



# **TIBCO ActiveMatrix BusinessWorks™**

## **Release Notes**

Version 6.10.0 | November 2023

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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™.

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### Common Features

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Support for Array of Path Parameters in REST Service and Reference Binding

A new field **Repeating** has been added in the Path Parameters section of the REST service and reference binding. This field can be toggled to true or false. To create an array of Path parameters, set this field to true.

At runtime, the array of path parameters is sent with comma-separated values in the endpoint URL.

Support for empty body in PUT operation request

Support has been added to invoke the PUT operation of a REST service without a request body.

**Note:** If you are using the REST Reference Binding to invoke the service without a body, then you must set the Input as empty double quotes ("" ) in the Invoke activity.

From Swagger UI, the Request Body is not seen for top-down OAS 3.0 service. For Swagger 2.0 services, the body does not disappear from the Swagger UI. It is only made non-mandatory when the property `bw.rest.disable.requestbody.swagger2.service=true` is set in the VM arguments of TIBCO Business Studio for BusinessWorks.

Support for printing 4xx/5xx error codes on REST Service in the AppNode logs

Now if an error occurs when invoking a REST service, the corresponding 4xx or 5xx error code is printed in the TIBCO Business Studio for BusinessWorks console and BWAAppNode logs.

## Administration

Support for secured communication between BWAgent and AppNode	<p>Communication between the BWAgent and AppNode via the HTTP port is secured now.</p> <p>For more information, see "Creating an AppNode Using a Secured Port (HTTPS)" in the <i>TIBCO ActiveMatrix BusinessWorks™ Administration</i>.</p>
Support for Browse Apps API requests	<p>Earlier, the "Browse Apps" API request generated a lot of details that created a very heavy response.</p> <p>Now, you have two options. You can either choose only the fields that are to be included in the results (<code>includeitems</code>) or choose the fields that are to be excluded from the entire result set (<code>excludeitems</code>).</p>

## Design Time

Support for mapping module properties to an Activity input	<p>All the module properties as well as the properties from the Shared Module can now be mapped to an activity input without creating a process property.</p> <p>For more information, see "Mapping Module Properties to an Activity Input" in the <i>TIBCO ActiveMatrix BusinessWorks™ Application Development</i>.</p>
Support for BusinessWorks Upgrade Manager	<p>From upcoming releases, users will be able to upgrade the BusinessWorks version within the Studio itself using the Upgrade Manager.</p>
A new <b>Test Connection</b> button is added on the Debug Configuration wizard.	<p>To check connection with deployment server a new <b>Test connection</b> button is added on Debug configuration wizard for Remote BusinessWork Application.</p> <p>For more information, see "Remote Debugging" in the <i>TIBCO ActiveMatrix BusinessWorks™ Application Development</i>.</p>

## Maven Plug-in

Support for Skipped test cases count

You can now view the "Skipped" test cases count when any test cases are being skipped.

Support for mocking Set Shared Variable and Get Shared Variable activities

You can now mock the output of Set Shared Variable and Get Shared Variable activities.

Support for Gold input and Mock output generation after activity execution

You can now generate Gold input and Mock output files from Job Data in Debug mode when the activity is executed.

## Palettes

Support for Saxon pluggable XSLT Engine for XSLT transformation

A new **EngineType** dropdown has been added in the General tab of TransformXML activity to select between TIBCO XSLT 2.0 and Saxon-B XSLT 2.0 for the XSLT transformation. By default, it is TIBCO XSLT 2.0.

Support for custom properties via OAuth shared resources

Support is added for OAuth shared resources to allow access to the "resource" custom property.

Support for different functions in Jolt JSON Mapper

Support is added in the Transform JSON activity to perform transformation with Input and Output JSON Schema files using a Jolt JSON Mapper. The Jolt JSON Mapper supports performing String, Numeric, and Array functions on the provided JSON files.

## Runtime

Support for major, minor, and patch application versions in logs

The property `bw.frwk.version.format` now enables you to print the `major.minor.patch` application versions in logs.

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### Common Features

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

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

Support for  
Confirm activity in  
Unit Testing

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

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

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

The system properties are:

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

```
bw.monitor.publishProcessEvents
```

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

```
bw.monitor.publishActivityEvents
```

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



## Common Features

```
bw.monitor.publishTransitionEvents
```

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

```
bw.monitor.publishMainProcessEvents
```

Support is added for OpenTelemetry with ISTIO Services.

This release adds support for OpenTelemetry with ISTIO Services.

Support is added for custom headers for OpenTelemetry.

