



TIBCO EBX®

Release Notes

Version 5.9.27
May 2025

Table of contents

5.9 service packs.....	9
Overview of 5.9.0.....	17
User experience.....	18
New Skin.....	18
Find in hierarchy.....	19
Using filters defined in associations.....	19
User interface advanced customization.....	19
User services and record forms.....	19
Enriched context for record creation.....	20
New properties for toolbar actions.....	20
Layout capabilities.....	20
Perspectives configuration.....	20
Selecting a perspective and a perspective action.....	21
Security on exit redirection.....	21
New parameters for servlet URL.....	21
Maximum length of text areas.....	21
Permissions.....	21
New access rules applied during record creation.....	21
Permission evaluation in the perspective menu.....	21
Workflow.....	22
Workflow diagrams.....	22
Workflow inbox counter.....	22
Comment history on a process instance.....	23
Workflow miscellaneous.....	24
Data validation.....	25
Validation rules on null values.....	25
Non-blocking validation rules.....	25
Validation settings.....	25
Disabling validation for mass update.....	26
Resetting validation reports.....	26
Dynamic validation messages on foreign key filters.....	26
Validation messages threshold.....	26
Limit validation messages in logs.....	26
Data services.....	26
REST Toolkit.....	26
Built-in RESTful services.....	28
Performance.....	29
Data services.....	29
Permissions.....	29
Data modeling.....	29
Primary key evolutions.....	29
Location of Java sources.....	29
Introspection API.....	29
Persistence and databases.....	30
New supported database.....	30
Inter-database migration.....	30
History anonymization.....	30
Renaming a column in the database.....	30
Miscellaneous.....	31
Other useful Java API.....	31
Embedded third-party libraries.....	32
Version upgrade.....	32
Changes on supported environments.....	33

Backward compatibility.....	34
How to upgrade an installed environment.....	37
5.9.27 Closed issues.....	38
Core Engine.....	38
Data Services.....	38
Infrastructure.....	38
User Interface.....	38
5.9.26 Closed issues.....	39
Core Engine.....	39
Distributed Data Delivery.....	39
User Interface.....	39
5.9.25 Closed issues.....	40
Core Engine.....	40
Infrastructure.....	40
5.9.24 Closed issues.....	41
Java EE integration.....	41
REST Toolkit.....	41
User interface.....	41
5.9.23 Closed issues.....	42
Core engine.....	42
Data services.....	42
Data views.....	42
Documentation.....	42
User interface.....	42
5.9.21 Closed issues.....	43
Core engine.....	43
Data validation.....	43
Documentation.....	43
Java EE integration.....	43
5.9.20 Closed issues.....	44
Core engine.....	44
Data services.....	44
Data validation.....	44
Data views.....	44
Dataspaces & History.....	44
Documentation.....	44
User interface.....	44
Users & Permissions.....	45
5.9.19 Closed issues.....	46
Core engine.....	46
5.9.18 Closed issues.....	47
Core engine.....	47
Data workflows.....	47
REST Toolkit.....	47
5.9.17 Closed issues.....	48
Core engine.....	48
Data modeling.....	48
Data services.....	48
Data views.....	48
Dataspaces & History.....	48
Distributed Data Delivery (D3).....	49
Infrastructure.....	49
Java EE integration.....	49
REST Toolkit.....	49
User interface.....	49
Users & Permissions.....	50
5.9.16 Closed issues.....	51
User interface.....	51
5.9.15 Closed issues.....	52

Core engine.....	52
Data modeling.....	52
Data services.....	52
Dataspaces & History.....	52
Documentation.....	52
User interface.....	52
5.9.14 Closed issues.....	53
Core engine.....	53
Data modeling.....	53
Data services.....	53
Data views.....	53
Data workflows.....	53
Dataspaces & History.....	54
Distributed Data Delivery (D3).....	54
Documentation.....	54
Import / Export.....	54
User interface.....	54
5.9.13 Closed issues.....	55
Core engine.....	55
Data modeling.....	55
Import / Export.....	55
Java EE integration.....	55
REST Toolkit.....	55
User interface.....	55
5.9.12 Closed issues.....	56
Core engine.....	56
Data views.....	56
Distributed Data Delivery (D3).....	56
Java EE integration.....	56
User interface.....	56
5.9.11 Closed issues.....	57
Core engine.....	57
Data services.....	57
Data validation.....	57
Documentation.....	57
User interface.....	57
Users & Permissions.....	58
5.9.10 Closed issues.....	59
Data services.....	59
User interface.....	59
5.9.9 Closed issues.....	60
Core engine.....	60
Data modeling.....	60
Data services.....	60
Data validation.....	60
Data views.....	60
Data workflows.....	60
Miscellaneous.....	60
User interface.....	61
5.9.8 Closed issues.....	62
Core engine.....	62
Data modeling.....	62
Data services.....	62
Data workflows.....	62
User interface.....	62
Users & Permissions.....	63
REST Toolkit.....	63
5.9.7 Closed issues.....	64
Core engine.....	64
Data modeling.....	64

Data views.....	64
Documentation.....	64
Messages & i18n.....	64
User interface.....	64
5.9.6 Closed issues.....	66
Data workflows.....	66
Java EE integration.....	66
User interface.....	66
Users & Permissions.....	66
5.9.5 Closed issues.....	67
Core engine.....	67
Data services.....	67
Java EE integration.....	67
User interface.....	67
5.9.4 Closed issues.....	68
Core engine.....	68
Data modeling.....	68
Data services.....	68
Data views.....	68
Data views - hierarchies.....	68
Data workflows.....	68
User interface.....	68
Users & Permissions.....	69
new-ui.....	69
REST Toolkit.....	69
5.9.3 Closed issues.....	70
Data modeling.....	70
Data services.....	70
Data views.....	70
Data workflows.....	70
Import / Export.....	70
User interface.....	71
Users & Permissions.....	72
5.9.0 fix B closed issues.....	73
Core engine.....	73
Data modeling.....	73
Data validation.....	73
Data views.....	73
Data workflows.....	73
Dataspaces & History.....	74
Distributed Data Delivery (D3).....	74
Java EE integration.....	74
User interface.....	74
Users & Permissions.....	75
5.9.0 fix A closed issues.....	76
Core engine.....	76
Data modeling.....	76
Data validation.....	76
Data views.....	76
Data workflows.....	77
Dataspaces & History.....	77
User interface.....	77
Closed issues.....	81
Core engine.....	81
Data modeling.....	82
Data services.....	83
Data validation.....	83
Data views.....	84
Data workflows.....	85
Dataspaces & History.....	86

Documentation.....	86
Import / Export.....	86
Miscellaneous.....	86
User interface.....	86
Users & Permissions.....	88

5.9 service packs

5.9.27 built on May 22, 2025 for:

License keys	The license key manager has been reinstated. Your license key is now aligned with your EBX® instance contract type: subscription, perpetual, or trial. Deployed add-ons are now registered and enabled at system startup. See <i>Setting an EBX® license key properties file</i> for more information.
New software delivery site	You can now download EBX® software from <i>TIBCO eDelivery</i>. If you have an existing eDelivery account, your existing credentials can be used to login to the new software delivery site.
Supported databases	PostgreSQL 17 is now supported and PostgreSQL 12 is no longer supported. The minimum supported version of PostgreSQL is now 13. Microsoft SQL Server 2014 is no longer supported. The minimum supported version of SQL Server is now 2016. See <i>Supported databases</i>, for more information.
REST Toolkit	The <i>Exception handling</i> section was updated with the description for a custom exception mapper.
Closed issues	See 5.9.27 Closed issues section.

5.9.26 built on May 17, 2024 for:

Backward compatibility - Servlet 3.1 minimal version	The minimal compatibility for Servlet was upgraded to version 3.1 (Java EE 7) instead of 3.0. The <code>web.xml</code> deployment descriptor for EBX® web applications was modified to comply with <i>Servlet 3.1</i> .
Supported databases	Backward compatibility - SAP HANA as a back-end database engine for EBX® is discontinued as of this release; the inter-database migration provides a way to export the full content of a repository to another database. Oracle 21c (Innovative Release) is no longer supported; the required version for Oracle is now 19c or 23c. See <i>Supported databases</i> and <i>Inter-database migration</i> for more information.
Backward compatibility - Maximum length of technical columns in database	The maximum length of technical fields LAST_USER_ID and CREATOR_ID , in replicated and relational tables, has been increased (from 50 to 320 characters) to support user references with long values.
Distributed Data Delivery (D3)	Primary cluster broadcast timeout before rollback is now configurable with the new <code>ebx.d3.master.cluster.broadcast.timeout</code> property key. See <i>Configuring primary, hub and replica nodes</i> for more information.
Closed issues	See 5.9.26 Closed issues section.

Backward compatibility - REST Toolkit JSON serialization changes	The Apache Johnzon changes in default serialization impacts how URIs and <code>BigDecimal</code>s are handled. URIs are now consistently serialized as strings, improving simplicity and interoperability. <code>BigDecimal</code>s are also serialized as strings, ensuring precision and interoperability. These changes may require code adjustments, particularly when parsing JSON from a <i>REST Toolkit</i> service, generating payloads, or working with <code>BigDecimal</code> calculations. Thorough testing is recommended after any updates. While the <code>BigDecimal</code> string serialization might have a slight performance impact in some cases, it enhances overall data integrity and compatibility.
Backward compatibility - Display policy	The Unicode CLDR has changed with JRE versions and impacts locale-sensitive formats such as integer or decimal. By default, EBX® uses the JRE's native format. However, you can configure this option. For more information, see <i>Supported application servers</i>.
Java Runtime Environment	JRE 17 LTS is now supported. Support was removed for JRE 8 and 11, except on WebLogic 14c where JRE 11 currently remains supported. Please see the following installation note for more details on WebLogic support: <i>Installation note for WebLogic 14c</i>. If mail is configured using 'ebx.properties', properties <code>ebx.mail.smtp.ssl.provider</code> and <code>ebx.mail.smtp.ssl.factory</code> are now ignored and may be removed. For more information, see <i>Supported application servers</i> and <i>Activating and configuring SMTP and emails</i>.
Installation notes	The following installation notes were updated with information on application server compliant with Java 17 LTS: • <i>Installation note for Tomcat 9.x</i> • <i>Installation note for JBoss EAP 7.4.x</i> • <i>Installation note for WebSphere Application Server Liberty 23.x</i> The following installation note was revised with the last available release information, but it currently does not comply with Java 17 LTS: • <i>Installation note for WebLogic 14c</i>

Supported databases

PostgreSQL 11 is no longer supported; the minimum required version for PostgreSQL has been upgraded to 12.
See *Supported databases* for more information.

Closed issues

See [5.9.25 Closed issues](#) section.

5.9.24 built on June 19, 2023 for:

- **Installation:** The Xalan and Xerces packaged libraries were removed and it is no longer necessary to install `xml-apis-1.4.01.jar` archive. It is important to note that this archive should be removed as it can cause Linkage errors on some web application servers.
- **Supported databases:**
Oracle 12c is no longer supported. The minimum required version for Oracle is now 19c.
- [Closed issues](#).

5.9.23 built on April 17, 2023 for:

- [Closed issues](#).
- **End of support of the browser "Internet Explorer"**
Internet Explorer will no longer be supported. EBX® will still be accessible with IE but no issue specific to IE will be fixed in the future.
- **Supported databases:**
 - PostgreSQL 10 is no longer supported; the minimum required version for PostgreSQL has been upgraded to 11.
 - SQL Server 2012 is no longer supported; the minimum required version for SQL Server has been upgraded to 2014.

See *Supported databases* for more information.

5.9.22 built on January 16, 2023.

5.9.21 built on October 13, 2022 for:

- [Closed issues](#).

5.9.20 built on August 30, 2022 for:

- To improve performance on history tables, the `includeMergeInfo` parameter was added to the REST select operation.
See *REST access to history table* for more information.
- [Closed issues](#).
- **Notifications for upcoming releases:**
 - *Oracle Database 12c* will come out of support in an upcoming release. We advise to upgrade the database to a recent supported version.
 - *Microsoft SQL Server 2012 SP4* will come out of support in an upcoming release. We advise to upgrade the database to a recent supported version.

5.9.19 built on May 17, 2022 for [closed issues](#).

5.9.18 built on April 28, 2022 for:

- **Workflow API - Add possibility to reallocate a work item allocated to a collection of profiles:**

Add a method in `CreationWorkItemSpec` in order to be able to create a work item allocated to a specified user with the possibility to reallocate it to a collection of profiles. `CreationWorkItemSpec.forAllocationWithPossibleReallocationAPI` for more information.

- **Release note**

The backward compatibility section regarding [web components and iframes](#) has been updated. The function `ebx_getContentWindow()` was misspelled, this is now fixed.

- [Closed issues](#).

5.9.17 built on March 15, 2022 for:

- **Backward compatibility**

H2 database version 2.0.

This version of TIBCO EBX® provides a new version of the H2 database engine, which does not support an automatic upgrade of existing repositories. These must be manually updated through the *dedicated procedure*. The alternative is to use the former versions of h2 in your deployments.

URLs configuration.

Two new properties have been added to the `ebx.properties` file to force the use of the HTTPS protocol and its related properties for building URIs.

In the user interface, the 'URL Policy' configuration in the Administration area becomes deprecated.

See *URLs computing* and *URL policy (deprecated)* for more information.

New recommendations for web application paths of EBX® modules are introduced. See *Path recommendations* for more information.

- **User Service integration.**

In order to improve User Service integration, a new interface has been introduced: `UserServiceForCreateAPI`. It is now recommended that implementations of `UserServiceRecordFormFactory.newUserServiceForCreateAPI` return an instance of `UserServiceForCreate` rather than `UserService`.

- **Log changes and limitations.**

Properties	<code>ebx.log4j.appender.xxxxx</code>	support	only
	<code>com.onwbp.org.apache.log4j.ConsoleAppender</code>		and
	<code>com.onwbp.org.apache.log4j.net.SMTPAppender</code> .	Other types of appenders are not supported.	

Renderers are not supported.

Properties	<code>ebx.log4j.appender.xxxxx.layout</code>	support	only
	<code>com.onwbp.org.apache.log4j.PatternLayout</code>		

Property `ebx.log4j.disableOverride` is no longer supported.

Properties `ebx.log4j.additivity.log.wbp.xxxxx` is no longer supported.

- **Supported databases:**

- Oracle 18c is no longer supported.
- PostgreSQL 9.6 is no longer supported; the minimum required version for PostgreSQL has been upgraded to 10.

See *Supported databases* for more information.

- [Closed issues](#).

5.9.16 built on September 15, 2021 for:

- **Backward compatibility**

- **Workflow activation property.**

- Since the fix of the [CP-22136](#), the value of the property `ebx.workflow.activation` (in EBX® configuration file) must be `true` or `false` (case-insensitive). Any other value throws a fatal exception at server launch.

- [Closed issues.](#)

5.9.15 built on September 15, 2021 for:

- **Backward compatibility**

- **Check on default constraint on primary keys of type string.**

- Since the fix of the [CP-21856](#) the check of the default constraint defined on primary keys of type string is now stricter. The default constraint that forbids non-collapsed whitespaces is now blocking for all operations. It is still possible to override this default constraint by specifying a specific pattern that allows non-collapsed whitespaces on primary keys of type string.

- See *Whitespace handling for primary keys of type string* for more information.

- **Supported databases:**

- A new database is supported: **Google Cloud SQL for PostgreSQL, version 9.6 or higher.**

- [Closed issues.](#)

5.9.14 built on June 11, 2021 for [closed issues](#).

5.9.13 built on January 20, 2021 for:

- **Supported databases:**

- Oracle 11g is no longer supported; the minimum required version for Oracle database has been upgraded to 12c.
 - PostgreSQL 9.4 and 9.5 are no longer supported; the minimum required version for PostgreSQL has been upgraded to 9.6.
 - Microsoft SQL Server 2008 R2 is no longer supported; the minimum required version for SQL Server has been upgraded to 2012 SP4.

- See *Supported databases* for more information.

- **Built-in REST token authentication create operation:** The user authentication, from the token build process, can now be performed against the HTTP request. See *Token authentication operations* for more information.

- **Performance of Workflow inbox:** The performance of the inbox has been improved by upgrading the existing cache system.

- [Closed issues.](#)

5.9.12 built on November 10, 2020 for:

- **Installation:** The Xalan and Xerces packaged libraries upgrade introduces new dependencies toward classes provided by the Java runtime environment 9. These classes can be added, without the resort of a Java runtime environment 11 LTS, by installing the new bundled jar archive called `xml-apis-1.4.01.jar`. If a Java runtime environment 11 LTS, or above, or a WebLogic 12c R2

application server is used to run the application, then no additional installation steps are required. See *Installation notes* for more information.

Note

This installation step is deprecated since **5.9.23**.

- [Closed issues](#).

5.9.11 built on October 9, 2020 for:

- **Association tables** Options have been added to the Data Model Assistant, to hide toolbars of association tables. On association nodes, options can be found within the setting group "Rendering in forms". It is also available programmatically from the Java class **UITable** `UITableAPI`.
- [Closed issues](#).

5.9.10 built on June 4, 2020 for:

- [Closed issues](#).

5.9.9 built on March 30, 2020 for:

- **Form node label:** It is now possible to add or remove a mandatory indicator (*) next to the label of a form node to simulate that it is mandatory by using `JavaScriptCatalog.ebx_form_setMandatoryIndicatorAPI` in JavaScript or `UIFormWriter.addJS_setNodeMandatoryIndicatorAPI` in Java.
- **User Service API:** `BeanElement.addFacetTableRefAPI` now throws an explicit exception if the given table is in a snapshot. `BeanElement.addFacetTableRefAPI` has been added. This new method allows the declaration of a table reference to a table in the current dataspace or snapshot. `ToolBarButton.setHighlightedAPI` has been added. This new method allows defining if a toolbar button should be highlighted by default.
- **Backward compatibility:** To comply with the restrictions applied on foreign key constraints the method `BeanElement.addFacetTableRefAPI` now throws an `IllegalArgumentException` if the specified table is in a snapshot.
- **Cloud Software Group, Inc. Support:** The EBX® Support team can now be contacted from the <https://support.tibco.com> website (an account is mandatory in order to access, follow the 'Register' process). Visit the **About Support** section of this page for more details.
- [Closed issues](#).

5.9.8 built on February 11, 2020 for:

- **Changes on supported environments:** For Mozilla Firefox, the support of ESR 60 has shifted to ESR 68. For Microsoft Edge, the support of 42 has been shifted to 44.
- [Closed issues](#).

5.9.7 built on November 7, 2019 for:

- **Automatic installation on first launch:** It is now possible to enable *automatic installation on first launch*.
- **New supported database:** Amazon Aurora PostgreSQL 2.3 (compatible with PostgreSQL 10.7) has been added as one of the *supported database engines*.
- **Default display density:** A new feature allows administrators to set the default density for all users. The display density will be 'Compact' by default.

