



# TIBCO ActiveMatrix BusinessWorks™

## Release Notes

*Version 6.8.1*

*May 2022*

Document Updated: July 2022



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# Context-Sensitive Help Preferences

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This procedure explains how to change your help preferences in TIBCO Business Studio™ for BusinessWorks™ to access context-sensitive help from a local directory or from an internal web server where you have placed the documents.

## Before you begin

To set context-sensitive help preferences, you must first download the product documentation from the FTP site provided by your TIBCO representative. Copy the documentation .zip file to a local directory, or to an internal web server and then extract the file.

## Procedure

1. In TIBCO Business Studio for BusinessWorks, click **Window > Preferences**. On macOS, click **TIBCO Business Studio > Preferences**.
2. In the Preferences dialog box, click **BusinessWorks > Help**.
3. Select **Custom Location** and then click **Browse** to select the html directory where you extracted the documentation, or provide the URL to the html directory on your internal web server.
4. Click **Apply** and then click **OK**.

# New Features

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The following new features are available in this release of TIBCO ActiveMatrix BusinessWorks™.

## Release 6.8.1

### Common Features

Ability to share Smart Mapper Learning via externalized database

With this version, you have the capability to connect the Smart Mapper to an externalized database to be able to share learning done on one machine within your team to achieve an improved collaborative team development experience.

Support for "allof" keyword in Swagger files

You can now generate XSD and create a top-down service or reference binding using an existing JSON file with "allof" keyword for request and response schemas.

Support for parsing the Swagger files with the special characters @ and #

Support is provided to parse the Swagger files having element names with the special characters @ and # in the request and response schema objects.

A new field **activityTimeout** under **dynamicConfigurations** element is added.

A new field **activityTimeout** under **dynamicConfigurations** element is added to the Input tab of the REST Invoke activity created with a reference binding. Provide the value in seconds. At runtime, it takes precedence over the Activity Timeout value on the Advanced tab.

Support to refer to the external JSON from OpenAPISpecification 3.0 JSON file

Support is added to generate XSD and create service and reference binding using OpenAPISpecification 3.0 JSON file, which refers to an external JSON file.

Creation of a web service with one-way operations returning faults is supported

Support is added to use One-Way operation along with Fault replies.

### Common Features

Support to enforce authentication on REST Reference binding using the Authentication check box on the HTTP client shared resource

You can now enforce basic authentication on REST Reference binding using the Authentication check box on the HTTP client shared resource. The Authorization header for the same is reflected in the outbound request.

### Administration

Encryption/Decryption of profiles supported via REST API

This release adds support to encrypt or decrypt profiles via provided REST API to enhance encryption of profiles feature.

### Runtime

Support added for Concatenated system Module Properties

On adding new Concatenation feature properties, properties referencing other properties are displayed as Undefined under Admin UI.

The iterate loop variable resets after each iteration

Variable inside iterate loop resets now after each iteration when you set the property to `bw.engine.enable.loop.reset=true`.

### 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

You can now add Custom Xpath function as a module

## Design Time

function as a module dependency.

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:** At a time you can use only one method, 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.

## Palettes

Nested *mimeEnvelopeElement* is visible and supported.

Now 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 is provided to add the custom boundary for multipart content type on the Send HTTP Request and Send HTTP Response activities.

## Release 6.8.0

### Common Features

Support is added to remember mappings made in a smart mapping session.

ActiveMatrix BusinessWorks now remembers mappings made during a smart mapping session and provides recommendation for mapping elements.

For more information, see "Smart Mapper" in *TIBCO ActiveMatrix BusinessWorks™ Application Development*.

Out of the box support provided for TIBCO ActiveMatrix BusinessWorks™ plug-in for Apache Maven

The ActiveMatrix BusinessWorks installer now includes the installer of TIBCO ActiveMatrix BusinessWorks™ plug-in for Apache Maven.

Support is added for Java 11.

Now TIBCO ActiveMatrix BusinessWorks™ 6.8.0 supports Java 11 on the Windows, Mac, and Linux platforms.

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

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

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

Support is provided for form parameters for OpenAPISpecification 3.0.

REST service binding and REST reference binding now support form parameters for OpenAPISpecification 3.0.



## Common Features

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 request URL dynamically on REST reference binding

The **dynamicConfigurations** field is added on the **Input** 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 OpenAPISpecification 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.

The SOAP Invoke activity now sends requests with CDATA tags.

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

For the CDATA tags to remain intact on the wire, set the following Java property in VM arguments:

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

Support of Binary Response Format for

The **Binary** check box is added in the Response Format for OpenAPISpecification 3.0 service and reference binding.

## Common Features

OpenAPISpecification 3.0 REST services is provided.

Support added for implementing callbacks in OpenAPISpecification 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.

ActiveMatrix BusinessWorks 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

Generate Manifest.json file for TIBCO Cloud projects using bwdesign.

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

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

The **Use local time** option is provided in the **Timer** activity.

The **Use local time** check box is added on the **General** tab of the **Timer** activity. If you select the check box, the timer is triggered at the specified **Start Time** value of a system from which an application is deployed.

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## Design Time

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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:

1. 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 "default" response in REST Service.

If a Swagger file has "default" as one of the responses for REST service's operation, then on creating a top-down REST service from the Swagger file the same is reflected in the **Response Status** tab of REST service binding.

To Reply with default fault, you must add the statusCode element to the default fault schema. Use the following steps :

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

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

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## Design Time

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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](#).

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## Palettes

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Support is added for TLS session resumption

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

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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.

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

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## Palettes

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10.98.179.110.

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

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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.

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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 & Palette Reference*.

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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 & Palette 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 & Palette Reference*
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## Runtime

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**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 ActiveMatrix BusinessWorks™ Administration*.

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## Release 6.7.0

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### Common Features

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**Smart Mapper** Smart Mapper provides the ability to intelligently determine how data is to be mapped in the activity's input tab.

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This release adds support for OpenAPISpecification 3.0.

- **REST Service Binding:** Now you can create and implement a REST Service defined with OpenAPISpecification 3.0, using both: the Swagger file as well as ActiveMatrix BusinessWorks™ REST Service Wizard.
- **REST Reference Binding:** You can invoke the REST APIs created using the OpenAPISpecification 3.0, with the REST Reference Binding, and Invoke REST API activity.
- **Updation to Swagger UI:** OpenAPISpecification 3.0 support is added to the Swagger UI, which supports the Swagger 2.0 and OpenAPISpecification 3.0. On invoking the REST 3.0 service from Swagger UI, the runtime Swagger is generated as per OpenAPISpecification 3.0.

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

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**Encryption and decryption of application profiles.**

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

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## Common Features

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

For more information about handling encrypted profiles securely at the administration side, see "Configuring Application Archives" in *TIBCO ActiveMatrix BusinessWorks™ Administration*.

---

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

Set the following logger in the logback.xml file :

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

---

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

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

---

New error code to represent SOAP Undeclared Client Fault

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

For more information, see "SOAP Binding Error Codes" in the *TIBCO ActiveMatrix BusinessWorks™ Error Codes* .

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Support is added for OAuth 2.0 configuration

This release adds support for OAuth 2.0 configuration on **HTTP Client** shared resource for getting OAuth access and refresh token.

It also adds ability to include access token in outbound REST reference.

A new **OAuth Configuration** shared resource is added.

For more information, see "OAuth Configuration Resource" in *TIBCO ActiveMatrix BusinessWorks™ Bindings and Palette Reference*.

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## Common Features

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### Plug-in manager

You can now install and uninstall TIBCO ActiveMatrix BusinessWorks™ plug-ins from TIBCO Business Studio for BusinessWorks in more simplified way using Plug-in manager.

For more information, see "Installing Plug-ins using BusinessWorks Plug-ins Manager" and "Uninstalling Plug-ins using BusinessWorks Plug-ins Manager" in *TIBCO ActiveMatrix BusinessWorks™ Installation*.

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## Administration

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Ability to refresh the status of an application instance.

The **Refresh Agents** button is added on page 1 and page 2 of Agents on the Admin UI.

This button refreshes the status of all AppInstances and AppNodes running on that particular agent.

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Ability to collect and download AppNode data.

The new **Appnode Data** tab is added on the AppNode Level 2 page.

For more information, see "Auto Collecting Engine Data" in *TIBCO ActiveMatrix BusinessWorks™ Administration*.

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Support is added for MySQL 8.x.

ActiveMatrix BusinessWorks™ now supports MySQL 8 database. The options to install the available versions of the driver are listed on the command line interface.

**Note:** You can install only one version of the driver at a time. If you want to install new version, the previously installed driver version is overridden.

To install the driver for Mysql database, use the `bwinstall` command line utility as follows:

```
bwinstall mysql-driver
```

To uninstall the driver for Mysql database, use the `bwuninstall` command line utility as follows:

