RELEASE NOTES

2023.4-MP1

February 2024 (updated March 11, 2024)

Table of Contents

2023.4 Release Notes

These release notes describe the new, enhanced, and changed features provided with the release. Some changes 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.

Release highlights:

- **Configuration Management**: Building upon the foundation laid in the 2023.3 initiative, this release introduces the ability to generate a change package from a configuration previously exported to Git. This enhancement allows users to export a configuration to Git, perform edits and merges within Git, and subsequently create a change package that can then be imported into a target system, enabling an impact analysis to be conducted before installation. (MDM Platform)

- **ESG Data Management:** As part of our ambitious environmental, social and governance (ESG) strategy, Stibo Systems introduces the first iteration of our ESG Data Management solution for solving sustainability compliance data management needs. (Product MDM, MDM Platform)

- **Faceted Search Optimizations**: Overall performance and robustness of the consistent cross-domain search experience released in 2023.3 has been improved to enable users to interact quicker with data in a more efficient manner. (Customer, Supplier, and Location MDM)

- **Multiple Language Automation**: Stibo Systems now supports new language specific functionalities (conditions, channel attribute names, and LOVs) enabling a multilingual syndication strategy. (Product Data Exchange, Product MDM)

- **Instrument**: The UI is generally available with this release. (Product MDM)

Stibo Systems is continuously adapting to the changing needs of the market and our customers by implementing various enhancement requests in all of our releases. Information regarding these requests as well as the enhancements / initiatives summarized above, plus a wide variety of other improvements and changes, are included in this release note set. Release notes are accessible by clicking on the links below:

- 2023.4 Upgrade Guide

- General Enhancements and Changes

- Data Exchange Enhancements and Changes

- Web UI and Instrument Enhancements and Changes

- Platform and Software Support Changes

- Product MDM for Automotive 2023.4 - 7.0.58 Release Notes

- Miscellaneous Bugfixes

Note: Product Data Exchange (PDX) release notes and online help are available in the PDX solution. Once logged into the tool, click Help Center > Documentation using the left navigation panel. Documentation will open in a new tab.

Reminder: Quarterly Releases

RELEASES ARE IDENTIFIED BY YEAR AND QUARTER IN WHICH THEY ARE INTRODUCED TO CUSTOMERS. THE FIRST FOUR DIGITS (2023) INDICATE THE YEAR OF THE RELEASE. THE LAST DIGIT (4) INDICATES THE CALENDAR QUARTER. TO LEARN MORE ABOUT RELEASE FREQUENCY, INCLUDING TARGET RELEASE TIMES, AND END-OF-LIFE BASELINE SUPPORT DATES, REFER TO THE NEW STEP RELEASE AND END-OF-LIFE INFORMATION TOPIC IN THE SYSTEM UPDATE AND PATCH NOTES DOCUMENTATION.

Upgrade Guide

In addition to the individual release notes, upgrading customers should read the 2023.4 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.

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 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. Find out more by going to Stibo Systems website at https://www.stibosystems.com.

Stibo Systems Academy

Maximize your investment in Stibo Systems Master Data Management (MDM) by taking Academy courses and completing our certification programs. The MDM Academy offers customer and partner hands-on training options to expand your knowledge on Stibo Systems MDM solutions. Class and program details are available on our website: https://www.stibosystems.com/services-support/mdm-academy.

Installing STEP 2023.4

For SaaS environments, upgrades can be done in the SaaS Self-Service UI or (if not available) by raising a request with Stibo Systems Support. More information on the upgrade process in the SaaS Self-Service UI can be found in the Upgrade Environment section in the in-build User Guide.

For on-premises customers, the baseline (and additional components) can be installed using these commands:

```
./spot --upgrade=step:2023.4
```

For on-prem systems, refer to the SPOT Program documentation for more information, including how to use the SPOT `--upgrade` command to also find compatible components that can be added at the same time as the baseline patch (`--upgrade=all`) in the SPOT Program topic of the System Administration Guide found in Downloadable Documentation. For assistance, contact Stibo Systems Technical Services.

For customers that have custom add-on components and/or if Stibo Systems Support is deploying your system upgrades and patches, submit an upgrade request via the Stibo Systems Service Portal.

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.

2023.4 Upgrade Guide

Summary

There are many benefits to keeping your current system upgraded. And, remember that upgrades are made easy with SaaS.

- Get the latest and greatest software to stay ahead of your competition

- Take advantage of new capabilities and enhancements to improve the user experience, increase productivity, increase efficiency, and tackle emerging security threats

- Stay current with releases for security, supportability, third-party application versions, latest industry standards, and more

- Support new business initiatives, which allows for opportunities to expand the use of the solution and increase business value

- Benefit from improved system performance

Customer action may be required. Before upgrading the platform and its add-on components to 2023.4 from an earlier version, customers should be aware of certain system changes. The list that follows may not be comprehensive; however, along with the full release note set, it provides a starting point for upgrade evaluation.

For on-prem deployed systems, it is always recommended to use the latest released version of SPOT (regardless of the current STEP version in use). If upgrading via the --upgrade command, using the latest SPOT version is required.

Details

Automatic purge for Web UI revisions

In the Web UI, there is now an automatic purge mechanism to purge older Web UI revisions. Users will no longer need to manually delete previous Web UI revisions in Workbench. User intervention might be needed to manually purge the Web UI revisions when the number of revisions retained after the automatic purge exceeds the configured maximum number of Web UI revisions.

For more information, refer to the 'Automatic revision purge in the Web UI' release note in Web UI and Instrument Enhancements and Changes.

Change Package Object-Event

The object type name related to a sealed change package, formerly known as 'Verified package contents,' has been changed to 'Change Package (Sealed).' Additionally, the object type has been made visible in the Select Object Types dialog when setting up an outbound integration endpoint (OIEP), and now, both Oracle- and Cassandra-based systems use the same object type configuration for Triggering Object Types and the

Output Template Object-Eventtype. If an OIEP was configured and triggered by sealing a change package in 2023.3, confirm the configuration is using 'Change Package (Sealed),' and test the integration before using change package event publishing for normal operation.

For more information, refer to the 'Integration improvements for change packages and VCS repositories' release note in Data Exchange Enhancements and Changes.

Event Mode options are renamed for clarity

The options on the Event Mode parameter for outbound integration endpoints (OIEPs) and event processors (EPs) are renamed to better indicate the functionality being selected. For more information, refer to the 'Event Mode options are renamed for clarity' release note in Data Exchange Enhancements and Changes.

Support, platform, and system admin information

Below is a table outlining the end-of-life schedule for the STEP releases shown:

Version	On-Prem & SaaS v1	SaaS v2
10.2	May 1, 2024	May 1, 2024
10.3	November 1, 2024	November 1, 2024
11.0	June 8, 2025	December 8, 2022
11.1	November 30, 2025	May 30, 2023
11.2	March 7, 2026	December 7, 2023
2023.3	September 30, 2024	September 30, 2024
2023.4	June 13, 2026	June 13, 2024

Refer to the new STEP Release and End-of-Life Information topic in the System Update and Patch Notes section for more information about quarterly release target dates and support end dates for future releases. Additional Platform and Software Support information can be found in the Platform and Software Support Changes topic in the 2023.4 Release Notes.

Customers should update as soon as possible to the latest release of Stibo Systems Enterprise Platform (STEP). Contact Stibo Systems 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.

Updated: New on-premises deployment architecture

One of Stibo Systems' strategic focuses is on delivering a superior SaaS service, which leads to changes in our overall architecture to introduce more and more containerized microservices. These changes cannot be deployed on-premises or in a private cloud without changes to the deployment architecture. As first published in the 2023.3 release notes, to allow on-premises customers to continue to upgrade STEP, **starting with the 2024.3 release** (and not for STEP 2024.2, as originally communicated), these customers need to change the way that Stibo Systems' software is deployed on-premises so it is aligned with how Stibo Systems' deploys in SaaS. Upgrades to 2024.3 and subsequent releases will require a new deployment architecture where the current application server architecture is replaced by a containerized architecture—just as in SaaS. This in turn requires extra hardware due to an overhead in running the SaaS architecture on-premises. Application operations like starting and stopping the application will be similar in complexity to today—but different.

The database deployment architecture will be exactly the same, so database administration along with backup / restore will remain the same. Any deployment of InDesign and Elasticsearch will also remain the same. Only the application server architecture is changed. On-premises and private cloud customers will receive more detailed documentation separately.

This notification is also included in its entirety in the Platform and Software Support Changes release note.

Deprecated components

Some components are moving into a new stage within the component removal lifecycle with the 2023.4 release. The purpose of these component status changes is to simplify the component list, minimize support on components that have an improved substitute, and remove clutter and uncertainty as to which component or components to use. **For users, this means that these components will later be withdrawn and removed.** At this time, components will continue to work, but it is important for customers to make plans for replacing them with the recommended components.

Being deprecated is everything that uses IBM WebSphere MQ directly from STEP. Specifically, that affects the following areas:

- IBM MQ SSL Receiver and IBM MQ SSL Delivery Method

- The WMQInitialContextFactory and FileInitialContextFactory JMS Connection Factory Class within the JMS Receiver and JMS Delivery Method

The ActiveMQInitialConnectionFactory JMS Connection Factory Class will remain available within the JMS Receiver and JMS Delivery Method. Customers that use any of the above for integration with IBM WebSphere MQ should use the Dynamic JMS Receiver and Dynamic JMS Delivery Method as replacements.

This information is also included in the Data Exchange Enhancements and Changes release note.

Online help / documentation changes

With every release, documentation updates occur. In addition to documentation that was updated as part of 2023.4 projects, the following documentation updates that users should be aware of when upgrading to 2023.4 are listed below:

- Changes were made to the structure of the faceted search documentation.

- As mentioned in the 'Support, platform, and system admin information' section above, a new STEP Release and End-of-Life Information topic is now part of the System Update and Patch Notes section.

- 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 support portal on the Release Information dashboard. Product MDM for Automotive 10.1 release and maintenance patch notes were also removed and can be provided upon request.

General Enhancements and Changes

Summary

The following enhancements and changes have been made as part of the 2023.4 release. These are outlined below and described in the Details section that follows:

- A new Environmental, Social, and Governance (ESG) Data Management solution for solving sustainability compliance data management is now available with this release.

- Cassandra database recycle bin improvements include optimized deletion functionality, the ability to revive gateway integration endpoints (GIEPs) from the Recycle Bin, and searching objects in the Recycle Bin by name.

- Value generators have been updated to include a prefix and postfix value to generate more unique number sequences.

- The IDs of object and reference types are now displayed in the Validity tab of attributes. This should help users in distinguishing between object and reference types that share similar or identical names.

- Functionality is extended in the JavaScript API with a method for getting the ID of a data container object. This allows access to the ID without requiring a custom extension.

- Improved failure handling for DaaS environments further ensures that data in STEP remains synchronized with DaaS and downstream systems.

- Stibo Systems has successfully secured the SAP integration re-certification for STEP 2023.

In addition, a number of enhancements have been included to ensure the ongoing security and supportability of the platform. Enhancements have also been made in the processes used to clean up old transactions to increase the efficiency of the In-Memory component.

For Cassandra database environments, to provide enhanced efficiency and improved performance, there have been improvements in event handling as well as reduced usage of Lock-free Schema Change (LFSC) background processes for small operations, such as extending the length of a text attribute.

Details

New Environmental, Social, and Governance (ESG) Data Management solution

Stibo Systems introduces a ramp-up release of the new Environmental, Social, and Governance (ESG) Data Management solution. As governments, consumers, and companies evaluate the impact commerce has on our environment, various ESG-minded organizations have built metrics and assessments against which those impacts can be measured. The ESG Data Management solution helps customers better manage and understand the 'footprint' their products, suppliers, employees, and locations make in the world based on these metrics. The ESG Data Management solution is an add-on configuration that enables customers to add

and configure ESG assessments relevant to their business, and to evaluate their master data against the compliance criteria of those assessments. Designed to work with any data model, the ESG Data Management solution can assist customers in their aims to better manage how ESG requirements affect their business.

The ESG Data Management solution is available for implementation with the 2023.4 release. Refer to the License and Component Lifecycle topic for details regarding a typical software release lifecycle. Documentation outlining how the solution can be configured and deployed is in progress now and will be available for the 2024.1 release.

Cassandra database recycle bin improvements

Continuing with the Cassandra recycle bin improvements from release 2023.3, this release further optimizes the deletion functionality. Also, Cassandra database users can now revive deleted gateway integration endpoints (GIEPs) from the System Setup recycle bin and can search for objects in the Tree and System Setup recycle bins by object name as well as ID. For more information, refer to the Recycle Bin for the Tree Tab topic in the Getting Started documentation and the Recycle Bin for System Setup topic in the System Setup documentation.

Value generators improvement

Value generators in STEP have two new fields: value prefix and value postfix. These two new fields allow users to create more specified unique number sequences for products. Value prefix allows users to add a value before the generated sequence. Value postfix allows users to add a specific value at the end of a generated sequence.

These new pre and post values will eliminate the need for configuring additional business functions to create unique number sequences. These two new fields on the sequence value generator also eliminate the need for an algorithm value generator in cases where pre-prend or post-pend strings result from a sequence value generator.

For more information on value generators refer to the Sequence Value Generator topic in the System Setup documentation.

