



TIBCO BusinessWorks™ Container Edition

Release Notes

Version 2.6.2
May 2021



Contents

Contents	2
New Features	3
Changes in Platform Support	15
Changes in Functionality	16
Deprecated and Removed Features	19
Closed Issues	20
Binding	20
General	22
Migration	28
Monitoring	29
Palette	29
Policies	35
Runtime	36
Known Issues	40
Binding	40
General	43
Migration	50
Monitoring	53
Palettes	54
Policies	58
Runtime	59
TIBCO Documentation and Support Services	60
Legal and Third-Party Notices	62

New Features

The following new features have been introduced in TIBCO BusinessWorks™ Container Edition and are listed by release.

Release 2.6.2

Common Features

Certifications

This release adds certification for:

- OpenShift 4.6.x
- Azure App Service
- Podman
- Kubernetes 1.20.x
- Cloud run for Google Anthos

Note: While deploying an application on cloud run for Anthos, specify the hostname as 0.0.0.0 under resource configuration. Ensure sufficient memory is allocated to each container instance while deploying an application on cloud run for Anthos.

New environment variable added to support logging format on TIBCO BusinessWorks Container Edition

This release adds additional support for logging format on TIBCO BusinessWorks Container Edition using the BW_LOG_FORMAT as an environment variable.

For more information, see "Environment Variables on Docker", "Environment Variables on Cloud Foundry" and "Environment Variables on TIBCO Business Studio for BusinessWorks in the *TIBCO BusinessWorks Container Edition Application Development*.

Support is added for form parameters

REST service binding and REST reference binding now support form parameters for Open API Specification 3.0.

Design Time

Support is added for "default" response in REST Service.

If a swagger file has "default" as one of the responses for REST service's operation, then on creating a top-down REST service from the swagger file the same is reflected in the Response Status tab of REST service binding. To Reply with default fault, it is mandatory to add "statusCode" element to the default fault schema by following below steps :

1. Open the REST service process.
2. Click on OnMessage Start -> Properties -> Fault tab.
3. Select defaultResponseSchema
4. Add statusCode as Integer type element.

If the statusCode element is already present in the default response schema, then the user need not add the element.

Generate Manifest.json file using bwdesign

Now you can generate the Manifest.json file for cloud projects by using the following bwdesign command line utility:

```
generate_manifest_json -project <project_name> <location to generate manifest.json file>
```

Support added to manually update element mappings for Smart Mapper preview feature.

After using the Smart Mapper, if you do not get the desired mapping results, you can now drag any other element. The smart mapper remembers your selection by increasing the recommended score for that element and then map the same elements next time.

Note that the source and target elements must be within the range of the level set during smart mapping.

Enhanced Recommended Mappings in Smart Mapper preview feature.

The **Recommended Mappings** option is now available for mapped elements as well as Smart Mapper preview feature.

Release 2.6.1

Common Features

Certifications

This release adds certification for:

- Kubernetes 1.19.x
- OpenShift 4.5.x

Support added for multiple buildpacks in Cloud Foundry for TIBCO BusinessWorks Container Edition

This release adds support for multiple buildpacks while deploying in Cloud Foundry in TIBCO BusinessWorks Container Edition.

For more information, see "The TIBCO BusinessWorks™ Container Edition Buildpack" in the *TIBCO BusinessWorks Container Edition Application Development*.

Support added for YAML and properties file for using Consul as Configuration Management Service.

This release adds support for YAML and properties file for using Consul as Configuration Management Service.

For more information, see "Adding the YAML file or Properties file for Configuration Management using Consul" in the *TIBCO BusinessWorks Container Edition Application Development*.

Support added for module property for the **OAuth Configuration** shared resource.

This release adds support for module properties for the following fields of the **OAuth Configuration** shared resource:

- Client ID
- Client Secret
- Access Token URL
- Scope
- Username
- Password
- Confidentiality

Common Features

Mapping Score % value is set to 100%

When you manually map an element through the suggestive mapping, the Mapping Score % value in the **Recommended Mappings** dialog box is set to 100%.

SOAP Invoke activity now sends requests with CDATA tags.

Request with CDATA tags can now be sent with **SOAP Invoke** activity.

For the CDATA tags to remain intact on the wire we need to set the below java property in VM arguments :

```
bw.binding.soap.invoke.cdata.serialization=true
```

Design Time

Support added for **Timer** activity to use local time of the container

A new **Use local time** check box is added under **General** tab of **Timer** activity.

If you select the check box, the timer activity is triggered at the specified Start Time value of the container's time zone.

Monitoring

Support is added for using Azure SQL Managed Instance (MI) for TIBCO BusinessWorks Container Edition Monitoring.

A new property DB_ENCRYPT is added to use Azure SQL Managed Instance (MI) for TIBCO BusinessWorks Container Edition Monitoring on Docker and Cloud Foundry.

For more information, see "Configuring MS SQL Server on Cloud Foundry" and "Setting Up TIBCO BusinessWorks™ Container Edition Application Monitoring on Docker" in the *TIBCO BusinessWorks Container Edition Application Monitoring and Troubleshooting*.

Palettes

Support added for reconnecting logs

This release adds support for reconnecting logs for

Palettes

for JMS Send Message and JMS Receive Message activities.

JMS Send Message and JMS Receive Message activities.

These logs are seen after setting root level as INFO in the logback.xml file as follows:

```
<root level="INFO">
  <appender-ref ref="STDOUT" />
</root>
```

The following output is displayed:

Connection re-established successfully. Starting JMSSender.

Connection re-established successfully. Starting JMSReceiver.

Support added for Azure Authentication for SQL Server database for JDBC Connection Shared Resource.

TIBCO BusinessWorks Container Edition adds supports for Azure Authentication for SQL Server database for JDBC Connection Shared Resource.

For more information, see "Azure Authentication" in the *TIBCO BusinessWorks Container Edition Bindings and Palette Reference*.

Runtime

Support added to configure both Credential and Config Management together while designing a TIBCO BusinessWorks Container Edition application.

This release adds support for using configuration management service and credential management together at once for TIBCO BusinessWorks Container Edition applications.

For example, you can use Hashicorp as credential management and Consul as configuration management service together.

Release 2.6.0

Common Features	
Certifications	<p>This release adds certification for:</p> <ul style="list-style-type: none"> • Tanzu Application Services (TAS) 2.10.0 • Kubernetes 1.18.x
Integration for Azure Key Vault with TIBCO BusinessWorks Container Edition.	<p>This release adds out-of-the-box support for Azure Key Vault for Credential Management Service for TIBCO BusinessWorks Container Edition applications.</p> <p>For more information, see "Using Azure Vault for Credential Management Service" in the <i>TIBCO BusinessWorks Container Edition Application Development</i>.</p>
Support is added for Namespace in HashiCorp Vault Credential Management.	<p>A new environment variable <code>HASHICORP_VAULT_NAMESPACE</code> is added to use Namespace in HashiCorp Vault for Credential Management Service for TIBCO BusinessWorks Container Edition applications.</p> <p>For more information, see "Using HashiCorp Vault for Credential Management Service" in the <i>TIBCO BusinessWorks Container Edition Application Development</i>.</p>
Smart Mapper	<p>Smart Mapper provides the ability to intelligently determine how data is to be mapped in the activity's input tab.</p> <p>For more information, see "Smart Mapper" in <i>TIBCO BusinessWorks Container Edition Application Development</i>.</p>
This release adds support for OpenAPI 3.0 specification	<ul style="list-style-type: none"> • REST Service Binding: Now you can create and implement a REST Service defined with OpenAPI 3.0 Specification, using both: the Swagger file as well as TIBCO BusinessWorks Container Edition REST Service Wizard. • REST Reference Binding: You can invoke the REST APIs created using the OpenAPI 3.0 Specification, with the REST Reference Binding, and Invoke REST API activity.

Common Features

- **Update to Swagger UI:** OpenAPI 3.0 support is added to the Swagger UI, which supports the Swagger 2.0 and 3.0 Specification. On invoking the REST 3.0 service from Swagger UI, the runtime Swagger is generated as per OpenAPI 3.0 Specification.

Note: The Swagger 3.0 JSON file containing OpenAPI 3.0-specific features, which are not in parity with the Swagger 2.0 JSON file, is not supported.

Encryption and decryption of application profiles.

TIBCO BusinessWorks Container Edition provides capability to encrypt complete application profiles which can be decrypted while debugging and at runtime. It helps to increase security for application properties containing confidential information.

For more information about encrypting profiles in TIBCO Business Studio™ for BusinessWorks™, see "Encrypting an Application Profile" in *TIBCO BusinessWorks Container Edition Application Development*.

Now you can capture the details of query parameters sent as a part of the incoming request to a REST service.

Set the following logger in the logback.xml file :

```
<logger name="com.tibco.bw.binding.rest">
  <level value="DEBUG"/>
</logger>
```

A namespace prefix is now added for SOAP RPC Literal response.

The response received from SOAP RPC Literal service was malformed. Hence the namespace prefix is prepended to the Response element.

New error code to represent SOAP Undeclared Client Fault

The TIBCO-BW-BINDING-SOAP-550101 error code is displayed on the **Invoke** activity on receiving Undeclared Client Fault in response from a SOAP service. In case of server error, the error code TIBCO-BW-BINDING-SOAP-550100 is displayed.