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## Administration

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```
bwuninstall mysql-driver
```

For more information, see "Using MySQL 8.x Database" in *TIBCO ActiveMatrix BusinessWorks™ Installation*.

---

Support is added to dynamically update flow limit.

This release adds support to dynamically update the flow limit from the Application level 2, AppSpace level 2, and AppNode level 2 pages of the Admin UI.

You can also update the flow limit using the REST APIs.

For more information, see "Engine and Job Tuning" in *TIBCO ActiveMatrix BusinessWorks™ Administration*

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## Design Time

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Visual Diff

You can compare two revisions of a process and its artifacts side by side visually in TIBCO Business Studio™ for BusinessWorks™. It highlights changes in newer revision such as addition or removal of activities, changes in an activity configuration.

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

For more information, see "Diff Viewer" in *TIBCO ActiveMatrix*

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## Design Time

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### *BusinessWorks™ Application Development*

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Sorting functionality is available for roles.

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

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

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

For more information see "Call Process" and "Java Invoke" in *TIBCO ActiveMatrix BusinessWorks™ Bindings and Palettes Reference*.

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

---

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

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

---

Support is added for application templates.

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

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

You can perform the following operations:

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

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

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## Palettes

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

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

Support is added for PostgreSQL failover URL.

Support is added for PostgreSQL failover URL. For example:

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

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

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

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

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

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

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

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

Add the following logger in the logback.xml file :

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

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

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

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## Runtime

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

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

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

For more information, see "Collecting Performance Parameters with respect to Activities and Processes" in the *TIBCO ActiveMatrix BusinessWorks™ Administration*.

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# Changes in Platform Support

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In this release, platform support for ActiveMatrix BusinessWorks has changed as follows:

Platforms	Status	As of Release
Apple Mac OS 12.x	Added	6.8.1
Oracle 11g and 12c databases	Removed	6.8.1
Apple Mac OS X 10.13.x, 10.14.x 64-bit on x86-64	Removed	6.8.0
Apple Mac OS X 11.x 64-bit on x86-64	Added	6.8.0
Microsoft Windows 8 64-bit on x86-64	Removed	6.8.0
Microsoft Windows Server 2012 64-bit on x86-64	Removed	6.8.0
Novell SUSE Linux Enterprise Server 11.x 64-bit on x86-64	Removed	6.8.0

For a complete list of all the currently supported platforms, see the [readme file](#).

# Changes in Functionality

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The following functionality-related changes have been made in this release.

## Release 6.8.1

### General

Updated spring framework libraries for Eclipse.	The spring framework libraries for Eclipse are updated to address the vulnerability issues.
Upgrade the JDK compiler compliance version to the one greater than 1.5.	The minimum JDK compiler compliance required is 1.5. If the project that you are importing with Java nature has JDK compiler compliance less than 1.5, you can choose to upgrade the JDK compiler compliance version to the one greater than 1.5.

### Binding

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 login details.
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### Runtime

Password Digest option is provided in SOAP Reference.	You can choose the password type as Password Digest when using the UserNameToken for security in SOAP Reference.
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## Palette

Improved error message for SOAP Client using HTTP and HTTPS

Earlier, while invoking a service using HTTPS, the error message returned by invoke was not very useful to identify the problem.

Now, an improved error message occurs for SOAP Client using HTTP and HTTPS.

## Release 6.8.0

### Administration

Support is added to enable and disable OpenTelemetry from Admin CLI and Admin UI.

Earlier, support was added to enable and disable OpenTracing from Admin CLI and Admin UI.

Now, the support is added for OpenTelemetry.

Change in the content arrangement in a backup .zip file.

Earlier, while backing up profile, an application profile name used to change to profile\_<application\_name><application\_version>.substvar and for appinstance, it used to change to profile\_<application\_name><application\_version>\_<appnode\_name>.substvar

Now, in backup .zip file, all the artifacts are arranged in a folder to maintain exact configurations.

Change in the default transport layer.

Earlier, the default transport layer between the BWAgent and the AppNode was UDP.

Now, the default transport layer is REST.

### General

Change in the default setting of the **Always**

Earlier, the **Always run in background** check box located at Window > Preferences > General was clear by default.

## General

**run in background** check box. 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 added. A new **JMS Fetch Timeout** field is added on the **Advanced** tab of the **Get JMS Queue Message** activity. Additionally, the behavior of the timeout field on the **Input** tab is changed. For more information, see "Get JMS Queue Message" in *TIBCO ActiveMatrix BusinessWorks™ Binding and Palette Reference*.

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 ActiveMatrix BusinessWorks™ Administration*.

## Release 6.7.0

### Administration

Change in the default log level of the Jetty, Jersey, and MSSQL server (if applicable) logs. Earlier Jetty, Jersey, and MSSQL server (if applicable) logs were available under the BWAgent log when started in Debug mode. Now by default, only Warn level logs are present. You can change the log level of loggers present in the `bwagent_logback.xml`.

### General

The Earlier the `TIBCOBusinessStudio.ini` file was present inside `TIBCOBusinessStudio.app` folder.



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## General

TIBCOBusinessStudio.ini file is present at the /studio/4.0/eclipse folder location on Mac operating system.

Now from TIBCO ActiveMatrix BusinessWorks™ 6.7.0, the TIBCOBusinessStudio.ini file is present under eclipse folder.

Change in the deployment method name

The name of the deployment method is now changed from "Appspace" to "BW Appspace".

Change in a way to discover application server URL.

When TIBCO ActiveMatrix BusinessWorks™ application with REST reference and with Mesh service client enabled was launched from TIBCO Business Studio™ for BusinessWorks™, the application invoked a Mesh service from the application on an application server. The application server's URL was determined by fixed rules.

After a fully-qualified domain names (FQDN) service is provided, when the ActiveMatrix BusinessWorks™ application is launched, TIBCO Business Studio for BusinessWorks accesses the FQDNs and discovers the application server URL from it using a domain URL.

EGIT plug-in installation

There is no need to install EGIT plugin manually.

EGIT plug-in version 4.4.1 is now a part of TIBCO Business Studio for BusinessWorks itself.

To verify the installation, navigate to **Help > Installation Details > Plugins (Egit)**.

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## Migration

Addition of the module name as a prefix to the custom Xpath function

Earlier, after migration, the customxpathfunction jar-name did not have prefix of the module name in it and it migrated as a plain customxpathfunction jar for the custom Xpath functions.

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

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## Migration

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the customxpathfunction jar name.

For example, in SampleApplication\_CustomXPathFunction.jar, SampleApplication is the module name.

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# Deprecated and Removed Features

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

## Deprecated Features

### Release 6.8.1

- Writing Process Statistic Data to an External Database using logback file is deprecated.
- The Password Grant feature is deprecated.
- The Analyzer feature is deprecated.

## Deprecated Features

### Release 6.8.0

- 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.

### Release 6.7.0

- The Universal Installer for TIBCO ActiveMatrix BusinessWorks™ will not include out of the box support for SVN from the next release. TIBCO will provide a separate documentation with respective release on how to install the SVN plug-in.
- Maven plug-in will not be shipped with ActiveMatrix BusinessWorks™ 6.x. Maven plug-in installation option from the bwinstall scripts is removed.

## Removed features

### Release 6.8.1

No feature has been removed from this release.

### Release 6.8.0

With TIBCO ActiveMatrix BusinessWorks™ 6.8.0 release, OpenTracing libraries are removed.

TIBCO ActiveMatrix BusinessWorks™ 6.8.0 now includes OpenTelemetry support for tracing. All OpenTelemetry compliant service providers can be integrated to show traces for ActiveMatrix BusinessWorks applications.

For more information, see the "OpenTelemetry" in *TIBCO ActiveMatrix BusinessWorks™ Administration*.

ActiveMatrix BusinessWorks removes out-of-the-box support for SVN.

**Release 6.7.0**

No feature has been removed from this release.

# Closed Issues

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The following are the closed issues in this release of TIBCO ActiveMatrix BusinessWorks™.

The closed issues are grouped by components:

- [Administration](#)
- [Binding](#)
- [Core Design Time](#)
- [Core Run Time](#)
- [General](#)
- [Migration](#)
- [Palette](#)
- [Policies](#)

## Administration

This topic lists the closed issues related to Administration.

### Release 6.8.1

Key	Summary
AMBW-45498	Now the TEA Activity Instrumentation Panel can display all the activities.
AMBW-45121	The database query to update the ApplInstance status has been optimized to improve database performance.

### Release 6.8.0

Key	Summary
AMBW-44051	The database query to update the AppInstance status has been optimized to improve database performance.
AMBW-42939	A BWAgent fails to start when using SSL with wildcard certificates.
AMBW-42938	The process id value for an AppNode present in the output of an API server URL does not change even if you restart the AppNode.
AMBW-42899	The BWAdminDataManager is not yet initialized error is displayed when you try to update the profile using the bwadmin config command with -cf option.
AMBW-42130	The BWAgent's query working with TEA uses bind variables in the query on the Oracle database.
AMBW-34574	There was a harmless warning when starting BWAgent.

### Release 6.7.0

Key	Summary
AMBW-40946	User were not able to download the Log and Logback files from Admin UI.
AMBW-40794	The swagger response was different than the actual response of the Deploy Application API.
AMBW-40712	The Javascript core libraries are updated to the latest version.