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

Support for choosing to apply Policy on REST Service Binding paths

A new check box **Apply Policy to Subpaths** is added on the **REST Service Binding** configuration tab. The user can now choose if a policy is to be applied to the sub-paths of a service.

When this checkbox is selected for a parent resource service path configured with Policy, the policy will be applied to the child paths at runtime.

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

For more information, see "REST Service Binding" in the *ActiveMatrix BusinessWorks REST Reference*.

## Palettes

Support for streaming non-multipart in Send HTTP Request activity

Sending a file as streaming non-multipart is now supported in Send HTTP Request activity.

Support for parsing the Swagger files with the special character "\$" and whitespace

Support is provided to parse the Swagger files having element names with the special character "\$" and whitespace in the query parameters, request, and response schema objects.

Support of Smart Engine for HTTP-based transport

You can now generate various HTML reports for the engine data collected for different performance use cases with applications using HTTP-based transport. The Smart Engine also analyzes the engine data collected and provides recommendations to improve the performance of your application.

For more information, see the "Smart Engine" section in *TIBCO ActiveMatrix BusinessWorks™ Administration*.

Support for XSLT stylesheet selection in TransformXML activity

Support is added to select the XSLT stylesheet from the shared module in the TransformXML activity.

Support to override SQL statements via JDBC\_Update activity

An **Override SQL Update Statement** checkbox is added on the Advanced tab of the JDBC\_Update activity to override the SQL statement.

## Runtime

Start an independent component of

An option has been added now to start an

## Runtime

the ActiveMatrix BusinessWorks application	independent component of the ActiveMatrix BusinessWorks application despite of an Impaired or StartFailed state.
Support for ActiveMatrix BusinessWorks metrics such as system data and process stats via OpenTelemetry	ActiveMatrix BusinessWorks metrics for system data and process stats can now be seen on any standard metric-supported data source via OpenTelemetry.
Support is added for B3 propagation format on Jaeger.	This release adds support for B3 propagation format in ActiveMatrix BusinessWorks on Jaeger.

## Release 6.9.0

### Common Features

Dynamic timeout in SOAP Invoke activity	<p>You can now use <b>dynamic timeout</b> in SOAP Invoke activity using the SetContext activity.</p> <p>A schema must be created with specific element names i.e. complexType element as "dynamicConfigurations" containing the "activityTimeout" element.</p> <p>The <b>dynamic timeout</b> overrides any static setting in the Advanced tab of the Invoke activity.</p>
Deploy the same EAR with different profiles using Maven	A new option has been added now to deploy the same EAR file multiple times with different profiles using <code>bw6-plugin-maven</code> .
Support for Inline Schema at request and response in OAS 3.0 Swagger files	OAS 3.0 JSON file with inline schema in request and response is now getting parsed when creating top-down REST service or reference binding.
Support for OAS 3.0 Multiple Response feature	Support has been added to create a top-down REST service with OAS 3.0 JSON file having multiple response content-types.

## Common Features

Support for **anyOf** and **oneOf** keywords in Swagger files

You can now generate XSD and create a top-down service or reference binding using an existing OAS 3.0 JSON file with **anyOf** or **oneOf** keywords for request and response schemas.

## Administration

Addition of a new field, **Machine name** under **Application Status** of REST API.

A new field, **Machine name** has been added now under **Application Status** of REST API. It helps to get the status of a deployed application in a domain along with the machine name.

## Design Time

Promote module properties in a batch

With this release, you can now promote module properties in a batch rather than individually.

TIBCO ActiveMatrix BusinessWorks™ integration with TIBCO Cloud API Modeler

The TIBCO Cloud API Modeler (TCAM) APIs are now available on the **TIBCO Cloud APIs** website that ActiveMatrix BusinessWorks can leverage to make the API specs from TCAM discoverable in the API explorer.

Support for multiple TIBCO Cloud Integration environments via SSO

You can now choose multiple TIBCO Cloud Integration environments and log in via SSO. An option is provided to select a cloud server in the SSO Settings dialog.

Support for importing/exporting application templates to TIBCO Cloud Integration Marketplace

This feature is an integration of the Application Template with the TIBCO Cloud Integration Marketplace via TIBCO Business Studio for BusinessWorks. It enables you to import/publish the app templates as marketplace listings on the TIBCO Cloud Integration Marketplace.

