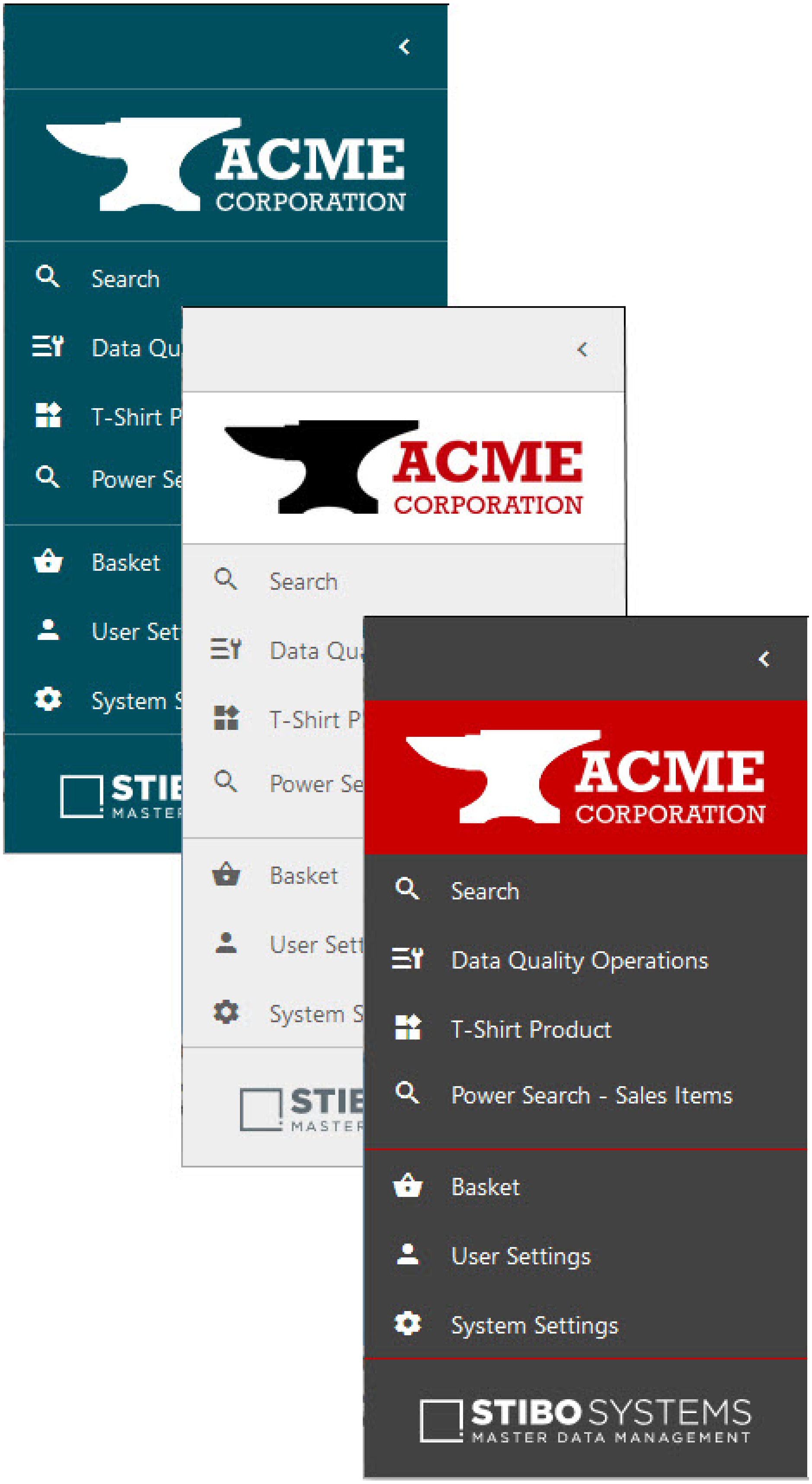
The ability to incorporate your company's logo and colors into the Web UI has been expanded, enabling product managers to design and customize their Web UIs with additional precision. Prompted by significant interest from users, this update provides admins with the tools needed to create Web UIs that better conform to their company aesthetic, are pleasing to the eye, and give visual primacy to the customer's brand.

Via the Web UI Style tab in the designer, the Web UI can now be customized in the following ways:

- A white background can be chosen to display behind the logo image at the top of the Global Navigation Panel in both the collapsed and expanded versions of the panel.



- One of three color schemes can be selected for the Global Navigation Panel to better align the Web UI visual design with your selected logo image: the default Skagerrak blue, light gray, and dark gray. The color scheme chosen affects not only the Global Navigation Panel color, but also how table headers and homepage widget headers are shaded. With Skagerrak blue selected, those headers display with a light blue color; with light or dark gray selected, those headers display with a light gray color.


ACME CORPORATION
Search
Data Quality Operations
T-Shirt Product
Power Search - Sales Items
Basket
User Settings
System Settings
STIBO SYSTEMS MASTER DATA MANAGEMENT

- With either the light gray or dark gray color scheme selected, the appearance of action buttons throughout the Web UI can be adjusted to display as 'Bright' (the default option), which is turquoise,

or 'Muted,' which is a dark cyan color.

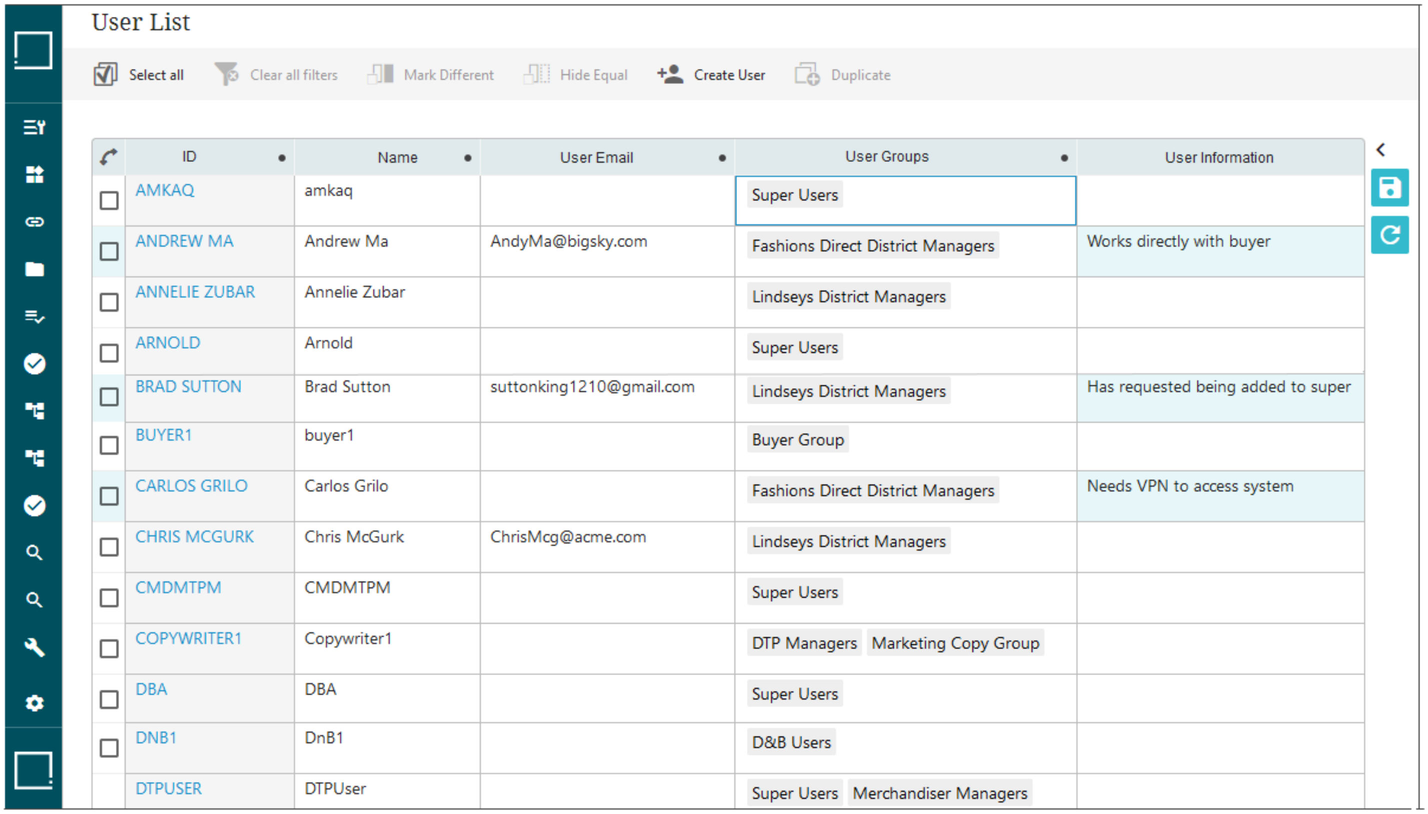
- Select any color to serve as either the background for your logo at the top of the Global Navigation Panel, the lines that divide the various sections in the Global Navigation Panel, or both.

It should be noted that the Stibo Systems logo that displays at the bottom of the Global Navigation Panel is fixed in place and cannot be replaced or removed.

For more information on configuring a global style for your Web UI, see the Designer Web UI Style Tab topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

User List screen improvements

The capabilities of the User List screen have been expanded to better empower admins to manage their users in the Web UI.



ID	Name	User Email	User Groups	User Information
AMKAQ	amkaq		Super Users	
ANDREW MA	Andrew Ma	AndyMa@bigsky.com	Fashions Direct District Managers	Works directly with buyer
ANNELIE ZUBAR	Annelie Zubar		Lindseys District Managers	
ARNOLD	Arnold		Super Users	
BRAD SUTTON	Brad Sutton	suttonking1210@gmail.com	Lindseys District Managers	Has requested being added to super
BUYER1	buyer1		Buyer Group	
CARLOS GRILO	Carlos Grilo		Fashions Direct District Managers	Needs VPN to access system
CHRIS MCGURK	Chris McGurk	ChrisMcg@acme.com	Lindseys District Managers	
CMDMTPM	CMDMTPM		Super Users	
COPYWRITER1	Copywriter1		DTP Managers Marketing Copy Group	
DBA	DBA		Super Users	
DNB1	DnB1		D&B Users	
DTPUSER	DTPUser		Super Users Merchandiser Managers	

The updates to the User List screen are:

- Admins can now configure the screen. By adding the new User List Global Representation component to the Global Representation List, admins can add and configure desired toolbar actions to the top of the table (including business actions and the ability to remove users via a 'Delete' button), and add additional user-specific attributes to display in a configurable display of columns. In the screenshot above, the column 'User Information' has been added.
- All columns displaying on the User List screen now allow for column re-sizing, table sorting, and table filtering. This gives admins the ability to more clearly display user data, and more easily locate specific users, thus speeding the time required for admins to complete user-related tasks in the Web UI.
- Data displaying in the default attribute columns for the User List screen—ID, Name, User Email, and User Groups—can now be edited within the screen. Additional attribute columns configured for the table are also editable.
- The 'Create User' button is now found by default in the toolbar above the table, and allows admins to also add the new user's email address when creating a new user.
- The Hide Equal, Mark Different, and Duplicate from Grid action buttons are now added to the toolbar by default.
- A new 'User List Link' component enabling one-click access to the User List screen is now available via the 'Links' component. This component can be added to the Links Widget on the homepage, and the Links

component in the Global Navigation Panel. This provides users with easier access to the User List screen than the link available via the System Settings option.

All users who update to 11.0 will have the updated User List screen described above. In order to add additional attribute columns and toolbar action buttons to the table shown on this screen, admin users must first add the User List Global Representation component to the Global Representation List and then configure the component.

For more information on the User List screen, see the Web User Interfaces / Web UI Setup and User Guide documentation.

New header components to improve user searches

Two new table header components, User Email Header and User Groups Header, are now available to be configured on Node Lists via these display modes: Table, Multi Edit, Compare, Grid, and Sequencing.

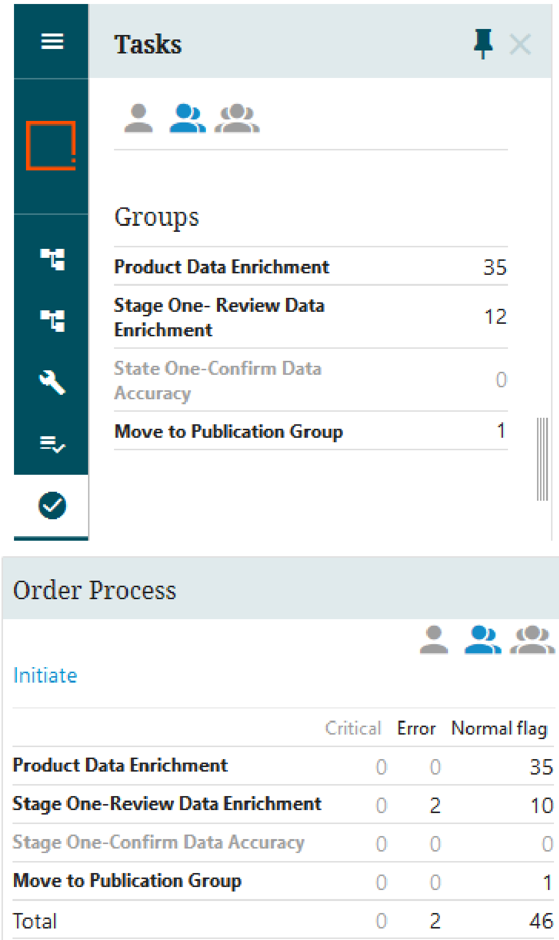
These new components can enable, for example, configuration of the User Email and User Groups columns in the Advanced Search screen, thus allowing a search of users to display results that include these important data points.

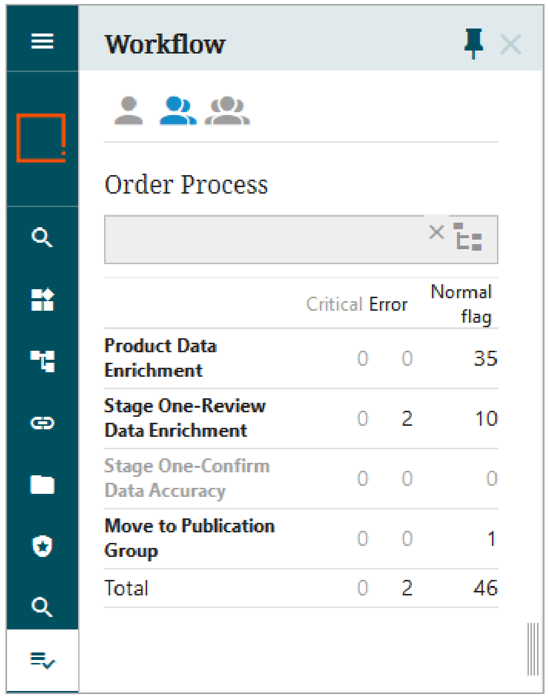
For more information on Node Lists and the various display modes, see the Node List Component topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

For more information on the Advanced Search screen, see the Advanced Search topic, also in the Web User Interfaces / Web UI Setup and User Guide documentation.

Workflow state alignment in Tasks on the Global Navigation Panel to Web UI Styling

The look and feel for workflow states in Tasks on the Global Navigation Panel, is now aligned with the Status Selector on the Global Navigation Panel and the Status Selector Homepage Widget for font size, weight, color, and word wrapping. Additionally, if a workflow state is empty, the state name and count displays consistently with other disabled text throughout Web UI.



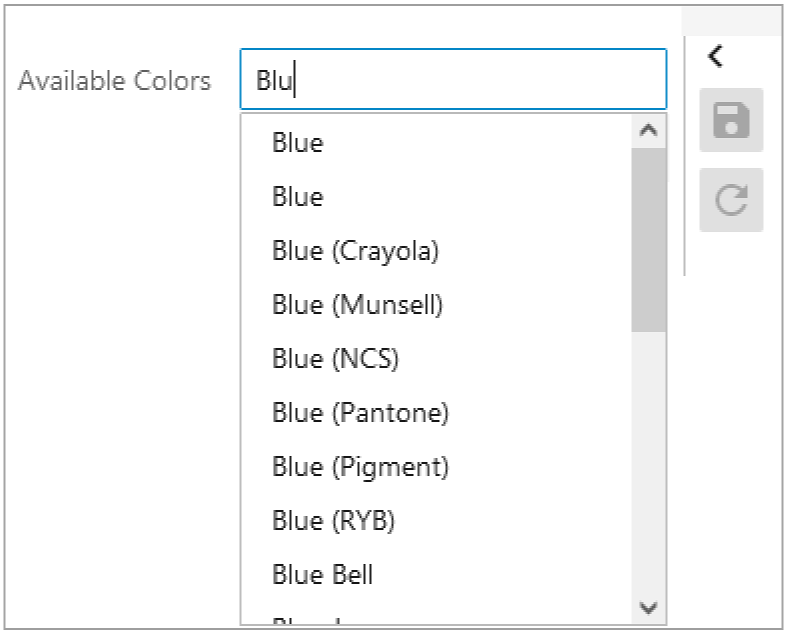


For more information on workflows in Web UI, see the Workflows in Web UI topic in the Using a Web UI section of the Web User Interfaces / Web UI Setup and User Guide documentation.

Typeahead List Of Values are now dynamic when users can add values

For an attribute with List Of Values (LOV) validation where the LOV is set to allow users to add values, the displayed values list will adjust once the third character is entered, and will continue to adjust as more values are typed.

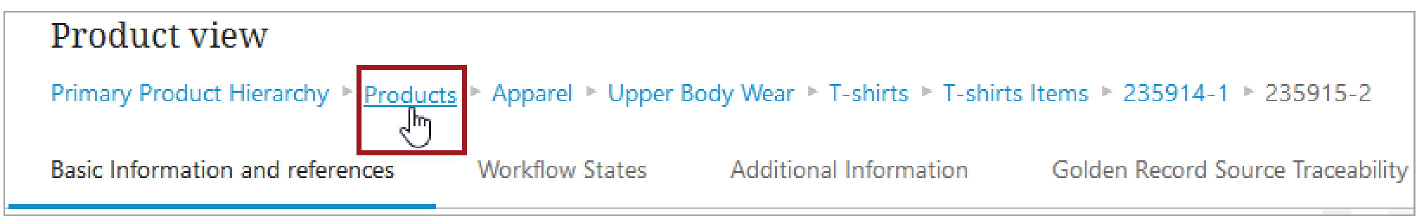
Additionally, if the LOV has more than ten values, a scroll bar will now display inside the values list, enabling users to navigate through the list easier. If the LOV does not have more than ten values, it will adjust accordingly. These changes enable users to work quickly and more effectively when filling out information on products.

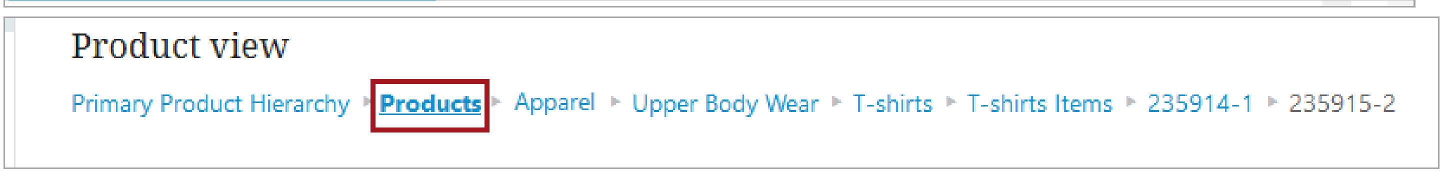


For more information on creating and maintaining attributes, such as LOV attributes, see the Attribute and LOV Creation and Maintenance in Web UI topic in the Using a Web UI section of the Web User Interfaces / Web UI Setup and User Guide documentation.

Updated link view for Breadcrumb and Tab indication

A Breadcrumb, which is added to a Below Title parameter located under Child Components on a Node Detail screen, is now blue to indicate that there are clickable links, and when hovered over with a mouse, an underline appears underneath the link in focus. Additionally, when a user lands on a page and presses the Tab button, the breadcrumb link in focus is underlined and in bold. Previously, the links in a Breadcrumb were gray and would only turn blue with an underline if the link was in focus. Turning all of the links blue now shows users they are navigable links, and there is clear indication as to which link is in focus.

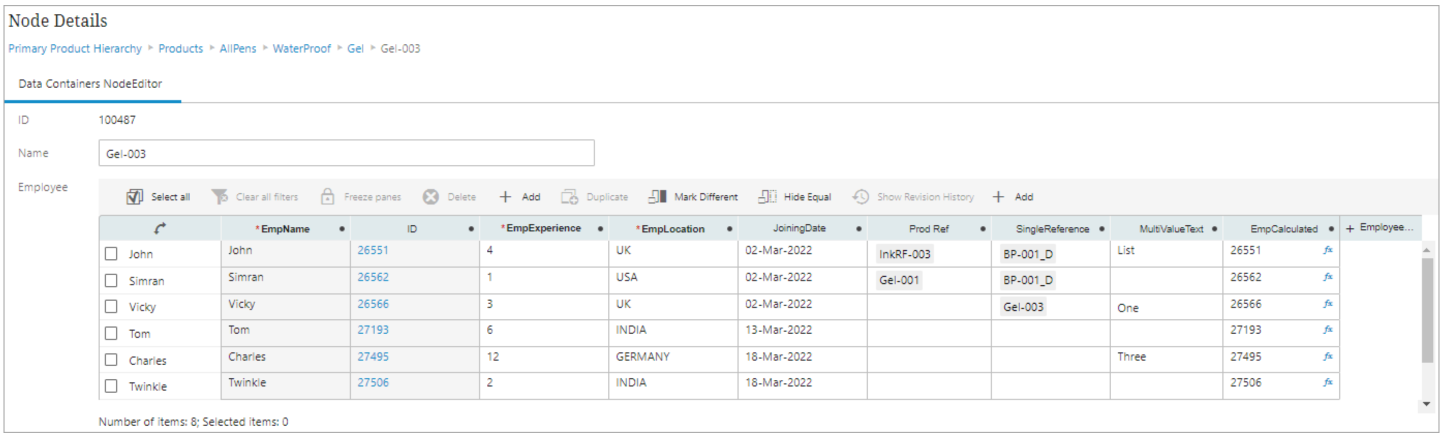




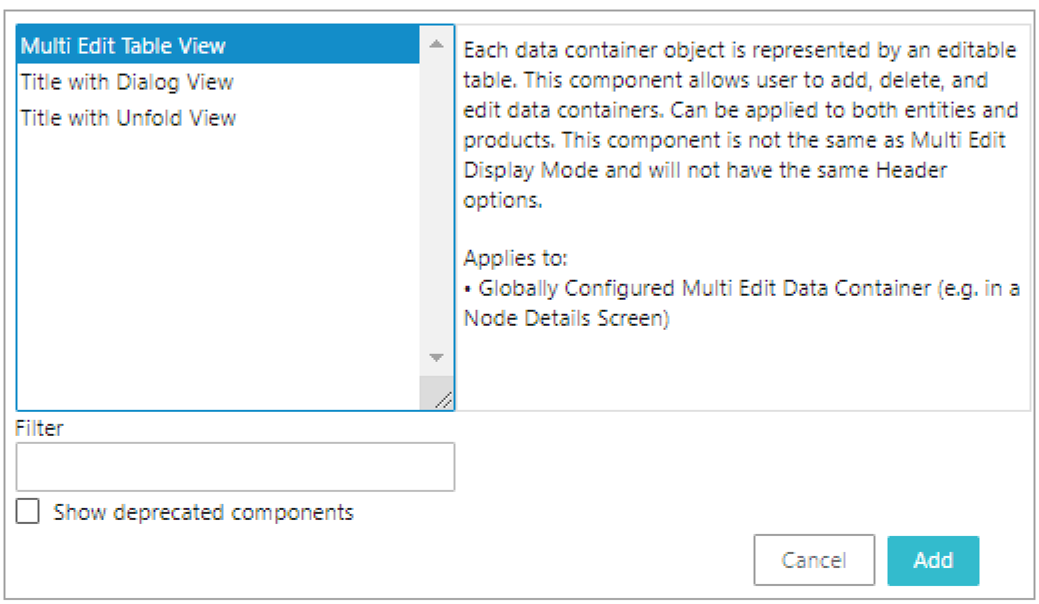
For more information, see the Below Title Component and the Below Title Breadcrumb topics in the Using Web UI section of the Web User Interfaces / Web UI Setup and User Guide.