- **Perspective selector:** A new icon for the perspective selector.
- **Custom perspective:** The perspective name of a custom perspective has been added to the navigation bar's header along with a new icon for the expand/collapse button.
- [Closed issues.](#)

5.9.6 built on September 9, 2019 for:

- To speed up the web applications server startup, the *JAR files scanner* should be configured.
- [Closed issues](#)

5.9.5 built on July 22, 2019 for:

- [Closed issues.](#)

5.9.4 built on June 20, 2019 for:

- **Optimization of compact density:** These evolutions provide a denser layout when using the compact density. Compacting the space around the workspace, the toolbar and the table rows increases the space that is available for displaying the workspace content. It also allows displaying more records for a given screen resolution than in previous 5.9 versions. Therefore, customers who deal with a lot of records may visualize more records at a glance.
- **Workflow API:** The method `ProcessInstanceStep.isHiddenInProgressViewAPI` has been added to know if the step has been defined as hidden in the progress view.
- **New support team contact details:** The TIBCO EBX® Support team can now be reached at ebx-support@tibco.com. Deliverables can be found on the *TIBCO eDelivery* website (an account is mandatory in order to access eDelivery, please contact the support team to request one). The license key can be retrieved from the *TIBCO eDelivery* website.
- [Closed issues.](#)

5.9.3 built on March 25, 2019 for:

- **New branding:** The EBX® logo has been updated so as to reflect the new product name: TIBCO EBX®. This renaming also impacts the product documentation and the Javadoc, in which you will now find the following names: TIBCO EBX® and EBX®. The logos have also been updated in all the documentation. As far as the user interface is concerned, a new shade of blue has been implemented and replaces the former, lighter, EBX® blue.
- **New versioning:** The Cloud Software Group, Inc. Release Version Schema Policy is now enforced and fully applied. This Policy is composed as follows: <major>.<minor>.<servicePack>. What used to be called Fix A, B, C etc. will now be an increment of the latest Service Pack number. The concept of "Fix" will no longer exist.
- **Backward compatibility:** the 'Welcome message' and 'Window name' fields no longer support HTML. A text containing HTML tags is now escaped. In order to display an HTML entity, an alternative is to use the unicode number corresponding to the entity.
- [Closed issues.](#)

5.9.0 fix B built on January 21, 2019 for:

- Copy-paste in Grid edit: the former limitation (detected in version 5.9.0) has been removed, it is now possible to paste in foreign keys referring to a primary key which is not a simple string field.
- [Selecting a perspective and a perspective action.](#)
- [New parameters for servlet URL:](#) New parameters for UI servlet URL in `ebx.properties`.

- The issue on Oracle WebLogic server version 12.2.1.3, detected since version 5.9.0, for the TIBCO EBX® redeployment, is fixed. See *Installation note for WebLogic 14c* for more information.
- The issue regarding the HTTP Authorization header override on Microsoft Internet Explorer or Edge Web browsers, detected since version 5.9.0, is fixed. See [CP-16355](#) and *HTTP Authorization header policy* for more information.
- [Closed issues](#).

5.9.0 fix A built on December 10, 2018 for:

- This fix includes minor layout improvements that will ensure a smoother display of the user interface.
- Similarly to the `JavaScriptCatalog.ebx_setWorkspaceTitleAPI` that was recently added in version 5.9.0, this fix includes the method `JavaScriptCatalog.ebx_getWorkspaceTitleAPI` that allows retrieving the title of the current workspace. For more information, please refer to the corresponding Javadoc.
- [Closed issues](#).

5.9.0 built on October 26, 2018.

Overview of 5.9.0

Some of the most notable features offered by this release are:

- **New Skin** renovates the graphical aspect of the user interface.
- The **REST Toolkit** is a Java API facilitating the development of custom RESTful services.
- The [workflow diagram](#) now provides a BPMN-like representation of workflow models.
- A new database is supported, **SAP HANA**, and an **inter-database migration** service is available.

Concerning supported environments, this release brings some notable changes that are documented in the section [Changes on supported environments](#).

Attention

Before proceeding with the upgrade of an existing environment, ensure that you have carefully read the [Version upgrade](#) section.

User experience

New Skin

The screenshot displays the EBX user interface. At the top, a blue header bar contains a hamburger menu icon, the breadcrumb '000590 > Authors : Joy Adamson [00-0-007]', and a user profile icon. Below the header, a left sidebar lists navigation items: Governance (Dashboard, Information governance, Business glossary), Workflow (Inbox, Launcher, Supervision), and Reference data (Reference documentation). A modal form is open in the center, titled 'Actions' with a dropdown arrow. The form has two tabs: 'Main' (selected) and 'EditorWithContracts'. A red circle with the number '1' points to the 'Main' tab. The form contains fields for 'Id' (00-0-007), 'Lastname' (Joy), 'Firstname' (Adamson), 'Address', 'Birth date' (01 / 20 / 1910), and 'Death date' (01 / 3 / 1980). A red circle with the number '2' points to the 'Reference documentation' item in the sidebar. At the bottom of the form are buttons for 'Save', 'Save and close', 'Revert', and 'Close'.

Modal pop-up window (1)

Modal pop-up windows have been removed from most EBX® screens. Instead, the requested content overlaps the workspace and a breadcrumb allows the user to return to the previous content.

Translucent bottom bar (2)

The new bottom bar displayed for forms is now translucent. This allows the end-user to become more aware that the page can be scrolled.

More technical details [below](#).

Hierarchical views

Action buttons of hierarchy nodes are now displayed to the left of each node (no longer to the right).

Tabs with home icon

On a record form, when tabs are enabled in the *data model definition* of the table, the main tab used to be displayed with a home icon. This icon is no longer displayed (the 'Main tab label' is still displayed; by default, this label is 'Main').

As a consequence, the existing Java methods `setHomeIconDisplayed` have been marked as deprecated, see [Backward compatibility](#) for more information.

Dataset tree structure	The displayed record is still displayed below the current table but is no longer displayed with a selected style.
Filter icon and filter pane	The magnifying glass icon for filtering has been replaced with a funnel icon  . Actions that remove all filters or quickly apply a given filter have been moved to the filter pane.

Find in hierarchy

A new search pane 'Find in hierarchy' is now available for hierarchical views.

As opposed to filtering, it allows the user to position the members whose label matches the search criteria while keeping the hierarchy displayed. The matched member is highlighted and opened, i.e. its first-level children are displayed. Two buttons (next and previous) are provided to find the following or the previous member matching the search criteria.

This implementation is explicitly announced as a beta version since it contains some limitations, particularly:

- it is only available for pure recursive hierarchical views,
- the search is only applied to the labels of the members of the recursive dimensions.

Using filters defined in associations

When creating an associated record directly from an association, the filters defined in the data model are now evaluated. Applied filters include the one defined by the association and those defined by the foreign key(s) involved in the association. As a consequence, it is now forbidden to create an associated record that does not comply with these filters.

The feature includes the possibility to customize the message displayed to the end-user when attempting to create an associated record that does not comply with the defined filters. If the filter is defined by the association, a new message property is available, see *association filter* for more information; for a filter defined on a foreign key, the existing validation message is reused.

These filters are also evaluated when displaying the list of records that can be associated directly from an association (however, in the case of an association over a link table, the filter defined by the foreign key to the source table is ignored).

User interface advanced customization

This release offers new capabilities to customize the user interface through additional configuration or Java programming.

User services and record forms

It is now possible to use custom user services to replace default model-driven record forms. Regarding `UIFormAPI`, it allows implementing more advanced user interfaces.

See `UserServiceRecordFormFactory`^{API} for more information.

Enriched context for record creation

When a record is being created from a foreign key field or from an association, the Java API now provides information about the source record. This new information is available in table triggers and in the new [access rule for create](#).

For more information, see `NewRecordContext`^{API} and the two interfaces extending it.

New properties for toolbar actions

It is now possible to define if the service is to be launched in the current context or in a web component. In the latter case, it is possible to specify values for the declared parameters of the service as well as the characteristics of the modal containing the service.

These options are available both in the Data Modeling Assistant and via the Java API.

See also

`WebComponentAction.setDisplayMode`^{API}

`UIHttpManagerComponent.setAdditionalParameter`^{API}

Note

In order to be available as a Web Component in a toolbar action, a service must be declared as such. See `WebComponentDeclarationContext.setAvailableAsToolbarAction`^{API}.

Layout capabilities

With New Skin, an inner white border is always displayed on all workspaces. For developers who exceptionally want to have full width and height components (as the grid edit), a new method `isPaddingEnabled()` has been added to `UIFormPane`^{API}, `UserServicePane`^{API} and `UserServiceRawPane`^{API}.

Along with full height, the bottom bar is now translucent; the JavaScript function obtained through `UIJavaScriptWriter.addJS_addResizeWorkspaceListener`^{API} gives a second parameter to the JavaScript listener in order to not take into account the bottom bar height. Developers can now size their components to display to the back of the bottom bar.

Perspectives configuration

Perspective activation and menu items include a new "allowed device" property.

This property allows to specify devices that can display the perspective or menu item. Currently only two devices are supported: "EBX® Web Application" and "EBX® GO".

For more information, see *Perspective creation* and *Child perspective menu*.

Note

This feature will be supported in the next version of EBX® GO that is expected in a few months.

Selecting a perspective and a perspective action

A new attribute has been added to perspective actions: the action unique name. This new optional attribute is used by new Java API to select a perspective action. Also, methods to select a perspective have been added.

Web component API: `UIHttpManagerComponent.selectPerspectiveAPI` and `UIHttpManagerComponent.selectPerspectiveActionAPI`.

UIResourceLocator: `UIResourceLocator.getURLForPerspectiveSelectionAPI` and `UIResourceLocator.getURLForPerspectiveSelectionAPI`.

UIJavaScriptWriter: `UIJavaScriptWriter.addJS_switchToPerspectiveActionAPI`.

Security on exit redirection

It is now possible to restrict the URL used to redirect the end-user at the end of a Web Component session (as a reminder, this redirection can be specified either by means of the *Web Component* redirect parameter, or through the 'Exit policy' in the user interface configuration). In the 'Administration' section, by selecting 'User interface configuration > Advanced perspective', then the 'Exit policy' form, it is possible to specify the list of authorized domains and whether HTTPS is mandatory for each domain.

For more information, see *Exit policy*.

New parameters for servlet URL

Two new parameters (`ebx.servlet.http.ui.path` and `ebx.servlet.https.ui.path`) are added to `ebx.properties` in order to allow the customization of the UI servlet path in the URL.

If they are not specified, they default to "ebx-ui/". See *URLs computing* for more information.

Maximum length of text areas

A new configuration for the maximum length of text areas are added to 'Ergonomics and layout' section under 'Administration' in order to allow the customization of the allowed length of text areas. You can also disable the check of maximum length of text areas.

Permissions

New access rules applied during record creation

In order to bypass the existing `AccessRuleAPI` limitation which prevents dissociating a record creation from a column display, a new kind of access rule has been added. Once set on a record node, such a rule will be evaluated each time a record is created, in addition to any other `AccessRule` that might also be set on this node.

For more information, see `AccessRuleForCreateAPI`.

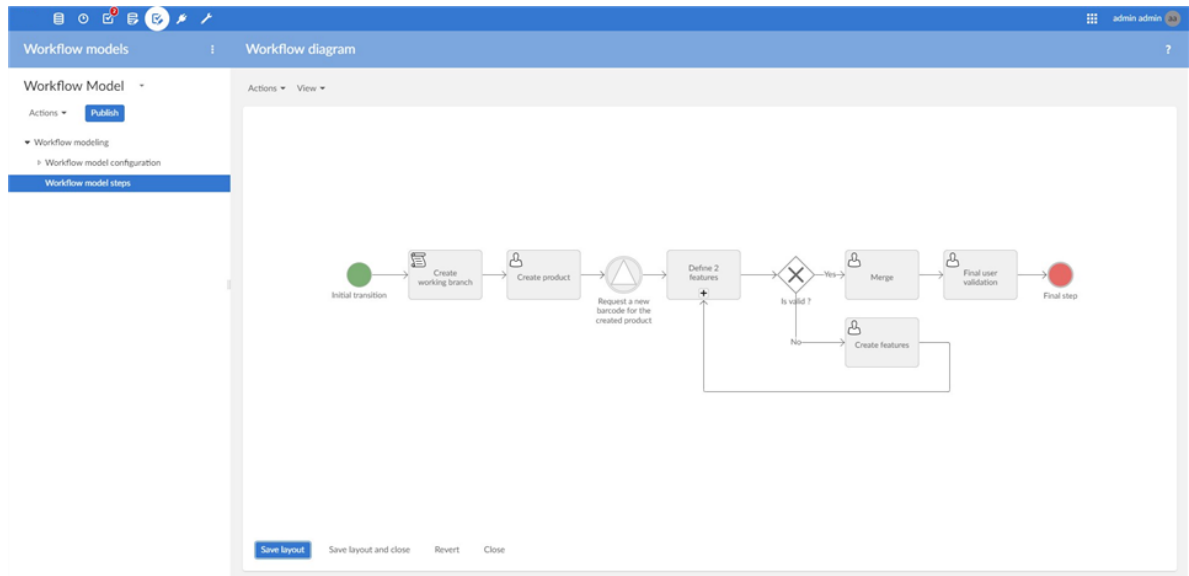
Permission evaluation in the perspective menu

When displaying the perspective menu, permissions are now evaluated before adding any action of the "service" type. As a consequence, services that are not allowed for the user will no longer be displayed.

Also, to identify this new context in the service permission rules, the new toolbar location `ToolBarLocation.PERSPECTIVE_MENUAPI` has been added.

Workflow

Workflow diagrams



In order to help modelers have a clear view of the workflow model they are designing, a BPMN-like workflow diagram is now available.

From the hierarchical view toolbar, it can be accessed by clicking on the button with the following icon: .

Some features of this view:

- nodes and links are movable, the layout can be customized and saved;
- a grid can be displayed, which is helpful to align nodes and links;
- it is also possible to zoom in/out, revert to a previously saved state, and export to PNG/SVG format.

This view is a service with limited edition abilities: it is only possible to modify existing steps, and links still need to be modified through the hierarchical view.

See *Visualizing the workflow diagram* for more information.

Workflow inbox counter

The workflow inbox counter is now refreshed asynchronously, even when no action has been launched. Two parameters have been added to the configuration of workflows under the section 'Temporal tasks' to configure this behavior.

See *Workflow inbox counter configuration* for more information.

Comment history on a process instance

Since it is more intuitive to have the possibility to read previous comments before leaving one, it is now possible to see all the comments of a workflow directly from the user task.

The screenshot displays the TIBCO EBX user interface. At the top, a blue header bar contains navigation icons and the user's name, Alexandra Dupont. Below the header, a light blue banner reads "Data workflows" and "Select the feature to define > products : 4566". On the left, a sidebar menu lists various workflow categories: "Inbox" (highlighted), "Select the feature to define", "Workflow launchers", "Monitoring", "Publications", "Active workflows", "Work items", and "Completed workflows". The main content area shows a form for a workflow instance. It includes an "Accept" button, a "See comments" dropdown, and a "Comment" button. Below these, an "Actions" dropdown is visible. The form itself has a "Product" section with a "code" field containing "4566" and a "name" field containing "Neverending story". A comment history overlay is positioned on the right side of the form, showing two comments: one from John Skywalker dated 10/23/2018 11:04:33 stating "The publication date is wrong. Please correct it.", and another from Alexandra Dupont dated 10/23/2018 11:00:41 asking "Can you please validate this record ?".

Workflow miscellaneous

Clear history of selected workflows	In the workflow history table view, one can now remove the history of workflows that have been manually selected. To complete the cleaning, a dataspace purge will have to be executed. See Backward compatibility for more information regarding the new procedure for deleting history data.
Add a new scheduled task	The new SchedulerMarkDataspaceHistoryForPurge task marks the history of a given dataspace for purge, if it is older than the specified number of days.
Duplicate a step	In the workflow modeling, one can now duplicate a step that was previously defined. To facilitate reuse, the new step is created without parents. It can then be relinked to another existing step.
New built-in script to remove a record or a list of records	It is now possible to use a built-in script task to delete records, provided that the following properties are specified: the dataspace, dataset and XPath which identify the record(s).
New Java API to retrieve process instances from a publication name	When a workflow model is updated and republished with the same publication name, it was not possible to retrieve the workflows that were launched beforehand (the publication name is reset to be reused). To retrieve workflows from their launching publication name (the publication name with which they are launched), including the ones whose publication is no longer active, two new methods have been added to the Java API: <code>WorkflowEngine.getProcessInstanceKeys^{API}</code> and <code>WorkflowEngine.getProcessInstanceKeysFromHistory^{API}</code>.
New java API to retrieve the original publication name from a published process	A new method has been added in order to retrieve the original publication name: <code>PublishedProcess.getOriginalPublicationName^{API}</code>.
New columns added to facilitate sorting and filtering on publication names	The publication structure has changed and the original publication name is now stored in the 'Publication table'. Two new columns have been added for both <code>workItems</code> and <code>Process</code> administration tables and also all the tables in <code>Data workflows</code> section: • Launching publication name • Publication date

By default, they are hidden on the different views of the Workflow section (Inbox/Active workflows/Work items/Completed workflows) but these columns are available for custom views.

Improved publication labels	The initial publication name is now stored and can be displayed even if the publication has been disabled or unpublished. • if the publication is available : PUBLICATION_LABEL + "[" + PUBLICATION_NAME + "]" or PUBLICATION_NAME if label is not defined • if the publication is unavailable : PUBLICATION_LABEL + "[" + PUBLICATION_NAME + ":" + PUBLICATION_DATE + "]" or PUBLICATION_NAME + ":" + PUBLICATION_DATE if label is not defined
Improved process labels	Legacy display of process labels also contains the publication name: the publication name is saved and thus displayed all the time. The template is as follows: • if the publication is available : PUBLICATION_NAME + "#" + PROCESS_ID • if the publication is unavailable : PUBLICATION_NAME + "#" + PROCESS_ID + ":" + PUBLICATION_DATE

Data validation

Validation rules on null values

It is now possible to define constraints on null values using the validation rule editor in the Data Model Assistant. See *validation rules* for more information.

Non-blocking validation rules

It is now possible to specify the behavior of a validation rule defined on fields, when a user submits a form with validation errors. That is, it is now possible to indicate whether an input that would violate a validation rule will be rejected or not when submitting a form. See *validation rules* for more information.

Validation settings

A new class has been added to specify the settings when validating a dataset, a table or a record. This new class includes new properties that allow to specify:

- if the validation of a dataset, a table or a record must wait until the end of a concurrent validation that is being performed by another process.
- that the result of the validation of a dataset or a table must not be added to the logs generated by EBX®.

See `ValidationSpecAPI` for more information.

Disabling validation for mass update

It is now possible to disable the incremental validation of a dataset during the execution of a procedure. The use of this new feature may be useful when performing mass modifications during a procedure. That is, disabling incremental validation prevents the validation of each update performed during a procedure and it can then lead to important performance improvements during mass updates.

See `ProcedureContext.disableDatasetValidationAPI` for more information.

Resetting validation reports

New methods have been added to the Java API to reset the validation report of a dataset, a table or of the datasets contained in a dataspace.

See `Adaptation.resetValidationReportAPI`, `AdaptationTable.resetValidationReportAPI` and `AdaptationHome.resetValidationReportsAPI` for more information.

Dynamic validation messages on foreign key filters

It is now possible to specify dynamic validation messages on programmatic filters defined over foreign key constraints.

See `TableRefFilter.getValidationMessageAPI` for more information.

Validation messages threshold

A new method has been added to indicate if a validation report item is related to a constraint that has reached the threshold defined by the property `ebx.validation.constraints.messages.threshold` in the EBX® main configuration file (`ebx.properties`).

See `ValidationReportItem.isValidationMessageThresholdItemAPI` for more information.

Limit validation messages in logs

The property `ebx.validation.report.maxItemDisplayedInLogs` has been added to the EBX® main configuration file (`ebx.properties`). It allows to specify the maximum number of validation items to display in the logs. By default this property is set to 100. See [Backward compatibility](#) for more information.

Data services

REST Toolkit

It is now possible to develop custom REST API using JAX-RS 2.1 annotations. A REST service operation is implemented by a Java method. The JSON media type is supported for the body content by using the Java API for JSON Binding (JSON-B) that can automatically map JSON to a Java type; for example a Data Transfer Object (DTO). Other media types are available, please refer to the documentation for more details. Extended components have been added to use the EBX® API:

- annotations to describe resources or to grant REST anonymous access to a given EBX® resource;
- injectable built-in objects that provide various useful APIs, for example to execute EBX® procedures on behalf of the current user or to build URLs without worrying about configuration (for example proxies or encoding);

- logging and debugging utilities.

Attention

After upgrading an existing EBX® configuration, a new main logging category should be configured. See [How to upgrade an installed environment](#) for more information.

See *REST Toolkit* for more information.