Display object and reference type ID in attribute Validity tab

The IDs of object and reference types are now displayed in parentheses beside their names when viewed in the Validity tab of an attribute in STEP. Previously, only the names of object and reference types were displayed. This change was made in order to help users differentiate between object and reference types that may share the same name.
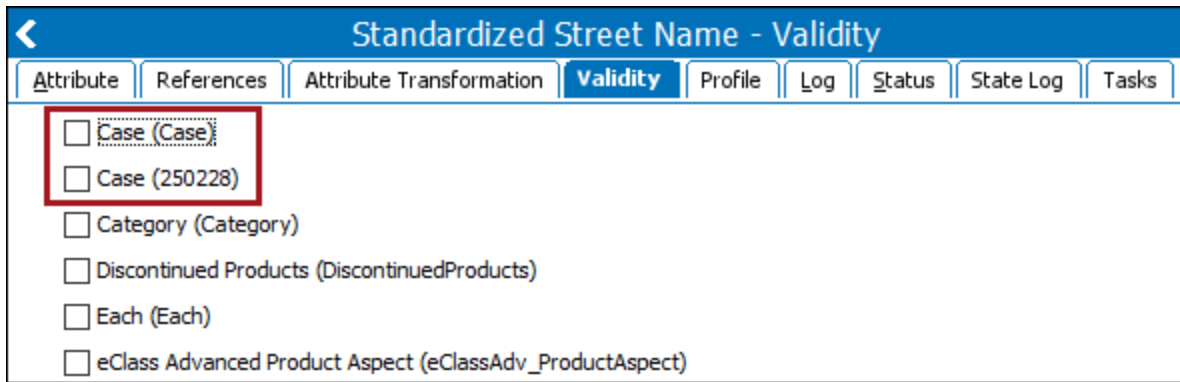
Note that Version Types, Link Types, and E-Catalog Types do not display their IDs in this manner.

For more information, refer to the Validity on Specification Attributes and Validity on Description Attributes topics in the System Setup documentation.

Data Container object ID available via JavaScript API

The JavaScript API has been extended with a method to get the ID of a data container object to provide consistency among the APIs:

```
com.stibo.core.domain.datacontainer.DataContainerObject.getID()
```

Since the methods for creating data containers with ID are already public, this makes it easier to use the ID of data container objects when using business rules.

For more information on the JavaScript API functionality, refer to the STEP API documentation (accessible at [system]/sdk or from the system Start Page) within the Extension API section from the Javadoc link.

Improved event publishing failure handling for DaaS

Event publishing in DaaS now includes the ability to roll-back transactions and informs the STEP application when delivery of a change notification event to a customer-hosted event queue fails. Previously, only a connectivity check was performed before processing a data change. Occasionally, this connectivity check can still lead to a scenario in which DaaS is updated while no change notification event can be delivered. However, the strengthened failure handling process further ensures that data in STEP remains synchronized with DaaS and downstream systems.

For more information, refer to the Data as a Service topic in the Data as a Service documentation.

SAP Re-certification for STEP 2023

Stibo Systems has successfully secured the SAP integration re-certification for Material Master Data (MATMAS), Creditor Master Data (CREMAS), and Debitor Master Data (DEBMAS) for the Multidomain MDM

platform STEP 2023. This continues to enable our customers to exchange material master, customer master, and vendor master data between STEP and SAP S/4HANA$^{®}$ improving the new product introduction process and time to market.

The re-certification further reaffirms Stibo Systems' commitment to excellence, ensuring that our integration capabilities remain cutting-edge, reliable, and ready to meet the dynamic demands of the digital landscape.

Data Exchange Enhancements and Changes

Summary

The following enhancements to STEP's data exchange functionality have been made as part of the 2023.4 release. These updates are outlined below and described in the Details section that follows:

- The Kafka Receiver and Kafka Delivery methods have been upgraded to work with Kafka 3.5.1.

- Configuration management is improved with inbound integration for change packages exported to VCS (version control systems) which now allows files to be combined to import a change package object in a target system, including user-defined installation instructions, custom attributes, and modifications made outside of STEP. This improves management of project-based initiatives running various configurations simultaneously across development, test, acceptance, and production (DTAP) environments.

- Gateway integration endpoints now allow proxy support with Amazon S3 Blob Storage. This is used by on-premises systems where the AWS S3 Storage is hosted externally.

- Support added for the latest industry standards, including ECLASS 14 (Basic and Advanced) and UNSPSC version 26.

- A new feature in ECLASS Advanced version 14 allows for the sorting of cardinality blocks.

- The Classification-Specific Attribute Value Group Component that is used for viewing and editing ETIM data now allows to define the display order of ETIM attributes.

- The Industry Standard Mapper, integrated with Data Onboarding, automates the interpretation of Industry Standard Mapping files, creating Mapper Configuration setup entities. This enables seamless ECLASS version mapping, offering both automated and manual onboarding capabilities, and streamlining standard upgrades within STEP.

- Receiver and delivery methods in STEP that are related to the IBM WebSphere solution are being deprecated and customers should transition to using Dynamic JMS Receiver and Dynamic JMS Delivery as replacements.

- Event Mode options for outbound integration endpoints and event processors have been renamed to 'Standard' and 'Deduplicate' to better describe the functionality.

- Authentication and encryption are strengthened for the PDX integration to allow the OAuth 2.0 token-based authorization protocol in both inbound and outbound integration endpoints. Additionally, the 'Product Data Exchange 2' delivery method now allows excluding asset binary content, while still sending asset metadata.

Details

Kafka integrations upgraded

The Kafka Receiver available in inbound integration endpoints (IIEPs) and the Kafka Delivery method available in the outbound integration endpoints (OIEPs) are upgraded to use Kafka 3.5.1.
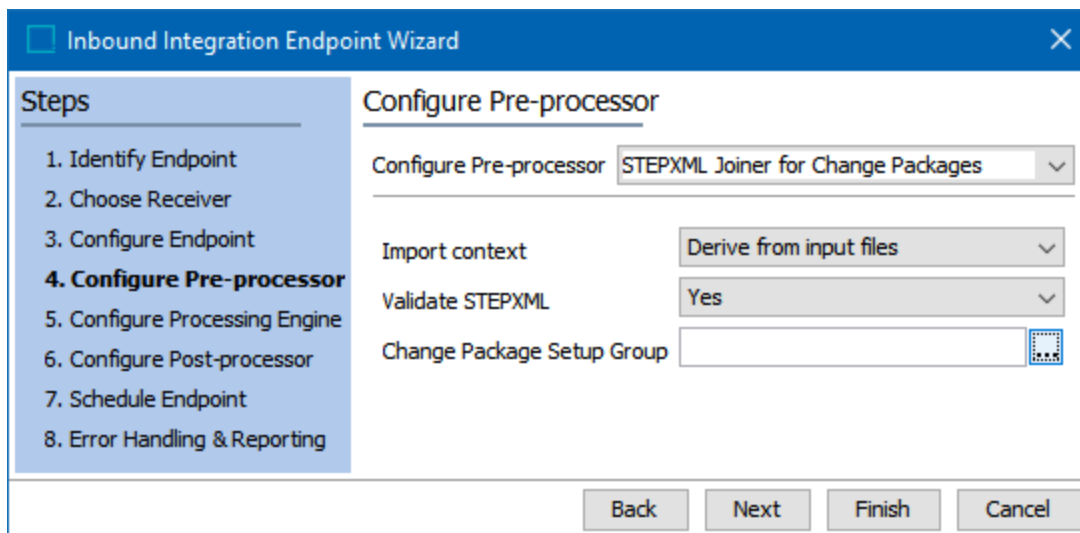
STIBO SYSTEMS
MASTER DATA MANAGEMENT

Both the receiver and the delivery method enable a STEP platform integrated with Apache Kafka to use a Kafka queue. For more information, refer to the Considerations for Setting Up Kafka Receiver or Delivery topic in the Data Exchange documentation.

Configuration management improvements for change packages and VCS repositories

Using change packages with an external version control system (VCS, like Git) in a development, test, acceptance, or production (DTAP) environment, now enables better management of systems in the DTAP environment by allowing external modification and impact analysis before installation of the change package versus directly updating objects in a target system via STEPXML.

Now, users can construct a change package containing all the changes previously exported to a VCS. This provides a better configuration management user experience by allowing users to review the impact of an update on the target system by running an impact analysis before it is installed. Improvements in this release include:

- The new STEPXML Joiner for Change Packages pre-processor collects and validates the required files (STEPXML, .js, and .json) from a .ZIP file sent to an inbound integration endpoint (IIEP) from a VCS or other location, and creates the change package version of STEPXML for import, where changes are not applied until it is installed. This pre-processor provides data to the 'Primary Items' and 'Secondary Items' flippers in the imported change package, as well as the custom change package attributes and instructions optionally included by the user who created the change package on the source system. Data for the 'Items Required for Transfer' and 'Possibly Impacted Items' flippers are not exported to the VCS and are not included when the change package is created in a target system.

- The Git Delivery method for outbound integration endpoints (OIEPs) now includes a 'Git Access Method' parameter with radio buttons for HTTPS and SSH. To reduce user error during setup, based on radio button selection, only the applicable parameters are activated.

- To reduce troubleshooting time for both IIEPs and OIEPs, error messages have been improved to include detailed information related to the specific problem.

- To improve usability on the Output Templates flipper when configuring an OIEP for use with change packages, the Object-Eventtype 'Verified package contents' option has been renamed to 'Change Package (Sealed)'. The newly named option can now be found using the Browse or Search tabs on the 'Conditions for output template' dialog.
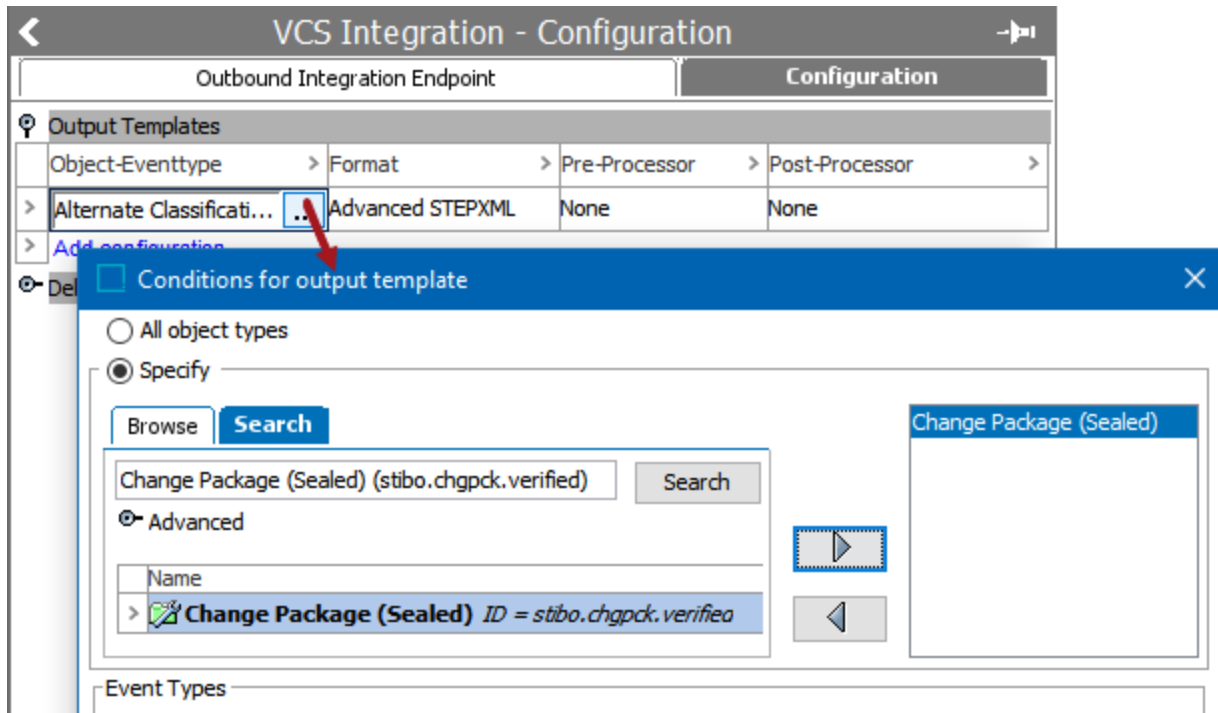
For more information, refer to the Version Control System Integration topic or the VCSI: Change Package Git Delivery Method in OIEP topic, both in the Configuration Management documentation.

Gateway integration endpoints allow proxy support for Amazon S3 Blob Storage

In some scenarios, particularly on-premises systems where the AWS S3 Storage is hosted externally, a proxy server is used to restrict internet connectivity from STEP. Now, gateway integration endpoints (GIEPs) using the Amazon S3 Blob Storage option support proxy configuration with the new 'Proxy config' parameter.
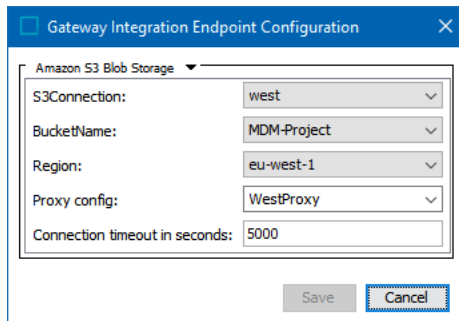
For more information, refer to the HTTP Proxy Configurations topic or the Configuring a Gateway Integration Endpoint - Amazon S3 Blob Storage topic, both in the Data Exchange documentation.

Support for the latest industry standard formats

Updates include support for:

- ECLASS 14: STEP now supports ECLASS version 14, both Basic and Advanced. For more information, refer to the ECLASS Format topic in the Data Exchange documentation.