Common Features

	<p>For more information, see "SOAP Binding Error Codes" in the <i>TIBCO BusinessWorks Container Edition Error Codes</i>.</p>
Support is added for OAuth 2.0 configuration	<p>This release adds support for OAuth 2.0 configuration on HTTP Client shared resource for getting OAuth access and refresh token.</p> <p>It also adds ability to include access token in outbound REST reference.</p> <p>A new OAuth Configuration shared resource is added.</p> <p>For more information, see "OAuth Configuration Resource" in <i>TIBCO BusinessWorks Container Edition Bindings and Palette Reference</i>.</p>
Plug-in manager	<p>You can now install and uninstall TIBCO BusinessWorks Container Edition plug-ins from TIBCO Business Studio for BusinessWorks in a more simplified way using Plug-in manager.</p> <p>For more information, see "Installing Plug-ins using BusinessWorks Plug-ins Manager" and "Uninstalling Plug-ins using BusinessWorks Plug-ins Manager" in <i>TIBCO BusinessWorks Container Edition Installation</i>.</p>
Support is added to update flow limit dynamically.	<p>You can update the flow limit dynamically and using the REST APIs.</p> <p>For more information, see "Updating Flow Limit Dynamically" in <i>TIBCO BusinessWorks Container Edition Application Monitoring and Troubleshooting</i>.</p>

Design Time

Visual Diff	<p>You can compare two revisions of a process and its artifacts side by side visually in TIBCO Business Studio for BusinessWorks. It highlights changes in newer revision such as addition or removal of</p>
-------------	--

Design Time

activities, changes in an activity configuration.

- You can compare the application properties sections of two projects and difference between the two profiles of the same project.
- You can compare the module properties sections of two projects.
- This feature supports the visual difference for encrypted profiles.
- You can compare two revisions of a process.
- You can compare shared resources.
- It provides integration with GIT and SVN to compare revisions stored in a version control system along with local revisions.

For more information, see "Diff Viewer" in *TIBCO BusinessWorks Container Edition Application Development*.

Sorting functionality is available for roles.

Now you can move the rows up or down and sort the roles in ascending or descending order.

Custom Icon is now introduced for **Call Process** and **Java Invoke** activities.

The **Custom Icon** field is added on the **General** tab for the **Call Process** and **Java Invoke** activities.

For more information, see "Call Process" and "Java Invoke" in *TIBCO BusinessWorks Container Edition Bindings and Palettes Reference*.

For more information on how to add the custom icons, see "Adding Custom Icons" in *TIBCO BusinessWorks™ Container Edition Application Development*.

Support is provided for module property for the **Client ID** on the **JMS Connection**.

You can use a module property for the **Client ID** on a **JMS Connection** resource.

Design Time

Support is added for application templates.

Ability to import and export pre-designed application templates designed with best practices and pre-configured processes, shared resources, modules etc.

It helps improve collaborative development experience and reusability where team members can design their applications using application templates.

You can perform the following operations:

- Export an existing project as a template.
- Create a project using a template.
- Modify an existing template.

For more information, see "Working with Templates" in *TIBCO BusinessWorks Container Edition Application Development*.

Palettes

The ResourcePath element is added on the **Input** tab of the **Invoke REST API** activity.

An additional element ResourcePath is added on the **Input** Tab of the **Invoke REST API** activity for overriding the **Resource Path** value on the **General** tab of the activity.

Support is added for PostgreSQL failover URL.

Support is added for PostgreSQL failover URL. For example:

```
jdbc:postgresql://host1:port1,host2:port2/database
```

The **Loop Subset in Current Process** check box and the **Loop Subset in Calling Process** field are added on the **Advanced** tab of the **JDBC Query** activity.

These options are enabled only when the process in subsets is selected.

For more information, see "JDBC Query" in *TIBCO BusinessWorks Container Edition Bindings and Palettes Reference*.

Palettes

A new **Interpret Invalid XML Chars** check box is added on the **Advanced** tab of the **JDBC Query** activity.

Select the check box to avoid getting problems with illegal chars.

Now you can enable Debug level logs for the **Parse JSON** and **Render JSON** activities.

Now the input and output for the **Parse JSON** and **Render JSON** activities are logged when the **Schema Type** is selected as XSD on the **General** tab, by enabling Debug level logs.

Add the following logger in the logback.xml file :

```
<logger name="com.tibco.bw.palette.restjson">
  <level value="DEBUG"/>
</logger>
```

Support is added for the square bracket ([]) in the resource path.

You can pass a query parameter having the square ([]) bracket in the **Invoke REST API** activity's **Resource Path** field on the **General** tab or **Input** tab using percent-encoding for ? as %3F.

Runtime

Integration for ECS Services with AWS Parameter Store

This release adds support for ECS Services with AWS Parameter Store on TIBCO Business Studio for BusinessWorks.

For more information see, "Integrating ECS Services with AWS Parameter Store" in the *TIBCO BusinessWorks Container Edition Application Development* .

Support is added to collect activity instance and process data instance.

This release adds the ability to collect activity instance and process data instance.

The activity instance and process instance data is collected from the Appnode and is stored in a database. The data can be queried by using REST APIs to find maximum time consuming and maximum memory consuming activities and processes.

Runtime

For more information, see "Collecting Performance Parameters with respect to Activities and Processes" in the *TIBCO BusinessWorks Container Edition Application Monitoring and Troubleshooting*.

For more information on New Features prior to TIBCO BusinessWorks Container Edition 2.6.0 release, see [New Features](#)

Changes in Platform Support

There are no changes in platform support in TIBCO BusinessWorks™ Container Edition. For a complete list of all the currently supported platforms, see the [readme file](#).

Changes in Functionality

The following notable changes in functionality have been made in TIBCO BusinessWorks Container Edition and are listed by release.

Release 2.6.2

Runtime	
By default, the logback.xml file for console output includes both the date and time.	<p>Earlier, the logback.xml file in TIBCO BusinessWorks Container Edition runtime had just the hour as trace.</p> <p>Now, the logback.xml in TIBCO BusinessWorks Container Edition runtime for console output includes both date and time as trace.</p>
Change in the default base OS image	<p>Earlier, the default base OS image was debian:stretch-slim.</p> <p>Now, it is changed to debian:buster-slim to fix some security vulnerabilities.</p>
Sending SSL based request using Jetty HTTP Client without Mutual authentication	<p>Earlier, to send a SSL based request with Send HTTP Request activity using Jetty HTTP Client library to a REST service, the Mutual Authentication checkbox on SSL Client shared resource needed to be enabled</p> <p>Now, to send a SSL based request with Send HTTP Request activity using Jetty HTTP Client library to a REST service, the Mutual Authentication checkbox on SSL Client shared resource does not need to be enabled. In Studio console, the "java.lang.IllegalStateException" warning message is generated but the application executes end-to-end.</p>

Release 2.6.1

There are no changes in functionality in TIBCO BusinessWorks™ Container Edition

Release 2.6.0

General	
The TIBCOBusinessStudio.ini file is present at the /studio/4.0/eclipse folder location on Mac operating system.	<p>Earlier the TIBCOBusinessStudio.ini file was present inside TIBCOBusinessStudio.app folder.</p> <p>Now from TIBCO BusinessWorks™ Container Edition 6.7.0, the TIBCOBusinessStudio.ini file is present under eclipse folder.</p>
Change in the deployment method name	The name of the deployment method is now changed from "Appspace" to "BW Appspace".
Change in a way to discover application server URL.	<p>When TIBCO BusinessWorks Container Edition application with REST reference and with Mesh service client enabled was launched from TIBCO Business Studio for BusinessWorks, the application invoked a Mesh service from the application on an application server. The application server's URL was determined by fixed rules.</p> <p>After a fully-qualified domain names (FQDN) service is provided, when the TIBCO BusinessWorks Container Edition application is launched, TIBCO Business Studio for BusinessWorks accesses the FQDNs and discovers the application server URL from it using a domain URL.</p>
EGIT plug-in installation	<p>There is no need to install EGIT plugin manually.</p> <p>EGIT plug-in version 4.4.1 is now a part of TIBCO Business Studio for BusinessWorks itself.</p> <p>To verify the installation, navigate to Help > Installation Details > Plugins (Egit).</p>
Migration	
Addition of the module name as a prefix to the	Earlier, after migration, the customxpathfunction jar-name did not have prefix of the module name in it and it migrated as a plain

Migration

custom Xpath function customxpathfunction jar for the custom Xpath functions.

Now, the CustomXpathFunction jar that is generated by the migration tool contains the name of the module as prefix before the customxpathfunction jar name.

For example, in SampleApplication_CustomXpathFunction.jar, SampleApplication is the module name.

Runtime

The default local of the Docker file for TIBCO BusinessWorks Container Edition is UTF-8	Earlier, the default local of the Docker file for TIBCO BusinessWorks Container Edition was POSIX.
	Now, The default local of the Docker file for TIBCO BusinessWorks Container Edition is UTF-8.

For more information on Changes in Functionality prior to TIBCO BusinessWorks Container Edition 2.6.0 release, see [Changes in Functionality](#)

Deprecated and Removed Features

This section lists the features that have been deprecated or removed in this release.