Built-in RESTful services

The built-in RESTful services have been improved on the following topics:

Data operations	Improves the JSON meta data value type for <code>osd:email</code>, <code>osd:html</code>, <code>xs:Name</code>, <code>osd:password</code> and <code>osd:text</code> by using a dedicated value type. The data value representation does not change for all operations. See <i>Content of simple type</i> for more information.
Paginated access	The pagination context has been updated to improve API performance. The URL for the <code>nextPage</code> has been modified, and the backward compatibility has been ensured. The <code>pageSize</code> parameter value upper bound limit has been removed (equivalent to the SOAP operations). See <i>Table parameters</i> for more information.
Authentication	When Basic authentication is activated and an authentication fails, it is now possible to deactivate the interaction by adding a header to the request. See <i>Request header X-Requested-With</i> for more information.
Token authentication	When using the EBX® default directory, the token creation prompts the user to change their password. The password change can be done through the new <i>Change password operation</i>. The token authentication method is now always supported and the EBX® property <code>ebx.dataservices.rest.auth.token.activate</code> is no longer supported. See <code>DirectoryDefault^{API}</code>
Check	The request header 'Content-Type' is checked. See <i>Content-Type header request</i> for more information.
Logging	Some REST operation logs have been migrated to a more appropriate new main logging category, identified by the <code>ebx.log4j.category.log.restServices</code> property key. See <i>Configuring the EBX® logs</i> for more information.

Performance

Data services

The REST select table operations have been improved for the [pagination](#).

Permissions

Permissions on user services have been added to the session cache scope. They provide enhanced responsiveness, especially on use cases where a lot of services are to be displayed.

This cache operates as before: it only takes user-defined permission rules into account, not programmatic rules (which are not cached since they are contextual and dynamic); and its life cycle depends on the context as described hereafter:

- In the UI, the cache is cleared for every non-ajax event (i.e on page display, pop-up opening, etc.).
- In programmatic procedures, the cache lasts until the end of the procedure, unless explicitly cleared (see below).

Attention

When modifying permissions in a procedure context (by importing an EBX® archive or merging a dataspace programmatically), the session cache **must** be cleared using `Session.clearCacheAPI`. Otherwise, these modifications will not be reflected until the end of the procedure.

Data modeling

Primary key evolutions

The data model publication process has been enhanced to detect modifications performed on primary key definitions in semantic tables. That is, a warning about the modifications performed on primary key definitions is now displayed when publishing a data model in the Data Model Assistant. Details of these modifications are displayed as well.

For more information about data model evolutions, see [Data model evolutions](#).

Location of Java sources

In the Data Model Assistant, it is now possible to define several locations for the Java sources to be used in a data model.

See [Data model properties](#) for more information.

Introspection API

- A new Java method has been added to retrieve the value of the `osd:checkNullInput` property defined on a field.

See `SchemaNode.isCheckNullInputAPI` for more information.

Persistence and databases

New supported database

SAP HANA® has been added as one of the *supported database engines*. Standard, enterprise, and express editions are supported for versions 2.0 and above.

Inter-database migration

It is now possible to fully migrate a repository from one database to another. The migration is automatic (it does not require technical intervention on the target database, aside from its global setup).

For more information, see *Inter-database migration*.

History anonymization

A new Java interface is available to anonymize a set of records in the history, according to a specified functional key.

For more information, see `RepositoryAnonymizerAPI`.

Renaming a column in the database

For mapped tables, it is now possible to programmatically rename a database column. The typical use case is when a schema type change creates a new column with an automatically suffixed name, such as 'name00'. While renaming was already possible through the UI, this new API allows automating the name change over several environments or many tables.

For more information, see `DatabaseMappingAPI`.

Miscellaneous

Other useful Java API

Getting the dataset reference	The new method <code>Adaptation.getDatasetReference^{API}</code> allows getting the <code>AdaptationReference</code> of a dataset.
System session on module registration	The new method <code>ModuleContextOnRepositoryStartup.createSystemUserSession^{API}</code> allows obtaining a new EBX® system session during the module startup.
Setting additional parameters to a Web Component	The new method <code>UIHttpManagerComponent.setAdditionalParameter^{API}</code> sets an additional specific parameter to the Web Component.
WebListener annotation	An EBX® module can now also be registered using the <code>@WebListener</code> annotation from Servlet 3.0. The requirements are the following: the annotated class must be placed in the EBX® module, it must extend <code>ModuleRegistrationListener</code> and the servlet 3.0 annotation scanning must be activated on the application server. See <i>Module registration</i> for more information.
D3 advanced setup	To perform the advanced setup of a D3 replica node, a new Java interface <code>ModuleRegistrationAdvancedD3^{API}</code>, is available. For example, when several inter-dependent broadcast dataspace are used, implementing this interface allows to create the required D3 delivery dataspace on the replica nodes.

Embedded third-party libraries

EBX® is packaged with its own third-party libraries with some new additions in this release. This simplifies the Java Runtime Environment 9 and above, and improves the application server installation.

Activation	The activation (<i>JSR-925</i>) library is embedded.
Annotations	The common annotations API (<i>JSR-250</i>) library is embedded.
JAX-RS	The CXF and JAX-RS API (<i>JSR-370</i>) libraries are embedded.
JSON	The Johnzon, JSON Processing API (<i>JSR-374</i>) and JSON Binding API (<i>JSR-367</i>) libraries are embedded.
XML	The Bcel, JAXB (<i>JSR-222</i>), SAAJ (<i>JSR-67</i>), Xalan, Xerces and Stax2 (<i>JSR-173</i>) libraries are embedded. The JVM option should be removed: <code>--add-modules java.xml.ws</code>.

Attention

Some of those third-party libraries may cause conflicts when deployed aside from `ebx.jar` or included into custom web applications. See *Embedded third-party libraries* for more information.

Version upgrade

In addition to the information provided in this release note, the document 5.9 Java API changes provides an exhaustive list of the Java API changes provided with this release.

Changes on supported environments

The chapter *Supported environments* has been updated to reflect the necessary upgrades detailed below.

Browser support	Microsoft Internet Explorer 8 and 9 are no longer supported. For Mozilla Firefox, the support of ESR 52 has shifted to ESR 60.
JVM support	Java Runtime Environment requirement is now JRE 17 LTS.
Oracle Database support	Minimum supported version of Oracle Database is now 19c.
PostgreSQL support	Minimum supported version of PostgreSQL is now 13.
Microsoft SQL Server support	Minimum supported version of Microsoft SQL Server is now 2016.

Backward compatibility

New behavior on server startup

To ensure that the EBX® repository is always consistent with the deployed EBX® modules on which it depends, the repository initialization process now waits endlessly for the registration of the expected modules.

If an expected module is not deployed for any reason, it **now must be declared** as such in the new property `ebx.module.undeployedModules`. Please note that the kernel logging category indicates which modules are awaited.

See *Declaring modules as undeployed* for more information.

A final consequence is that the previous property `ebx.module.timeInSecondsForModuleRegistration` is now ignored.

EBX® as a Web Component and iframes

In some circumstances, EBX® may add an internal `iframe` or `object`. This means that when using EBX® as a Web Component in iframes, custom JavaScript code relying on child/parent relationships may break after EBX® is upgraded.

To avoid this, it is recommended to:

use `ebx_getContainerWindow().parent` instead of `window.parent`,

use `webComponentIFrame.contentWindow.ebx_getContentWindow()` instead of `webComponentIFrame.contentWindow`.

For more information, see the documentation for methods **`ebx_getContainerWindow()`** JavaScriptCatalog.`ebx_getContainerWindow`^{API} and **`ebx_getContentWindow()`** JavaScriptCatalog.`ebx_getContentWindow`^{API}.

For the same reason, a `UIService` called as a Web Component in javascript (XHR) will no longer work. Such hack may have been used to implement the upload service. Instead, it is highly recommended to use `UserService`^{API} or **REST** `package-frame`^{API} service API.

Color settings

The [New Skin](#) design also involves a redesign of the colors used to customize the user interface. Some color parameters have been deleted since they were no longer used. The colors used on tables have been reset to their default value so that users can enjoy the new design before customizing it.

See *Colors and themes* for more information.

No raw HTML in a workspace title and navigation pane

The workspace title and the navigation pane no longer allow raw HTML: a text containing HTML tags is now escaped. This includes text generated by classes implementing the interface `UILabelRenderer`.

In some cases, such as hierarchy views and the display of hierarchy nodes by implementing `UILabelRendererForHierarchy`, HTML is still tolerated. To distinguish between these cases accepting HTML and the others, a new method `UILabelRendererContext.isHTMLForbiddenAPI` has been added.

Java methods to set a home icon

With the [New Skin](#) graphical chart, if a record form has tabs, the main tab is no longer displayed with a home icon. As a consequence, the existing Java methods `setHomeIconDisplayed` no longer have an effect and have been marked as deprecated.

For more information, see `UserServiceRootTabbedPane.setHomeIconDisplayedAPI` and `UIFormPaneWithTabs.setHomeIconDisplayedAPI`.

Removal of locale declaration at the module level

Locales can no longer be declared at the module level. Instead, locales should be declared globally in the *main configuration file*.

As a consequence, the elements `<locales>` should be removed from the `module.xml` documents and the missing locales should be added to the `ebx.locales.available` property of the main configuration file. If locales are still defined in a module, they will be ignored and EBX® will log a warning message.

For more information, see *Adding a new locale*.

Built-in RESTful API

The JSON meta data value type for `osd:email`, `osd:html`, `osd:password` and `osd:text` is no longer returned as a string value.

See [Data operation](#) for more information.

REST forward authentication method

Web application deployment on `/` path context is no more supported.

See *Web applications* for more information.

Workflow - Clear history of selected workflows

The purge process of history data has been improved in order to deal with larger volumes. It now consists of two distinct steps: the deletion of workflows and the deletion of remnant data. The first step works exactly like the previous

'clear from date' service, the only difference being that it only clears the 'Workflows' table in the history. The second step consists in executing the standard EBX® purge, so as to delete all remnants in the background.

See *How to clean workflow history* for more information.

Workflow - role controls when offering a work item

The behavior of the control of profiles when offering a work item has been modified: in the previous behavior, a single empty role (a role that does not contain any user) would lock the work item in an "error" state even though the list of profiles contains valid users.

Now, when the list contains:

- only users: no error
- users and roles (empty or not): no error
- only roles, with at least one containing users: no error
- only empty roles: the work item is set to the error state

Whenever a role is empty, a warning is saved in workflow logs for debugging purposes.

Using EBX® as a Web Component

When some entity parameters are missing, the web component may display an error. Previously, the web component would attempt to fill missing entity parameters based on the user's last visited dataspace.

Specifying the "breadcrumb" feature using the layout parameters `viewFeatures` and `recordFeatures` is now deprecated and ignored.

For more information, see *Using TIBCO EBX® as a Web Component*.

Data validation

As a consequence of the bug fix [#19375](#), the number of validation items displayed in the logs is now limited by default to 100.

For more information, see *Validation report logs*.

Data modeling

As a consequence of the bug fix [#17372](#), the data model compilation is now stricter regarding dynamic facets. That is, to prevent unexpected errors when working on data, a compilation error is now raised when a dynamic facet targets a field under a list that is not an ancestor of the field holding the dynamic facet.

For more information, see *Dynamic constraints*.

Exit policy

Error redirection is now deprecated and may be ignored by EBX®.

Strong encoding is no longer supported	Property <code>ebx.urlParameters.strongEncoding</code> is now ignored if specified in the EBX® main configuration file. Web access management tools must be configured to allow the following characters in URLs: A-Za-z0-9 / - _ . ! ~ * ' () %. These tools must also allow all percent encoded characters including %00-%1f, %7f-%ff, and %25.
XPath functions for validation search	It is no longer possible to use <i>XPath functions for validation search</i> (<code>osd:has-validation-item()</code> or <code>osd:contains-validation-message('xxx')</code>) in XPath filters defined on associations and foreign keys. That is, a compilation error is now raised when XPath functions for validation search are used in the context of an association or a foreign key.
Data model - button configuration in custom toolbar	In the configuration form of the Toolbar, the field 'Relief' has been removed. The relief configuration is now ignored and the buttons are flat.
Buttons default relief is now 'FLAT'	To set a border on a button, the method <code>UIButtonSpec.setRelief^{API}</code> must be used with the argument <code>UIButtonRelief.EMBOSED^{API}</code>.

How to upgrade an installed environment

In order to upgrade your version of EBX®, perform the following steps:

1. Back up your repository, including the RDBMS and the directory `ebx.repository.directory`.
2. Replace the `*.war` and `ebx.jar` files on your application server.
3. Add the new required `ebx-ui.war` file in your EAR or on your application server. See *Java EE deployment* for more information.
4. Add the new main logging category, in the `ebx.properties` file ,with the `ebx.log4j.category.log.restServices` property key. See *Configuring the EBX® logs* for more information.

Attention

If using the EBX® add-ons, make sure that the version of the add-ons is compatible with EBX® version `{releaseNote.version}` before upgrading. For the backward compatibility of the add-ons themselves, refer to the release note of each add-on.

Once an EBX® repository has been used with this version, using it with a previous version is not supported. Consequently, a backup must be created before upgrading, as described above, in order to maintain the possibility of downgrading later.

5.9.27 Closed issues

Core Engine

CP-22975

The following error can occur after performing some actions: 'Specified context must be in the same data model as the field node holding this foreign key constraint.'

This issue occurs after modifying a data model and attempting to retrieve the target table of a foreign key constraint from obsolete `SchemaNode` or `Adaptation` objects.

CP-27398

A deadlock can occur between the home status check and child retrieval.

Data Services

CP-27420

REST Toolkit exception handling can abort and return an HTTP 500 error.

If the Java REST service uses built-in exception handling and creates a method that does not declare the `@Produces` Java annotation with an "application/json" media type value, then an error from the service creates an HTTP 500 with the following message: 'No message body writer has been found for class'.

CP-27611

There is no JSON body response with the built-in 'select' operation when the query parameter `includeMetadata` includes an incorrect value.

This occurs even if the Accept HTTP header is defined with: `"*/"` or `"application/json"`.

Infrastructure

CP-17643

The custom module log threshold is not used when an `ebxFile` appender is specified.

The INFO threshold is used instead.

CP-18028

The module log level is set to DEBUG when using the module log configuration syntax from previous versions.

CP-26868

The log level cannot be configured for a specific module.

The specific module log level is always defined to DEBUG.

User Interface

CP-1503 [36316]

Accessing a permalink to a dataspace in the scope of a node leads to a "Page not found" error.

CP-27482

Some UI pages might display an incomplete product version.

CP-27718

After applying a filter, it is not possible to delete records where an association is used.

5.9.26 Closed issues

Core Engine

CP-26978

A thread can access and initialize a dataspace before the Procedure that created it has been committed.

Before the Procedure that creates a dataspace has been committed, another thread can access the newly created dataspace through its parent and initialize it. This results in inconsistencies in the cache as the initialization is done based on the persistent state in the database that doesn't exist yet.

Distributed Data Delivery

CP-26895

Primary cluster broadcast timeout is not configurable.

CP-26896

Broadcast aborts when replica delivery snapshot is already closed.

User Interface

CP-26125

The 'Access data' service default behaviour was changed and the option is missing.

CP-26687

An issue occurs in the UI when loading a saved filter.

5.9.25 Closed issues

Core Engine

CP-26312

An error can occur when searching with a value greater than Integer .MAX_VALUE.

In some environments, an error is randomly displayed when creating a filter criterion over an integer field with a value greater than Integer .MAX_VALUE.

Infrastructure

CP-25651

The Log4j2 SMTP appender is not being sent.

This results in emails configured to be sent when there is an error in the EBX Kernel, or Workflow log files to not be sent.

5.9.24 Closed issues

Java EE integration

CP-25771

There is a SOAP message Type Mismatch error on traditional WebSphere Application Servers.

The SOAP messages cannot be de-serialized and return a 500 error code.

REST Toolkit

CP-25889

A 500 error code is returned when parsing request that includes an incorrect BigDecimal value.

When the value correspond to an illegal argument, such as 5f5 an internal server error is returned.

User interface

CP-25795

A blank page displays when redirecting to another user service and an exit policy is defined.

5.9.23 Closed issues

Core engine

CP-24626

When adding a new column in a historized table, its default value is added to the existing records in the history.

CP-24944

When extending `SchemaDocumentation`, displayed links are not clickable.

CP-25519

The file stream is not closed.

When using the Windows platform, certain temporary files cannot be deleted until the server is shutdown.

Data services

CP-24961

A `PathAccessException` occurs when importing XML.

The exception causes the import to fail when a record contains an empty group that comes directly after a list of groups.

Data views

CP-25582

CSV import fails on hidden fields.

Documentation

CP-25092

The double quote usage for the Windows path in the Tomcat installation note is incorrect.

CP-25573

The French language PDF documentation is missing accent characters.

User interface

CP-2041 [33485]

Fields are unexpectedly filled automatically while creating a record through an association.

When the association is based on an XPath predicate, and when the XPath predicate is composed of several atomic predicates separated by the "or" logical operator, the fields in the creation form should be pre-filled but not read-only.

CP-17509

An error occurs when using a web component URL that selects a perspective and a branch.

CP-25262

A blank page displays when redirecting to another user service.

5.9.21 Closed issues

Core engine

CP-22187

Empty string displayed as invalid character(!) in the user interface.

For an enumeration field, an empty string is displayed as invalid in the user interface (! symbol). This happens when data is programmatically set.

CP-22283

Supplementary Unicode characters are incorrectly serialized and incorrectly exported to XML archive

Unicode characters in range [#x10000 - #x10FFFF] are incorrectly split into two characters, when exported to an XML archive.

Data validation

CP-18807

In a user service, an exception may be thrown on page redisplay.

The User Service API can be used to customize the form for creating a record. If a record contains a foreign key, an unexpected exception may be thrown, when the user service is redisplayed.

CP-23502

The record validation report is computed for each tab to be displayed in a record form.

The header of a record's form displays the up-to-date validation report of the related record. Each tab of the form has its own header. As a consequence the validation report is computed as many times as the number of tabs to be displayed in the form. This can lead to performance issues if the table contains many constraints.

Documentation

CP-21198

Incorrect directory users XPath from documentation samples.

The documentation samples include the wrong directory in an XPath sample.

Java EE integration

CP-24028

Startup fails if Apache Log4j 2 is deployed twice on the server.

5.9.20 Closed issues

Core engine

- CP-18010** **TestEnvironment raises an error when used with an h2 database from version 1.4.200.**
The H2 database stopped supporting the MVCC option in version 1.4.200. This causes an error when using TestEnvironment.
- CP-23686** **A deadlock can occur when the primary key index is not loaded.**
A deadlock can occur when a table's primary key index is not loaded.
- CP-23931** **When creating a new record containing a multivalued complex targeted by a validation rule, new values are not taken into account.**
When creating a new record containing a multi-valued complex field targeted by a validation rule, new values are not taken into account.
- CP-23978** **File META-INF/com/onwbp/org/apache/logging/log4j/core/config/plugins/Log4j2Plugins.dat is missing.**
After upgrading to log4j2, the META-INF/com/onwbp/org/apache/logging/log4j/core/config/plugins/Log4j2Plugins.dat was missing from common JAR file.

Data services

- CP-23306** **Upgrade CXF library**
The Apache CXF library was upgraded to version 3.5.2.

Data validation

- CP-23685** **ClassCastException happens when validating a validation rule using aggregated lists.**
A ClassCastException occurs when a table includes a complex data type where the maximum number of values is unbounded and the table's validation rules check aggregated lists.

Data views

- CP-23500** **Missing documentation about possible issue when zooming in or out.**
Large records do not display correctly in in EBX Views.

Dataspaces & History

- CP-16773** **An error occurs when anonymizing list fields.**
If you invoke RepositoryAnonymizer#anonymizeHistory with a consumer that modifies an aggregated list element, then the following exception occurs when constructing the DDL statements:
java.lang.ArrayIndexOutOfBoundsException: 37
- CP-23598** **The comparison view should show icon difference changes.**
The dataspace comparison view should be improved.