- UNSPSC 26: STEP now supports UNSPSC version 26. With this update, UNSPSC users can import and have access to the most efficient, accurate classification system UNSPSC has to offer. For more information, refer to the UNSPSC Format topic in the Data Exchange documentation.

Added feature for sorting of cardinality blocks in ECLASS Advanced version 14

Enhanced support for ECLASS version 14 (Basic and Advanced) with a new feature facilitating the sorting of cardinality blocks. The system now facilitates sorting based on the FORDER approach.

In support of this solution, the following implementations have been made:

Running the ECLASS ADVANCED Model easy setup action creates a description attribute, FORDER (ID = eClassAdv_FORDER), valid for the 'eClass Advanced Product Block' object type. The importer populates the sequence number of the block within this attribute. Having this attribute as part of the model facilitates to import and maintain the sequence of the cardinality blocks.

Furthermore, the BMECat exporter has been updated to incorporate the FORDER value within the <FORDER> element in the exported file.

It is strongly recommended to initiate the import process by importing ECLASS Advanced files (Unit and Dictionary) first, followed by the import of ECLASS Basic files. This sequence ensures proper data handling and adherence to the system's requirements.

Improved display order of ETIM attributes in Web UI

This enhancement is for those using the Classification-Specific Attribute Value Group Component to view classification-specific attribute values in Web UI. Users using this component (which is generally used for viewing and editing ETIM data) can now define the attribute display order using the newly introduced parameter: 'Classification Link Display Sequence Attribute.' The parameter is to be configured with a metadata attribute that determines the display order of ETIM attributes. This facilitates the ETIM users to view the ETIM attributes in accordance with the ETIM specifications.

For more information, refer to the Classification-Specific Attribute Value Components topic in the Web User Interfaces documentation.

New Industry Standard Mapper

Industry standards evolve through periodic releases, introducing updates to their reference files. The new Industry Standard Mapper solution addresses challenges associated with those evolving industry standards. STEP now supports seamless mapping between different versions of a standard, allowing users to automate reclassification and data transfer tasks. This enhancement ensures an automated approach to handling standard upgrades.

Every time there is a version upgrade, many industry standards provide a description file that contains an instruction on how to upgrade from one of their versions to their next major version, which Stibo Systems refers to as Industry Standard Mapping files. The new solution interprets those Industry Standard Mapping files to create Mapper Configuration setup entities with necessary mapping instructions. These created Mapper Configuration setup entities later facilitate onboarding of data from one version to another version.

Currently the new Industry Standard Mapper solution supports only the ECLASS BASIC. For optimal functionality of this solution, it is required that the system utilizes the version-specific object type structure for ECLASS classifications. This can be achieved by selecting the 'Version specific object types' option on the Advanced step of the ECLASS Classification Importer during an import.

Additionally, the Data Onboarding solution has been enhanced to read the Industry Standard Mapping files and automatically generate Mapper Configuration setup entities, minimizing manual efforts. Users can now efficiently map between ECLASS Basic versions, benefiting from both automated and manual mapping capabilities.

The Industry Standard Mapper solution works in conjunction with the existing Data Onboarding solution in STEP. Implementation of the Industry Standard Mapper is dependent upon the prior implementation of the Data Onboarding solution.

In support of this solution, the following components have been newly implemented:

- A component model called 'Industry Standards Mapping Model' that when run creates all the necessary folders, object types, attributes, LOVs, etc.

- A processing engine called 'Eclass Mapping File Importer' that when configured in an IIEP will import the Industry Standard Mapping files into the system.

- A Web UI screen called 'Industry Standard Mapping Creator' that provides an interface to create Mapper Configuration setup entities.

- A Web UI component called 'Manual handling Component' which supports handling mapping issues that requires manual handling as deletion and specialization (splits) of classifications.

Documentation outlining how the solution can be configured and deployed is in progress now and will be available for the 2024.1 release.

IBM WebSphere deprecations and replacements

Being deprecated is everything that uses IBM WebSphere MQ directly from STEP. Specifically, that affects the following areas:

- IBM MQ SSL Receiver and IBM MQ SSL Delivery Method

- The WMQInitialContextFactory and FileInitialContextFactory JMS Connection Factory Class within the JMS Receiver and JMS Delivery Method

The ActiveMQInitialConnectionFactory JMS Connection Factory Class will remain available within the JMS Receiver and JMS Delivery Method. Customers that use any of the above for integration with IBM WebSphere MQ should use the Dynamic JMS Receiver and Dynamic JMS Delivery Method as replacements.

This information is also outlined in the 2023.4 Upgrade Guide.

Event Mode options are renamed for clarity

The Event Mode parameter options on outbound integration endpoints (OIEPs) and event processors (EPs) are renamed to better indicate the functionality being selected.

- The 'Detailed' option is now renamed to 'Standard.' This option continues to handle each event as it is presented by the queue to the processor.

- The 'Efficient' option is now renamed to 'Deduplicate.' It continues to perform the same action, namely, deduplicating events on the queue at run time.

For more information on the Event Mode parameter, refer to the EP - Event Processor Tab topic in the System Setup documentation and the OIEP - Event-Based - Manual Configuration topic in the Data Exchange documentation.

PDX improved security and asset management

The PDX integration now allows use of the OAuth 2.0 token-based authorization protocol via the 'Product Data Exchange 2' delivery method in outbound integration endpoints (OIEPs) and the 'Product Data Exchange' receiver in inbound integration endpoints (IIEPs). Configuration parameters in both OIEPs and IIEPs now provide users with the option to use either 'Token-based Authentication' (with a business function providing an Auth-Header Value Function) or the existing 'Basic Authentication' (with API user name and password) options.

Additionally, the new 'Upload Assets' parameter on the 'Product Data Exchange 2' delivery method allows asset binary content to be excluded, while still sending asset metadata.

For more information, refer to the Base Setup topic in the Data Integration documentation and the Asset Publisher topic in the Digital Assets documentation.

Web UI and Instrument Enhancements and Changes

Summary

The following enhancements and changes have been made to the Web User Interface as part of the 2023.4 release:

- The Instrument User Interface is now generally available to customers. There are prerequisites required; refer to the details section for more information.

- Assets displaying in the Referenced Asset Representation component can now be ordered by configuring a metadata attribute.

- Image assets displaying in a hierarchy (in the Tree Navigator or in a Node Picker) will display a thumbnail when the user places their cursor over the asset name in the hierarchy.

- Notification pop-up messages presented to the user in the Web UI now display with an icon in the pop-up's color band.

- The Web UI designer now has an automatic purge feature that will delete older Web UI revisions. Revisions will automatically purge upon daily saves, allowing users more space to customize and make changes to the Web UI without compromising memory.

- The name of the image asset is now displayed when viewed in the popup dialog of the Thumbnail Header and Referenced Asset Representation components. This should help users quickly identify the asset being displayed.

- Several UI improvements have been made to the Status Selector components. These components now better align with other similar components in the Web UI.

- The Submit Dialog section of multiple Web UI components has been updated to align the functionality across components.

- LOV Cross-Validation has been enabled for the Globally Configured Unfolding Data Container component.

Details

Instrument User Interface now generally available
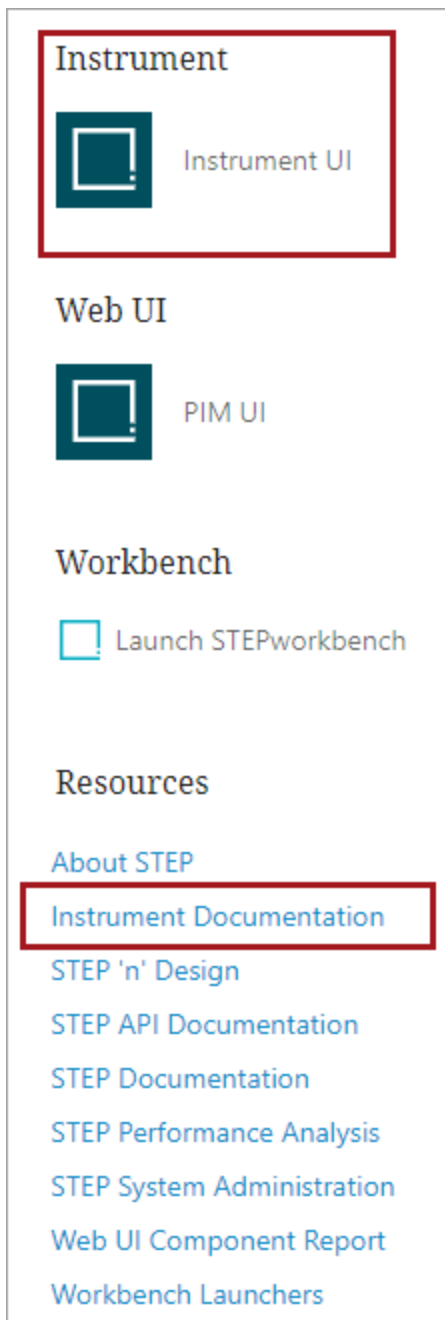
The Instrument UI is now generally available. While Instrument is generally available, it still must be enabled for your system. Additionally, these prerequisites must be met:

- Be on the most recent STEP version. Going forward, update to the latest version when available. Instrument updates will not be backported.

- Have the Elasticsearch license and Elasticsearch server configuration setup. For more information, go to the Elasticsearch Setup in the System Setup documentation.

- Have the In-Memory license and setup. For more information, refer to In-Memory Database Component for STEP in the Resource Materials documentation.

Contact Stibo Systems to determine how best to meet these requirements and get started.

Once activated for your system, the Instrument UI icon will appear on your system's Start Page or directly via https://[your system name]/instrument/. Along with the UI, Instrument-specific documentation is available on the Start Page under Resources.

Refer to the Instrument Documentation for new feature information and online help, which details the functionality as well as any applicable considerations and limitations. Highlights for 2023.4 include:

- Data container support

- PDX channel statuses to track syndication

- User settings updates

- Asset details view improvements

- And, much more!
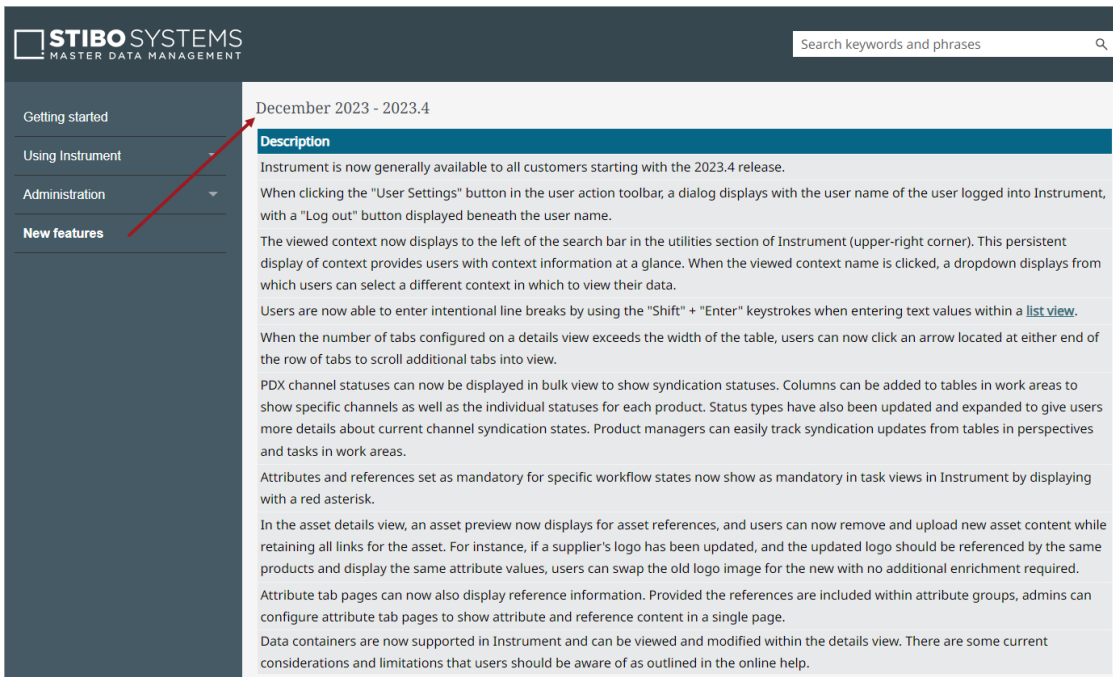
Defining sort ordering for asset tiles

The Referenced Asset Representation component now allows admin users the ability to determine the ordering for asset tiles displaying in the Web UI. A new parameter, 'Sorting Metadata Attribute', has been added to the configuration settings for the component. By configuring a metadata attribute on the relevant asset reference type, and then assigning an alphanumeric value to each asset referenced by the product, the assets will display in alphanumeric order in the Web UI based on those assigned values.

Additionally, if no attribute has been selected for 'Sorting Metadata Attribute', the default sorting for assets displayed using the Referenced Asset Representation component will be alphanumeric, by asset name.

For more information on the Referenced Asset Representation component, refer to the topic in the Web User Interfaces documentation.

Asset thumbnails display in pop-ups

Assets now display a pop-up thumbnail image when users hover their cursor over asset names in the hierarchy.

The thumbnail pop-up displays when users hover over an asset in a Tree Navigator component in the Global Navigation Panel or in the 'Browse' tab in a Node Picker component. When an image asset's pop-up displays, a small thumbnail of the image asset is shown; when a non-image asset's pop-up displays, an icon of the asset type is displayed. Additionally, when users hover their cursor over any other object in the hierarchy, a pop-up displays with the object's name and ID. This update, aimed primarily at users locating product images to reference, will speed image reference selection by allowing users to more easily browse image assets without clicking each image to review.