Deprecated Features

Release 2.6.2

No features are deprecated in TIBCO BusinessWorks Container Edition

Release 2.6.1

No features are deprecated in TIBCO BusinessWorks Container Edition

Release 2.6.0

The Universal Installer for TIBCO BusinessWorks Container Edition will not ship the out of the box support for SVN from the next release. TIBCO provides a separate documentation on how to add the SVN support.

Removed features

Release 2.6.2

No features are removed in TIBCO BusinessWorks Container Edition

Release 2.6.1

No features are removed in TIBCO BusinessWorks Container Edition.

Release 2.6.0

No features are removed in TIBCO BusinessWorks Container Edition.

Closed Issues

The following are the closed issues in TIBCO BusinessWorks™ Container Edition.

The closed issues are grouped by components:

- [Binding](#)
- [General](#)
- [Migration](#)
- [Monitoring](#)
- [Palette](#)
- [Policies](#)
- [Runtime](#)

For more information on Closed Issue prior to TIBCO BusinessWorks Container Edition 2.6.0 release, see [Closed Issues](#)

Binding

This topic lists closed issues related to Binding.

Release 2.6.2

Key	Description
BWCE-3962	The BinaryContent field is not visible in HTTP Receiver activity's output schema with the PATCH and PUT methods of the REST service binding when you set the Output Style as Binary on the General tab of the HTTP Receiver activity.
BWCE-3690	Swagger UI request is sent to a wrong port if TIBCO ActiveMatrix BusinessWorks application exposes multiple REST endpoints by using separate HTTP Connector shared resource.
BWCE-	TIBCO Business Studio for BusinessWorks displays the 500 internal server error

Key	Description
3323	<p>when you have the following configuration in the REST service binding:</p> <ul style="list-style-type: none"> On the General tab of the REST service binding, <ul style="list-style-type: none"> The Enforce BW Service Response check box is selected The Response Client Format is JSON On the Response tab: <ul style="list-style-type: none"> Use Empty Values for Null check box is selected. The complex type element having "nillable=true" is sent with Set Explicit Nil selected in the Input tab.

Release 2.6.1

Key	Description
AMBW-42099	The operationID field is now displayed in the runtime Swagger file of a REST service when it is hit from Swagger UI.
AMBW-35328	The Configure Local Swagger option does not work when you import a project in TIBCO Business Studio™ for BusinessWorks™ first and then configure the Local Folder path in the API explorer tab.

Release 2.6.0

Key	Description
AMBW-41468	<p>After migration, the org.apache.axiom.om.OMException: Unable to determine SOAP version error occurred when an attachment style was MTOM.</p> <p>Add the following property:</p> <pre>bw.binding.soap.client.reply.mtom.contenttype.override=true.</pre>
AMBW-	The unbound header parts were missing in the concrete WSDL generated at

Key	Description
41299	design time using the Generate Concrete WSDL option from SOAP service, which imported another WSDL importing request and response header XSDs.
AMBW-41129	The Apache Axis2 threads were not increased with an increase in load.
AMBW-40680	The Unbound Header parts were missing in the runtime concrete WSDL retrieved from SOAP service with version 1.2.
AMBW-40679	The Unbound Header parts were missing in the runtime concrete WSDL retrieved from a SOAP service when the abstract WSDL imported another WSDL, and the WSDL imported request and response header XSDs.
AMBW-39997	<p>The incorrect error code 403 Forbidden was thrown for the Invoke activity in a SOAP over HTTP application when the HTTP Client shared resource was configured with the following options:</p> <ul style="list-style-type: none"> • Default port = 443 • Implementation Library = Apache HttpComponents(Supported by HTTP 1, SOAP and REST) • Default Confidentiality check box was selected.
AMBW-39819	The time required for runtime concrete WSDL retrieval for a SOAP service increased if more applications with a large number of schemas were deployed on the same AppNode.
AMBW-39038	The runtime concrete WSDL took too much time to generate when an endpoint was hit in the browser, because the schema cache was not initialized before WSDL retrieval.

General

This topic lists the closed issues related to General issues.

Release 2.6.2

Key	Description
BWCE-3982	For the End activity, the testFilePath and activityTestInput fields are not shown on the Test tab when you select the Activity Assertion Mode and select the Gold Input From File check box.
BWCE-3889	Now you can generate Manifest.json file for cloud projects by using the following bwdesign command line utility: <code>generate_manifest_json -project <project_name> <location to generate manifest.json file></code>
BWCE-3844	For an existing TIBCO ActiveMatrix BusinessWorks process, a schema namespace is not refreshed when you define a new exception type as a part of a new activity added in a process.
BWCE-3777	TIBCO Business Studio for BusinessWorks throws a validation error when the transition conditions of parallel JDBC palette activities inside the Local Transaction group are mutually exclusive.
BWCE-3719	The Validate button in the Process launcher XML dialog box validates the input now.
BWCE-3697	The Transform XML activity cannot process an XSLT that has multiple sort elements.
BWCE-3696	The Mapper activity cannot sort the values of type DateTime and Date .
BWCE-3587	TIBCO Business Studio for BusinessWorks becomes unresponsive when you open processes of the external shared modules that are imported from a Maven repository.
BWCE-3418	On Cent OS, TIBCO Business Studio for BusinessWorks cannot display the Cloud Container Service Configuration dialog box when you set the Deployment Target as Container and select the Browse Container Configuration for an application property in the application properties editor.
BWCE-3397	BWDesign Utility fails to start on SUSE 12.5

Key	Description
BWCE-2541	If you change a schema on the Start activity, the test input is not updated automatically and there is no way to update the test input to reflect the new schema.
BWCE-2015	TIBCO JRE is removed from openjdk:8-jdk-alpine based container image.
AMBW-42962	In some scenarios, migrating a JDBC project displays a validation error for the Iteration Element in the Iterate group.
AMBW-42859	TIBCO Business Studio for BusinessWorks becomes unresponsive intermittently when you import a shared module through maven plug-in.
AMBW-42640	An application throws an error when an activity's XPath expression contains the insert-before() function.
AMBW-42627	The Iterate group in a subprocess generates incorrect output when two different processes call the same subprocess containing the Iterate group at the same time.
AMBW-42583	<p>The Mapper activity displays the literal white space character (" ") is not datatype-valid with respect to the datatype definition '{http://www.w3.org/2001/XMLSchema}double' error.</p> <p>To avoid typecasting error, use the following VM argument:</p> <p>-Dbw.xml.general-comparison.ignore-numeric-cast=true</p>
AMBW-40371	You cannot add the duplicate When condition along with its expression if you use the Surround with Choice option for an element, and then try to duplicate the When condition.
AMBW-37898	An application with Timer and Log activities fails and displays the Invalid BWApplicationHandle error when an AppSpace is configured in an FT Group mode and you restart an application on a new AppNode.

Release 2.6.1

Key	Description
BWCE-3732	All the unbounded elements are not loaded on the Process Launcher tab if an XML file is provided having unbounded elements in the Validate Schema dialog box.
BWCE-3731	When the namespace prefix is changed in the Validate Schema window on the Process Launcher tab, the request message is not updated as per the validated schema.
BWCE-3725	When the non-string elements are removed from the Validate Schema dialog box, the corresponding elements are not removed from the Process Launcher tab.
AMBW-42534	After renaming a process package, the Input tab of the Call Process activity is not displayed.
AMBW-42086	After Tibtunnel recovers from its termination, TIBCO BusinessWorks Container Edition cannot connect to the on-premise resources such as Enterprise Message Service (EMS) for the one round of Timer trigger.
AMBW-42068	The CurrentElement of the Iterate Group is not populated and the element remains empty.
AMBW-41099	The Last Modified date of an API in the API Explorer tab is incorrect.

Release 2.6.0

Key	Description
BWCE-3294	Mashery integration did not show endpoint definition when port mappings were used.
BWCE-3262	The application property screen went blank intermittently while performing any tasks on the application properties.
BWCE-	When profile properties file was exported using bwdesign utility for TIBCO

Key	Description
3207	BusinessWorks Container Edition applications, the property values exported were different than the ones provided in TIBCO Business Studio for BusinessWorks.
AMBW-41613	<p>The activity input data validation error occurred when converting a double value to a decimal value and the -Dbw.application.activity.validateOutput=false property was set in the config.ini file.</p> <p>A new -Dbw.xml.decimal.allowDoubleExponent property is added.</p> <p>Set the -Dbw.xml.decimal.allowDoubleExponent property to true along with the -Dbw.application.activity.validateOutput=false in the config.ini file.</p>
AMBW-41298	The Iterate group for a schema element did not work when the element belonged to a no-namespace schema.
AMBW-41223	The trim() mapper function in the Group by clause failed and generated the XSLT transformation error at run time.
AMBW-41221	The input tab mappings were not visible for activities when the if condition in the XPath function was empty.
AMBW-40860	The coercion failed to fetch the correct elements for mapping and displayed a validation error at design time when there were two elements of the same name and namespaces, but from the different schemas.
AMBW-40453	Support for migration of the tib:evaluate function is provided in TIBCO BusinessWorks™ Container Edition 2.6.0.
AMBW-40436	<p>TIBCO Business Studio for BusinessWorks displayed null pointer exception when constructing the CatchAllFaultDetails document because of the incorrect transition link from the Scope.</p> <p>Now, the following error message is displayed whenever there is a link in the process that has the source activity set as the group end activity.</p> <p>Outgoing link from Group End activity of <group_name> group is incorrectly configured. Please delete and recreate it to repair or apply the quick fix.</p>