Documentation

- CP-23689** **Error on documentation indexing when a custom language is set as default.**
When a custom language is set as default, an error is written in the log file on application server startup:
"java.lang.IllegalArgumentException: No analyzer implementation declared for this language".

User interface

- CP-21157** **Confirmation message in UserServiceDeclaration.OnDataset is not working.**
The confirmation message in UserServiceDeclaration.OnDataset does not work.
- CP-22129** **Normal Redirection Exit Policy URL.**
From EBX® version 5.9.13, special characters must be escaped in the URL value set for the Normal Redirection Exit Policy.
- CP-23417** **[Chrome/FF68ESR/Edge] A Javascript error occurs when clicking on a multi valued field.**
When users click on a multi-valued field, a Javascript error occurs.

CP-23749

Submit button in legacy user service redirects to the login page.

Clicking a submit button in a legacy user service redirects to the login page instead of the running user service.

Users & Permissions

CP-23099

A procedure executed by 'ebx-system-user' should not trigger any access rules

As mentioned in the documentation: "A System session has no associated roles: internal permission resolutions bypass role-based permission rules and more generally any permission rule."

5.9.19 Closed issues

Core engine

CP-23488

Potential data loss if a field is specified as 'hiddenInViews'.

If, for a field, the data model specifies 'Hidden in all views' (`osd:defaultView/hiddenInViews` set as `true`), then when a record is written to the database, the value of the field is erased. If it concerns a primary key field, then it will not be possible to reload the record.

5.9.18 Closed issues

Core engine

CP-22965

The method `AdaptationTable.lookupFirstRecordMatchingPredicate` is not optimized for relational mode.

Data workflows

CP-3594 [22558]

The mail content generated by the built-in "Send an email" service may be inserted twice for a locale.

REST Toolkit

CP-23412

Setting servlet path to root causes errors.

Setting servlet path to root causes errors when creating URI builders

5.9.17 Closed issues

Core engine

CP-21787	Upgrade Commons IO 2.5 library to version 2.11.0
CP-21831	Some UTF-8 characters are not supported. Some UTF-8 characters encoded within 2 chars are not supported.
CP-22062	Supplementary Unicode characters are persisted incorrectly. Unicode characters in range [<code>#x10000</code> - <code>#x10FFFF</code>] are incorrectly split into two characters, when translated to the XML persistent format. This causes an error when later trying to read them from the database.
CP-22454	Inter-database migration from HANA fails Migrating from HANA to any database fails with this message: Caused by: <code>java.lang.IllegalArgumentException: Unsupported type: 2011</code>
CP-22836	Memory leak when creating and removing a large number of integers.
CP-22893	Version v2.x of H2 database is not supported. An error occurs with the message <code>org.h2.jdbc.JdbcSQLException: Table "CONSTRAINTS" not found</code>

Data modeling

CP-3087 [23461]	UIBeans on fields of type "osd:password" are not imported when importing an XSD in the data modeler.
CP-21387	The value context is null in the ConstraintOnTable#toUserDocumentation method.
CP-21867	Property 'viewForAdvancedSelection' is duplicated if the default combo-box widget is overridden. The property 'viewForAdvancedSelection' is duplicated when publishing a data model that defines a field overriding the built-in combobox widget in combination with a combobox selector. This issue occurs only when importing such a data model, then republishing it.
CP-22362	On startup, data model compilation should wait for the end of initialization of registered addons modules.
CP-22527	The dropdown list displaying the library components should be sorted.
CP-22605	On PostgreSQL, error after fixing blocks containing invalid XML characters. This message is displayed: "org.postgresql.util.PSQLException: ERROR: portal "C_xx" does not exist"
CP-23009	Association node is considered as a value function. The method isValueFunction() is returning true for an association node. It should return false since an association does not define any computed value.

Data services

CP-20629	The documentation for RESTEncodingHelper API is not clear.
CP-22368	The dataspace tree view is unavailable when a reverse proxy is activated. When a reverse proxy is activated, the dataspace tree view is not displayed, and generates browser connection errors.
CP-22627	The REST built-in insert operation used for update must consider the 'byDelta' parameter. The PUT update operation for a single record manages the 'byDelta' parameter, but this parameter has no effect when using the POST insert operation with 'updateOrInsert=true' parameter.

Data views

CP-2333 [28549]	A newly created record is not displayed in the grid view of association. In the grid view of an association element, when users create a new record, the record is not displayed. It should be automatically associated and displayed in this view.
-----------------	---

Dataspaces & History

CP-22125	Error when anonymizing foreign key fields in history.
CP-22134	Error when anonymizing lists in history.

Distributed Data Delivery (D3)

- CP-22284 **D3 replica node throws `IllegalStateException` when registering a broadcast trigger on startup.**
The `D3NodeAsSlaveOnStartup.registerBroadcastTrigger(AdaptationHome, Class<? extends D3ReceiveBroadcastTrigger>)` always throws `IllegalStateException` with message "This object is not in update mode."
- CP-22314 **Forbidden to close snapshot, with no reason message.**
When a snapshot corresponds to the current D3 snapshot for a delivery dataspace, the access permission is hidden and no reason message is displayed.
- CP-22351 **`D3Broadcast.getDeliveryModes()` returns an empty list if there is no registered replica.**
Even if the delivery mode is defined in each delivery profile, an empty list is returned when the registered replica table is empty.

Infrastructure

- CP-22359 **File `i18n_xx.zip` of the 'ebx-manager' webapp is corrupted.**
- CP-22528 **User interface is broken when reverse proxy is activated.**
The user interface is broken when a reverse proxy is activated: the front-end and the back-end are in different http(s) protocols.
- CP-23114 **The value of property `ebx.https.support` should be `true` by default.**

Java EE integration

- CP-21852 **Upgrade JDOM 1.0 library to version 2.0.6.**
- CP-22983 **JDOM 2.0.6 library should be upgraded to version 2.0.6.1**

REST Toolkit

- CP-21188 **`RequestUriFilter` does not properly handle base URI definition according to built-in data services lineage and modules public path prefix property**
When the `_ebx.module.publicPath.prefix_` property and the built-in data services lineage are defined, their URI path value are concatenated resulting in wrong URI builds.
If no built-in data services lineage and no modules public path prefix are defined, then default values must be applied.
* server URI path: /
* built-in data services URI path: /ebx-dataservices
* base URI path: the one from the HTTP request
* request URI path: the one from the HTTP request
If no built-in data services lineage is defined but there is a modules public path prefix, then it must be considered:
* server URI path: modules public path prefix
* built-in data services URI path: modules public path prefix + /ebx-dataservices
* base URI path: modules public path prefix + partial base URI path which begin with the servlet name segment
* request URI path: modules public path prefix + partial request URI path which begin with the servlet name segment
If there is a built-in data services lineage, then it must be considered:
* server URI path: built-in data services lineage URI path minus the servlet name segment
* built-in data services URI path: built-in data services lineage URI path
* base URI path: server URI path + partial base URI path which begin with the servlet name segment
* request URI path: server URI path + partial request URI path which begin with the servlet name segment
- CP-21779 **REST Toolkit application throws `NullPointerException` during providers registration.**

User interface

- CP-18798 **An error occurs when accessing history from an association targeting a table in another dataset.**

CP-19653	In a paginated tabular view, the grid edit comes back to the first page. In a paginated tabular view, when the user navigates several pages and clicks the grid edit option, the first page is displayed.
CP-19856	The page for selecting backed-up user does not display in some cases. If the backed-up user feature is enabled in a custom directory, the page for selecting a backed-up user does not display when using either of: * a custom login page, * a URL with parameters: example: [http://localhost:8080/ebx/?login=testAdministrator&password=testAdministratorPassword] * SSO
CP-21105	Encoding mismatch when enabling file upload for the form with UserServiceDisplayConfigurator
CP-21186	The 'Create' button is missing for association tables of newly-created records. In case a record was created using the 'Create' button of a foreign key selector, some actions are temporarily missing from the toolbars of its association tables.
CP-21509	Some characters are converted to HTML entities in the breadcrumb. In the row at the top of the record view, when displaying a record with a special character in its label, it gets displayed as an HTML tag.
CP-22041	The URL computing documentation must mention the data lineage configuration when using a reverse proxy. When using a reverse proxy (particularly in https), it is necessary to configure the data lineage property. This should be mentioned in the URL computing configuration.
CP-22064	Erroneous scope of the comparison service in a workflow task.
CP-22130	An empty value for workflow action in ebx.properties hides "Data workflows" and "Workflow models" As the default value for workflow activation is "true", the "Data workflows" and "Workflow models" categories should be available, even if this property is not set.
CP-22214	Error when calling <code>UserTaskBeforeWorkItemCompletionContext.reportMessage</code> Clicking on the error should not have any effect, but in this case, it displays a blank page with an unexpected error.
CP-22295	Horizontal scrollbar is not displayed in the dataset view to select a dataspace.
CP-22349	[All browsers] A JavaScript error occurs when expanding a computation rule. When users click on the "Expand" button on "Computation rule", a JavaScript error occurs.
CP-22453	The language selector is broken, when using Internet Explorer.
CP-22808	Upgrade third-party library CKEditor to version 4.17.1
CP-22898	Opening a work item can fail when a data context variable is too large.
CP-22899	A record is not automatically selected in the combo box after its creation through the 'Create' button of a foreign key's combo box. This happens when the creation form is a user service declared by <code>UserServiceRecordFormFactory#newUserServiceForCreate(ForCreate)</code>. To overcome this issue, services returned by this method should implement the new API <code>UserServiceForCreate</code>.

Users & Permissions

CP-1876 [29663]	Unclear error when calling <code>Session.isUserInRole()</code> with a null parameter. Calling <code>Session.isUserInRole()</code> with a null parameter leads to an unclear 'Unexpected error in request computation.' error. Error management in such a case should be improved.
CP-3935 [21388]	A field with a default view defined as hidden should not be exported in CSV or XML exports.
CP-22354	Error in administration pane if some users have no password
CP-23096	A read-only user is able to edit the workflow diagram. If a read-only user is set "Writer" permission on a workflow, he/she is still able to edit the workflow diagram.

5.9.16 Closed issues

User interface

CP-22130

Empty value for workflow action in ebx.properties hide "Data workflows" and "Workflow models"

As default value for workflow activation is true, the "Data workflows" and "Workflow models" categories should be available even if property is not set.

5.9.15 Closed issues

Core engine

- CP-21758 **Error on inter-database migration for mapped table with field of type `osd:dataspaceKey` or `osd:datasetName`.**
- CP-21849 **Poor performance of history queries when exporting or calling the REST 'select' operation.**
- CP-21856 **The default constraint on primary key should be blocking for all operations.**
A default pattern is defined on primary key fields if no other patterns are defined in the data model. This default constraint is checked in the user interface, and then blocks any erroneous value but is not blocking on some operations (e.g. during an import). Invalid values can be set during these operations but cannot be corrected.
This default pattern should be blocking for all operations.

Data modeling

- CP-21791 **An exception occurs when deleting a record that contains an inherited field.**
A fatal error may appear in the dataset when deleting a record.
This issue occurs on tables that contain an inherited field that must be unique.
- CP-22077 **Control policy on enumerations is ignored when importing an XSD in the DMA.**
The control policy set for enumerations is lost after importing a data model.

Data services

- CP-21637 **The generated WSDL for `getChangesOnDataSet` and `replicationRefresh` operations are incorrect for certain conditions.**
The generated WSDL can contain invalid XML characters (such as space, slash or comma), if the model is packaged in a 'war' file and the webapp is deployed in 'unpack wars' mode. This case happens when the servlet container is unable to translate the given virtual path to a path of the data model.

Dataspaces & History

- CP-16707 **Cannot access the history record of a merged dataspace.**
From the table history view, when double-clicking a history record of a merged dataspace, an error message is displayed: 'No record found for the predicate [...]'.

Documentation

- CP-22018 **The installation note for JBOSS EAP 7.1 specifies the use of an XA data source, instead of non-XA.**

User interface

- CP-21806 **The error message on login is not user-friendly when using the default directory.**
When using the EBX default directory, and login fails, the login page displays "HTTP error 401".
- CP-21886 **The warning 'Changes will be lost...' is not displayed in the presence of validation errors.**
After submitting a form that raises a validation error, no warning that changes will be lost is displayed when quitting the form.

5.9.14 Closed issues

Core engine

CP-20571	Method <code>CfOccurrence.isDeleted</code> fails if the container table has been truncated.
CP-20828	A blank workspace is displayed when the 'Seniority (days)' field contains special characters. In the 'Administration' area, when users create the 'Seniority (days)' field with special characters then re-access the 'Task scheduler' dataset, a blank page is displayed and an exception is thrown in the log file.
CP-20851	Modification of facet name should impact the FCT metadata table. For a mapped field, when the name of a facet is changed (for example, from <code>xs:length</code> to <code>xs:maxLength</code>), the description of the facet is not updated in FCT. As a consequence, all following data model compilations detect a change and uselessly issue a DDL.
CP-20882	Inter-database migration fails if the source is SQL Server. If the source is SQL Server, the inter-database migration fails while migrating sequences.
CP-21015	Poor performance of the workflow history purge when using a PostgreSQL database.
CP-21106	The number of historized tables with a similar name in a repository is limited to 256.

Data modeling

CP-21255	SqlChecker error with data models if they have circular dependencies, including one data model in error.
----------	---

Data services

CP-5130 [18463]	REST URL in operation response must better manage 'disableRedirectionToLastBroadcast' parameter. When the request is applied on D3 dataspace. 1. If 'disableRedirectionToLastBroadcast' parameter is used in request, the URL in JSON response must propagate it. 2. If D3 redirection to a snapshot is activated, the URL in JSON response must keep the original dataspace parameter.
CP-20911	NPE occurs when a REST built-in service selects a history table with a foreign key field to a non-historized table. A <code>NullPointerException</code> occurs when a REST built-in service selects a history table that contains a foreign key field to a non-history table.
CP-21510	Error while fetching history with built-in REST service with a tableRef to a different dataset/dataspace. The error "Specified context must be in the same data model as the field node holding this foreign key constraint" occurs while querying history, with a REST select operation for a table that contains a foreign key a to table belonging to a distinct dataset/dataspace.

Data views

CP-20706	Exporting data from an association with custom view should not export all fields from association table. Considering an association link (definition: By foreign key) with a custom view: while exporting data from the associated table, all table columns are getting exported with the default column position. Usually, the export contains only the columns of the current view.
----------	---

Data workflows

CP-2239 [31108]	The data context variable standing for output parameter of validation service is not displayed. After defining a data context variable for 'Output parameters' of the '[built-in] Validate a dataspace, a snapshot or a dataset' service, this variable is not displayed.
CP-19487	Error when using service extensions in perspectives. When accessing service extensions in perspectives, we get the below error: Perspective action is badly configured: action 203 in perspective validation-overview
CP-19752	When using the 'Duplicate' service in a workflow user task, primary key fields that are also foreign keys are not editable.

CP-21390

Spelling error in a message for workflows.

The following French message for workflows contains some spelling errors :

Impossible d'ouvrir le bon de travail à cause d'une erreur inattendue. Veuillez contater votre administrateur.

It should be instead :

Impossible d'ouvrir le bon de travail à cause d'une erreur inattendue. Veuillez contacter votre administrateur.

Dataspaces & History

CP-21011

Compilation errors when several threads concurrently access the history of a table.

On startup, for nodes of complex type, error messages appear, regarding compilation of history schemas.

Distributed Data Delivery (D3)

CP-21433

Resetting all schemas can deadlock with D3 event notifications.

Documentation

CP-20351

FactoryConfigurationError on WebSphere AS 9 on start-up

A FactoryConfigurationError occurs while trying to parse the JNDI entry for EBX_REPOSITORY.

Import / Export

CP-3442 [27043]

An exception occurs while importing some special characters, using the CSV built-in import.

User interface

CP-825 [37252]

When setting the 'Node category' field to 'Hidden' for a table, under the 'Action' menu of an associated data set, 'Categories' is not shown.

CP-17343

An authentication error is not displayed correctly in the default login page.

When the authenticateUserFromLoginPassword() method of a custom directory throws an

AuthenticationException, a "HTTP error 500" message is displayed in the page displayed to the user.

The message specified when creating in the AuthenticationException should be displayed instead of the meaningless above message.

CP-20904

The authorization header is not correctly escaped

The authorization header contains unexpected characters, which may prevent the user from logging.

CP-21046

When closing a user service form, the user is not redirected to the right view.

When closing a user service form with the default 'Close' button, the user is not redirected to the right view.

This occurs when the record was opened from a work item that selects a custom hierarchical table view.

In that case, the user is redirected to the default view instead of the custom one.

CP-21192

Fatal error may occur when accessing a view.

Fatal error occurs when accessing a view, with a logged StackOverflowError.

CP-21507

Avatar in header should be wider

Avatar size is too small; user initials are too close from avatar border.

5.9.13 Closed issues

Core engine

- CP-20392 **ObjectAlreadyExistsException when registering a scheduler cron task, if it already exists.**
An exception is thrown when a module registers several times a scheduler cron task with the same identification. A warn log should only be added.
- CP-20546 **An error can be silently dropped when executing an SQL request.**

Data modeling

- CP-20123 **The auxiliary content of the data model is not reused, when creating a snapshot during the publication of an embedded data model.**
Toolbars, entity mappings and services are not published when creating a snapshot during the publication of an embedded data model.
- CP-20274 **The XSD generated by the Data Model Assistant is not formatted.**
The datamodel XSD file no longer has any tabs/spaces to make the XML human-readable.

Import / Export

- CP-20109 **XML Export is not formatted.**
The exported XML misses tabs for formatting.

Java EE integration

- CP-20339 **Fix the JMS section and improve JDBC section in the JBoss EAP 7.1.x installation note example.**
In the JBoss EAP 7.1.x installation note example.
The JMS section is incorrect since the `EBX_JMSConnectionFactory` is defined as a queue and should be specified in a `<connection-factory>` element.
The JDBC section has been improved to specify sample as for PostgreSQL.

REST Toolkit

- CP-20186 **Too many SocketExceptions due to browser connections management with Tomcat.**
When the browser manages connections, it can close some of them. The server detects `SocketException` with "broken pipe", "socket write error" message and logs in `restService` category of the EBX® server. For Tomcat server, it catches and rethrows the exception with `org.apache.catalina.connector.ClientAbortException`.

User interface

- CP-18601 **The horizontal scroll bar is not displayed, in a form opened from a work item.**
- CP-19995 **NPE when creating a record through a table reference declared by a BeanDefinition.**
- CP-20168 **Textarea fields should not be limited to 1 million characters.**
- CP-20460 **When a custom login page is implemented, the application locking page redirects to the login page.**
When custom login page is implemented, application locking page is redirecting to standard login page.
The expected behavior is that the application locking page should redirect to the custom login page.
- CP-20464 **[IE11] 'Access denied' returned to a JavaScript function in a portal integration.**
'Access denied' returned to a JavaScript function when using IE 11 in a portal integration.

5.9.12 Closed issues

Core engine

CP-197052

An error occurs when building an XPath filter that uses a validation predicate.

An error occurs with a `NullPointerException` when building an XPath filter that uses a validation predicate.

Data views

CP-19687

Filter on link table may disappear when creating a custom view.

When creating a custom view that specifies a filter on link table as a dimension criteria, the filter disappears after creating the view, saving then reopening.

Distributed Data Delivery (D3)

CP-19973

A communication error in D3 federation broadcast is not detailed in console and log.

When a broadcast in federation mode is configured, if the communication with a replica node does not work, the stack information is not added to the D3 primary console and D3 log.

Java EE integration

CP-18044

The shipped Apache Xerces library may lead to a StackOverflow error on custom code.

The shipped Apache Xerces library may lead to a `StackOverflow` error on custom code that validates an XML file. This issue must be fixed by upgrading the shipped Apache Xerces and Xalan libraries (plus any related libraries).

User interface

CP-20022

Global help URL may be invalid with some configurations.

The global help URL may be invalid when property `ebx.module.publicPath.prefix` is set in file `ebx.properties`.