New table-based data container editor

A new Web UI table-based editor for data containers called 'Globally Configured Multi Edit Data Container' provides a more streamlined and user-friendly experience for end users. This component can be applied to both entities and products where users can view, edit, add, or delete the records with an entity or product selected. It also supports editing multi-valued attributes and features like sorting / filtering along with other standard table-based features. This new component improves upon and supersedes the 'Data Container Table View Editor' component, which will be deprecated and withdrawn in a future release.



The Globally Configured Multi Edit Data Container component can be added to a Node Details screen. The table columns are configured using the 'Multi Edit Table View' component, also new with the 11.0 release, located within 'Global Data Container Representations'.



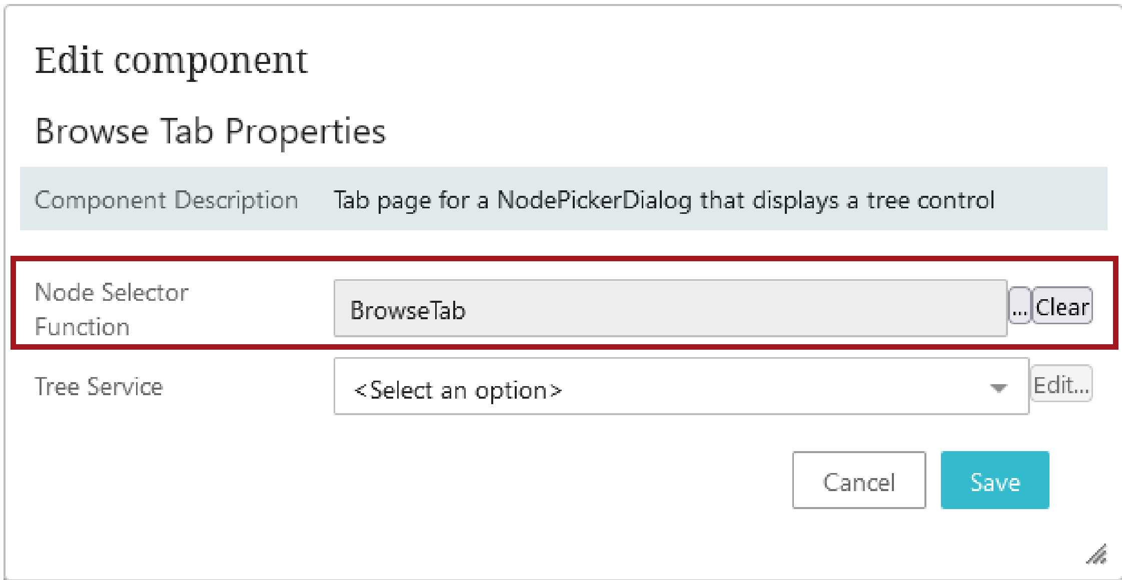
Multi Edit Table View component is not the same as Multi Edit Display Mode and will not have the same header options.

For more information, see the Globally Configured Multi Edit Data Container topic in the Data Containers in Web UI section of the Web User Interfaces / Web UI Setup and User Guide documentation.

New Browse Tab business function

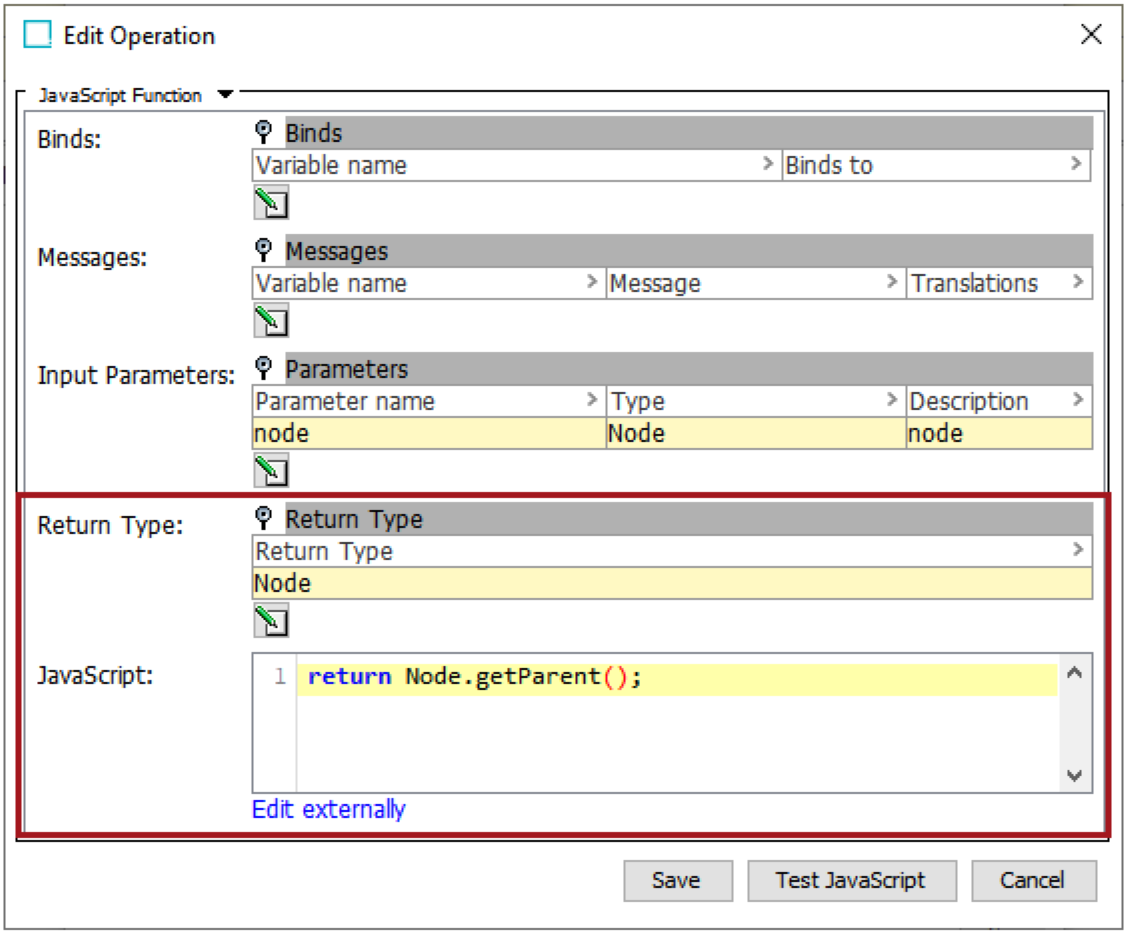
A new parameter field for the Browse tab on a Node Picker Dialog called 'Node Selector Function' enables users to select a business function that brings the user directly to the desired node.

This functionality was introduced with 10.3-MP2. This release note is also available in the 10.3-MP2 Maintenance Patch notes in the online help documentation.



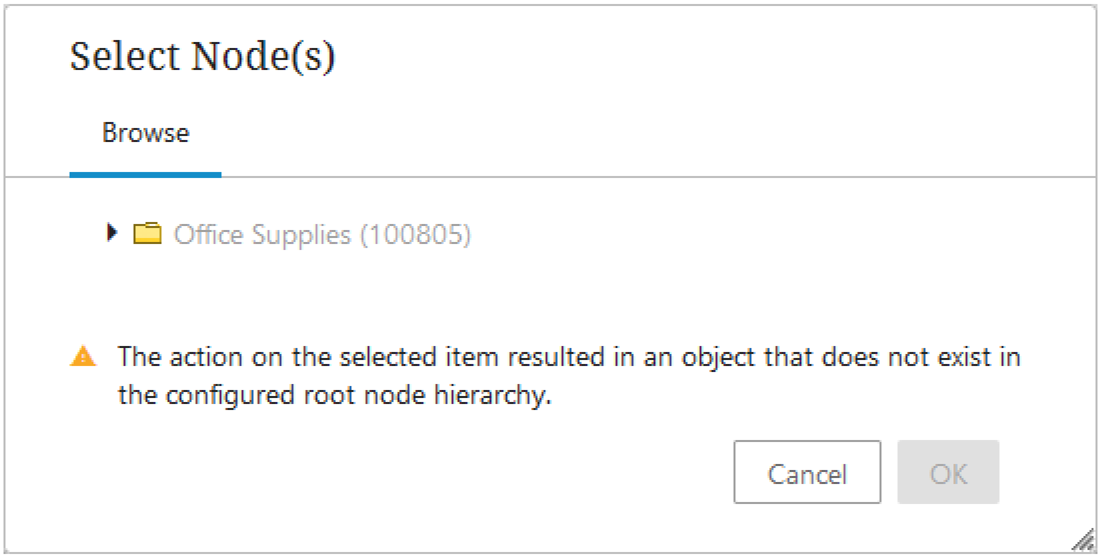
The ability to select a business function that returns a specific node aids users who need to make numerous references throughout their work day. Being brought directly to the relevant node saves valuable time and enables them to complete their tasks more efficiently instead of having to navigate to the desired node each time.

To enable, users must select a business function for the 'Node Selector Function' written in JavaScript that has a Return Type of 'Node.'

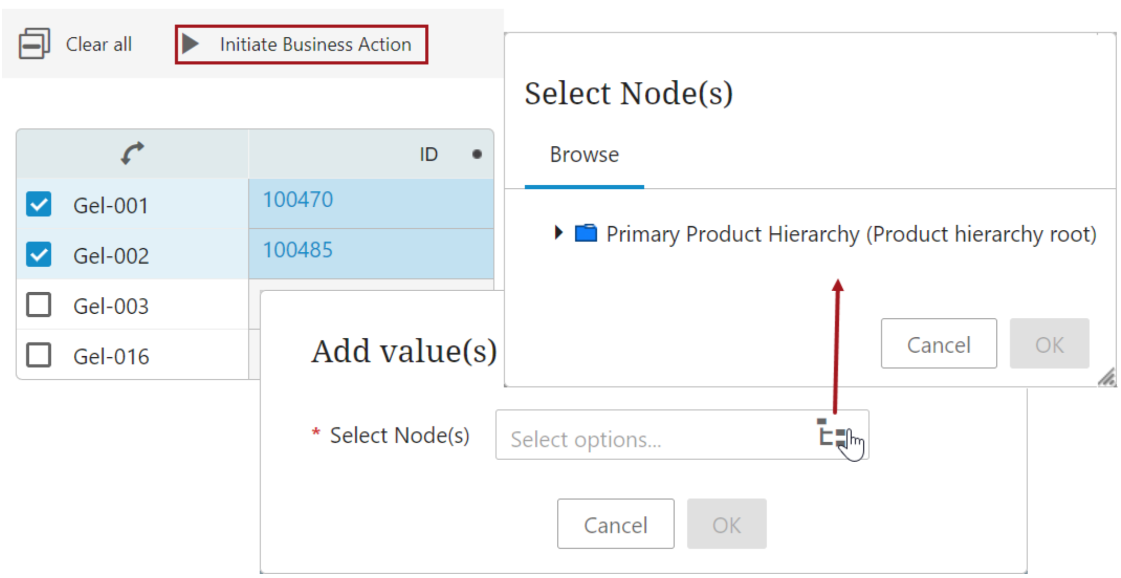


The business function selected in the 'Node Selector Function' field will be executed only if the user has selected one object and the starting node exists.

If the business function configured in the Node Picker Dialog returns a node that does not exist in the static root node hierarchy, a warning message displays, and the user can manually navigate to the desired node.



If more than one object is selected, the 'Node Selector Function' field will be ignored and the top-most node in the hierarchy will display.



For more information on the new 'Node Selector Function' parameter, see the Node Picker Dialog topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

Embedded Analytics Platform components withdrawn

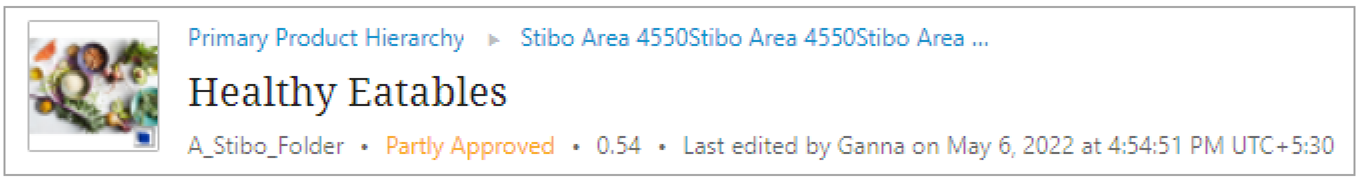
The Embedded Analytics Platform (EAP), powered by Sisense, solution is no longer available, and the corresponding components have been withdrawn from Web UI:

- Embedded Analytics Platform Widget
- Embedded Analytics Platform Screen
- Embedded Analytics Platform Flyout Panel (configured as an 'Analytics' button on a Node Details screen)

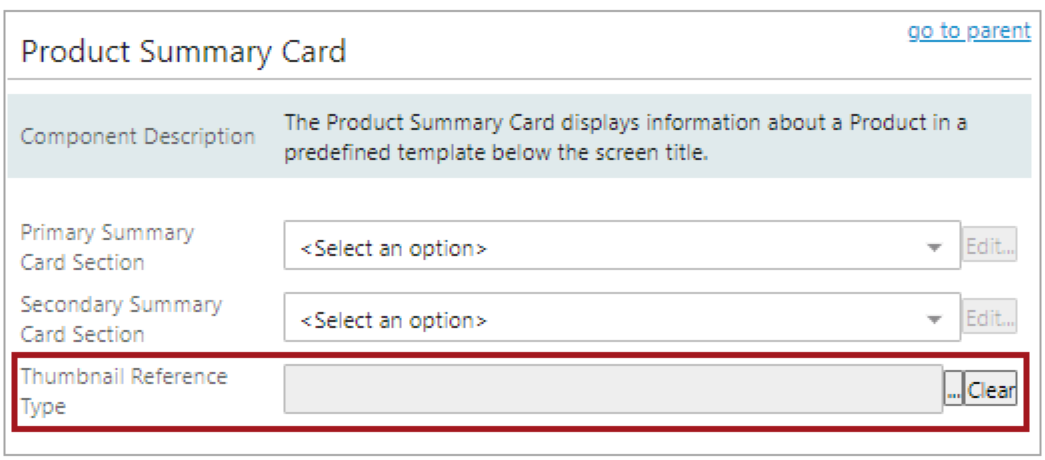
If a customer has Power BI, they can still configure the Power BI Analytics Flyout Panel (configured as an 'Analytics' button on a Node Details screen). It is only the Sisense version of the Analytics button that has been withdrawn. For more information on our existing analytics offerings, refer to the Analytics section of documentation.

Additional feature in summary cards

Summary cards for products, classifications, and entities can now have a thumbnail of an image referenced by the object being worked on.



The new parameter, found in the summary card properties in the designer (shown below), is 'Thumbnail Reference Type.' When an image-based reference type is selected, a thumbnail of that image displays in the leftmost part of the summary card. If there are multiple images linked to the same reference type which is selected in the summary card, the image thumbnail will select the first image linked to the product, entity or classification. If no reference type is selected, no image thumbnail will be displayed. The thumbnail can be clicked to see a full size image.



Additionally, the Product Sufficiency Card has also been updated and now enables display of a thumbnail image.

For more information on summary cards, see the Below Title Component topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

Faceted Search Enhancements and Changes

Summary

The following enhancements, introduced in release 10.3-MP4, have been made to the faceted search solution, which offers a modern search experience powered by Elasticsearch:

- Administrators can configure, save (including the screen layout), and share searches with user groups, ensuring that users see the intended objects on a Search Screen. Privileged users can also access the new 'Share searches' functionality.
- The Search Screen includes an improved faceted search user experience with consolidated search configuration options. Fewer tabs and menus result in a streamlined look for the screen while including all of the functionality.
- The Search Screen now includes pre-configured super type, asset content, and asset reference facets, enabling users to find assets based on keywords, approval status, and other attributes regardless of the storage location (STEP or a DAM), content, or reference status.
- More than 10,000 items can now be selected for exporting or running a business action, which expands the available Search Screen functionality for larger datasets.
- Elasticsearch User Group settings have been removed only for 'Node field' rows in the Elasticsearch Configuration in workbench, allowing all users to access STEP system attribute data in the Search Screen.
- The Search Screen works with the latest versions of Elasticsearch and Kibana to remain current and continue to be supported with third-party technologies.

Elasticsearch is used by the Web UI Search Screen and is activated by the Faceted Search User Experience commercial license. Contact your account manager or partner manager to begin the process of enabling licenses for your system.

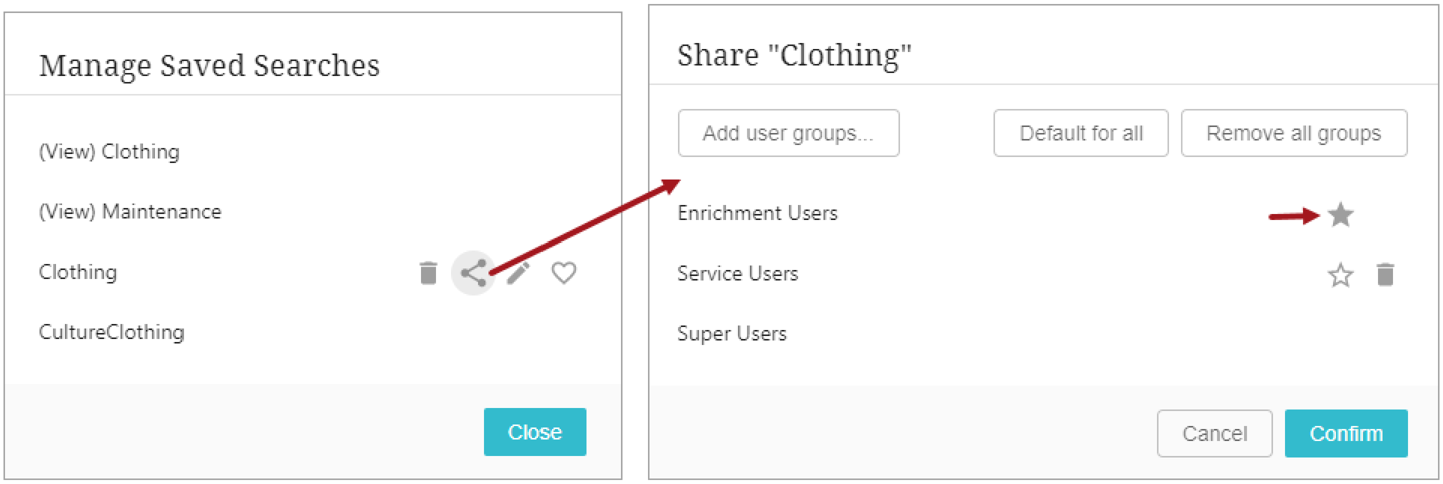
Some changes require reindexing and/or republishing to take effect, as noted in the individual sections below.

Details

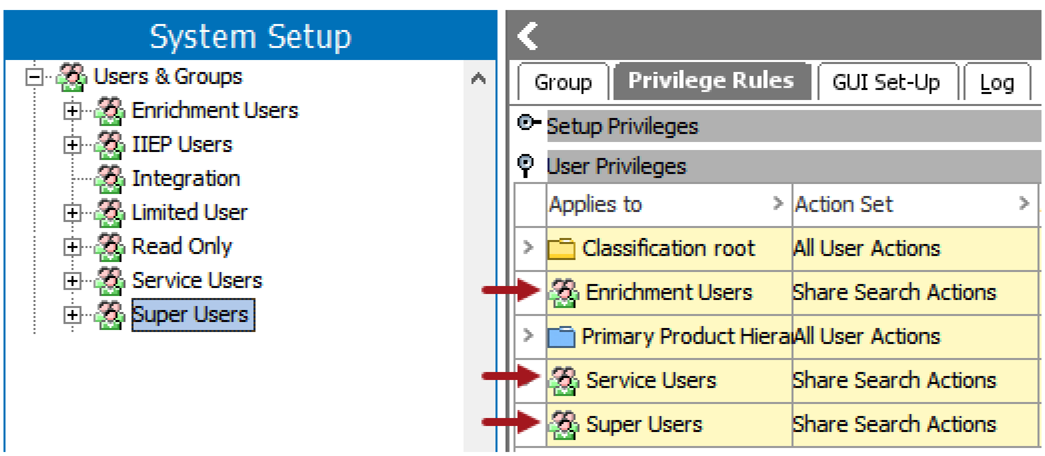
Share searches with user groups

Administrators can now configure the Search Screen based on role and task, save the settings, and then share that configuration (including a suggestion that it be the default search) with all members of the selected user group(s). Administrator-configured shared searches allow users to be confident that they are working from an appropriate search result set. Since saved searches include the view settings, display settings, facet settings, and search bar text, sharing a search provides users in a group with a customized interface and removes the need for them to understand the data model. Users can identify the default recommended search and make a local copy with their own modifications without impacting other users. Given the necessary privileges, users can also share saved searches including the user interface settings with each other. The functionality to share a search via URL is still possible but does not include the user interface settings.

From the 'Search configuration' button in the Web UI Search Screen, the 'Manage Saved Searches' dialog displays the share button only for users in a group with the 'Share Search With Group' user action. The Share dialog includes the 'Add user groups' button, which allows the user to select one or more of the groups configured to receive shared searches. Clicking the star button suggests the shared search as the recipient's default search. The default suggestion can be set for individual groups or for all groups by clicking the 'Default for all' button.



Workbench setup includes specifying user groups that can receive shared searches by adding them as a User Privilege on the sharing group's Privilege Rules. In this example, the required 'Share Search With Group' user action is added to an Action Set named 'Share Search Actions' (shown below) which allows the Super Users group members to share searches with the Enrichment Users, the Service Users, and the Super Users groups.