Key	Description
	Applying the quick fix deletes the erroneous link and recreate the link with the correct serialization.
AMBW-40295	TIBCO Business Studio for BusinessWorks did not select subprocesses correctly in the Run Configuration and Debug Configuration windows.
AMBW-39898	The XSD resolver could not process the id attribute in the xs:group element.
AMBW-39820	TIBCO Business Studio for BusinessWorks did not display appropriate error for a transition from the Group End activity to any activity inside the Group.
AMBW-39494	The current-dateTime() function returned different representation of output in TIBCO Cloud Integration, ActiveMatrix BusinessWorks, and TIBCO BusinessWorks Container Edition.
AMBW-38971	After migration, coercion disappeared and had to be remapped frequently.
AMBW-38966	TIBCO Business Studio for BusinessWorks failed to generate .EAR from studio and bwdesign utility due to null pointer exception.
AMBW-38787	TIBCO Business Studio for BusinessWorks displayed an error in the Problems tab when a module property inside a shared module referred a process property of type JDBC Connection.
AMBW-38748	Leading or trailing white spaces from alias name of SSL server shared resource did not trim when the value type was literal value.
AMBW-38292	Null pointer exception occurred while generating .EAR for specified customer project.
AMBW-37808	While moving the JMS shared resources from an application module to a shared module, TIBCO Business Studio for BusinessWorks didn't refactor the module property path correctly.
AMBW-	The Job Data view in the debugger became unresponsive while displaying

Key	Description
37597	large data.
AMBW-37112	The validation message was not displayed on using the parallel JDBC activity inside the Local Transaction group.
AMBW-36034	An application was not visible in the Debug Configuration window when the project's name was different than the value of the ID field of the Overview section of the project.
AMBW-34133	The Iterate group configuration error because of schema used does not have namespace. error reported if the Iterate group used schema without namespace.

Migration

This topic lists the closed issues related to Migration.

Release 2.6.0

Key	Description
BWCE-3586	Post migration and mavenising a project, during a build or deployment of the project a NullPointerException occurred due to the sequencing of the MANIFEST.MF file in the CustomXPathfunction jar.
BWCE-3568	The MANIFEST.MF file in the CustomXPathfunction jar is now the first entry whenever the jar contents are extracted.
AMBW-41319	After migration, the \$error_<activityname> was not migrated and failed to fetch error details from the Local Transaction group.
AMBW-41022	After migration, the subprocess containing the padfront() function failed at runtime.
AMBW-40178	After migration, multiple errors occurred for DTD to XSD conversion.

Key	Description
AMBW-40068	After migration, the SOAP Request Reply activity could not migrate successfully.
AMBW-40067	After migration, transitions to Invoke activities were not present in a process.
AMBW-38737	After migration, the faultDetails mapping was incorrect.
AMBW-37700	After migration from the SAP adapter configurations to TIBCO ActiveMatrix BusinessWorks™ Plug-in for SAP, the mappings were not migrated.
AMBW-37114	After migration, the pipe character (" ") was converted to the "or" condition which resulted in incorrect activity output.
AMBW-31022	The transition condition now has the migration support of adding the XPath 1.0 tag.

Monitoring

This topic lists the Closed Issues related to Monitoring.

Release 2.6.0

Key	Description
BWCE-3443	The Database table was getting locked when any operation occurring on an application, that had a large number of application instances.
BWCE-2749	The TransitionLoggingStats was getting logged in to the database only when instrumentation and process monitor was enabled. By default it is disabled.

Palette

This topic lists the Closed Issues related to Palettes.

Release 2.6.2

JDBC Palette

Key	Description
AMBW-43088	With the SQL Direct activity in an application, a heap memory leak is observed on an AppNode.
AMBW-42888	TIBCO Business Studio for BusinessWorks displays timeout error with SQL stored procedures when you use Data Direct Driver and XML type parameters as IN or OUT.

JMS Palette

Key	Description
BWCE-3887	<p>The JMS Receive Message activity throws an error when the Message Type is set as Text on the General tab of the JMS Receive Message activity but the message contains the byte content.</p> <p>To align the functionality with TIBCO ActiveMatrix BusinessWorks 5.x, the new property is added.</p> <p>Set the <code>bw.jms.receiver.deserialize.message.as.bw5=true</code> property in the AppNode's config.ini file to receive appropriate content.</p>

REST and JSON Palette

Key	Description
BWCE-3689	<p>The output of the Render JSON activity shows the decimal number in double quotes (""") if both of the following conditions are met:</p> <ul style="list-style-type: none"> On the General tab, the Badgerfish check box is selected. Schema element is of complexType with extension base and contains decimal type value.

REST and JSON Palette

Key	Description
AMBW-43096	The design time and runtime Swagger files now include the definitions of the extended elements from different XSD.

XML Palette

Key	Description
AMBW-42474	The Value-of <code>max(xsd:int*)</code> expression returned as a scientific notation value when the Transform XML activity has bigger numbers in input.

Release 2.6.1

File Palette

Key	Description
AMBW-42344	The Write File activity cannot generate a file when the TextContent field has the space character (" ") value.

HTTP Palette

Key	Description
BWCE-3639	<p>The routing URL is unavailable when user defined module property value localhost is configured in the HTTP Connector shared resource.</p> <p>For docker or cloud foudry, you can set the property by passing it in <code>BW_JAVA_OPTS</code> environment variable as</p> <p><code>Dbw.user.module.property.value.localhost.resolved=true</code> to access the route URL.</p>

Mail Palette

Key	Description
AMBW-42212	An application becomes unresponsive on the Send Mail activity and does not timeout when the existing engine threads are occupied.

JDBC Palette

Key	Description
BWCE-3687	When the Nil option is selected in SQL Direct and the table is left empty or only one of the columns contains data then at runtime the Activity output data validation error is displayed.

Release 2.6.0

FTP Palette

Key	Description
AMBW-38106	The FTP Rename File activity failed intermittently to rename files from a particular directory when the FTP Rename File activity was a part of a subprocess, which was called from a Call Process activity with the Spawn check box selected.

HTTP Palette

Key	Description
AMBW-41408	The Send HTTP Request activity threw the HttpClientException when the application deployed on TEA was restarted, and the HTTP Client shared resource had the Apache HttpComponents(Supported by HTTP 1, SOAP and REST) implementation library, and the Provide Client Resource check box was selected on the Advanced tab of the Send HTTP Request activity.

HTTP Palette

Key	Description
AMBW-41006	<p>The SSL was configured even when the SSL Client shared resource picker was not empty and the module property against the Confidentiality field at HTTP Client shared resource was set to false.</p> <p>Set the <code>bw.plugin.http.client.relyOnConfidentialityField</code> property to true.</p>
AMBW-40484	<p>The Send HTTP Request activity could not send the request with Content-type as multipart/form-data to ServiceNow with Apache HttpComponents library.</p> <p>Send the POST request using the Jetty HTTP Client library in the HTTP Client shared resource.</p>

JDBC Palette

Key	Description
AMBW-41608	<p>The JDBC connection created against the database increased beyond the configured value when any of the following cases occurred:</p> <ul style="list-style-type: none"> • There was a network issue. • Database was stopped or started • The <code>bw.engine.activity.async.waitTime</code> property was present in the <code>config.ini</code> file.
AMBW-41215	<p>The Null Pointer Exception was thrown when re-connecting the database with an application.</p>
AMBW-41146	<p>The input and output parameters for a stored procedure were not accessible when the stored procedure was inside a package.</p>
AMBW-41145	<p>The JDBC Call Procedure activity failed and generated the Unknown exception occurred.</p>
AMBW-40335	<p>TIBCO BusinessWorks™ Container Edition generated the <code>java.sql.SQLException</code> at runtime when the Database URL had forward slashes in the <code>sslTrustStoreLocation</code> path.</p>

JMS Palette

Key	Description
BWCE-3292	The Get JMS Queue Message activity was not able to reconnect to EMS when there was an EMS connection failure.
AMBW-41548	For the ActiveMQ JMS provider, the JMS Receive Message activity failed to reconnect for network issues.
AMBW-40637	The JMS Send Message activity displayed the Null pointer exception intermittently when messages were sent in concurrent batches.
AMBW-35597	The JMS Request Reply activity can now filter requests and response messages correctly on the basis of JMS CorrelationID or MessageID.
AMBW-34959	<p>Messages were stuck in an EMS queue when the EMS connection dropped and reconnected.</p> <p>This issue occurred intermittently when the AppSpace was configured with FTgroup persistence with the EMS FT URL.</p> <p>Also, the secondary EMS server was not available intermittently after the failure of the first server.</p>
AMBW-33187	In TIBCO Business Studio™ for BusinessWorks™, the default value for the Directory preference option on the BusinessWorks > Palettes > JMS preference page was invalid.

Mail Palette

Key	Description
AMBW-39777	The Receive Mail activity used to start the handshake with TLSv1 irrespective of the TLS SSL Protocol selected in the SSL Client Configuration for the SMTP shared resource.
AMBW-39776	The Send Mail activity used to start the handshake with TLSv1 irrespective of the TLS SSL Protocol selected in the SSL Client Configuration for the SMTP shared resource.