AMBW-40586	The Get Application Status REST API displayed the 500 internal server error when an application was in the Starting state.
AMBW-40027	Updating the Password field from Admin UI was not working when the provided password had the percentage character (%).

Key	Summary
AMBW-39972	The application instance properties could not be restored to their original values when they were modified through Admin UI.
AMBW-39511	Create domain at the custom location was not working from REST API.
AMBW-37423	After upgrading, too many unnecessary errors were displayed when starting the BWAgent.
AMBW-36613	The upload and deploy profile took too much time.
AMBW-34574	There was a harmless warning when starting BWAgent.

## Binding

This topic lists closed issues related to Binding.

### Release 6.8.1

Key	Summary
AMBW-45639	When Invoke activity with REST Reference binding is configured with absolute file path for multipart form parameters, it deletes the files that are passed as mimePart input.
AMBW-45520	For bypassing the version validation in TIBCO Business Studio for BusinessWorks for swagger files having openapi version other than 3.0.0, pass the property <code>bw.plugin.rest.disableOpenApi3xVersionValidation=true</code> in the <i>TIBCOBusinessStudio.ini</i> file.
AMBW-45399	The application fails to start intermittently and throws an error

Key	Summary
	"TIBCO-BW-SCHEMA-RESOLVER-500201: WSDL not found".
AMBW-45155	The 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".

### Release 6.8.0

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.
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



Key	Summary
	<code>bw.binding.soap.client.reply.empty.header.override=true.</code>
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 <code>&lt;xs:extension&gt;</code> element with base attribute and array-based sub-elements.
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 <b>Configure Local Swagger</b> option does not work when you import a project in TIBCO Business Studio for BusinessWorks first and then configure the <b>Local Folder</b> path in the <b>API Explorer</b> tab.
AMBW-27634	The null pointer exception is thrown while adding the SOAP Unbound Headers.

### Release 6.7.0

Key	Summary
AMBW-41468	After migration, the <code>org.apache.axiom.om.OMException: Unable to determine SOAP version error</code> occurred when an attachment style was MTOM.  Add the following property:  <code>bw.binding.soap.client.reply.mtom.contenttype.override=true.</code>
AMBW-41299	The unbound header parts were missing in the concrete WSDL generated at design time using the <b>Generate Concrete WSDL</b> option from SOAP service, which imported another WSDL importing request and response header XSDs.
AMBW-41129	The Apache Axis2 threads were not increased with an increase in load.

Key	Summary
AMBW-40680	The Unbound Header parts were missing in the runtime concrete WSDL retrieved from SOAP service with version 1.2.
AMBW-40679	The Unbound Header parts were missing in the runtime concrete WSDL retrieved from a SOAP service when the abstract WSDL imported another WSDL, and the WSDL imported request and response header XSDs.
AMBW-40484	<p>The <b>Send HTTP Request</b> activity could not send the request with Content-type as multipart/form-data to ServiceNow with Apache HttpComponents library.</p> <p>Send the POST request using the Jetty HTTP Client library in the HTTP Client shared resource.</p>
AMBW-39997	<p>The incorrect error code 403 Forbidden was thrown for the Invoke activity in a SOAP over HTTP application when the <b>HTTP Client</b> shared resource was configured with the following options:</p> <ul style="list-style-type: none"> <li>• Default port = 443</li> <li>• Implementation Library = Apache HttpComponents(Supported by HTTP 1, SOAP and REST)</li> <li>• <b>Default Confidentiality</b> check box was selected.</li> </ul>
AMBW-39819	The time required for runtime concrete WSDL retrieval for a SOAP service increased if more applications with a large number of schemas were deployed on the same AppNode.
AMBW-39038	The runtime concrete WSDL took too much time to generate when an endpoint was hit in the browser, because the schema cache was not initialized before WSDL retrieval.

## Core Design Time

The following issues have been fixed in this release of TIBCO ActiveMatrix BusinessWorks™.

**Release 6.8.1**

Key	Summary
AMBW-45923	For certain projects, TIBCO Business Studio for BusinessWorks displays a misleading error in the Problems tab as follows: <i>Inline schema is not cloned correctly.</i>
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 <b>End</b> activity, a new variable with an optional error report type is created and that variable takes precedence over the normal error variable.
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-42932	Selecting the <b>Generate Process Diagrams</b> check box does not generate the process diagram in the application module.
AMBW-36625	When there are validation errors in a 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.

**Release 6.8.0**

Key	Summary
AMBW-44487	While performing the <b>Push to Cloud</b> action from TIBCO Business Studio for BusinessWorks, the EAR generation operation does not time out for large projects.
AMBW-44475	ActiveMatrix BusinessWorks throws an error when mapping

Key	Summary
	the <b>JDBC Query</b> activity's output to the Iterate group.
AMBW-43710	On running an application, the Activity output data validation error is displayed when the <b>JDBC Query</b> activity is used with the Iterate group.
AMBW-43195	The <code>system:validate</code> command throws an error and returns incorrect status code for some projects.
AMBW-43138	TIBCO Business Studio for BusinessWorks becomes unresponsive intermittently when you import a shared module through maven plug-in.
AMBW-43109	<p>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 <b>Problems</b> tab when you import a project in TIBCO Business Studio for BusinessWorks for the <b>Get Context</b> activity.</p> <p>After applying the quick fix, the error is not displayed and you get a successful response.</p>
AMBW-43026	After renaming a process package, the Input tab of the <b>Call Process</b> 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 <b>API Explorer</b> tab is incorrect.
AMBW-42089	TIBCO Business Studio for BusinessWorks displays incorrect build order of modules when the projects are imported using the <code>bwdesign</code> utility.

## Release 6.7.0

Key	Summary
AMBW-41298	The Iterate group for a schema element did not work when the element belonged to a no-namespace schema.
AMBW-40453	Support for migration of the tib:evaluate function is provided in TIBCO ActiveMatrix BusinessWorks™ 6.7.0.
AMBW-40436	<p>TIBCO Business Studio™ for BusinessWorks™ displayed null pointer exception when constructing the CatchAllFaultDetails document because of the incorrect transition link from the Scope.</p> <p>Now, the following error message is displayed whenever there is a link in the process that has the source activity set as the group end activity.</p> <p>Outgoing link from Group End activity of &lt;group_name&gt; group is incorrectly configured. Please delete and recreate it to repair or apply the quick fix.</p> <p>Applying the quick fix deletes the erroneous link and recreate the link with the correct serialization.</p>
AMBW-40295	TIBCO Business Studio for BusinessWorks did not select sub processes correctly in the Run Configuration and Debug Configuration windows.
AMBW-39820	TIBCO Business Studio for BusinessWorks did not display appropriate error for a transition from the Group End activity to any activity inside the Group.
AMBW-38966	TIBCO Business Studio for BusinessWorks failed to generate .EAR from studio and bwdesign utility due to null pointer exception.
AMBW-38787	TIBCO Business Studio for BusinessWorks displayed an error in the <b>Problems</b> tab when a module property inside a shared module referred a process property of type JDBC

*(Continued)*

Key	Summary
	Connection.
AMBW-38748	Leading or trailing white spaces from alias name of SSL server shared resource did not trim when the value type was literal value.
AMBW-38292	Null pointer exception occurred while generating .EAR for specified customer project.
AMBW-37808	While moving the JMS shared resources from an application module to a shared module, TIBCO Business Studio for BusinessWorks didn't refactor the module property path correctly.
AMBW-37597	The Job Data view in the debugger became unresponsive while displaying large data.
AMBW-37112	The validation message was not displayed on using the parallel JDBC activity inside the <b>Local Transaction</b> group.
AMBW-34133	The Iterate group configuration error because of schema used does not have namespace. error reported if the Iterate group used schema without namespace.

## Core Run Time

The following issues have been fixed in this release of TIBCO ActiveMatrix BusinessWorks™.

### Release 6.8.1

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

**Release 6.8.0**

Key	Summary
AMBW-44452	When migrating the 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	<p>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 reco.//very system.</p> <p>Set the <code>com.tibco.bx.engine.recovery.failure.threshold</code> property to a value between 31 to 180 seconds.</p>
	<p>TIBCO ActiveMatrix BusinessWorks SharedVariable does not reset to initial value after deployed application restart.</p> <p>The module shared variable failed to reset to initial value on restarting an application.</p>
AMBW-43980	ActiveMatrix BusinessWorks application containing the <b>FTL Subscriber</b> activity having flowlimit set along with engine threads displays the out of memory error when the number of transactions per second are increased above 50.
AMBW-43770	The <b>JMS Receive Message</b> activity running on an AppNode with the Group mode fails to start when a BWEEngine resumes from the Suspended state.
AMBW-43221	<p>The <b>Wait</b> and <b>Notify</b> activities in the group persistence mode do not work with default values for the <code>bw.engine.threadCount</code> and <code>bw.engine.db.maxConnection</code> properties.</p> <p>Set the following new properties in the AppSpace's config.ini file:</p> <pre>com.tibco.bx.lockWaitNotify=true com.tibco.bw.throttle.notify.activity=true</pre>

Key	Summary
	<pre data-bbox="399 317 829 344">com.tibco.bw.throttle.wait.activity=true</pre> <p data-bbox="367 411 1170 438">Use the throttle properties when default configuration is used .</p> <p data-bbox="367 474 1284 541">The <code>bw.engine.db.maxConnection</code> property's value must be greater than the <code>bw.engine.threadcount</code> value.</p>
AMBW-43220	<p data-bbox="367 590 1360 659">Some of the ActiveMatrix BusinessWorks jobs are not processed intermittently when an application has <b>Wait</b> and <b>Notify</b> activities.</p> <p data-bbox="367 695 1386 800">To avoid the deadlock scenario, TIBCO recommends to set the <code>com.tibco.bx.lockWaitNotify=true</code> property and the value of <code>bw.engine.db.maxConnection</code> property = twice the value of <code>bw.engine.threadCount</code>.</p>
AMBW-43102	<p data-bbox="367 852 1395 957">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.</p>
AMBW-43101	<p data-bbox="367 1010 1406 1079">The <code>BW.MODULE.NAME</code> and <code>BW.MODULE.VERSION</code> module properties return empty values.</p>
AMBW-43099	<p data-bbox="367 1131 1395 1236">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.</p>
AMBW-42919	<p data-bbox="367 1289 1406 1394">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.</p>
AMBW-42506	<p data-bbox="367 1446 1346 1516">Modifications done inside a running application in TIBCO Business Studio for BusinessWorks displays the Process not found error.</p>
AMBW-42106	<p data-bbox="367 1568 1224 1596">AppNode APIs now provide complete stack trace in a thread dump.</p>
AMBW-41286	<p data-bbox="367 1690 1406 1759">TIBCO Business Studio for BusinessWorks throws <code>NullPointerException</code> while running a project with different nested subprocesses.</p>

## Release 6.7.0



Key	Summary
AMBW-41486	<p>The <code>&lt;?xml-multiple?&gt;</code> tag disappeared from the output of the <b>Parse XML</b> activity when the <b>Validate Output</b> check box was selected.</p> <p>Set the <code>-Dbw.application.activity.validateOutput.treeValidation=true</code> property as VM argument to add the tag when validating an output XML.</p>
AMBW-41289	<p>The <code>&lt;msgCode&gt;</code> tag under <code>FaultDetails</code> could not capture the actual <code>msgCode</code> value.</p>
AMBW-41222	<p>An application was unable to resolve a process variable on startup for the <b>Assign</b> activity, even though the <b>Call Process</b> activity in the same process could resolve the same process variable.</p>