Updates to notification pop-ups

Pop-up notification messages in the Web UI have been visually updated to include informational icons. These updates apply to system-generated messages as well as user-configured messages triggered by business rules. Adding icons to the pop-up's color bands improves the user's ability to quickly understand the nature of the presented message and aids accessibility by accommodating those with color blindness.

For general information on pop-up notifications, an informational 'i' displays in the gray color band:
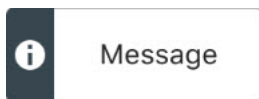
For error notifications, an exclamation point displays in the red color band:
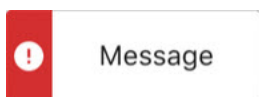
For warning notifications, a warning triangle displays in the yellow color band:
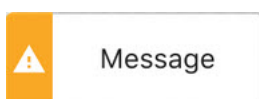
For notifications indicating a successful action or operation has been completed, a checkmark displays in a green color band:
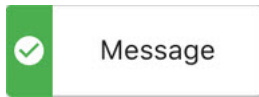
For more information on creating Web UI notifications in business rules, refer to the Writing User Notification Messages for Business Rules topic in the Business Rules documentation.

New automatic Web UI revision purge

A new automatic purge feature has been implemented to allow for automated cleanup of Web UI revisions. In the Web UI designer, older Web UI revisions will execute an automatic purge when the user saves a new Web UI configuration. Users will no longer have the manual task of deleting previous Web UI revisions in Workbench to save their most recent configurations, further preventing the STEP system from running into memory issues. The automatic purging mechanism executes in the background without any user actions. However, a user intervention might be required if the number of Web UI revisions exceeds the configured maximum revisions after the purging mechanism has been executed.

For more information, refer to the 'Purging Web UI Configuration Revisions' section of the Managing Web UI Configurations topic in the Web User Interfaces documentation.

Display thumbnail asset name and ID

The name of the image asset is now displayed beside its ID when viewed in the popup dialog of the Thumbnail Header and Referenced Asset Representation components in Web UI. Previously, only the ID would display in the popup dialog. This change should make it easier for users to quickly identify the asset being referenced.
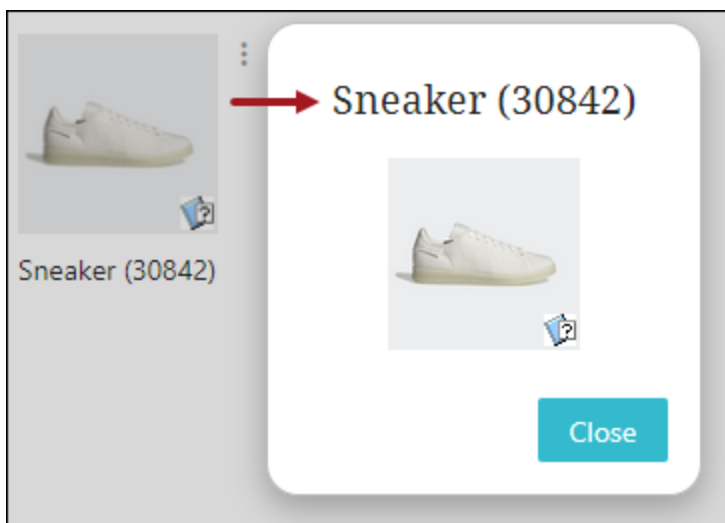
For more information, refer to the Thumbnail Header and Referenced Asset Representation topics in Web User Interfaces documentation.

Improved display of links in the Status Selector

A number of improvements have been made to the display of the Status Selector Homepage Widget, Status Selector Global Navigation Panel, and the Tasks Global Navigation Panel Component. The 'Initiate Label' text link has been changed into a button and can be found to the left of the group filter icons. To improve visual parity across components, some text colors were changed, and the active workflow state names no longer appear in bold.

Additionally, when hovering over a clickable text link, an underline will appear.
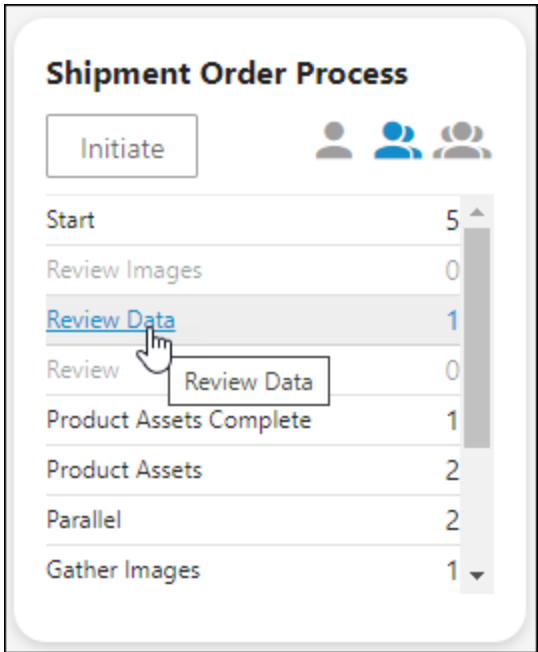
For more information on the Status Selector Homepage Widget, refer to the Status Selector Homepage Widget topic in the Web User Interfaces documentation.
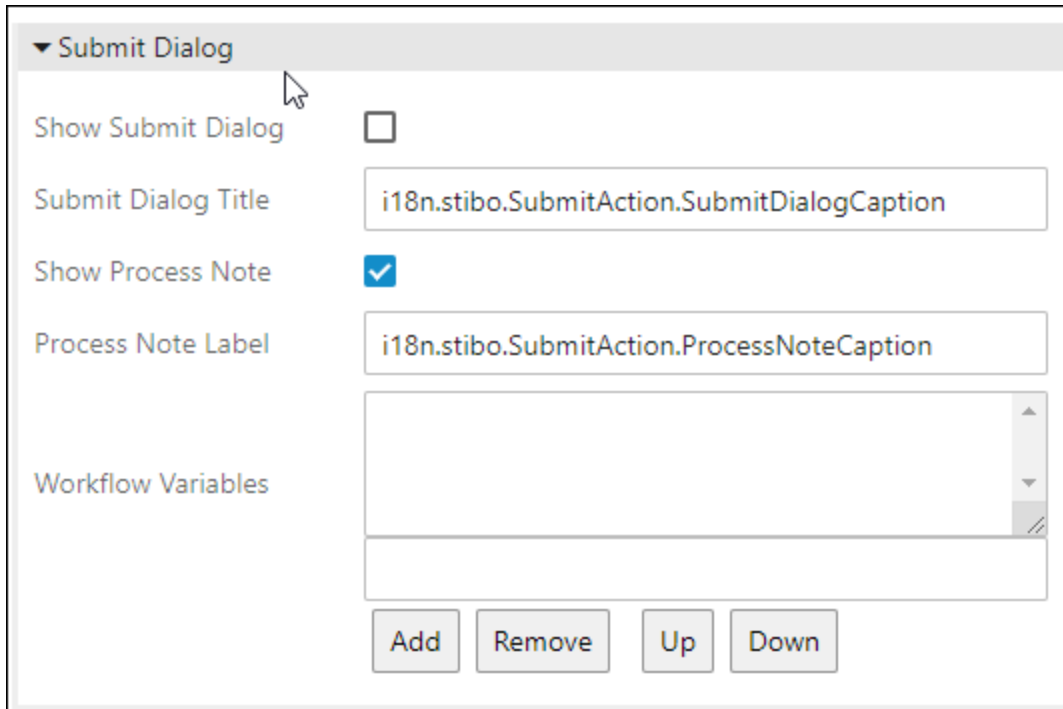
For more information on the Status Selector component in the Global Navigation Panel, refer to the Status Selector in the Global Navigation Panel topic in the Web User Interfaces documentation.

Updated Submit Dialog parameters

Multiple actions have been updated to better align their behavior across Web UI.

For the Submit Action, configurable in Node Details, a new parameter called Show Process Note has been created, which controls the display of the process note field. Previously, the Show Submit Dialog parameter controlled the display of both the process note field and the submit dialog. These functions have been split between the two parameters. Additionally, the Process Note Caption parameter has been renamed to Process Note Label and the Submit Dialog Caption parameter has been renamed to Submit Dialog Title.

For the Submit from Grid Action, configurable on a Task List, two new parameters have been added: Show Submit Dialog and Show Process Note. As with the Submit Action, the Show Submit Dialog parameter controls the display of the submit dialog and the Show Process Note parameter controls the display of the process note field. The Process Note Caption and Submit Dialog Caption parameters have also been renamed to align with the Submit Action.
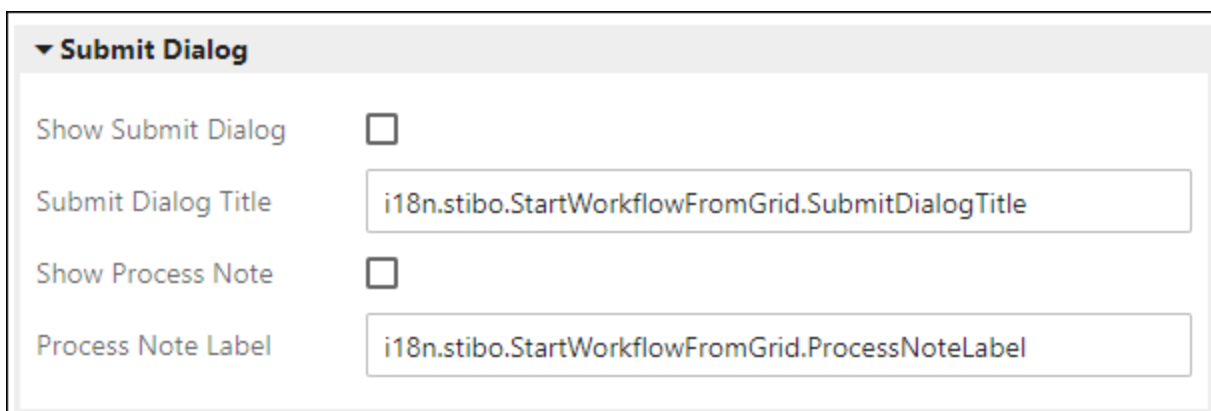
For the toolbar action Start Workflow from Grid, none of the parameters described above previously existed. All four parameters have been added under the Submit Dialog section of the Start Workflow From Grid properties.

For more information, refer to the Action Buttons and Submit Action topics in the Web User Interfaces documentation.

LOV Cross-Validation is now supported by the Globally Configured Unfolding Data Container

The LOV Cross-Validation business condition, which specifies relationships between the values in two Lists of Values (LOV) attributes, is now supported by the Globally Configured Unfolding Data Container component when the condition has been configured for two editable attributes inside the data container.

This enables the user to limit the LOV values available for selection in a data container by setting a 'Defining attribute' LOV and comparing it to a 'Dependent attribute' LOV. For example, for a 'Defining attribute' LOV named 'List Colors' with values, 'Blue', 'Black', and 'Red' and another 'Dependent attribute' LOV named 'List Size' with values 'M', 'L', 'XL', or 'XXL', it is possible to use the LOV Cross-Validation business condition to specify the relationships between the two LOV attributes, like 'Blue' is only available in size 'L', while 'Black' is available in size 'L' and 'XXL', etc.

For more information about LOV Cross-Validation, refer to the topic Business Condition: LOV Cross-Validation in the Business Rules documentation. For details on the Globally Configured Unfolding Data Container, refer to the Globally Configured Unfolding Data Container View topic in the Web User Interfaces 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 2023.4 Platform and Software Support section of the System Update and Patch Notes documentation within online help.

The changes in platform and software support from version 2023.3 (11.3) to 2023.4 are listed below. **Customer action may be required.**

Current Updates

Support has been added for:

- macOS 14 (Sonoma) for Mac clients

Support for the items listed below has ended:

- macOS 11 (Big Sur)

- 10.1 baseline support (ended on December 1, 2023)

Future Updates and End-of-Life (EOL) Notifications

The support for the items below will begin / end as indicated.

Server and client support

- Red Hat Enterprise Linux and Oracle Linux 9.2 will be supported with the 2024.1 release.

- Adobe InDesign® 2024 support will begin 2024.1.

- Adobe InDesign® 2022 support will end with 2024.2.

- Red Hat Enterprise Linux and Oracle Linux 7.9 will be supported for existing customers until officially desupported on June 30, 2024.

Deprecated functionality

Being deprecated is everything that uses IBM WebSphere MQ directly from STEP. Specifically, that affects the following areas:

- IBM MQ SSL Receiver and IBM MQ SSL Delivery Method

- The WMQInitialContextFactory and FileInitialContextFactory JMS Connection Factory Class within the JMS Receiver and JMS Delivery Method

The ActiveMQInitialConnectionFactory JMS Connection Factory Class will remain available within the JMS Receiver and JMS Delivery Method. Customers that use any of the above for integration with IBM WebSphere MQ should use the Dynamic JMS Receiver and Dynamic JMS Delivery Method as replacements.