REST and JSON Palette	
Key	Description
AMBW-41167	<p>For some scenarios, the Parse JSON activity generated the XMLStreamException in the console, in logs and the Output tab in Job Data view became empty when an application was executed in the debug configuration.</p> <p>Set the <code>bw.engine.debug.core.disableNamespaceFixup</code> property to true.</p> <p>Do not use this property while mocking the output for unit testing.</p>
AMBW-40875	The Parse JSON activity could not parse a JSON key having a value of array type with length more than 512 characters.
AMBW-40618	<p>Logs for the Invoke REST API activity now also display the response body information. Set the following logger in the logback.xml file:</p> <pre><logger name="com.tibco.bw.palette.restjson.runtime.RestInvoke"> <level value="DEBUG"/> </logger></pre>
XML Palette	
Key	Description
AMBW-41240	<p>The Parse XML activity threw Content is not allowed in prolog error when the input file encoding was UTF-8-BOM and the Validate Output check box was selected.</p> <p>Set the <code>-Dbw.application.activity.validateOutput.treeValidation=true</code> property as a VM argument when validating an output XML.</p>
AMBW-33245	An error occurred when the YearMonth datatype was typecasted with the <code>xsd:string()</code> .

Policies

This topic lists the Closed Issues related to Policies.

Release 2.6.1

Key	Description
BWCE-3544	If a policy is applied at root "/" level, then it gets applicable to every path under it, unexpected calls are received at governance layer which leads to memory leak.

Runtime

This topic lists the Closed Issues related to Runtime.

Release 2.6.2

Key	Description
AMBW-43223	<p>The Wait and Notify activities in the group persistence mode do not work with default values for the <code>bw.engine.threadCount</code> and <code>bw.engine.db.maxConnection</code> properties.</p> <p>The following new properties are introduced in the AppSpace's <code>config.ini</code> file:</p> <ul style="list-style-type: none"> • <code>com.tibco.bx.lockWaitNotify=true</code> • <code>com.tibco.bw.throttle.notify.activity=true</code> • <code>com.tibco.bw.throttle.wait.activity=true</code> <p>Use the throttle properties when default configuration is used.</p> <p>The <code>bw.engine.db.maxConnection</code> value must be greater than the <code>bw.engine.threadcount</code> value.</p>
AMBW-43222	<p>Some of the TIBCO BusinessWorks Container Edition jobs are not processed intermittently when an application has the Wait and Notify activities.</p> <p>To avoid the deadlock scenario, TIBCO recommends to set the <code>com.tibco.bx.lockWaitNotify=true</code> property and the value of <code>bw.engine.db.maxConnection</code> property = twice the value of <code>bw.engine.threadCount</code>.</p>
AMBW-	The performance is degraded in the Iterate group.

Key	Description
42815	
AMBW-42771	The Iterate group maps incorrect data to the iteration element when the Iterate group is executed by multiple jobs at the same time.
AMBW-41331	Two applications incorrectly refer to the same hashmap in some cases when an AppNode starts the applications at the same time, and an activator process is used along with custom XPath functions.

Release 2.6.1

Key	Description
BWCE-3712	An exception occurs in debug mode for console, when the ASCII Characters are not be serialized or parsed in XML.
AMBW-42418	The BW.MODULE.NAME and BW.MODULE.VERSION module properties return empty values.
AMBW-42416	On stopping an application, the application cannot call the delete method of the shared resource when the shared resource uses a module property in one of the fields.
AMBW-42125	TIBCO Business Studio for BusinessWorks displays an error message for the OAuth Configuration shared resource when the confidentiality is not defined for the HTTPS.
AMBW-40159	Modifications done inside a running application in TIBCO Business Studio for BusinessWorks displays the Process not found error.

Release 2.6.0

Key	Description
BWCE-3396	The JDBC Call Procedure activity failed by timeout when the store procedure used had a complex nested array type of objects.

Key	Description
BWCE-1665	The performance of <code>xsl:apply-templates</code> was poor, when the optional <code>Select</code> attribute contained a XPath expression which was not an empty string. The optimizer now recognizes such XPath expressions that can be sped up, and improves performance in supported cases significantly.
AMBW-41486	<p>The <code><?xml-multiple?></code> tag disappeared from the output of the Parse XML activity when the Validate Output check box was selected.</p> <p>Set the <code>-Dbw.application.activity.validateOutput.treeValidation=true</code> property as VM argument to add the tag when validating an output XML.</p>
AMBW-41289	The <code><msgCode></code> tag under <code>FaultDetails</code> could not capture the actual <code>msgCode</code> value.
AMBW-41222	An application was unable to resolve a process variable on startup for the Assign activity, even though the Call Process activity in the same process could resolve the same process variable.
AMBW-41218	The Engine Command activity did not stop an application when an application was restarted.
AMBW-41207	Memory leak issue was observed due to an instance of <code>org.eclipse.xsd.XSDSchemaDirective[]</code> on an <code>AppNode</code> .
AMBW-41045	After upgrading, the Transform XML activity took more memory and generated the Out of Memory Exception.
AMBW-40793	An application could not be started when its status was <code>STARTFAILED</code> .
AMBW-40362	An application using WSDL from a shared module failed to restart and displayed the <code>java.lang.IllegalStateException: BundleContext is no longer valid</code> error.
AMBW-40232	The conversation handler failed when multiple <code>AppNodes</code> were set up in a group persistence mode.
AMBW-	Ability to evaluate transition expression as XPath 1.0 expression

Key	Description
40145	<p>Set the <code>bw.engine.use.transition.xpath.expression.lang.1.0</code> property to true in the AppNode's <code>config.ini</code> file.</p> <p>By default, the value is false.</p>
AMBW-38813	The performance was degraded in the Iterate Group activity.
AMBW-36149	When an application had a persistent shared module in the group mode, the following error occurred intermittently: PVM-MODEL-102700.
AMBW-33830	After migration, the Repeat group used in a calling process displayed <code>java.sql.SQLException</code> when the JDBC Query activity was configured with a process in subsets used inside a subprocess.

Known Issues

The following known issues have been introduced in TIBCO BusinessWorks™ Container Edition .

The known issues are grouped by components:

- [Binding](#)
- [General](#)
- [Migration](#)
- [Mocking Support](#)
- [Monitoring](#)
- [Palettes](#)
- [Policies](#)
- [Runtime](#)

Binding

This topic lists the Known Issues related to **Binding**.

Key	Description
BWCE-3983	<p>Summary: The Swagger UI does not load the resource path details for applications having multiple REST services with separate HTTP Connector for each endpoint on Cloud Foundry.</p> <p>Workaround: None.</p>
AMBW-43156	<p>Summary:The Swagger UI is blank when the swagger URL is hit from Internal Web Browser in TIBCO Business Studio for BusinessWorks 6.7.0</p> <p>Workaround:Hit the swagger URL from external browser.</p>
AMBW-43023	<p>Summary:For form parameter of password type, the Swagger JSON under service descriptors has missing "format": "password" key-value inside the</p>

Key	Description
	<p>Schema object.</p> <p>Workaround: Manually add the "format" : "password" tag to the form parameter in the swagger file.</p>
AMBW-36113	<p>Summary: A multipart message where one part points to type and the other part points to element and a message using mixed security mode is not supported.</p> <p>Workaround: Change mixed security mode in a given WSDL.</p>
AMBW-32951	<p>Summary: A SOAP service responding with mustUnderstand attribute as true is ignored irrespective of selecting or deselecting the Ignore mustUnderstand check box on the SOAP Reference binding. This behavior does not affect the client and server communication.</p> <p>Workaround: None</p>
AMBW-32760	<p>Summary: On creating SOAP Reference Binding with the concrete WSDL generated at run time with multilevel schema imports, the java.lang.NullPointerException is displayed when clicking the reference binding.</p> <p>Workaround: None</p>
AMBW-29098	<p>Summary: When creating a concrete WSDL by right-clicking on the Service Descriptor folder, the following error is generated at design time: WSDL import error.</p> <p>Workaround: None</p>
AMBW-27870	<p>Summary: On importing WSDL with RPC Encoded style, a validation error is generated at design time since the underlying schema with namespace http://schemas.xmlsoap.org/soap/encoding/ is not generated.</p> <p>Workaround: To remove the validation error and create the SOAP Reference Binding, download the encoding schema with the said namespace and ensure that schema is a part of the application module or the shared module.</p>
AMBW-	<p>Summary: When module properties used from a shared module project were</p>

Key	Description
27435	renamed, the changes made were not reflected at the SOAP binding level. Workaround: Select the updated module property from the drop down in the SOAP binding.
AMBW-26806	Summary: When a REST service with a schema that uses a type which was imported from another XSD is invoked in a REST Reference Binding, it fails with the ServiceRuntimeException. Workaround: None
AMBW-23104	Summary: When the WSDL uses multiple parts in the Request body of an operation, a design time validation error occurs on the generated SOAP reference binding. The application works fine at run time. Workaround: None
AMBW-22981	Summary: When the REST Service which is implemented with GET Operation with Response as String, then the content-type of the response is changed from application/json to text/plain. Workaround: Use XSD Element in Response instead of String.
AMBW-13607	Summary: REST Doc UI is not supported on Firefox browser. Workaround: Use other browsers for the Doc UI.
AMBW-13572	Summary: For some use cases, REST Doc UI does not show the correct error code in case of Internal Server errors on the Server side. Workaround: Check the raw message that contains the correct error code.
AMBW-13485	Summary: REST Doc UI does not support browsers like Internet Explorer. Workaround: Use Chrome browsers for the Doc UI.
AMBW-8982	Summary: Changing the Resource name in the REST service Bindings tab, does not update the Resource Service Path . Workaround: None

General

This topic lists the Known Issues related to **Binding**.