AMBW-41218	<p>The <b>Engine Command</b> activity did not stop an application when an application was restarted.</p>
AMBW-41207	<p>Memory leak issue was observed due to an instance of <code>org.eclipse.xsd.XSDSchemaDirective[]</code> on an <code>AppNode</code>.</p>
AMBW-41045	<p>After upgrading, the <b>Transform XML</b> activity took more memory and generated the Out of Memory Exception.</p>
AMBW-40793	<p>An application could not be started when its status was <code>STARTFAILED</code>.</p>
AMBW-40362	<p>An application using WSDL from a shared module failed to restart and displayed the <code>java.lang.IllegalStateException: BundleContext is no longer valid</code> error.</p>
AMBW-40232	<p>The conversation handler failed when multiple <code>AppNodes</code> were set up in a group persistence mode.</p>
AMBW-40145	<p>Ability to evaluate transition expression as XPath 1.0 expression</p> <p>Set the <code>bw.engine.use.transition.xpath.expression.lang.1.0</code> property to true in the <code>AppNode</code>'s <code>config.ini</code> file.</p> <p>By default, the value is false.</p>
AMBW-	<p>The performance was degraded in the <b>Iterate Group</b> activity.</p>

Key	Summary
38813	
AMBW-36149	When an application had a persistent shared module in the group mode, the following error occurred intermittently:  PVM-MODEL-102700.
AMBW-33830	After migration, the <b>Repeat</b> group used in a calling process displayed java.sql.SQLException when the <b>JDBC Query</b> activity was configured with a process in subsets used inside a subprocess.

## General

This topic lists the closed issues related to General issues.

### Release 6.8.1

Key	Summary
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-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, ActiveMatrix BusinessWorks adds the 'O' character in the activity output instead of the character provided by you.
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.

Key	Summary
AMBW-45414	Unable to map the iterator element value on transition post-migration.
AMBW-44957	The context-sensitive help for TIBCO Business Studio for BusinessWorks is not currently available in ActiveMatrix BusinessWorks 6.8.0.
AMBW-44034	The JDBC Query activity result set adds extra space in the output for a field that is empty in the database.

### Release 6.8.0

Key	Summary
AMBW-44449	<p>Transition condition with boolean value is not evaluated correctly against String true.</p> <p>Add the new <code>-Dbw.xml.comparable.legacy.booleanStringEquality=true</code> property as a VM argument along with the <code>-Dbw.engine.use.transition.xpath.expression.lang.1.0=true</code> property in TIBCO Business Studio for BusinessWorks</p>
AMBW-44448	<p>Empty tag is not generated for optional-nil elements.</p> <p>Now, a new <b>Treat optional-nil elements as optional elements</b> check box is added on <b>Window &gt; Preferences &gt; Mapper</b> page. Select the check box and clean the workspace.</p> <p>After cleaning the workspace, you get some XSLT out-of-sync errors on the <b>Problems</b> tab. Use the <b>Quick Fix</b> option to resolve those errors and execute the project again to generate empty tags for the optional-nil elements.</p>
AMBW-44435	Input and Output schemas are not formed correctly when creating a Mesh client for a ActiveMatrix BusinessWorks and TIBCO Flogo Open API Specification 3.0 Mesh Service.
AMBW-44434	After Tibtunnel recovers from its termination, ActiveMatrix BusinessWorks cannot connect to the on-premise resources such as Enterprise Message Service (EMS) for one round of Timer trigger.

Key	Summary
AMBW-44350	ActiveMatrix BusinessWorks consumes a large memory heap and throws the out of memory error when you read a file using the <b>Java Invoke</b> activity.
AMBW-44305	If you select the <b>Generate Implementation Specification</b> 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-44090	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 ActiveMatrix BusinessWorks.
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 <b>Render JSON</b> activity.
AMBW-43104	The <b>Write File</b> activity cannot generate a file when the <b>TextContent</b> field has the space character (" ") value.
AMBW-43100	<p>The literal white space character (" ") is not datatype-valid with respect to the datatype definition '<code>{http://www.w3.org/2001/XMLSchema}double</code>'. error is displayed in mapper.</p> <p>To avoid typecasting error, use the following VM argument:</p> <pre>-Dbw.xml.general-comparison.ignore-numeric-cast=true</pre>
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 <b>Mapper</b> activity.
AMBW-43044	The bwdesign utility shows the NLS unused message warning when exporting a project.

Key	Summary
AMBW-42903	A SOAP service having the <b>Reply</b> activity throws the following error for an error configured on the <b>Reply</b> activity when the <b>Reply</b> activity has an input value mapped to the <b>Description</b> 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 <b>Surround with Choice</b> 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 <b>Quick Fix</b> 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.
AMBW-33562	TIBCO Business Studio for BusinessWorks does not show the job data when debugging an application in the debugger

## Release 6.7.0

Key	Description
AMBW-41613	The activity input data validation error occurred when converting a double value to a decimal value and the -Dbw.application.activity.validateOutput=false property was set in the config.ini file.  A new -Dbw.xml.decimal.allowDoubleExponent property is added.

Key	Description
	Set the <code>-Dbw.xml.decimal.allowDoubleExponent</code> property to true along with the <code>-Dbw.application.activity.validateOutput=false</code> in the <code>config.ini</code> file.
AMBW-41486	<p>The <code>&lt;?xml-multiple?&gt;</code> tag disappeared from the output of the <b>Parse XML</b> activity when the <b>Validate Output</b> check box was selected.</p> <p>Set the <code>-Dbw.application.activity.validateOutput.treeValidation=true</code> property as VM argument to add the tag when validating an output XML.</p>
AMBW-41289	The <code>&lt;msgCode&gt;</code> tag under <code>FaultDetails</code> could not capture the actual <code>msgCode</code> value.
AMBW-41223	The <code>trim()</code> mapper function in the <b>Group by</b> clause failed and generated the XSLT transformation error at run time.
AMBW-41222	An application was unable to resolve a process variable on startup for the <b>Assign</b> activity, even though the <b>Call Process</b> activity in the same process could resolve the same process variable.
AMBW-41221	The input tab mappings were not visible for activities when the if condition in the XPath function was empty.
AMBW-41218	The <b>Engine Command</b> activity did not stop an application when an application was restarted.
AMBW-41207	Memory leak issue was observed due to an instance of <code>org.eclipse.xsd.XSDSchemaDirective[]</code> on an <code>AppNode</code> .
AMBW-41045	After upgrading, the <b>Transform XML</b> activity took more memory and generated the Out of Memory Exception.
AMBW-40860	The coercion failed to fetch the correct elements for mapping and displayed a validation error at design time when there were two elements of the same name and namespaces, but from the different schemas.
AMBW-40793	An application could not be started when its status was <code>STARTFAILED</code> .

Key	Description
AMBW-40362	An application using WSDL from a shared module failed to restart and displayed the java.lang.IllegalStateException: BundleContext is no longer valid error.
AMBW-40232	The conversation handler failed when multiple AppNodes were set up in a group persistence mode.
AMBW-40145	Ability to evaluate transition expression as XPath 1.0 expression Set the bw.engine.use.transition.xpath.expression.lang.1.0 property to true in the AppNode's config.ini file. By default, the value is false.
AMBW-39898	The XSD resolver could not process the id attribute in the xs:group element.
AMBW-39494	<b>Summary:</b> The current-dateTime() function returned different representation of output in TIBCO Cloud Integration, ActiveMatrix BusinessWorks, and TIBCO ActiveMatrix BusinessWorks Container Edition.
AMBW-38971	After migration, coercion disappeared and had to be remapped frequently.
AMBW-38813	The performance was degraded in the <b>Iterate Group</b> activity.
AMBW-36149	When an application had a persistent shared module in the group mode, the following error occurred intermittently:  PVM-MODEL-102700.
AMBW-36034	An application was not visible in the Debug Configuration window when the project's name was different than the value of the ID field of the Overview section of the project.
AMBW-33830	After migration, the <b>Repeat</b> group used in a calling process displayed java.sql.SQLException when the <b>JDBC Query</b> activity was configured with a process in subsets used inside a subprocess.

# Migration

This topic lists the closed issues related to Migration.

## Release 6.8.1

Key	Description
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.

## Release 6.8.0

Key	Description
AMBW-43791	After migration, the mapper input is empty when the schema is referenced from data format shared resource.
AMBW-43501	<p>The migration tool migrates processes with the <b>REST-Dispatch-and-Reply</b> 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.</p> <p>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.</p> <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p><b>Note:</b> 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.</p> </div>
AMBW-42280	After migration, the <b>Mapper</b> activity is migrated as an empty activity.
AMBW-41353	After migration, if the variable list XPath expression of an Iterate group is linked to multiple schemas then the iterator schema is not resolved.



Key	Description
AMBW-33641	Getting "Coercion error: Can't find substitution for ""." at design time after migrating a project.

### Release 6.7.0

Key	Description
AMBW-41319	After migration, the \$error_<activityname> was not migrated and failed to fetch error details from the <b>Local Transaction</b> group.
AMBW-41022	After migration, the subprocess containing the padfront() function failed at runtime.
AMBW-40178	After migration, multiple errors occurred for DTD to XSD conversion.
AMBW-40068	After migration, the <b>SOAP Request Reply</b> activity could not migrate successfully.
AMBW-40067	After migration, transitions to Invoke activities were not present in a process.
AMBW-38737	After migration, the faultDetails mapping was incorrect.
AMBW-37700	After migration from the SAP adapter configurations to TIBCO ActiveMatrix BusinessWorks™ Plug-in for SAP, the mappings were not migrated.
AMBW-37114	After migration, the pipe character (" ") was converted to the "or" condition which resulted in incorrect activity output.
AMBW-31022	The transition condition now has the migration support of adding the XPath 1.0 tag.

# Palette

This topic lists the Closed Issues related to Palettes.

## Release 6.8.1

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	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 ActiveMatrix BusinessWorks 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	ActiveMatrix BusinessWorks 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 ActiveMatrix BusinessWorks project when connecting to the IBM MQ server, it gives InvalidDestinationException.
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 JMS Request Reply activity in ActiveMatrix BusinessWorks 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	Get JMS Queue Message activity shows different types of timeout errors for the same scenario when there is no message in the queue.

### Mail Palette

Key	Summary
AMBW-45461	"Test connection" for SMTP resource shows the error "Configuration error in field [Host] and/or [Port], the value must be a valid hostname and/or port" with correct values.

### 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.

### Parse Palette

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

## Release 6.8.0

### HTTP Palette

Key	Summary
AMBW-43969	The <b>Send HTTP Request</b> activity fails and throws <code>TimeoutException</code> when the <b>HTTP Client</b> shared resource is configured with the Jetty HTTP Client library along with SSL, and the Proxy shared Resource without authentication.
AMBW-43072	The <b>Send HTTP Request</b> activity fails with 500 error when the <b>HTTP Client</b> shared resource configured with Apache HTTP Components library and a request with MIME attachment is sent to REST service.