Updated: New on-premises deployment architecture

One of Stibo Systems' strategic focuses is on delivering a superior SaaS service, which leads to changes in our overall architecture to introduce more and more containerized microservices. These changes cannot be deployed on-premises or in a private cloud without changes to the deployment architecture. As first published in the 2023.3 release notes, to allow on-premises customers to continue to upgrade STEP, **starting with the 2024.3 release** (and not for STEP 2024.2, as originally communicated), these customers need to change the way that Stibo Systems' software is deployed on-premises so it is aligned with how Stibo Systems' deploys in SaaS. Upgrades to 2024.3 and subsequent releases will require a new deployment architecture where the current application server architecture is replaced by a containerized architecture—just as in SaaS. This in turn requires extra hardware due to an overhead in running the SaaS architecture on-premises. Application operations like starting and stopping the application will be similar in complexity to today—but different.

The database deployment architecture will be exactly the same, so database administration along with backup / restore will remain the same. Any deployment of InDesign and Elasticsearch will also remain the same. Only the application server architecture is changed. On-premises and private cloud customers will receive more detailed documentation separately.

This notification is also included in its entirety in the 2023.4 Upgrade Guide.

Baseline EOL

Below is a table outlining the end-of-life schedule for the STEP releases shown:

Version	On-Prem & SaaS v1	SaaS v2
10.2	May 1, 2024	May 1, 2024
10.3	November 1, 2024	November 1, 2024
11.0	June 8, 2025	December 8, 2022
11.1	November 30, 2025	May 30, 2023
11.2	March 7, 2026	December 7, 2023
2023.3	September 30, 2024	September 30, 2024
2023.4	June 13, 2026	June 13, 2024

Refer to the new STEP Release and End-of-Life Information topic for more information about quarterly release target dates and support end dates for future releases.

Customers should update as soon as possible to the latest release of Stibo Systems Enterprise Platform (STEP). Contact Stibo Systems 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.

Product MDM for Automotive
2023.4 - 7.0.58 Release Notes

Release: December 2023

🐞 BUGFIXES

TecDoc

- **Fixed an issue where the TecDoc Reference Data Import workflow did not consider TAF table 125.dat.**

  This problem resulted in inaccuracies in the allocation of valid Engine numbers to vehicle types. The TecDoc Reference Data import workflow now accurately considers TAF table 125.

  This solution includes two hotfixes applicable to STEP versions STEP 10.3 MP5 + Automotive-7.0.45, STEP 11.0 MP3 + Automotive-7.0.48, STEP 11.1 MP2 + Automotive-7.0.52, STEP 2023.2 (11.2) + Automotive-7.0.53, and STEP 2023.3 (11.3) + Automotive-7.0.56.

  Hotfix recipe: `to:hotfix/663/issue-663734-HOTFIX-6917.spr`

  Hotfix recipe: `to:hotfix/665/issue-665732-HOTFIX-6926.spr`

- **Fixed NPE generated when calculating the size of the TecDoc imported files to report the import progress**

  Fixed a Null Pointer Exception (NPE) generated during the calculation of the size of TecDoc imported files, specifically when the file was empty or null. The bug fix addresses the NullPointerException in the calculateWeight function.

  Hotfix recipe compatible with STEP 2023.3 (11.3) + Automotive-7.0.56: `to:hotfix/657/issue-657088-HOTFIX-6870.spr`.

  Hotfix recipe compatible with STEP 10.3 MP4+ Automotive-7.0.45: `to:hotfix/657/issue-657088-HOTFIX-6870.spr`.

- **Resolved an issue where the TecDoc Supplier Data importer created application records (linkage) with two referenced Generic Articles**

  Resolved an issue in which the importer failed to establish a local reference to the Generic Article for specific TAF table 400 entries. This problem resulted in inherited multiple references in the linkage, leading to errors in displaying Supplier Articles in the Web UI. The fix ensures adherence to the solution's restriction of one reference to a Generic Article for a linkage, preventing duplicates.

- **Resolved an issue where incorrect asset references were generated in the TecDoc Supplier Data import**

The TecDoc Supplier Data importer now accurately considers reference replacements for digital assets, specifically for 'TD_SupplierArticleToResource' reference type. Previously, references between supplier articles, accessory list members, part numbers, part lists, and digital assets / logos were accumulated for each import but not replaced. With this fix, asset references on the product will be correctly replaced with each new import run, ensuring the handling of 'Supplier Article To Resource' references.

Additionally, an issue consisting of a duplicate replacement rule for 'TD_ SupplierArticleToAccessoryList' reference has also been addressed.

- **Correction of outdated PCdb codes in PIES version 7.2 exports**

Resolved an issue where outdated PCdb codes were used in PIES version 7.2 exports. The AutoCare standard previously rejected the 'ASM' code during validation, leading to the error message "12674 Invalid Code(s): ASM is not currently an official PCdb Code for C10 Application Summary Brand AAIAID: BCNB." This problem has been resolved.

Hotfix recipe compatible with STEP 10.3 MP4+ Automotive-7.0.45: `to:hotfix/660/issue-660176-HOTFIX-6894.spr`.

📥 PATCH RECIPE

For SaaS environments, upgrades can be done in the SaaS Self-Service UI or (if not available) by raising a request with Stibo Systems Support. More information on the upgrade process in the SaaS Self-Service UI can be found in the Upgrade Environment section in the in-build User Guide.

For on-premises customers, the Automotive add-on component and STEP baseline can be installed using these commands:

`to:automotive/7.0/automotive-7.0.58.spr`

The above recipe is compatible with the following STEP 2023.4 baseline recipe:

`to:step/platform/step-2023.4.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 on-prem systems, refer to the SPOT Program documentation for more information, including how to use the SPOT `--upgrade` command to also find compatible components that can be added at the same time as the baseline patch (`--upgrade=all`) in the SPOT Program topic of the System Administration Guide found in Downloadable Documentation. For assistance, contact Stibo Systems Technical Services.

For customers that have custom add-on components and/or if Stibo Systems Support is deploying your system upgrades and patches, submit an upgrade request via the Stibo Systems Service Portal.

Miscellaneous Bugfixes

A number of bugfixes have been applied as part of this release. Refer to the entire set of 2023.4 release and maintenance patch notes prior to installing or upgrading.

■ **Fix for non-sequential dynamic configuration properties**

Dynamic configuration properties allow multiple entries using an integer to distinguish them, for example, ChangePackageGitDelivery.RemoteRepoUri.[i]. Now, all unique entries display in workbench, even if there are gaps in the sequence. When duplicate entries are found, the last entry is displayed.

■ **Fix for Match and Merge**

Previously, when using the Match and Merge Importer and Matching Event Processor, in some situations the processing would stop. Now, a fix has been made and the processing runs as expected.

■ **Fix for improperly displayed mapper headers in the Object to Object Mapping plugin**

Fixed the problem of improperly displayed mapper headers in the Object to Object Mapping plugin (specifically, the Child and Reference mapping type only). Prior to the fix, there were issues with incomplete column header names. This problem has been addressed, and the headers now display correctly.

■ **Fix for the inconsistent naming convention of ECLASS Advanced and ECLASS Basic**

To ensure a consistent naming convention, all instances of improperly spelled 'ECLASS Advanced' and 'ECLASS Basic' have been corrected throughout the Web UI and workbench. These names now appear correctly across all related components.

■ **Fix for search filter criteria and view not having the same behavior after logging out**

Now, the user can define both static facets and search views, and those settings will be saved properly.

■ **Fix for a setback where the Sufficiency Component was throwing an exception**

A sufficiency that was deleted but not purged would return a null list of sufficiency scores which in turn would cause the Web UI to fail, as the list of sufficiencies are expected.

■ **Fix for ECLASS Advanced Editor: language inconsistency when showing blocks**

Previously, when a block was created, the name of the block was taken from the attribute name. This was not correct, since after saving the name of a newly created block, it is taken from reference target which is classification name. Now, the name presented after adding the block will come from classification target reference instead of the attribute name. A hotfix for this solution is available and applicable to saas-2023.3, eclass-advanced-7.0.10, and eclass-advanced-7.0.11.

■ **ISSUE-497731 - Fix for unable to configure multiple emails in list value generator**

Allow multiple email recipients in list value generator.

■ **ISSUE-572265 - Fix for a Web UI error message telling users to check the server log**

Added localizable 'Item cannot be deleted due to {number} reasons. Check the server log for more details.' message to Web UI, when an item cannot be deleted after clicking on Delete Action button. This message will be shown in locales other than the default English locale, where the non-localizable reasons will be shown as it was before. There is also a hotfix available for this solution that is applicable to step-11.0-mp4 and 11.0-mp5.

■ **ISSUE-594617 - Fix for STEP-PDX import erroneous - Article Number gets deleted**

With the new integration plugin, it is now possible to use multiple contexts for exports to PDX.

■ **ISSUE-597698 - Fix for translated values not stored in the right context for classification objects with two dimensions**

Structured XML translation with multiple dimension dependencies will by default translate to the source context with the language replaced with the target language, even if there is no matching context. You can now set the configuration property `Translation.Xml.UseExistingContext=true` to make the target context an existing context with the target language.

■ **ISSUE-599811 - Fix for inability to use '<>' in the name of a project or variety**

Now, the tags will be escaped in the product name before save by 'Create From Template' action in the Web UI.

■ **ISSUE-603849 - Fix for displaying thousands separators in attribute values on the Web UI**

Introduced a possibility to show the thousands separators on the Web UI Node Editor and Web UI Node List when displaying the Attribute Value components of numeric-based validation base types. To toggle this option, contact Stibo Systems Support. There is also a hotfix available for this solution that is applicable to saas-11.1, saas-11.2, as well as step-11.1-mp4, step-11.1-mp5, step-11.1-mp6, and step-11.2-mp1.

■ **ISSUE-606769 - Fix for REST API Version 1 does not work**

Fixed a problem when the GET requests from REST API V1 requests from SwaggerUI were throwing an unexpected error, triggered by the invalid value of the 'Accept' request header.

■ **ISSUE-611402 - Fix for a post upgrade issue: empty recycle bin is not working**

On out-memory systems, an In-Memory limit of only 100 objects plus their children was imposed on the actual purge-process, regardless of the size of the task. This has been fixed and a limit is no longer applied.

■ **ISSUE-619495 - Fix for a matching algorithm not creating a confirmed non-duplicate reference after a clerical reject of products**

Changes made for 11.0 and potential duplicate relation include: removed confirmed non-duplicates of a workflow compatible node before processing by task updaters and remove duplicates with existing potential duplicate relation to avoid creating a PDR task without duplicates. There is also a hotfix available for this solution that is applicable to saas-11.0 and step-11.0-mp4 / mp5.

■ **ISSUE-625810 - Fix for a healthcheck still running after four days**

Implemented a fix to make the admin portal refresh less aggressively when healthchecks are running. There is also a hotfix available for this solution that is applicable to step-11.1, step-11.1-mp1, 11.1-mp2, 11.1-mp3, 11.1-mp4, and 11.1-mp5.

■ **ISSUE-626274 - Fix for when the proof view action is not working**

Modified the code to send a dummy request between client and server to keep the connection alive while InDesign Render is producing the proof or PDF. Also, added a timeout property set to 15 minutes. If no result is delivered in that time period, the requests are stopped. There is also a hotfix available for this solution that is applicable to saas-10.3, as well as step-10.3-mp4 and 10.3-mp5.

■ **ISSUE-627730 - Fix for when a thumbnail does not display the object type icon**

Introduced two new pipelines, one with a frame and one without a frame, to display a product image without an embedded mime-type. Additionally, the getThumbnail method was modified to reestablish use of the pipeline when the thumbnail is configured to show object type icons and frames.

■ **ISSUE-628987 - Fix for when downloading large files takes a long time**

Now, the link for Asset Download will be opened in a new window when the download is preparing to start. It affects the 'Download Asset' action for Asset Representations on the Web UI Node Editor screen with the 'Direct download' option enabled in design mode. This fix improves the user experience by letting the user know that the download started, even if it takes some time to start the download due to the connection to the external DAM location.

■ **ISSUE-630480 - Fix for issue in images import**

An existing fix to keep the Workbench connection alive has been backported to step-10.2-mp3. The issue occurred when a user was trying to import around 6000 images from their local machine to STEP and the process was getting stuck after a certain period. The import process was failing.

■ **ISSUE-630531 - Fix for an error configuring standard functionality in a workflow**

Fixed NullPointerException (NPE) that occurred in workbench when accessing a Bulk Update Trigger Workflow Event business rule. There is also a hotfix applicable to saas-11.1, saas-2023.3, step-11.1-mp3 to mp6, step-11.2-mp2, and step-2023.3.

■ **ISSUE-633503 - Fix for healthcheck tests with status 'Failed'**

The following healthchecks were shown on systems not running In-Memory: Large Commit, History entries pointing to nonexistent previous versions, and Value missing content. These checks are not valid on systems not running In-Memory. There is a hotfix available for this solution that is applicable to saas-11.1, as well as step-11.1-mp3-6.

■ **ISSUE-633880 - Fix for a PMDM upgrade paste issue in the Workbench**

The fix increases the maximum number of LOV values that are preloaded to the LOV from the server to 6000. Those values are used to preemptively validate if the pasted value exists in that LOV. If the value was not found and the LOV has more values than those preloaded, an attribute tries to set the value anyway. Then, if the server finds the value, it is set properly, and if not, a message that the value does not belong to the LOV is returned. Previously, if the pasted value was not found among the preloaded values, the error message appeared. This has been fixed. There is also a hotfix available for this solution that is applicable to saas-11.1 as well as step-11.1-mp4, step-11.1-mp5, and step-11.1-mp6.