Key	Description
BWCE-4016	<p>Summary: Context-sensitive help for any activity or sample in TIBCO Business Studio™ for BusinessWorks™ is not currently available.</p> <p>Workaround: Use the enhanced search functionality in TIBCO BusinessWorks™ Container Edition 2.6.2 online help to find necessary information.</p>
BWCE-2556	<p>Summary: When an application containing Netsuite plug-in activities is deployed in TIBCO BusinessWorks Container Edition Container, a SSLHandShakeException is thrown.</p> <p>Workaround: Copy the libsunec.so library found in jre-8u<no>-linux-x64.rpm/tar.gz which is available in Oracle resource library to /resources/addons/lib folder before you create the base image or buildpack.</p>
BWCE-2073	<p>Summary: Marketo application generates run time SSLHandshakeException for TIBCO BusinessWorks Container Edition.</p> <p>Workaround: Copy the libsunec.so library found in jre-8u<no>-linux-x64.rpm/tar.gz which is available in Oracle resource library to /resources/addons/lib folder before you create the base image or buildpack.</p>
BWCE-2008	<p>Summary: FTL application does not work in windows container because of absense of FTL client libraries for windows.</p> <p>Workaround: None.</p>
BWCE-1433	<p>Summary: In the FTL application logs, an Invalid message type received from peer 'NULL' error message occurs.</p> <p>Workaround: None. These errors can be ignored.</p>
BWCE-1239	<p>Summary: An error, related to libcrypto.so, is displayed in the logs when the application is pushed to the Cloud Foundry or Docker.</p> <p>Workaround: None. These errors can be ignored.</p>

Key	Description
BWCE-103	<p>Summary: When specifying Application Properties, if invalid login credentials are specified in the Configure Container Connection Dialog, the dialog asking for valid login credentials repeatedly pops up even after valid login credentials are specified.</p> <p>Workaround: Press the Cancel button on the dialog.</p>
AMBW-41950	<p>Summary: In bwdesign, if we export substvar files with the same name twice in the same location, it does not overwrite the substvar file.</p> <p>Workaround: Delete the previous substvar file and export substvar again.</p>
AMBW-41948	<p>Summary: Many to one mapping is not supported for Smart Mapper.</p> <p>Workaround: None</p>
AMBW-41846	<p>Summary: Any operation on the module or application properties that leads to a change in their order results in a faulty difference generation. So, such operations are not supported in TIBCO BusinessWorks Container Edition 6.7.0.</p> <p>Workaround: None.</p>
AMBW-41832	<p>Summary: The lock icon on the encrypted profile in the difference viewer perspective is shown based on whether the workspace copy of the profile is encrypted or not. Currently, if the workspace copy of the profile is encrypted, then in the difference viewer perspective, the lock icon is shown even on the un-encrypted revisions of that profile.</p> <p>Workaround: None.</p>
AMBW-41827	<p>Summary: The properties and profile are not showing in the application property editor on opening the editor for the first time in a new workspace.</p> <p>Workaround: Close and reopen the editor, it shows all the details.</p>
AMBW-41779	<p>Summary: If a keystore file location or name is changed then on refresh blank property value is shown and on running the application, the File Not Found Exception is thrown.</p>

Key	Description
	Workaround: Restore file with a valid name at a specified location on disk and do project clean.
AMBW-41716	<p>Summary: Any changes in the module or application properties inside groups are not supported in TIBCO BusinessWorks Container Edition 6.7.0 and the corresponding difference generation is faulty in such cases.</p> <p>Workaround: None.</p>
AMBW-41715	<p>Summary: The difference viewer calculates the difference and highlights the properties, but does not highlight any corresponding fields of the properties.</p> <p>Workaround: Switch to the text difference mode and see the difference in the non-UI fields.</p>
AMBW-41499	<p>Summary: In the substitution variables file, only five types of module properties are saved: String, Integer, Long, Boolean, and Password.</p> <p>When a module property is assigned a type other than the above-mentioned types then that type is saved as a String in the substvar file in the Diff Viewer window.</p> <p>Workaround: None.</p>
AMBW-41474	<p>Summary: If there are any changes in the Description field of a module or application property, it is not highlighted in the difference viewer.</p> <p>Workaround: None.</p>
AMBW-41307	<p>Summary: Application property editor does not display value in case of removing encryption setting using the Clear All button and exporting profile.</p> <p>Workaround: Close the application properties editor and open it again.</p>
AMBW-41277	<p>Summary: When you try to install a missing plugin using the Quick Fix option and you select or unselect a plugin version from the list of provided versions; the following message is displayed: Cannot complete the install because of a conflicting dependency.</p> <p>However, you can still install the plugin successfully.</p>

Key	Description
	Workaround: None.
AMBW-41252	<p>Summary: The New Name field in the Rename Projects section on the Create Project From Template window is not enabled on a single click.</p> <p>Workaround: First click on the old name of the module or the application after which the field is enabled. .</p>
AMBW-41155	<p>Summary: The Password field is shown as changed while doing a Shared Resource diff, even if the password are the same.</p> <p>Workaround: None.</p>
AMBW-41238	<p>Summary: Confirmation message is displayed with any operation on encrypted profiles.</p> <p>Workaround: Click Yes.</p>
AMBW-41035	<p>Summary: The Authentication field is shown while doing a diff when the Confidentiality field is set for Http Connector shared resource.</p> <p>Workaround: None.</p>
AMBW-40811	<p>Summary: Default icon shown instead of Custom icon for the Call Process and Java Invoke activities within external shared module.</p> <p>Workaround: Manually browse the Custom icon field value and add respective icon to activity on importing external shared module.</p>
AMBW-39899	<p>Summary: The null pointer exception reported on clicking Binding Section in Components after the Refactoring operation.</p> <p>Workaround: Post refactoring, close the Module Descriptor section and reopen it. No popup is displayed.</p>
AMBW-39837	<p>Summary: The collectappnodedata command is not working on the AIX platform.</p> <p>Workaround: None</p>

Key	Description
AMBW-37594	<p>Summary: Breakpoints are not working when execution flow goes from one process to another.</p> <p>Workaround: Select an activity where debugging with the breakpoint is halted. It enables the Resume button. Click the button to resume debugging.</p>
AMBW-36990	<p>Summary: When you delete a module shared variables or job shared variables from the Unused Resources view, then the editor for module shared variables or job shared variables does not get refreshed automatically</p> <p>Workaround: Close the module shared variables or job shared variables and open it again.</p>
AMBW-34416	<p>Summary: Failed to connect to AppNode using SSH client</p> <p>Workaround: Use HTTP client. Preferred way is using curl.</p>
AMBW-34404	<p>Summary: Incorrect trace is generated for the invoke process with default jaeger properties.</p> <p>Workaround: Set JAEGER_SAMPLER_TYPE=const, and JAEGER_SAMPLER_PARAM=1 properties in the AppNode or AppSpace config.ini file.</p>
AMBW-34343	<p>Summary: An application fails to start in TIBCO Business Studio for BusinessWorks when you install the latest EMS driver.</p> <p>Workaround: Restart TIBCO Business Studio for BusinessWorks.</p>
AMBW-32761	<p>Summary: The user will not be able to create the references for the custom operations like Merge, Update, Trace etc. using the drag and drop swagger file approach.</p> <p>Workaround: Users can create the references for the custom operations using the REST Reference wizard.</p>
AMBW-28941	<p>Summary: Ungrouping nested groups created inside a catch block of a group may not ungroup as expected.</p> <p>Workaround: None</p>

Key	Description
AMBW-28663	<p>Summary: The <code>tibco.bw.sample.policy.samlcredentialmapping.SoapHttpBinding</code> sample fails intermittently with the error: <code>com.tibco.governance.agent.action.ActionException</code>.</p> <p>Workaround: None</p>
AMBW-28378	<p>Summary: When a Process Property is renamed , the change is not reflected in the activity and an error is displayed.</p> <p>Workaround: None</p>
AMBW-28319	<p>Summary: WSDL interface fails to resolve correctly if multiple WSDLs share the same target namespace and the SOAP invoke is created with an external binding reference.</p> <p>Workaround: Instead of an external reference binding, use binding reference.</p>
AMBW-28264	<p>Summary: When groups with the On Catch, Catch All and the OnEvent faults are created inside a constructor or a proxy operation, the activities inside them are lost after ungrouping.</p> <p>Workaround: None</p>
AMBW-27253	<p>Summary: The Identity Provider field in the WSSConsumer Policy resource does not support module properties.</p> <p>Workaround: None</p>
AMBW-25073	<p>Summary: The option to test connections, for example JMS or sFTP, in a shared resource that has a profile is not supported in TIBCO Business Studio for BusinessWorks.</p> <p>Workaround: Specify the server configuration details as literal value or module properties.</p>
AMBW-24508	<p>Summary: TIBCO-THOR-FRWK-CMN-500001:Error while renaming bundle file to final location: - error could be due to low disk space.</p> <p>Workaround: None</p>

