

TIBCO BusinessWorks™ Container Edition

Release Notes

Version 2.8.3 | August 2023

Document Updated: September 2023



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New Features

The following new features have been added in this release of TIBCO BusinessWorks™ Container Edition.

Common Features	
Certifications	The following certification has been added in this release: • Kubernetes 1.27.x • Docker 24.x.x
Support for multiple configuration management system.	This release adds support for multiple configuration management systems in the same application.
Support for Rendezvous palette	This release adds support for Rendezvous palette in the container applications.
Support for a new bwdesign command export_to_consul is added for exporting a profile to Consul.	A new bwdesign command export_to_consul is added to export the profile to the Consul key-value store.
	For more information, see "Using the bwdesign Utility" in the TIBCO BusinessWorks™ Container Edition Application Development.

Runtime	
Support for AWS_XRAY in OpenTelemetry Traces.	This release adds support to include AWS_XRAY in OpenTelemetry Traces.
	For more information, see "OpenTelemetry" in the TIBCO BusinessWorks™ Container Edition Application Monitoring and Troubleshooting.
Support for TraceID and SpanID in for OpenTelemetry Traces.	This release adds support to include TraceID and SpanID loggers for OpenTelemetry Traces.
Support to export OpenTelemetry metrics to custom port	This release adds support to export OpenTelemetry metrics with remote setup having custom port exposed.
	For more information, see "Metrics" in the TIBCO BusinessWorks™ Container Edition Application Monitoring and Troubleshooting.

Bindings	
Support for choosing to apply Policy on REST Service Binding paths	A new check box Apply Policy to Subpaths is added on the REST Service Binding configuration tab. The user can now choose if a policy is to be applied to the sub-paths of a service.
	When this checkbox is selected for a parent resource service path configured

Bindings

with Policy, the policy will be applied to the child paths at runtime.

If in case you do not wish to apply the policy to all the sub-paths but for selective paths, then do not select this checkbox and add the Policy for the required service paths.

For more information, see "REST Service Binding" in the *TIBCO BusinessWorks*Container Edition REST Reference.

Common Features

Certifications

The following certification has been added in this release:

- Kubernetes 1.26.x
- OpenShift 4.12.x
- Docker 23.x.x

Support for Confirm activity in Unit Testing.

This release adds support for the Confirm activity for Unit Testing.

Support is added for bwobfuscator utility to encrypt password.

Support is added for the bwobfuscator utility to encrypt passwords for TIBCO BusinessWorks Container Edition. With this utility, you can encrypt passwords using the custom encryption key.

For more information, see "Password Obfuscator Utility" in the *TIBCO BusinessWorks Container Edition Application Development*.

Common Features

Support is added for OpenTelemetry with ISTIO Services.

This release adds support for OpenTelemetry with ISTIO Services.

Support is added for additional system properties for process, activity and transition events.

This release adds support for additional system properties that help determine which process, activity, and transition events should be published. These system properties can be utilized as filters to exclude events that aren't necessary, ensuring that only the essential data is sent through the OSGi EventAdmin service and handled by the statistical event handlers.

The system properties are:

• If the value is set to true, process events are published. If the value is set to false, no process events are published. The default value is true.

bw.monitor.publishProcessEvents

• If the value is set to true, activity events are published. If the value is set to false, no activity events are published. The default value is true.

bw.monitor.publishActivityEvents

• If the value is set to true, transition events are published. If the value is set to false, no transition events are published. The default value is true.

bw.monitor.publishTransitionEvents

• If the value is set to true, only events from

Common Features

the main process, including Process, Activity, and Transition events, are published. If the value is set to false, events from all process events, including Process, Activity, and Transition events, are published. The default value is false.

bw.monitor.publishMainProcessEvents

Support for XPath normalize-unicode function in the XSL Transform activity

The "normalize-unicode()" function is now added and listed under the String functions section.

Monitoring

Support is added for custom headers for OpenTelemetry.

This release adds support for customer headers like api_key to authenticate with the OpenTelemetry system on New Relic.

Runtime

A new method
net.logstash.logback.marker is added
in the com.tibco.tpcl.logback_
1.2.1300.004 osgi bundle

Support is added for B3 propagation
format on Jaeger.

This release adds support for B3 propagation
format in TIBCO BusinessWorks Container Edition
on Jaeger.

An option has been added now to start an

Runtime	
TIBCO BusinessWorks Container Edition application	independent component of the TIBCO BusinessWorks Container Edition application despite of an Impaired or StartFailed state.
Support for TIBCO BusinessWorks Container Edition metrics such as system data and process stats via OpenTelemetry	TIBCO BusinessWorks Container Edition metrics for system data and process stats can now be seen on any standard metric-supported data source via OpenTelemetry.

Palettes	
Support for streaming non- multipart in Send HTTP Request activity	Sending a file as streaming non-multipart is now supported in Send HTTP Request activity.
Support for parsing the Swagger files with the special character "\$" and whitespace	Support is provided to parse the Swagger files having element names with the special character "\$" and whitespace in the query parameters, request, and response schema objects.
Support of Smart Engine for HTTP- based transport	You can now generate various HTML reports for the engine data collected for different performance use cases with applications using HTTP-based transport. The Smart Engine also analyzes the engine data collected and provides recommendations to improve the performance of your application. For more information, see the "Smart Engine" section in TIBCO ActiveMatrix BusinessWorks™ Application Monitoring and Troubleshooting.
Support for XSLT	Support is added to select the XSLT stylesheet from the shared module

Bindings	
Support is added for Threadpool Shared Resource with REST Reference Binding.	The REST Reference Binding can now use the Threadpool Shared Resource when configured on the HTTP Client Shared Resource.
	The name of the threads generated by the default thread pool (previously named as bw-flowlimit-executor-provider) is now changed to bw-rest-jersey-executor for clarity on component using the thread to end-users.

Common Features	
Certifications	The following certification has been added in this release:
	Kubernetes 1.25.x

Common Features

• Tanzu Application Services 3.0

Support for String type module properties.

This release adds support for String type module properties for AWS Secret Manager Credential Management Service provider.

Monitoring

Support is added to provide database connection details with segregated fields for TIBCO BusinessWorks Container Edition Monitoring connection.

This release provides capability to configure all required database details through their respective fields separately to allow obfuscated passwords to be added.

Palettes

Support is added for Azure Managed Identities for JDBC Shared Resource. Support is provided for managed identities as an authentication method for Azure SQL Connections for the JDBC Shared Resource.

A new checkbox **Custom Access Logs Format** is added for **HTTP Connector** Shared Resource.

A new checkbox **Custom Access Logs Format** is added in the **HTTP Connector** shared resource.

You can now select the **Enable Access Logs** checkbox and provide a value for the newly added field with a custom log format to fetch the Jetty logs.

Runtime

Support is added for TraceID and SpanID in engine logging statements.

This release adds support to include TraceID and SpanID loggers in the engine logging statements.

Common Features	
Certifications	The following certification has been added in this release: • Kubernetes 1.24.x • OpenShift 4.11.x
Updated default OS for base image.	This release adds support for a new base Docker image, "debian:bullseye-slim". For more information, see "Creating the TIBCO BusinessWorks Container Edition Base Docker Image for Linux Containers" in the TIBCO BusinessWorks Container Edition Application Development.
A new environment variable BW_LOGGER_OVERRIDES is added in TIBCO BusinessWorks Container Edition	This release adds support for a new environment variable BW_LOGGER_OVERRIDES in TIBCO BusinessWorks Container Edition. This environment variable contains the list of loggers. For more information, see "Environment Variables for TIBCO Business Studio for BusinessWorks" in the TIBCO BusinessWorks Container Edition Application Development
Dynamic timeout in SOAP Invoke activity	You can now use dynamic timeout in SOAP Invoke activity using the Set Context activity. A schema must be created with specific element names i.e. complexType element as "dynamicConfigurations" containing the "activityTimeout" element. The dynamic timeout overrides any static setting in the Advanced tab of the Invoke activity.
Deploy the same EAR with different profiles using Maven	A new option has been added now to deploy the same EAR file multiple times with different profiles using bw6-plugin-

Common Features		
		maven.
Support for Inline Scher request and response in 3.0 Swagger files		OAS 3.0 JSON file with inline schema in request and response is now getting parsed when creating top-down REST service or reference binding.
Support for OAS 3.0 Mul Response feature	tiple	Support has been added to create a top-down REST service with OAS 3.0 JSON file having multiple response content-types.
Support for anyOf and okeywords in Swagger fil		You can now generate XSD and create a top-down service or reference binding using an existing OAS 3.0 JSON file with anyOf or oneOf keywords for request and response schemas.
Design Time		
A new field Record failure		field Record failure predicate is added in Circuit Breaker uration tab for the HTTP Client Shared Resource.
<pre>predicate is added for HTTP Client Shared Resource.</pre>	Using this field you can browse and select a java class that implements the Predicate interface.	
		re information, see "HTTP Client" in the <i>TIBCO BusinessWorks</i> ner EditionBindings and Palette Reference.
Promote module properties in a batch	With this release, you can now promote module properties in a batch rather than individually.	
TIBCO BusinessWorks™ Container Edition integration with TIBCO Cloud API Modeler	The TIBCO Cloud API Modeler (TCAM) APIs are now available on the TIBCO Cloud APIs website that ActiveMatrix BusinessWorks can leverage to make the API specs from TCAM discoverable in the API explorer.	

Design Time	
Support for multiple TIBCO Cloud Integration environments via SSO	You can now choose multiple TIBCO Cloud Integration environments and log in via SSO. An option is provided to select a cloud server in the SSO Settings dialog.
Support for importing/exporting application templates to TIBCO Cloud Integration Marketplace	This feature is an integration of the Application Template with the TIBCO Cloud Integration Marketplace via TIBCO Business Studio for BusinessWorks. It enables you to import/publish the app templates as marketplace listings on the TIBCO Cloud Integration Marketplace.
Test Connection feature for Smart Mapper	A new button named Test Connection is provided on the Database Configuration window of the Smart Mapper preferences. It enables you to verify the database connection for the Smart Mapper.
Learn Existing Links feature for Smart Mapper	The Learn Existing Links feature enables you to store all mapping data of all projects in the current workspace. For using this feature, you first need to configure the DB. All the mapping data gets stored in the respective DBs.
Importing/exporting recommendation info via Smart Mapper	This feature enables you to import/export the recommendation info. The Import button helps to import the mapping data present in the DBnfo file into the configured DB. Similarly, the Export button helps to export the mapping data present in DB to the DBinfo file.
Palette	
Support is added for Hot Update for JDBC Shared Resource.	This release adds support for Hot Update for JDBC Shared Resource in TIBCO BusinessWorks Container Edition.
	For more information see, "Hot Update of Application Module Properties and Module Property for JDBC Shared Resource" in the TIBCO BusinessWorks Container Edition Application Development.

Palette	
Support for OAuth 2.0 Authentication in Receive Mail Activity	OAuth 2.0 Authentication is now supported for Receive Mail Activity IMAP protocol in the Mail palette.
Support for XML type input parameter in Oracle stored procedure	XML type input parameter in Oracle stored procedure is now supported for Oracle.
Runtime	
Improved support to monitor status, readiness, and liveness of running applications	This release adds improved support to monitor status, readiness, and liveness for TIBCO BusinessWorks Container Edition applications via enhanced APIs.
Force stop application via Engine Command activity	In TIBCO ActiveMatrix BusinessWorks [™] 6.x, the stopapplication command is used in the Engine Command activity which gracefully shutdowns the application. Since it is the graceful shutdown of applications, it waits for all jobs to get completed.
	This enhancement is raised to have a "force shutdown/stop application" so that it can stop the application immediately.
	For the EngineCommand activity, a force option for the StopApplication command is added to stop the ActiveMatrix BusinessWorks application forcefully. For example, the existing process instances are canceled immediately.
Introducing a new log level, Fatal in the Log Activity	A new log level named Fatal has been added to the Log Activity. This feature enables you to distinguish the Fatal log-level messages from the Error log messages and can also be used for observability goals.
Support for getting	In the input binding of activities and transitions, the TIBCO

Runtime	
the Product Version	BusinessWorks Container Edition product version can now be accessed by using the following property:
	<pre>bw:getSystemProperty("BW.VERSION")</pre>

Common Features	
Certifications	The following certification has been added in this release: • Tanzu Application Services 2.13
Support is added for EKS Services for AWS Secret Manager	This release adds support for credential and configuration management for AWS Secret Manager while deploying applications on EKS service.
Support is added for Circuit Breaker for Rest Invoke activity	This release adds support for Circuit Breaker using Resilience 4j for the Rest Invoke activity.

Support is added for two new configuration properties for properties in Circuit Breaker of the HTTP Client shared resource: 1. recordExceptions: Exceptions to record 2. ignoreExceptions: Exceptions to ignore For more information, see "HTTP Client Shared Resource" in the TIBCO BusinessWorks™ Container

Edition Bindings and Palette Reference.

Runtime	
New property added to disable OSGi	A new property bw.osgi.disable is added to disable OSGi commands.
command	For more information, see "Disabling OSGi Commands" in the TIBCO BusinessWorks™ Container Edition Application Monitoring and Troubleshooting.

Common Features	
Certifications	 The following certifications have been added in this release: OpenShift 4.9 and 4.10 Kubernetes 1.23.x
Support is added for Azure Vault for Certificate Management in TIBCO BusinessWorks Container Edition	This release adds support for fetching certificates from Azure Key Vault in TIBCO BusinessWorks Container Edition. For more information, see "Using Azure Vault for Certificate Management" in TIBCO BusinessWorks™ Container Edition Application Development.
Support for SSL configured REST Services.	The Irestdoc URL is now secured for SSL configured REST Services.
Support to enforce authentication on REST Reference binding using Authentication check box on HTTP Client shared resource.	You can now enforce basic authentication on REST Reference binding using the Authentication check box on HTTP Client shared resource. The Authorization header for the same is reflected in the outbound request.
Ability to share Smart	With this version, you have the capability to connect the Smart

The Export as Json file option is added in the Export Profile Wizard in TIBCO BusinessWorks Container Edition

The **Export as Json file** option is added in the **Export Profile** Wizard in TIBCO BusinessWorks Container Edition to export the application properties file in JSON format.