■ **ISSUE-636889 - Fix for Elasticsearch error with STEP 11.2-mp1**

Now, a removed property (Elasticsearch.FeatureToggle.SupplierPrivileges) will not be mentioned in the warning message about a missing supplier setup for Elasticsearch. There is also a hotfix available for this solution that is applicable to saas-11.2 and elasticsearch-integration-7.0.29.

■ **ISSUE-640304 - Fix for inability to add a new line to a data container when attribute value contains the 'greater than' or 'less than' characters**

Fixed a problem occurring when it was not possible to save an LOV value with 'less than' / 'greater than' characters in the Add Data Container dialog, invoked from Multi Edit Data Container of Globally Configured Data Container component in Web UI.

■ **ISSUE-640983 - Fix for all environments (V11) - issues with creating a specific product**

Fixed the issue which caused the whole import to fail when the triggered business rule ran the next workflow step, which ran another business rule, that failed and threw an exception.

■ **ISSUE-641564 - Fix for 'ORA-02291: integrity constraint (STEPSYS.NODESTATE_ PREVIOUS_TRAN_FK) violated - parent key not found' error**

Trying to move an object through a workflow could cause the error: ORA-02291: integrity constraint (STEPSYS.NODESTATE_PREVIOUS_TRAN_FK) violated - parent key not found. This has been fixed.

■ **ISSUE-641882 - Fix for recycle bin scheduling**

On systems without In-Memory, an In-Memory limit of only 100 objects plus their children were imposed on the actual purge process, regardless of the size of the task. This limit is no longer applied.

■ **ISSUE-642643 - Fix for STEP unavailability; one of the nodes is crashing frequently**

The system will no longer update the topology of the cluster when nothing has changed.

■ **ISSUE-642892 - Fix for exception when loading bulk update configuration**

Fixed a problem occurring when a saved Bulk Update Set Single Value configuration could not be reused if it was targeting the node with the empty multi-value LOV with ID attribute, which has to be updated in this configuration. There is also a hotfix available for this solution that is applicable to saas-11.1 and step-11.1-mp3 through mp6.

■ **ISSUE-643143 - Fix for a failed deleted content file**

Auto-deletion of files in the 'Save' and 'Failed' folders in a hotfolder integration endpoint could delete files not in the 'Save' or 'Failed' folder if either 'Save' or 'Failed' folder was not present. This has been fixed. There is also a hotfix available for this solution that is applicable to saas-11.1, as well as step-11.1-mp3-6, and step-11.2.

■ **ISSUE-643697 - Fix for bind error**

Fixed possible ClassCastException when opening a Packaging screen in Design Mode in the Web UI.

■ **ISSUE-643708 - Fix for when attribute is set mandatory with business condition, business actions are disabled**

Changed errors to warnings for missing mandatory attributes. Warnings work with enforce validity for: Node Selector, Value Component, Globally Configured References, and Rich Text. Source of the missing mandatory is irrelevant.

■ **ISSUE-644589 - Fix for changes to the LOV filtering of an attribute link on a product created unwanted events**

Added a configuration property to disable event generation when changing the LOV filter for attribute links in STEP. In order to set this property, contact Stibo Systems Support.

■ **ISSUE-645382 - Fix for links uniquely requiring the Remove Un-Mapped parameter to permit link target updates**

Improved error message for STEP importer, when single Classification Product link is not allowed to be replaced with the imported one due to the missing replacement rules.

■ **ISSUE-645657 - Fix for SaaS Migration Hypercare: exported metadata are not in order**

When exporting products with multiple product to classification links with metadata, the order of the links and metadata was not consistent. This has been fixed.

■ ISSUE-646151 - Fix for Private Label Food Flex Attributes not working correctly

Updated dependency versions for graphql-java and guava. step-2023.3 and saas-2023.3 hotfixes are also available for this solution.

■ ISSUE-646553 - Fix for a revision error

Fixed a problem when performing a 'Purge Action' in the Workbench on a list of IDs with selected Setup Configuration node type that caused an unexpected exception to display in the corresponding BGP. There is also a hotfix available for this solution that is applicable to saas-11.1 and saas-2023.3, as well as step-11.1-mp4-6, and step-2023.3.

■ ISSUE-648396 - Fix for Mapping config causes stacktrace

Fixed unexpected exception on the Mapping step in workbench Import Manager when trying to map a column to the attribute with default unit.

■ ISSUE-648500 - Fix for SaaS migration issue: business rule getting null pointer exception

Fixed a problem when LFSC 0bits.legacy shadow copies could have been retrieved by attributeGroup.getAttributes() invocation via a business rule with 'Run Privileged' checkbox enabled.

■ ISSUE-649425 - Fix for when 'Hide Equal' was not working correctly on the Revision screen of the Web UI

Fixed a problem when 'Hide Equal' action did not work on the Web UI Multi Revision screen. There is also a hotfix available for this solution that is applicable to saas-11.1 and saas-2023.3, as well as step-11.1-mp4-6, step-11.2, and step-2023.3.

■ ISSUE-649432 - Fix for parent reference being deleted when deleting inherited asset reference from Multi Context Editor screen

Now, when deleting the inherited reference / classification to product link on a Web UI Node List's Reference Table Header, an error message will be shown: 'The link/cross reference is inherited and thus cannot be deleted.'

■ ISSUE-649501 - Fix for when collection refresh is not working for OIEP

Fixed the refresh of collections when running a Business Rule Based Message processor processing engine in an outbound integration endpoint.

■ ISSUE-649514 - Fix for BMEcat export: Referenced objects are added

Fixed the issue with large STEPXML files being generated when creating BMECat exports with the product reference type mapping. There is a hotfix available for this solution that is applicable to saas-11.1, saas-2023.3, step-11.1-MP3 through MP6, step-11.2-mp2, and step-2023.3.

■ ISSUE-650390 - Fix for BGP getting stuck in an infinite loop

There is a known bug in the parallel framework, which triggers a task to get stuck indefinitely waiting for tasks. Work will be done to resolve this issue in the next STEP release. The current fix is to break the loop with an error after one hour.

■ ISSUE-650606 - Fix for when an inconsistent scroll bar appears inside a table

Fixed a problem when an unnecessary scrollbar was showing for long cell values on the Web UI Node List Table Display mode cells.

■ ISSUE-651166 - Fix for issue with LOV display in Web UI

Fixed a problem occurring when selecting a read-only value on a Web UI LOV Management Screen Values tab caused it to disappear.

■ ISSUE-653752 - Fix for issue with the Override Control Type Rule

Fixed the backward compatibility of Global Override Control Type Rules which was broken with the introduction of the Global Attribute Override Control Type Rules. The issue occurring was that it was not possible to use a global configuration on the Attribute Value Component with a local override control type different than Default / Select a value. step-2023.3 and saas-2023.3 hotfixes are also available for this solution.

■ ISSUE-655233 - Fix for Multi Revisions where Save results in unexpected error

Fixed a problem with saving values in the Web UI Multi Revision Editor.

■ ISSUE-656157 - Fix for missing library on latest STEP patch

Added dependency to com/zaxxer/sparsebits/SparseBitSet used by Apache POI, which is used for Excel exports and imports. There is a step-11.2-mp2 hotfix also available for this solution.

■ ISSUE-656469 - Fix for Download XLS not working

Fixed a problem with downloading an Excel Workbook asset from the Web UI. A ZIP file was downloaded by mistake. A hotfix applicable to saas-2023.3 and step-2023.3 is also available for this solution.

■ ISSUE-656770 - Fix for bug in Grouping component

The fields for the Attribute Value Group component were not visible to the user when used within the Grouping component in Web UI. A fix has been implemented to make those fields visible to the user in order to manage the content for each attribute. A hotfix applicable to step-2023.3 and saas-2023.3 is also available for this solution.

■ ISSUE-657079 - Fix for error when adding new record with multiple values in a data container

Fixed a problem occurring when multi values chosen on the Add Data Container popup for Globally Configured Multi Data Container caused an uncaught exception to be thrown. A hotfix for this solution is available and applicable to saas-2023.3, step-11.2-mp2, and step-2023.3.

■ ISSUE-657277 - Fix for Migration - Web UI - Golden Record Clerical review task list error

Fixed a bug appearing when having a database migrated from Oracle into Cassandra with transition log rows. A bug resulted in errors when trying to inspect historic workflow transitions on certain objects. The bug was introduced with the 2023.3 release. A hotfix applicable to saas-2023.3 and step-2023.3 is also available for this solution.

■ ISSUE-657499 - Fix for Multi Reference not working in split panel

Fixed a problem when the Multi Reference component configured as a right component of a Split Panel was not being shown in Web UI.

■ ISSUE-657604 - Fix for setback with the Performance Analysis Tools date picker

Modified the z-index for the date picker's popup so it is not hidden behind the modal.

■ ISSUE-657805 - Fix for account REST Receiver not processing files

Fixed a problem with hotfolder implementations causing a five-second delay between processing each file (backported to 10.2). Also, fixed a problem occurring when the Purge revisions process threw an exception when purging entities from a list with the IDs.

■ ISSUE-658255 - Fix for editing an LOV value in the Web UI destroys inline formats

Introduced a possibility to disable the 'less than' / 'greater than' tags escape when saving the changed LOV values on LOV Management Values screen in order to prevent removing the STEP style tags from the values. The screen does not support displaying and adding the tags, but a solution was created so that the tag formatting will be preserved, if needed. To implement this solution, contact Stibo Systems Support.

■ ISSUE-658686 - Fix for unexpected error in Advanced Merge in Customer MDM Web UI

Fixed a problem occurring when a Table Header Data Container Value on an Advanced Merge screen was causing the unexpected exception to appear if one of the displayed records did not have a data container of the configured type.

■ ISSUE-658956 - Fix for upgrade to 11.1-mp6 not preserving transparency in transformed assets

Previously, a transparent background was replaced by white color. Now, converted images keep their transparency for .png files.

■ **ISSUE-659424 - Fix for post-hotfix issue with choosing a checkbox**

Fixed a problem where it was not possible to change and save a multi-value LOV, represented by checkboxes, on a Web UI Node Editor, if LOV values contained formatting tags. There is a hotfix for this solution that is applicable to the following baselines: saas-10.3, saas-11.0, saas-11.1, saas-2023.3, step-10.3-mp4 / mp5, step-11.0-mp4 / mp5, step-11.1-mp4 through mp6, step-11.2-mp2, and step-2023.3.

■ **ISSUE-659574 - Fixed NullPointerError for Simple Import**

Fixed an issue with temporary collections and the export functionality in Web UI.

■ **ISSUE-659812 - Fix for copy from Excel Sheet into STEP not working anymore**

Flipping of table, while copying data from Excel, was removed. It allowed for the proper copying data from clipboard to Workbench. This is now fixed.

■ **ISSUE-659881 - Fix for State Log tab error**

Fixed a bug appearing when having a database migrated from Oracle into Cassandra with transition log rows. A bug resulted in errors when trying to inspect historic workflow transitions on certain objects. The bug was introduced with 2023.3 release.

■ **ISSUE-660238 - Fix for collection name wrong from the Collection Content Screen in upgraded Production system**

Fixed a problem occurring when collection names were updated to BGP_tmp_input when starting a bulk update of a collection content in Web UI. Instead, only the temporary collection should be renamed this way.

■ **ISSUE-660269 - Logging added to identify reason for inability to create temp file**

Added more logging to IO exception that occurs when creating a temp file when uploading an asset.

■ **ISSUE-660639 - Fix for error on the Log tab for entity objects in 2023.3**

Fixed IllegalArgumentException when accessing the Log tab in the Workbench for the selected entity.

■ **ISSUE-662940 - Fix for STEP instability**

Introduced the possibility to disable an asset cache during export. This cache has been completely removed in STEP 11.0, but is backwards compatible for STEP 10.3. Contact Stibo Systems Support for assistance with this option. A hotfix solution applicable to step-10.3-mp4 / mp5 and saas-10.3 is available for this issue.

■ **ISSUE-663029 - Fix for unresponsive Asset Push sidecar**

Stibo Systems implemented some code changes that will keep the connection between asset push and the STEP server alive while the assets are handled by the STEP server. Furthermore, additional logging has been added.

■ **ISSUE-665268 - Fix for monitors showing 'Unknown' and 'Critical' for services which are up and running before a STEP upgrade**

Fixed a problem occurring when sidecar monitoring was reporting the wrong Java version even though Java 11 was installed. A hotfix is available for this solution and is applicable to saas-2023, step-11.2-mp2, and step-2023.3.

■ **ISSUE-668215 - Fix for system crash when clicking on item list**

Fixed a problem occurring when the Assignment Time and Time in State column values for the Workflow profile screen were calculating even if these columns were not configured in the corresponding WF Profile. This was causing performance problems.

■ **Bugfixes and enhancements in the BMEcat solution**

These enhancements were made as solutions to customer and internal bugfix tickets:

- Running the BMEcat Model easy setup action now creates description attribute ISO-639-2 (ID = stibo_ISO-639-2), which is valid for both Entity type and Entity Reference type. This attribute stores the Language ISO Code for Language Dimension Points. If this attribute already exists in the system, then running the setup action adds it to the BMEcat Attributes group, making it visible in the Language Dimension Point.

- The exported file now includes <LANGUAGE> tags generated based on the value populated in the ISO-639-2 attribute for each exported context's selected language. If no value is present in this attribute for any exported context, the <LANGUAGE> tag is generated based on the selected Locale (if available). In the BGP logs for each exported context, a message indicates the source of the <LANGUAGE> tag value, whether it originates from the ISO-639-2 attribute or the locale.