Key	Description
AMBW-19746	<p>Summary: When you initialize the module shared variable of XSD type with the select value option to point the XML instance, application fails to start at run time.</p> <p>Workaround: Enforce the default encoding of AppNode JVM to UTF-8 by adding <code>-Dfile.encoding=UTF-8</code> in the <code>bwappnode.tra</code> file.</p>
AMBW-19540	<p>Summary: When a project contain abstract and concrete WSDL using same target namespace, a validation error is generated.</p> <p>Workaround: None</p>
AMBW-18459	<p>Summary: The ability to reference from a standalone (external) schema to an inline schema is not supported. If your project contains such a reference, a validation error is generated.</p> <p>Workaround: Externalize the WSDL-inline schema and change the import statements to reference the newly created (external) schema.</p>
AMBW-16256	<p>Summary: The first attempt to change the data type of an Operator's input or output schema element fails and the change is not committed. Subsequent attempts complete without any failure.</p> <p>Workaround: To commit the change, you must press the return key after every change.</p>
AMBW-14861	<p>Summary: Unable to enter an XPath expression on a transition using the XPath Builder. This issue is observed on Mac OS only.</p> <p>Workaround: Enter the XPath expression directly in the Properties tab > Expression field for the transition without using the XPath Builder.</p>
AMBW-12490	<p>Summary: Under certain circumstances, substitution types do not resolve properly in the mapper. The mapper shows errors for them.</p> <p>Workaround: Try closing and reopening the project. If that does not solve the issue, try closing and reopening Eclipse. If the errors still persist, perform a project clean (that is, go to the Project menu and click Clean...).</p>
AMBW-	<p>Summary: TIBCO Business Studio for BusinessWorks hangs when opening</p>

Key	Description
11624	<p>SQL Builder if the database details on the JDBC shared resource are changed from PostgreSQL to MySQL after a query has been created using SQL builder.</p> <p>Workaround: None</p>
AMBW-11534	<p>Summary: TIBCO Business Studio for BusinessWorks crashes occasionally on Windows 2012 R2 platform when switching workspace from File > Switch Workspace.</p> <p>Workaround: Retry by switching the workspace.</p>

Migration

This topic lists the Known Issues related to **Migration**.

Key	Description
BWCE-3763	<p>Summary: After migration, an element of simple type is not supported.</p> <p>Workaround: In the existing schema create an element reference for all WSDL messages which are referring type references.</p> <p>First create an element reference in inline or externalized schema and then update WSDL message to refer the element (newly created one for complex or simple type definition) and remove the reference of type definition.</p>
AMBW-40387	<p>Summary: After migration, a path is not executed that leads to the difference in output.</p> <p>Workaround: In TIBCO BusinessWorks Container Edition 5.x the transition condition <code>\$Map-Data/ConditionType[last()]</code> is treated as boolean but not in TIBCO BusinessWorks Container Edition 6.x as TIBCO BusinessWorks Container Edition 6.x has strict validations.</p> <p>In order to resolve this, please update the condition as follows:</p> <pre>count(\$Map-Data/ConditionType[last()])>0</pre>

Key	Description
AMBW-40187	<p>Summary: Migration of custom icon for the Call Process activity is not supported</p> <p>Workaround: After migration, manually browse the custom icon field value for the Call Process activity.</p>
AMBW-39231	<p>Summary: While migrating a project using XPATH language for transitions option, which is set to XPATH 1.0 by default, on the Migration Wizard, the Process inline namespace schema collision issue occurs intermittently after migration is complete.</p> <p>Workaround: Navigate to the faulted process and add the missing schema location field next to the namespace.</p>
AMBW-39230	<p>Summary: While migrating a project using the XPATH language for transitions option, which is set to XPATH 1.0 by default, the service agent process migrates as an empty process thereby throwing the Argument Cannot Be Null exception upon trying to view that process post Migration.</p> <p>Workaround: Migrate that project in a different workspace, because the issue is intermittent.</p>
AMBW-36094	<p>Summary: Post migration, a schema cannot refer the .WSDL file in it and if you try to run the project, the Schema not found error is displayed at the run time.</p> <p>Workaround: Copy the inline schema that gets created post migration of the project and paste it into the .WSDL file.</p> <p>Remove the inline schema dependency from the dependencies section and in the input editor of the inline schema activity, re-map the point to the inline element. After this remove the inline schema that is empty and execute the project.</p>
AMBW-36077	<p>Summary: After migration, if the migrated project contains any SOAP service or client binding that uses SOAP RPC Encoded arrays, the following WSDL validation error occurs:</p> <p>WSDL In-line schema SOAP encoded array type error. In-line schema in WSDL file contains SOAP encoded array type which requires a fix pattern.</p>

Key	Description
	<p>Workaround: Download the SOAP Encoding schema from 'http://schemas.xmlsoap.org/soap/encoding/', and put it into the TIBCO BusinessWorks Container Edition project.</p>
AMBW-35926	<p>Summary: The migration tool does not support external schema for multi-part message in the bindings.</p> <p>Workaround: Create wrapper schemas for all multi-part messages of WSDL.</p>
AMBW-35899	<p>Summary: Currently, only copy-of mapping is supported for context mapping of headers.</p> <p>Workaround: You can either create One-to-one mapping manually or use a copy-of option for context mappings.</p>
AMBW-33749	<p>Summary: After migration, additional round brackets in the names of the folder for externalized schema creates issues at run time.</p> <p>Workaround: Remove the special characters after migration in the folder names.</p>
AMBW-30656	<p>Summary: A schema cannot contain two global components with the same name.</p> <p>Workaround: Modify one of the schema namespaces or element names, so that the names are unique.</p>
AMBW-30476	<p>Summary: After migration, the input mapping for the End activity which refers to a multi-part WSDL message displays validation errors.</p> <p>Workaround: A WSDL message is not supported by a mapper. Create a new .xsd schema element with the structure similar to associated WSDL message, and then map the schema element in place of WSDL message.</p>
AMBW-26746	<p>Summary: The TransformXML activity from TIBCO BusinessWorks Container Edition 5.x did not migrate correctly if the Input/Output style of the activity was set to TREE in the TIBCO BusinessWorks Container Edition 5.x project.</p> <p>Workaround: None</p>

Key	Description
AMBW-14547	<p>Summary: When you migrate an TIBCO ActiveMatrix BusinessWorks 5.x project containing in-built functions in the JDBC Query activity, an Invalid Column name error is thrown in the JDBC Query activity.</p> <p>Workaround: Use an Alias instead of the in-built functions in the TIBCO BusinessWorks Container Edition 5.x project.</p>
AMBW-14295	<p>Summary: After migration, the output of project with Rest and JSON activities does not match with the input of the other activities in the migrated project.</p> <p>Workaround: None</p>
AMBW-13683	<p>Summary: Shared resource module property references in the migrated TIBCO ActiveMatrix BusinessWorks 5.x projects do not show up correctly on non-Windows platforms.</p> <p>Workaround: Close and reopen the project.</p>
AMBW-9969	<p>Summary: ActiveMatrix BusinessWorks 5.x projects with SOAP headers configuration in SOAP activities are not properly migrated to TIBCO BusinessWorks Container Edition .</p> <p>Workaround: SOAP functionality in TIBCO BusinessWorks Container Edition is achieved through SOAP Binding where its detail configuration is outside of TIBCO BusinessWorks Container Edition Process. The SOAP headers definition are defined at the Binding configuration and configured as generic context parameters for the Process. In the Process, you can use the Get Context activity (from Basic Palette) to retrieve and process the headers as context data. You can do this manually to complete the migrated project.</p>

Monitoring

This topic lists the Known Issues related to **Monitoring**. .

Key	Summary
BWCE-	Summary: When a monitoring application is started with any database other

(Continued)

Key	Summary
2548	<p>than Oracle, the Oracle libraries are getting downloaded.</p> <p>Workaround: None.</p>
BWCE-2393	<p>Summary: TIBCO BusinessWorks Container Edition Monitoring does not work with Oracle Database on Docker.</p> <p>Workaround: In the Dockerfile, add RUN npm rebuild on line number 29.</p>
BWCE-1832	<p>Summary: In some cases, catch block, reference binding, service binding is misaligned in the process diagram in Monitoring UI.</p> <p>Workaround: None.</p>
BWCE-1810	<p>Summary: When Process Monitoring is enabled for an application, in PCF, all historical records also appear when observing process monitoring data when an application is deleted and same application is pushed again.</p> <p>Workaround: None.</p>
BWCE-1795	<p>Summary: Once you enable Process Monitoring, if your application completes all its jobs, before process monitoring is enabled, then you wont see any process instances in the Monitoring UI.</p> <p>Workaround: Add sleep in your process or hit REST/SOAP/HTTP endpoints if any to see newly created process instances.</p>
BWCE-1396	<p>Summary: You have to edit the logback.xml every time you restart the application.</p> <p>Workaround: None.</p>

Palettes

This topic lists the Known Issues related to **Palettes**.