For more information, see the Search Screen Search Configuration topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

Improved faceted search user experience on Search Screen

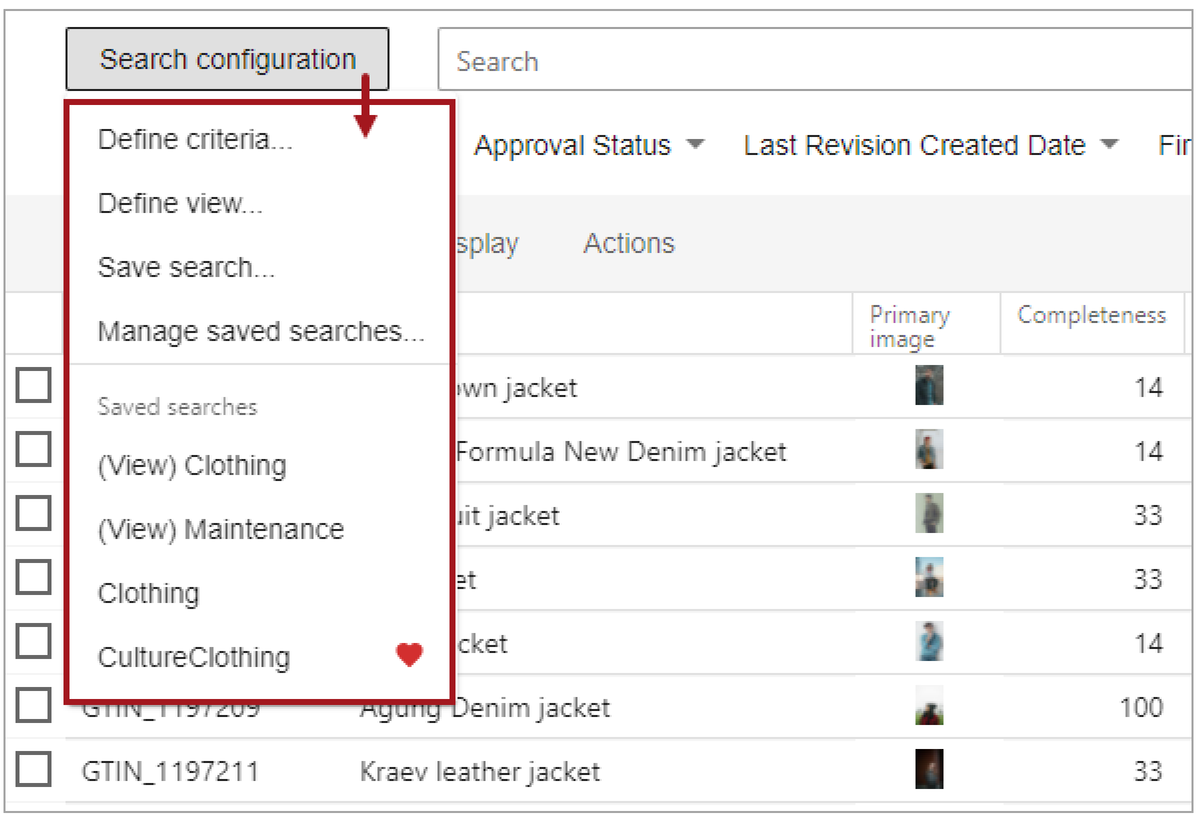
Previously on the Search Screen, separate menus and dialogs allowed access to views (which define the attributes visible in the search results) and saved searches (which store the selected settings for a repeatable search). Additionally, a variety of options to refine and act on the search results were handled using several tabs, like Select and Export. While users could configure an effective search for routine tasks, the configuration required setup in several areas on the screen.

The user experience improvements in this release streamlines the Search Screen to reduce the number of tabs and to gather the configuration options in a single new 'Search configurations' button.

The configuration element improvements include:

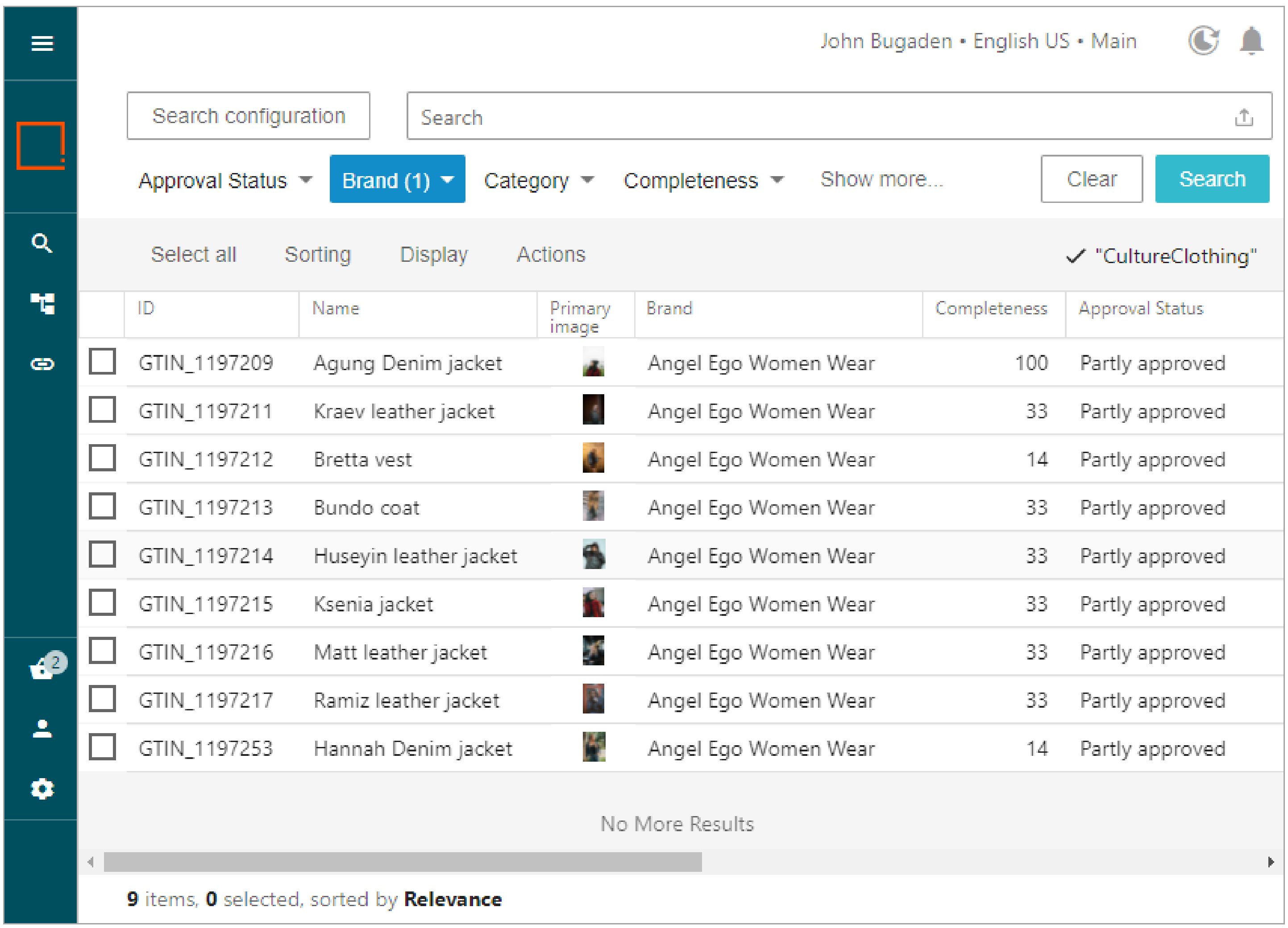
- The 'Define criteria' option for configuring the static facets that are displayed - replaces the 'Add Criteria' button which is removed.
- The 'Define view' option for configuring the data displayed for search results - the previously available 'View' tab is removed, and the 'Favorite Views' and 'Save View as Favorite' options are incorporated into the improved 'Saved search' functionality on the 'Search configuration' button. When defining a view, the standard attributes (ID, Name, Path, and Primary Image) are now identified as 'Static attributes,' which can be removed from the view if desired.
- The 'Save search,' 'Manage saved searches,' and 'Saved searches' options for saving, configuring, and running reusable searches - the previously available 'Searches' tab is removed, and these options are incorporated into the 'Search configuration' button.

For existing faceted search users, updating to this release retains existing saved searches and migrates existing views, which are displayed in the Saved searches list with '(View)' prepended to the name. Users can manually edit the name of a search or delete it as necessary.



The updates to options on tabs include:

- The 'View' tab is removed.
- The 'Select' tab (with 'All' and 'None' options) is renamed as a single button with the label 'Select all' or 'Clear all' (based on the current selections).
- The 'Show as' tab is renamed to 'Display' and allows search results to be displayed as cards or in a table.
- The 'Actions' tab is moved to the left and now includes either the 'Export' or 'Export all' option (based on the selected products).
- The 'Export' tab and the 'Export current view' option are removed.
- The currently displayed search configuration is identified below the Search button and shows '(edited)' if the saved search has been modified. The user can update the existing saved search or create a new saved search from the current settings.



After patching, the updates are immediately visible in the Search Screen; republishing is not required for these improvements.

For more information, see the Search Screen Details topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

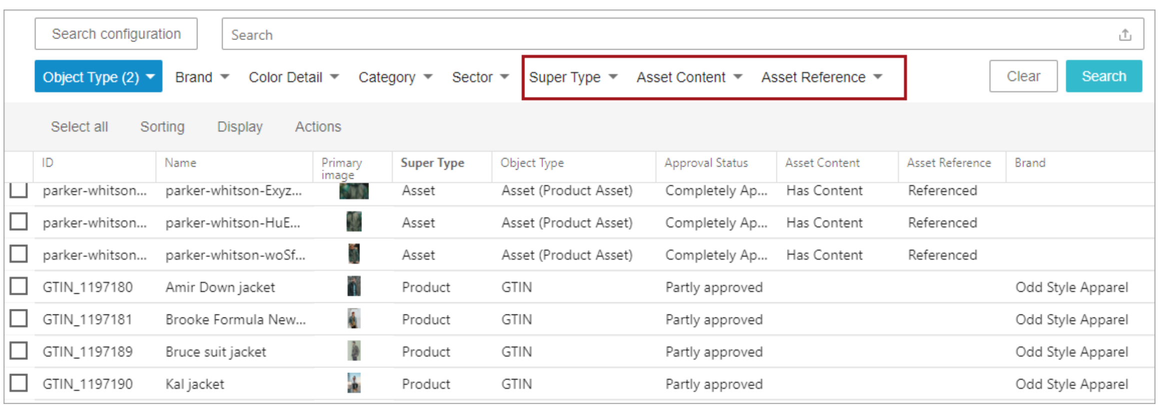
New super type, asset content, and reference facets

New default 'node fields' in the Elasticsearch Configuration wizard Data Specifications step allow the Search Screen to be configured to display super types and asset-related data as facets. Previously, the object type facet was required to create a search based on super type, and often required selecting multiple values. With the new Super Type facet, users can easily restrict the search results to products, classifications, and/or assets (or any combination) and then select individual object types if further refinement is needed. This new facet provides a more effective way to create product searches versus asset searches.

The new Asset Content and Asset Reference facets include assets saved in STEP and those stored externally in a DAM. Since these fields are blank for products and classifications, it is advisable to exclude them for searches that do not include assets.

After configuring and reindexing / publishing these 'node fields,' the Search Screen displays the following new asset facets:

- Super Type - The values on this facet allow users to include assets, products, and/or classifications in the search result set.
- Asset Content - The values on this facet allow users to filter assets in the search result set by 'Assets with Content' and 'Assets Without Content.'
- Asset Reference - The values on this facet allow users to filter assets in the search result set by 'Reference' and 'Not Referenced.'



To implement these new facets on the Search Screen:

- For an active Elasticsearch Configuration, update the Data Specifications section to indicate how the data should be accessed from the Search Screen, and reindex (and republish), as defined in the Reindex the Elasticsearch Database section of the Elasticsearch Publishing topic in the Web User Interfaces / Web UI Setup and User Guide documentation.
- For new Elasticsearch configurations, the super type, asset content, and asset reference 'node fields' are each set to be a Default Facet. Consider the default settings along with the other configuration options, as

defined in the Creating an Elasticsearch Configuration topic of the Web User Interfaces / Web UI Setup and User Guide documentation.

For more information on Elasticsearch and Kibana, refer to the Initial Setup for Elasticsearch topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

Exports and business actions no longer limited to run on 10,000 items

Previously, the Search Screen prevented a user from selecting more than 10,000 items, which limited the actions that could be performed in a single process on large dataset. With this release, users can select all items in the search result set, even when there are more than 10,000. Once selected, users can export the items or run a valid business rule on the items. This allows a user to streamline their work process by executing an operation once for a large number of items, such as bulk updates or initiating items into a workflow, as well as exporting to a spreadsheet for offline review.

For large result sets, users must sculpt the search criteria to include only the necessary items since individual items cannot be unselected when more than 10,000 items are selected.

For more information, see the Search Screen Actions topic and the Search Screen Select All topic, both in the Web User Interfaces / Web UI Setup and User Guide documentation.

Elasticsearch User Group setting updates

The User Group Permissions column in the Elasticsearch Configuration allows elements of the faceted search screens to be restricted based on user group. Previously, for the Data Specifications step of the configuration, setting User Group Permissions on 'Node field' specifications allowed STEP system attributes to be hidden in the Search Screen. With this release, the 'Node field' specifications can no longer be restricted by user group, as indicated by the yellow coloring in the cells.

Updating to this release removes only for 'Node field' specifications settings for any User Group Permissions, which means this data is now available to all Search Screen users as further defined by the checkboxes in the configuration (shown in the following image). Since permissions are not published to Elasticsearch, after patching, the update is immediately visible in the Search Screen; republishing is not required for this change.

Data Specification ID	Data Specification Type	User Group Permissions	Displayed Data	Full Text	ID Query	Default Facet	
Super Type	Node field		☑	☐	☐	☑	
ID	Node field		☑	☑	☑	☐	
Name	Node field		☑	☑	☐	☐	
Object Type	Node field		☑	☐	☐	☑	
Path	Node field		☑	☐	☐	☑	
Approval Status	Node field		☑	☐	☐	☑	
Last Revision Created Date	Node field		☑	☐	☐	☑	
First Revision Created Date	Node field		☑	☐	☐	☑	
Asset Content	Node field		☑	☐	☐	☑	
Asset Reference	Node field		☑	☐	☐	☑	

For more information, see the Creating an Elasticsearch Configuration topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

Support for version 7.17 for Elasticsearch and Kibana

The 11.0 release supports version 7.17 of Elasticsearch and Kibana.

For more information on Elasticsearch and Kibana, refer to the Initial Setup for Elasticsearch topic in the Web User Interfaces / Web UI Setup and User Guide documentation.

Customer MDM and Supplier MDM Enhancements and Changes

Summary

The following enhancements have been made to the Customer and Supplier Master Data Management solution:

- Automatic Machine Learning Matching Agent recommendations now update whenever the event processor detects a new item or change in an existing item in the Clerical Review workflow.
- A simplified Matching - Merge Golden Record component model has been implemented to readily identify if a golden record is in clerical review.
- Match and Merge performance has been optimized for overly large match code groups.
- Performance is improved when using Loqate address standardization with CASS validation for US addresses.
- Performance is improved for profiling large data sets.
- Match Criteria documentation has been improved by being expanded and reorganized.

The following enhancements have been made to Clerical Review for the Customer and Supplier Master Data Management solution:

- Unfoldable headers and filtering for data containers in Clerical Review allows users to see each attribute of a data container as its own collapsible column and filter based on the attribute values.
- New Clerical Review Task and Golden Record Information headers improve the visual display of data.
- Configurable default column widths for Unfoldable Data Container Headers allow the user to alter the default width of the attribute and reference columns within an Unfoldable Data Container.
- A record information overflow indicator for Clerical Review displays a message telling the user if a task contains more than five potential duplicates.
- Clerical Review match score filtering allows users to view and filter by match scores between potential duplicates.

Details

Automatic Machine Learning Matching Agent recommendations

The Machine Learning Matching Agent (MLMA) for Clerical Review continuously and automatically trains based on a data steward's decisions to merge or reject tasks in Clerical Review. Before this release, if a new task was added to the Clerical Review workflow or records in an existing task were modified (e.g., changing an attribute such as a name or phone number), the user had to manually initiate the recommendation process to get new and updated recommendations for all tasks in the Clerical Review Task List.

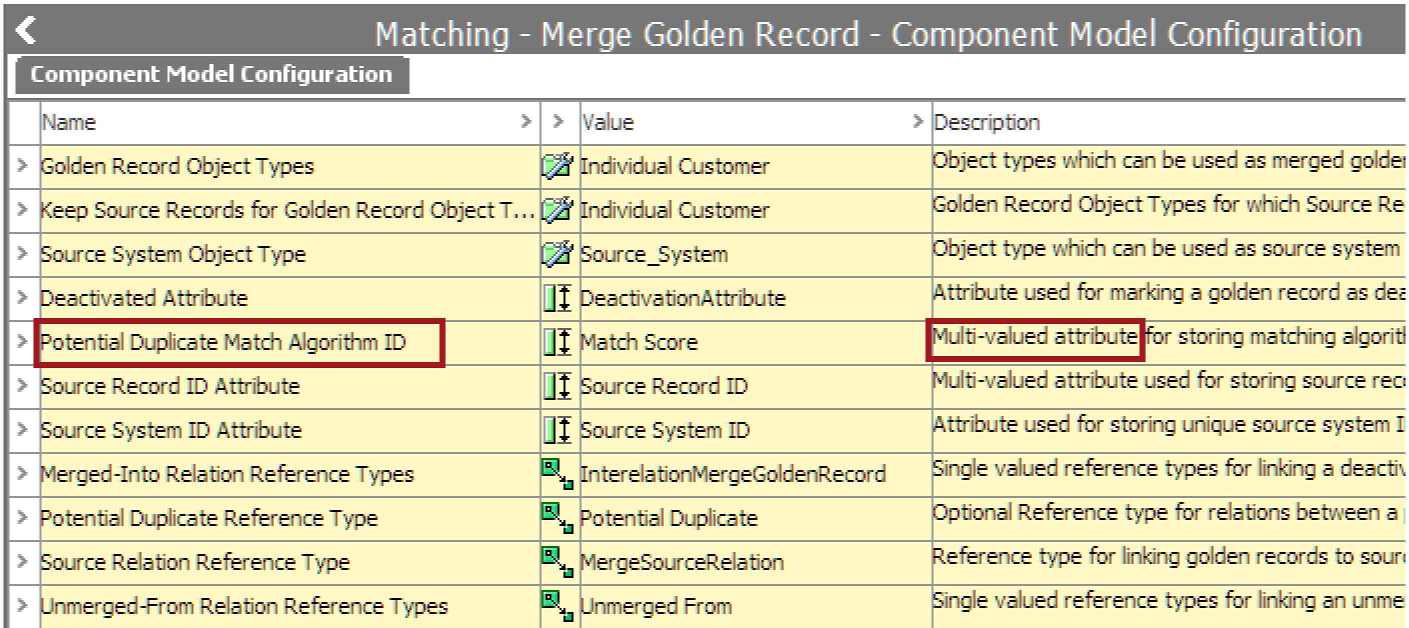
Now, when the Matching event processor is triggered and creates a new task or existing records in a task are altered, it immediately updates the recommendation for the task. This ensures the data steward always has accurate and trustworthy recommendations, and it allows the data steward to continue their tasks confidently.

For more information, see the Machine Learning Matching Agent topic in the Matching, Linking, and Merging documentation.

Simplified Matching - Merge Golden Record component model

The Matching - Merge Golden Record component model operates with a potential duplicate reference type which tells the user at a glance if a golden record is in a Clerical Review workflow. Prior to this release, the potential duplicate reference type needed to be multi-valued, and a matching algorithm ID (MAID) attribute was needed as metadata on the reference type, which told the user which matching algorithm was being used on that golden record. However, this method of operating meant that more than one matching algorithm could be applied to the same golden record, placing it in multiple Clerical Review workflows, which could be confusing to users.

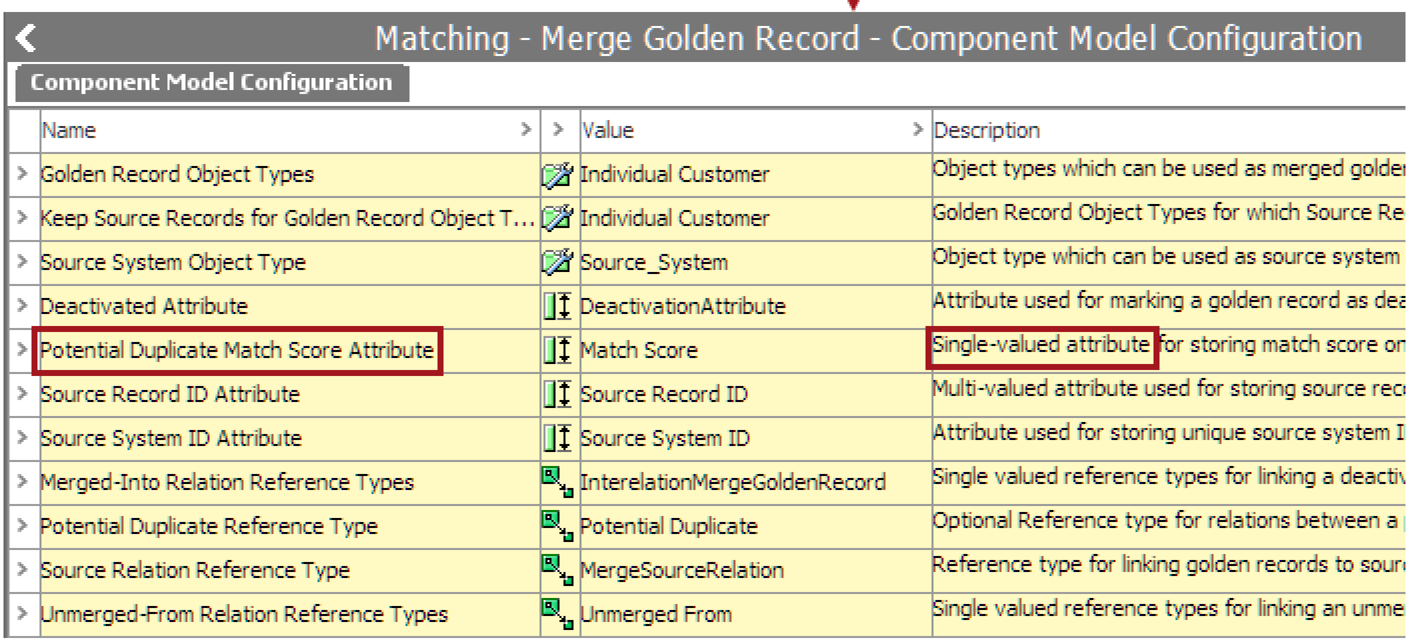
With this release, the Matching - Merge Golden Record has been simplified so that only one matching algorithm can operate on a golden record at a time. The potential duplicate reference type and potential duplicate match algorithm ID are now single-valued, so that one record cannot have more than one potential duplicate reference, and thereby can only exist in one Clerical Review workflow. As such, the MAID attribute is no longer relevant, as there is no need to differentiate between multiple potential duplicate references.