- The OIEP allows saving the BMEcat export Output Template without having to select any language (which is not allowed in standard BMEcat export). However, upon invoking such OIEPs, the BGP terminates with an error indicating that mandatory contexts and the default context have not been selected, thus halting the export process.

- Language field generated based on Sample field is no longer taken into account in <LANGUAGE> tags in the output file if there is any context specified. However, if a Language parameter exists and has a value in it, then the BGP warns the user that this value will be overwritten by contexts selected in 'Export Context for selected contexts' field. The error message states: 'Found a <LANGUAGE> tag specified in the sample. It will be overwritten by language dimensions selected in Cross Context Chooser field.'

■ BMEcat exporter is updated to correctly export all the block and attribute names based on the default context selected in the 'Select default context' field. Previously, some block and attribute names were exported based on the context selected in the workbench.

Following are the hotfixes available for the above mentioned issues:

Hotfix recipes compatible with STEP 2023.3 (11.3) + eclass-advanced-7.0.11:

- `to:hotfix/676/issue-676453-HOTFIX-7036.spr`

- `to:hotfix/677/issue-677280-HOTFIX-7046.spr`

- `to:hotfix/684/issue-684862-HOTFIX-7137.spr`

- `to:hotfix/684/issue-684950-HOTFIX-7142.spr`

Hotfix recipes compatible with STEP 2023.3 (11.3) + bmecat-7.0.53:

- `to:hotfix/676/issue-676453-HOTFIX-7036.spr`

- `to:hotfix/677/issue-677270-HOTFIX-7045.spr`

- `to:hotfix/684/issue-684862-HOTFIX-7137.spr`

Hotfix recipes compatible with STEP 2023.4 + eclass-advanced-7.0.12:

- `to:hotfix/677/issue-677297-HOTFIX-7047.spr`

- `to:hotfix/678/issue-678136-HOTFIX-7060.spr`

- `to:hotfix/684/issue-684862-HOTFIX-7137.spr`

- `to:hotfix/684/issue-684950-HOTFIX-7142.spr`

Hotfix recipes compatible with STEP 2023.4 + bmecat-7.0.54:

- `to:hotfix/677/issue-677297-HOTFIX-7047.spr`

- `to:hotfix/677/issue-677502-HOTFIX-7050.spr`

- `to:hotfix/684/issue-684862-HOTFIX-7137.spr`

■ Addressed an issue where exporting large BMEcat files encountered errors. Current implementation uses streams ensuring smooth export operations regardless of file size. Users can now export large BMEcat files without encountering performance issues or errors.

For the BMEcat 2005 version, **Hotfix recipes compatible with STEP 2023.3 (11.3) + bmecat-7.0.53 and STEP 2023.4 + bmecat-7.0.54:**

- `to:hotfix/693/issue-693598-HOTFIX-7241.spr`

For the BMEcat 2005.1 version, **Hotfix recipes compatible with STEP 2023.3 (11.3) + eclass-advanced-7.0.11 and STEP 2023.4 + eclass-advanced-7.0.12:**

- `to:hotfix/693/issue-693731-HOTFIX-7242.spr`

For general information regarding BMEcat export and configuration, refer to the Exporting in BMEcat 2005.1 Format and BMEcat 2005 Format topics of the Data Exchange documentation.

PERFORMANCE ENHANCEMENTS

■ Fix for GDSN import performance problems

A performance improvement specific to the GDSN Receiver and the way it handles incoming messages / files is available. This fix is particularly needed if:

- the system has a slow file system.

- there are a large number of files / messages waiting to be processed.

Hotfixes are available for this solution and are applicable to saas-11.2 and gdsn2-receiver-7.0.67.

■ ISSUE-641832 - Fix after analysis of a SQL request related to Matching & Linking

Improved the performance of MatchingContextGetConfirmedRanks SQL, which, if system is not running In-Memory, is used to cache the confirmed duplicate and confirmed non-duplicate relations of matched objects. There is also a hotfix available for this solution that is applicable to saas-10.3, as well as step-10.3-mp4 and mp5.

■ ISSUE-646831 - Fix for OIEP BGPs very slow on PROD

A performance fix for fetching deleted values has been implemented. This fix applies to systems running In-Memory.

> **Note:** Customers may want to search Stibo Systems Service Portal for their Issue Numbers (if shown). To do so, while in the Service Portal, navigate to Issues (in the header bar) and then select 'Search for Issues.' Click on the 'Advanced' option on the filtering bar, and then type in 'issue=' and the issue number. Press Enter or click the magnifying glass icon to run the query. **Users can only view Service Portal issues for issue numbers that they have privileges to access. If the issue is not applicable to the user searching, then a 'No issues were found to match your search' message displays.**

2023.4-MP1 Maintenance Patch Notes
February 2024

Note: There are no regularly scheduled maintenance patches. However, there are times an ad-hoc maintenance patch must be made available to allow for system hotfixing. It is important that users read the documentation below. Action may be needed by on-premises customers to install this maintenance patch so that they can apply hotfixes, if / when applicable.

🐞 BUGFIXES

■ **ISSUE-586557 - Fix for Referenced Asset Representation Web UI component display assets error**

Fixed problem: uploading multiple assets via the Referenced Asset Representation with Asset Import Configuration caused only the last uploaded asset thumbnail to be shown on a Web UI Node Editor before the user saved the result.

■ **ISSUE-649501 - Fix for when collection refresh is not working for OIEP**

Fixed the refresh of collections when running a business rules based outbound processing engine.

■ **ISSUE-658057 - Fix for an outbound export issue: Workflow does not export local business rules**

Fixed a problem when local business rules were not exported during the workflows export via Outbound Integration Endpoint.

■ **ISSUE-658939 - Fix for International Bank Account Numbers (IBAN) having the wrong date after a system upgrade to 11.1-MP5**

When editing dates in data containers in the Web UI, the date would be stored wrong. This has been fixed.

■ **ISSUE-661188 - Fix for the Remove Attribute Link button not working after certain operations in the Attribute Link Editor screen of the Web UI**

Remove Attribute Links toolbar action did not work when selecting more than 50 items with the 'Select All' action. This is now fixed.

■ ISSUE-661263 - Fix for inability to import translation STEPXML

Fixed a problem occurring when an attribute, present in the translation import XML, but missing on a system where the translation import was initiated, was causing the exception during translation import when attempted to be created. In such cases, missing attributes should be skipped instead of being created.

■ ISSUE-661733 - Fix for a context issue on the Web UI version 2023.3

Fixed a problem when contexts with special characters in IDs (for example, braces) were not correctly filtered out from Global Navigation Panel in the Web UI if they were unchecked in GUI setup for a current user in workbench. There is also a hotfix available for this solution that is applicable to saas-2023.3, step-2023.3, and step-2023.4.

■ ISSUE-663682 - Fix for translation status of attributes

Solved a problem when the translation status always appeared as 're-translation needed.' This bug was introduced by HOTFIX-6824.

■ ISSUE-665700 - Fix for unable to download CSV

Fixed NullPointer and IndexOutOfBound exceptions occurring when downloading text (.txt) extension files, with the txt mime type but .csv extension in the file name, from the Web UI.

■ ISSUE-667910 - Fix for the performance analysis events tab

Fixed a problem when triggering an event did not log this action into the activity scope, which later can be used by Performance Reports in Events on STEP with Cassandra.

■ ISSUE-668523 - Fix for the PCM Deadline Processor running slow after STEP upgrade

This is a performance fix for Oracle systems related to pruning old entries in the transition log.

■ ISSUE-669933 - Fix for error when trying to update an attribute value in the workflow

Fixed a problem when it was not possible to save the Attribute Value on the Web UI Node Editor, if it contained bullet point list with the spaces between a bullet point and a text.

■ ISSUE-669976 - Fix for Supplier Portal user risk issue

Introduced a possibility to disable the typeahead suggestions of user groups outside the current user's supplier hierarchy in Web UI. To enable this possibility, contact Stibo Systems Support.

■ ISSUE-670119 - Fix for Multi Edit table view data container not forcing privileges

Fixed a problem when attribute value table headers were shown under the Web UI Multi Edit Data Container view, even though a current user did not have privileges to view them.

■ **ISSUE-670407 - Fix for a Smartsheet error when generating a report**

Fixed a NullPointerException in Smartsheet import during the creation of the error file.

■ **ISSUE-670492 - Fix for when a single asset upload showed two uploads**

Fixed a problem when uploading and inserting a single asset via the 'Asset Importer' configuration in the Web UI caused the BGP ID to state that 2 files were uploaded. This happened because the empty upload form was also counted as an empty file (which was later ignored).

■ **ISSUE-670773 - Fix for the French workbench shortcut not being configured**

Fixed a setback when all shortcuts in the French locale's workbench were displaying 'Ctrl+Plus' instead of the actual shortcut.

■ **ISSUE-670794 - Fix for when the approve button is not available**

Fixed a problem when 'Approve Action' on the Node Editor was not available after adding / deleting references on the Multi-Reference component on a first tab when there was a Data Container Multi-Editor on another tab. There is also a hotfix available for this solution that is applicable to saas-2023.3, step-2023.3, and step-2023.4.

■ **ISSUE-671493 - Fix for an 2023.3 upgrade: Thumbnail in Multi Reference component changed**

Introduced a possibility to change a default thumbnail size for thumbnail header on the Web UI Node List. By default, a thumbnail size is set to medium. In order to change this property, contact Stibo Systems Support.

■ **ISSUE-671510 - Fix for no events generated when values update from 'EMPTY' to 'YES'**

Fixed a problem occurring when setting an LOV from null value to non-null value queued event with previous (null) value, instead of the new (non-null) value.

■ **ISSUE-671522 - Fix for importing STEPXML files resulting in creation of new assets results in error**

Improved logging when reporting the event loop in the Event Queue / OIEP. Now, more detailed log information will appear in the app server log. There is also a hotfix available for this solution that is applicable to saas-11.1, saas-2023.3, as well as step-11.1-mp4-6, step-11.2-mp2-3, and step-2023.3, and step 2023.4.

■ **ISSUE-671577 - Fix for OIEP: context splitter removes the second part of the NumberRange value**

When the number range had negative numbers during an export, the value was cut in half. Now, the number range is exported correctly.

■ **ISSUE-671797 - Fix for error importing workflow with default user assignee**

Introduced a private config property to export UserList and UserGroupList tags in STEPXML before STEPWorkflow tag in order to allow the import of non-existing users who are participating in the imported workflow. Notice: setting this property will make STEP XSD validation to fail, as PIM.xsd has not been changed yet to reflect the changed order. So, keep in mind the risk of setting this property.

■ **ISSUE-671852 - Fix for GDSN environments**

A performance fix for background processes (BGP) using parallel threads creating files in the background process area on slow file system like, e.g., Cloud file systems. There is also a hotfix available for this solution that is applicable to saas-2023.3, step-2023.3, step-2023.4, gdsn2-receiver-7.0.69, and gdsn2-receiver-7.0.68.

■ **ISSUE-671980 - Fix for IIEP and OIEP slow functionality for STEP application**

Performance fix for when values delete. Imports deleting a lot of values will benefit from this fix.

■ **ISSUE-672072 - Fix for when no post processor is found**

Fixed the 'No post processor found' exception for Outbound Business Rule Message Processor with XSLT Post Processor configured.

■ **ISSUE-672140 - Fix for 'Match & Merge' not working after 2023.3 installation on dev system**

Fixed a problem when Match & Merge REST services executed for different configurations with different matching algorithms were failing due to the caching problem with 'Matching algorithm not found' exception. There is also a hotfix available for this solution that is applicable to saas-2023.3, step-2023.3, and step-2023.4.

■ **ISSUE-672146 - Fix for a problem when downloading an asset from the Web UI**

It was not possible to download very small assets from the Web UI. This has been fixed.

■ **ISSUE-672268 - Fix for very long runtime for small imports of STEPXML**

A performance fix to the 'feature' batch log was made to related to imports.

■ **ISSUE-673042 - Fix for Excel export: missing lines from Web UI export**

Fixed a problem when exporting multiple products from the Web UI with the references to the same assets caused a discrepancy in the exported Excel file. The assets only appeared once instead of being exported for each product. It happened because of the bug in the exporter, caused by the Web UI sorting order preservation.

■ ISSUE-673086 - Fix for export not working for a user group after recent 11.2 upgrade

Fixed a NullPointerException that appeared in a very corner case, when supplier privileges were checked before checking any other attribute privileges during the export. There is also a hotfix available for this solution that is applicable to saas-2023.3, step-11.2-mp2, step-11.2-mp3, step-2023.3, and step-2023.4.

■ ISSUE-673294 - Fix for when there are high response times in the Web UI

Now, all global representations from the Web UI Main screen are cached for 30 seconds (by default) to increase a performance of the Web UI Node List / Node editor component when retrieving the same information about global representations multiple times (depending on configured sub-components).

■ ISSUE-673810 - Fix for when search from list identifier is not available in local DE in advanced search

Fixed a problem when the dropdown of ID List search descriptor in the Web UI Advanced Search screen was empty because it contained unsupported tags '<' and '>' in German locale.

■ ISSUE-673867 - Fix for when index creation is not working in the publication

Fixed a problem when creating an Alpha Index in workbench would not work. There is also a hotfix available for this solution that is applicable to saas-11.2, saas-2023.3, as well as step-11.2-mp1-3, step-2023.3, and step 2023.4.