CP-20025

The path of the cookie used by the EBX® help search is not set correctly.

The path of cookie `ebx_BaseURLForDocSearch`, which is used by the EBX® help search form, is usually set to `'/'`.

When more than one EBX® application is installed on the same host, this may cause cookies to conflict.

5.9.11 Closed issues

Core engine

- CP-18782 **Mapped mode fails with the H2 1.4.200 database when a field name is a reserved word.**
CP-18946 **An error occurs when requesting the history of a table in all dataspace.**

Data services

- CP-19491 **Incorrect permission evaluation with REST built-in service, when updating a record from 'overwrite' to 'inherit'.**
When changing the inheritance mode of an 'overwriting' record back to 'inherit', the permission to evaluate should be 'Delete a record' instead of 'Overwrite inherited record'.
- CP-19503 **Label and details URL for foreign key field are unavailable on REST history content.**
When a user requests the history content through the REST built-in service, the label and URL of details for foreign key fields are unavailable. However, this information is displayed in the user interface.

Data validation

- CP-19254 **A foreign key with a blocking constraint prevents from merging dataspace.**
A foreign key referencing another dataset of the same dataspace prevents from merging if the 'blocksCommit' policy of the constraint is set to 'onInsertUpdateOrDelete'.
- CP-19375 **OutOfMemoryError if the validation report contains too many messages.**
An OutOfMemoryError occurs when a dataset has too many messages, due to printing the validation report into the logs.
- CP-19423 **Blocking foreign key constraint during merge.**
If the 'blocksCommit' property is set to 'onInsertUpdateOrDelete' on a foreign key field, then the merge operations may be blocked even if there are no errors on that foreign key.
- CP-19561 **Validation error appears in the record form, even for hidden fields.**
Even when a field is hidden programmatically, the validation error displays in the record view

Documentation

- CP-19646 **Bronken links in pdf documentation if the anchor contains a point character.**
When an anchor contains the point ('.') character, the pdf link is incorrect. The product documentation contains 2 broken links.

User interface

- CP-16694 **When using UserServiceNext in a UserServiceExtended<DatasetEntitySelection>, the user is not redirected.**
When using UserServiceNext in a UserServiceExtended<DatasetEntitySelection>, the user is not redirected.
- CP-18404 **Search with programmatic label on foreign key not working.**
Searching with a programmatic label on a foreign key does not work, in the combo box component.
- CP-18416 **UILabelRendererForHierarchyContext.setDefaultLinkEnabled does not work.**
The method UILabelRendererForHierarchyContext.setDefaultLinkEnabled(false) does not disable the default preview link for hierarchy node.
- CP-18766 **When creating a record from a foreign key, the predicate filter is ignored.**
When creating a record from a foreign key, the predicate filter is ignored.
The value of the nodes referenced by the predicate should be initialized
- CP-18794 **Performance issue with combo boxes, due to Ajax prevalidation.**
When Ajax prevalidation updates are executing on a form, it prevents every combo box of the form from displaying; this leads to performance issues.
- CP-18913 **On completion of a workitem displayed in a root session web component, the user is redirected to the exit policy URL instead of the component redirection URL.**
On completion of a workitem displayed in a root session web component, the user is redirected to the exit policy URL instead of the component redirection URL.
When no exit policy URL is defined, the user is correctly redirected to the component redirection URL.

CP-19006	A technical error occurs for a relative 'login URL' parameter, if 'useLocalUrl' is true. A technical error occurs when accessing the default URL if the 'Login URL' parameter is set to a relative path, along with <code>ebx.servlet.useLocalUrl=true</code> in <code>ebx.properties</code>.
CP-19089	[IE11] 'Access denied' returned to a JavaScript function in a portal integration. 'Access denied' returned to a JavaScript function when using IE 11 in a portal integration.
CP-19287	[Firefox] An alert box can be erroneously displayed when leaving the page. An alert box can be displayed when leaving the page, whereas no modification was made to the current form. It occurs on Firefox and from a record opened from a foreign key preview button.
CP-19310	A white screen is displayed when accessing a foreign key selector view. A white screen is displayed, and a <code>NullPointerException</code> is thrown, when accessing a foreign key selector view.
CP-19332	Error when using relative path in <code>addJS_*</code> methods in <code>WidgetWriter</code>. Using relative path in the class <code>WidgetWriter</code> is not possible in this following methods: * <code>addJS_getNodeValue</code> * <code>addJS_setNodeValue</code> * <code>addJS_setNodeMandatoryIndicator</code> These methods should be able to detect if the input path has already been normalized. If not, the path must be normalized.
CP-19354	An error page is shown when application locking is enabled, and using SSO non-admin login. An error occurs when application locking is enabled and a custom directory is used for SSO authentication by using <code>RemoteUser</code> or <code>UserPrincipal</code> in the method: <code>com.orchestranetworks.service.directory.Directory#authenticateUserFromHttpRequest</code>.
CP-19376	Cannot set the 'mandatory' indicator for field, when using a custom widget on a record form. On a simple record form (without custom <code>UIForm</code>), if a custom widget is set to be displayed on a given field: in the widget, the method to set the 'mandatory' indicator does not work.
CP-19460	Browser does not spellcheck the content of HTML inputs. HTML inputs are used for long texts, and the user might want to let the browser spellcheck such input. An option should be added in administration, to enable spellcheck on HTML inputs.
CP-19669	Error when REST request contains an XPath predicate in the URI When users request a GET method containing an XPath predicate, an error occurs.

Users & Permissions

CP-19329	Permissions for table view user services are not evaluated when displaying history. Programmatic permissions for table view user services are not evaluated when displaying history.
----------	---

5.9.10 Closed issues

Data services

CP-18785

REST built-in select operation with 'includeSortCriteria=true' parameter aborts.

The REST select operation aborts if the following conditions are all true:

'includeSortCriteria=true,' the 'sort' parameter is defined, and the pagination mechanism is activated.

User interface

CP-17469

EBX® becomes inaccessible when a redirection restriction is specified in the exit policy.

The application becomes inaccessible when a redirection restriction is specified in the exit policy.

It occurs when the property `ebx.servlet.useLocalUrl` parameter of `ebx.properties` is set to 'true'.

CP-18826

Fatal error on perspective navigation.

When moving a service from a dataset to another in the same dataspace via perspective actions, a fatal error occurs.

[^StackTrace.txt]

CP-18935

Improve the CSRF token mechanism for better protection against CSRF attacks.

5.9.9 Closed issues

Core engine

CP-18609

If the JavaMail jar is missing, an error message should explicitly state it.

When deployed on Tomcat, if the JavaMail jar is not installed, startup fails without relevant information.

CP-18677

Upgrade script to 5.7 assumes that the table name starts with the repository prefix.

If a repository has run on EBX® 5.0 to 5.2, and used history or relational tables, these have been created without a repository prefix. However, installation script TSA.6 - issued for upgrading a repository to 5.7 - assumes that the name of any relational table starts with the repository prefix. The upgrade to 5.7 fails with this message:[SqlChecker] Table EBX_MY_TABLE does not exist.

Data modeling

CP-18509

Validation messages on nested lists may not be displayed.

Field-level validation messages are not displayed when the field is part of a multivalued complex type that is itself under a complex type having the "Read & Write" access property.

CP-18527

Records can be duplicated, even when that action is forbidden on the data model.

Users set 'Duplicate record' on the table of a data model to 'Forbidden', but in the dataset, records can still be duplicated.

Data services

CP-18589

The REST forward should not be limited to use the built-in operations.

The REST dataservices introduction chapter mentions a REST forward authentication limitation. The limitation restricted to the built-in services is incorrect, it should be removed.

Data validation

CP-18637

Mandatory message constraint not displayed for list types.

Multi-valued fields never display their mandatory message constraint.

CP-18690

Uniqueness constraint validation messages are not displayed in record form.

Uniqueness constraint messages at record-level are not displayed if the dataset is not validated.

Data views

CP-7201 [12927]

An error occurs after creating a new 'User Defined Attribute' with Hidden/Read-only 'Type' field

In a data set, when the Type field of Catalog of User Defined Attributes table is Hidden or Read-only, the user can create a record without a 'Type' value into the 'Catalog of User Defined Attributes' table. After the user creates a record having a field with that type, an error occurs and an exception is thrown in the log file.

CP-18713

The 'Delete' button is misplaced in the case of an occurrence with an invalid multi-valued foreign key.

On a multi-valued foreign key: if users add an invalid occurrence, then submit the form, the 'Delete' button of that occurrence is misplaced.

Data workflows

CP-17629

The icon path for the workflow diagram should be relative.

The path for the icon is absolute and not relative. Thus, when testing in the cloud for example, the icon does not display correctly.

Miscellaneous

CP-18686

Event broker aborts on firing dataspace creation event, if the creation has aborted.

When a dataspace aborts on creation and if a subscriber has subscribed to the dataspace creation event, an exception is thrown.

User interface

CP-2203 [27189]

A custom service is erroneously displayed in a group when defining a toolbar with a built-in service group.

A custom service is erroneously displayed in the last add-on service group when defining a toolbar with the built-in "Root custom services" group.

The subgroup name must appear in a specific part with all root custom services. If at least one add-on is activated, the addon submenu must appear in first position.

CP-16725

Icons missing after upgrading.

After upgrading to the new version, some icons do not display due to a caching issue.

Although it can be fixed by cleaning the browser cache, it is impractical.

CP-17813

In a programmatic record label, 'UILabelRendererContext.isHTMLForbidden()' never returns true.

In a programmatic record label, `UILabelRendererContext.isHTMLForbidden()` never returns true.

CP-17911

HTTP parameters are lost when clicking on the preview button of a URL field that contains a permalink.

On table view, when clicking on the "Preview" button of a URL field that contains a permalink, HTTP parameters are lost and the user is redirected to the login page.

CP-17987

A dataspace user service that contains a dynamic object with a foreign key field fails when executed on a snapshot.

CP-18032

When the page becomes obsolete, clean the list of widgets kept in the session's page history.

CP-18166

A technical error occurs if a relative "login URL" parameter is defined.

A technical error occurs when accessing the default URL if the "Login URL" parameter is set to a relative path.

CP-18221

Incorrect display of table form row in inner tabbed panes.

When a tabbed pane is included in an other pane, the tab table form row is displayed in a div with an unnecessarily large width.

CP-18336

Unwanted consecutive slash characters in EBX® URLs.

Unwanted consecutive slash characters appear in EBX® URLs, leading to URLs being blocked by security tools.

CP-18505

The sub-page's name ("History" and "Duplicate") of a dataset disappears from the navigation pane when opening it twice.

When users open a sub-page (History/ Duplicate) twice on a dataset, the name of that page disappears from the navigation pane.

CP-18519

An error occurs when changing the locale in a workitem opened from a UserServiceExtended.

An error occurs when changing the locale in a workitem opened from a `UserServiceExtended` using `UserServiceNext.nextWorkItem`.

The error only occurs if the service was launched in the context of a custom perspective.

CP-18521

Application locking does not work when connecting to EBX® with credentials as HTTP parameters.

CP-18643

Password field always causes a message prompt when leaving creation form.

This is the case even when the form is empty.

CP-18659

Widgets on boolean not seen as updated when updated via a TableTrigger.

The radio button group widget is not seen as updated in the GUI, when updated via a `TableTrigger`.

CP-18691

The 'system' user should be allowed to modify dataspace labels.

5.9.8 Closed issues

Core engine

CP-18296

An exception occurs while renaming a mapped column under a group through the API.

Data modeling

CP-17835

The "Trim white spaces" property is not inherited from a simple data type.

When the "Trim white spaces" property is set to false on a simple data type, and a field reuses this type, this property is not inherited, even though it looks like it is in the DMA. Also, the property is still not considered when overloading the value.

Data services

CP-552 [36564]

Error when using built-in REST service with filter by record label.

A NullPointerException occurs when using the built-in REST service to get table data with filter by predicates on a record label (osd:contains-record-label).

CP-1120 [36858]

REST 'get history' returns an unexpected error when the table has locale 'zh-cn'.

When a record has the locale zh-cn, the REST call to get the history of a table returns an unexpected error.

CP-17747

Incomprehensible error message while inserting data using REST data services.

Such a message is returned as soon as there is a node under the table path in the base URI, which is related neither to the record primary key, nor to the technical primary key.

CP-17766

Predicates are not encoded when using the URIInfoUtility.

The predicate part of a resource URL must be encoded, if generated by the URIInfoUtility.

The bug is detected when generating historical data when serializing a ContentHolder.

CP-17881

Provide more detail when authentication is denied because of multiple methods in a REST request.

When a REST request is received with multiple authentication methods configured, only the message "Authentication failed" is returned. No information regarding the cause is provided, even in the log files at debug level.

A reason for the failed authentication should be given.

CP-18562

Property `ebx.http.authorization.header.policy` should not impact basic authentication.

Currently setting `ebx.http.authorization.header.policy` from file `ebx.properties` impacts all authentication modes.

Standard "Basic" authentication mode then becomes incompatible with most REST clients.

This setting should only concern the "Token Authentication Scheme".

Data workflows

CP-17216

According to the documentation, the data context wizard should be available by default, but it is missing.

The context wizard is missing for scripts and user tasks.

User interface

CP-533 [35889]

The sub-page's name ("Information" and "Permission") of a dataset disappears from the navigation pane when opening it twice.

When users open a sub-page (Information/ Permission) twice on a dataset, the name of that page disappears from the navigation pane.

CP-16524

Blank space appears when using a web component inside a tabbed pane.

A custom form that uses a tabbed pane with a tab displaying a web component will have its layout broken. It appears as though its display shifted to top, leaving a blank space at the bottom.

CP-17115

Theme color for the selected item in the perspective navigation tree is not applied.

The theme color for the selected item in the perspective navigation tree is not applied.

CP-17622

Embedded Web Components modify the parent EBX® breadcrumb.

When a Web Component is embedded in another EBX®, it modifies its breadcrumb once loaded.

CP-17655

HTTP parameters are lost while accessing a permalink through a custom login page.

CP-17656	Permalinks generated through the GUI can be broken. When a custom login page is declared, the permalink to access a record is broken. [http://localhost:8080/ebx/?instance=toto&xpath=%2Froot%2Ftable&branch=toto]
CP-17671	Erroneous date in a form due to the application server and the browser being on different time zones.
CP-17765	An error occurs in a user service whose form contains a submit button named 'submit'. An error is displayed when executing a user service which contains a form with a submit button called 'submit'.
CP-17788	Table header icons should have light color on a dark background. The background color and font color of the table header can be customized in the administration. However, when the font color is "light", the icons of the table header do not change accordingly. They remain grey, whereas they should be white.
CP-17853	The task name is erroneous after running service "Hide in the workflow progress view". When users run the service "Hide in the workflow progress view", on the "Workflow model steps" screen, the task name is erroneous.
CP-17976	Within a user service, cannot select or close the foreign key selector in combo box. The foreign key selector of a combo box, when used in a user service, seems to be broken.
CP-18282	It is not possible to enter a carriage return on a multi-line text field in grid-edit mode.
CP-18287	[Perspective] The "Perspective pane selected item" color is not working. The color selected for "perspective pane selected item" option is not working. The default applied color is the one from "Main" option.
CP-18289	In grid edit, it is impossible to select edited cell text with keyboard. In a standard form, user can select a text of a focused textarea by using SHIFT+LEFT/UP/RIGHT/BOTTOM. This cannot be achieved in grid edit.
CP-18397	Display subtabs on several lines in a custom form pane. Display subtabs on several lines in a custom form pane when there are too many tabs to fit on a single line. It was the behaviour prior to EBX® versions 5.9.
CP-18465	The space around error page is not in accordance with the selected density

Users & Permissions

CP-17971	An exception occurs when a non-admin user modifies the label of a dataspace through the API. An exception occurs when a non-admin user modifies the label of a dataspace through the API.
----------	--

REST Toolkit

CP-18370	REST Toolkit returns HTTP error status 500 with a null body request. The JSON parser aborts and returns a HTTP error status 500, when a request is sent, using POST method with a Content-Type set to application/json and a request body set to null.
----------	---

5.9.7 Closed issues

Core engine

- CP-17527 **A deadlock may occur on startup on a JBoss EAP server.**
When using a JBoss EAP server, a deadlock may occur on startup.
- CP-16455 [37260] **Unclear error message when an `OperationException` is thrown during the "apply last modifications" action.**

Data modeling

- CP-2425 [28754] **The method `SchemaDocumentationContext.getSession` can return null erroneously.**
- CP-17579 **`ClassCastException` referencing field from an included schema in a computation rule.**
`ClassCastException` referencing field from `DaqaMetadata` in a computation rule.
- CP-17593 **Constraint on the "source location" field in the DMA should return a warning instead of an error.**
- CP-17491 **Error at the data model compilation when inheriting a field from another data model.**
An error occurs at the data model compilation when a field of the data model inherits from a field in another data model through 2 foreign keys.

Data views

- CP-17541 **The 'Display the message box' button is not shown upon the first time accessing a fatal dataset after publishing.**
When users access a fatal dataset for the first time after publishing, the 'Display the message box' button is not displayed.
- CP-17537 **The message box is shown inappropriately when opening a deleted record.**
When users open a deleted record, an error is shown. When opening the message box, an inappropriate message is displayed.

Documentation

- CP-17638 **Custom module log threshold documentation is incorrect.**
The property `ebx.log4j.category.log.module.xxxxxx` defined in the main configuration file `ebx.properties` should be `ebx.log4j.category.log.wbp.xxxxxx`.

Messages & i18n

- CP-17533 **The `UserMessage` JavaDoc is not fully compliant with the `MessageFormat` pattern.**
When using a `UserMessage` the pattern syntax is not fully compliant with `MessageFormat` as described in the documentation. For example, it is currently not possible to declare a format type and a style pattern to a format element.

User interface

- CP-17631 **An error occurs when the authorization header contains special characters.**
An error that prevents the user from logging in occurs when the authorization header contains special characters.
- CP-16733 **Faulty display when trying to display an association widget several times in a `UserService`.**
- CP-17545 **Cross origin Javascript error.**
When EBX® GUI is displayed in an `Iframe`, when the `Iframe` container is not in the same domain than EBX®, a cross origin Javascript error can occur.
- CP-17536 **An incorrect message is shown after running "Refresh data model" under 'Development tools' in the 'Administration' area.**
When users run 'Refresh all data models'/'Refresh updated data models', an incorrect message is shown.

CP-878 [37123]

The grid edit button on association tables is sometimes not displayed when it should be and inversely.

The grid edit button is not displayed after creating a record on an initially empty association table. Inversely, it is still displayed after deleting all records from the table.

CP-17561

An error appears when saving a record on a user service launched from a record that belongs to another table.

An error appears when saving a record on a user service launched from a record that belongs to another table. The 'An error occurred while displaying field. Please contact your administrator.' message is displayed near a foreign key field when the user service page is closed.

CP-17540

The message under 'Display the message box' is misplaced when an error occurs on the 'Web Component link generator' preview.

When users open an erroneous preview in the 'Web component link generator' screen, the message under 'Display message box' is misplaced.

5.9.6 Closed issues

Data workflows

CP-17015 **The session interaction is not valued in the `AccessRule` execution.**

Java EE integration

CP-17392 **When deploying EBX® over Weblogic, the Jersey library should be prevented from scanning REST Toolkit services.**
When deploying EBX® over Weblogic, the Jersey library should be prevented from scanning REST Toolkit services.
Consequently, the scanning operation has to be disabled.

User interface

CP-16925 **Unchecking a checkbox on a Boolean field sets the field value to null instead of false.**
Unchecking a checkbox on a Boolean field sets the field value to null instead of false.

CP-17114 **[IE10] The background color of the 'Confirm password' label displays incorrectly when creating a new user in the Users table under the Administration area.**
On IE10, when creating a new user in the Users table of the Directory, under the Administration area, the background color of the 'Confirm password' label is displayed incorrectly.