AMBW-42083	ActiveMatrix BusinessWorks 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-43983	The <b>JDBC Call Procedure</b> activity throws an error and cannot call a stored procedure when you use PostgreSQL 12 database.
AMBW-43965	The <b>JDBC Query</b> activity throws the Numeric overflow error when the number coming from the database is greater than 10 digits.
AMBW-43964	TIBCO Business Studio for BusinessWorks displays timeout error with SQL stored procedures when you use Data Direct Driver and XML type parameters as IN or OUT.
AMBW-43037	The <b>SQL Direct</b> 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 inaccessible if the procedure is selected without selecting Schema, and Catalog or Package.
AMBW-41912	Heap memory leak is observed on an AppNode for the <b>SQL Direct</b> activity in an application,
AMBW-38321	The JDBC Tibco Driver for PostgreSQL is upgraded from 5.1.4.000097 to 5.1.4.000329 and the Native Driver is updated with 9.4.1212 to 42.2.18.
AMBW-31970	JDBC Driver for Microsoft SQL server is upgraded from 4.0 to 8.2.2.

### JMS Palette

Key	Summary
AMBW-43981	Whenever EMS fault-tolerance server is switched or the EMS server is restarted, the <b>JMS Send Message</b> activity loses the first message after reconnecting.
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 <b>Send Mail</b> activity and does not timeout when the existing engine threads are occupied.

### REST and JSON Palette

Key	Summary
AMBW-43585	The <b>Invoke REST API</b> 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	<p>Non-default namespace can not map to empty URI Set the <code>-Dbw.xml.jsonrest.multiple-ns.removensprefix=true</code> property as a VM argument in TIBCO Business Studio for BusinessWorks.</p> <p>This property removes all non default prefixes from the XML and uses only default 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 <code>xmlns=""</code> at the root level of the schema.</p>
AMBW-43994	<p>The Value-of <code>max(xsd:int*)</code> expression returned as a scientific notation value when the <b>Transform XML</b> activity has bigger numbers in input.</p>
AMBW-41240	<p>The <b>Parse XML</b> activity gives error when the input file encoding was UTF-8-BOM and the <b>Validate Output</b> check box was selected.</p> <p>Set the <code>-Dbw.application.activity.validateOutput.treeValidation=true</code> property as a VM argument when validating an output XML.</p>
AMBW-33245	<p>An error occurs when the YearMonth datatype is typecasted with the <code>xsd:string()</code>.</p>

### Release 6.7.0

### FTP Palette

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

### HTTP Palette

Key	Summary
AMBW-41408	The <b>Send HTTP Request</b> activity threw the <code>HttpClientException</code> when the application deployed on TEA was restarted, and the <b>HTTP Client</b> shared resource had the <b>Apache HttpComponents(Supported by HTTP 1, SOAP and REST)</b> implementation library, and the <b>Provide Client Resource</b> check box was selected on the <b>Advanced</b> tab of the <b>Send HTTP Request</b> activity.
AMBW-41006	The SSL was configured even when the SSL Client shared resource picker was not empty and the module property against the <b>Confidentiality</b> field at <b>HTTP Client</b> shared resource was set to false.  Set the <code>bw.plugin.http.client.relyOnConfidentialityField</code> property to true.
AMBW-40484	The <b>Send HTTP Request</b> activity could not send the request with Content-type as <code>multipart/form-data</code> to ServiceNow with Apache HttpComponents library.  Send the request using the Jetty HTTP Client library in the <b>HTTP Client</b> shared resource.

### JDBC Palette

Key	Summary
AMBW-42049	The stored procedure input and output parameters with MSSQL DataDirect driver were inaccessible if the procedure was selected without selecting Schema, and Catalog or Package.
AMBW-41608	The JDBC connection created against the database increased beyond the configured value when any of the following cases occurred: <ul style="list-style-type: none"> <li>• There was a network issue.</li> <li>• Database was stopped or started</li> <li>• The <code>bw.engine.activity.async.waitTime</code> property was present in the <code>config.ini</code> file.</li> </ul>
AMBW-	The Null Pointer Exception was thrown when re-connecting the database with an



### JDBC Palette

Key	Summary
41215	application.
AMBW-41146	The input and output parameters for a stored procedure were not accessible when the stored procedure was inside a package.
AMBW-41145	The <b>JDBC Call Procedure</b> activity failed and generated the Unknown exception occurred.
AMBW-40335	TIBCO ActiveMatrix BusinessWorks™ generated the java.sql.SQLException at runtime when the Database URL had forward slashes in the sslTrustStoreLocation path.

### JMS Palette

Key	Summary
AMBW-41548	For the ActiveMQ JMS provider, the <b>JMS Receive Message</b> activity failed to reconnect for network issues.
AMBW-40637	The <b>JMS Send Message</b> activity displayed the Null pointer exception intermittently when messages were sent in concurrent batches.
AMBW-35597	The <b>JMS Request Reply</b> activity can now filter requests and response messages correctly on the basis of JMS CorrelationID or MessageID.
AMBW-34959	<p>Messages were stuck in an EMS queue when the EMS connection dropped and reconnected.</p> <p>This issue occurred intermittently when the AppSpace was configured with FTgroup persistence with the EMS FT URL.</p> <p>Also, the secondary EMS server was not available intermittently after the failure of the first server.</p>

### JMS Palette

Key	Summary
AMBW-33187	In TIBCO Business Studio™ for BusinessWorks™, the default value for the <b>Directory preference</b> option on the <b>BusinessWorks &gt; Palettes &gt; JMS</b> preference page was invalid.

### Mail Palette

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

### REST and JSON Palette

Key	Summary
AMBW-41167	<p>For some scenarios, the <b>Parse JSON</b> activity generated the XMLStreamException in the console, in logs and the <b>Output</b> tab in Job Data view became empty when an application was executed in the debug configuration.</p> <p>Set the <code>bw.engine.debug.core.disableNamespaceFixup</code> property to true.</p> <p>Do not use this property while mocking the output for unit testing.</p>
AMBW-40875	The <b>Parse JSON</b> activity could not parse a JSON key having a value of array type with length more than 512 characters.
AMBW-40618	Logs for the <b>Invoke REST API</b> activity now also display the response body information. Set the following logger in the logback.xml file:

### REST and JSON Palette

Key	Summary
	<pre>&lt;logger name="com.tibco.bw.palette.restjson.runtime.RestInvoke"&gt; &lt;level value="DEBUG"/&gt; &lt;/logger&gt;</pre>

### XML Palette

Key	Summary
AMBW-41240	<p>The <b>Parse XML</b> activity threw Content is not allowed in prolog error when the input file encoding was UTF-8-BOM and the <b>Validate Output</b> check box was selected.</p> <p>Set the <code>-Dbw.application.activity.validateOutput.treeValidation=true</code> property as a VM argument when validating an output XML.</p>
AMBW-33245	<p>An error occurred when the YearMonth datatype was typecasted with the <code>xsd:string</code> ().</p>

## Policies

This topic lists the Closed Issues related to Policies.

### Release 6.6.1

Key	Description
AMBW-39090	<p>A SAML message was not forwarded and generated the following error:</p> <p>Error unmarshalling a SAML assertion.</p>
AMBW-38857	<p>The Heap Out of Memory message was thrown for faulted jobs while using the <b>SOAP/HTTP Invoke</b> activity with Policy Basic Authentication.</p>

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Key	Description
AMBW-37873	The performance was degraded when the authentication was done with LDAP.

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# Known Issues

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The following known issues have been identified in this release of TIBCO ActiveMatrix BusinessWorks™.

The known issues are grouped by components:

- [Administration](#)
- [Binding](#)
- [General](#)
- [Migration](#)
- [Palette](#)
- [Policy](#)

## Administration

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

Key	Description
AMBW-46059	<p><b>Summary:</b> The application properties are not displayed in the Internet Explorer browser.</p> <p><b>Workaround:</b> Use any other web browser such as Google Chrome, Firefox, or Microsoft Edge.</p>
AMBW-44868	<p><b>Summary:</b> The bwadmin --help command still shows help for the upgrade command that is not supported in this release.</p> <p><b>Workaround:</b> None</p>
AMBW-44826	<p><b>Summary:</b> When OpenTelemetry is enabled or disabled via Admin UI or Admin CLI, in pertaining debug level log, EnableOpenTracingCommand or</p>

Key	Description
	<p>DisableOpenTracingCommand is displayed respectively.</p> <p><b>Workaround:</b> None</p>
AMBW-41955	<p><b>Summary:</b> If an AppNode log is not present and you click the <b>Download Log</b> button from Admin UI, an exception is thrown.</p> <p><b>Workaround:</b> Start an AppNode and try again</p>
AMBW-41795	<p><b>Summary:</b> When agent is started with MySQL 8.x jar, a harmless message about the driver being deprecated is displayed on bwagent and the bwadmin console.</p> <p><b>Workaround:</b> None</p>
AMBW-41794	<p><b>Summary:</b> A harmless warning is shown when starting a BWAgent.</p> <p><b>Workaround:</b> None</p>
AMBW-41555	<p><b>Summary:</b> The <b>Appnodeconfig</b> button is not available under the Appnode Data view.</p> <p><b>Workaround:</b> Navigate to any other page within an AppNode and then navigate to appnode config.</p>
AMBW-37468	<p><b>Summary:</b> Harmless logs are shown at Admin Console on SUSE 12 Linux.</p> <p><b>Workaround:</b> None</p>
AMBW-32929	<p><b>Summary:</b> Process monitoring statistics are not populated if checkpoint has been used in the process.</p> <p><b>Workaround:</b> None</p>
AMBW-32922	<p><b>Summary:</b> On Process Monitoring page, Job filter displays results for records on the current page only.</p> <p><b>Workaround:</b> None</p>
AMBW-32904	<p><b>Summary:</b> Sometimes all the transitions are not highlighted and input/output data is not seen for activities when process monitoring is enabled using UDP transport.</p>

Key	Description
	<b>Workaround:</b> Use FTL transport for process monitoring.
AMBW-32594	<b>Summary:</b> On the Process Monitoring page, the Datetime value in the MM/DD/YYYY format for filtering jobs does not work. <b>Workaround:</b> Use the datetime value as displayed in the database
AMBW-32071	<b>Summary:</b> Failed to Upload Large EAR file larger than 10MB with MariaDB. <b>Workaround:</b> Use any other database.
AMBW-32057	<b>Summary:</b> Agent Count is getting increased for AppSpace after restoring Domain. <b>Workaround:</b> None
AMBW-31832	<b>Summary:</b> In the process diagram view of Process Monitoring, if a constructor block includes a catch block, then it is not highlighted after its execution. <b>Workaround:</b> None
AMBW-31831	<b>Summary:</b> In Process Monitoring, sometimes, because of uid issue references are not highlighted and input or output data might not displayed. <b>Workaround:</b> Remove all uid related warnings from TIBCO Business Studio™ for BusinessWorks™. Create an EAR file. Deploy the EAR file, and then enable process monitoring.
AMBW-31600	<b>Summary:</b> When an application is running and AppNode is restarted, the job id is duplicated and two jobs with same id is present under process monitoring. <b>Workaround:</b> None
AMBW-31493	<b>Summary:</b> User is getting considered as Role in file based authorization. <b>Workaround:</b> None
AMBW-30759	<b>Summary:</b> Failed to get AppNode Config.ini file's property details by REST API. <b>Workaround:</b> None
AMBW-	<b>Summary:</b> Unable to register BWAgent from the command line on some

Key	Description
30398	<p>machines.</p> <p><b>Workaround:</b> None</p>
AMBW-29846	<p><b>Summary:</b> Process diagrams are not visible on the Admin UI when the project name has a period (.) between the numbers.</p> <p><b>Workaround:</b> Remove the number from the process package name, regenerate the EAR file, and re-deploy it.</p>
AMBW-29725	<p><b>Summary:</b> The Internal Server Error is displayed intermittently in logs when there is a change in the network.</p> <p><b>Workaround:</b> None</p>
AMBW-29632	<p><b>Summary:</b> Process diagram is not shown in TIBCO® Enterprise Administrator when the TIBCO ActiveMatrix BusinessWorks™ process package name contains number.</p> <p>For example com.tibco.bw.service.SIXXXZZZ.1.0</p> <p><b>Workaround:</b> None</p>