Design Time	
Configure the REST Endpoints in Cloud Mesh via CICD.	You can configure and override the TIBCO Cloud Integration Cloud Mesh Resource Endpoints during the deployment process.
Send the password digest while using UserNameToken.	Now you can send password digest while using UserNameToken for security in the Soap Policy.
Add Custom Xpath function as a module dependency.	You can now add Custom Xpath function as a module dependency in pom.xml using TIBCO ActiveMatrix BusinessWorks Maven plug-in.
You can run an application using TIBCO Cloud Mesh with Single Sign On option selected.	When you select the Single Sign On option from Preferences and run an application with TIBCO Cloud Mesh service, you can select the Enable TIBCO Cloud Mesh Services Consumer check box available under Run > Run configurations > Advanced Tab or Run > Debug Configurations > Advanced Tab .
Support is provided to connect to TIBCO Cloud Integration from TIBCO Business Studio for BusinessWorks using Single Sign-On (SSO).	This release adds support to connect to TIBCO Cloud Integration from TIBCO BusinessStudio for BusinessWorks using Single Sign-On for enhanced authentication.
	Note: You can only use one method at a time, either SSO Login or Password Grant, to connect to the cloud application.
Support for Assertion of activities within a group.	This release adds out of the box support for adding assertions to the activities within a group in a process.
Support for mocking of activities within a group	Support for mocking activities within a group is now provided.

Monitoring

Support is added for SSL enabled Oracle in TIBCO BusinessWorks Container Edition Monitoring. This release adds support for SSL enabled Oracle for TIBCO BusinessWorks Container Edition Monitoring. An Oracle specific Docker file is added where you can choose to either enable SSL or use it without SSL.

To use this feature, perform the following steps:

- 1. Use the Dockerfile_Oracle and uncomment line number 31-33.
- 2. Perform all the steps for using Oracle DB for TIBCO BusinessWorks Container Edition monitoring.
- 3. Add the SSL Enabled Oracle server's cwallet.sso, sqlnet.ora and tnsnames.ora in the instantclient folder. Ensure that the correct server name is present in tnsnames.ora.
- 4. Create a monitoring container with the *USE_ORACLE_ SSL=true* environment variable.

Nested Mow nested mimeEnvelopeElement is visible and supported in the Input and Output schemas of the HTTP palette activities. Support to provide a custom boundary for multipart content type Support to provide a custom boundary for multipart content type on the Send HTTP Request and Send HTTP Response activities.	Palettes	
boundary for multipart content type on the Send HTTP Request and Send HTTP	mimeEnvelopeElement is	,
	boundary for multipart	content type on the Send HTTP Request and Send HTTP

The iterate loop variable variable inside iterate loop resets now after each iteration when set to bw.engine.enable.loop.reset=true.

Common Features	
Certifications	The following certifications have been added in this release:
	• Kubernetes 1.22.x
	• Enterprise Message Service 10.1
	• Openshift 4.8
The Activity Status Code field is added for SOAP Binding.	The Activity Status Code field is added on the Reply activity interface to select the HTTP Response status from the Advanced properties section.
Support is added for new log details in SmartMapper.	For a better user experience, more details have been added in the logs for SmartMapper.
Design Time	
Support is added for Custom Xpath function using TIBCO ActiveMatrix	This release adds support for Custom Xpath function as a module dependency in pom.xml using TIBCO ActiveMatrix BusinessWorks Plug-in for Maven.
BusinessWorks Plug-in for Maven.	For more information, see "Using Custom XPath Functions with TIBCO ActiveMatrix BusinessWorks Plug-in for Maven" in TIBCO BusinessWorks™ Container Edition Application Development.
Palettes	
handling nested n	This release adds support for parsing responses received as sested multipart/mixed MIME parts for the Send HTTP Request activity. An extra mimeEnvelopeElement is added in

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Pa	lettes

as responses for Send HTTP Request activity.

the **Output** tab of the **Send HTTP Request** activity.

For more information, see "Send HTTP Request" in TIBCO BusinessWorksTM Container Edition Bindings and Palette Reference.

Runtime	
Upgrading Logback.	To enhance security, Logback is upgraded from version 1.2.3 to 1.2.10.
Enhancement for finding BW version in a running BW application.	In the input binding of activities and transitions, the ActiveMatrix BusinessWorks product version can be accessed by bw:getSystemProperty("BW.VERSION").

Common Features	
Certifications	The following certifications have been added in this release:
	• Kubernetes 1.21
	• Docker 20.x
	• Openshift 4.7
Support is added to remember mappings made in a smart mapping session.	TIBCO BusinessWorks Container Edition now remembers mappings made during a smart mapping session and provides recommendation for mapping elements.
	For more information, see "Smart Mapper" in <i>TIBCO</i> BusinessWorks™ Container Edition Application Development.

Common Features	
Out of the box support provided for TIBCO BusinessWorks™ Container Edition plug-in for Apache Maven	The TIBCO BusinessWorks Container Edition installer now includes the installer of TIBCO BusinessWorks™ Container Edition plug-in for Apache Maven.
Support is added for Java 11.	Now TIBCO BusinessWorks Container Edition 2.7.0 supports Java 11 on the Windows, Mac, and Linux platforms.
Support added for Unit Testing for External Shared Module.	Starting this release, you can execute the test cases from External Shared Module while running the test goals on application module.
Support added for AmazonLinux 2 OS docker image in TIBCO BusinessWorks Container Edition.	This release adds support for AmazonLinux 2 OS docker image in TIBCO BusinessWorks Container Edition.
Support added for OpenTelemetry to fetch traces with any OpenTelemetry complaint service provider.	This release adds support for OpenTelemetry collector to receive traces from the OpenTelemetry SDKs, and to forward the data from the OpenTelemetry complaint service provider.
	Testing is completed with Datadog as well with OpenTelemetry collector.
Support for dynamically overriding binary response format	You can override the binary response format only when "application/octet-stream" is selected in the Response Media Type using Content-Type Response Header on the Reply activity. Select the Use HTTP Headers check box and then pass the value in the Reply activity. The same value is reflected at runtime in the Response headers content-type.
Support is added for setting the	The dynamicConfigurations field is added on the Input

Common Features	
request URL dynamically on REST reference binding	tab of the Invoke activity, which is used for invoking REST service with REST reference binding. The dynamicConfigurations consists of the following information: URL: The endpoint URL to override from reference
	binding.
	Note: This field is visible for newly created reference binding only.
Support is added for handling runtime expressions in Callback URL	When you drag a callback URL with runtime expressions from a Swagger 3.0 file to create a REST service or a reference binding, the Resource Service Path is set to /callback and the shared resources have localhost and 8080 as Host and Port values respectively.
The Description field is added on the REST service binding.	The Description field is added on the REST service binding for all the parameters. Set the description in TIBCO Business Studio for BusinessWorks and the same value is reflected in Swagger UI when you refresh the Swagger UI URL.
Support of Binary Response Format for OAS 3.0 REST services is provided.	The Binary check box is added in the Response Format for Swagger 3.0 service and reference binding.
Support added for implementing callbacks in OAS 3.0.	You can now create REST service or reference bindings from a JSON file containing a callback URL.
REST service can return HTML content to the browser.	REST service can return HTML content to browser by passing "text/html" as Content-Type header value in the response headers of the Reply activity. Select the Use HTTP Headers check box and Format as Text on the

	Response tab of REST service binding.	
Enhancements are made in Unit testing and Mocking support.	TIBCO BusinessWorks Container Edition adds support for Mocking and unit testing for the following entities:	
	 Main process activities 	
	 Events or process starters 	
	Service Binding	
	 SOAP service implemented as a constructor operation 	
Design Time		
The temp files are no longer showed under Unstaged Changes.	Now the Git Staging tab does not show the temp files in the Unstaged Changes section after committing the changes.	
The temp files are added to the .gitignore file.	Now the temp files are added to the .gitignore file.	
Successful installation of AWS CodeCommit Plugin	Now you can successfully install AWS CodeCommit Plugin by following these steps:	
	 Install Guava: Google Core Libraries for Java 21.0 from here. 	
	2. Install Eclipse Equinox Target Components from here	
	3. Install M2E from here.	
	4. Install AWS Code Commit from here.	
The View Documentation icon is added for plug-ins in Plug-in Manager	The plug-ins in the Plug-in Manager now display a View Documentation icon. Click the icon to view the corresponding plug-in's documentation on docs.tibco.com	

Support is added for Eclipse 4.19 platform for TIBCO Business Studio for BusinessWorks TIBCO Business Studio for BusinessWorks is now based on Eclipse 4.19 platform.

For more information, see "Eclipse 4.19 - New and Noteworthy" page on the Eclipse's site.

Palettes

Support is added for TLS session resumption

All activities from the FTP palette now support TLS session resumption on the data connection.

Support is added to allow or restrict IP addresses in the HTTP Connector shared resource. The following VM arguments are added in TIBCO Business Studio for BusinessWorks to allow or restrict IP addresses.

- Dbw.plugin.http.httpConnector.allowIPs=<IP address>
- Dbw.plugin.http.httpConnector.restrictIPs=<IP address>

You can provide a list of IP address by using a semicolon (;) as a separator.

For example:

Dbw.plugin.http.httpConnector.allowIPs=10.98.179.102;10.98.179.110. In this example, both IP addresses 10.98.179.102 and 10.98.179.110 are allowed.

Use a hyphen to provide a range of IP addresses.

For example: Dbw.plugin.http.httpConnector.restrictIPs=10.98.179.102-10.98.179.110.

In this example, IP addresses 10.98.179.102 to 10.98.179.110, both inclusive are restricted.

You can also provide a range of IP addresses along with other IP addresses not in the IP address range separated by semicolons. For example: Dbw.plugin.http.httpConnector.restrictIPs=10.98.179.102-10.98.179.110;10.98.179.120.

Use a hyphen to provide a range of IP addresses.

Palettes

For example: Dbw.plugin.http.httpConnector.restrictIPs=10.98.179.102-10.98.179.110.

In this example, IP addresses 10.98.179.102 to 10.98.179.110, both inclusive are restricted.

The performance of JDBC palette activities is improved.

Set the following VM arguments:

• -Dbw.application.jdbc.validateConnection.frequency=55

The frequency means how often to check connection validity when inside the pool. This value must not be above the Connection Idle Timeout property in the **JDBC Connection** shared resource.

• -Dbw.application.jdbc.validateConnection=false

Check whether to validate the connection prior to sending it to the activities.

Support is added for TLS 1.3 version.

The shared resources for **SSL Server Configuration** and **SSL Client Configuration** now support TLSv1.3 as SSL Protocol version for HTTP, REST, SOAP, Mail and TCP Palettes. TLS 1.3 supports only RSA certificates.

For more information, see "SSL Server Configuration" and "SSL Client Configuration" in *TIBCO ActiveMatrix BusinessWorks™Binding & Pallete Reference*.

Support added for module properties for additional configuration.

- You can use a module property for configuring Confidentiality on HTTP Connector shared resource.
 For more information, see "Security" in TIBCO ActiveMatrix BusinessWorks™Binding & Pallete Reference
- You can use a module property for providing the HTTP
 Connector Name on SOAP service binding.
 For more information, see "Configuration for HTTP Transport" in
 TIBCO ActiveMatrix BusinessWorks™Binding & Pallete Reference

Runtime	
Smart Engine	You can now generate various HTML reports for the engine data collected for different performance use cases. Smart engine also analyzes the engine data collected and provides recommendation to improve performance of your application.
	For more information, see "Smart Engine" section in TIBCO BusinessWorks™ Container Edition Application Monitoring and Troubleshooting.

For more information about New Features before TIBCO BusinessWorks Container Edition 2.7.0 release, see New Features

In this release, platform support for TIBCO BusinessWorks Container Edition has changed as follows

Platforms	Status	As of Release	Notes
Apple macOS 13.x 64-bit on x86-64	Added	2.8.3	

For a complete list of supported platforms, see the Readme file.

Changes in Functionality

The following functionality and features have been changed in this release of TIBCO BusinessWorks Container Edition.

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General	
Support for Oracle JRE 11.0.19	Earlier, Oracle JRE 11.0.18 was supported. Now, Oracle JRE 11.0.19 is shipped with this release.
Enhanced error description for OAuth Shared Resource Test Connection.	The error description is enhanced now for OAuth Shared Resource Test Connection faults.

General	
The "Transformation failed for element" type error shows a complete XPath to the element.	Earlier, the simplified stack trace variable showed only the Caused by message and the element with the error.
	Now, if an exception occurs while processing an element's content, the Transformation failed for element type error shows the complete XPath to the element having the problem.
Ability to process XML elements of complex type with simple content for Render JSON activity:	Earlier, the Render JSON activity used to fail with the error JsonRenderException: Unexpected child content, if the XML input to Render JSON activity contained XML elements of complex types with simple content.
	Now, support is added for processing XML elements of

General	
	complex type with simple content in Render JSON activity.
Support for Oracle JRE 11.0.18	Earlier, Oracle JRE 11.0.16.0.1 was supported.
	Now, Oracle JRE 11.0.18 is shipped with this release.
Auto-complete fixable after	For Smart Mapper, after selecting a recommended element
selecting recommended elements via existing internal	which is a convertible type of the current target element, you can use the existing internal QF that automatically casts it.
QF for Smart Mapper.	This can help you to avoid an extra click.
Design Time	
Provision of creating test suite/test files for newly creat folders.	Users can now create test suite/test files for newly created ed folders under the 'Tests' folder.
Provision of module property picker for input XML files.	Users are now provided with a module property picker to provide test input XML files on process starter activities.
Palette	
Enabling basic	The basic authentication for the HTTP Receiver activity having
authentication for HTTP Receiver activity sub-paths.	sub-paths can be enabled by selecting the Apply Policy to Subpaths checkbox in the Advance tab.
Change in the cardinality of	The Send HTTP Request activity fails with an "Activity output
Allow header in Send HTTP Request activity.	data validation" error when invoking a service responding with a repeated Allow header element.
	The cardinality for Allow header field is now set to Repeating (*) in the Output Editor of Send HTTP Request activity.
Support for OAuth 2.0 with	OAuth 2.0 is now supported with HTTP Client shared resources
HTTP Client shared resources.	for REST reference binding, Invoke REST API, and Send HTTP Request.