CP-17313 **[IE10] Cannot edit the user password, the button does not react to clicks.**
On IE10, when the password is not empty, the user cannot click on the "Change password" button, nothing happens - as if the button was disabled.

CP-925 [36282] **The number of messages in the message box accumulates when an error occurs.**
The number of messages in the message box accumulates when users receive an error message in the Web component link generator.

Users & Permissions

CP-17339 **The `ActivationContext.setDisplayForLocations()` behavior needs to be clarified.**
When calling the `ActivationContext.setDisplayForLocations()` with the `ActionDisplaySpec.HIDDEN_IN_DEFAULT_MENU` parameter without specifying any toolbar location, the user service is still displayed in the default menu.
As it could be expected that such a call could hide the service in that default menu, the current behavior must be clarified in order to avoid any misunderstanding.

5.9.5 Closed issues

Core engine

CP-1247 [36231]

Exceptions can occur while requesting data while customer modules are not fully compiled or have been unregistered.

Exceptions can occur while requesting data while customer modules are not fully compiled or have been unregistered.

CP-17156

An error occurs when publishing a data model declaring a replication with a name longer than 32 characters.

An error occurs when publishing a data model with a replication that has a key length greater than 32 characters. The max key length should be 64 characters.

Data services

CP-17227

HTTP Request Authentication scheme is performed even if a built-in authentication is tried.

During the authentication activation / deactivation feature development, a condition has been removed and must be added anew. If a built-in authentication scheme can be applied to the given request, then the HTTP Request Authentication scheme and the following anonymous authentication schemes must not be tried.

CP-17197

REST Toolkit: UnsupportedOperationException error thrown when combining standard authentication, POST verb and application/x-www-form-urlencoded content-type.

An UnsupportedOperationException error is thrown during the standard authentication process.

The exception is caused by a replacement of the provided password by an obfuscated one and it must be done for security reason.

Java EE integration

CP-17273

Failure to deploy ebx-ui.war on weblogic 12c R2.

A MANIFEST.MF entry defining the ebx.jar where 'about' is not valued.

Without this value, the deployment of, at least, ebx-ui.war cannot be successful.

User interface

CP-17286

When a user has a favorite perspective, a display error occurs while accessing a perspective action with scope data.

CP-17270

Workspaces in sub-sessions with a scope greater than the node replace the root workspace.

If a web component with a scope data, dataset or dataspace is displayed in a workspace, then only the workspace content of this web component is displayed.

5.9.4 Closed issues

Core engine

CP-1961 [31455]

The default log file for a given category should not be created when the logs are redirected elsewhere.

Data modeling

CP-16910

The list of data model versions is empty if it has not been previously published.

The section that displays the versions of a data model is empty if the data model has not been previously published.

Data services

CP-16393

Lineage base URL makes EBX® inaccessible.

Lineage base URL makes \EBX® inaccessible.

Data views

CP-2063 [29780]

A StackOverflowError occurs when using a hierarchy view.

Data views - hierarchies

CP-16756

Performance issues while building a hierarchy tree.

New optimizations have been implemented in the hierarchy tree construction algorithm.

CP-17085

Stack overflow occurs while performing a 'Find in hierarchy'.

On a big tree, a stack overflow occurs while performing a 'Find in hierarchy'.

Data workflows

CP-16739

The filter is kept when switching between the custom perspective action and the advanced perspective.

The filter is kept when going from an inbox as a custom perspective action to the inbox in the advanced perspective.

User interface

CP-16932

When duplicating a record through an association, its primary foreign keys that target other tables are in read-only.

When duplicating a record through an association, its primary foreign keys that target other tables are in read-only. They should be in read-write instead.

CP-17000

An error occurs when accessing history from an association.

CP-17033

[IE][Edge] Unable to access a table content when the initial request contains a parameter whose value is very long.

The content of a table cannot be displayed if using the Microsoft Internet Explorer or Edge browsers when the initial request contains a HTTP parameter whose value is very long.

Nothing is displayed in the workspace pane.

CP-16632

Impossible to compute the size in a tabular view in some cases.

When the size of a tabular view on a large table is already computed, if the size becomes unknown - e.g. because a search criterion has changed - then the "Compute size" menu item is not displayed.

CP-16663

The user is logged-out after completing a work item opened in a Web Component from a filtered inbox view.

The user is logged-out after completing a work item opened in a Web Component from a filtered inbox view.

CP-16656

When using the link workflow.workItem.link.allocateAndStart the user is not redirected to the work item when he does not have access to the advanced perspective.

When using the link workflow.workItem.link.allocateAndStart the user is not redirected to the work item when he does not have access to the advanced perspective. He is instead redirected to the start page of a custom perspective.

Users & Permissions

CP-16850

Tracking information is not valued in the Access Rule execution.

The tracking information declared in a workflow user task definition is null while building the navigation pane.

CP-16719

Performance issue while computing the list of services accessible in a toolbar when the add-ons are activated.

new-ui

CP-17059

Under certain conditions a NPE can occur when selecting the dataspace tree.

When using the REST UI service on the dataspace version 1 for a tree operation, and under certain conditions, a NPE can occur when selecting the dataspace tree.

REST Toolkit

CP-17057

When a JSON body request is required but is not available, or the format is incorrect, a 500 HTTP status code is returned.

When no body request is sent by the client and a JSON body request is required, a 500 error is returned instead of a 400 bad request.

When a JSON body request with bad format is sent by client, a 500 error is returned instead of a 400 bad request.

5.9.3 Closed issues

Data modeling

CP-610 [36975]

Impossible to compare 2 records if the table contains a data complex type with the "Access properties" as "Not a dataset node".

When comparing 2 records, if the table contains a data complex type which sets the "Access properties" to "Not a dataset node", then it does not work.

The compare service should work normally. The data complex type that does not have the permission should be hidden from the compare screen.

Data services

CP-16482

Comparing with filter `isResolvedMode` returns a different result than from the Web.

In unresolved mode, the comparison result of two records by a workflow using a built-in service is different from the one using the public API `DifferenceHelper.compareOccurrences(Adaptation, Adaptation, boolean)`.

CP-16560

In the compare service, the session is sometimes null when trying to retrieve it from a `UILabelRenderer`.

In the compare service, the session is sometimes null when trying to retrieve it from a `UILabelRenderer`. It happens when the service is displaying the label of a record that has a foreign key referencing a table that uses the `UILabelRenderer`. The record contains that foreign key's label as part of its default label.

CP-16638

When setting a toolbar with `isForTable=false` in a `UserServiceDisplayConfigurator`, table-level services are offered instead of record-level services.

Data views

CP-1710 [32335]

When a user who has no rights to share views duplicates a view, it is shared with the same profiles as the original view.

When a user who has no rights to share views duplicates a view, the view is shared with the same profiles as the original view. These users should not be able to share any view, even by duplicating a shared view.

CP-16514

A `java.lang.StackOverflowError` occurs when creating a pruned hierarchy over a link table.

A `java.lang.StackOverflowError` occurs when creating a pruned hierarchy with a filter on the dependency link table.

CP-16670

A `ClassCastException` occurs on a text search.

The error occurs if the search is performed on a table reference list which is itself contained in a list. Also, the error occurs only if a validation filter has been set and a validation has been performed.

Data workflows

CP-1000 [35068]

A user is able to launch a workflow from a URL without the required permission.

A user is able to launch a workflow from a manually built URL without the required permission.

Import / Export

CP-571 [37210]

The CSV export service must be optimized when enabling the user-friendly option.

The CSV export service performance must be optimized when enabling the user friendly option.

CP-1249 [36820]

An error that occurs when deleting the temporary file for exporting may be silently dropped.

When there is an error when exporting data, if the temporary file deletion raises an error, the latter may be silently dropped.

User interface

CP-558 [35636]	The preview link for an association table displayed in a user service fails with a blank screen. The preview link for an association table displayed in a user service fails with a blank screen and a logged <code>java.lang.NullPointerException</code> error. The latter occurs when this association is configured to be displayed in a modal in the data model.
CP-837 [36899]	[LAYOUT][IE10] The 'Set as favorite perspective' icons are not aligned with the 'Select perspective' menu. When users open the 'Select perspective' menu on IE10, the 'Set as favorite perspective' icons are not left-aligned as they are on other browsers.
CP-996 [36378]	Clicking the search button on an association throws an exception when used within a user service.
CP-1055 [36391]	An error occurs when performing actions on an association by an XPath predicate opened within a user service. An error occurs with a <code>NullPointerException</code> when performing actions on an association by an XPath predicate opened within a user service. The error occurs: - when using the "Delete" built-in service - when using the "Create a record" built-in service and clicking on "Close" or "Save and Close" buttons - when opening a record from the table and clicking on "Close" or "Save and Close" buttons
CP-1065 [35638]	The associate or detach actions end with an error for an association displayed in a user service. The associate or detach actions end with an error for an association over a link table displayed in a user service.
CP-1265 [36313]	Accessing a dataset via a permalink in the node scope results in an erroneous empty page. If there is a field at the root of the dataset, accessing it via a permalink in the node scope leads to an erroneous empty page.
CP-5429 [17579]	If a hierarchy view is applied in a filtered foreign key selector, records that do not match the filter can be selected. If a foreign key has a filter, when the user opens its selector and applies a recursive hierarchy view, then it is possible to select all the nodes of the hierarchy, including those that do not match the filter.
CP-16316	Null session in <code>UILabelRenderer</code> when triggered from the comparison screen.
CP-16339	EBX® does not work if we specify the following parameter in <code>ebx.properties</code> in order to deploy the static resources on another server:port than the server:port of servlet. EBX® does not work if we specify the following parameter in <code>ebx.properties</code> in order to deploy the static resources on another server:port than the server:port of the servlet: <code>ebx.externalResources.http.host=otherhost.</code>
CP-16342	EBX® does not work with the HTTP Servlet path parameter set in admin. When the HTTP Servlet path parameter is set in admin configuration, EBX® doesn't work.
CP-16349 [35636]	An error occurs when performing actions on the grid edit for an association by an XPath predicate in a user service. An error occurs with a <code>NullPointerException</code> when performing actions on grid edit for an association by an XPath predicate opened in a user service. The error occurs when the user clicks on the "Close" or "Save and Close" buttons in the modal opened for grid edit.
CP-16379	Backed-up user page does not display when implemented in a custom directory. When a custom directory is implemented and a user has one or more backed-up users, the backed-up user selector page does not display after a successful login.
CP-16390	Record navigation arrows are only displayed for the records on the first page. Record navigation arrows are only displayed for the records on the first page. They should also be displayed for records on the other pages.
CP-16401	The dataset selector does not open automatically. When a dataspace is selected and more than one dataset can be selected, the dataset selector should open automatically.
CP-16447	The <code>trackingInfo</code> value, when defined on a perspective action, is not available in the session. The <code>trackingInfo</code> value, when defined on a perspective action, is not available in the session. The <code>getTrackingInfo()</code> method returns null.

CP-16471	State of selected records on custom perspectives is kept when switching to the advanced perspective. Access built-in services to select more than one record on a custom perspective, then switch to the advanced perspective, the state of selected records is kept.
CP-16529	A user service 'Close action' does not work in a workflow user task. The 'Close action' of a user service does not work in a workflow user task: the result screen contains only the workflow 'Comment' link and the 'Reject' and 'Accept' buttons.
CP-16580	A concurrency conflict happens when a record is updated through a trigger in the parent session. A concurrency conflict happens when a record is updated through a trigger in the parent session. Such an issue happens if the update is done in a child dataspace and if the record in the parent session is sharing its revision with its parent dataspace.

Users & Permissions

CP-16472	Job title updated for capitalization in the default directory. There is no need to update the job title for capitalization in the directory. It leads to unwanted behaviors, ex: VP, Vp.
----------	---

5.9.0 fix B closed issues

Core engine

CP-879 [34239]

osd:label requests on non-labelled fields need to be optimized.

Requests such as `osd:contains-case-insensitive(osd:label(/.label), 'ddd')` on a field (label) which is not a labelled field should be optimized.

CP-16281

AdaptationTreeOptimizerSpec_RemoveDuplicates fails to remove some records.

The deletions made by `AdaptationTreeOptimizerSpec_RemoveDuplicates` may not be effective (and the optimization incomplete) when the modified record causes the persistence block to become unshared.

Data modeling

CP-796 [37026]

The method `SchemaNodeRelationships.getReverseRelationships()` returns duplicated relationships.

The method `SchemaNodeRelationships.getReverseRelationships()` returns duplicated relationships involving inter-dataset relationships.

This issue occurs only if data models are published using the DMA.

CP-928 [36487]

An error occurs on the 'Define criteria' page when attempting to add a criterion on an empty table.

When users add a criterion on the 'Define criteria' page of an empty table, a blank pop-up displays.

CP-1104 [36807]

An error occurs when deleting a snapshot of a data model in the DMA.

When a user deletes a version on 'Manage version' of a data model, a white page is displayed. This issue occurs if the version to delete is a snapshot that is selected in the DMA.

Data validation

CP-1175 [36996]

Method `ValueContext.getNode()` in a foreign key filter returns the wrong node when creating a record.

In the context of a foreign key filter, the method `ValueContext.getNode()` returns the table node instead of the foreign key field when creating a record directly from an association.

CP-1426 [36389]

The error message that indicates why the validation has stopped is inaccurate.

The error message that indicates why the validation has stopped reads "validation stopped because of too many errors" even if the severity of the concerned messages is not 'error'.

Data views

CP-612 [36910]

It is not possible to occult a record in child datasets if this record does not comply with blocking constraints.

On a child dataset, it is not possible to occult a record that does not comply with blocking constraints. This issue occurs if the error management policy of an existing constraint is modified and set to blocking mode and if existing records have values that do not comply with this constraint.

CP-629 [35616]

Without sufficient permissions on the advanced perspective, users cannot open a web component with the scope as a selected node.

A user without sufficient permissions on the advanced perspective (but who has permissions on other perspectives) cannot display a web component with the scope as a selected node.

Loading the advanced perspective causes a 404 HTTP error.

CP-16309

A blank workspace is displayed when accessing a table if its toolbar contains an invalid XPath.

When accessing a table in a dataset, a blank workspace is displayed and an exception occurs in the log file if the toolbar contains an invalid XPath value.

Data workflows

CP-860 [36558]

Primary key violation error persisting data in the workflow history.

Primary key violation error persisting data in the workflow history when a work item is offered several times to the same profile.

Dataspaces & History

CP-689 [36906]

A fatal error occurs when importing an archive file into the dataspace.

On a dataspace which had some dataset deleted and then re-created, when users export an archive file with the 'The updates with their whole content' or 'The updates only' mode activated and import this file again, a fatal error occurs.

Distributed Data Delivery (D3)

CP-981 [37125]

Cluster broadcast aborts on the D3 replica node when the delivery dataspace exists but is not registered.

The broadcast aborts when it is realized from the D3 primary node, and if the delivery dataspace exists but is not registered from the D3 replica configuration.

Java EE integration

CP-16419

EBX® does not start on Websphere Application Server 8.5.

EBX® does not start on Websphere Application Server 8.5 when using the Enterprise Application Archive shipped in the product package. Multiple `ClassNotFoundException` errors are written in the application server log file.

User interface

CP-584 [36935]

[All browsers] The warning message should not be shown when modifying a workflow diagram and double-clicking on 'Final step'.

Users open a diagram of a workflow and modify it then double click on 'Final step'. An unnecessary warning message is shown.

CP-606 [36956]

Decrease spacing between the DateTime field buttons.

The DateTime field buttons take too much space in version 5.9.0 due to the new CSS style for buttons.

CP-622 [36647]

Validation report disappears when the user clicks on "Revalidate".

When the validation report is opened and the user clicks on "Revalidate", the root node of the dataset is displayed instead of the validation report.

This only occurs when a dataset contains one or more fields at the "/root" node.

CP-651 [37212]

An error is displayed in a perspective when trying to perform an 'access data' action on dataset-level fields.

CP-655 [36280]

The 'Page not found' warning displays when using the 'Merge' service in the web component link generator.

On the 'Web component link generator' screen, when users select the 'Merge' service and a dataspace, the 'Page not found' warning displays when clicking the 'Preview' button for the first time.

CP-682 [35954]

[All browsers] Some fields on the 'Web component link generator' should be reordered.

'Dataset node / Filter (XPath)', 'Scope', 'View publication' should be put under 'Dataspace' and 'Dataset' fields on 'Web component link generator'.

CP-720 [36784]

In an association table, if the toolbar has no button on the left, then the right part is aligned to the left.

CP-725 [36970]

The custom login page that is defined in 'Entry configuration' is not handled.

Defining a Custom login page through 'Entry configuration' is not supported.

In order to test this bug, first create a custom login page, then set the url of this page in "Administration/Advanced Perspective/Session Configuration/Entry Configuration" and save.

When an EBX® is launched in a new tab, the custom login page should be displayed.

CP-759 [35455]

Defining a tabularView element without any columnchild leads to a broken page.

Defining for an association node a tabularView element without any columnchild leads to a broken page when opening a record in a table view. A `java.lang.NullPointerException` error is additionally logged.

CP-768 [37006]

JavaScript error (undefined table).

If a web component, with a full scope, is displayed in the workspace, an error occurs when the Exit policy equals "_parent", "_top" or "_blank".

CP-776 [36288]

A wait icon appears when users 'Access data' using the 'Root session' option in the 'Web component link generator'.

A wait icon appears when users 'Access data' using the 'Root session' option without service parameters in the 'Web component link generator'.

CP-826 [37142]	[All browsers] The "Add a criterion" field is displayed partially when opening the table filter pane. The "Add a criterion" field is displayed partially when opening the table filter pane.
CP-828 [36370]	[LAYOUT][IE10] The star icon is not aligned with others in perspective selection. The star icon is not aligned with others in perspective selection on the IE 10 browser.
CP-845 [36472]	The confirmation message does not pop up after generating Java.
CP-869 [37124]	[IE10] The expand button of a sub-menu does not display. The expand button of a sub-menu does not display.
CP-897 [34600]	The 'Grid edit [@SncGridEdit]' service in a toolbar does not work. When configuring the 'Grid edit [@SncGridEdit]' service in a toolbar (current context or specific context), there is no toolbar on the associated table.
CP-941 [34112]	[LAYOUT] [IE] Some UI problems occur on the 'Create dataset' screen. When users create a dataset using the Package data model, some UI problems occur.
CP-1112 [36920]	An error message should be displayed when users access an EBX® instance by using a non-existent snapshot. When users access an EBX® instance by using a non-existent snapshot via a permalink web component, an error message should be displayed.
CP-1158 [37057]	A technical error occurs when using HTTPS with an erroneous web access configuration. A technical error occurs when using HTTPS when this protocol support is disabled in the main configuration file.
CP-1266 [37058]	The external resources configuration is erroneously used to redirect to the user interface module. The external resources configuration (<code>ebx.externalResources.http.path</code> or <code>ebx.externalResources.https.path</code>, depending on the protocol used) is erroneously used to redirect to the user interface module.
CP-1405 [36854]	Users should be redirected back to the Web component link generator page after the Merge process ends. Users should be redirected back to the Web component link generator page after merging.
CP-16298	[All Browsers] The border of the 'Define your formula' pop-up is not in the correct color. The border of the 'Formula' text box is both blue and red when users enter an invalid value into the text box.
CP-16310	Unexpected fields display when selecting the 'Workflow' service on the 'Web component link generator'. On the 'Web component link generator', when users select the '[built-in] Workflow' service, 'Dataspace', 'Dataset' and 'Snapshot' are still displayed.
CP-16355	An unexpected error occurs on IE or Edge browsers when enabling single sign-on with a specific directory. An unexpected error occurs with IE or Edge browsers when enabling a single sign-on with a specific directory. The "An unexpected error occurred during hybrid mode initialization" message is displayed in a dialog box.

Users & Permissions

CP-1447 [37237]	Regression in the Directory API. It is impossible to connect to EBX® with a <code>UserReference</code> that would not be mapped to the login used on the login page.
CP-1998 [32114]	While creating a record through an association, pre-filled fields should always be read-only. While creating a record through an association based on a foreign key, the foreign key field is supposed to be pre-filled and read-only, if the foreign key is part of the record primary key, it is pre-filled but read-write.