AMBW-29235	<p><b>Summary:</b> When application components are started or stopped multiple times from the Admin UI, the TIBCO-BW-TEAAGENT-500506: Failed to get components for Application error is sometimes displayed.</p> <p><b>Workaround:</b> Refresh the entire page or navigate to different tab, for example, the AppNodes or AppSpaces page and then go back to the <b>Components</b> tab.</p>
AMBW-28244	<p><b>Summary:</b> Admin UI shows wrong information under <b>Installation</b> tab after upgrade.</p> <p><b>Workaround:</b> None.</p>
AMBW-27654	<p><b>Summary:</b> Identity-Truststore is not created for the SSL Client post migration.</p> <p><b>Workaround:</b> After migrating the SSL enabled service , it will create the SSL client resource. In SSL client resource, provide the keystore provider resource in Keystore Provider as Trust Store. Provide the Keystore only. This will import all the certificates required for SSL enabled services in ActiveMatrix BusinessWorks™</p>



Key	Description
	6x.
AMBW-26286	<p><b>Summary:</b> Unable to upload large sized EAR files (~10 MB) when the DB2 database is used for the DBEMS or DBFTL mode.</p> <p><b>Workaround:</b> None</p>
AMBW-25889	<p><b>Summary:</b> From the command line, users can enable the OSGi and create a new AppNode on the same OSGi port.</p> <p><b>Workaround:</b> Use the Admin UI to enable the OSGi port.</p>

## Binding

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

Key	Description
AMBW-46002	<p><b>Summary:</b> 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.</p> <div style="background-color: #f0f0f0; padding: 10px; margin: 10px 0;"> <p><b>Note:</b> The schemas are merged into a single schema object in the runtime Swagger file and this doesn't impact the functionality.</p> </div> <p><b>Workaround:</b> None.</p>
AMBW-45941	<p><b>Summary:</b> The Swagger specifications having the <i>pattern</i> keyword are not supported in ActiveMatrix BusinessWorks 6.x.</p> <p><b>Workaround:</b> 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.</p>
AMBW-	<p><b>Summary:</b> The deescription provided for form parameters on REST 3.0 service</p>

Key	Description
44739	<p>binding is not reflected on the reference binding as well as on top-down service binding's Form Parameters table.</p> <p><b>Workaround:</b> None</p>
AMBW-44492	<p><b>Summary:</b> The 415: Unsupported Media Type error is thrown on <b>Invoke</b> activity of a REST Reference Binding while invoking a REST service with Request and Response formats other than JSON. That is, XML or Text.</p> <p><b>Workaround :</b> To get rid of the error, select JSON format in Request and Response along-with other formats.</p>
AMBW-44479	<p><b>Summary:</b> The dynamicConfigurations WSDL part and dynamicConfigurations element aren't automapped by default for the input of <b>Invoke</b> activity created from the reference binding.</p> <p><b>Workaround:</b> Either map manually or map using the <b>Show Check and Repair</b> option.</p>
AMBW-44338	<p><b>Summary:</b> 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.</p> <p><b>Workaround:</b> On selecting Binary checkbox re-select "binary" or "base64" from Resource Schema dropdown.</p>
AMBW-44208	<p><b>Summary:</b> The java.lang.NullPointerException is thrown on adding new operation to a REST service when you change the <b>JSON Definition Style</b> or the Request schema from the drop-down for the newly added operation.</p> <p><b>Workaround:</b> If you are adding new operation then select the required schemas in the REST Service Wizard and avoid modifying it from service binding.</p>
AMBW-44197	<p><b>Summary:</b> REST Service Binding configuration error is thrown at design time when the Resource Schema of DELETE operation is modified in the <b>Response</b> tab of REST Service Binding.</p> <p><b>Workaround:</b> 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.</p>

Key	Description
	This workaround is not applicable for the Binary Response format.
AMBW-44116	<p><b>Summary:</b> 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.</p> <p><b>Workaround:</b> None.</p>
AMBW-44022	<p><b>Summary:</b> The Swagger UI accessed using Lrestdoc command is not supported to show the callbacks section for the REST Operation of an ActiveMatrix BusinessWorks REST Service Endpoint created by dragging a Swagger Path whose operation is configured with callbacks.</p> <p><b>Workaround:</b> None.</p>
AMBW-43156	<p><b>Summary:</b> The Swagger UI is seen as blank when the Swagger URL is hit from Internal Web Browser in TIBCO Business Studio for BusinessWorks.</p> <p><b>Workaround:</b> Hit the Swagger URL from an external browser.</p>
AMBW-43023	<p><b>Summary:</b> The "format" tag is not created for "Password" type form parameter in bottom-up REST service and hence seen as String on the reference binding.</p> <p><b>Workaround:</b> Manually add the "format" : "password" tag to the form parameter in the swagger file.</p>
AMBW-36113	<p><b>Summary:</b> A multipart message where one part points to type and the other part points to element and a message using mixed security mode is not supported.</p> <p><b>Workaround:</b> Change mixed security mode in a given WSDL.</p>
AMBW-32951	<p><b>Summary:</b> A SOAP service responding with mustUnderstand attribute as true is ignored irrespective of selecting or deselecting the <b>Ignore mustUnderstand</b> check box on the SOAP Reference binding. This behavior does not affect the client and server communication.</p> <p><b>Workaround:</b> None</p>
AMBW-	<p><b>Summary:</b> On creating SOAP Reference Binding with the concrete WSDL</p>

Key	Description
32760	<p>generated at run time with multilevel schema imports, the java.lang.NullPointerException is displayed when clicking the reference binding.</p> <p><b>Workaround:</b> None</p>
AMBW-29098	<p><b>Summary:</b> When creating a concrete WSDL by right-clicking on the <b>Service Descriptor</b> folder, the following error is generated at design time: WSDL import error.</p> <p><b>Workaround:</b> None</p>
AMBW-27870	<p><b>Summary:</b> On importing WSDL with RPC Encoded style, a validation error is generated at design time since the underlying schema with namespace <a href="http://schemas.xmlsoap.org/soap/encoding/">http://schemas.xmlsoap.org/soap/encoding/</a> is not generated.</p> <p><b>Workaround:</b> To remove the validation error and create the SOAP Reference Binding, download the encoding schema with the said namespace and ensure that schema is a part of the application module or the shared module.</p>
AMBW-27435	<p><b>Summary:</b> When module properties used from a shared module project were renamed, the changes made were not reflected at the SOAP binding level.</p> <p><b>Workaround:</b> Select the updated module property from the drop down in the SOAP binding.</p>
AMBW-26806	<p><b>Summary:</b> 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.</p> <p><b>Workaround:</b> None</p>
AMBW-23104	<p><b>Summary:</b> When the WSDL uses multiple parts in the Request body of an operation, a design time validation error occurs on the generated SOAP reference binding. The application works fine at run time.</p> <p><b>Workaround:</b> None</p>
AMBW-22981	<p><b>Summary:</b> 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.</p>

Key	Description
	<b>Workaround:</b> Use XSD Element in Response instead of String.
AMBW-21363	<p><b>Summary:</b> REST Call failed on run-time under non-UTF8 locale environment.</p> <p><b>Workaround:</b> Set the default encoding of the AppNode to UTF-8 by adding "Dfile.encoding=UTF-8" to java.extended.properties of "bw/6.3/config/bwappnode-an.tra_template".</p>
AMBW-13607	<p><b>Summary:</b> REST Doc UI is not supported on Firefox browser.</p> <p><b>Workaround:</b> Use other browsers for the Doc UI.</p>
AMBW-13572	<p><b>Summary:</b> For some use cases, REST Doc UI does not show the correct error code in case of Internal Server errors on the Server side.</p> <p><b>Workaround:</b> Check the raw message that contains the correct error code.</p>
AMBW-13485	<p><b>Summary:</b> REST Doc UI does not support browsers like Internet Explorer.</p> <p><b>Workaround:</b> Use Chrome browsers for the Doc UI.</p>
AMBW-8982	<p><b>Summary:</b> Changing the <b>Resource</b> name in the REST service <b>Bindings</b> tab, does not update the <b>Resource Service</b> Path.</p> <p><b>Workaround:</b> None</p>

## General

This topic lists the Known Issues related to **General issues**.

Key	Description
AMBW-46056	<p><b>Summary:</b> The OSGi commands to start and stop the application do not work.</p> <p><b>Workaround:</b> Use TEA, Admin CLI, or REST API to start and stop the application.</p>
AMBW-45408	<p><b>Summary:</b> The Ant task failure error occurs when you uninstall ActiveMatrix BusinessWorks 6.8.0 hotfixes, 6.8.0, and 6.7.0 from the TIBCO_HOME containing the</p>

Key	Description
	<p>version 6.7.0.</p> <p><b>Workaround:</b> Ignore the errors and proceed further with uninstallation.</p>
AMBW-45183	<p><b>Summary:</b> A non-readable POM file error is thrown upon importing CXF project from Maven repository.</p> <p><b>Workaround:</b> None. It does not affect the functionality.</p>
AMBW-45146	<p><b>Summary:</b> The FluentD container fails to insert the activity (input/output) data if the data size is greater than 4000 characters for the Oracle database.</p> <p><b>Workaround:</b> 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.</p>
AMBW-45015	<p><b>Summary:</b> An activity having a large input data is not shown in the job details on the Execution History tab for MySQL.</p> <p><b>Workaround:</b> None</p>
AMBW-44769	<p><b>Summary:</b> On some Linux machines, you cannot launch TIBCO Business Studio for BusinessWorks.</p> <p><b>Workaround:</b> You must ensure that you have GTK 3.2 installed on your machine and then re-launch TIBCO Business Studio for BusinessWorks.</p>
AMBW-44643	<p><b>Summary:</b> The <b>Transform XML</b> activity's output is not visible in <b>Job Data</b> debugger output tab.</p> <p><b>Workaround:</b> 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.</p>
AMBW-44437	<p><b>Summary:</b> Two .application folders are created when a new application is created in a new workspace.</p> <p><b>Workaround:</b> 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</p>

Key	Description
	BusinessWorks then restart it.
AMBW-43862	<b>Summary:</b> EMF Validation does not work for imported existing projects by using Module Property to Keystore URL. <b>Workaround:</b> Reassigning the same module property resolves the validation error.
AMBW-43860	<b>Summary:</b> Consuming a TIBCO Flogo service with parameters having Object data type in Input and Output schema from ActiveMatrix BusinessWorks client is not supported. <b>Workaround:</b> None
AMBW-43779	<b>Summary:</b> Unit testing does not start when a connection is not successful for the HTTP Receiver being mocked. <b>Workaround:</b> None
AMBW-43743	<b>Summary:</b> In some scenarios, unit testing does not work for Java palette activities. <b>Workaround:</b> None.
AMBW-43118	<b>Summary:</b> For Open API Specification 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. <b>Workaround:</b> Use Runtime swagger file to create the service.
AMBW-42385	<b>Summary:</b> You can't launch TIBCO Business Studio for BusinessWorks after adding it into Dock in MAC OS. <b>Workaround:</b> None.
AMBW-42174	<b>Summary:</b> Customization of template for an unencrypted project template fails. <b>Workaround:</b> Import the template directly in TIBCO Business Studio for BusinessWorks and rename it as per your requirement.
AMBW-	<b>Summary:</b> Encryption Setting Window shows no editable fields when opened by

Key	Description
42046	<p>clicking on the Lock Icon if TIBCO Business Studio™ for BusinessWorks™ is not in full-screen mode.</p> <p><b>Workaround:</b> 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.</p>
AMBW-41991	<p><b>Summary:</b> Eclipse command line options such as -clean does not work with TIBCO_HOME/studio/4.0/eclipse/TIBCOBusinessStudio.app/Contents/MacOS/TIBCOBusinessStudio executable on macOS platform.</p> <p><b>Workaround:</b> Use the following command:</p> <pre>TIBCO_HOME/studio/4.0/eclipse/Eclipse.app/Contents/MacOS/TIBCOBusinessStudio --launcher.ini TIBCO_HOME/studio/4.0/eclipse/TIBCOBusinessStudio.ini -clean or any other eclipse command line option</pre>
AMBW-41950	<p><b>Summary:</b> In bwdesign, if we export substvar files with the same name twice in the same location, it does not overwrite the substvar file.</p> <p><b>Workaround:</b> Delete the previous substvar file and export substvar again.</p>
AMBW-41948	<p><b>Summary:</b> Many to one mapping is not supported for Smart Mapper.</p> <p><b>Workaround:</b> None</p>
AMBW-41846	<p><b>Summary:</b> 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 ActiveMatrix BusinessWorks™ 6.7.0.</p> <p><b>Workaround:</b> None.</p>