Runtime

Support for DSR command via Admin CLI. In TIBCO Business Studio for BusinessWorks, input options are present within the same DSR command scope. Whereas in Command Line, each input option of the DSR command now works as an individual command.

Release 2.8.1

General

Support is added for auto tokenize property value on export profile.

Earlier, on the application property editor in TIBCO Business Studio for BusinessWorks, for applications with deployment target as **Container** the **Tokenize** option is checked and non editable. So on exporting the profile as property file the property values are auto-tokenized.

Now, the **Tokenize** option is editable and not selected by default. Hence the property value do not get auto-tokenized on profile export. You can manually check the **Tokenize** option to auto-tokenize property value on profile export.

Default heap size for TIBCO Business Studio for BusinessWorks is increased to 4 GB.

Earlier, the default heap size of TIBCO Business Studio for BusinessWorks was 2 GB.

Now, the heap size is increased to 4 GB for TIBCO Business Studio for BusinessWorks.

Runtime

Upgrade OpenTelemetry jars with the latest compatible jars.

For a better user experience, the OpenTelemetry jars are upgraded with the latest compatible released jars.

General	
Disabling the Persistent option in TIBCO BusinessWorks Container Edition	Earlier, the Persistent option for a Module Shared Variable was enabled when the deployment target option was set to Container and the TIBCO Business Studio for BusinessWorks threw an error message.
	Now, the Persistent option for a Module Shared Variable is disabled when the deployment target option is set to Container .
New default value for the Activation option in TIBCO BusinessWorks Container Edition is set to Single AppNode.	Earlier, for all the Deployment Targets (BW6 AppSpace, Container, Cloud) the Activation option was set to Multiple Appnode.
	Now, the Activation option is now visible for TIBCO BusinessWorks Container Edition and the default value is set to Single AppNode.
Support is added for the Use Process Data check box for the FTP Put and FTP Get activity in TIBCO BusinessWorks Container Edition	Earlier, the visibility of the Use Process Data check box was not enabled for the FTP Put and FTP Get activity in TIBCO BusinessWorks Container Edition.
	Now, the visibility of the Use Process Data check box is enabled for the FTP Put and FTP Get activity when the deployment target is set to Container and Tibco Cloud .
Support is added for multiple XSD schemas with duplicate target namespaces.	When the user has multiple XSD schemas with duplicate target namespaces, TIBCO Business Studio™ for BusinessWorks™ application fails to validate them; whereas, when an application EAR is deployed, it throws an error.
	Now, a Preference is added in TIBCO Business Studio for BusinessWorks application wherein either an Error, a Warning, or an Ignore option is provided in this scenario.
Enabling Memory Saving Mode by default	The Memory Saving Mode is enabled now by default in Design time and Runtime.

Palette	
Upgrade to PostgreSQL 6.0 driver.	With this release, PostgreSQL has been upgraded to the latest 6.0 version driver.

Palette	
Support is added for custom line separator.	Earlier, a dropdown was added to select a line separator with predefined options in Data Format shared resource.
	Now, a new option for custom line separator in Data Format shared resource is added.
Runtime	
New Data type added for Client Secret field.	Earlier, the data type for the Client Secret field in the OAuth Shared Resource was String.
	Now, the data type is updated to Password.

Bindings	
Support is added for Authorize button on Swagger UI	Earlier, for invoking REST services configured with Basic Authentication Policy from Swagger UI, you had to provide the Username and Password in the provided input fields and click the Explore button. Now, you can use the Authorize button and provide the log-in details.
	uetails.

Reference.

SOAP Reference.

Palette

Support is added for discontinuing the extra mime part in the Send **HTTP Request** activity.

When sending a multipart/mixed request with Send HTTP Request activity, TIBCO BusinessWorks Container Edition is adding an extra mime part with an unspecified boundary at runtime.

Now TIBCO BusinessWorks Container Edition supports the behavior to avoid adding any extra headers by setting the com.tibco.net.mime.mpwob=true in VM arguments. As a workaround, if whitespace is prepended to the main Content-Type, then the extra headers are removed.

Release 2.7.0

General	
Resilience4j for Circuit Breaker	Earlier, Hystrix Libraries were supported for Circuit Breaker.
	Now, Resilience4j is supported for Circuit Breaker.
Change in the default setting of the Always run in background check box.	Earlier, the Always run in background check box located at Window > Preferences > General was clear by default.
	Now, the Always run in background check box is by default selected.
	Clear the check box to view progress bars for some events.

Palette

A new JMS Fetch **Timeout** field is

A new JMS Fetch Timeout field is added on the Advanced tab of the **Get JMS Queue Message** activity.

Palette	
added.	Additionally, the behavior of the timeout field on the Input tab is changed. For more information, see "Get JMS Queue Message" in <i>TIBCO BusinessWorks™ Container Edition Binding and Palette Reference</i> .
Support is added for OpenTelemetry to collect traces.	Earlier, you could collect traces by using OpenTracing. Now, you can collect traces by using OpenTelemetry. For more information, see "OpenTelemetry" in TIBCO BusinessWorks™ Container Edition Administration.

For more information about Changes in Functionality before TIBCO BusinessWorks Container Edition 2.7.0 release, see Changes in Functionality

Deprecated and Removed Features

The following features have been deprecated or removed as of this release of TIBCO Business Studio for BusinessWorks.

Deprecated Features

Release 2.8.3

No features are deprecated in TIBCO BusinessWorks Container Edition

Release 2.8.2

Support for Progress DataDirect drivers has been deprecated with this release.

Release 2.8.1

No features are deprecated in TIBCO BusinessWorks Container Edition

Release 2.8.0

 The Profile Encryption feature is deprecated in the TIBCO Business Studio for BusinessWorks.



Note: The Profile Encryption feature is now governed by a preference named "Profile Encryption". The preference is available at Window > Preferences > BusinessWorks > Profile Encryption. By default, it is disabled. You can use the feature by enabling it via the above-mentioned preference.

Release 2.7.3

No features are deprecated in TIBCO BusinessWorks Container Edition

Release 2.7.2

Writing Process Statistic Data to an External Database using logback file is deprecated.

The Password Grant feature is deprecated.

The Analyzer feature is deprecated.

No features are deprecated in TIBCO BusinessWorks Container Edition

Release 2.7.0

- TLS v1 and TLS 1.1 support is deprecated.
- Support for third-party JMS drivers which are JMS 1.1 compliant by using the Custom JMS driver approach is deprecated.

Removed features

Release 2.8.3

No features are removed in TIBCO BusinessWorks Container Edition

Release 2.8.2

• The Profile Encryption feature in TIBCO Business Studio for BusinessWorks has been removed from this release.

Release 2.8.1

No features are removed in TIBCO BusinessWorks Container Edition

Release 2.8.0

This version of the product no longer supports the Password Grant feature.

This version of the product no longer supports the analyzer feature.

Release 2.7.3

This version of the product no longer supports PostgreSQL 9.x for TIBCO BusinessWorks™ Container Edition Monitoring.

Release 2.7.2

No features are removed in TIBCO BusinessWorks Container Edition

Release 2.7.1

No features are removed in TIBCO BusinessWorks Container Edition

Release 2.7.0

• This release of TIBCO BusinessWorks Container Edition removes the Hystrix

Circuit Breaker libraries with the product. This release onwards, support for Resilience4j for Circuit Breaker is added. For more information, see "HTTP Client Shared Resource" in TIBCO BusinessWorks Container Edition Bindings and Palette Reference.

- This release of TIBCO BusinessWorks Container Edition removes the out-of-the-box support for SVN version control plug-in.
- With TIBCO BusinessWorks Container Edition 2.7.0 release, OpenTracing libraries are removed.

TIBCO BusinessWorks Container Edition 2.7.0 now includes OpenTelemetry support for tracing. All OpenTelemetry compliant service providers can be integrated to show traces for TIBCO BusinessWorks Container Edition applications.

For more information, see the "OpenTelemetry" in TIBCO BusinessWorks™ Container Edition Application Monitoring and Troubleshooting

Closed Issues

The following issues have been fixed in this release of TIBCO BusinessWorks Container Edition.

The closed issues are grouped by components:

- Binding
- General
- Migration
- Monitoring
- Palette
- Policies
- Runtime

For more information about Closed Issues before TIBCO BusinessWorks Container Edition 2.7.0 release, see Closed Issues

Binding

This topic lists closed issues related to Binding.

Key	Summary
BWCE-5908	When a REST Service is invoked with an invalid Query or Path parameters, the Catch All block in the service is not executed.
BWCE-5811	When REST Applications are deployed on container where SSL is configured from the outside rather than configuring it within the application, the Swagger UI does not load due to the

Key	Summary
	protocol mismatch error. A new property bw.rest.enable.secure.swagger.url is added to switch the Swagger URL protocol to HTTPS when the property is set to true to resolve this issue.
BWCE-5767	From a REST service with POST operation having Content-Type as "application/json", if the JSON formatted text contents were sent to the REST client in response, then it was being received as normal text instead of JSON formatted contents.
	Note: If an invalid JSON which is a simple string is provided in the response, the Swagger UI shows a parsing-related error, can't parse JSON. Raw result: along with the response value; which is the expected behavior. The response value must be configured with the correct JSON format. For example, {"name": "abc"}
BWCE-5289	The java.io.IOException error occurs on running an application having the REST Reference Binding in Binary Shared Module.
AMBW-48261	The attributes that are present at the root element level are missing in the output of Invoke activity while invoking a REST service having XML as the response content type.
AMBW-48196	When a REST service is invoked with invalid Query/Path parameters, the Catch All block in the service is not executed.

Key	Summary
BWCE-5375	On invoking a REST service using REST reference binding, if a fault is received in response then its failing with NullPointerException instead of giving the proper fault data.

Key	Summary
AMBW-48168	When migrating TIBCO ActiveMatrix BusinessWorks 5.x SOAP project to 6.x, the input mappings on the Invoke activity are lost, causing an issue while invoking the SOAP service.
	Note: The input of the "_configData" element from the ActiveMatrix BusinessWorks 5 project must be provided as an input in the SOAP Reference Binding -> Request Context -> endpointURI field.
AMBW-48167	An error "TIBCO-BW-FRWK-400030: Error destroying binding [RestService1], <causedby> java.lang.NullPointerException" is thrown after the application restart when some changes are made to an already running application having multiple REST services with similar resource service paths.</causedby>
AMBW-48157	The anyType element in the input editor of the SOAP service, which is expected to receive any kind of requested XSD data structure is not mapping the received data in any element, resulting in an empty output from OnMessageStart.
AMBW-48028	The Error Code is not reflected in the FaultDetails/MsgCode element when a REST service fails due to a bad request.
AMBW-48017	Data types are missing during the Generation of XSD from the Swagger file containing JSON schema object with properties referring to other models.
AMBW-47607	To address security vulnerabilities in the snakeyaml-1.33.jar file, the SnakeYAML jar has been updated to version 2.0.

Key	Summary
BWCE-5136	The attachments sent to a REST Service with multiple/form- Data-Content-type is saved in the temp folder causing disk

Key	Summary
	space errors.
BWCE-4889	An input is required for OPTIONS operations of a REST Service implemented as Opaque, when invoked from Swagger UI.
AMBW-47555	When invoking a REST service without Policy configured on the binding, the Username and Password fields are not visible in the Swagger UI. To make the fields available in Swagger UI, set the property – Dbw.rest.swaggerui.legacy.basicauth.enable=true in the VM arguments of TIBCO Business Studio for BusinessWorks or a config.ini file of appnode. Note: If the REST service has a Policy configured on the binding as well as the above property is set to true, then the preference is given to the credentials passed from the
AMBW-47514	Authorize button. The "charset" gets added along with the Content-type in the response header on invoking a REST service. Now, the charset is not added by default. The charset can be present in the response header content-type by setting the property bw.rest.autoAppendCharsetToMediaType=true in the TIBCO Business Studio for BusinessWorks VM arguments or the config.ini file of the appnode.
AMBW-47419	Status code 400 is not handled correctly in one-way SOAP invocation.
AMBW-47154	If multiple REST services (endpoints) are part of the same process and the Reply activity is configured to reply with 400 faults, then on invoking the service, the Fault message does not display for the client.