5.9.0 fix A closed issues

Core engine

- [30784] **Publishing a data model after enabling replication could result in a blank screen and prevent users from logging in.**
Publishing a data model after enabling replication could result in a blank screen when the data model publication fails because an existing value for a string field in the replicated dataset is larger than the maximum length set for the field in the model.
A `java.lang.NullPointerException` is logged and this error could prevent users from logging in.
- [35837] **Very long duration for the 'select all records' action from a hierarchy view.**
When a user selects all records from a hierarchy view, and nodes are already collapsed, the process is very lengthy when the schema contains an `AccessRule` on records and fields. If not, the duration is normal.
Note: when a user expands the hierarchy nodes and selects all records, the duration is normal.
- [36912] **Improve the API to offer a way to reload an add-on index under the protection of EBX® write-locks.**
Add method `AdaptationTableBridge.getAddonTableIndex(AdaptationTable, AddonTableIndexDefinition, boolean)`.
- [36169] **Validation reports remain in memory when closing the dataspace until the dataspace is deleted.**
If the validation report is loaded in the Java cache using strong references, it remains in the Java cache until the dataspace deletion. As soon as the dataspace is closed, the strong references should be removed.
- [36299] **Calling the `SchemaLocation.getFileOrNull()` method may lead to an error.**
Calling the `schemaLocation.getFileOrNull()` method may lead to a `java.lang.NullPointerException` error.

Data modeling

- [34544] **[LAYOUT] The border shape of the Help icon on the 'Dataspace' field is wrong.**
On the 'New dataset' page of the model publishing process, the border shape of the Help icon is square instead of a circle as the guideline specifies.
- [34545] **[LAYOUT] The background color of a parent button is not changed when creating a permission.**
When creating a permission, the background color of a parent button is not changed if users focus on a field.
- [34551] **The 'Module name' and 'Path in module' fields are not red when an error occurs on them.**
On the 'Include a data model' page, users save the record without defining any value on the 'Module name' and 'Path in module' fields, then the labels of the 'Module name' and 'Path in module' fields are not red.
- [34559] **[LAYOUT] The title is displayed on the modal when running the 'Export xsd' service.**
The title is displayed on the modal when users run the 'Export xsd' service on a data model.
- [36442] **Incorrect data types are listed when creating a new field on the DMA.**
On a data model with included data models, when creating a new field, under 'Data Type', when we switch from 'Included data models' to 'Current data model', the combo box still lists the types from 'Included data models'.

Data validation

- [36916] **A validation message with a "fatal" severity is added when accessing a record with too many messages.**
A validation message with a "fatal" severity is displayed in the validation report of a dataset when a user edits a record which contains too many validation messages.
This issue only occurs if the container table defines a constraint on a table with a record level check, and if the maximum number of validation messages is reached when this constraint checks the record.
- [36511] **Duplicated mandatory error message on a foreign key field.**
Duplicated mandatory error message on a foreign key field when a specific constraint is declared on this field.

Data views

- [34218] **[All browser] The icon level node on a hierarchy view displays inconsistently.**
When users create a hierarchy view, the icon level node shows an inconsistency between the titles and the record view.

- [34988] **A published view can be deleted from an HTTP request by any user.**
A published view can be deleted from an HTTP request by any user, even if he is not the view owner.
- [35345] **A new record is not displayed after the 'Create a record toolbar' action if the target is a Web component.**
When users create a record by using 'Create a record toolbar', on which the 'Target' is defined as a 'Web component', the created record is not automatically displayed in the table view.
- [35364] **[WRONG CONFIGURATION] The 'Merge view' toolbar still displays when its defined dataspace has been closed.**
The 'Merge view' toolbar that uses 'Web component' as a target is still displayed although its defined dataspace has been closed.
- [35550] **A record on the table view is not updated when using the 'Access data [@default]' service of the toolbar.**
From the table view, access a record by using the 'Access data [@default]' service of the toolbar, on which the 'Target' is set to 'Web component', then modify that record, it is not updated on the table view.
- [36363] **A blank page displays when pressing the 'Esc' button on a record view.**
Users open a hierarchy node. On the record form, when pressing the 'Esc' button from the keyboard, an empty workspace is shown.
- [36399] **Hierarchy view dimension filter is not applied when the "Display non-matching children" option is activated.**

Data workflows

- [29782] **When launching a dynamic sub-workflow invocation with no sub-workflow, the workflow is stuck waiting for a sub-workflow state.**
When no sub-workflow is launched in a dynamic sub-workflow invocation, it goes to the next step without throwing an exception.
- [34231] **When running the 'Export as PNG/SVG' service on the workflow diagram, the exported file should be downloaded.**
When users access the Workflow diagram service, then run 'Export as PNG/Export as SVG', the exported file should be downloaded.
- [34770] **The breadcrumb disappears after closing the comment pop-up in a workflow.**
In a data workflow, when users accept a task which displays the breadcrumb, click on the comment button then close the comment pop-up, the breadcrumb disappears.
- [34937] **[LAYOUT] [All browsers] 'Specific icon url' overlaps the text box in the 'Create a new priority' screen.**
In the 'Create a new priority' screen in Workflows under 'Administration', the 'Specific icon url' text overlaps the text box.
- [36266] **When a work item is opened, the associated breadcrumb item can be clicked, but nothing happens on click.**
When a work item is opened, the associated breadcrumb item seems to be clickable, but nothing happens on click.
- [36341] **[Workflow model] A white page is displayed after exporting a PNG from the workflow diagram.**
After the user clicks to export a PNG from the workflow diagram, a white page is displayed.
- [36357] **A white page is displayed after exporting an SVG from the workflow diagram.**
After the user clicks to export an SVG from the workflow diagram, a white page is displayed.

Dataspaces & History

- [36037] **The "restore from history" service fails with a blank screen when the data model contains a non-terminal group.**
The "restore from history" function fails with a blank screen when the data model contains a group whose access properties parameter specifies it is a non-terminal node. A `java.lang.NullPointerException` error is simultaneously logged.

User interface

- [17573] **Field value is reset in the aggregated list when using a `UIBeanEditor`.**
When disabling the edition with a `UIBeanEditor` for a field that belongs to an aggregated list, the field value is set to null for the items of the list that follow the first modified one.

[32993]	[All browsers] The border and error message of Dataspace key in the Data section disappear when focusing out. When users leave blank Dataspace key in the Data section of Data service, then click on Next; a red border and an error message of the mandatory field Dataspace key in the Data section of Data service disappear when focusing out of this field.
[33051]	[IE/Edge] Alignment issue occurs when opening a drop-down list. Open any drop-down list of the test EBX® instance on IE and Edge browsers, an alignment issue occurs.
[33053]	[LAYOUT] The field value and the Preview button are not horizontally aligned in a read-only foreign key field. When opening a record, the Preview button and the foreign key value are not horizontally aligned in a foreign key field in read-only mode.
[34227]	UILabelRenderer . displayLabel is executed without session when executing a request. UILabelRenderer . displayLabel is executed without session when executing a request with an XPath filter such as <code>osd:contains-case-insensitive(osd:label(../fk), 'tryh')</code> where 'fk' is a foreign key referring to a labelled table, even in the case when <code>setSession(. .)</code> is called on the request.
[34302]	The navigation pane is not properly synchronized after re-initializing the validation report of a dataset. After users reinitialize the validation report of a dataset and click on a table in the navigation pane, then open the menu under the 'Actions' button, the 'view validation report' service is displayed instead of validation.
[34326]	[LAYOUT][All browsers] A blank page displays when clicking on the Cancel button of an Export workflow task. The message 'User logged out' is not displayed when clicking on the Cancel button of an Export workflow task.
[34432]	[LAYOUT] The label of the group with an erroneous child is not properly colored. When an error exists in a group, the label of the group is not colored with the proper color, as mentioned in the guidelines.
[34491]	[IE] The Copy/Paste service under the Edit menu of the grid view displays incorrectly. On browser IE, the Copy/Paste service under the Edit menu of the grid view displays incorrectly.
[34499]	[All browsers] Avatar is not synchronized after being customized in the 'Ergonomics and layout' section under 'Administration'. After customizing the field 'Avatar displayed in the header' in the 'Ergonomics and layout' section, the avatar is not synchronized.
[34621]	[LAYOUT] The design of the 'Export'/'Import' archive page is erroneous. When users run the 'Import'/'Export' archive on a dataspace or workflow model, the design of these pages are not compliant with the guidelines.
[34857]	[All browser] The button allowing to switch from normal mode to reduced mode in a Perspective is not displayed. The button allowing to switch from normal mode to reduced mode in a Perspective is not displayed.
[35201]	[All browsers] The 'Logout' button displays when accessing an instance by using a permalink. When users access an EBX® instance by using a permalink, the 'Logout' button displays in the top right corner of the EBX® instance.
[36555]	An exception is logged as an error when the user's browser ends a connection. An exception is logged as an error when the user's browser aborts a resource loading. An informative message in debug mode should be displayed instead.
[35209]	When displaying a record, the label of the table should be clickable in the breadcrumb. When displaying a record, its label in the breadcrumb is 'Table: Record'. It should be possible to click on the 'Table' part to go back to the table if the context allows navigating to the table.
[35231]	Group labels should be clickable. Group labels should be clickable, not just the small arrow on the right. Also, the entire line could be made clickable, rather than just the text.
[35291]	[All browsers] [LAYOUT] The confirmation pop-up is not centered in the workspace when running 'Reinitialize validation report'. The confirmation pop-up is too close to the right margin. The confirmation pop-up should be at the center of the workspace after clicking on the 'Reinitialize validation report' button on the 'Validation report' screen on: Dataset/Data model/Workflow model/Administration.
[36810]	An error occurs when calling add-on services if a website icon is defined on the perspective. An error occurs when calling add-on services if a website icon is defined for the perspective. It is caused by a <code>ClassCastException</code>.

[35719]	The 'See comment' button does not work when changing a comment in the workflow task. When entering or deleting a comment in an open task, the 'See comment' button does not automatically display or update the content.
[35831]	The navigation pane displays incorrectly when creating a new record in the 'Access rights by profile' table of a dataset. When users create a new record in the 'Access rights by profile' table of a dataset, 'Access rights by profile' is not shown under the navigation pane.
[35897]	[IE][LAYOUT] An alignment problem occurs in the drop-down list of the 'Dataspace or snapshot' field when comparing dataspace. When users run the 'Compare' service under the 'Action' menu in the Dataspace area, the arrow icons are not aligned with the dataspace name in the drop-down list of the 'Dataspace or snapshot' field.
[36084]	The menu in the navigation pane is not highlighted when accessing a perspective using a permalink. When users access the perspective using a permalink, the selected item to be displayed is not highlighted in the perspective navigation pane.
[36166]	[LAYOUT][All browsers] The text box displays incorrectly after setting the 'Character' unit in the widget of a field. On a string field, users configure a widget text box and set the width to 'Character'. After users enter 100 zero numbers in this text box, the text box has a redundant whitespace.
[36202]	[LAYOUT][All browsers] Large gap between the tag label and the tag input of the 'Edit publication' screen in a data model. When users access the 'Edit publication' screen of a data model, the gap between the tag label and the tag input is too large.
[36218]	[LAYOUT][All browsers] A modal with a form displays incorrectly after saving it. On a modal with a form, after saving the form, the modal header and body are separated.
[36220]	[All browsers] The work item's header displays incorrectly after saving a comment. On a work item, users add a comment. After saving that comment, the work item's header is changed.
[36225]	An empty pop-up displays when 'Create a dataset' is forbidden. The button 'Select DataSet' should be replaced by a non-clickable button "see picture_5.8.1".
[36232]	Custom scrollbars cannot be released over the workspace card when dragged. Custom scrollbars cannot be released over the workspace card.
[36326]	[LAYOUT][All browsers] The 'Close' button is missing when editing a workflow step under the diagram. When users access a workflow step under the diagram, the 'Close' button is not displayed.
[36327]	The tooltip is not displayed when hovering over the condition node of a workflow diagram. When hovering over the condition node of a diagram, a tooltip is not displayed.
[36331]	[LAYOUT][All browsers] The 'New record' window displays incorrectly on the navigation pane after closing a dataset sub-page. The 'New record' window displays in the wrong area on the navigation pane when users create a new record after closing the 'Web component link generator' page.
[36369]	When EBX® is configured to use no cookie, the display of a Web Component for the sub-session will fail. When EBX® is configured to use no cookie, a URL will not display correctly.
[36340]	[LAYOUT][IEs] Some UI problems occur on the 'Create dataset' screen. When users create a dataset using the Package data model, some UI problems occur.
[36345]	[LAYOUT] The confirmation dialog box does not comply with the guidelines. The confirmation dialog box does not comply with the guidelines.
[36365]	[All browsers] A JavaScript error occurs when pressing the 'Esc' button. Users access a page of EBX® and press the 'Esc' button except for the preview of 'Web component link generator', a JavaScript error occurs.
[36377]	[LAYOUT][All browsers] The horizontal scroll bar is missing when applying a simple tabular view which uses fixed columns. Users first apply 'Fix the (maximum) columns' on a simple tabular view, then move all columns to the 'Displayed' pane and click on Apply. On the created view, if the table has no records, the horizontal scroll bar is missing and not a single column is shown.
[36387]	[LAYOUT][All browsers] The 'Owner' field displays incorrectly on the 'Duplicate/ Create a dataset' page. Users create/duplicate a dataset. On the 'Duplicate/ Create a dataset' page, if the system has a user with a long name, the 'Owner' field is enlarged on the right side.
[36402]	[IE 10] The checkbox and radio button should comply with the guidelines. On IE 10, the checkbox and radio button should comply with the guidelines.

[36560]	[IE10][LAYOUT] An unexpected element displays on the 'Access denied' page. When users have no perspective, an unexpected element displays on their 'Access denied' page.
[36562]	[LAYOUT][IE] A UI problem occurs on the 'Input help' drop-down list on the create/update screen of the workflow item. There are several UI problems when testing the 'Input help' drop-down list on the workflow item's create/update screen on IE10 and IE11.
[36617]	Initials do not display if the directory is not the defaultDirectory.
[36640]	The width of the data navigation pane changes according to the length of the title of the dataspace.
[36679]	A specific URL to replace the default login page is not considered. When a specific directory is implemented, if the login page is replaced by a dedicated URL, it does not work.
[36729]	The toolbar on the right side of a table is not displayed when the dataset has a long label. When users access a table in a dataset that has a long label, the toolbar on the right side of a table such as View, Filter, Pagination is not displayed.

Closed issues

Core engine

- [4720] **Default values on fields are ignored when a Java Bean is defined on ancestor fields.**
When a user defines default values on simple fields, these are ignored at record creation if a parent node specifies a Java Bean.
- [22306] **Error when reducing the length of a primary key (or indexed) column on SQL Server.**
On SQL Server, when reducing the length of a primary key column, IF the table contains no record exceeding this length, then EBX® will allow issuing the corresponding DDL. But SQL Server then produces the error: "The object 'EBX_HG_myTable_PK' is dependent on column 'pk'."
Note: Increasing the length of such a column does not cause an error.
- [26111] **Replication fails if a column name is identical to a reserved word with H2 Database 1.4.**
- [26651] **The displayed association content is incomplete after creating a record (re-fix).**
The displayed association content is incomplete after creating a record when a view is defined for the association and this view is first sorted by a boolean field in descending order.
- [28605] **The performance of 'View history' for a table should be improved.**
Performance is degraded when viewing the history of tables with a few million records.
- [28934] **SqlChecker false positive on primary key deletion.**
SqlChecker prevents the execution of a script that both creates a table defining its primary key and then tries to drop the primary key constraint.
This is because the primary key existence check in the previous operation only takes the primary key creation into account. It should also check that the generated script includes the operations in an appropriate order.
- [29037] **Improve the error message for the infinite cycle in inherited fields with no set field.**
If the inheritance relationship defines a cycle in which no field is set, then an internal `StackOverflowError` is thrown and the end-user does not receive a useful explanation.
- [29161] **Performance issues when accessing the record selector of a foreign key.**
When accessing the record selector through a foreign key combo box, EBX® always computes the full size of the view whereas it is supposed to skip the computation if the request computation is too heavy. This is due to a bug in the computation statistics of the request.
- [29188] **The thread responsible for recording user preferences is stopped after startup.**
- [29316] **Deleting a dataspace or snapshot is slow in SQL Server.**
Deleting a dataspace or snapshot takes a long time on a large repository if the underlying database is SQL Server.
- [29548] **A deadlock can occur when starting EBX®.**
- [30222] **EBX® does not start when using Java SE 9.**
When using Java 9, EBX® fails to start with a `PreconditionFailure` error.
- [30359] **Performance issue due to cache cleaning during dataspace deletion.**
Deleting a dataspace can take several minutes due to slow cache cleaning.
- [30441] **When using `SchemaFacetTableRef.getLinkedRecords(Adaptation)`, concurrent threads can interlock.**
When using `SchemaFacetTableRef.getLinkedRecords(Adaptation)` on two tables with recursive foreign keys in `AddonTableIndex.loadIndex()` and inside a thread, this API hangs.
- [30997] **Releasing the connection used by the repository ownership check could fail if an error occurs during this operation.**
- [31347] **The performance of `RequestResult.isEmpty()` should be improved.**
The `isEmpty` method is called quite often, in particular for use cases that include the evaluation of permission rules, leading to poor performance. In many cases, the method triggers a query that needs to compute the full result, which can be costly especially if the tables are in relational mode.
- [32012] **If another JVM is running on the same database repository at server start-up, the repository should be shut down.**
If another JVM is running on the database repository at server start-up, the repository should be shut down.
- [32387] **An exception upon schema compilation can lead to stale replicas in the database.**
An exception upon schema compilation can lead to a desynchronization of the replicas if some tables of the data model are replicated.
- [32492] **A module generating `ModuleDefinitionException` prevents access to the Manager.**
When a module cannot register due to a `ModuleDefinitionException` (e.g a service without a name), the UI cannot be accessed and a white page is displayed.
- [32547] **The SQL Checker should verify the naming of the constraints.**

[32548]	When renaming a table, all related objects should also be renamed (constraint, indexes, etc.).
[32590]	The ThreadLocal format cache for DateFormat may be reset excessively. The ThreadLocal format cache for DateFormat may be reset excessively, leading to poor performance.
[32921]	An error occurs due to unprotected access to the HashMap object. A ConcurrentModificationException occurs while copying a validation context due to unprotected access to the HashMap object.
[32930]	Avoid updating on-commit replication tables in some cases. Replica tables should not be updated in the case where the updated fields are all disabled for replication.
[32931]	Avoid updating all fields in the replica tables for on-commit replication. Only fields which have actually been modified by a unit of work should be updated selectively.
[33375]	Inappropriate error when updating a table while replication is activated. EBX® detects that another thread is executing a procedure on the dataspace.
[33901]	Optimizations regarding SQL requests on EBX_HV_TX_STAT. The overall performances of the application can be impacted by long SQL requests on EBX_HV_TX_STAT, new indexes may be required.
[33912]	"CASE" should be a reserved word for the H2 database policy. H2 database accepts table creation with a column named "CASE" but this column cannot be queried by giving its name explicitly in a SELECT or WHERE clause. The statement fails with error: org.h2.jdbc.JdbcSQLException: Syntax error in SQL statement "SELECT CASE,[*] OP FROM JFBHG_TABLE201 "; expected "., WHEN, NOT, EXISTS, SELECT, FROM"; As a consequence, the test ReservedWordsForFieldNamesHistoryTest should be more aggressive by inserting and retrieving records from the created history tables.
[33984]	The exception thrown while closing the database connection is silently dropped. The exception thrown while closing database connection is silently dropped.
[34388]	"Table block does not exist in database" errors. Due to a memory leak, the semantic cache can contain corrupted data that makes the cache unreadable.
[34534]	SimpleDateFormat unsafe for multi-threaded use. DateFormats are inherently unsafe for multi-threaded use.
[35069]	The purge clean-up process does not clean up data from semantic tables.
[35796]	Using fail-over, registered modules remain in "init" state after waking up the standby instance when using the Java API. Using fail-over, registered modules remain in the "init" state after waking up the standby instance when using the Java API. This does not occur when waking via the HTTP request.
[35958]	Custom indexes are not used when performing requests with ORs on an indexed field.
[36106]	Unresponsive UI when setting sort criteria on a large table. When setting sort criteria on a large table, the delay is very long, and no information is displayed in the UI: it might look like it is frozen.