■ ISSUE-673878 - Fix for a punctuation bug when using HTML dashboard widgets

Fixed a problem when the attribute value search with an exclamation mark (which is a part of a search) was not correctly restored from the STEP URL into 'Advanced Search' search descriptors. It means that if there was a value search with '!' saved as the browser URL and made as a navigation in the Web UI, then Advanced Search did not restore this search correctly as a Value Search, but instead showed it as a Name / ID / Value search.

■ ISSUE-674382 - Fix for when auto upgrade failed after Cassandra import

Fixed a problem with the auto upgrading database. Some of the plugins were executed in the wrong order, so one plugin would fail because it depended on another plugin being run, which was run at latter stage. This would happen if you skipped some major versions of STEP. If you upgraded to all lower versions of STEP one by one, this did not happen.

■ ISSUE-674526 - Fix for 2023.3 upgrade: Use of 'Upload and Insert' function makes images disappear

Fixed a problem when an inserted and uploaded asset on the Web UI Node Editor Referenced Asset Representation component was intermittently disappearing after pressing a Save button. There is also a hotfix available for this solution that is applicable to saas-2023.3, step-2023.3, and step-2023.4.

■ **ISSUE-674896 - Fix for an error in the 'Packaging Hierarchy' Web UI screen on WF - Initiate**

Fixed an IndexOutOfBound uncaught exception which appeared on the Web UI Node List when localizing number / integer attributes without units.

■ **ISSUE-675038 - Fix for fatal and internal server errors**

The fix limits the number of rows shown on the Classification Web UI screen to 10K - like other places in the UI. Inadvertently, this limit had previously not been implemented for this screen, which prevents the application from running out of memory when a lot of nodes is shown on the screen. Further more, the code populating the screen has been changed to be more conservative with its memory usage.

■ **ISSUE-675082 - Fix for error importing workflow with default user assignee: when UserList tag is after the STEPWorkflows tab in the STEPXML**

When changing the handling of a change package item to 'Ignore,' the item still had to be approved before the change package could be sealed. This has been fixed.

■ **ISSUE-675446 - Fix for when 'Word Matcher' is not working**

Fixed a NullPointerException for editing a normalizer in a Decision table, when there is a word matcher with Formula expression configured. There is also a hotfix available for this solution that is applicable to saas-2023.3, step-2023.3, and step-2023.4.

■ **ISSUE-675601 - Fix for an issue after implementing In-Memory**

Event-based export: Fixed meta-data of event so that it will export correct nodeType when running In-Memory.

■ **ISSUE-675980 - Fix for optimistic verification problems when moving objects through workflow**

Fixed a caching problem when running STEP on Oracle without In-Memory. The bug could incorrectly cause optimistic locking errors.

■ **ISSUE-676533 - Fix for Project Team Migration: Workbench - republish matching events throwing error**

Customer previously reported an error with their matching algorithm configuration. Upon republishing, an error occurred. Now, it should be possible for the customer to republish more than 1,000,000 entity children to the event processor. There is also a hotfix available for this solution that is applicable to saas-2023.3, step-2023.3, and step-2023.4.

■ **ISSUE-677036 - Fix for timeout / error message in the Web UI**

Fixed a problem when the Web UI was throwing an unexpected exceptions 'User...Only allowed to do SSO Authentication' after a period of inactivity for externally maintained users on a STEP system with OAuth (keycloak) SSO enabled. There is also a hotfix available for this solution that is applicable to

step 2023.4.

■ **ISSUE-677379 - Fix for 'java.net.SocketTimeoutException: Read timed out' errors on sidecar0.log - unknown but regular sidecar restarts occurring**

A new configuration property has been added that allows you to set the timeout used when the Sidecar connects to the application server when the Sidecar is reporting its status. There is also a hotfix available for this solution that is applicable to saas-11.1, saas-11.2, saas-2023.3, as well as step-11.1-mp4-6, step-11.2, step-11.2-mp1-3, and step-2023.3, and step 2023.4.

■ **ISSUE-677897 - Fix for NPEs on Dev environment**

Fixed NullPointerException thrown by the OIEP/IIEP monitoring sensor, if the OIEP/IIEP cannot be retrieved (was deleted when monitoring tried to find it).

■ **ISSUE-678556 - Fix for Web UI warning: The node could not be expanded as it has more than the configured maximum of displayable children**

Fixed a problem when entity references were counted twice, which caused a 'The node cannot be expanded...' message to be shown in Web UI when trying to expand an entity with a huge amount of references - but not big enough to prevent it from being expanded.

■ **ISSUE-679582 - Fix for duplicate data container row being created with same data container key**

HOTFIX-7163 is being prepared to fix the problem with 'SnapshotTooOldException' when running 'Check Duplicate Key' on a data container type.

■ **ISSUE-679677 - Fix for a setback: Certain DTP documents might get inconsistencies introduced by 'Upgrade Plugin'**

There was a bug that could cause inconsistencies in DTP documents (and Assets). Now, the upgrade plugin for injecting stibo.uid values on DTP documents will skip documents having any existing stibo.uid values, and the functionality will work as expected.

■ **ISSUE-679687 - Fix for STEP logs filled with warnings**

Now, the Admin Portal GC log parser will not spam the application server logs about the impossibility of parsing the gc.log file.

■ **ISSUE-679743 - Fix for certain ACES Imports failing with java.util.ConcurrentModificationException**

Fixed ConcurrentModificationException inside of JS scripting API caused by race conditions.

■ **ISSUE-679843 - Fix for LFSC error on startup / attribute schema history workbench tab**

Lock-free Schema Change: Fixed a problem deserializing lock-free schema change meta data for attribute validation changes. Worst case this would prevent a system from starting up when upgrading to 2023.4. Another symptom is an internal error in the workbench when opening the Schema History tab on Attribute objects (in the System Setup), which had previously had their validation changed.

■ **ISSUE-679894 - Fix for when large amount of LOV values created an error**

Fixed a problem when an error message about a huge amount of LOV values was shown on the Web UI Create Product Variant action dialog when the variant attribute link contained the LOV filter, which decreased the amount of values, but the link was inherited.

■ **ISSUE-680628 - Fix for issues in Workflow Widgets when upgrading to STEP 2023.4**

Fixed problem when the Status Selector width on a Web UI Homepage could be affected by external CSS configured in other widgets.

■ **ISSUE-680663 - Fix for when editing LOV values in the Web UI destroys inline formats**

Fixed an incorrect error message while editing an LOV value with HTML tags in the Web UI.

■ **ISSUE-680702 - Fix for when comparer functions cannot be outsourced into the library**

Fixed a NullPointerException which occurred when calling comparator function from a business library in a JavaScript business rule.

■ **ISSUE-680866 - Fix for Asset Publisher not setting to the right MIME Type**

Made Asset Publisher respect manual mime-type mappings set by the 'DocumentContent.ExtensionToMimeType' property.

■ **ISSUE-681001 - Fix for customer's preprod environment not being accessible**

Fixed a problem when the 'Too many revisions' healthcheck occupied too much memory when retrieving the BLOB asset contents, which can be quite big.

■ **ISSUE-681142 - Fix for when the search option in the 'Select Node(s)' screen does not work when adding reference**

Fixed a problem when picking a suggestion on a 'Search' tab of an 'Add reference' node picker on the Web UI Multi Reference screen caused a search result to not display, if a search was configured with attribute value criteria. It happened because of the second search being executed after picking a suggestion on a node ID, which did not pass the configured attribute criteria. Now, the second unnecessary search has been removed.

■ ISSUE-681337 - Fix for 2023.4: creating a collection from a file import throws an error

Fixed an exception 'java.sql.SQLException: org.datanucleus.store.rdbms.datasource.dbcp2.DelegatingPreparedStatement with address: 'NULL' is closed" which was thrown when creating collection from file.

■ ISSUE-682027 - Fix for 'hidden' bind not working work on a screen for Assets

Now, a Hidden JavaScript bind will correctly work for a business condition, configured on a Web UI Node Editor to hide an attribute value for a currently-selected Asset.

■ ISSUE-683266 - Fix for error messages from the business rules not shown properly in the Web UI

Previously, a value threw in business rules was not handled and presented in an alert. There was only information about the issue without details. Now, the value which is thrown is presented in the alert.

■ ISSUE-683351 - Fix for inability to map multi-variable to data container

Fixed unexpected exception when trying to map a multi-variable mapping rule to a data container in workbench Import Manager's mapping pop-up.

■ ISSUE-683400 - Fix for when editing the 'Global Navigation Panel' tree or search fails with exceptions

Fixed a setback, when navigating to main area components in Design Mode with Context Global representation configured, caused the unexpected exception to appear due to the problem in caching functionality.

■ ISSUE-683841 - Fix for Configuration tab in admin portal not having all information

Improved Admin Portal logging.

Made change so that the Admin Portal uses a configurable property to change a default timeout of the requests between servers in a cluster.

Fixed NullPointerException when running ./spot --prop=* and there are undocumented properties in STEP, and added better logging in that case.

■ ISSUE-684295 - Fix for 'Show LOV IDs' setting in Web UI not working in Multi Edit screens

Now, LOV IDs will be shown in typeahead suggestions for the Table Header Value on Web UI Node Lists, if the Show LOV IDs parameter is configured in Design Mode for this header.

■ **ISSUE-684371 - Fix for workbench: Internal application error when choosing BMEcat 2005 in the Export Manager**

Fixed NullPointerException that was thrown when choosing the BMECat2005 plugin in STEP Workbench Export Manager without doing the EasySetup for this component, so the attribute 'stibo_ ISO-639-2' was missing on a system.

■ **ISSUE-684569 - Fix for workbench Excel Import Mapping in German language not working**

Fixed a problem where radio button labels on the Import Manager mapping dialog in the STEP Workbench were truncated in the German locale.

■ **ISSUE-684606 - Fix for inability to create an LOV value with <> symbols**

Fixed adding values to LOV with STEP tags.

■ **ISSUE-685003 - Fix for Promote Article Ordinary job processing slowly**

Fixed performance problem during matching that was caused by unnecessary calculated attribute value calculations, even if the particular attribute is not a part of the attribute group, configured for a survivorship rule.

■ **ISSUE-685098 - Fix for viewing some assets in the Web UI causing an error**

Fixed a problem when an unexpected exception was thrown in Web UI when trying to view the asset content for an asset, which size is less than 4 bytes.

■ **ISSUE-685442 - Fix for when updating a Change Package runs into an exception 'Node specification cannot be null'**

Adding an asset that was never approved to a change package when a specific private property was set would cause a java.lang.IllegalArgumentException: Node specification cannot be null. If you run into this same situation / error, contact Stibo Systems Support for help.

■ **ISSUE-685859 - Fix for space usage in /tmp**

When importing assets with the Web UI Asset Importer, temporary files would be left behind in /tmp, which could eventually cause the disk to run full. This has been fixed.

■ **ISSUE-685990 - Fix for mail formatting not working properly**

When sending emails from OIEP, the body of the mail was treated as HTML even if it did not contain any kinds of tags. Now, mail will be sent as plain text if there are no tags in the body text. Plain-text mails show the proper newlines.

■ **ISSUE-686436 - Fix for event processor failing with OptimisticLockRetryCountExceeded errors**

Fixed a problem with fetching references for data containers, when the object owning them had been deleted.

■ **ISSUE-687529 - Fix for when BackgroundProcessStatisticsCollector consumes way too much memory**

Decreased the memory usage of BGP Statistics Collector by fixing the cleanup and using a better API to retrieve the BGP by status.

■ **ISSUE-687535 - Logging added for issue: Pagination is not working in Thailand context**

Additional logging has been added to help diagnose the root cause of the problem.

■ **ISSUE-688034 - Fix for button not working properly when applying filters**

Business actions run from the Multi Reference component will now receive the correct selection even when one or more filters has been applied to a column.

■ **ISSUE-689467 - Fix for issues when customer upgraded to 11.1-MP6 from 11.1-MP4 during the maintenance window**

Now, the Web UI Node Editor's Multi Editor Data Container will not throw the 'value is being modified by another user' error when Use Immediate Save is enabled for this component and there are headers with date validation base type attributes configured.

📥 PATCH RECIPE

The 2023.4-MP1 baseline patch can be installed with the following recipes:

```
./spot --apply=to:step/platform/step-2023.4-mp1.spr
```

—OR—

```
./spot --upgrade=step:2023.4*
```

Before installing the recipe, review the baseline and component versions that the system will be updated to before applying. Verify that the baseline and/or components are the correct versions to be applied (i.e., the versions you did testing on—and not a higher, untested version).

For on-premises systems, refer to the SPOT Program documentation for more information, including how to use the SPOT `--upgrade` command to also find compatible components that can be added at the same time as the baseline patch (`--upgrade=all`) in the SPOT Program topic of the System Administration Guide found in Downloadable Documentation. For assistance, contact Stibo Systems Technical Services. For SaaS

systems, contact Stibo Systems. For customers that have custom add-on components and/or if Stibo Systems Support is deploying your system upgrades and patches, submit an upgrade request via the Service Portal.

Note: Customers may want to search the Service Portal for their Maintenance Patch Issue Numbers. To do so, while in the Service Portal, navigate to Issues (in the header bar) and then select 'Search for Issues.' Click on the 'Advanced' option on the filtering bar, and then type in 'issue=' and the Issue number from the Maintenance Patch Notes. Press Enter or click the magnifying glass icon to run the query. **Users will only be able to view Service Portal issues for Maintenance Patch Issue Numbers that they have privileges to access. If the issue is not applicable to the user searching, then a 'No issues were found to match your search' message will be displayed.**