Key	Summary
BWCE-4854	When the Invoke activity with reference binding is used to send multipart/form-data of File/Text type to a REST service, a FormFileException exception is thrown only on docker.
AMBW-46622	Invoking SOAP service fails with "Failed to initialize SoapReferenceBinding - TIBCO-BW-SCHEMA-RESOLVER-500201: WSDL not found" error.
AMBW-46604	The ProcessStack field under the FaultDetails tab is not populating the correct Process Name in the fault details when the process has two service bindings with the same operation.
AMBW-46557	The XML parser in TIBCO BusinessWorks™ Container Edition does not recognize the boolean value and treats it as a whitespace.
AMBW-46371	On installing TIBCO ActiveMatrix BusinessWorks™ 6.7.0 HF-005, whitespaces are getting trimmed in the output.
AMBW-46046	When a process has multiple reference bindings with "Enable DefaultFaultElement" and "Enable CustomFaultElement" selected ONLY in one of the bindings, the fault in the Catch block throws design-time errors.
AMBW-22981	When invoking a REST service's GET operation with Content- Type as "application/json" having response as "string" type, the response content-type changes to "text/plain".
	Note: If an invalid JSON i.e. a simple string is provided in the response, the Swagger UI shows a parsing-related error, "can't parse JSON. Raw result:" along with the response value; which is the expected behavior. The response value must be configured with the correct JSON format, for example: {"name": "abc"}
AMBW-47033	The SOAP service returns xml:lang="en_US" instead of

Key	Summary
	<pre>xml:lang="en-US" in the fault response under <soapenv:reason>.</soapenv:reason></pre>
AMBW-46818	When TIBCO ActiveMatrix BusinessWorks 6.x exposes SOAP service over the service binding with the MTOM attachment style selected, it returns the attachments as SwA (SOAP with Attachments)

Key	Summary
BWCE-4754	The SOAP fault returns HTTP Status Code as 200 instead of 500.
AMBW-46477	Invoking SOAP service fails with Failed to initialize SoapReferenceBinding - TIBCO-BW-SCHEMA-RESOLVER-500201: WSDL not found error.
AMBW-46009	The ProcessStack field under the FaultDetails tab is not populating the correct Process Name in the fault details when the process has two service bindings with the same operation.

Key	Summary
AMBW-45639	When Invoke activity with REST Reference binding was configured with absolute file path for multipart form parameters, it deleted the files that were passed as mimePart input.
AMBW-45520	For bypassing the version validation in TIBCO Business Studio for BusinessWorks for swagger files having openapi version

Key	Summary
	other than 3.0.0, pass the property bw.plugin.rest.disableOpenApi3xVersionValidation=true in the <i>TIBCOBusinessStudio.ini</i> file.
AMBW-45399	The application fails to start intermittently and throws an error "TIBCO-BW-SCHEMA-RESOLVER-500201: WSDL not found".
AMBER- 45155	Runtime Swagger file does not include enumeration restrictions which are defined in a request and response XSD configured with the REST service.
AMBW-45154	The Runtime Swagger file of a REST service has optional extension elements declared in the XSD as required.
AMBW-45153	The Runtime Swagger file does not include field length restrictions which are defined in a request and response XSD configured with the REST service.
AMBW-43403	The XSD generation, and Service or Reference binding creation operation are no more blocked, by avoiding parsing of "#/components/examples".

Key	Summary
AMBW-43816	For REST application deployed on an AppNode, the bw-flowlimit- executor-provider threads are not destroyed and keep on increasing even after starting and stopping an application.
AMBW-43397	You can now decide whether to send SOAP headers or not in the SOAP Envelope of the service. Set the – Dbw.binding.soap.client.invoke.send.headers property as a VM argument in TIBCO Business Studio for BusinessWorks or in the config.ini file to false to stop sending SOAP headers. By default, the property value is set as true.

Key	Summary
AMBW-43238	Empty header is passed in response in the SOAP envelope even if you don't configure the SOAP service with Headers.
	To not send empty headers set the property
	<pre>bw.binding.soap.client.reply.empty.header.override=true.</pre>
AMBW-42775	The "definitions" section in the runtime Swagger file does not show the type as "array" for the child properties of an object when you run a REST service configured with a complex element in an XSD, and the element's definition in the XSD contains <xs:extension> element with base attribute and array-based subelements.</xs:extension>
AMBW-42550	The operationID field is now displayed in the runtime Swagger file of a REST service when it is hit from Swagger UI.
AMBW-42313	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.
AMBW-27634	The null pointer exception is thrown while adding the SOAP Unbound Headers.

General

This topic lists the closed issues related to General issues.

Key	Description
BWCE- 5505	An application is not complete if an activity in a process has multiple transactions of type "Success with no matching condition". Now an error validation message is shown in TIBCO Business Studio for BusinessWorks.

Key	Description
BWCE- 5365	While building an EAR file from a BusinessWorks project which has the dependency of Jar file with No-MANIFEST.MF; a non-informative error message occurs.
BWCE- 5351	In the Throw activity the original mapped fault schema values are lost after the schema is changed to a different schema.
BWCE- 4938	While running the Unit Tests for TIBCO BusinessWorks Container Edition 2.7.2 with Maven plug-in 2.9.2, inconsistencies are observed in the bwcoverage reports.
AMBW- 48404	TIBCO Cloud Integration API Modeler APIs are not visible in TIBCO Business Studio for BusinessWorks for regions other than the US West region.
AMBW- 45183	Non-readable POM file error is thrown when importing the CXF project from the Maven repository.

Key	Description
BWCE- 5423	While creating a new custom xpath function, the activator class does not get generated even if the Generate Activator Class check box is selected.
BWCE- 5385	When the pom.xml file is generated for an application, it refers to an older version of "com.tibco.bw.palette.shared" jar.
BWCE- 5385	When the pom.xml file is generated for an application, it refers to an older version of "com.tibco.bw.palette.shared" jar.
BWCE- 5352	Iterate cannot be used in a group over a list when the elements are derived from abstract types to map inputs, because it does not have the variable type configured in the currentElement.
BWCE- 5348	While migrating to TIBCO BusinessWorks Container Edition 2.7.1, an issue occurs with the coercion of a schema (fastbank-base.xsd) in parse XML and mapper activities. The elements are not visible in the output schema of the parse XML

Key	Description
	activity and then in subsequent activities in TIBCO BusinessWorks Container Edition 2.7.1.
BWCE- 5297	While using the Maven plug-in, when there are redundant dependencies configured in the pom.xml file of an application, the workspace keeps displaying the message Validating External Shared Modules from Maven Dependencies indefinitely.
BWCE- 4988	The Azure managed identity lookup fails at the time of getting access tokens and the POST method does not work with the Azure identity API.
AMBW- 48156	The dateTime() function throws "[FORG0001] Invalid value for cast/constructor" error for the input value "xsd:dateTime("2022-12-20T17:14:50.Z")". Set the property -Dbw.xml.datetime.allowMissingFracSeconds=true to overcome the error while parsing the date and time for the input value. By default, this property is false.
AMBW- 48034	The previously saved changes from the "Export-Package" section in the manifest.mf file are removed when modification is done in the projects.
AMBW- 47854	Application with an iterate group running in Debug mode throws an Out of memory error.
AMBW- 47723	A Null pointer error is thrown when promoting module properties with no/empty default value.
AMBW- 47541	TIBCO Business Studio for BusinessWorks throws a StackOverflow error when it builds the workspace after importing a specific project.
AMBW- 47019	When updating the XSLT version from 1.0 to 2.0, errors are thrown as "Invalid conversion from string? string? to item" relating to type-casting values from one type to another.
AMBW- 46900	To address security vulnerabilities, the maven-shared-utils-3.2.1.jar file has been upgraded to CVE-free maven-shared-utils-3.3.3.jar in assembly_tibco_com_tibco_org_eclipse_maven_feature_p2.

Key	Description
AMBW- 36024	Tests tab and icon shown for mocked activities are missing when importing a project configured using Maven in a workspace.
AMBW- 34062	An error is thrown when running an application having additional space in the element name of the schema.

Key	Description
BWCE- 5011	The repeat on error group does not iterate correctly when the stop repeat condition value is changed from the default value '2' to any other value.
BWCE- 4893	When a TIBCO ActiveMatrix BusinessWorks application runs in debug mode in TIBCO Business Studio for BusinessWorks and if the application is terminated from the Console view, the activity halted on Breakpoint > Set Before is resumed and executed to produce its output.
BWCE- 4731	When an EAR is created using the Maven plug-in from a BusinessWorks application which uses Custom XPath function; the EAR does not include the same.
AMBW- 47478	When the Custom XPath Function is created with the name in Camel case format, a compile error is thrown because of the mismatch between capitalized plug-in (cxf) name and the lower-case package name (Activator class) derived from it.
AMBW- 47450	The location of the error log file created after EAR generation is changed to .bsproject in the workspace.
AMBW- 47374	Unable to open TIBCO BusinessWorks Plugin Manager on TIBCO Business Studio for BusinessWorks.
AMBW- 47136	The XSLT has a mismatch in the process file where one of the elements is missing in the Partbinding located in inputBinding.
AMBW-	On Linux OS machines, the mapping lines are broken and cursor is invisible when

Key	Description
46462	the user is mapping values on the Input tab.
AMBW- 45951	The Maven plug-in does not resolve the transitive dependencies when you create an EAR using the mvn package command.

Key	Description
BWCE- 4934	A ClassNotfoundexception is thrown during Maven testing when a shared module has a Java class and it is called using the Java Invoke activity .
BWCE- 4848	The Maven plug-in does not pick dependency versions from the parent pom.xml file.
BWCE- 4847	When application modules have any external dependencies such as shared modules and custom xpath functions, these dependencies do not get imported automatically into the workspace.
BWCE- 4726	A validation error is thrown when an activity has invalid name and the error message is not clear.
BWCE- 4676	The JMS Receiver activity with sequence key throws an error in TIBCO BusinessWorks Container Edition when the deployment target is set as Container .
BWCE- 4604	When you rename a module or application property group as "Application", TIBCO Business Studio for BusinessWorks crashes. It is a reserved keyword now and a validation error message is displayed.
BWCE- 4029	It was not possible to upgrade TIBCO BusinessWorks Container Edition home from 2.6.2 onwards.
AMBW- 46540	When you add external JAR files in Shared Module, the Export-Package entry from the manifest.mf file is removed.
AMBW-	When an integer value is mapped to a decimal element, the fractional values are

Key	Description
46579	always present even though there is no fractional part in the mapping.
AMBW- 46474	TIBCO Rendezvous® (RV) projects throw NullPointerException with version RV 8.6.0.
AMBW- 45744	The Timer Trigger process blocks when the EMS connection is lost.
AMBW- 44570	TIBCO BusinessWorks™ Container Edition throws an error when a long-type value is mapped in the "int" type for XPath.
AMBW- 40485	The XSLT Transform activity fails to recognize and transform certain data from the input XML string.
AMBW- 28277	The XSLT Transform activity skips certain data from the input XML string.

Key	Description
BWCE- 4798	If a REST service is configured with Blocking Queue Size on service binding, then after accepting certain number of requests, the remaining are not rejected. To achieve the expected behavior, the number of requests to process should be equal to the addition of Max QTP value on HTTP Connector shared resource and BQS value at binding.
	For example, if 50 requests are processed at any given time, and the Max QTP is 10, then we should set the Blocking Queue Size on service binding as 40.
	For applications with a service using HTTP Palette activities or SOAP Binding, we have to set the following property – Dbw.engine.http.jetty.blockingQueueSize= <bqs_intger_value>, in the VM arguments.</bqs_intger_value>
	Note: If the above property is used for REST service, then its value should be same as the Blocking Queue Size on service binding.

Key	Description
BWCE- 4722	The Resilience4jCircuitBreakerOpenExceptionType exception is thrown by the Send HTTP Request activity to catch the exception when the circuit breaker is opened.
	The HystrixCircuitBreakerOpenException exception is now removed from the list of exceptions thrown by the Send HTTP Request activity.
BWCE- 4677	The Maven plug-in does not pick dependency versions from the parent pom.xml file.
BWCE- 4674	When application modules have any external dependencies and the shared modules as xpath custom functions library, these dependencies do not get imported automatically into the workspace.
AMBW- 46613	The Maven plug-in does not pick dependency versions from the parent pom.xml file.
AMBW- 46606	Adding external jars in Shared Module to Lib folder removes Export-Package entries from the manifest.mf files.

Key	Description
BWCE- 4551	When the export command is used with bwdesign utility, it fails to generate the EAR file due to an invalid keystore path in the project.
BWCE- 4532	In TIBCO Business Studio for BusinessWorks, for the Thread Pool Shared resource, the Keep Alive Time unit is changed from seconds (s) to milliseconds (ms)
BWCE- 4286	When the SOAP Service and Client uses SOAP over JMS with IBM MQ the property not valid and String index out of range error JMSCC0049: The property name 'mime-version' is not a valid Java(tm) identifier errors occur
AMBW- 45923	For certain projects, TIBCO Business Studio for BusinessWorks displays a misleading error in the Problems tab as follows: Inline schema is not cloned correctly.

Key	Description
AMBW- 45862	You cannot rename a file when you use the Parse Data activity to read the file in batches.
AMBW- 45819	TIBCO ActiveMatrix BusinessWorks plugin for Apache Maven does not resolve the transitive dependencies when you create an EAR using the mvn package command.
AMBW- 45716	The Keystore Provider URL field when mapped as a module property continues to throw an error even when user corrects a previous invalid/incorrect value. Now a warning message is shown for this field irrespective of the mapping being module property or literal value.
AMBW- 45682	Whenever there are multiple transitions to the End activity, a new variable with an optional error report type is created and that variable takes precedence over the normal error variable.
AMBW- 45457	Any element in output editor or RVSubscriber which is expected to receive any kind of requested XSD data structure is not mapping received data in any element, resulting in empty output from RVSubscriber.
AMBW- 45449	The Rendezvous Subscriber activity fails to process messages that are generated with the third-party Rendezvous publishers.
AMBW- 45414	Unable to map the iterator element value on transition post-migration.
AMBW- 45326	An error is thrown when you try to start an application when using the remote debugging feature in TIBCO Business Studio for BusinessWorks.
AMBW- 45489	If you provide any character in the Fill With field of the Data Format shared resource and then use the shared resource along with the Render Data or the Parse Data activities, TIBCO BusinessWorks Container Edition adds the 'O' character in the activity output instead of the character provided by you.
AMBW- 44957	The context-sensitive help for TIBCO Business Studio for BusinessWorks is not currently available in TIBCO BusinessWorks Container Edition 6.8.0.