Matching - Merge Golden Record - Component Model Configuration

Component Model Configuration

Name	Value	Description
Golden Record Object Types	Individual Customer	Object types which can be used as merged golder
Keep Source Records for Golden Record Object T...	Individual Customer	Golden Record Object Types for which Source Re
Source System Object Type	Source_System	Object type which can be used as source system
Deactivated Attribute	DeactivationAttribute	Attribute used for marking a golden record as dea
Potential Duplicate Match Algorithm ID	Match Score	Multi-valued attribute for storing matching algorit
Source Record ID Attribute	Source Record ID	Multi-valued attribute used for storing source rec
Source System ID Attribute	Source System ID	Attribute used for storing unique source system I
Merged-Into Relation Reference Types	InterelationMergeGoldenRecord	Single valued reference types for linking a deacti
Potential Duplicate Reference Type	Potential Duplicate	Optional Reference type for relations between a
Source Relation Reference Type	MergeSourceRelation	Reference type for linking golden records to sour
Unmerged-From Relation Reference Types	Unmerged From	Single valued reference types for linking an unme



Matching - Merge Golden Record - Component Model Configuration

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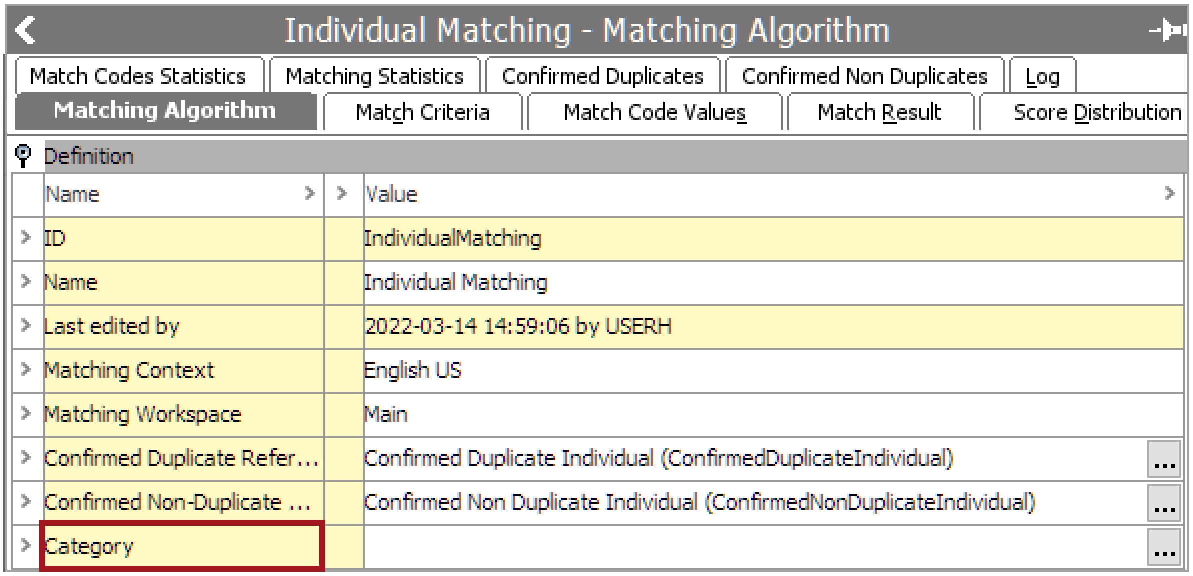
Keep Source Records for Golden Record Object T...	Individual Customer	Golden Record Object Types for which Source Re
Source System Object Type	Source_System	Object type which can be used as source system
Deactivated Attribute	DeactivationAttribute	Attribute used for marking a golden record as dea
Potential Duplicate Match Score Attribute	Match Score	Single-valued attribute for storing match score or
Source Record ID Attribute	Source Record ID	Multi-valued attribute used for storing source rec
Source System ID Attribute	Source System ID	Attribute used for storing unique source system I
Merged-Into Relation Reference Types	InterelationMergeGoldenRecord	Single valued reference types for linking a deacti
Potential Duplicate Reference Type	Potential Duplicate	Optional Reference type for relations between a
Source Relation Reference Type	MergeSourceRelation	Reference type for linking golden records to sour
Unmerged-From Relation Reference Types	Unmerged From	Single valued reference types for linking an unme

Stibo Systems will provide an auto-upgrader to change the potential duplicate reference type to single-valued without disrupting the rest of STEP. However, the auto-upgrader cannot account for all scenarios in STEP, and some users must upgrade manually. Contact your Stibo Systems account manager or partner manager for more information.

Additionally, the 'Category' parameter from the match and link solution has been added to the match and merge solution. As such, match and merge matching algorithms no longer match records across categories.

For more information, see the Configuring the Matching - Merge Golden Record Component Model topic under the Matching, Linking, and Merging documentation.



For example, consider an implementation with two matching algorithms, one for USA customers, another for EU customers, where it is a requirement to keep the customers separate, and the matching algorithms for these have different properties. With this release, a golden record for a customer living in the EU is placed under a category for EU customers and is only handled by the EU matching algorithm. Consider then if the customer moves to the USA and has a new golden record placed under the category for USA customers. The EU matching algorithm does not match these two golden records, as the USA record exists in a different category.

For more information, see the Configuring Matching Algorithms topic in the Matching, Linking, and Merging documentation.

Match and Merge performance optimized for overly large match code groups

In the match and merge importer, the matching algorithm uses match codes to know which golden records to compare. STEP uses these match codes to optimize the parallel imports. Previously, when too many records shared the same match code value, STEP would drastically slow down while it attempted to import the affected records one at a time.

With this release, STEP ignores overly occurring match codes to optimize the parallel import.

Now if, for instance, a file containing thousands of contacts all share a phone number match code (e.g., all contacts used the same reception phone number), STEP ignores those match codes to allow the tasks to run in parallel. Meanwhile, if a file contains a series of records, the first 20 records are updates to the same contact, STEP does not run any two of those 20 updates in parallel. In both use cases, the new functionality improves performance in a match and merge solution.

For more information, see the IIEP - Configure Match and Merge Importer Processing Engine topic in the Data Exchange documentation.

Loqate address standardization performance improvement

Performance is improved when using Loqate address standardization with CASS validation for US addresses.

For more information, see the CASS Address Component Model topic in the Data Integration documentation.

Data profiling performance improvement

Data profiling performance is improved to support 35 million records. It is possible to profile up to 100 million records, though it requires some protected settings. Contact your Stibo Systems account manager or partner manager for details.

For more information, see the Data Profiles topic in the Data Profiling documentation.

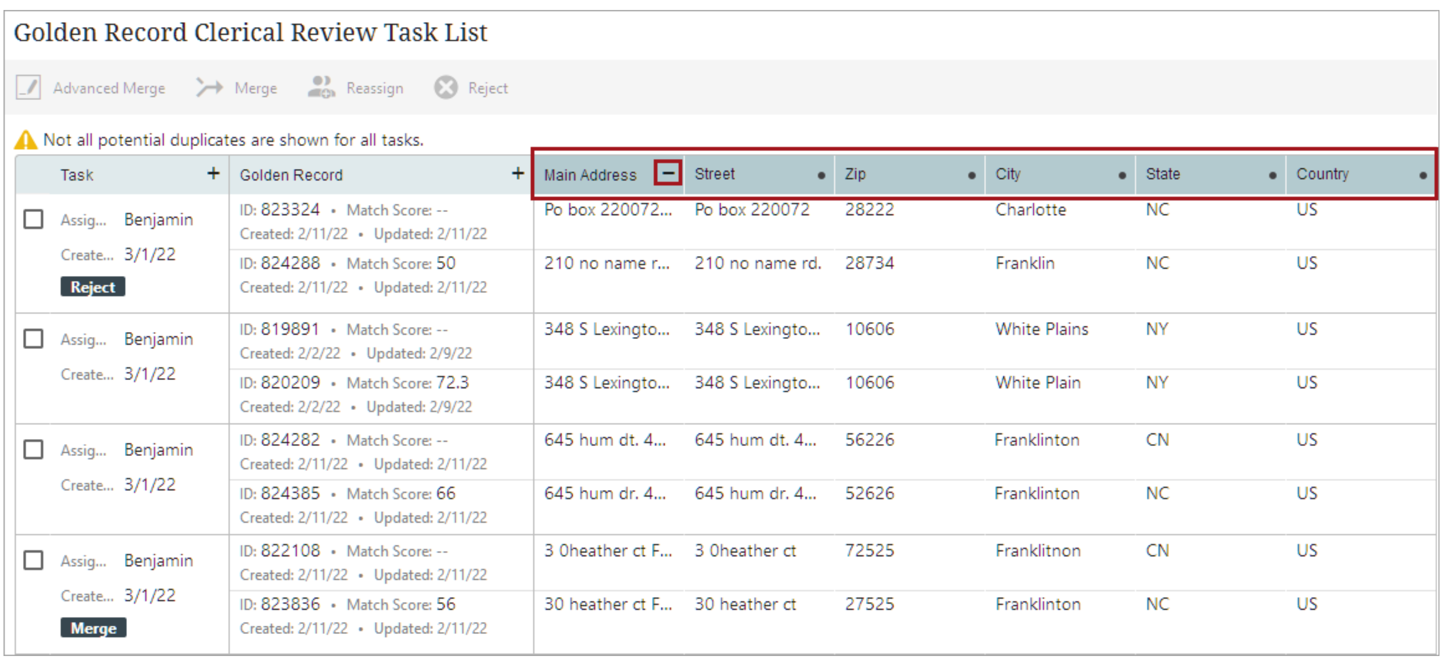
Match Criteria documentation updated

Match Criteria materials for matching algorithms, including details on data elements, matchers, and match code generators, are expanded and reorganized for better navigation within Matching, Linking and Merging documentation.

Unfoldable headers and filtering for data containers in Clerical Review Task Lists

Golden Record Clerical Review Task Lists can be configured to display data containers containing attributes which may affect a golden record's match score. Previously, these data containers listed all their attributes in one column, making it difficult to read and determine whether the individual attributes aligned between potential duplicates.

Now, data container columns can be unfolded to show each attribute in its own column, and users can filter a Clerical Review Task List on the values of attributes within a data container. This allows data stewards to quickly search for tasks with attributes equal to, beginning with, or containing specific values.

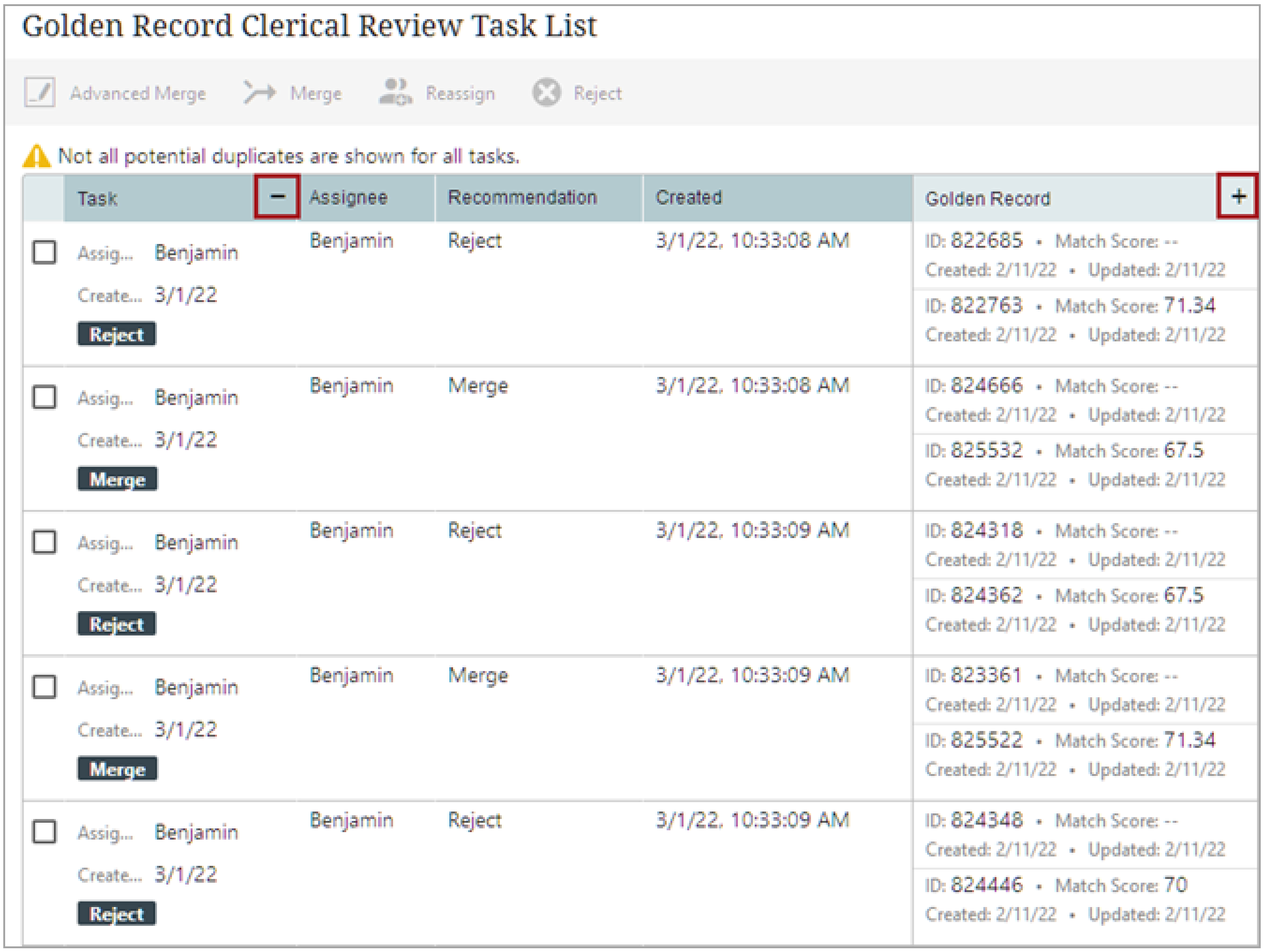


For more information, see the Golden Record Clerical Review Task List topic in the Matching, Linking, and Merging documentation.

Task Information and Golden Record Information headers for Clerical Review

Previously in a Golden Record Clerical Review Task List, there were separate columns to display information like assignee, merge or reject recommendation, golden record ID, match score, etc. As a result, this important information took up a large amount of space, making the data steward's viewing experience difficult.

Now, by default, the Task and Golden Record columns are anchored to the left side of the Clerical Review Task List. These columns show information concerning the task and the involved potential duplicates.



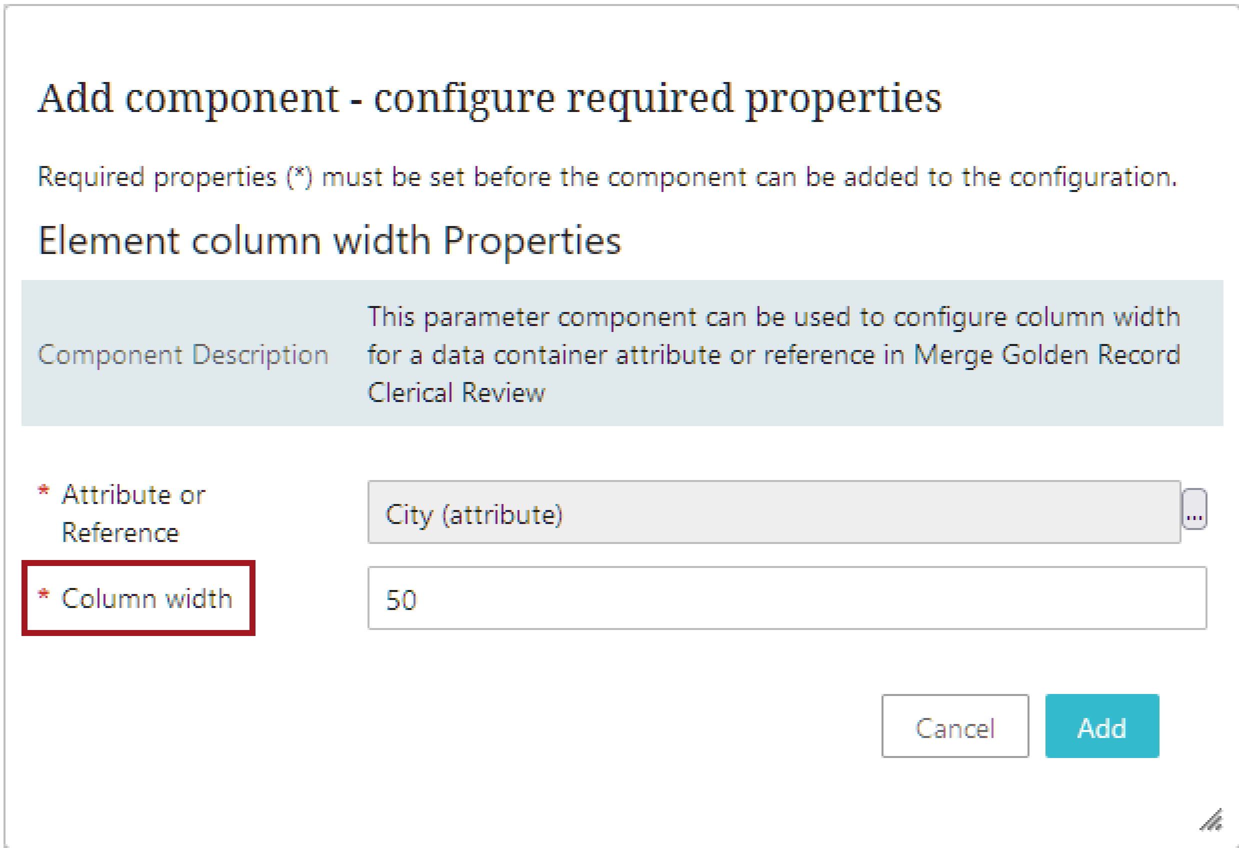
Task	Assignee	Recommendation	Created	Golden Record
Assig... Benjamin Create... 3/1/22 Reject	Benjamin	Reject	3/1/22, 10:33:08 AM	ID: 822685 • Match Score: -- Created: 2/11/22 • Updated: 2/11/22 ID: 822763 • Match Score: 71.34 Created: 2/11/22 • Updated: 2/11/22
Assig... Benjamin Create... 3/1/22 Merge	Benjamin	Merge	3/1/22, 10:33:08 AM	ID: 824666 • Match Score: -- Created: 2/11/22 • Updated: 2/11/22 ID: 825532 • Match Score: 67.5 Created: 2/11/22 • Updated: 2/11/22
Assig... Benjamin Create... 3/1/22 Reject	Benjamin	Reject	3/1/22, 10:33:09 AM	ID: 824318 • Match Score: -- Created: 2/11/22 • Updated: 2/11/22 ID: 824362 • Match Score: 67.5 Created: 2/11/22 • Updated: 2/11/22
Assig... Benjamin Create... 3/1/22 Merge	Benjamin	Merge	3/1/22, 10:33:09 AM	ID: 823361 • Match Score: -- Created: 2/11/22 • Updated: 2/11/22 ID: 825522 • Match Score: 71.34 Created: 2/11/22 • Updated: 2/11/22
Assig... Benjamin Create... 3/1/22 Reject	Benjamin	Reject	3/1/22, 10:33:09 AM	ID: 824348 • Match Score: -- Created: 2/11/22 • Updated: 2/11/22 ID: 824446 • Match Score: 70 Created: 2/11/22 • Updated: 2/11/22

The Task Information header can be configured to show information relevant to making merge or reject decisions, while the Golden Record Information header can be configured to show information regarding the golden record. Both headers are unfoldable if the data steward wishes to view each column. This allows data stewards to keep large amounts of important information in one place.

For more information, see the Golden Record Clerical Review Task List topic in the Matching, Linking, and Merging documentation.

Configurable default column widths for Unfoldable Data Container Headers

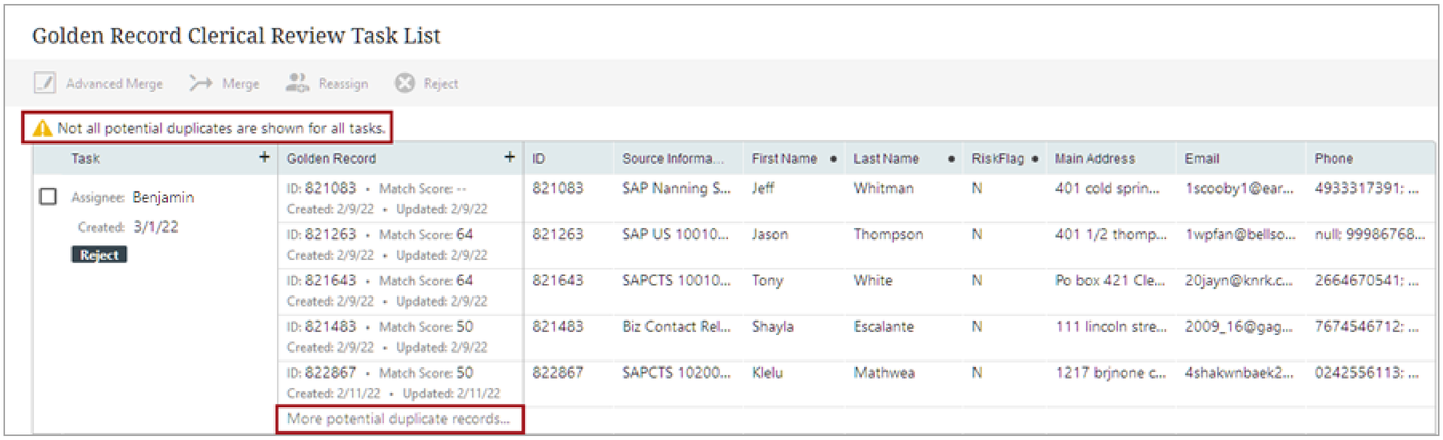
Column widths for the attribute and reference columns within an Unfoldable Data Container Header are now configurable to have specific widths. This ensures that each time a user opens the Task List screen an optimal column width for working with data is already established without further manual adjustments. This eliminates a tedious extra step, ensuring that Task Lists now have an optimal look every time users open the screen.



For more information, see the Golden Record Clerical Review Task List topic in the Matching, Linking, and Merging documentation.

Record information overflow indicator for Clerical Review

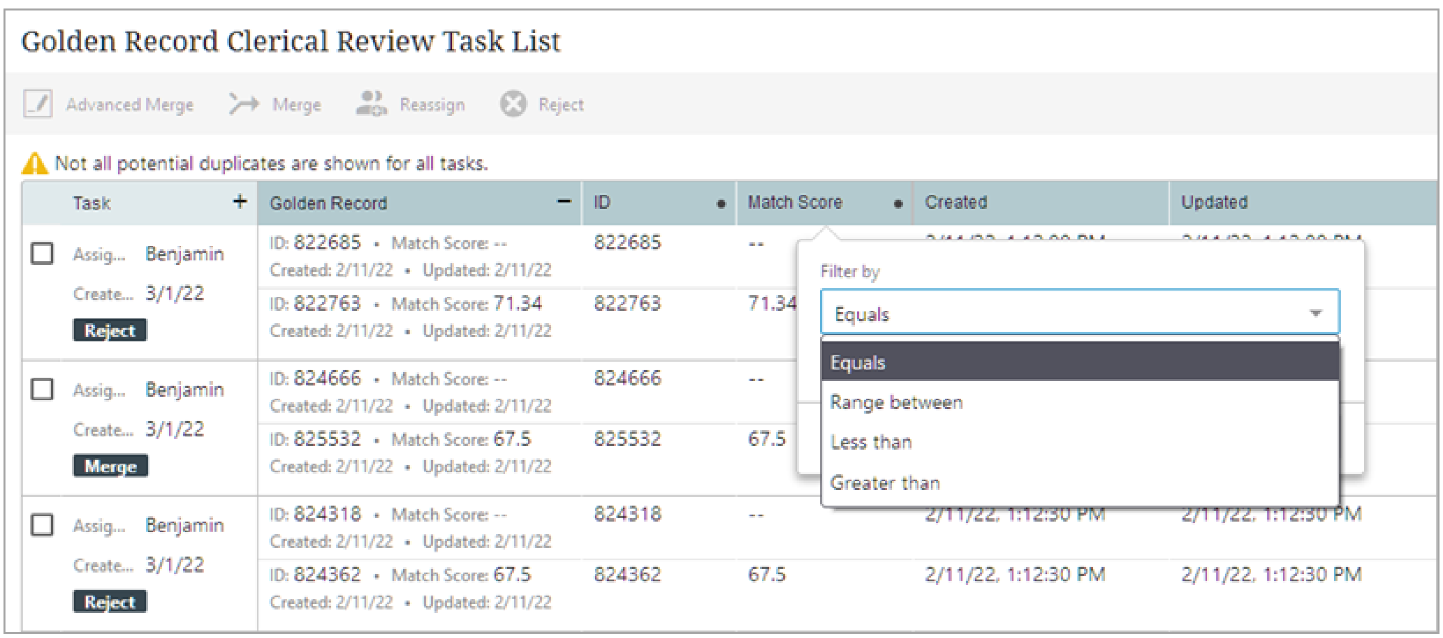
If a task in a Golden Record Clerical Review Task List contains more than five potential duplicates, a message now shows on the bottom of the default Golden Record column, stating, 'More potential duplicate records . . .' Additionally, there is now an indicator above the task list with an alert icon ( ) stating, 'Not all potential duplicates are shown for all tasks.' This quickly informs the data steward that there are tasks that require a more thorough review.