Test Connection feature for Smart

A new button named **Test Connection** is provided on the Database Configuration window of the Smart Mapper preferences. It enables

## Design Time

Mapper	you to verify the database connection for the Smart Mapper.
Learn Existing Links feature for Smart Mapper	The Learn Existing Links feature enables you to store all mapping data of all projects in the current workspace. For using this feature, you first need to configure the DB. All the mapping data gets stored in the respective DBs.
Importing/exporting recommendation info via Smart Mapper.	This feature enables you to import/export the recommendation info. The Import button helps to import the mapping data present in the DBnfo file into the configured DB. Similarly, the Export button helps to export the mapping data present in DB to the DBinfo file.

## Palettes

Support for OAuth 2.0 Authentication in Receive Mail Activity	OAuth 2.0 Authentication is now supported for Receive Mail Activity IMAP protocol in the Mail palette.
Support for XML type input parameter in Oracle stored procedure	XML type input parameter in Oracle stored procedure is now supported for Oracle.

## Runtime

Force stop application via Engine Command activity	<p>In TIBCO ActiveMatrix BusinessWorks™ 6.x, the <b>stopapplication</b> command is used in the Engine Command activity which gracefully shutdowns the application. Since it is the graceful shutdown of applications, it waits for all jobs to get completed.</p> <p>This enhancement is raised to have a "force shutdown/stop application" so that it can stop the application immediately.</p> <p>For the EngineCommand activity, a <b>force</b> option for the <b>StopApplication</b> command is added to stop the ActiveMatrix BusinessWorks application forcefully. For example, the existing process instances are canceled immediately.</p>
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## Runtime

Introducing a new log level, <b>Fatal</b> in the Log Activity.	A new log level named <b>Fatal</b> has been added to the Log Activity. This feature enables you to distinguish the Fatal log-level messages from the Error log messages and can also be used for observability goals.
Support for getting the Product Version	In the input binding of activities and transitions, the ActiveMatrix BusinessWorks product version can now be accessed by using the following property:  <code>bw:getSystemProperty("BW.VERSION")</code>

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### 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 <b>activityTimeout</b> under <b>dynamicConfigurations</b> element is added.	A new field <b>activityTimeout</b> under <b>dynamicConfigurations</b> 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	Support is added to generate XSD and create service and reference binding using OpenAPI Specification 3.0 JSON file,

## Common Features

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.

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

You can configure and override the TIBCO Cloud Integration  
Cloud Mesh Resource Endpoints during the deployment process.

## Design Time

via CICD.

Send the password digest while using UsernameToken.

Now you can send password digest while using UsernameToken for security in the SOAP Policy.

Add Custom Xpath function as a module dependency.

You can now add Custom Xpath function as a module dependency in pom.xml using TIBCO ActiveMatrix BusinessWorks Maven plug-in.

You can run an application using TIBCO Cloud Mesh with Single Sign On option selected.

When you select the Single Sign On option from Preferences and run an application with TIBCO Cloud Mesh service, you can select the **Enable TIBCO Cloud Mesh Services Consumer** check box available under **Run > Run configurations... > Advanced Tab** or **Run > Debug Configurations... > Advanced Tab**.

Support is provided to connect to TIBCO Cloud Integration from TIBCO Business Studio for BusinessWorks using Single Sign-On (SSO).

This release adds support to connect to TIBCO Cloud Integration from TIBCO BusinessStudio for BusinessWorks using Single Sign-On for enhanced authentication.

**Note:** 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.



## Palettes

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.

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### 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

Common Features	
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.
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	<p>The <b>dynamicConfigurations</b> field is added on the <b>Input</b> tab of the <b>Invoke</b> activity, which is used for invoking REST service with REST reference binding. The <b>dynamicConfigurations</b> consists of the following information:</p> <p>URL: The endpoint URL to override from reference binding.</p> <p><b>Note:</b> This field is visible for newly created reference binding only.</p>
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 <b>Resource Service Path</b> is set to /callback and the shared resources have localhost and 8080 as Host and Port values respectively.
The <b>Description</b> field is added on the REST service binding.	The <b>Description</b> 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.	<p>Request with CDATA tags can now be sent with SOAP Invoke activity.</p> <p>For the CDATA tags to remain intact on the wire, set the following</p>

## Common Features

	<p>Java property in VM arguments:</p> <pre>bw.binding.soap.invoke.cdata.serialization=true</pre>
Support of Binary Response Format for OpenAPISpecification 3.0 REST services is provided.	The <b>Binary</b> check box is added in the Response Format for OpenAPISpecification 3.0 service and reference binding.
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 <b>Reply</b> activity. Select the <b>Use HTTP Headers</b> check box and Format as Text on the <b>Response</b> tab of REST service binding.
Enhancements are made in Unit testing and Mocking support.	<p>ActiveMatrix BusinessWorks adds support for Mocking and unit testing for the following entities:</p> <ul style="list-style-type: none"> <li>• Main process activities</li> <li>• Events or process starters</li> <li>• Service Binding</li> <li>• SOAP service implemented as a constructor operation</li> </ul>

## Design Time

Generate Manifest.json file for TIBCO Cloud projects using bwdesign.	<p>Now you can generate Manifest.json file for TIBCO Cloud projects by using the following bwdesign command line utility:</p> <pre>generate_manifest_json -project &lt;project_name&gt; &lt;location to generate manifest.json file&gt;</pre>
--	---

## Design Time

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.