AMBW-41832	<p><b>Summary:</b> The lock icon on the encrypted profile in the difference viewer perspective is shown based on whether the workspace copy of the profile is encrypted or not. Currently, if the workspace copy of the profile is encrypted, then in the difference viewer perspective, the lock icon is shown even on the un-encrypted revisions of that profile.</p> <p><b>Workaround:</b> None.</p>



Key	Description
AMBW-41827	<p><b>Summary:</b> The properties and profile are not showing in the application property editor on opening the editor for the first time in a new workspace.</p> <p><b>Workaround:</b> Close and reopen the editor, it shows all the details.</p>
AMBW-41779	<p><b>Summary:</b> If a keystore file location or name is changed then on refresh blank property value is shown and on running the application, the File Not Found Exception is thrown.</p> <p><b>Workaround:</b> Restore file with a valid name at a specified location on disk and do project clean.</p>
AMBW-41716	<p><b>Summary:</b> Any changes in the module or application properties inside groups are not supported in ActiveMatrix BusinessWorks 6.7.0 and the corresponding difference generation is faulty in such cases.</p> <p><b>Workaround:</b> None.</p>
AMBW-41715	<p><b>Summary:</b> The difference viewer calculates the difference and highlights the properties, but does not highlight any corresponding fields of the properties.</p> <p><b>Workaround:</b> Switch to the text difference mode and see the difference in the non-UI fields.</p>
AMBW-41499	<p><b>Summary:</b> In the substitution variables file, only five types of module properties are saved: String, Integer, Long, Boolean, and Password.</p> <p>When a module property is assigned a type other than the above-mentioned types then that type is saved as a String in the substvar file in the Diff Viewer window.</p> <p><b>Workaround:</b> None.</p>
AMBW-41474	<p><b>Summary:</b> If there are any changes in the Description field of a module or application property, it is not highlighted in the difference viewer.</p> <p><b>Workaround:</b> None.</p>
AMBW-41417	<p><b>Summary:</b> Multiple coercion does not work upon trying to toggle the faulty process.</p>

Key	Description
	<p><b>Workaround:</b> The QName conflict here refers to having two schemas defining two elements with exact same name and same namespace, but the element contents differ. This causes design-time problems without warning when you use both elements in the same process.</p>
AMBW-41307	<p><b>Summary:</b> Application property editor does not display value in case of removing encryption setting using the <b>Clear All</b> button and exporting profile.</p> <p><b>Workaround:</b> Close the application properties editor and open it again.</p>
AMBW-41277	<p><b>Summary:</b> When you try to install a missing plugin using the <b>Quick Fix</b> option and you select or unselect a plugin version from the list of provided versions; the following message is displayed: Cannot complete the install because of a conflicting dependency.</p> <p>However, you can still install the plugin successfully.</p> <p><b>Workaround:</b> None.</p>
AMBW-41271	<p><b>Summary:</b> The application property editor doesn't get refreshed intermediately on encrypting profiles.</p> <p><b>Workaround:</b> None.</p>
AMBW-41252	<p><b>Summary:</b> The New Name field in the Rename Projects section on the Create Project From Template window is not enabled on a single click.</p> <p><b>Workaround:</b> First click on the old name of the module or the application after which the field is enabled. .</p>
AMBW-41155	<p><b>Summary:</b> The Password field is shown as changed while doing a Shared Resource diff, even if the password are the same.</p> <p><b>Workaround:</b> None.</p>
AMBW-41238	<p><b>Summary:</b> Confirmation message is displayed with any operation on encrypted profiles.</p> <p><b>Workaround:</b> Click <b>Yes</b>.</p>

Key	Description
AMBW-41035	<p><b>Summary:</b> The <b>Authentication</b> field is shown while doing a diff when the <b>Confidentiality</b> field is set for <b>HTTP Connector</b> shared resource.</p> <p><b>Workaround:</b> None.</p>
AMBW-40811	<p><b>Summary:</b> Default icon shown instead of Custom icon for the Call Process and Java Invoke activities within external shared module.</p> <p><b>Workaround:</b> Manually browse the Custom icon field value and add respective icon to activity on importing external shared module.</p>
AMBW-40464	<p><b>Summary:</b>ActiveMatrix BusinessWorks applications fail at run time in TIBCO Cloud Integration if they consume a Flogo endpoint that has Post/Put Operations.</p> <p><b>Workaround:</b> None.</p>
AMBW-40010	<p><b>Summary:</b>null pointer exception is thrown at run time on ActiveMatrix BusinessWorks Mesh client when the organization name contains a space character.</p> <p><b>Workaround:</b> When importing the ASR descriptor json file to create a Mesh client, there is a second wizard page for customizing json file location (Change swagger name). In that wizard page, remove the space from the folder name.</p>
AMBW-39899	<p><b>Summary:</b> The null pointer exception reported on clicking Binding Section in Components after the Refactoring operation.</p> <p><b>Workaround:</b> Post refactoring, close the Module Descriptor section and reopen it. No popup is displayed.</p>
AMBW-39887	<p><b>Summary:</b>ActiveMatrix BusinessWorks Mesh Client applications fail at runtime in TIBCO Cloud Integration if they consume a Flogo Mesh Service that has Post or Put Operations.</p> <p><b>Workaround:</b> None.</p>
AMBW-39837	<p><b>Summary:</b> The collectappnodedata command is not working on the AIX platform.</p> <p><b>Workaround:</b> None.</p>

Key	Description
AMBW-39804	<p><b>Summary:</b> SVN compare with revision option doesn't work for any revision other than the base revision.</p> <p><b>Workaround:</b> None.</p>
AMBW-38593	<p><b>Summary:</b> Condition fails to evaluate completely when you try to equate a boolean value to a string.</p> <p>For example:-If an expression is \$DataGen/group/bool2 != "false", where the bool2 is true()</p> <p><b>Workaround:</b> Simply update "false" to false() or 0 and run the project. It runs as expected (or vice-versa if its equated to "true" value)</p>
AMBW-38580	<p><b>Summary:</b>Transition configuration error for specific customer projects.</p> <p><b>Workaround:</b> When a project has the Invalid expression value: [: not a Boolean] error, complete the transition by equating it to either "true" ("1") or "false" ("0") and run the project.</p>
AMBW-37714	<p><b>Summary:</b><b>Local Transaction</b> group option is not present in the drop-down list present for the Group Type field for a group.</p> <p><b>Workaround:</b> User should ungroup the existing group and create a new group.</p>
AMBW-37594	<p><b>Summary:</b> Breakpoints are not working when execution flow goes from one process to another.</p> <p><b>Workaround:</b> Select an activity where debugging with the breakpoint is halted. It enables the <b>Resume</b> button. Click the button to resume debugging.</p>
AMBW-36990	<p><b>Summary:</b> When you delete a module shared variables or job shared variables from the <b>Unused Resources</b> view, then the editor for module shared variables or job shared variables does not get refreshed automatically.</p> <p><b>Workaround:</b> Close the module shared variables or job shared variables editor and open it again.</p>
AMBW-34416	<p><b>Summary:</b> Failed to connect to AppNode using SSH client</p> <p><b>Workaround:</b> Use HTTP client. Preferred way is using curl.</p>

Key	Description
AMBW-34404	<p><b>Summary:</b> Incorrect trace is generated for the invoke process with default jaeger properties.</p> <p><b>Workaround:</b> Set JAEGER_SAMPLER_TYPE=const, and JAEGER_SAMPLER_PARAM=1 properties in the AppNode or AppSpace config.ini file.</p>
AMBW-34396	<p><b>Summary:</b> Clicking <b>Help Contents</b> shows HTTP ERROR: 500 error.</p> <p><b>Workaround:</b> None</p>
AMBW-34343	<p><b>Summary:</b> An application fails to start in TIBCO Business Studio™ for BusinessWorks™ when you install the latest EMS driver.</p> <p><b>Workaround:</b> Restart TIBCO Business Studio for BusinessWorks.</p>
AMBW-32761	<p><b>Summary:</b> The user will not be able to create the references for the custom operations such as Merge, Update, Trace using the drag and drop swagger file approach.</p> <p><b>Workaround:</b> Users can create the references for the custom operations using the REST Reference wizard.</p>
AMBW-28941	<p><b>Summary:</b> Ungrouping nested groups created inside a <b>Catch</b> block of a group may not ungroup as expected.</p> <p><b>Workaround:</b> None</p>
AMBW-28663	<p><b>Summary:</b> The tibco.bw.sample.policy.samlcredentialmapping.SoapHttpBinding sample fails intermittently with the error: com.tibco.governance.agent.action.ActionException.</p> <p><b>Workaround:</b> None</p>
AMBW-28378	<p><b>Summary:</b> When a process property is renamed , the change is not reflected in the activity and an error is displayed.</p> <p><b>Workaround:</b> None</p>
AMBW-28319	<p><b>Summary:</b> WSDL interface fails to resolve correctly if multiple WSDLs share the same target namespace and the SOAP invoke is created with an external binding reference.</p>

Key	Description
	<b>Workaround:</b> Instead of an external reference binding, use binding reference.
AMBW-28264	<p><b>Summary:</b> When groups with the On Catch, Catch All and the OnEvent faults are created inside a constructor or a proxy operation, the activities inside them are lost after ungrouping.</p> <p><b>Workaround:</b> None</p>
AMBW-27253	<p><b>Summary:</b> The <b>Identity Provider</b> field in the <b>WSS Consumer</b> policy resource does not support module properties.</p> <p><b>Workaround:</b> None</p>
AMBW-25219	<p><b>Summary:</b> Multiple <b>End</b> activities use the same variable in TIBCO ActiveMatrix BusinessWorks™.</p> <p><b>Workaround:</b> None</p>
AMBW-25073	<p><b>Summary:</b> The option to test connections, for example JMS or sFTP, in a shared resource that has a profile is not supported in TIBCO Business Studio for BusinessWorks.</p> <p><b>Workaround:</b> Specify the server configuration details as literal value or module properties.</p>
AMBW-24508	<p><b>Summary:</b>TIBCO-THOR-FRWK-CMN-500001:Error while renaming bundle file to final location: - error could be displayed due to low disk space.</p> <p><b>Workaround:</b> None</p>
AMBW-19746	<p><b>Summary:</b> When you initialize the module shared variable of XSD type with the select value option to point the XML instance, application fails to start at run time.</p> <p><b>Workaround:</b> Enforce the default encoding of AppNode JVM to UTF-8 by adding -Dfile.encoding=UTF-8 in the bwappnode.tra file.</p>
AMBW-19540	<p><b>Summary:</b> When a project contain abstract and concrete WSDL using same target namespace, a validation error is generated.</p> <p><b>Workaround:</b> None</p>

Key	Description
AMBW-18459	<p><b>Summary:</b> The ability to reference from a standalone (external) schema to an inline schema is not supported. If your project contains such a reference, a validation error is generated.</p> <p><b>Workaround:</b> Externalize the WSDL-inline schema and change the import statements to reference the newly created (external) schema.</p>
AMBW-17562	<p><b>Summary:</b> The OSGi configuration properties have been aligned between the debug environment launched from within TIBCO Business Studio for BusinessWorks and the AppNode that is launched in an installation. However, a difference in behavior of the <code>osgi.compatibility.bootdelegation</code> property in both the environments has been observed.</p> <p><b>Workaround:</b> None</p>
AMBW-16256	<p><b>Summary:</b> The first attempt to change the data type of an Operator's input or output schema element fails and the change is not committed. Subsequent attempts complete without any failure.</p> <p><b>Workaround:</b> To commit the change, you must press the return key after every change.</p>
AMBW-14861	<p><b>Summary:</b> Unable to enter an XPath expression on a transition using the XPath Builder. This issue is observed on Mac OS only.</p> <p><b>Workaround:</b> Enter the XPath expression directly in the <b>Properties</b> tab &gt; <b>Expression</b> field for the transition without using the XPath Builder.</p>
AMBW-12490	<p><b>Summary:</b> Under certain circumstances, substitution types do not resolve properly in the mapper. The mapper shows errors for them.</p> <p><b>Workaround:</b> Try closing and reopening the project. If that does not solve the issue, try closing and reopening Eclipse. If the errors still persist, perform a project clean (that is, go to the <b>Project</b> menu and click <b>Clean...</b>).</p>