For more information, see the Golden Record Clerical Review Task List topic in the Matching, Linking, and Merging documentation.

Match score filtering in Clerical Review

Users can now filter tasks in a Golden Record Clerical Review Task List by match score. By unfolding the default Golden Record column to show the Match Score column, then clicking the circle (●) button next to the header, users can specify whether they want the filter for match scores that are equal to, less than, or greater than a certain value, or within a certain range.



For more information, see the Golden Record Clerical Review Task List topic in the Matching, Linking, and Merging documentation.

Data Exchange Enhancements and Changes

Summary

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

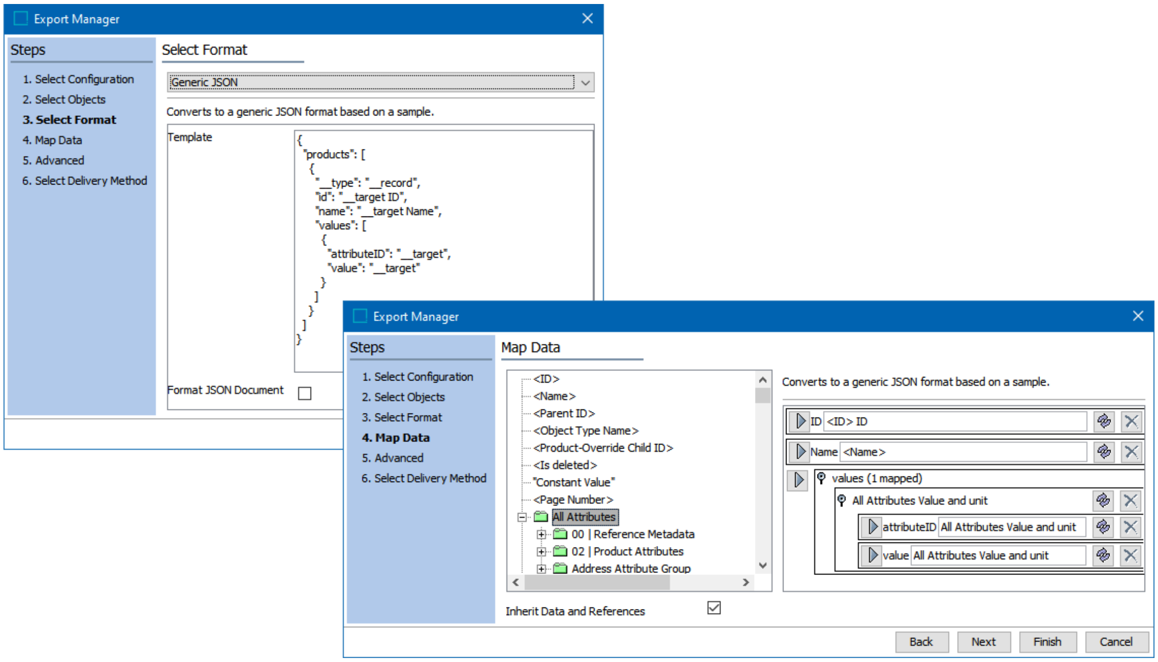
- An out-of-the-box JSON export option is now available for OIEPs and Export Manager giving users a more straightforward way to generate JSON files for object data in STEP.
- When a Unit ID is available for MongoDB, it will now include information about the Default Unit (DefaultUnitID) in the output.
- When exporting via Excel, CSV, STEPXML, or Advanced STEPXML, users have the option to include empty fields in the exported data.
- A new Efficient mode for processing events is available for OIEPs and event processors.
- The use of multiple partitions for OIEPs using Kafka Delivery Method is now supported, allowing for parallelization of processes and fault tolerance.
- All AssetPushLocation items will be exported inside an asset item for STEPXML exports.

Details

New Generic JSON out-of-the-box export option

A new Generic JSON export format plugin has been added to Outbound Integration Endpoints (OIEPs) and Export Manager. JSON is a widely used format for data exchange. This new functionality significantly simplifies the work for STEP administrators and enterprise architects as they can now send data in JSON format without requiring scripting, extensions, or other complex configurations.

Existing methods of sending data in JSON format will still be available to support non-standard use cases, but customers should attempt to use the out-of-box format whenever possible to reduce extensions, experience smoother upgrades, and optimize outbound performance.



For more information, refer to the Generic JSON Format topic in the Data Exchange documentation.

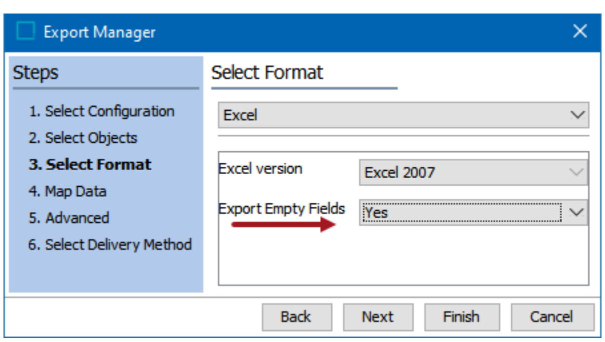
Attribute information for MongoDB now includes DefaultUnitID

When an Outbound Integration Endpoint sends the attribute information by MongoDB delivery, and a Unit ID is available, it will now include information about the Default Unit (DefaultUnitID) in the output in addition to other units linked to the attribute. This helps downstream systems to understand the data and organize it better for user consumption.

For more information on MongoDB, see the Mongo Delivery Method topic in the Outbound Integration Endpoints section of the Data Exchange documentation.

Export empty values available for Excel, CSV, STEPXML, and Advanced STEPXML

Now, users can export empty data (attributes, references, metadata, data container values, etc.) in Excel, CSV, STEPXML, and Advanced STEPXML via a new option on the export manager. When used, the option will include any valid and linked data types for the selected objects so that empty values will be exported. When exporting empty values is chosen for mappable formats (Excel and CSV), empty values will be included in the export regardless of whether the data is mapped using attribute groups or individual attribute selection. When the option to export empty values is set to 'no,' the empty values will be excluded from the export.

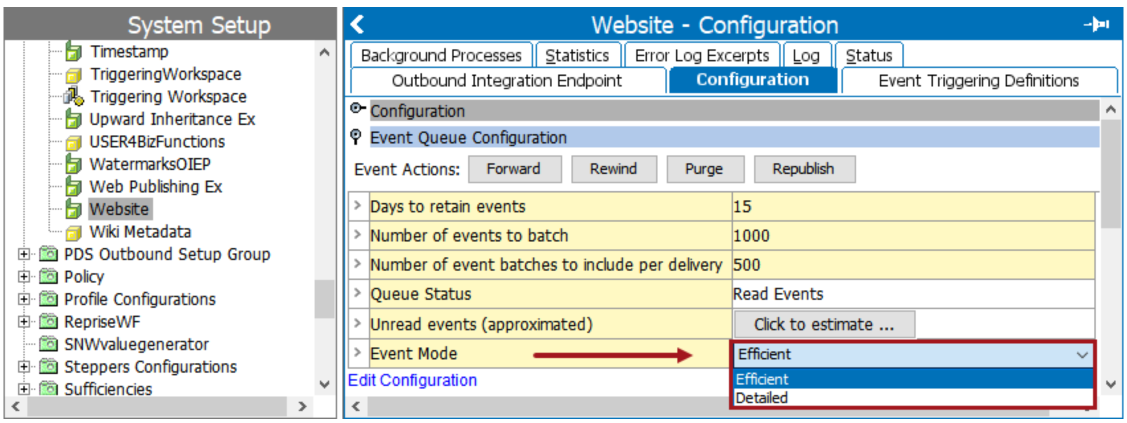


When the option to include empty values is selected for STEPXML or Advanced STEPXML, all linked and valid attributes, references, metadata, and data containers are included in the export. For Excel and CSV exports, where empty values are included, and the user maps an attribute group using the 'All Attributes' or 'Select Attribute' options instead of / in addition to mapping individual attributes, all attributes are included in the export from the attribute group(s) for attributes that are valid and linked attributes in the product or classification hierarchies related to the exported objects through inheritance or links. In any case, exports are limited by the view permissions of the exporting user.

For more information, see the Data Formats section of the Data Exchange documentation.

New Efficient processing mode for OIEPs and event processors

The new Event Mode parameter can provide more efficient event handling on Outbound Integration Endpoints (OIEPs) and event processors.



It is advised that customers verify that existing OIEPs and event processors use the most beneficial mode based on the configuration scenarios outlined below:

- Efficient mode improves performance when an OIEP or event processor routinely has a long backlog of events to process with multiple events for the same object in its event queue and/or long running exports and/or business rules and/or it uses small batch sizes and/or when downstream systems have trouble keeping up with message processing. Efficient mode requires processing time to analyze and remove redundant events.
- Detailed mode does not include processing time to analyze and remove redundant events. Event queues where the queue length is routinely short, or all of the objects on the queue are already unique, or the exports and/or business rules are simple and complete quickly, or a large batch size is configured will perform better using Detailed mode.

The Detailed mode is the default for all newly created OIEPs and event processors. For backward compatibility, existing OIEPs and event processors will continue to run in the Detailed mode until changed.

Online help updates for this functionality will be included in documentation released with 11.0-MP1.

For more information on creating an event-based OIEP, see the Manual Configuration step of the Creating an Event-Based Outbound Integration Endpoint topic in the Outbound Integration Endpoints section of the Data Exchange documentation. For more information on modifying OIEPs already created, see the OIEP - Event-Based - Manual Configuration topic in the Outbound Integration Endpoints section of the Data Exchange documentation.

For more information on configuring an event processor, see the EP - Event Processor Tab topic in the Event Processor section of the System Setup / Super User Guide documentation.

Multiple partitions now supported in OIEPs using the Kafka Delivery Method

Now, STEP supports the use of multiple partitions for OIEPs using the Kafka Delivery Method. This allows for parallelization of processes, in addition to providing fault tolerance.

In order to support the use of multiple partitions, there is an option to send the Node ID as the event key when using Kafka integration. Events and messages with the same ID are put onto the same partition, ensuring correct sequence in processing the messages. The event ID will default to the endpoint ID unless configured otherwise.

This affects OIEPs only. IIEPs are still read from a single partition.

The available options for the event key are ${endpointId}, ${nodeType}, and ${nodeId}.

For more information, see the Considerations for Setting Up Kafka Receiver or Delivery topic in the Creating an Outbound Integration Endpoint section of the Outbound Integration Endpoints documentation.

AssetPushLocation items export update

For STEPXML exports, all AssetPushLocation items will be exported inside an Asset item. Previously, STEP would export AssetPushLocation items only for the selected workspace in the Export Configuration.

New STEP Performance Analysis Tools

Summary

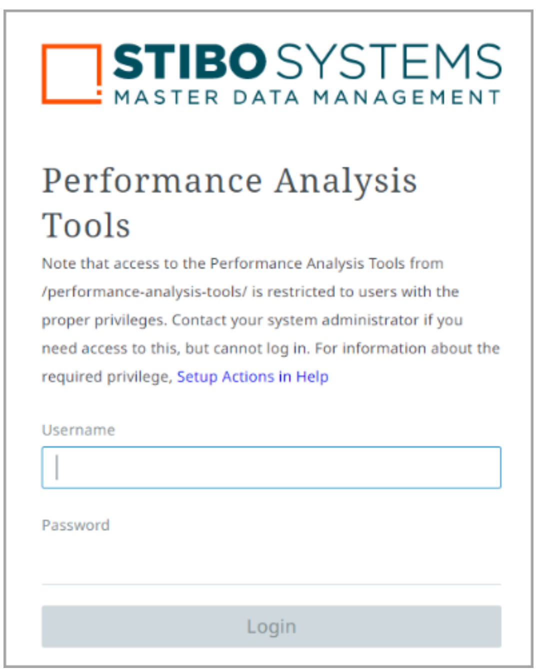
STEP Performance Analysis tools enable administrators to analyze system health and data to proactively identify issues that could lead to sub-optimal performance, as well as to troubleshoot cases where a performance impact has been observed. To support this, a new interface has been provided that displays the creation and consumption of events, system activity, and the results of weekly scheduled health checks (including several new health checks designed specifically to expose configurations that may lead to poor performance). The new tools are intended to be used in conjunction with one-another and support customers in independently optimizing their system configurations for better overall health and performance, leading to higher efficiency, reduced dependency on Stibo Systems Support team, and less overall disruption of the business.

Details

The new STEP Performance Analysis consists of a separate user interface that contains three analysis tools: Health Checks, Activity Tree, and Events. Using the Health Checks screen, in conjunction with the Activity Tree and Events graph, can help to identify slow-running processes and correlate issues with event queue activity to identify whether business rule logic, data objects, and/or event handling are contributing to poor system performance.

STEP Performance Analysis

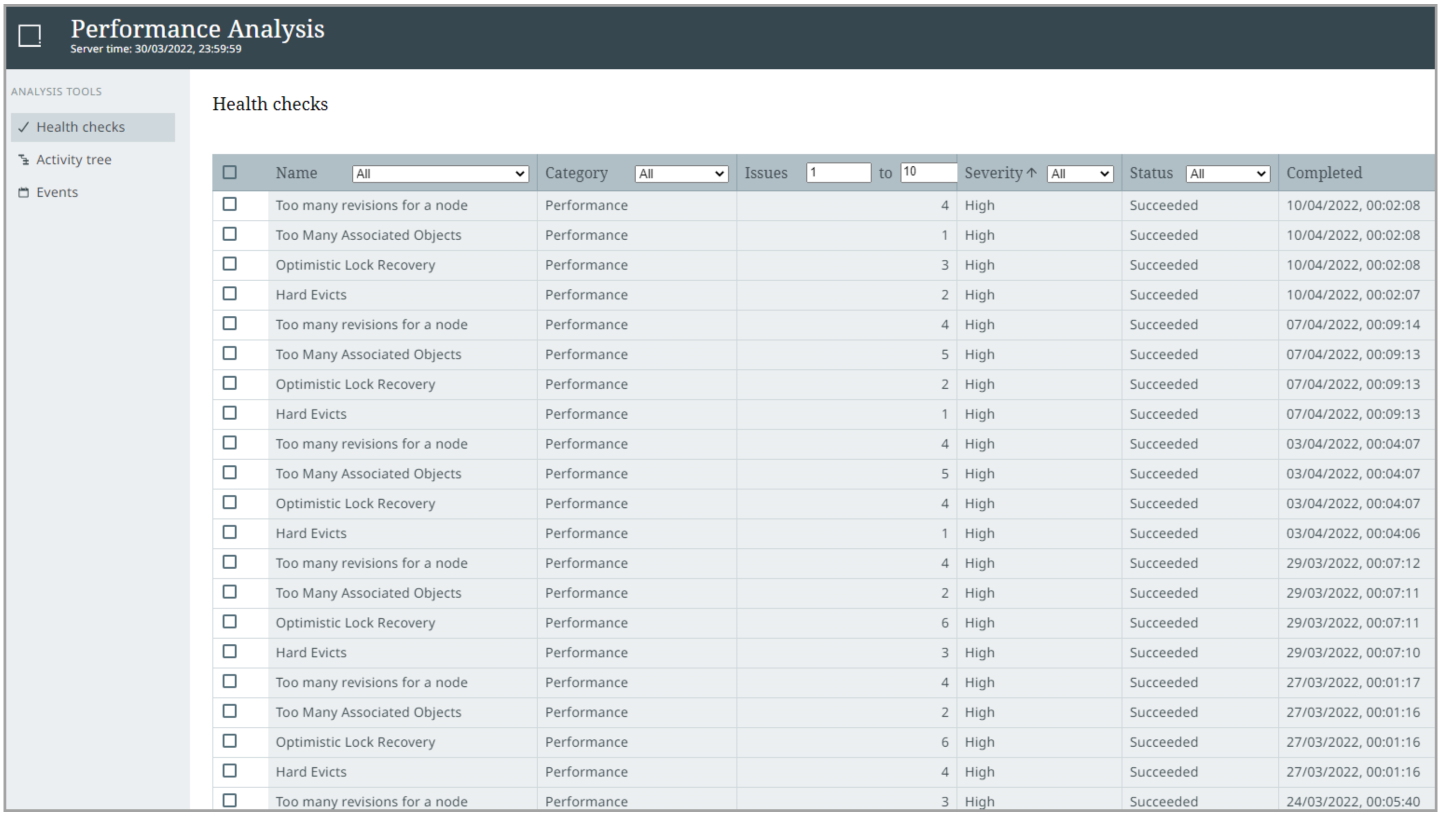
The Performance Analysis tools can be accessed via the STEP Performance Analysis link found on the Resources section of the Start Page.



Once logged in, the user can navigate to the Health Checks, Activity Tree, or Events screen.

Health Checks

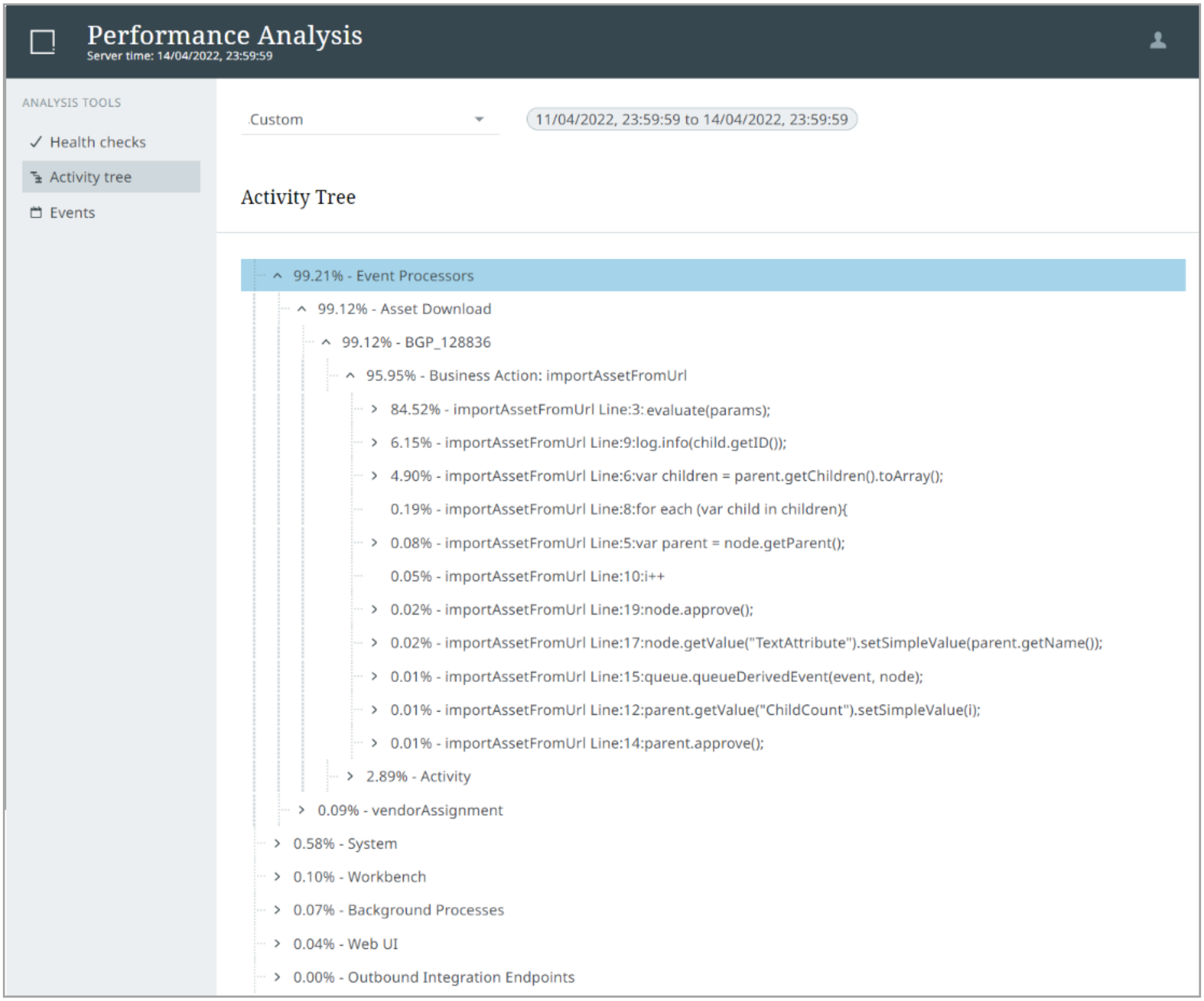
The Health Checks screen displays a table listing the health checks completed for the scheduled runtime, sorted by the most current execution and providing 12 weeks of history to help identify patterns over time. Taking action on the identified data and configuration issues will help prevent issues from growing to a level where the issues are more difficult to resolve.