Key	Description
AMBW- 44034	The JDBC Query activity result set adds extra space in the output for a field that is empty in the database.
AMBW- 42932	Selecting the Generate Process Diagrams check box does not generate the process diagram in the application module.
AMBW- 36625	When there are validation errors in a TIBCO ActiveMatrix BusinessWorks application, they are not reported by the bwdesign utility when using the Validate option.
AMBW- 28561	You can use TIBCO ActiveMatrix BusinessWorks Maven plug-in to integrate the test reports, which are generated with the CI/CD tools like Jenkins.

Key	Description
BWCE- 4419	When the bwce-docker script is used from the master branch, container startup error occurs since the bwce-docker git repo still has references of Java 1.8.
BWCE- 4019	On importing a project to a new workspace, an error occurs and the project sequences is changed.
BWCE- 3922	Memory leak is observed in the Prometheus monitoring plug-in even though the application is not enabled.
BWCE- 3709	The application container fails with unary operator expected error when reduced startup time scripts is used.
AMBW- 45187	TIBCO Business Studio for BusinessWorks displays the following error in the Iterate group type element Group configuration error. Inline schema is not cloned correctly.
AMBW- 45186	In TIBCO Business Studio for BusinessWorks, on the Problems tab, errors for all processes are not displayed.

Key	Description
AMBW- 41919	TIBCO Business Studio for BusinessWorks throws a Null Pointer error when creating the custom xpath function.

Key	Description
BWCE- 3920	A Namespace error occurs while creating an iterate group, setting the variable list and saving it.
BWCE- 3450	On debug, TIBCO Business Studio for BusinessWorks crashes and leaves the debug java engine running while loading logs or clearing logs in TIBCO Business Studio for BusinessWorks console.
BWCE- 3397	BWDesign Utility crashes in SUSE 12.5
BWCE- 2556	When an application containing Netsuite plug-in activities is deployed in TIBCO BusinessWorks Container Edition Container, a SSLHandShakeException is thrown.
AMBW- 44487	While performing the Push to Cloud action from TIBCO Business Studio for BusinessWorks, the EAR generation operation does not time out for large projects.
AMBW- 44475	TIBCO BusinessWorks Container Edition throws an error when mapping the JDBC Query activity's output to the Iterate group.
AMBW- 44305	If you select the Generate Implementation Specification check box, the REST service binding binds properly with the newly generated Swagger specification and the same specification appears in the Manifest.json while exporting the application EAR.
AMBW- 43710	On running an application, the Activity output data validation error is displayed when the JDBC Query activity is used with the Iterate group.
AMBW- 43195	The system:validate command throws an error and returns incorrect status code for some projects.

Key	Description
AMBW- 43138	TIBCO Business Studio for BusinessWorks becomes unresponsive intermittently when you import a shared module through maven plug-in.
AMBW- 43109	TIBCO Business Studio for BusinessWorks throws the <i>Value for context variable is null</i> error at runtime for some projects. Now a Quick Fix option is available which shows the <i>Invalid context variable configuration</i> error on the Problems tab when you import a project in TIBCO Business Studio for BusinessWorks for the Get Context activity.
	After applying the quick fix, the error is not displayed and you get a successful response.
AMBW- 43026	After renaming a process package, the Input tab of the Call Process activity is not displayed.
AMBW- 42293	The XSLT is out of sync with schema component properties error continues to occur even after a quick fix is applied post-migration.
AMBW- 42115	The last modified date of an API in the API Explorer tab is incorrect.
AMBW- 42089	TIBCO Business Studio for BusinessWorks displays incorrect build order of modules when the projects are imported using the bwdesign utility.
AMBW- 44449	Transition condition with boolean value is not evaluated correctly against String true.
	Add the new - Dbw.xml.comparable.legacy.booleanStringEquality=true property as a VM argument along with the - Dbw.engine.use.transition.xpath.expression.lang.1.0=true property in TIBCO Business Studio for BusinessWorks
AMBW-	Empty tag is not generated for optional-nil elements.
44448	Now, a new Treat optional-nil elements as optional elements check box is added on Window > Preferences > Mapper page. Select the check box and clean the workspace.

Key	Description
	After cleaning the workspace, you get some XSLT out-of-sync errors on the Problems tab. Use the Quick Fix option to resolve those errors and execute the project again to generate empty tags for the optional-nil elements.
AMBW- 44435	Input and Output schemas are not formed correctly when creating a Mesh client for a TIBCO ActiveMatrix BusinessWorks and TIBCO Flogo Open API Specification 3.0 Mesh Service.
AMBW- 44434	After Tibtunnel recovers from its termination, TIBCO BusinessWorks Container Edition cannot connect to the on-premise resources such as Enterprise Message Service (EMS) for one round of Timer trigger.
AMBW- 44350	TIBCO ActiveMatrix BusinessWorks consumes a large memory heap and throws the out of memory error when you read a file using the Java Invoke activity.
AMBW- 44305	If you select the Generate Implementation Specification check box, the Swagger specification links a REST Service binding with an incorrect Swagger specification. It results in incorrect artifacts when you export an application to TIBCO Cloud Integration.
AMBW- 44090	TIBCO ActiveMatrix BusinessWorks does not display expected elements, if any, when an unexpected element is encountered while validating an XML document against a schema.
AMBW- 43867	Oracle JDK 11.0.12 is now bundled with this release of TIBCO ActiveMatrix BusinesWorks.
AMBW- 43209	When an XSLT transformation fails, the stack trace does not show the element that fails during the transformation and the cause of the failure on the Render JSON activity.
AMBW- 43104	The Write File activity cannot generate a file when the TextContent field has the space character (" ") value.
AMBW- 43100	The literal white space character ('') is not datatype-valid with respect to the datatype definition ' {http://www.w3.org/2001/XMLSchema}double'. error is displayed in mapper.

Key	Description
	To avoid typecasting error, use the following VM argument:
	-Dbw.xml.general-comparison.ignore-numeric-cast=true
AMBW- 43098	An application throws an error when an activity's XPath contains the insert-before() function.
AMBW- 43097	The whitespace characters (' ') are trimmed in a string field of the Mapper activity.
AMBW- 43044	The bwdesign utility shows the NLS unused message warning when exporting a project.
AMBW- 42903	A SOAP service having the Reply activity throws the following error for an error configured on the Reply activity when the Reply activity has an input value mapped to the Description field:
	\$\$\$\$\$ ERROR occurred while converting between Axiom and BW preferred node type.
AMBW- 42657	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- 42568	An application throws an error on design time and runtime when an activity's XPath contains the min() and max() function. A new Quick Fix option is provided to resolve the error.
AMBW- 41646	Smart Mapper cannot create a For Each statement for a repeating element.
AMBW- 34798	The \$ParseXml/primitive>sum(\$ParseXml/NewElement) expression generates incorrect results with XPath 2.0 when the following VM arguments are set in TIBCO Business Studio for BusinessWorks: - Dbw.application.activity.validateInput=false and - Dbw.application.activity.validateOutput=false
AMBW- 33760	Transition expression is not saved in MAC OS.

Key	Description
AMBW- 33562	TIBCO Business Studio for BusinessWorks does not show the job data when debugging an application in the debugger

Migration

This topic lists the closed issues related to Migration.

Release 2.8.3

Key	Description
AMBW- 48154	Mapping on a transition is broken, which leads to validation error post migration.

Release 2.8.2

Key	Description
AMBW- 48159	The RV publisher activity does not honor special keyword characters like "_plus_" and "_sp_" in the element name post Migration.
AMBW- 47732	GV mapped to the JDBC activity timeout and Maximum rows are not showing up in ActiveMatrix BusinessWorks 5.x to 6.x migrated code.
	The "Timeout (secs)" and "Maximum rows" fields in the JDBC Call Procedure activity do not display the mapped module property value post migration but display the default literal values.
AMBW- 32780	The REST Dispatch and Reply activity in TIBCO BusinessWorks Container Edition 5.x is migrated to the Invoke Rest API activity instead of the REST Service Binding.

Key	Description
BWCE- 4343	When TIBCO ActiveMatrix BusinessWorks [™] 5.x projects are migrated using the Migrate as shared module option in the migration wizard, the module properties are migrated incorrectly.
AMBW- 44538	After migration, the element inside the Catch all > error_variables are not resolved correctly when a process with more than one fault element is configured in the End activity.

Key	Description	
BWCE- 3873	After migration, the "or " operator migrated as a " " character throws a warning in design time and an error at runtime.	
AMBW- 43791	Post-migration, the mapper input is empty when the schema is referenced from data format shared resource.	
AMBW- 43501	The migration tool migrates processes with the REST-Dispatch-and-Reply activity to a REST resource. In TIBCO ActiveMatrix BusinessWorks™ 5.x, the service processing logic is delegated to a subprocess as per operation. Normally the subprocess is migrated. To supplement this, a call process is created to invoke that subprocess in the REST resource.	
	You may need to fix the mapping for the newly created call process manually. This could fix the mapping itself, or the input and output schemas for the called subprocess.	
	Note: The REST Service descriptor supports both internal and external WADL references. However, we do not support multiple resources pointing to the same resource path and having the same HTTP method.	
AMBW- 42280	After migration, the Mapper activity was migrated as an empty activity.	
AMBW-	Post-migration, if the variable list XPath expression of an Iterate group is linked to	

Key	Description
41353	multiple schemas then the iterator schema does not get resolved.
AMBW- 33641	Getting "Coercion error: Can't find substitution for ""." at design time after migrating a project.

Monitoring

This topic lists the Closed Issues related to Monitoring.

Release 2.8.0

Key	Description
BWCE- 4879	After restart, the application was not registering properly on TIBCO BusinessWorks Container Edition Monitoring.

Release 2.7.0

Key	Description
BWCE-3938	The activity name is not displayed on the process diagram with custom icons.

Palette

This topic lists the Closed Issues related to Palettes.

HTTP Palette	
Key	Summary
BWCE- 5558	While using the Send HTTP Request activity in which a cookie value is set as input, the MalformedCookieException exception occurs.
	An Input Item is added with a new Advanced field which consists of the CookieExpiresDatePattern: Date Time pattern format for the expires attribute.

JMS Palette	
Key	Summary
BWCE- 5686	When a custom JMS provider is used, a Null Pointer exception occurs for the first message sent to the queue and topic. To overcome this issue, use the -Dbw.custom.jms.provider.config.values=true
	property in VM arguments.
BWCE- 5138	When an EMS and Custom JMS provider is added in the same project and when an activity is trying to connect to EMS with EMS specific features, an Unsupported Operation exception occurs.
AMBW-	GetJMSQueueMessage throws a Timeout exception when messages are pending in
48670	the queue on a JMS Local transaction.
XML Palette	

Key Summary BWCEThe Transform XML activity does not handle the XSLT variable correctly while transforming the Input.

	HTTP Palette
Key	Summary
BWCE- 5377	An error occurs for the HTTP Receiver activity when the Expose Security Context check box is enabled with Basic Authentication Policy.

	Java Palette
Key	Summary
AMBW- 47626	Java to XML activity does not return/generate proper schema when Maven Buildpath is added.

JDBC Palette	
Key	Summary
BWCE-5306	The Custom JDBC Driver AS400 and the SQL Direct activity is not retuning the connections back to the pool.
AMBW-48187	Output Schema is not updated dynamically for overriding the SQL Statement checkbox selected in the Advanced tab of JDBC_Query activity.
AMBW-48165	A "Commit & Rollback Failed, Transaction Integrity Unknown" error is thrown for JDBC Stored Procedure Activity.
AMBW-47943	While clicking the Result Sets Use Schema option on the JDBC_Call_Procedure activity > Advanced tab, it should generate the output. Instead, it throws the "DRIVER IS LOCKED FOR USE WITH EMBEDDED APPLICATIONS" error pop-up with the TIBCO DD driver for MSSQL 2016 Server.

	JMS Palette
Key	Summary
AMBW- 42975	The installdriver.xml script is unable to install jars required for jms.ibmmq.runtime.

Parse Palette	
Key	Summary
AMBW- 47173	The Parse Data activity processes all rows successfully when the first value of the row is empty and the Continue on error checkbox is not enabled. Use the property com.tibco.bw.palette.parse.data.throwExceptionForEmptyFirstColumn=true for the proper exception of the usecase.

REST and JSON Palette	
Key	Summary
AMBW- 47850	The InvokeRESTAPI activity concatenated the header values when repeating headers are sent from a server in response.

	XML Palette		
Key	Summary		
AMB W- 4742 2	Unable to disable XML validation at activity level since Parse XML is not enforcing the properties in TIBCO BusinessWorks™ Container Edition. Use the following property to disable the XML validation at the activity level for Parse XML activity, — Dbw.application.activity.validateOutput. <appname>.application.<appversion>.<appname>.application.<appversion>.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.application.<appname>.app</appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appname></appversion></appname></appversion></appname>		

File Palette	
Key	Summary
AMBW- 25753	The Copy File activity does not work when the file name contains characters like [], {}, (). It gives the java.util.regex.PatternSyntaxException exception.

HTTP Palette	
Key	Summary
BWCE- 4817	The java.lang.ClassCastException error is thrown at runtime if the Threshold Data Size value on Send HTTP Request activity is configured with Module Property of Integer data type.
	Note: The Module Property value's data type should be of Long.

JAVA Palette	
Key	Summary
AMBW- 46587	XSD with required elements is not generated when a Java class is selected in XML to Java activity.

JDBC Palette	
Key	Summary
AMBW- 47730	The java.lang.IllegalStateException:Queue full error is thrown for the JDBC Query activity.
	After upgrading to TIBCO BusinessWorks Container Edition 2.8.1, this issue is fixed and the NCName cache size is incremented.
	By default, the NCName cache is enabled. To disable the NCName cache, set the property bw.application.activity.jdbc.cache.names to false.