AMBW-11534	<p><b>Summary:</b> TIBCO Business Studio for BusinessWorks crashes occasionally on Windows 2012 R2 platform when switching workspace from <b>File &gt; Switch Workspace</b>.</p> <p><b>Workaround:</b> Retry by switching the workspace.</p>

# Migration

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

Key	Description
AMBW-40387	<p><b>Summary:</b> After migration, a path is not executed that leads to the difference in output.</p> <p><b>Workaround:</b> In TIBCO ActiveMatrix BusinessWorks™ 5.x the transition condition \$Map-Data/ConditionType[last()] is treated as boolean but not in ActiveMatrix BusinessWorks™ 6.x as ActiveMatrix BusinessWorks™ 6.x has strict validations.</p> <p>In order to resolve this, please update the condition as follows:</p> <pre>count(\$Map-Data/ConditionType[last()])&gt;0</pre>
AMBW-40187	<p><b>Summary:</b> Migration of custom icon for the <b>Call Process</b> activity is not supported</p> <p><b>Workaround:</b> After migration, manually browse the custom icon field value for the <b>Call Process</b> activity.</p>
AMBW-39231	<p><b>Summary:</b> While migrating a project using XPATH language for transitions option, which is set to XPATH 1.0 by default, on the Migration Wizard, the Process inline namespace schema collision issue occurs intermittently after migration is complete.</p> <p><b>Workaround:</b> Navigate to the faulted process and add the missing schema location field next to the namespace.</p>
AMBW-39230	<p><b>Summary:</b> While migrating a project using the XPATH language for transitions option, which is set to XPATH 1.0 by default, the service agent process migrates as an empty process thereby throwing the Argument Cannot Be Null exception upon trying to view that process post Migration.</p> <p><b>Workaround:</b> Migrate that project in a different workspace, because the issue is intermittent.</p>
AMBW-36094	<p><b>Summary:</b> Post migration, a schema cannot refer the .WSDL file in it and if you try to run the project, the Schema not found error is displayed at the run time.</p> <p><b>Workaround:</b> Copy the inline schema that gets created post migration of the</p>



Key	Description
	<p>project and paste it into the .WSDL file.</p> <p>Remove the inline schema dependency from the dependencies section and in the input editor of the inline schema activity, re-map the point to the inline element. After this remove the inline schema that is empty and execute the project.</p>
AMBW-36077	<p><b>Summary:</b> After migration, if the migrated project contains any SOAP service or client binding that uses SOAP RPC Encoded arrays, the following WSDL validation error occurs:</p> <p>WSDL In-line schema SOAP encoded array type error. In-line schema in WSDL file contains SOAP encoded array type which requires a fix pattern.</p> <p><b>Workaround:</b> Download the SOAP Encoding schema from 'http://schemas.xmlsoap.org/soap/encoding/', and put it into the ActiveMatrix BusinessWorks project.</p>
AMBW-35926	<p><b>Summary:</b> The migration tool does not support external schema for multi-part message in the bindings.</p> <p><b>Workaround:</b> Create wrapper schemas for all multi-part messages of WSDL.</p>
AMBW-35899	<p><b>Summary:</b> Currently, only copy-of mapping is supported for context mapping of headers.</p> <p><b>Workaround:</b> You can either create One-to-one mapping manually or use a copy-of option for context mappings.</p>
AMBW-33749	<p><b>Summary:</b> After migration, additional round brackets in the names of the folder for externalized schema creates issues at run time.</p> <p><b>Workaround:</b> Remove the special characters after migration in the folder names.</p>
AMBW-30656	<p><b>Summary:</b> A schema cannot contain two global components with the same name.</p> <p><b>Workaround:</b> Modify one of the schema namespaces or element names, so that the names are unique.</p>
AMBW-	<p><b>Summary:</b> After migration, the input mapping for the <b>End</b> activity which refers to</p>

Key	Description
30476	<p>a multi-part WSDL message displays validation errors.</p> <p><b>Workaround:</b> A WSDL message is not supported by a mapper. Create a new .xsd schema element with the structure similar to associated WSDL message, and then map the schema element in place of WSDL message.</p>
AMBW-26746	<p><b>Summary:</b> The <b>TransformXML</b> activity from ActiveMatrix BusinessWorks 5.x did not migrate correctly if the Input/Output style of the activity was set to TREE in the ActiveMatrix BusinessWorks 5.x project.</p> <p><b>Workaround:</b> None</p>
AMBW-14547	<p><b>Summary:</b> When you migrate an TIBCO ActiveMatrix BusinessWorks 5.x project containing in-built functions in the <b>JDBC Query</b> activity, an Invalid Column name error is thrown in the <b>JDBC Query</b> activity.</p> <p><b>Workaround:</b> Use an Alias instead of the in-built functions in the ActiveMatrix BusinessWorks 5.x project.</p>
AMBW-14295	<p><b>Summary:</b> After migration, the output of project with REST and JSON palette activities does not match with the input of the other activities in the migrated project.</p> <p><b>Workaround:</b> None</p>
AMBW-13683	<p><b>Summary:</b> Shared resource module property references in the migrated TIBCO ActiveMatrix BusinessWorks 5.x projects do not show up correctly on non-Windows platforms.</p> <p><b>Workaround:</b> Close and reopen the project.</p>
AMBW-9969	<p><b>Summary:</b>ActiveMatrix BusinessWorks 5.x projects with SOAP headers configuration in SOAP activities are not properly migrated to ActiveMatrix BusinessWorks6.x.</p> <p><b>Workaround:</b> SOAP functionality in ActiveMatrix BusinessWorks6.x is achieved through SOAP Binding where its detail configuration is outside of ActiveMatrix BusinessWorks 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 <b>Get Context</b> activity (from Basic Palette) to retrieve</p>

Key	Description
	and process the headers as context data. You can do this manually to complete the migrated project.

## Palette

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

Palette HTTP	
Key	Description
AMBW-46027	ActiveMatrix BusinessWorks does not throw an exception for the invalid HTTP header value sent by the HTTP service.
AMBW-43566	<p><b>Summary:</b> Error occurred when Minimum QTP Threads and Maximum QTP Threads values in the <b>HTTP Connector</b> resource are set as one.</p> <p><b>Workaround:</b> If Minimum QTP Threads value is set as one then set the Maximum QTP Threads value greater than one.</p>
AMBW-43361	<p><b>Summary:</b> Performance degradation is observed with Java 11 platform while using SSL configuration with <b>Mutual Authentication</b>.</p> <p><b>Workaround:</b> None.</p>
AMBW-36777	<p><b>Summary:</b> Error occurred on the <b>Send HTTP Request</b> activity with <b>HTTP Client</b> shared resource using HTTP1 Apache HttpComponents and connector SR using HTTP 2.0 with Follow HTTP1 Compliance checked.</p> <p><b>Workaround:</b> Use the Jetty client as the client library for implementation under <b>HTTP Client</b> shared resource.</p>

### JAVA Palette

Key	Description
AMBW-13526	<p><b>Summary:</b> In <b>Java To XML</b> activity, the <b>Output</b> tab is not populated correctly, if Java class contains nested object references in different classes.</p> <p><b>Workaround:</b> None.</p>

### JDBC Palette

Key	Description
AMBW-36229	<p><b>Summary:</b> Unnecessary error logs are displayed in the log file.</p> <p><b>Workaround:</b> None</p>
AMBW-23464	<p><b>Summary:</b> The Oracle DataDirect driver does not support cursor datatype.</p> <p><b>Workaround:</b> Use native drivers instead of DataDirect drivers.</p>
AMBW-23260	<p><b>Summary:</b> MySQL Community Edition is not supported for Data Direct drivers</p> <p><b>Workaround:</b> Use native drivers instead of DataDirect drivers.</p>
AMBW-23193	<p><b>Summary:</b> When using DataDirect drivers with the <b>JDBC</b> shared resource, that is linked to a JDBC process, the SQL Builder Wizard does not work correctly.</p> <p><b>Workaround:</b> Use native drivers.</p>
AMBW-20130	<p><b>Summary:</b> The login timeout value is not effective when connecting to a Windows OS database. The <b>JDBC Query</b> activity fails with the error, <b>JDBCConnectionNotFoundException</b> at runtime without honoring the <b>Login Timeout</b> value specified in the <b>JDBC Connection</b> Shared Resource.</p> <p><b>Workaround:</b> None</p>
AMBW-14624	<p><b>Summary:</b> The <b>Set Explicit Nil</b> check box for Objects and Collections in <b>JDBC Call Procedure</b> activity is disabled.</p> <p><b>Workaround:</b> None</p>

### JDBC Palette

Key	Description
AMBW-14547	<p><b>Summary:</b> When you migrate an TIBCO ActiveMatrix BusinessWorks™ 5.x project containing in-built functions in the <b>JDBC Query</b> activity, an invalid column name error is thrown in the <b>JDBC Query</b> activity.</p> <p><b>Workaround:</b> Use an Alias instead of the in-built functions in the ActiveMatrix BusinessWorks™ 5.x project.</p>
AMBW-11667	<p><b>Summary:</b> Using any in-built function in <b>JDBC Query</b> activity without "Alias" fails to execute the application and throws an Invalid Column name error at run time.</p> <p><b>Workaround:</b> Use "Alias" to work with any in-built function in <b>JDBC Query</b> activity.</p>
AMBW-11624	<p><b>Summary:</b>TIBCO Business Studio for BusinessWorks stops responding when opening SQL Builder if the database details on the <b>JDBC</b> shared resource are changed from PostgreSQL to MySQL after a query has been created using SQL builder.</p> <p><b>Workaround:</b> None</p>
AMBW-8855	<p><b>Summary:</b> The localized error messages of JDBC connection are not displayed correctly in TIBCO Business Studio for BusinessWorks.</p> <p><b>Workaround:</b> None</p>

### JMS Palette

Key	Description
AMBW-38735	<p><b>Summary:</b> ActiveMatrix BusinessWorks does not support parsing the Date-Time elements in the JMS application properties schema.</p> <p><b>Workaround:</b> TIBCO recommends not to use such elements in the JMS application properties schema.</p>

### XML Palette

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

### REST and JSON Palette

Key	Description
AMBW-28795	<p><b>Summary:</b> The <b>Parse JSON</b> activity fails to pick up the prefixes defined in the namespace registry and provides the output with the default namespace prefixes.</p> <p><b>Workaround:</b> None</p>

## Policy

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

Key	Description
AMBW-	<p><b>Summary:</b> Marketo plugin container edition breaks with the recent JRE upgrade.</p>

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Key	Description
34607	<b>Workaround:</b> Please refer Marketo plug-in documentation for more information.
AMBW-19513	<b>Summary:</b> If a SOAP binding is not configured with Transport, the <b>Add New Policy</b> icon should be disabled, the <b>Policy</b> 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.  <b>Workaround:</b> None

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# TIBCO Documentation and Support Services

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

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## Product-Specific Documentation

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

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

`TIBCO_HOME/release_notes/TIB_BW_6.8.1_docinfo.html` where `TIBCO_HOME` is the top-level directory in which TIBCO products are installed. On Windows, the default `TIBCO_HOME` is `C:\tibco`. On UNIX systems, the default `TIBCO_HOME` is `/opt/tibco`.

The following documentation for this product is available on the [TIBCO ActiveMatrix BusinessWorks™](#) page:

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

- *TIBCO ActiveMatrix BusinessWorks™ Release Notes*
- *TIBCO ActiveMatrix BusinessWorks™ Installation*
- *TIBCO ActiveMatrix BusinessWorks™ Application Development*
- *TIBCO ActiveMatrix BusinessWorks™ Bindings and Palettes Reference*
- *TIBCO ActiveMatrix BusinessWorks™ Concepts*
- *TIBCO ActiveMatrix BusinessWorks™ Error Codes*



- *TIBCO ActiveMatrix BusinessWorks™ Getting Started*
- *TIBCO ActiveMatrix BusinessWorks™ Migration*
- *TIBCO ActiveMatrix BusinessWorks™ Performance Benchmarking and Tuning*
- *TIBCO ActiveMatrix BusinessWorks™ REST Implementation*
- *TIBCO ActiveMatrix BusinessWorks™ Refactoring Best Practices*
- *TIBCO ActiveMatrix BusinessWorks™ Samples*

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- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to <https://support.tibco.com>. If you do not have a user name, you can request one by clicking Register on the website.

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