Name	Category	Issues (1 to 10)	Severity	Status	Completed
Too many revisions for a node	Performance	4	High	Succeeded	10/04/2022, 00:02:08
Too Many Associated Objects	Performance	1	High	Succeeded	10/04/2022, 00:02:08
Optimistic Lock Recovery	Performance	3	High	Succeeded	10/04/2022, 00:02:08
Hard Evicts	Performance	2	High	Succeeded	10/04/2022, 00:02:07
Too many revisions for a node	Performance	4	High	Succeeded	07/04/2022, 00:09:14
Too Many Associated Objects	Performance	5	High	Succeeded	07/04/2022, 00:09:13
Optimistic Lock Recovery	Performance	2	High	Succeeded	07/04/2022, 00:09:13
Hard Evicts	Performance	1	High	Succeeded	07/04/2022, 00:09:13
Too many revisions for a node	Performance	4	High	Succeeded	03/04/2022, 00:04:07
Too Many Associated Objects	Performance	5	High	Succeeded	03/04/2022, 00:04:07
Optimistic Lock Recovery	Performance	4	High	Succeeded	03/04/2022, 00:04:07
Hard Evicts	Performance	1	High	Succeeded	03/04/2022, 00:04:06
Too many revisions for a node	Performance	4	High	Succeeded	29/03/2022, 00:07:12
Too Many Associated Objects	Performance	2	High	Succeeded	29/03/2022, 00:07:11
Optimistic Lock Recovery	Performance	6	High	Succeeded	29/03/2022, 00:07:11
Hard Evicts	Performance	3	High	Succeeded	29/03/2022, 00:07:10
Too many revisions for a node	Performance	4	High	Succeeded	27/03/2022, 00:01:17
Too Many Associated Objects	Performance	2	High	Succeeded	27/03/2022, 00:01:16
Optimistic Lock Recovery	Performance	6	High	Succeeded	27/03/2022, 00:01:16
Hard Evicts	Performance	4	High	Succeeded	27/03/2022, 00:01:16
Too many revisions for a node	Performance	3	High	Succeeded	24/03/2022, 00:05:40

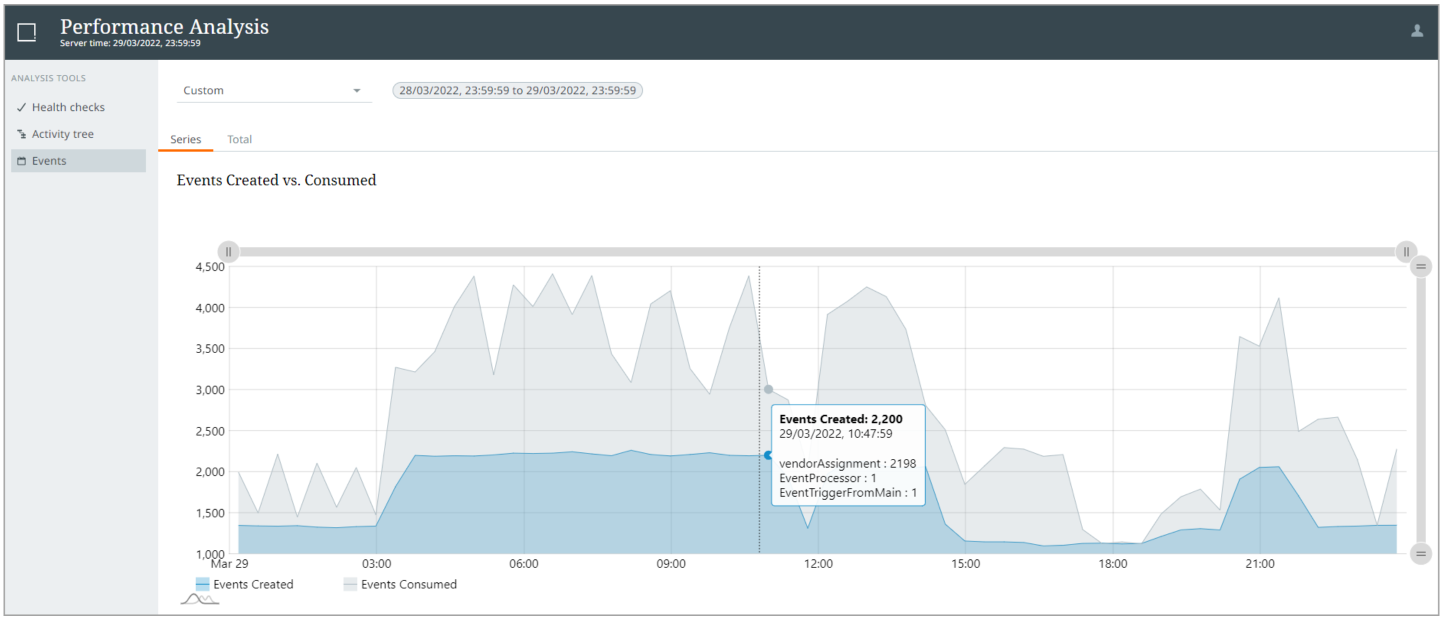
Activity Tree

In the Activity Tree screen, a user can investigate short-term performance issues when there is a known problem (e.g., event consumption lagging creation, overall system slowness, BGP not progressing, etc.) but the cause is unclear. This drill-down tree helps the user discover the problematic activity and/or process, in addition to determining the possible cause.



Events

On the Events screen, the 'Events Created vs. Consumed' graph allows the user to visualize event processing in two ways. The Series tab allows the user to see a line graph of all the events created versus those consumed within the defined time period. The Total tab displays the events created versus those consumed with individual queue counts in a bar chart. Mouse-over text shows the three event queues with the highest count of events for the selected date/time.

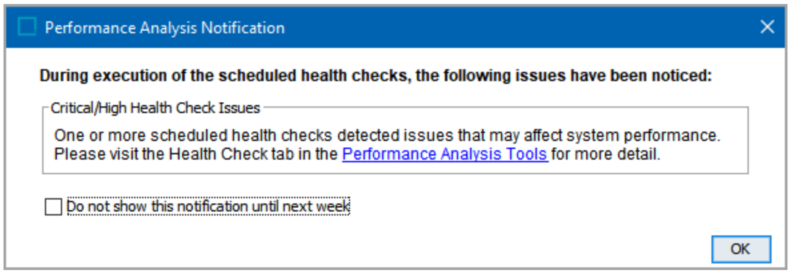


Using Performance Analysis tools

For example, a system is configured to trigger an Event Processor executing a business action following the import of products, which triggers an Outbound Integration Endpoint, sending the changes to a downstream system. This flow can quickly create a high volume of events in the system, assuming the import volume is high. The Events graph shows the rate of event creation on one line and the rate of event consumption on another line of the same graph, which shows how well the system is able to process changes. A minor phase-shift is typical between creation and consumption of events, based on schedules and execution time of the business action. In this example we'll assume there is an action taking more than a few seconds to execute. This could be because the action is written inefficiently or it encounters objects that have a lot of children or references or values or revisions or there are time delays while concurrent updates to the same object in a different transaction are retried, or other issue. In any of these cases, the consumption of events will lag behind the creation significantly. When this occurs, the weekly executed health checks will also indicate issues, detailing which objects, the number of occurrences, timestamps, and the related BGP ID. Using the information from the health checks and lag in event processing, the Activity Tree screen will be useful to drill into an identified timeframe to help indicate the configuration areas where the system is spending the most time. Exploring the Activity Tree for the highest percentages below the Event Processors exposes the ID of the problematic Event Processor, the BGP ID, the ID of the Business Action and the lines of code where the system is spending the most amount of time. By combining the information in these screens, the administrator is empowered to quickly identify the contributors to performance issues, continue to research, modify and test to resolve the identified issues, which may involve rewriting a business action, adding an Event Processor to manage revisions, restructuring hierarchies, or other configurations changes, in order to optimize the system performance.

Workbench

If any of the scheduled health checks detect an issue that has either a critical or high severity, the schedule has been disabled, or there is not enough time to complete all scheduled health checks within the execution window, users who have the View Administration privilege will see a popup upon opening the workbench. This alert allows the user to review the issue(s) in the Performance Analysis tools.



The background process execution report for the scheduled health checks can be viewed in the workbench. Additionally, there are two new configuration properties:

- `HealthCheckScheduler.AutoRun`: Allows the user to disable, enable, or skip the automated execution for a date in the future.
- `HealthCheckScheduler.OperatingDayAndHours`: Allows the user to schedule the start day(s) of the week and window of execution for the health checks.

For more information, refer to the STEP Performance Analysis topic / section of the documentation.

General Enhancements and Changes

Summary

The following enhancements and changes have also been made as part of the 11.0 release. These are outlined below and described in the Details section that follows:

- PIM for Retail has delivered a series of updates to aid clarity in workflows and adjust privileges to streamline tasks for buyers and suppliers.
- Queued BGPs are prioritized for execution for better utilization of server resources.
- The Extension API Create Attribute method has been extended to include 'ISO Date' and 'ISO Date and Time' validation base types.
- Two password security updates have been made to STEP.
- The status icons for integration endpoints (IEPs) have been modified.
- The status icons for event processors have been modified.
- The event processor 'Failed (retrying)' state has been introduced to allow matching event processors and execute business action event processors to try to automatically self-correct after a fail.
- Users can now be designated as 'Externally Maintained'.
- In-Memory updates have been made to improve resiliency and stability for SaaS customers.
- Improvements have been made to the table data provider to make it easier to generate tables based on classification data.
- A Proof View tab is now available in workbench when a classification object is selected.
- A timeout feature can be enabled for testing business rules.
- The Triggering Workspace functionality has been realigned to its original purpose and relocated within the configuration.
- New Multifactor Authentication (MFA) for user accounts managed in STEP for SaaS systems.
- Online help / documentation includes updates for 11.0 and information users should be familiar with.

Details

PIM for Retail Enhancements and Changes

The PIM for Retail solution has been updated for the 11.0 release. Listed below are some of the improvements made to the solution for this release:

- New suppliers can now be created directly from the PIM for Retail solution Web UI.
- Suppliers may now be invited to use the PDX solution for product onboarding from within PIM for Retail. Additionally, those invitations can also be managed within the PIM for Retail solution.
- Suppliers now have the privileges needed to submit data containers from PDX.
- The PIM for Retail PDX channel now supports extended asset validation.
- External Source Record Handling workflow statuses have been renamed for clarity. External source records active in the workflow will now display with one of these four statuses: Maintenance - Initial, Maintenance - Reworked, Onboarding - Initial, and Onboarding - Reworked.
- Supplier-specific data profiling is now available on PIM for Retail, to include profiling on values like Rejected products.
- Users who reject items in the External Source Record Handling workflow can now select one or more reasons for the rejection from a predefined list, and may also add a custom message to the supplier.
- The search functionality in the Global Navigation Panel now includes the ability to search for GTIN and SKUs in addition to the standard Name and ID.

It should be noted that all enhancements and changes described above for the PIM for Retail solution pertain to new installations only.

For full details on the PIM for Retail solution, see the PIM for Retail section of the Solution Enablement documentation.

New background process execution management framework

To limit the need for complex manual configuration and allow for better utilization of server resources, a new mechanism for managing the execution of background processes (BGPs) was introduced with the 10.3 release. Initially, this functionality was in ramp-up status but is now generally available as the default behavior to all new customer systems and all new environments for existing customers.

Previously, the mechanism for managing the execution of BGPs used queues that BGPs were assigned to based on the background process type and owner (i.e., event processor, OIEP, IIEP) and for which the degree of parallelism can be configured. The new mechanism abandons the queue (i.e., legacy) concept and instead selects BGPs to start across all BGPs waiting to be executed. This can be enabled via the configuration property BackgroundProcess.Scheduler.PluginID=OneQueueBGPScheduler.

> **Important:** Before applying to a production setting, the background process execution mechanism should be applied and thoroughly tested on lower-level environments due to its affects on other processes.

Waiting BGPs can be prioritized for execution based on two criteria: creation time and a priority that can be set for event processors, OIEPs, and IIEPs (for the latter two, the configurable priority is for the 'worker' BGPs started by the endpoints). The application server capacity will determine how many BGPs can run in parallel.

Users privileged with the 'View Background Processes of Other Users' setup action can monitor the process execution via a new editor available from the STEP Workbench BG Processes navigator tab.

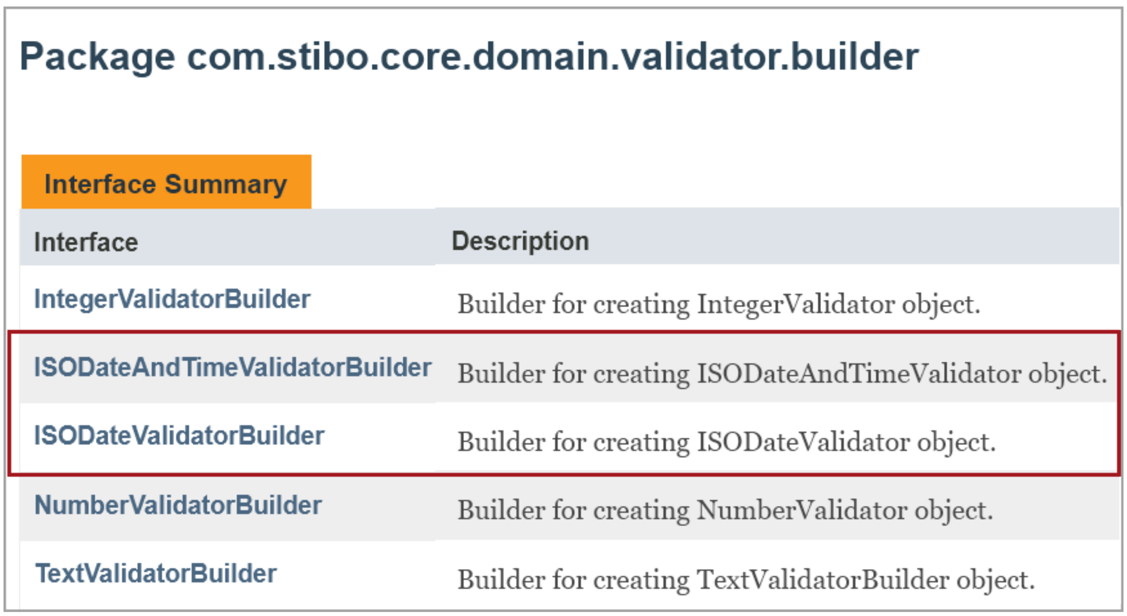
With this new functionality, there is also a change to how threads are assigned for processes that make use of the parallel framework in STEP. While previously the number of threads was assigned statically per background process queue, the number of threads per BGP will be dynamically assigned when a BGP starts, dependent on the relevant application server's available resources.

For more information on the new mechanism for BGP execution, see the BG Processes Execution Management topic in the Background Processes and Queues section of System Setup documentation.

Documentation has been updated to indicate the recommended practice to use these new features instead of legacy features.

ISO Date / ISO Date and Time validation base types included in STEP Extension API

The STEP Extension API Create Attribute method has been extended to now include 'ISO Date' and 'ISO Date and Time' validation base types. The 'ISO Date' and 'ISO Date and Time' validation base types have been included as part of the 'com.stibo.core.domain.validator.builder' package. This aids users in streamlining the attribute creation process when using STEP Extension API.


Package com.stibo.core.domain.validator.builder

Interface Summary

Interface	Description
IntegerValidatorBuilder	Builder for creating IntegerValidator object.
ISODateAndTimeValidatorBuilder	Builder for creating ISODateAndTimeValidator object.
ISODateValidatorBuilder	Builder for creating ISODateValidator object.
NumberValidatorBuilder	Builder for creating NumberValidator object.
TextValidatorBuilder	Builder for creating TextValidatorBuilder object.

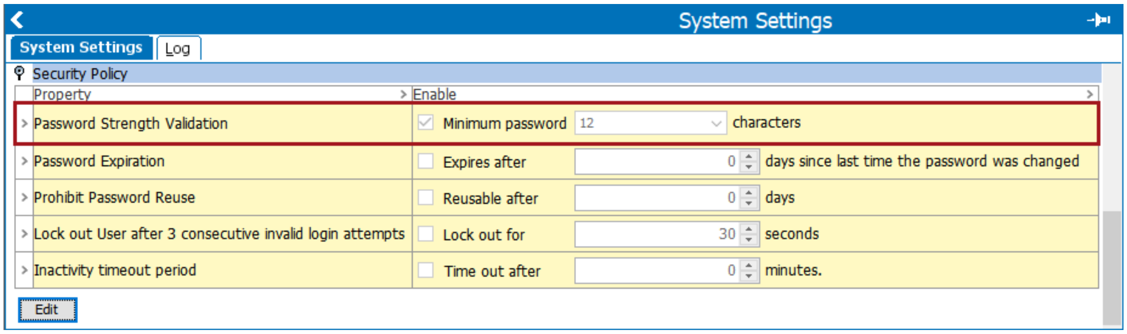
Additional information is available in the Scripting API section of the STEP API Documentation available at [system]/sdk or accessible from the system Start Page.

Updates to password security for users

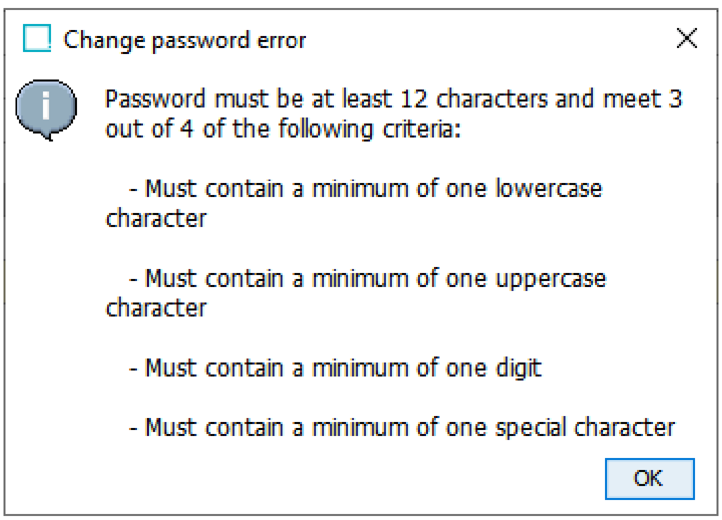
Two security policy updates have been made within the Security Policy section on the Users and Groups node in workbench System Setup:

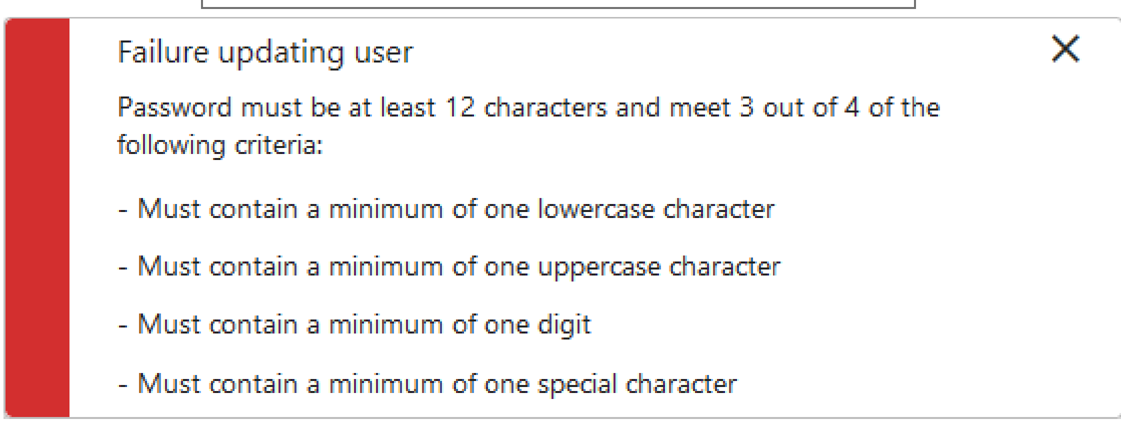
- The ability to further define the required character count for a user's password
- Lock out time period reset for users locked out of the system

Administrators are now able to further define the minimum password length, enabling companies to comply with security policies and strengthen user password security via the updated Password Strength Validation parameter. Once the Password Strength Validation parameter was enabled, the password minimum was eight (8) characters by default, and this will remain the default. However, administrators can also now choose to set the minimum character count for passwords from the minimum default of eight (8) to the maximum of 20.



When a user creates a password in workbench or Web UI that does not meet the password criteria, an error message displays.





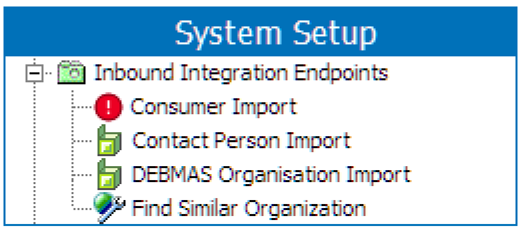
Existing users are not affected by newly enabled password settings unless they change or reset their passwords after the password strength validation parameter has been enabled.

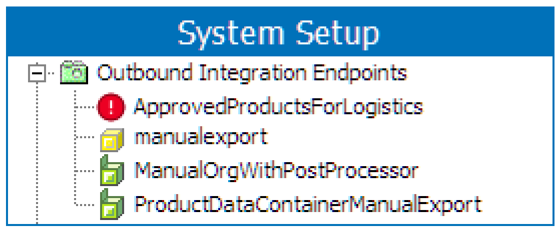
The 'Lock out User after 3 consecutive login attempts' parameter has also been updated. Previously, if a user was locked out after three (3) consecutive invalid login attempts, and the user's password was reset, the lockout time period did not reset. If the user then entered their new password incorrectly, they were locked out after the first attempt. This has now been updated so that the time out period also resets when the user's password is reset, and users have three (3) attempts to log back into the system with the new password.

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

New status icon for integration endpoints (IEPs)

A new status icon has been implemented for workbench to display in System Setup when an IEP has failed. The old 'Failed' IEP icon ( ) has been replaced with an icon with a red circle and a white exclamation mark in the center ( ). With this change, the IEP states are much easier to differentiate at a glance.

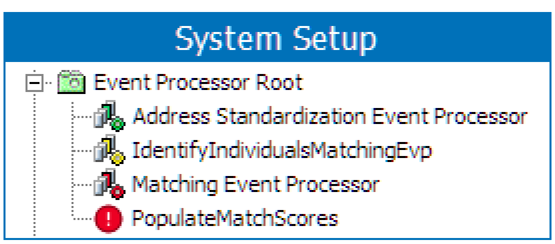




For more information, see the Running an Inbound Integration Endpoint topic and the Running an Outbound Integration Endpoint topic in the Data Exchange documentation.

New status icons for event processors

The status icons for event processors have been modified. The red gear icon ( ) now represents a 'Failed (retrying)' state (only in a matching or execute business action event processor), and a red circle with a white exclamation mark ( ) has been added for a 'Failed' state. With this change, the event processor states are much easier to differentiate at a glance.



For more information, see the Running an Event Processor topic in the System Setup / Super User Guide documentation.