JMS Palette		
Key	Summary	
AMBW- 47395	While using the solace property Ack Mode: SOL_CLIENT_ACKNOWLEDGE with Solace JMS Provider, the session does not recover when there is a functional error, the received messages are not confirmed, and the JMS Receiver stops receiving further messages.	
AMBW- 46010	JMS receiver stops receiving messages with EMS Explicit Ack mode and flow limit.	
Rendezvous Palette		
Key	Summary	
AMBW- 47383	The element name in Rendezvous Requestor gets messed up when concurrent requests are sent.	
	REST/JSON Palette	
Key	Summary	
AMBW- 47103	The Invoke REST API activity's mapping for resource path goes to the wrong path location with load test.	
	Note: For high loads, if request rejections are observed, change the default Blocking Queue Size value on the REST Service Binding to a non-default value that is comparable to the number of incoming requests.	

	HTTP Palette	
Key	Summary	
BWCE- 5022	The Send HTTP Request activity fails to upload files in the mimeHeader because of the missing "filename" parameter in the content-disposition header at runtime.	
AMBW- 46677	The Send HTTP Request activity fails to send image files in the mimeHeader because of the missing "filename" parameter in the content-disposition header at runtime.	
AMBW- 46605	The endpoint URL is generated as "HTTPS" instead of "HTTP" when the Confidentiality field on the HTTP Connector shared resource is configured with the module property value set to "false".	
Java Palette		
Key	Summary	
AMBW- 46550	Java object reference passed from parent process to subprocess fails to work.	
AMBW- 44678	The SOAP Invoke MTOM throws a Java heap space out of memory error with large payloads of 800 MB.	
AMBW- 36726	The output schema for JavaToXML activity is not generated if there is a defined public method without a defined respective member variable.	
AMBW- 33916	The JavaToXML activity fails to generate the schema for classes with no member variables.	
	JMS Palette	
Key	Summary	
BWCE- 4695	When multiple messages are in the receiver queue, the project throws a java.lang.NullPointerException exception for the first Send JMS Message	

	JMS Palette	
Key	Summary	
	activity.	
AMBW- 46727	TIBCO BusinessWorks™ Container Edition application fails with a specific error, "Can not change client ID" when Client ID is set in EMS Server Level.	
JDBC Palette		
Key	Summary	
AMBW- 46797	JDBC Transaction Group does not end the database session when JDBC Call Procedure times out.	
AMBW- 46201	JDBC Update Activity inserts a "NULL" value instead of an empty string into the database.	
	Mail Palette	
Key	Summary	
AMBW- 46731	The Send Mail input credentials are not overriding with SMTP shared resource credentials.	
	REST and JSON Palette	
Key	Summary	
AMBW- 46603	When an XML file containing nested double quotes (") is passed as an input to Render JSON activity with Generic schema type, it does not get escaped in the output JSON string.	
AMBW- 46602	The Render JSON activity is unable to transform "'" from the XML string to single quote (') in Generic mode.	

REST and JSON Palette	
Key	Summary
AMBW- 46580	Runtime throws a "JsonParserException" error on Parse JSON activity with Generic mode when the content to be parsed is larger than 512 characters. The character limit is now increased by default to 1024 characters. To parse a large JSON file (for example, more than 1024 characters), the user has to pass the below property in the TIBCO Business Studio™ for BusinessWorks™ VM arguments to increase the default cache size: com.tibco.plugin.restjson.json.setCacheSize = <integer value=""></integer>

XML Palette		
Key	Summary	
AMBW-46044	Recursive extension type in schema gives run-time error.	

HTTP Palette		
Key	Summary	
AMBW- 46259	The endpoint URL is generated as "HTTPS" instead of "HTTP" when the Confidentiality field on the HTTP Connector shared resource is configured with module property value set to false.	

JDBC Palette			
Key	Summary		
BWCE- 4738	The JDBC Query activity fails with output data validation error at runtime.		
AMBW- 46578	JDBC Transaction Group does not end the database session when JDBC Call Procedure times out.		

JMS Palette		
Key	Summary	
BWCE- 4695	After EMS fails, BW continues throwing the error Message not delivered in EMS Explicit Client Acknowledge Mode and Flowlimit.	

REST and JSON Palette		
Key	Description	
AMBW- 46289	Runtime throws a JsonParserException error on Parse JSON activity with Generic mode when the content to be parsed is larger than 512 characters. The character limit is now increased by default to 1024 characters. To parse a large JSON file (for example, more than 1024 characters), you have to pass the below property com.tibco.plugin.restjson.json.setCacheSize = <integer value=""> in the studio VM arguments to increase the default cache size:</integer>	
AMBW- 46277	The Render JSON activity is unable to transform & apos; from the XML string to a single quote (') in Generic mode.	
AMBW- 46258	When an XML file containing nested double quotes (") is passed as an input to Render JSON activity with Generic schema type, it does not get escaped in the output JSON string.	

XML Palette			
Key	Summary		
AMBW-46241	Recursive extension type in schema gives run-time error.		

	HTTP Palette	
Key	Summary	
AMBW- 45532	For the applications using the HTTP Client shared resource configured with the Thread Pool shared resource having Core Pool Size greater than 10, "IllegalArgumentException" is thrown at runtime.	
AMBW- 45450	TIBCO ActiveMatrix BusinessWorks redirects a SOAP call to the HTTP Receiver activity if the Enable Access Log property is enabled and an application contains both a SOAP service and HTTP Receiver activity.	
	JDBC Palette	
Key	Summary	
AMBW- 44571	You can see the Updated Parameter->Data type value in the JDBC statement parameter preparation.	
AMBW- 45455	Interpreted the Invalid XML Chars check box, not available in TIBCO BusinessWorks Container Edition 6.6.1. You can see an Invalid white space character (0x1c) in the text to output.	
AMBW- 45445	The Number element on the Input tab of JDBC Call Procedure activity shows an integer value and not a decimal value after loading the procedure or function.	
AMBW- 43303	TIBCO BusinessWorks Container Edition does not retrieve data of type timestamp from a database.	
	JMS Palette	
Key	Summary	
AMBW- 45456	If we use a JNDI Destination name for the actual queue in the TIBCO BusinessWorks Container Edition project when connecting to the IBM MQ server, it gives InvalidDestinationException.	

	JMS Palette
Key	Summary
AMBW- 45454	Huge memory consumption is causing the AppNode to hang. A new session is being created on every run causing huge memory consumption. Now, the Ack Mode in the key is used also while pulling which resolves the huge memory consumption issue as the session is not created on every run.
AMBW- 45333	The null pointer exceptions are thrown when you destroy the JMS Reply activities while application instances are being stopped.
AMBW- 44019	The JMSRequestReply activity in TIBCO BusinessWorks Container Edition 6.x creates a new Message Producer per request, which causes the disk overhead on the EMS side, hence leading to performance issues.
AMBW- 43126	When you use an element from some external schema to join the conversation, the mapping showed an error "No matching namespace prefix".
AMBW- 35465	There is no option available for "Supports XA Transactions" in JMS Connection in ActiveMatrix BusinessWorks 6.x.x.
AMBW- 31953	GetJMSQueueMessage activity shows different types of timeout errors for the same scenario when there is no message in the queue.
	Java Palette
Key	Summary
AMBW- 44678	The SOAP Invoke MTOM throws a Java heap space out of memory error with large payloads of 800 MB.
	Mail Palette
Key	Summary
AMBW-	Test connection for SMTP resource shows the error Configuration error in

	Mail Palette
Key	Summary
45461	field [Host] and/or [Port], the value must be a valid hostname and/or port with correct values.

	Parse Palette
Key	Summary
AMBW- 45862	You cannot rename a file when you use the Parse Data activity to read the file in batches.

HTTP Palette	
Key	Description
BWCE- 4411	The multipart/related Content-Type set in the Send HTTP Request activity was converted to multipart/form-data at runtime. Also a new flexibility is added for users to add a custom boundary for multipart content-types.

JDBC Palette	
Key	Summary
BWCE-4347	The JDBC activity throws a timeout error instead of the actual [SQLState 23000] Duplicate row error error for Teradata Database.
AMBW-45076	The Number element on the Input tab of the JDBC Call Procedure activity shows an integer value and not a decimal value after loading the procedure or function.

JMS Palette		
Key	Summary	
AMBW-26882	If we use a JNDI Destination name for the actual queue in the TIBCO ActiveMatrix BusinessWorks project when connecting to the IBM MQ server, it gives InvalidDestinationException.	

HTTP Palette	
Key	Description
BWCE- 3918	The HTTP Connector shuts down when it receives a flowlimit request and no response is sent back.
AMBW- 43969	The Send HTTP Request activity fails and throws TimeoutException when the HTTP Client shared resource is configured with the Jetty HTTP Client library along with SSL, and the Proxy shared Resource without authentication.
AMBW- 43072	The Send HTTP Request activity fails with 500 error when the HTTP Client shared resource configured with Apache HTTP Components library and a request with MIME attachment is sent to REST service.
AMBW- 42083	TIBCO BusinessWorks Container Edition can not handle non-preemptive basic authentication when the User-Agent header is not present in the HTTP request.
	JDBC Palette
Key	Summary
AMBW- 43984	An application goes into the Impaired state when the dbURL has special characters.
AMBW-	The JDBC Call Procedure activity throws an error and cannot call a stored

	JDBC Palette	
Key	Summary	
43983	procedure when you use PostgreSQL 12 database.	
AMBW- 43965	The JDBC Query activity throws the Numeric overflow error when the number coming from the database is greater than 10 digits.	
AMBW- 43037	The SQL Direct activity fails for Unicode special characters.	
AMBW- 42443	TIBCO Business Studio for BusinessWorks now supports overloaded procedures from PostgreSQL.	
AMBW- 42049	The stored procedure input and output parameters with MSSQL DataDirect driver are inaccessable if the procedure is selected without selecting Schema, and Catalog or Package.	
AMBW- 41912	Heap memory leak is observed on an AppNode for the SQL Direct activity in an application,	
AMBW- 38321	The JDBC Tibco Driver for PostgresSQL is upgraded from 5.1.4.000097 to 5.1.4.000329	
AMBW- 31970	JDBC Driver for Microsoft SQL server is upgraded from 4.0 to 8.2.2.	
	JMS Palette	
Key	Description	
BWCE- 3352	An activity configuration error is thrown for activities mapped with the output from Get JMS Queue Message activity of XML Type and having a schema without namespace.	
AMBW- 43981	Whenever EMS fault-tolerance server is switched or the EMS server is restarted, the JMS Send Message activity loses the first message after reconnecting.	

	JMS Palette		
Key	Description		
AMBW- 42608	Exchange of message takes place for a queue type messaging style configured in JMS Sender and a topic type messaging style in JMS Receiver.		
AMBW- 37702	TIBCO Business Studio for BusinessWorks displays an error when connecting to an SSL enabled EMS server.		
	Mail Palette		
Key	Summary		
AMBW- 43990	An application becomes unresponsive on the Send Mail activity and does not timeout when the existing engine threads are occupied.		
	REST and JSON Palette		
Key	Summary		
AMBW- 43585	The Invoke REST API activity is migrated as empty for some activities.		
AMBW- 43255	The design time and run time Swagger files are now including the definitions of the extended elements from different XSD.		
	XML Palette		
Key	Summary		
AMBW- 44572	Non-default namespace can not map to empty URI Set the – Dbw.xml.jsonrest.multiple-ns.removensprefix=true property as a VM argument in TIBCO Business Studio for BusinessWorks.		
	This property removes all non default prefixes from the XML and uses only default		

XML Palette	
Key	Summary
	namespace prefix for all namespaces and ensures that a non default namespace is never bound to an empty URI. The Render XML activity adds an extra namespace xmlns=" " at the root level of the schema.
AMBW- 43994	The Value-of max(xsd:int*) expression returned as a scientific notation value when the Transform XML activity has bigger numbers in input.
AMBW- 41240	The Parse XML activity gives error when the input file encoding was UTF-8-BOM and the Validate Output check box was selected.
	Set the -Dbw.application.activity.validateOutput.treeValidation=true property as a VM argument when validating an output XML.
AMBW-	An error occurs when the YearMonth datatype is typecasted with the xsd:string
33245	().

Policies

This topic lists the Closed Issues related to Policies.

Release 2.8.2

Key	Description
AMBW- 33546	For a better user experience, a tool hashpassword.jar has been provided for generating obfuscated passwords with basic XML Authentication.

Key	Description
AMBW-	Applications require a restart if JKS (Keystore) file contents are changed on the

Key	Description
46897	filesystem, as those changes are not picked up by the Keystore shared resource even after Refresh Interval Time.

Key	Description
AMBW- 46589	The basic security profile compliance is not disabled for a SOAP service even when the <code>-Dbw.governance.bspCompliant.disabled=true</code> property is set at an AppNode level.

Runtime

This topic lists the Closed Issues related to Runtime.

Release 2.8.3

Key	Summary
AMBW- 47873	When two SOAP applications are started on the same AppNode simultaneously, then one of them fails to start.

Key	Summary
BWCE- 5410	The TIBCOJRE is hardcoded in the setup.sh file.
BWCE- 5391	The Configuration Management Services for AWS is not working if the application name is not set.

Key	Summary
BWCE- 5374	The format of number fields gets changed when they are of type string fields.
AMBW- 48181	The activator process is slow when running an activity with large XML data in Debug mode.
AMBW- 43215	For the SAP application, If the SAP component is not available, then the application goes into an impaired/start failed state.