HTTP Palette

Key	Description
AMBW-36777	<p>Summary: Error occurred on the Send HTTP Request activity with client SR using HTTP1 Apache HttpComponents and connector SR using HTTP2.0 with Follow HTTP1 Compliance checked.</p> <p>Workaround: Use the Jetty client as the client library for implementation under HTTP client shared resource.</p>

JAVA Palette

Key	Description
BWCE-1740	<p>Summary: TIBCO BusinessWorks Container Edition Application throws java.net.UnknownHostException when deployed in Docker Swarm</p> <p>Workaround: None.</p>
AMBW-13526	<p>Summary: In Java To XML activity, the Output tab is not populated correctly, if Java class contains nested object references in different classes.</p> <p>Workaround: None.</p>

JDBC Palette

Key	Description
BWCE-79	<p>Summary: Exceptions are seen when you import a project that contains a JDBC shared resource.</p> <p>Workaround: Restart TIBCO Business Studio for BusinessWorks and open the project in a new workspace. If the issue persists, recreate and reconfigure the JDBC shared resource.</p>
AMBW-36229	<p>Summary: Unnecessary error logs are displayed in the log file.</p> <p>Workaround: None</p>

JDBC Palette	
Key	Description
AMBW-23464	<p>Summary: The Oracle DataDirect driver does not support cursor datatype.</p> <p>Workaround: Use native drivers instead of DataDirect drivers.</p>
AMBW-23260	<p>Summary: MySQL Community Edition is not supported for Data Direct drivers</p> <p>Workaround: Use native drivers instead of DataDirect drivers.</p>
AMBW-23193	<p>Summary: When using DataDirect drivers with a JDBC Shared Resource, that is linked to a JDBC process, the SQL Builder Wizard does not work correctly.</p> <p>Workaround: Use native drivers.</p>
AMBW-20130	<p>Summary: The login timeout value is not effective when connecting to a Windows OS database. The JDBC Query activity fails with the error, JDBCConnectionNotFoundException at runtime without honoring the Login Timeout value specified in the JDBC Connection Shared Resource.</p> <p>Workaround: None</p>
AMBW-14624	<p>Summary: The Set Explicit Nil check box for Objects and Collections in JDBC Call Procedure activity is disabled.</p> <p>Workaround: None</p>
AMBW-14547	<p>Summary: When you migrate an TIBCO ActiveMatrix Business works™ 5.x project containing in-built functions in the JDBC Query activity, an invalid column name error is thrown in the JDBC Query activity.</p> <p>Workaround: Use an Alias instead of the in-built functions in the ActiveMatrix Business works 5.x project.</p>
AMBW-11667	<p>Summary: Using any in-built function in JDBC Query activity without "Alias" fails to execute the application and throws an Invalid Column name error at run time.</p> <p>Workaround: Use "Alias" to work with any in-built function in JDBC Query activity.</p>

JDBC Palette

Key	Description
AMBW-11624	<p>Summary: TIBCO Business Studio for BusinessWorks hangs when opening SQL Builder if the database details on the JDBC shared resource are changed from PostgreSQL to MySQL after a query has been created using SQL builder.</p> <p>Workaround: None</p>
AMBW-8855	<p>Summary: The localized error messages of JDBC connection are not displayed correctly in TIBCO Business Studio for BusinessWorks.</p> <p>Workaround: None</p>

JMS Palette

Key	Description
AMBW-42602	<p>Summary: The reply to the JMS Request Reply activity is sent through the JMS Send Message activity, because of which the reply is not received. In the JMS Request Reply activity, if the correlation ID is not specified, the JMS Message ID is passed as a selector. The Reply To JMS Message activity replies for that corresponding ID only.</p> <p>Workaround: If you use the JMS Send Message activity instead of the Reply To JMS Message activity for sending the reply to the JMS Request Reply activity, then you must explicitly map the JMS Correlation ID in the JMS Send Message activity with the Message ID in the JMS Request Reply activity to maintain the correct order of the request and reply.</p>

REST and JSON Palette

Key	Description
AMBW-28795	<p>Summary: The Parse JSON activity fails to pick up the prefixes defined in the namespace registry and provides the output with the default namespace prefixes.</p>

REST and JSON Palette	
Key	Description
	Workaround: None
XML Palette	
Key	Description
AMBW-31813	<p>Summary: Use of pipe(union) (' ') character in XSLT throws the following error at runtime:</p> <p>com.tibco.bw.palette.xml.runtime.fault.XMLTransformException: Exception [org.genxdm.xpath.v20.err.ConcreteErrException] occurred during XSLT transformation. Exception detail [org.genxdm.xpath.v20.err.ConcreteErrException: [XPTY0004] Either the expression has a static type that is not appropriate for the context in which it occurs, or the dynamic type of the value does not match the required type.]</p> <p>Workaround: Open the XSLT file and manually convert the pipe (union) (' ') operator to "or" operator and run the project</p>
AMBW-14292	<p>Summary: The Parse XML activity displays blank ErrorCode and ErrorMessage for activity output data validation error.</p> <p>Workaround: None.</p>

Policies

This topic lists the Known Issues related to **Policies**.

Key	Description
AMBW-34607	<p>Summary: Marketo plugin container edition breaks with the recent JRE upgrade.</p> <p>Workaround: Please refer Marketo plug-in documentation for more information.</p>

Key	Description
AMBW-19513	<p>Summary: If a SOAP binding is not configured with Transport, the Add New Policy icon should be disabled, the Policy field should not be displayed in the tree view, and a NULL pointer exception is generated if you try to add a policy on the binding.</p> <p>Workaround: None</p>

Runtime

This topic lists the Known Issues related to **Runtime**. .

Key	Summary
BWCE-2571	<p>Summary: Service Discovery fails with SSL applications on Pivotal Platform.</p> <p>Workaround: None.</p>
BWCE-2072	<p>Summary: When a module property has inputs with combinations of special characters like \$,% &, the complete input provided is not reflected in the output. Some part of the input is omitted.</p> <p>Workaround: None.</p>

TIBCO Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, and join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the TIBCO Product Documentation website, mainly in HTML and PDF formats.

The TIBCO Product Documentation website is updated frequently and is more current than any other documentation included with the product. To access the latest documentation, visit <https://docs.tibco.com>.

Product-Specific Documentation

Documentation for TIBCO BusinessWorks™ Container Edition is available on the [TIBCO BusinessWorks™ Container Edition Product Documentation](#) page.

To directly access documentation for this product, double-click the following file:

`TIBCO_HOME/release_notes/TIB_bwce_2.6.2_docinfo.html` where `TIBCO_HOME` is the top-level directory in which TIBCO products are installed. On Windows, the default `TIBCO_HOME` is `C:\tibco`. On UNIX systems, the default `TIBCO_HOME` is `/opt/tibco`.

The following documents for this product can be found in the TIBCO Documentation site:

- *TIBCO BusinessWorks™ Container Edition Release Notes*
- *TIBCO BusinessWorks™ Container Edition Application Development*
- *TIBCO BusinessWorks™ Container Edition Application Monitoring and Troubleshooting*
- *TIBCO BusinessWorks™ Container Edition Bindings and Palettes Reference*
- *TIBCO BusinessWorks™ Container Edition Concepts*
- *TIBCO BusinessWorks™ Container Edition Error Codes*
- *TIBCO BusinessWorks™ Container Edition Getting Started*
- *TIBCO BusinessWorks™ Container Edition Migration*
- *TIBCO BusinessWorks™ Container Edition Performance Benchmarking and*

Tuning

- *TIBCO BusinessWorks™ Container Edition REST Implementation*
- *TIBCO BusinessWorks™ Container Edition Refactoring Best Practices*
- *TIBCO BusinessWorks™ Container Edition Samples*

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the [TIBCO Ideas Portal](#). For a free registration, go to <https://community.tibco.com>.

Legal and Third-Party Notices

SOME TIBCO SOFTWARE EMBEDS OR BUNDLES OTHER TIBCO SOFTWARE. USE OF SUCH EMBEDDED OR BUNDLED TIBCO SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED TIBCO SOFTWARE. THE EMBEDDED OR BUNDLED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER TIBCO SOFTWARE OR FOR ANY OTHER PURPOSE.

USE OF TIBCO SOFTWARE AND THIS DOCUMENT IS SUBJECT TO THE TERMS AND CONDITIONS OF A LICENSE AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED SOFTWARE LICENSE AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER LICENSE AGREEMENT WHICH IS DISPLAYED DURING DOWNLOAD OR INSTALLATION OF THE SOFTWARE (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH SOFTWARE LICENSE AGREEMENT OR CLICKWRAP END USER LICENSE AGREEMENT, THE LICENSE(S) LOCATED IN THE “LICENSE” FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME.

This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of TIBCO Software Inc.

TIBCO, the TIBCO logo, the TIBCO O logo, TIBCO ActiveMatrix BusinessWorks, TIBCO ActiveSpaces, TIBCO Business Studio for BusinessWorks, TIBCO Designer, TIBCO Enterprise Message Service, TIBCO Hawk, TIBCO Rendezvous, and TIBCO Runtime Agent are either registered trademarks or trademarks of TIBCO Software Inc. in the United States and/or other countries.

Java and all Java based trademarks and logos are trademarks or registered trademarks of Oracle Corporation and/or its affiliates.

This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL>

Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro.

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only.

This software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the readme file for the availability of this software version on a specific operating system platform.

THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. TIBCO SOFTWARE INC. MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS DOCUMENT AT ANY TIME.

THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "READ ME" FILES.

This and other products of TIBCO Software Inc. may be covered by registered patents. Please refer to TIBCO's Virtual Patent Marking document (<https://www.tibco.com/patents>) for details.

Copyright © 2015-2021. TIBCO Software Inc. All Rights Reserved.