New matching event processor 'Failed (retrying)' state

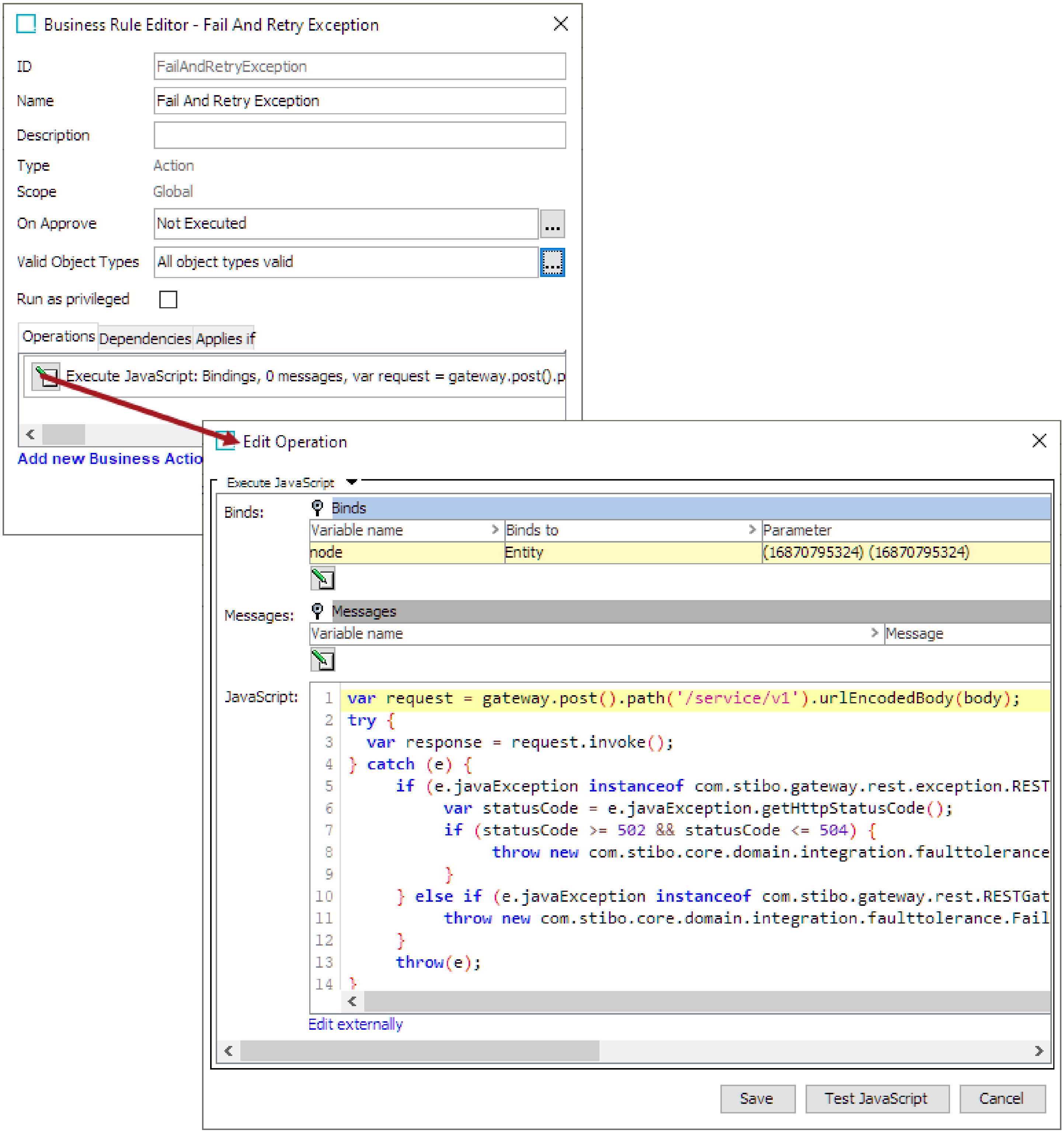
Previously, if an event processor failed, the execution would always stop, and the user would have to manually resume after resolving the error.

Now, a new 'Failed (retrying)' state has been created for matching event processors and the execute business action event processors.

The matching event processors have a built-in functionality that uses the 'Failed (retrying)' state to attempt to recover the 'Running' state. The new state is used when communicating with the Machine Learning ASPiRE environment.

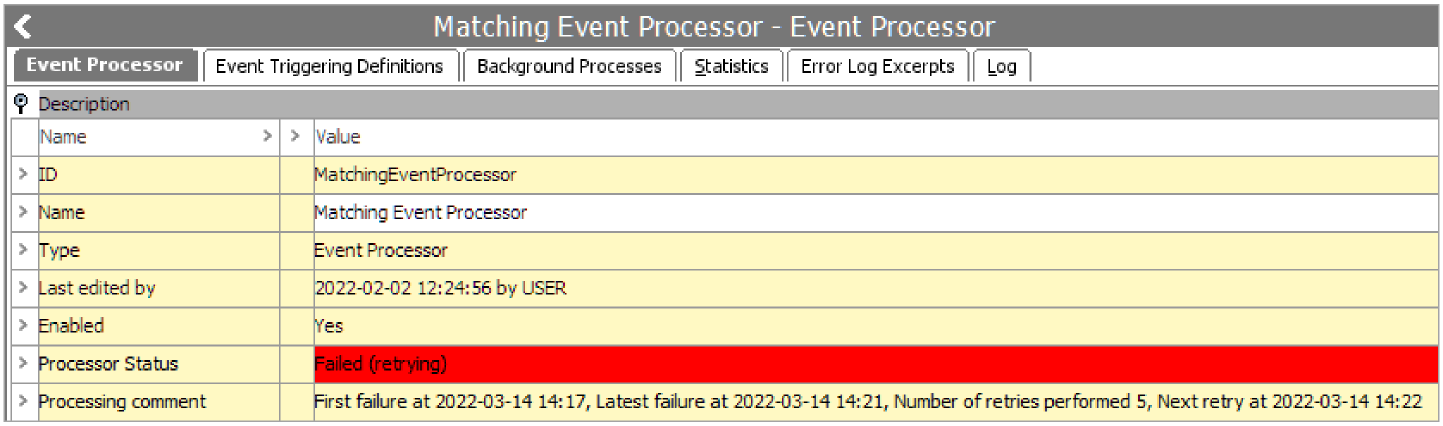
For the execute business action event processor, the state is entered when throwing the new FailAndRetryException (e.g., when a connection to an external server is failing).

The 'Failed (retrying)' state is exclusive to event processors and is not applicable to integration endpoints.



For more information, see the Machine Learning Matching Agent topic in the Matching, Linking, and Merging documentation, as well as the Running an Event Processor topic in the System Setup / Super User Guide documentation.

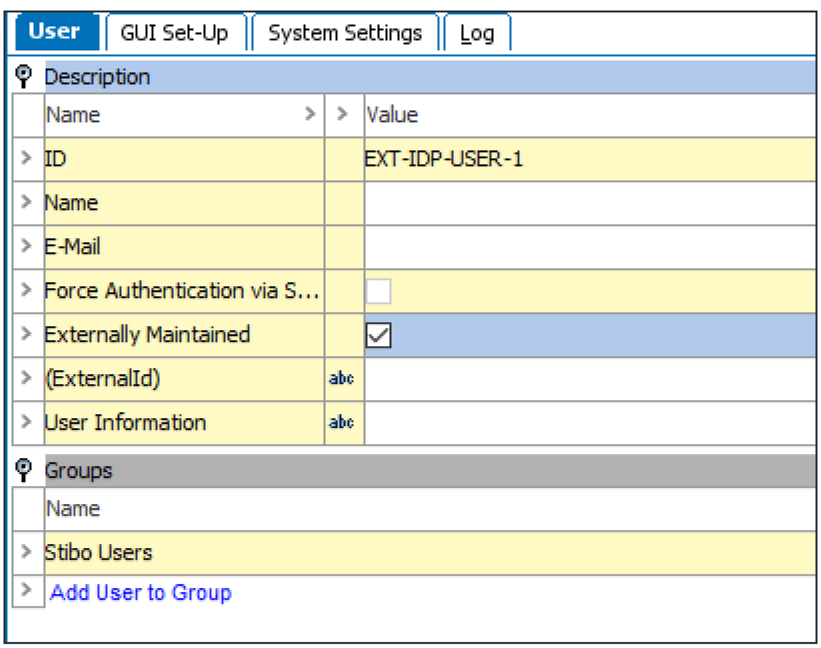
Additionally, below the 'Processor Status' row of the event processor editor, a new 'Processing comment' field reports the first and last failures, the number of retries performed, and the next scheduled retry. These statistics tell the user how long the event processor has been failing.



For more information, see the Running an Event Processor topic in the System Setup / Super User Guide documentation.

New parameter to indicate externally maintained users

A new checkbox parameter has been added to user configurations in workbench which indicates whether or not the user is externally maintained. If logging into a SaaS STEP system via an IDP, this setting is automatically enabled. When enabled, it is not possible to authenticate using STEP managed credentials nor is it possible to set or change a STEP password for the user account. Furthermore, the STEP password expiration policy will not apply. This ensures that users managed via an IDP are not able to introduce a conflict to their IDP credentials within STEP.



This parameter is only available to SaaS STEP systems that have the single sign-on (SSO) functionality enabled. The parameter can be maintained manually by users with the Maintain users and groups setup action. This allows administrators to preemptively disable STEP authentication for externally maintained users already synchronized to STEP.

For more information, see the Working with Users topic in the Users and Groups section of the System Setup documentation.

For more information about the single sign-on (SSO) functionality, refer to the STEP Authentication Guide available from the STEP API Documentation page, accessible at [your system URL]/sdk or from the Start Page.

Improved resiliency for In-Memory databases

Now, In-Memory databases have separate processes for foreground activity and background activity to improve resiliency and stability. Because the foreground activity and the background activity are separate processes, if a background server process has an error, the foreground server will continue to work. Additionally, background process downtime is minimized because the In-Memory process is still running.

This improvement will be rolled out gradually for SaaS customers. The functionality updates do not apply to on-premise systems.

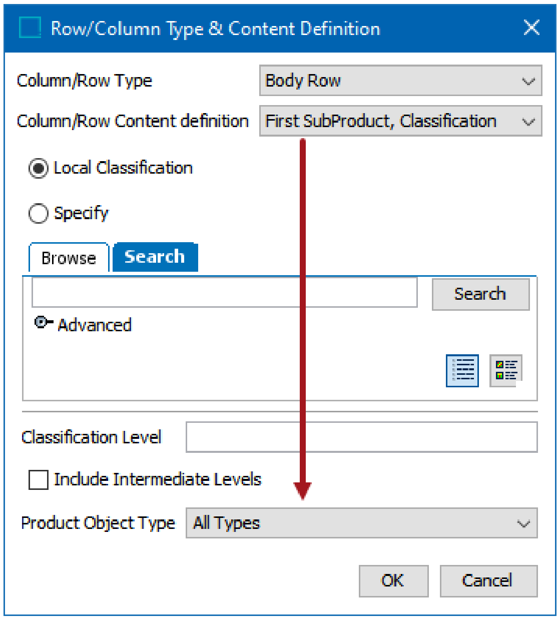
For more information, see the In-Memory Database Component for STEP topic in the Release Materials section in online help.

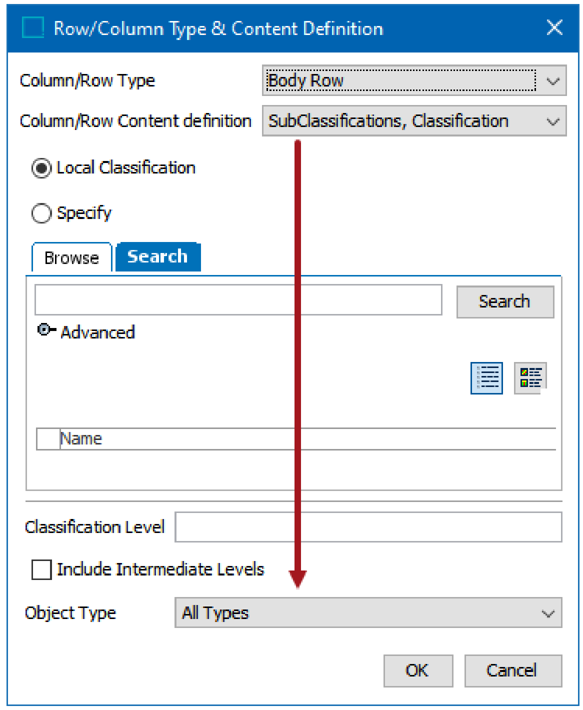
Enhanced table data providers now include classification data

Improvements have been made to the table data provider so that users can easily generate tables based on classification data. For example, users may want to and now are able to generate table of contents for print publications based on a hierarchy in the classification structure.

There are new options in the Row/Column Type & Content Definition provider dialog for 'SubProducts, Classification' and 'First SubProduct, Classification,' which now allows users to include data from linked products. For the 'SubClassifications, Classification' data provider, there new filter on Object Type is on classification objects instead of linked products.

Additionally, some of the product content definition names were updated to be consistent format-wise; however, the names remain the same.

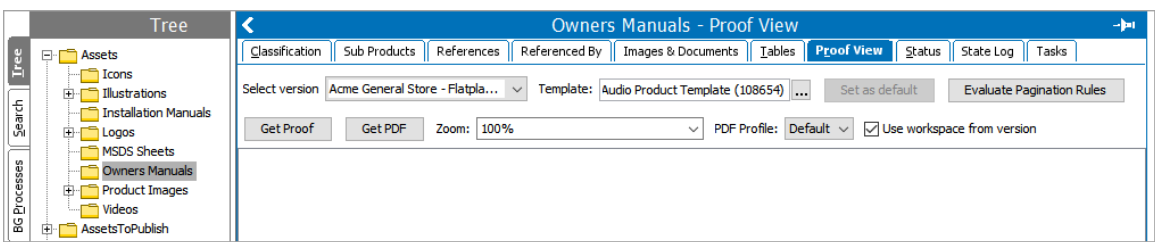




For more information, refer to the Product Content Definitions topic in the Tables documentation.

Proof View enabled in workbench on classification objects

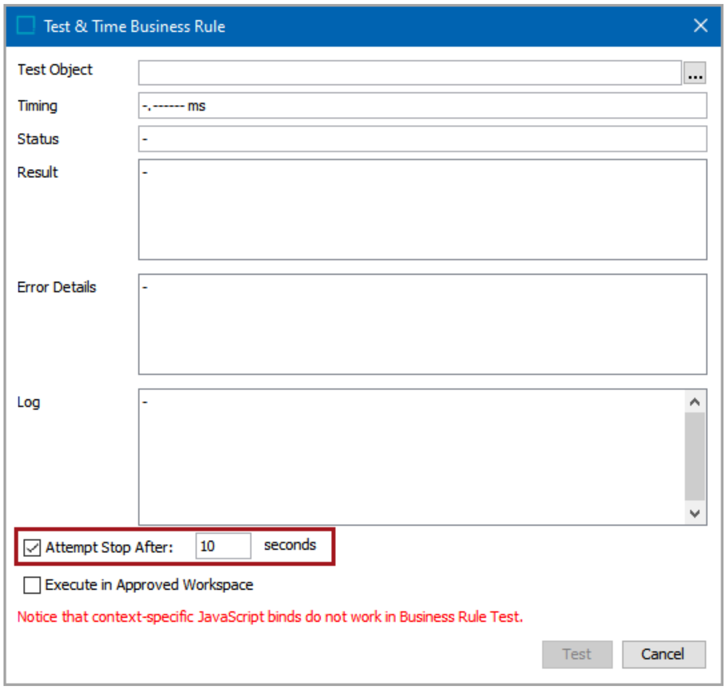
Proof View, used to generate visual proofs and generate PDFs, is now available in the workbench for classification objects. This change benefits those required to work on classifications as an alternate publishing structure.



For more details about the Proof View component, see the Publisher section of the Publisher (Adobe Indesign Integration) / Publisher User Guide documentation.

Timeout feature for business rule testing

When testing a business rule, users now have the ability to terminate the test with a new checkbox, 'Attempt Stop After: X seconds.' When checked, if the business rule test does not complete within the number of seconds specified, the test is terminated. In most cases, this prevents an infinite loop or other unintended long-running business rules, which, previously, may have caused the user to restart the system.



For more information, see the Testing a Business Rule section of the Business Rules documentation.

Workspace relocation and realignment

Event generation and processing from the maintenance (Main) workspace was introduced with 10.0. The functionality was primarily intended for keeping Elasticsearch indexes up to date. Over time the usage has spread outside of the original scope and may negatively impact performance in some cases. Changes in 11.0 realign the functionality as it was originally intended, while continuing to allow event processors of specific types to use the option.

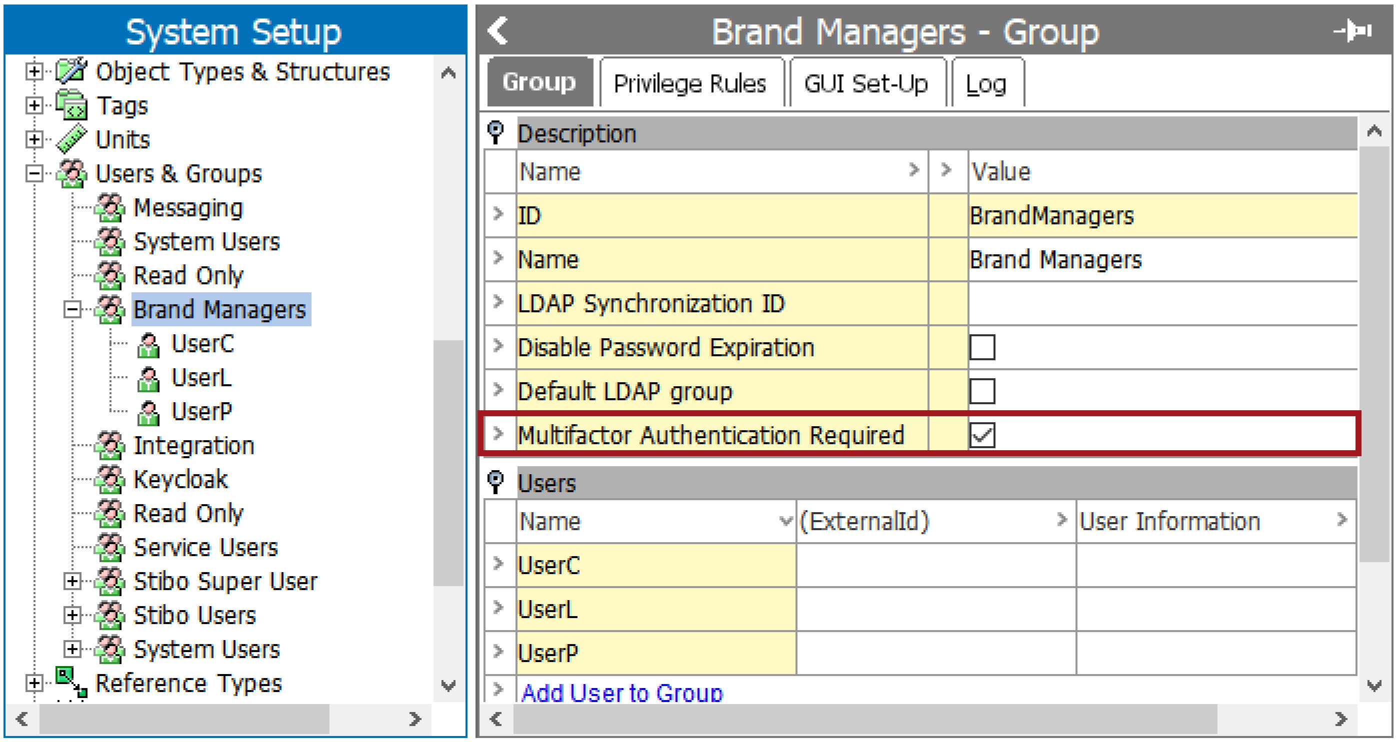
The Triggering Workspace setting for Event Processors (EPs) has been relocated to the Event Processor Wizard Configuring Processing Plugin step. The default setting is Approved, and the parameter is only visible for select event processors that allow for triggering events in Main. The Triggering Workspace flipper is no longer visible on the Event Trigger Definitions tab for EPs nor for any Outbound Integration Endpoints that are created after an upgrade to 11.0.

Upon upgrade, customers that currently have event queues configured to trigger events in Main will continue to show this option in the EP and OIEP editor UI only until the configuration is deleted or the setting is changed to Approved, if triggering via Main is not allowed for the processor type.

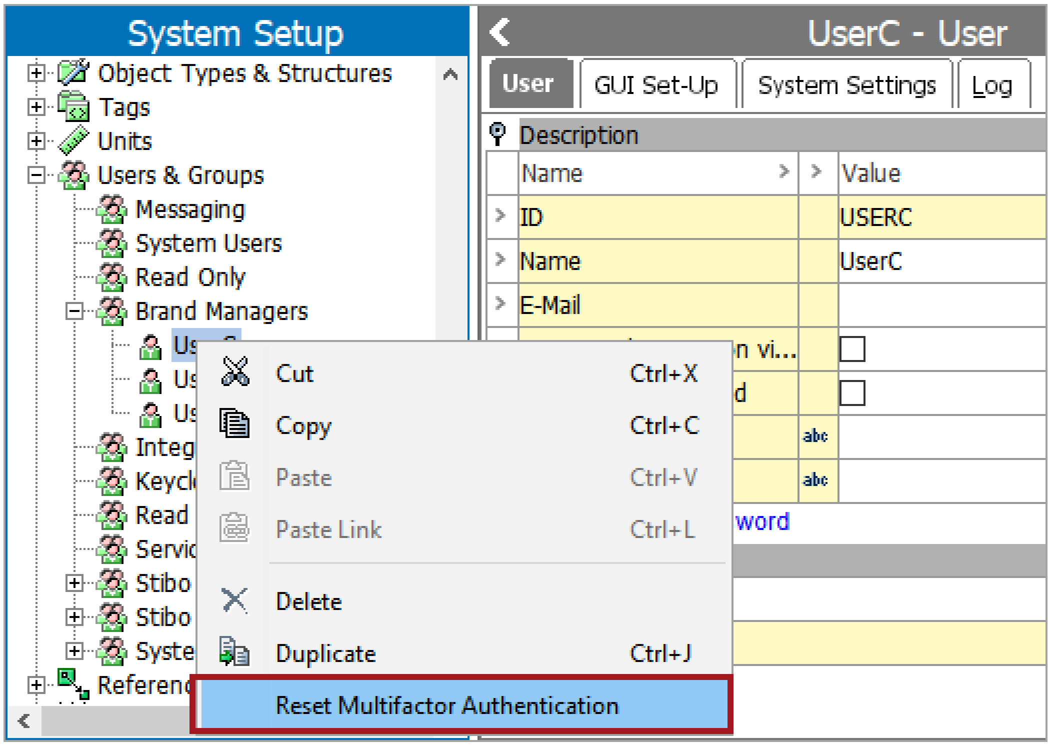
Only new EPs of the following types can select a Triggering Workspace option in the EP wizard: Data Sufficiency Calculator, Execute Business Action, and Matching. Additionally, the Elasticsearch Indexer allows the option, which is now set in the Elasticsearch Configuration, as defined in the Creating an Elasticsearch Configuration topic of the Web User Interfaces / Web UI Setup and User Guide documentation. For information on each EP type, see the links from the Processing Plugins topic in the System Setup / Super User Guide documentation.

New Multifactor Authentication for SaaS users

For SaaS customers, it is now possible to configure a cloud STEP system to support Multifactor Authentication (MFA) for user accounts managed in STEP. When the functionality is enabled, STEP administrators are able to select the 'Multifactor Authentication Required' parameter on the desired user group.



When MFA is enabled for a user group, the users in that group will be prompted to configure MFA using an authenticator application the next time they log into the system. Should a situation arise where the MFA configuration for a user needs to be reset, a STEP administrator can right-click on the desired user and select 'Reset Multifactor Authentication.'



For more information, see the Multifactor Authentication for SaaS topic in the User and Groups section of the System Setup / Super User Guide documentation.

Online help / documentation changes

In addition to documentation updates as part of 11.0 initiatives, the following changes have occurred:

- Documentation, including release notes, is now available in PDX. Once logged into PDX, from the left navigation panel, click on Help Center, and go to Documentation.
- STEP release information is available from within the customer portal (Jira) and will be available via the Partner and Customer Communities soon. Before accessing the documentation in Jira, clear your cache to ensure the system is accessing the latest materials.
- Documentation was updated to remove information about unsupported versions. For unsupported platform versions, this includes the removal of the release and maintenance patch notes, which are still accessible via the customer portal (Jira) within the Release Information dashboard. Product MDM for Automotive 9.1 release and maintenance patch notes were also removed and can be provided upon request.
- Match Criteria materials were updated; see the Customer MDM and Supplier MDM Enhancements and Changes release note for details.

Product MDM for Automotive 11.0 - 7.0.46 Release Notes

Release Date: May 17, 2022

BUGFIXES

Auto Care

- **Fixed NumberFormatException generated during PIES import if the description contained alpha-numeric sequences**

Fixed a problem with NumberFormatException generated during PIES import if the description contained alpha-numeric sequences. The error was reported relevant to the attributes PIES Description Sequence Code (ID = AC_PIES_Description_SequenceCode) and PIES Market Copy Record Sequence (ID = AC_PIES_MKTC_RecordSequence). This issue is now resolved.