Key	Summary
AMBW- 47598	Running an application with an activator process and large XML throws an out-of-memory error in Debug mode.
AMBW- 47549	Input mapped from SalesforceQueryAll shows trimmed output in Mapper output activity. For example, the decimal value of "1200.0" is trimmed to "1200".
AMBW- 46825	The white space characters in the appspace configuration.ini files fail to start in the appnode/application.
	The BWEngine now smartly removes the spaces, tabs, and other special characters while retrieving the configuration values from configuration files.

Key	Summary
AMBW- 46544	Application deployed to AppSpace configured in FT-group mode and FTL as group provider activates more than one active instance on restarting FTL servers configured in FT mode.
AMBW-	When Appnodes are configured in FT-group, the wrong Component status is

Key	Summary
46534	shown differently on TIBCO® Enterprise Administrator UI and via REST API calls.
AMBW- 46530	SOAP/JMS service throws an error, "cache cannot be null.stacktrace: java.lang.AssertionError: cache cannot be null" when the JMS receiver configured to the queue has a lot of pending messages more than the relative flow limit set for the component.
AMBW- 46514	Heap memory increases due to memory leaks while using Notify and ReceiveNotification activities.
AMBW- 46502	At runtime in ftgroup mode with weighted property, when the application contains a service-based sub-process call in a process, the Fault Tolerance mechanism stops working post secondary fail-over. A property named "bw.engine.ftgroup.activator.servicesubprocess" is now provided to fix this issue.
AMBW- 46207	Applications with subprocess calls without the Spawn option are moving into an unresponsive state in group persistence appspaces because of logical deadlock.
AMBW- 45361	The stopapp/startapp OSGi commands are not working in TIBCO ActiveMatrix BusinessWorks™ 6.7.x and 6.6.x code bases.
AMBW- 39684	An "Attribute DataType cannot be null" error occurs when coercion is used for the "anyType" element in the iteration loop.
AMBW- 36995	Variables inside the iterate loop do not reset after each iteration when they are not executed again.

Key	Summary
AMBW- 46512	Heap memory increases due to memory leaks while using Notify and ReceiveNotification activity

Key	Summary
AMBW- 46104	Applications with subprocess calls without the Spawn option are moving into an unresponsive state in group persistence appspaces because of logical deadlock.
AMBW- 45599	At runtime in ftgroup mode with weighted property, when the application contains a service based subprocess call in a process, the Fault Tolerance mechanism stops working post secondary fail-over.

Key	Summary
AMBW- 44222	The module shared variable failed to reset to initial value on restarting an application.

Key	Summary
AMBW- 44452	When migrating the TIBCO ActiveMatrix BusinessWorks application from 6.4.1 to 6.6.0, the JobsharedVariable defined in a module is not recognized by other modules of an application.
AMBW- 44451	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.
AMBW- 44450	For Group mode, if the AppNodes are unresponsive for more than 31 seconds then the process starter activity is disabled for the AppNodes which results in AppNodes are marked as inactive by the recovery systemSet the com.tibco.bx.engine.recovery.failure.threshold property to a value between 31 to 180 seconds.
AMBW- 43980	TIBCO ActiveMatrix BusinessWorks application containing the FTL Subscriber activity having flowlimit set along with engine threads displays the out of memory

Key	Summary
	error when the number of transactions per second are increased above 50.
AMBW- 43770	The JMS Receive Message activity running on an AppNode with the Group mode fails to start when a BWEngine resumes from the Suspended state.
AMBW- 43221	The Wait and Notify activities in the group persistence mode do not work with default values for the bw.engine.threadCount and bw.engine.db.maxConnection properties.
	Set the following new properties in the AppSpace's config.ini file:
	<pre>com.tibco.bx.lockWaitNotify=true com.tibco.bw.throttle.notify.activity=true com.tibco.bw.throttle.wait.activity=true</pre>
	Use the throttle properties when default configuration is used .
	The bw.engine.db.maxConnection property's value must be greater than the bw.engine.threadcount value.
AMBW- 43220	Some of the TIBCO BusinessWorks Container Edition jobs are not processed intermittently when an application has Wait and Notify activities.
	To avoid the deadlock scenario, TIBCO recommends to set the com.tibco.bx.lockWaitNotify=true property and the value of bw.engine.db.maxConnection property = twice the value of bw.engine.threadCount.
AMBW- 43102	On stopping the application, an application cannot call the delete method of the shared resource when the shared resource uses module property in one of the fields.
AMBW- 43101	The BW.MODULE.NAME and BW.MODULE.VERSION module properties return empty values.
AMBW- 43099	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.

Key	Summary
AMBW- 42919	After new installation and setup of AppSpaces and the AppNodes, the AppNodes that have "group" settings cannot start and display the following error: Unable to find CheckpointModelFactory: DB.
AMBW- 42506	Modifications done inside a running application in TIBCO Business Studio for BusinessWorks displays the Process not found error.
AMBW- 42106	AppNode APIs now provide complete stack trace in a thread dump.
AMBW- 41286	TIBCO Business Studio for BusinessWorks throws NullPointerException while running a project with different nested subprocesses.

The following known issues exist in this release of TIBCO Business Studio for BusinessWorks.

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	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. Workaround: None.
AMBW- 46861	Summary: When invoking a REST service created with a Swagger file having an "array" tag under the Components/Schemas section, the "array" tag is not reflected in the runtime Swagger file.

Key	Description
	Workaround: Add the "array" tag in the generated runtime Swagger file manually if you need to create a REST service/reference binding.
AMBW- 46806	Summary: Accept header value for Fault response is not honored in Swagger UI when the OAS 3.0 REST service configured with multiple response formats is hit.
	Workaround: Use Postman Client to hit the service and pass the Accept Header according to the expected response content-type.
AMBW- 46721	Summary: When creating a top-down REST service with an OAS 3.0 JSON file having response header parameters and multiple response formats, the parameters are not reflected in the service binding.
	Workaround: None
AMBW- 46663	Summary: If an OAS 3.0 REST service is created using a JSON file having anyOf/oneOf keywords with one of the schema referred with "\$ref" and another sub-schema as "inline", then the inline schema is not reflected in the Reply activity.
	Workaround: None
AMBW- 46607	Summary: If an OAS 3.0 REST service is created using a Swagger file having inline schema with "oneOf/anyOf" or nesting with "allOf", then the schema elements are not resolved in the Input tab of the Reply activity.
	Workaround: None
AMBW- 46002	Summary: The "allOf" tag is not reflected in the runtime Swagger JSON generated for the REST service created using an imported Swagger JSON having the "allOf" tag.
	Note: The schemas are merged into a single schema object in the runtime Swagger file and this doesn't impact the functionality.
	Workaround: None.
AMBW- 45941	Summary: The Swagger specifications having the <i>pattern</i> keyword are not supported in TIBCO BusinessWorks Container Edition 6.x.

Key	Description
	Workaround: You can either manually modify the Swagger specifications to remove the pattern tag before importing it in TIBCO Business Studio for BusinessWorks, or else after creating the service, you can manually modify the XSD by removing the pattern restriction for the respective element definition.
AMBW- 44739	Summary: The deescription provided for form parameters on REST 3.0 service binding is not reflected on the reference binding as well as on top-down service binding's Form Parameters table.
	Workaround: None
AMBW- 44492	Summary: The 415: Unsupported Media Type error is thrown on Invoke activity of a REST Reference Binding while invoking a REST service with Request and Response formats other than JSON. That is, XML or Text.
	Workaround : To get rid of the error, select JSON format in Request and Response along-with other formats.
AMBW- 44479	Summary : The dynamicConfigurations WSDL part and dynamicConfigurations element aren't automapped by default for the input of Invoke activity created from the reference binding.
	Workaround : Either map manually or map using the Show Check and Repair option.
AMBW- 44338	Summary : On selecting Binary checkbox in Response tab of REST Service Binding, if we keep default configurations in Resource Schema then the Reply activity's response is seen as "String" instead of base64Binary.
	Workaround : On selecting Binary checkbox re-select "binary" or "base64" from Resource Schema dropdown.
AMBW- 44208	Summary : The java.lang.NullPointerException is thrown on adding new operation to a REST service when you change the JSON Definition Style or the Request schema from the drop-down for the newly added operation.
	Workaround : If you are adding new operation then select the required schemas in the REST Service Wizard and avoid modifying it from service binding.

Key	Description
AMBW- 44197	Summary: REST Service Binding configuration error is thrown at design time when the Resource Schema of DELETE operation is modified in the Response tab of REST Service Binding.
	Workaround: If you want the DELETE operation response to be other than String then select the appropriate value in the drop-down menu for Response while creating a service using REST Service Wizard.
	This workaround is not applicable for the Binary Response format.
AMBW- 44116	Summary : For REST 3.0 service if you select Binary check box in Response, then at design time the Resource Schema details "\$item base64Binary" is not displayed on Response tab for all operations on service binding and for POST operation on reference binding. There is no impact on anything at runtime.
	Workaround: None.
AMBW- 44022	Summary : The Swagger UI accessed using Lrestdoc command is not supported to show the callbacks section for the REST Operation of an TIBCO BusinessWorks Container Edition REST Service Endpoint created by dragging a Swagger Path whose operation is configured with callbacks.
	Workaround: None.
AMBW- 43156	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
	Workaround: Hit the swagger URL from external browser.
AMBW- 43023	Summary: For form parameter of password type, the Swagger JSON under service descriptors has missing "format": "password" key-value inside the Schema object.
	Workaround: Manually add the "format": "password" tag to the form parameter in the swagger file.
AMBW- 36113	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.
	Workaround: Change mixed security mode in a given WSDL.

Key	Description
AMBW- 32951	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.
	Workaround: None
AMBW- 32760	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.
	Workaround: None
AMBW- 29098	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.
	Workaround: None
AMBW- 27870	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.
	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.
AMBW- 27435	Summary : When module properties used from a shared module project were 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-	Summary: When the WSDL uses multiple parts in the Request body of an

Key	Description
23104	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 General issues.

Key	Description
BWCE- 4856	Summary : The wrong exception name BW Hystrix is displayed instead of Resilience4j exception name after running an application in the console log when the circuit breaker is open.

Key	Description
	Workaround: None
BWCE- 4253	Summary : On some Linux machines, you cannot launch TIBCO Business Studio for BusinessWorks.
	Workaround : You must ensure that you have GTK 3.2 installed on your machine and then re-launch TIBCO Business Studio for BusinessWorks.
BWCE- 2883	Summary : Condition fails to evaluate completely when you try to equate a boolean value to a string.
2003	For example, if an expression is '\$DataGen/group/bool2 != "false"', where the bool2 is true()
	Workaround : Simply update "false" to false() or 0 and run the project. It runs as expected (or vice-versa if its equated to "true" value)
BWCE- 2073	Summary : Marketo application generates run time SSLHandshakeException for TIBCO BusinessWorks Container Edition.
	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.</no>
BWCE- 2008	Summary : FTL application does not work in windows container because of absence of FTL client libraries for windows.
	Workaround: None.
BWCE- 1433	Summary : In the FTL application logs, an Invalid message type received from peer 'NULL' error message occurs.
	Workaround: None. These errors can be ignored.
BWCE- 1239	Summary : An error, related to libcrypto.so, is displayed in the logs when the application is pushed to the Cloud Foundry or Docker.
	Workaround: None. These errors can be ignored.
BWCE-	Summary: When specifying Application Properties, if invalid login credentials are

Key	Description
103	specified in the Configure Container Connection Dialog , the dialog box asking for valid login credentials repeatedly opens even after valid login credentials are specified.
	Workaround: Press the Cancel button on the dialog box.
AMBW- 47025	Summary: After creating the Maven test file, if the user renames the TIBCO ActiveMatrix BusinessWorks™ Process name, the change is not reflected. The user cannot test run the same.
	Workaround: Re-create the test file after renaming the process.
AMBW- 46231	Summary: When two properties from two different modules having a common name are promoted, only one property gets promoted and seen under the application.
	Workaround: Keep each property name unique before promoting in a batch.
AMBW-	Summary: The OSGi commands to start and stop the application do not work.
46056	Workaround: Use TEA, Admin CLI, or REST API to start and stop the application.
AMBW- 45408	Summary : The Ant task failure error occurs when you uninstall TIBCO BusinessWorks Container Edition 6.8.0 hotfixes, 6.8.0, and 6.7.0 from the TIBCO_HOME containing the version 6.7.0.
	Workaround: Ignore the errors and proceed further with uninstallation.
AMBW- 45183	Summary : A non-readable POM file error is thrown upon importing CXF project from Maven repository.
	Workaround: None. It does not affect the functionality.
AMBW- 45146	Summary : The FluentD container fails to insert the activity (input/output) data if the data size is greater than 4000 characters for the Oracle database.
	Workaround : Set the MAX_STRING_SIZE = EXTENDED for the Oracle database, which increases the byte size capacity from 4000(default) to 32767. Note that this change is at the server level and is irreversible.

Key	Description
AMBW- 45015	Summary : An activity having a large input data is not shown in the job details on the Execution History tab for MySQL.
	Workaround: None
AMBW- 44643	Summary : The Transform XML activity's output is not visible in Job Data debugger output tab.
	Workaround : This issue occurs only on Windows operating system. So a mouse click and mouse hover on the Job Data section during debugging the application on the Transform XML activity displays the output.
AMBW- 44437	Summary: Two .application folders are created when a new application is created in a new workspace.
	Workaround: On launching TIBCO Business Studio for BusinessWorks wait for 5-10 seconds to ensure that it loads completely and then create a new application. If there are two .application folders created after loading TIBCO Business Studio for BusinessWorks then restart it.
AMBW- 43862	Summary: EMF Validation does not work for imported existing projects by using Module Property to Keystore URL.
	Workaround: Reassigning the same module property resolves the validation error.
AMBW- 43860	Summary : Consuming a TIBCO Flogo service with parameters having Object data type in Input and Output schema from TIBCO BusinessWorks Container Edition client is not supported.
	Workaround: None
AMBW- 43779	Summary : Unit testing does not start when a connection is not successful for the HTTP Receiver being mocked.
	Workaround: None
AMBW- 43743	Summary : Unit testing framework does not support Java palette activities. Workaround : None.