Data modeling

[31191]	The data model assistant displays the custom message input box for pattern constraint when only one locale is enabled. The data model assistant displays the custom message input box for the pattern constraint when only one locale is enabled.
[32597]	In the DMA, it is not possible to define custom programmatic constraints at the table-level in a relational data model. In the DMA, it is not possible to define a programmatic constraint implementing ConstraintOnTable in a relational data model.
[33962]	The "day-from-date" function returns an incorrect value.
[33988]	The "year-from-date" function has an incorrect type. The type in the signature of the "year-from-date" function should be "Integer" instead of "String".
[34288]	Labels display inconsistently between an association and a field in the data model. After setting a label for an association and a field, the label is displayed correctly in the workspace for the field, but incorrectly for an association.
[34577]	[LAYOUT][All browsers] An alignment problem occurs when users create/open a record on the 'User services' screen. When users open/create a record on the 'User services' screen, the Boolean on the 'Confirm before launch' field is not aligned with other fields.

- [35273] **An error occurs when re-importing a packaged data model that includes another data model.**
An error occurs when exporting and re-importing a packaged data model that includes another data model packaged in the same module. The error indicates that the included one cannot be found.

Data services

- [27369] **Updated records should not be considered if fields are declared as hidden in the default view.**
When the "get changes" operation is applied to a table, if all updated fields are declared hidden in the data service, the record should not be written in the response.
- [29008] **Access forbidden for non-admins with 'systemInformation' SOAP or REST operations, even if declared in global permissions.**
In the 'Global permissions', when a non-admin user has been given rights to access 'System information': using that non-admin user account to execute 'systemInformation' from SOAP or REST operations, the response always returns an 'access forbidden'.
- [29801] **Several authentication methods should be not authorized.**
When several authentication methods are used from a SOAP or a REST request, it should not be authorized and an exception should be returned.
- [30284] **Calling Repository.createSessionFromSOAPHeader can end in a java.lang.ClassCastException.**
Calling Repository.createSessionFromSOAPHeader can raise a java.lang.ClassCastException.
- [31093] **An error can occur if the predicate of the SOAP select operation is a number.**
When a SOAP select operation is used with a predicate parameter that conforms to an expression but does not conform to a predicate expression, then a ClassCastException is thrown.
- [31333] **Documentation is needed for the deletion of records that do not exist in SOAP.**
An error can occur when executing a 'delete' operation on a record that does not exist and needs to be included in the documentation.
- [32369] **REST sort and filter parameters should not return a status code 500 even if an illegal syntax is used.**
When invoking a REST select operation (data or history category) by using a sort or filter parameter value, especially when using an illegal syntax, the operation should not return an HTTP status code '500 Internal Error', but a '400 Bad Request'.
- [33126] **When a group contains only an association, the group level element is not present in the SOAP response.**
When a group contains only an association, the group level element is not present in the SOAP response. The association values are directly under the table element.
- [33272] **REST forward throws a ServletException for recent Tomcat versions.**
When a user interface component uses REST forward to access the REST API, it aborts on recent Tomcat versions (Tomcat 7.0.55+, 8.0.10+, 8.5.x and 9.0.x).
- [33871] **The SOAP insert operation aborts if the record field name is equal to the table name.**
A NullPointerException error may occur when executing a data service SOAP operation when two nodes have the same name at different levels in the data model. This issue is also present in the XML table import.
- [34168] **An error occurs while executing a REST call from a manager component.**
An error occurs while executing a REST call using the URL retrieved using UIResourceLocator.getURLForRest in a sub-session context.
- [35578] **Missing documentation for REST "Meta-data" service property valueFunction.**
Missing documentation for REST "Meta-data" service property valueFunction, pathInDataset and history.
- [35740] **REST authentication method 'Standard' failed if password is not defined in the request.**
When a REST request is invoked with a 'Standard' authentication method on built-in or toolkit, and if the 'password' parameter is not defined, the response status is 500.

Data validation

- [3432] **When validation threshold is reached for a constraint on a field, other constraints on the same field are not executed.**
When the validation threshold is reached for a constraint on a given field, an error message is added to this field for every record of the table and other constraints on the same field are no longer executed. The validation threshold should not have an impact on other constraints.

[12800]	An association create or attach should consider the association filter. It should not be possible to create or to associate a record through an association if the created record does not match the association filter (osd:association/xpathFilter) or constraint (osd:association/constraint).
[24218]	Validation error messages raised by TableRefFilter are disappearing when returning to the table view. Validation error messages raised by TableRefFilter while accessing a record are disappearing when returning to the table view.
[26378]	There are redundant error messages when having more than 100 validation errors. In the response of REST service for the case the dataset contains more than 100 messages, when getting the messages for each record by using API getValidationReport(), the error message "Validation stopped because of too many errors (above 100)." is always attached to each record and field.
[27632]	When the validation message threshold is exceeded, all records of the table have an error icon. When the number of error messages for a constraint is greater than the configured threshold (ebx.validation.constraints.messages.threshold), all records of the table have an error icon.
[29837]	A validation error remains in the validation report even after the correction and cannot be removed by validating again.
[30036]	Performance issue when applying a validation filter to a table with record errors coming from a constraint on table. Performance issue when applying a validation filter to a table with errors at the record level coming from a constraint on table.
[30428]	A validation error remains in the validation report even after the correction when the threshold is reached.
[30653]	Validating a table after correcting errors could lead to a fatal error. Validating a table could lead to a fatal error. This could occur after errors, information and warning messages from previous validation reports have been removed.
[30853]	Performance issues during validation due to the retrieval of the dataset activation state for each validated record.
[30900]	Performance issues when validating an inherited dataset foreign keys. When adding or deleting a new record in an inherited dataset, the incremental validation will search for records having a foreign key targeting the newly created or deleted record. Since the indexes are not present on foreign key fields with inheritance, the request response time is not optimized.
[31044]	Uniqueness constraint violation message could still be erroneously displayed after the error correction.
[32162]	Validation message threshold should be ignored when validating a record. The validation message threshold is applied when validating a record. This property should be ignored and an up-to-date validation report should be computed when validating a record. However, if the threshold has previously been reached by a constraint in a table, the validation of a record must not impact the validation report of the dataset.
[33146]	A 'null' string in an enumeration is handled as an empty string.
[35422]	Erroneous validation report when the validation threshold is reached.
[19375]	OutOfMemoryError while getting the validation report.

Data views

[13283]	Inconsistency of the collapse/expand state when filtering the search pane in a hierarchy view. On the search pane, when filtering the 'Search and Validation' block, the result is collapsed when nodes are collapsing. However, the result is expanded when filtering using the Text search block. After filtering the 'Search and Validation' block, the hierarchy keeps its collapse/expand state whereas, when filtering using the Text search, the hierarchy does not keep its collapse/expand state.
[17372]	Unexpected error is displayed when checking the constraint of a field under a complex list. This issue occurs on a field under a complex list which defines a constraint. After the user creates a record with the specified value for this field, an unexpected error displays.
[18249]	While creating a record from a hierarchical view, it is not possible to get the foreign key value in a trigger method. While creating a new record through the hierarchy 'create' action, the value of the foreign key is prefilled in the form. However, it is not possible to retrieve that value in the method handleNewContext of a TableTrigger.
[28133]	Applying the 'Search' filter to a dataset returns incorrect results. After the user applies the 'Search' filter to a dataset with the 'contains' operator, the search result is erroneous.

- [29236] **In a web component specifying a predicate, the hierarchical view is not expanded to the records that match the predicate.**
In a web component, if the selection specifies a predicate, the hierarchical view is not expanded to the records that match the predicate, although the method `UIHttpManagerComponent.setFirstCallDisplayHierarchyExpanded()` is called.
- [30507] **An error can occur when opening a hierarchy joint record in a manager component.**
A `NullPointerException` error can occur when opening a hierarchy joint record in a manager component.
- [30966] **Performance issues due to hierarchy views when the repository contains numerous dataspace.**
Performance issues can be experienced due to hierarchy views when the repository contains numerous dataspace.
- [31339] **Sorting a filtered table on a foreign key field results in an error.**
Sorting a table on a foreign key field in a filtered view results in an "error occurred while building the response" message. A related "unexpected error in request computation" can then be found in the log file.
- [33856] **Erroneous returned value when a custom filter is set on the view in an association context.**
According to the Javadoc, the `AssociationEntitySelection.getAllRecords()` method is supposed to return "all records for the association from the selected table". However, when a custom filter is applied to the association view (not the one declared in the association definition), it returns the filtered result.
- [33863] **Moving a record in an association context can throw an exception when a filter is defined on this association.**
When a filter is set on an association, using the "@associationMove" user service on an associated record in the user interface can lead to an exception.

Data workflows

- [28446] **An error occurs when executing the action "Show in graphical view" on the initial transition.**
On the workflow model steps page, an error occurs when executing the action "Show in graphical view" on the initial transition.
- [28496] **An error occurs when launching a parent workflow whose sub-workflow is missing a first step.**
The model publication is too permissive: a parent model can be published even if it has sub-workflows that do not have a first step.
After launching, the parent workflow throws an error because it failed to handle the sub-workflow.
The publication of models containing sub-workflows that do not have a first step needs to be forbidden.
- [28768] **Incorrect button name in the workflow launchers actions when enabling quick launch in the workflow model configuration.**
When users activate the quick launch in the 'Workflow model configuration', the 'Quick launch' button is not available in the 'Workflow launchers' actions.
- [28968] **The History purge parameters need to be logged.**
In order to help with the diagnosis in case of problems, we need to log the purge parameters.
- [29007] **Inconsistent user task labels when creating it from the service menu and when creating a step from a condition.**
In the workflow model, the label of a user task when selecting it from the service menu is 'User task with multiple work items', but when creating a step from a condition, the label is 'User task [Legacy mode]'.
- [29354] **Intermediate transaction commits are required during the workflow history purge.**
- [30417] **Aggressive error when the role of a user task has no user.**
If one of the role of a user task has no user, an `OperationException` is created, which is too aggressive. Indeed, even though we have one role which contains users, the workflow will launch an `OperationException` if at least one of the listed roles is empty.
The correct behavior is to offer the work item to the users available and ignore the empty roles.
If no users are found in all the "offered to" roles, then we throw an `OperationException`.
- [32168] **An error occurs while retrieving a SessionInteraction.**
A `NullPointerException` can occur while retrieving a `SessionInteraction` from the method `WorkflowEngine.createOrOpenInteraction`.
It happens when the "service" input is missing from the interaction.
- [33386] **A workflow remains in an inconsistent state when a work item is accepted twice in a user task extension.**

Dataspaces & History

- [30446] **The 'All history' value is not selected by default on the 'Delete history of dataspace recursively' screen.**
Users first select a dataspace to delete history, then select 'History before' and click on the 'Cancel' button: this value is still displayed when users select another dataspace to delete history.
- [31761] **An error occurs on history tables after increasing the primary key fields maximum length.**
An error occurs on history tables after increasing the primary key fields maximum length. This issue occurs when the table contains multi-valued fields.
- [32497] **The 'Merge information' field of a history record obtained through the Java API is empty.**
The technical field `merge_info` of a history record obtained by executing a Request on a history table is always null.

Documentation

- [29386] **Search results and page index links are incorrect in reverse proxy mode.**
The documentation search engine creates erroneous document links if the properties `ebx.servlet.*` or `ebx.externalResources.*` are not set to default.
- [30980] **Improve the `WorkflowEngine.forceTerminationWithoutCleaning()` method in the Javadoc specifying restrictions.**
The `WorkflowEngine.forceTerminationWithoutCleaning()` works only to force termination of sub-workflows in order to wake up the the parent and to terminate the workflow in error. These restrictions must be specified more clearly in the Javadoc.
- [32804] **The documentation of the property `inheritedFieldMode` in RESTful operations is incorrect.**
In the inheritance paragraph of the RESTful operations, the description of the `inheritedFieldMode` property is incorrect. It is the same as the description of the `inheritanceMode` property.
- [36319] **The "Installation note for Tomcat 8.x" page displays an alert.**
When accessing the documentation page "Installation note for Tomcat 8.x", a JavaScript alert pop-up displays "SyntaxHighlighter Can't find brush for: bash". This behavior is unexpected. `SyntaxHighlighter` should be updated to accept bash.

Import / Export

- [30515] **A `java.lang.NullPointerException` can occur when importing an archive with dataset inheritance enabled.**
A `java.lang.NullPointerException` can occur when importing an archive with a changeset if the dataset inheritance is enabled. This error occurs when the archive contains a record update from overwritten to inherited in a child dataset.

Miscellaneous

- [32197] **Add-on subscription licensing is not supported.**

User interface

- [21728] **The URL obtained from `ServiceContext.getURLForViewSelection` does not give access to the published view.**
- [23841] **The URL for ending a service is erroneous while calling a service from a toolbar on a row.**
Instead of redirecting the user to the table view, the user is redirected to the record form view.
- [27967] **The "Merge" field is empty in the history record form.**
- [28916] **Functions return an incorrect result when they are used by an XPath filter.**
Functions return an incorrect result when they are used by an XPath filter. For example: 'Predicates on record label'.
In a foreign key with a filter defined, the values are filtered correctly but an error message is displayed when the user saves the form.
- [29106] **The sort criteria is ignored when using a `TableRefDisplay`.**
The sort criteria is ignored when using a `TableRefDisplay`. The foreign key values are sorted depending on their labels.

[29226]	The initialize() method is not called when displaying a user service on an association entity selection. The initialize() method is not called when displaying a user service in the context of an association.
[29285]	An exception occurs when opening a dataset field under a multi-value group. In a multi-value group containing a dataspace field and a dataset field, if the value of the dataset field is filled by the dataspace field, an exception is raised when opening the dataset field.
[29312]	The record label is erroneous when it contains a dataspace field. When the record label contains a dataspace field, the record label displays incorrectly.
[29349]	Root sessions are created due to a malformed Ajax request when working with the expand/collapse block in a user service.
[30040]	The perspective default selection is not taken into account after logging in. The perspective default action is not selected after accessing the perspective straight after the login page.
[30133]	Some values in an aggregated list can be lost when saving a form after correcting a blocking error in the list.
[30620]	When using the Grid Edit, warnings and information messages are treated as blocking errors. When using the Grid Edit, warnings and information messages are treated as blocking errors and prevent updates from being applied.
[30894]	The first tab should always be selected when opening a record. When opening a record, the tab that was last selected when viewing the previous record is displayed instead of the first one.
[31113]	Implementing a dataspace user service without display leads to a "service does not exist in the request" error.
[31353]	The initialize() method is not called when the user service is launched from a JavaScript button. The method initialize() is not called with an extended user service launched from a JavaScript button.
[31363]	An error occurs when executing a dataspace level module service using UIHTTPManagerComponent in a form. An error occurs when executing a dataspace level module service using a UIHTTPManagerComponent inside a UIForm. This issue only appears when there is only one dataset in the dataspace.
[31599]	Performance is degraded on tables that contain a large number of columns and foreign keys.
[31851]	The initialize() method is not called when running a user service from a perspective action. The initialize() method is not called when running a user service from a perspective.
[32280]	Included JavaScript or CSS resources should be ordered by their module's nature and name. When an HTML page is generated, the JavaScript and CSS resources should be in the following order: core modules first, then add-on modules, and finally specific modules.
[33613]	UIHTTPManagerComponent.getURIToMyProfileWithParameters erroneously appears in the Javadoc. UIHTTPManagerComponent.getURIToMyProfileWithParameters is not a public API method and should not be in the Javadoc.
[33712]	A message added by ebx_form_setNodeMessage may not remain displayed. If the JavaScript method ebx_form_setNodeMessage is triggered after the user has changed the value of the component (UIAtomicWidget.setActionOnAfterValueChanged), the added message disappears when loosing the focus from the component if the click is slow.
[33753]	Parent record is not updated while updating a record through a trigger on an associated table. In a UI form containing an association, if the end user modifies associated objects (create, update, delete), a trigger modifies a field value in the parent object. Then the value in the parent form is supposed to be updated, it is not until you click on "revert".
[34931]	The initialize() method is not called when displaying a user service as a Web component. The initialize() method is not called when displaying a user service in the context of a Web component.
[36183]	[All browsers] The '...' icon is not shown in the drop-down list of a foreign key field that has a specified 'Page size'. When users set a value for the 'Page size' field in the 'Parameter' tab of a foreign key widget, the '...' icon is not displayed when opening the drop-down list.

- [36204] **The perspective menu tree is not opened up to the default perspective action.**
When accessing a perspective with a default action set, the perspective menu tree is not opened up to the default perspective action when this action is a group child.

Users & Permissions

- [31231] **When executing the built-in "duplicate" service in a user task, the primary key of the record to create is read-only.**
When executing the built-in "duplicate" service in a user task, the primary key of the record to create is read-only. It should be writable, otherwise, it is impossible to create a record.
- [31446] **Login and password are trimmed while connecting through the EBX® login page.**
When connecting to EBX®, users who have a space character at the start or end of their password can't log on. The string is trimmed prior to being sent to the directory implementation.
- [31500] **Method `TableViewEntitySelection.getSelectedRecords` should never return null, as mentioned in the Javadoc.**
In a `UserServicePermissionRule`, when no record is selected, the returned request is null.
- [31528] **A service rule on "tableView" set by `setServicePermissionRuleOnNode` should apply to single record contexts.**
As mentioned in the Javadoc of the method `SchemaExtensions.setServicePermissionRuleOnNode`, setting a `ServicePermissionRule<TableViewEntitySelection>` on a table node should also make that rule apply to single record contexts such as the record form.
- [31670] **Directory.`isUserInRole()` is erroneously called with `Profile.OWNER` when viewing a dataspace.**
The `Directory.isUserInRole()` method is erroneously called with the `Profile.OWNER` role as parameter when viewing a dataspace in contradiction with the Javadoc method statements.
- [31703] **`TableViewEntitySelection.getFilteredRecords` returns a wrong request for an association inline display.**
`TableViewEntitySelection.getFilteredRecords` returns a wrong request for an association inline display. This request does not filter the records according to the defined association.
- [31914] **Disabling the 'create' service still allows the creation of a record via the foreign key combo box.**
Disabling the 'create' service globally via a UI permission or with a `ServicePermissionRule` for a table still allows the creation of a record from a foreign key on that table.
- [32147] **In a `ServicePermissionRule`, the context can be erroneous when the service is called from a table.**
In a `ServicePermissionRule<RecordEntitySelection>`, the `getRecord()` method should always return null when the user service is called for display in a table view. However, when a record is selected in a table view, the selected record is actually returned.
- [32710] **Service permission rules on DELETE services are ineffective when deleting from an association.**
- [32851] **Performance issues while launching a legacy user service on a record with a `ServicePermission`.**
When many records are selected, performance is strongly degraded when launching a legacy user service with a `ServicePermission`.
- [33042] **Unable to use the "associate" action due to an erroneous resolution of permissions.**
The association is based on an inverse foreign key, the foreign key is writable, other fields of the associated table are read-only, the "associate" action is not proposed in the "action" combo-box.
- [33527] **Performance issues while launching a user service when using a complex filter.**
When using a complex filter in a table view and after selecting many records, launching a user service can be very slow.
- [33869] **When a toolbar is declared on rows, the service permissions on datasets should not be evaluated for each record.**
The static permissions declared at the dataset level are evaluated for each row of the view, this leads to performance issues when several custom services buttons are declared in the toolbar.