Hotfix recipe compatible with STEP 10.3 MP4+ Automotive-7.0.45: `to:hotfix/540/issue-540226-HOTFIX-5735.spr`.

PATCH RECIPE

The Automotive add-on can be installed with the following recipe:

```
to:automotive/7.0/automotive-7.0.46.spr
```

The above recipe is compatible with the following STEP 11.0 baseline recipe:

```
to:step/platform/step-11.0.spr
```

Important: Once an Automotive add-on is installed to a base STEP system, the base system cannot be upgraded without upgrading the Automotive add-on at the same time. Additionally, when upgrading any base STEP system that has any Automotive add-on installed, both install recipes must be prepared at the same time.

For assistance in applying the patch to systems with extensions or additional add-on components, contact Stibo Systems Technical Services. Instructions for installing components can be found in the SPOT Program topic in the System Administration documentation.

Platform and Software Support Changes

This section lists current and future planned changes to platform and software support. The complete list of platform and software support is available in the 11.0 Platform and Software Support section of the System Release and Patch Notes documentation within online help.

The changes in platform and software support from version 10.3 to 11.0 are listed below. **Customer action may be required.**

Current Updates

Support has been added for:

- RHEL / Oracle Linux 8.5 support
- Adobe InDesign CC 2022 (support for CC 2021 continues)

Support for the items listed below has ended:

- STEP version 9.1 (ended on January 1, 2022)
- Adobe InDesign CC 2019 and CC 2020 are no longer supported and have been removed as options within the STEP InDesign Plugins.
- MS Windows-based servers will be desupported for existing customers starting with the 11.0 release. Contact your account manager to review your options for making the transition to a supported platform.

Future Updates and End of Life Notifications

The support for the items below will end with the next feature release (Fall 2022) or as indicated:

- macOS 10.15 (Catalina)
- The Dun & Bradstreet Direct 2.0 platform is scheduled to be discontinued as of December 31, 2022, and as of January 1, 2023, D&B Licensed Products may only be accessed via Direct+. The 10.3-MP4 notes include additional information.
- Support ends in 2022 for these STEP versions:

    9.2 — ends on August 1

    9.3 — ends on November 1

- Support ends in 2023 for these STEP versions:

    10.0 — ends on May 1

    10.1 — ends on December 1

Customers should update as soon as possible to the latest release of Stibo Systems Enterprise Platform (STEP). Contact your Stibo Systems account manager or partner manager, or the support department, if you have questions and/or to receive help and guidance on how to update to a supported release.

Software errors reported for the versions shown above may be rejected after the listed effective dates. Application support issues in progress for the releases being desupported will be closed on the desupport date. It is not possible to extend the support services for desupported versions.

Miscellaneous Bugfixes

A number of bugfixes have been applied as part of this release. Separate notes are generated for each maintenance patch. Refer to the entire set of 11.0 release and maintenance patch notes prior to installing or upgrading.

- **Password fix**

A security fix has been made so that user passwords are more secure.

- **REST Extension API plugin fix for mTLS**

Previously, the REST Extension API plugin did not work with mTLS. This has been fixed so that mutual authentication works with the REST Extension API plugin.

- **Security fix for CSRF tokens**

A security fix has been made to CSRF tokens.

- **Data container type fix for manually sorted attribute groups**

Now, a data container type can be created in a manually sorted attribute group.

- **Business condition user-facing message fix**

Business condition user-facing messages will no longer include a full report of all evaluated business conditions. Only the failed business condition will be shown to the user.

- **Web UI Alert centers when window is resized**

Added behavior for the Web UI alert box so that it will move with the window when resized and keep being at the horizontal center of the screen.

- **Fix for IIEP JMS Receiver XSLT PreProcessor not executed in transaction mode strict**

Fixed problem with XSLT transformation not working when used together with JMS Receiver in IIEP.

- **Fix for Forgot Password unexpected error**

Fixed an Unexpected Error, which occurred when Keycloak was turned on and when the user inserted a password that was too week when trying to change it.

- **Fix for ECLASS 12 import issue**

Fixed illegal dimension point exception for non dimension-dependent LOVs during ECLASS import. There is also a hotfix for eclassimporter-7.0.67 available for this solution.

Fix for data inconsistencies in the history table

Improved the In-Memory cache consistency tool to not unintentionally generate empty report files.

Fix for error when running AutoCare and NAPA models easy setup

Fixed an application server-side exception thrown when running AutoCare and NAPA models easy setup in the Workbench Component Editor.

Fix for user attribute synchronization from Keycloak not working properly

User attribute synchronization is now allowed when a user is not assigned to any group on the external identity provider side. A hotfix for keycloak-sso-7.0.14 is also available for this solution.

Fix for language-dependent attributes from XML missing in GDSN production

When importing multiple GDSN files with different target markets having different dimensions, attributes would not always receive updates in all dimensions. This has been fixed. A hotfix for this solution is also available for gdsn2-receiver-7.0.62 and gdsn2-receiver-7.0.63.

Fix for PDX inbound BGP not getting auto cleared

Fixed an issue when the connection to PDX was terminated before all data was received by the inbound connector, and therefore the BGP was stuck.

ISSUE-425896 - Fix for browser autofill rendering on top of search suggestions

Now, browser auto-suggestions are disabled for the Web UI Homepage Search Widget.

ISSUE-447713 - Fix for Display Sequence metadata not showing in Web UI

Now, Display Sequence attribute metadata for Attribute Links meta-attributes will be shown correctly in the Product Attribute Links component on a Web UI Node Editor screen.

ISSUE-448679 - Solution for Web UI typeahead function on LOV

The typeahead function would only react to the first character when selecting an LOV value. Now, it is again possible to do typeahead on an LOV combo box which is representing the Attribute Value Header on Web UI Node List.

ISSUE-457412 - Solution for LOVs not being correct on the Multi Context Screen

Now, context-specific LOV values will be shown in a dropdown list for LOVs on the Multi Context Screen in Web UI.

- **ISSUE-466364 - Fix for generic search refresh not listing any results**

Now, a Generic Search screen will restore search results after reloading, if it has been navigated to by the Global Navigation Search.

- **ISSUE-467871 - Corrected issue with LOV Add Value Pop Up on List of Values Management Screen**

Fixed the issue where the pop-up bar was not getting closed even after a duplicate value was added to the LOV. It happened in the Web UI on the List Of Values Management Screen (Values Tab), when the user tried to add an LOV value which was a duplicate.

- **ISSUE-468068 - Fix to clear Web UI alerts**

Now, when a user executes the Run Business Action in a Web UI Node Editor, previous Web UI alerts will be closed. This will lessen the confusion for users.

- **ISSUE-472707 - Solution for attributes in workflow not supported in Web UI**

Now, it is possible to submit attributes on a Web UI Task List via the Submit From Grid action.

- **ISSUE-473507 - Fix for translation management error-free files going to error subfolder upon import**

Fixed an issue occurring where import files with translations were moved to the error folder even if there were no errors during translation using those files.

- **ISSUE-476092 - Fixed problem with apostrophe in Web UI messages**

Now, a single quote (apostrophe) will not be escaped in localization strings in Web UI and will display as expected.

- **ISSUE-476592 - Fix for Web UI Revision component issue**

Introduced the possibility to show dates for the Revisions component on a Web UI Node Editor with respect to the current Web UI locale. To enable this property, contact Stibo Systems Support. This fixed a customer issue with the Revisions fields being shown in random order for the same component.

- **ISSUE-477128 - Fix for missing navigation element in Web UI**

Fixed a bug where the width of a tab panel in the Web UI was calculated wrong if it was configured in a border panel, columns, or similar.

- **ISSUE-478081 - Fix for user getting exception when reordering rows in a table**

Fixed a problem where the workbench Table editor caused an exception when dragging and dropping rows / columns.

ISSUE-481153 - Fix for issue occurring for business actions newly added to workflow and permissions

Now, 'on transition' business rules will be executed with super user privileges if the workflow does not have a checkbox for 'Use current user privileges' checked in STEP workbench. Previously, it was working for OnEntry and OnExit business rules in Workflow.

ISSUE-481330 - Fix for blank Smartsheet calculated attributes

Now, dimension-dependent calculated attributes will be correctly exported in cross-context mode in Smartsheet format.

ISSUE-492298 - Fix for customer system crash

Now, memory will not be consumed on trying to resolve lookup formulas that point to external resources in Excel Smartsheets during the Smartsheet import when a lookup formula destination is not accessible from the application server. There is a step-10.1-mp4 to mp6 hotfix also available for this solution.

ISSUE-495555 - Solution to customer-specific issue of removing messages from business conditions

Introduced a possibility to hide unnecessary messages from the Reference Other Business Condition on a Web UI Node Editor when submitting an item to another state. To toggle this property, contact Stibo Systems Support. There is also a hotfix for this solution available for step-10.1-mp3 to mp6 and step-10.3-mp4.

ISSUE-496915 - Fix for GUI localization issue

Fixed a problem occurring when a non-date attribute in a Data Container popup was not localized according to Web UI locale, which caused a validation error when changing the attribute value.

ISSUE-500353 - Fix for logger.severe() causing business rule to abort

Calling logger.server("message") in a JavaScript Business Action should not cause a rollback of a transaction on the node that was being worked on in a bulk update. This has now been fixed, so it will not cause a rollback. If a business action is not supposed to be applied to a node in a bulk update, it should be handled by returning false in the configured business condition. If something unexpected happened during the execution of the action that necessitated a rollback, it will still be achieved by throwing an exception from the business action.

ISSUE-501798 - Fix for supplier users not able to see 'Batch' level objects when they are configured as part of the Supplier Web UI

Fixed a problem causing Supplier Batches hierarchy to not be shown in the Web UI Tree Navigator.

ISSUE-501869 - Fix for error during import of STEPXML

The problem was seen during import of STEPXML. If the STEPXML contained the tag <Products RejectNewProducts="true"> and a product with a bad key was seen, then an error message was written in the BGP log that it was not possible to create the product.

The solution has been to handle bad keys in the same way as bad IDs are handled. Two lines are written in the BGP for the product:

Example keys:
{code:java}
Line 7, Product 2: The new product with unique key 'A_SKU2' was rejected
Line 7, Product 2: The product with unique key 'A_SKU2' was skipped
{code}

Example IDs:
{code:java}
Line 6, Product 2: The new product with ID 'AcmeID2' was rejected
Line 6, Product 2: The product with ID 'AcmeID2' was skipped
{code}

ISSUE-505533 - Solution to increase max file size upload

Introduced a property that overrides the standard Apache file size limit and allows admins to control a maximum uploaded file size through the Web UI Asset Import Homepage Widget. To set this property, contact Stibo Systems Support. Hotfixes are available for step-10.1-mp1 - mp6.

ISSUE-506367 - Fix for REST Receiver inbound with large files causing BGP to be put into quarantine

Importing STEPXML containing very large assets would fail with 'out of memory' errors. This has been fixed.

ISSUE-508906 - Fix for data misalignment when not using the full screen

Now, a scrollbar on the Data Container Table View component will allow users to scroll horizontally on both headers and cells instead of scrolling only the cells.

ISSUE-513817 - Packaging screen fix for Web UI

Fixed incorrect exception about cycle in packaging graph, which was thrown for correct packaging graphs with more than one (1) level of references that prevented a Packaging screen in Web UI from loading. There is a hotfix for this solution that is applicable to step-10.3-mp1 to mp3.

ISSUE-514752 - Issue fix for header rows no longer word wrapping in a Task List

Now, dynamic table layout word wrap will correctly work for inherited value cells in Multi Edit Display mode on a Web UI Node List.

ISSUE-516025 - Fix for Details Overlay not loading when navigating back

Introduced possibility to bypass a navigation prevention check when navigating to the previous screen with Details Overlay in Web UI and the previous screen had the unsaved changes. To toggle this property, contact Stibo Systems Support. A hotfix for this solution is available for step-10.2.mp3.

ISSUE-518567 - Fix for missing 'Forgot password?' option for LDAP / non-LDAP combination

A new config property WebUI.ForgotPassword.ForceEnabled has been added. Set to true to enable the 'Forgot password?' functionality, even when LDAP is used. LDAP users cannot reset their passwords in this way.

ISSUE-519710 - Kafka Receiver Group ID override

Added option to manually override 'Group Id' parameter for the Kafka Receiver. Contact Stibo Systems Support to implement this solution. A hotfix is applicable to step-10.2-mp3.

ISSUE-520814 - Fix for import of translated file creating product-to-product references

Fixed the import of a translated file, which created product-to-product references when the reference was removed after creating file for translation.

ISSUE-521047 - STEP Workbench Launcher security upgrade

Fixed a STEP Workbench Launcher problem for Windows x64 not having signed executable files, which was a security issue.

ISSUE-521634 - Fix for multi-valued attributes not clearing on import

When importing data with an empty multi-valued attribute where STEP holds a value for a multi-valued attribute, data was not cleared. Now, when importing empty multi-valued attributes, the values for a multi-valued attribute will be cleared in STEP.

ISSUE-522286 - Fix for customer system going in Single Update Mode and needing restart

AutoDeleteBackgroundProcesses would delete a maximum of 1,000 background processes at a time. This limit has been removed.

ISSUE-523054 - Fix for import configuration ignoring mandatory flag

Fixed the problem with import configuration, which was ignoring a mandatory flag for data container attribute values.

ISSUE-523873 - Fix for XML formatting issues when editing Web UI

XML indent will be enabled again in the Web UI configuration if a certain config property is set. Contact Stibo Systems Support to enable this property.

ISSUE-524439 - Corrected an inheritance issue for classifications in Web UI

Now, it is possible to override an inherited CPLink via the Classification Product Links component in a Web UI Node Editor.

ISSUE-524796 - Fixed Excel export bug

Fixed calculation of filename extension for referenced assets in Excel export so that the original extension is used for assets that do not pass though an image conversion pipeline.

ISSUE-525134 - Fix for unavailable Basket button for end user

Introduced a possibility to check a Temporary Node Collection Create privilege instead of a Top Node Collection Create privilege to display a Basket screen in Web UI. To set this property, contact Stibo Systems Support. There is also a step-10.2-mp3 hotfix available for this fix.

ISSUE-525383 - Fix for translation configs with multiple locales exporting without DESCRIPTION

A fix was made for translation process descriptions that said 'null' instead of 'Translating.' There is also a hotfix available for this solution that is applicable to step-10.2-mp3.

ISSUE-525476 - Solution for inability to display multiple warning messages with business conditions

Fixed problem occurring when only one attribute value, which had a failing business condition validation, was highlighted on a Web UI Node Editor screen after editing this value. Users should see multiple values being highlighted if they are failing different business condition validations.

ISSUE-526346 - Fix for LOV binding inconsistency

Introduced a possibility to resolve Business Rules on Web UI Node Editor to LOV values instead of LOV IDs when evaluating business conditions. To toggle this possibility, contact Stibo Systems Support.

ISSUE-526949 - Improved workbench performance on high latency networks

Deprecated HTTP/1.0 headers removed. A hotfix for this solution is also available for step-10.3-mp4.

ISSUE-527032 - Corrected double quote CSV format import issue

Fixed problem occurring when there was an empty double quote with a delimiter at the beginning of the imported CSV string. This caused a CSV import to fail with an exception when the 'Allow Multiple Lines' parameter was enabled for CSV conversion. This solution also has a hotfix available for step-10.0-mp3 to mp5 baselines.

ISSUE-527367 - Publication Transfer Package export file with wrong extension correction

Fixed problem where an Export to Transfer Package created an Excel file with the wrong extension.

ISSUE-527721 - Solution for export to Excel failing since upgrade

Now, an exception will not be thrown when exporting STEP data in Excel / CSV / Smartsheet format via the File Delivery plugin. An exception was related to an attempt of renaming the result file while Excel was still locking it on a file system. The exporter will now retry again, and if this retry fails, it will copy the file with the correct name and delete an original file later.

ISSUE-527982 - Fix for asset format getting changed in published environment

When using STEPXML to export and import assets, the filename was lost. It was therefore not possible to set the asset mime type based on the filename extension when importing from STEPXML. This has been fixed, and a hotfix for step-10.2-mp3 is also available.

ISSUE-528220 - Fix for nested 'groupings' configured with Web UI mandatory validations that were conflicting and failing

Fixed problem occurring when the Action button with Enforce Validity on a Buttons component of the Web UI Node Editor screen was not enabled correctly after saving the hidden mandatory grouping options.

ISSUE-528721 - Fix for unexpected search results

Fixed an issue occurring with an In-Memory reference search by a classification product link reference in combination with other search criteria where a product could be linked with multiple classifications. The classification product link reference search criteria filter was omitted when results were queried by other search criteria before filtering them by the classification product link type.

ISSUE-529998 - Fix for double page references in PDF

Fixed problem in DAP Parser where node on pages was returning invalid page numbers. A hotfix for this solution is available for step-10.1-mp3 to mp6.

ISSUE-530171 - Fix for changed flag not propagating in STEPXML on LOV-based reference meta data

Cross-context delta exports now handle LOV deletions on meta data on associations correctly. Previously, deletions were sometimes interpreted as additions, in which case they were not marked as missing.

ISSUE-530611 - Fix for event processor failing automatically

Changed the user starting a background process to be the configured user on the event processor so that it is the configured user's privileges that apply to all aspects of the processing. The configured user will appear as the 'started by' user on the background process.

ISSUE-530865 - Fix for error being thrown when submitting publication section objects out of a workflow state

Fixed ClassCastException during the Submit From Grid of publication section on Web UI Task List screen. A hotfix for this solution is available for step-10.1-mp4 through mp6.

ISSUE-531172 - Fix for Excel export not working

Now, an exception will not be thrown when exporting STEP data in Excel / CSV / Smartsheet format via the File Delivery plugin. An exception was related to an attempt of renaming the result file while Excel was still locking it on a file system. The exporter will now retry again, and if this retry fails, it will copy the file with the correct name and delete an original file later.

ISSUE-531202 - Matching & Linking fix

Fixed multiple issues related to Trusted Source Multi Context Reference Survivorship Rule not able to handle Multi Reference Reference / CPLink types properly. A hotfix for step-10.2-mp3 is also available for this solution.

ISSUE-531899 - Local Loqate CASS native call Linux

Local Loqate CASS had performance issues. The Loqate library directory LD_LIBRARY_PATH for the app server process was added, if it exists. Users will see performance improvements now.

ISSUE-532078 - Fixed exception occurring during active translation

Fixed an 'This operation cannot be performed while a Transaction is active' exception occurring when a user was trying to generate Match Code statistics in workbench for a Matching Algorithm with an embedded match code with In-Memory enabled.

ISSUE-533477 - Solution for empty CSV files generated upon export

Introduced a property that allows the system to mark changed System Setup Nodes as 'Selected' in STEP XML export when performing an event-driven (OIEP) export in STEP. This means that empty converted files will no longer be generated for such OIEPs. To enable this property, contact Stibo Systems Support.

ISSUE-533662 - Fix for error given when copying an empty LOV cell value into a Smartsheet

Fixed a problem making it impossible to paste an empty value in an LOV cell in Excel Smartsheet to clean up the current value.

ISSUE-533725 - Fix for NPE occurring while Importing an XML file

Fixed NullPointerException in STEP importer that was related to the handling of ObjectTypeConstraintException (invalid Object Type, an invalid attempt to change the object type, etc.).

ISSUE-534226 - Fix for customer matching Clerical Review Confirmed Non-Duplicate - Matching Algorithm issue

Fixed a problem occurring when in Confirmed Duplicates and Confirmed Non Duplicates flippers on the workbench Matching tab a selected node showed all valid Matching Algorithms for a Reference Type, mapped as Confirmed Duplicate/Non Duplicate. Now, these algorithms will be additionally filtered by a valid Golden Record Object type. If the matching algorithm is valid for a selected Golden Record Object type, it will be shown in Matching Algorithm cell on the mentioned flipper.

ISSUE-534771 - Fix for Asset Download looping while loading asset content

When uploading new asset content, STEP would notify event listeners but ignore some Event Triggering Definitions. This has been corrected. Now, Event Triggering Definitions will be taken into account when uploading new asset content.

ISSUE-534819 - Solution for inability to sort description in Export / Import background process

Now, the Table Header BGP Description on a BGP List Screen in Web UI will support filtering.

ISSUE-535369 - New healthcheck in Admin Portal

A new Invalid Previous and Maximum History Revisions healthcheck determines if there are any nodes with invalid revision entries. The process for fixing the nodes is handled manually.

ISSUE-535492 - Solution for Kafka Receiver only taking a small number of events

A MaxPartitionFetch property (Kafka.Receiver.<InboundEndpointID>.MaxPartitionFetch=<value-in-integer>) was added for the Kafka Receiver Plugin so the default value can be overwritten.

ISSUE-535596 - Fix for issue with submit button on page

Fixed issue with a reference table in Web UI where it was possible to submit the form event if not all mandatory attributes were filled. A step-10.2-mp3 hotfix is also available for this solution.

ISSUE-535836 - Fix for deactivation of keys while installing the change package contents

When exporting a change package consisting of an LOV-validated attribute that was used in a unique key, the target system could fail during impact analysis even if the attribute / LOV has not changed. This has been fixed.

ISSUE-535922 - Fix for e-Signature exception

Fixed a problem occurring when submitting an item with an e-Signature business rule configured on a transition. It caused an exception to be thrown in Web UI.

ISSUE-535930 - Fix for Asset Importer not saving metadata for a reference

When trying to import assets via Asset Importer, STEP would not store metadata as attributes on multiple references. This has been corrected. Now, all metadata will be stored as attributes on multiple references.

ISSUE-536481 - Fix for errors on basic import of STEPXML

Now, a ModifyingUniqueKeyValueException will not fail an entire import, if this exception is thrown in Replacement Rules when replacing a value for an attribute which is used by the unique key.

ISSUE-537409 - Fix for package object details not showing after upgrade

Fixed a problem occurring when a current Node Details selection on a Packaging Node List in Web UI was not loaded after reloading a screen upon performing a Reset Action (or any other action that reloads a current screen).

ISSUE-537544 - Solution for error occurring while creating the IIEP for asset import

When trying to import an asset via Import Manager, STEP would display an error message while mapping Object Type. This has been corrected. Now, there will be no error message while mapping Object Type for an asset. A hotfix for this solution is available for step-10.2-mp3.

ISSUE-537556 - Fix for OIEP failing with a general contract violation error

Fixed non-transitive comparison in Domain exporter during the export of metavalues if any of the metavalues has a null persistence object. It caused a 'Comparison method violates its general contract' error in the BGP, which is now fixed.

ISSUE-538673 - Solution for inconsistent display of the RTE dialog box

Fixed the width of a Rich Text Editor popup on a Web UI Node Editor screen. The editable text box was bigger than the dialog box when the popup contained tags.

ISSUE-539493 - Data Container table horizontal scroll fix

Removed unnecessary scroll on Data Container Table Editor within a Node Editor.

ISSUE-539674 - Solution for authentication issues for Asset Streaming API

Fixed authentication issues occurring when using an Asset Upload endpoint with SaaS. An error was occurring when the customer sent an upload request to the Asset Streaming API and getting a 401 Unauthorized exception.

ISSUE-541019 - Fix for GUI bundle for creation of attributes

Now, internal Web UI validators will be hidden in workbench when creating a new attribute.