Key	Description
AMBW- 43118	Summary : For Swagger 3.0 service, the array of Form Parameters is sent as comma-separated values from Swagger UI which causes the request to fail with the 500 internal server error in TCI.
	Workaround: Use Runtime swagger file to create the service.
AMBW- 42046	Summary: Encryption Setting Window shows no editable fields when opened by clicking on the Lock Icon if TIBCO Business Studio™ for BusinessWorks™ is not in full-screen mode.
	Workaround: Open Encryption Settings when TIBCO Business Studio for BusinessWorks is in full-screen mode or enter into full-screen mode for Encryption setting if it is opened in a minimized view.
AMBW- 41950	Summary: In bwdesign, if we export substvar files with the same name twice in the same location, it does not overwrite the substvar file.
	Workaround: Delete the previous substvar file and export substvar again.
AMBW- 41948	Summary: Many to one mapping is not supported for Smart Mapper. Workaround: None
AMBW- 41846	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. Workaround: None.
AMBW- 41832	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 unencrypted revisions of that profile.
	Workaround: None.
AMBW- 41827	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.

Key	Description
	Workaround: Close and reopen the editor, it shows all the details.
AMBW- 41779	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.
	Workaround: Restore file with a valid name at a specified location on disk and do project clean.
AMBW- 41716	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.
	Workaround: None.
AMBW- 41715	Summary: The difference viewer calculates the difference and highlights the properties, but does not highlight any corresponding fields of the properties.
	Workaround: Switch to the text difference mode and see the difference in the non-UI fields.
AMBW- 41499	Summary: In the substitution variables file, only five types of module properties are saved: String, Integer, Long, Boolean, and Password.
	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.
	Workaround: None.
AMBW- 41474	Summary: If there are any changes in the Description field of a module or application property, it is not highlighted in the difference viewer.
	Workaround: None.
AMBW- 41307	Summary: Application property editor does not display value in case of removing encryption setting using the Clear All button and exporting profile.
	Workaround: Close the application properties editor and open it again.

Key	Description
AMBW- 41277	Summary: When you try to install a missing plug-in using the Quick Fix option and you select or deselect a plug-in version from the list of provided versions; the following message is displayed: Cannot complete the install because of a conflicting dependency.
	However, you can still install the plug-in successfully.
	Workaround: None.
AMBW- 41252	Summary: The New Name field in the Rename Projects section on the Create Project From Template window is not enabled on a single click.
	Workaround: First click on the old name of the module or the application after which the field is enabled
AMBW- 41155	Summary: The Password field is shown as changed while doing a Shared Resource diff, even if the password are the same.
	Workaround: None.
AMBW- 41238	Summary: Confirmation message is displayed with any operation on encrypted profiles.
	Workaround: Click Yes.
AMBW- 41035	Summary: The Authentication field is shown while doing a diff when the Confidentiality field is set for Http Connector shared resource.
	Workaround: None.
AMBW- 40811	Summary: Default icon shown instead of Custom icon for the Call Process and Java Invoke activities within external shared module.
	Workaround: Manually browse the Custom icon field value and add respective icon to activity on importing external shared module.
AMBW- 39899	Summary: The null pointer exception reported on clicking Binding Section in Components after the Refactoring operation.
	Workaround: Post refactoring, close the Module Descriptor section and reopen it. No popup is displayed.

Key	Description
AMBW- 39837	Summary: The collectappnodedata command is not working on the AIX platform. Workaround: None
AMBW- 37594	Summary: Breakpoints are not working when execution flow goes from one process to another.
	Workaround: Select an activity where debugging with the breakpoint is halted. It enables the Resume button. Click the button to resume debugging.
AMBW- 36990	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
	Workaround: Close the module shared variables or job shared variables and open it again.
AMBW-	Summary: Failed to connect to AppNode using SSH client
34416	Workaround: Use HTTP client. Preferred way is using curl.
AMBW- 34404	Summary: Incorrect trace is generated for the invoke process with default jaeger properties.
	Workaround: Set JAEGER_SAMPLER_TYPE=const, and JAEGER_SAMPLER_PARAM=1 properties in the AppNode or AppSpace config.ini file.
AMBW- 34343	Summary: An application fails to start in TIBCO Business Studio for BusinessWorks when you install the latest EMS driver.
	Workaround: Restart TIBCO Business Studio for BusinessWorks.
AMBW- 32761	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.
	Workaround: Users can create the references for the custom operations using the REST Reference wizard.
AMBW-	Summary: Ungrouping nested groups created inside a catch block of a group

Key	Description
28941	may not ungroup as expected.
	Workaround: None
AMBW- 28663	Summary: The tibco.bw.sample.policy.samlcredentialmapping.SoapHttpBinding sample fails intermittently with the error: com.tibco.governance.agent.action.ActionException. Workaround: None
AMBW- 28378	Summary: When a Process Property is renamed, the change is not reflected in the activity and an error is displayed. Workaround: None
AMBW- 28319	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.
	Workaround: Instead of an external reference binding, use binding reference.
AMBW- 28264	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.
	Workaround: None
AMBW- 27253	Summary: The Identity Provider field in the WSSConsumer Policy resource does not support module properties. Workaround: None
AMBW- 25073	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.
	Workaround: Specify the server configuration details as literal value or module properties.
AMBW-	Summary: TIBCO-THOR-FRWK-CMN-500001:Error while renaming bundle file to

Key	Description
24508	final location: - error could be due to low disk space.
	Workaround: None
AMBW- 19746	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.
	Workaround: Enforce the default encoding of AppNode JVM to UTF-8 by adding – Dfile.encoding=UTF-8 in the bwappnode.tra file.
AMBW- 19540	Summary: When a project contain abstract and concrete WSDL using same target namespace, a validation error is generated.
	Workaround: None
AMBW- 18459	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.
	Workaround: Externalize the WSDL-inline schema and change the import statements to reference the newly created (external) schema.
AMBW- 16256	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.
	Workaround: To commit the change, you must press the return key after every change.
AMBW- 14861	Summary: Unable to enter an XPath expression on a transition using the XPath Builder. This issue is observed on Mac OS only.
	Workaround: Enter the XPath expression directly in the Properties tab > Expression field for the transition without using the XPath Builder.
AMBW- 12490	Summary: Under certain circumstances, substitution types do not resolve properly in the mapper. The mapper shows errors for them.
	Workaround: Try closing and reopening the project. If that does not solve the

Key	Description
	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).
AMBW- 11624	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. Workaround: None
AMBW- 11534	Summary: TIBCO Business Studio for BusinessWorks crashes occasionally on Windows 2012 R2 platform when switching workspace from File > Switch Workspace. Workaround: Retry by switching the workspace.

Migration

This topic lists the Known Issues related to Migration.

Key	Description
BWCE-	Summary: After migration, an element of simple type is not supported.
3763	Workaround: In the existing schema create an element reference for all WSDL messages which are referring type references.
	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.
AMBW- 40387	Summary: After migration, a path is not executed that leads to the difference in output.
	Workaround: In TIBCO BusinessWorks Container Edition 5.x the transition condition \$Map-Data/ConditionType[last()] is treated as boolean but not in TIBCO BusinessWorks Container Edition 6.x as TIBCO BusinessWorks Container Edition 6.x has strict validations.

Key	Description
	In order to resolve this, please update the condition as follows:
	<pre>count(\$Map-Data/ConditionType[last()])>0</pre>
AMBW-	Summary: Migration of custom icon for the Call Process activity is not supported
40187	Workaround: After migration, manually browse the custom icon field value for the Call Process activity.
AMBW- 39231	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.
	Workaround: Navigate to the faulted process and add the missing schema location field next to the namespace.
AMBW-	Summary: While migrating a project using the XPATH language for transitions
39230	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.
	Workaround: Migrate that project in a different workspace, because the issue is intermittent.
AMBW- 36094	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.
	Workaround: Copy the inline schema that gets created post migration of the project and paste it into the .WSDL file.
	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.
AMBW- 36077	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:
	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.

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

Key	Description
14547	containing in-built functions in the JDBC Query activity, an Invalid Column name error is thrown in the JDBC Query activity.
	Workaround: Use an Alias instead of the in-built functions in the TIBCO BusinessWorks Container Edition 5.x project.
AMBW- 14295	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. Workaround: None
AMBW- 13683	Summary: Shared resource module property references in the migrated TIBCO ActiveMatrix BusinessWorks 5.x projects do not show up correctly on non-Windows platforms. Workaround: Close and reopen the project.
	workaround: Close and reopen the project.
AMBW- 9969	Summary: ActiveMatrix BusinessWorks 5.x projects with SOAP headers configuration in SOAP activities are not properly migrated to TIBCO BusinessWorks Container Edition .
	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.

Monitoring

This topic lists the Known Issues related to Monitoring.

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

(Continued)

Key	Summary
2548	Oracle, the Oracle libraries are getting downloaded. Workaround: None.
BWCE- 2393	Summary: TIBCO BusinessWorks Container Edition Monitoring does not work with Oracle Database on Docker. Workaround: In the Dockerfile, add RUN npm rebuild on line number 29.
BWCE- 1832	Summary : In some cases, catch block, reference binding, service binding is misaligned in the process diagram in Monitoring UI. Workaround : None.
BWCE- 1810	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. Workaround : None.
BWCE- 1795	Summary : Once you enable Process Monitoring, if your application completes all its jobs, before process monitoring is enabled then you do not see any process instances in the Monitoring UI.
	Workaround : Add sleep in your process or hit REST/SOAP/HTTP endpoints if any to see newly created process instances.
BWCE- 1396	Summary : You have to edit the logback.xml every time you restart the application. Workaround : None.
	mantan anna 1701101

Palettes

This topic lists the Known Issues related to Palettes.

	HTTP Palette	
Key	Description	
AMBW- 46027	TIBCO BusinessWorks Container Edition does not throw an exception for the invalid HTTP header value sent by the HTTP service.	
AMBW- 43566	Summary: The java.lang.IllegalStateException: Insufficient configured threads error is thrown if both Minimum QTP Threads and Maximum QTP Threads value is set to 1 in the HTTP Connector shared resource. Workaround: If Minimum QTP Threads is 1, then set the Max QTP Threads value to anything greater than 1.	
AMBW- 36777	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. Workaround: Use the Jetty client as the client library for implementation under HTTP client shared resource.	

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

	JDBC Palette
Key	Description
BWCE-79	Summary : Exceptions are seen when you import a project that contains a JDBC shared resource.
	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.
AMBW- 36229	Summary: Unnecessary error logs are displayed in the log file.
30223	Workaround: None
AMBW-	Summary: The Oracle DataDirect driver does not support cursor datatype.
23464	Workaround: Use native drivers instead of DataDirect drivers.
AMBW-	Summary: MySQL Community Edition is not supported for Data Direct drivers
23260	Workaround: Use native drivers instead of DataDirect drivers.
AMBW- 23193	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.
	Workaround: Use native drivers.
AMBW- 20130	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 run time without honoring the Login Timeout value specified in the JDBC Connection Shared Resource.
	Workaround: None
AMBW-	Summary: The Set Explicit Nil check box for Objects and Collections in JDBC
14624	Call Procedure activity is disabled.
	Workaround: None
AMBW- 14547	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
14741	containing in-built functions in the Jube Query activity, an invalid column fiame

JDBC Palette	
Key	Description
	error is thrown in the JDBC Query activity.
	Workaround : Use an Alias instead of the in-built functions in the ActiveMatrix Business works 5.x project.
AMBW- 11667	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. Workaround: Use "Alias" to work with any in-built function in JDBC Query activity.
AMBW- 11624	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. Workaround : None
AMBW- 8855	Summary : The localized error messages of JDBC connection are not displayed correctly in TIBCO Business Studio for BusinessWorks. Workaround : None

JMS Palette	
Key	Description
AMBW- 38735	Summary: TIBCO BusinessWorks Container Edition does not support parsing the Date-Time elements in the JMS application properties schema.
	Workaround: TIBCO recommends not to use such elements in the JMS application properties schema.

	Mail Palette
Key	Description
AMBW- 47225	Summary: The OAuth 2.0 Token mail server gets connected back after session expiry but does not receive/fetch any new email. Workaround: Stop and rerun the application.
AMBW- 47189	Summary: Intermediate Issue in Receive Mail Activity, the Basic protocol Test Connection button is not working. Workaround: None

REST and JSON Palette	
Key	Description
AMBW- 28795	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.
	Workaround: None

	XML Palette
Key	Description
AMBW- 31813	Summary: Use of pipe(union) (' ') character in XSLT throws the following error at runtime:
	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.]
	Workaround: Open the XSLT file and manually convert the pipe (union) (' ') operator to "or" operator and run the project

XML Palette	
Key	Description
AMBW- 14292	Summary : The Parse XML activity displays blank ErrorCode and ErrorMessage for activity output data validation error.
	Workaround: None.

Policies

This topic lists the Known Issues related to Policies.

Key	Description
AMBW- 34607	Summary: Marketo plug-in container edition breaks with the recent JRE upgrade. Workaround: Please refer Marketo plug-in documentation for more information.
AMBW- 19513	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. Workaround: None

Runtime

This topic lists the Known Issues related to Runtime.

Key	Summary
BWCE- 2571	Summary: Service Discovery fails with SSL applications on Pivotal Platform.
	Workaround: None.

(Continued)

Key	Summary
BWCE- 2072	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.
	Workaround: None.

TIBCO Documentation and Support Services

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Product-Specific Documentation

The following documentation for this product is available on the TIBCO BusinessWorks™ Container Edition page:

- TIBCO BusinessWorks™ Container Edition Release Notes
- TIBCO BusinessWorks™ Container Edition Installation
- 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
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