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.

## Design Time

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.

Support is added for Eclipse 4.19 platform for TIBCO Business Studio for BusinessWorks

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

For more information, see "Eclipse 4.19 - New and Noteworthy" page on the [Eclipse's site](#).

## Palettes

Support is added for TLS session resumption

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

Support is added to allow or restrict IP addresses in the HTTP Connector shared resource.

The following VM arguments are added in TIBCO Business Studio for BusinessWorks to allow or restrict IP addresses.

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

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

For example:

Dbw.plugin.http.httpConnector.allowIPs=10.98.179.102;10.98.179.110.

In this example, both IP addresses 10.98.179.102 and 10.98.179.110 are allowed.

Use a hyphen to provide a range of IP addresses.

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

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

## Palettes

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=10.98.179.102-10.98.179.110`.

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

The performance of JDBC palette activities is improved.

Set the following VM arguments :

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

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

- `-Dbw.application.jdbc.validateConnection=false`

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

Support is added for TLS 1.3 version.

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

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

Support added for Module Properties for additional configuration.

- You can use a module property for configuring **Confidentiality** on HTTP Connector shared resource. For more information, see "Security" in *TIBCO ActiveMatrix BusinessWorks™ Binding & 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*

## Runtime

**Smart Engine** You can now generate various HTML reports for the engine data collected for different performance use cases. Smart engine also analyzes the engine data collected and provides recommendation to improve performance of your application.

For more information, see "Smart Engine" section in *TIBCO ActiveMatrix BusinessWorks™ Administration*.

## Release 6.7.0

### Common Features

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

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.

**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.

## Common Features

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*.

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*.



## Common Features

### 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*.

## Administration

### 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.

### 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*.

### 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:

## Administration

```
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*

## Design Time

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*

## Design Time

### *BusinessWorks™ Application Development*

Sorting functionality is available for roles.

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

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

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

For more information see "Call Process" and "Java Invoke" in *TIBCO 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*.

## 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.

---

**Runtime**

---

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*.

---

## Changes in Platform Support

---

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

Platforms	Status	As of Release
Apple macOS 13.x 64-bit on x86-64	Added	6.10.0
Oracle Linux 9.x 64-bit on x86-64	Added	6.10.0
Microsoft Windows Server 2012 R2 64-bit on x86-64	Removed	6.10.0

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

# Changes in Functionality

---

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

## Release 6.10.0

### General

Support for default enabling of Smart Mapper	The Smart Mapper and recording the user mapping selections are now enabled by default.
Support for Oracle JRE 11.0.19	Earlier, Oracle JRE 11.0.18 was supported. Now, Oracle JRE 11.0.19 is shipped with this release.

### Administration

Support for Process Monitoring with HTTPS AppNode	The certificate file for BWAgent and HTTPS AppNode communication must be imported now into the JRE for accurate data fetch by process monitoring.
Support for disabling or enabling the input and output data storage using BWEngine REST APIs	When using Statistics collection, the input and output data storage can now be disabled or enabled for audit events using the BWEngine REST APIs.

### Design Time

Provision to export profiles with EAR using BWDesign utility	Support is added to export profiles with EAR using the BWDesign utility via a -pf option.
The Java compiler version is set to Java 11 for a BusinessWorks project.	Earlier, the Java Compiler version for a BusinessWorks Project created with Java configuration was set to 1.4.

## Design Time

Now, the Java Compiler version for a BusinessWorks Project created with Java configuration is set to Java 11.

The **Clear all blank lines** checkbox in the **Preferences -> XML -> XML Files -> Editor ->** is by default enabled.

Earlier, the **Clear all blank lines** checkbox in the **Preferences -> XML -> XML Files -> Editor ->** is not enabled.

Now, the **Clear all blank lines** checkbox in the **Preferences -> XML -> XML Files -> Editor ->** is by default enabled when the workspace is closed.

## Maven Plug-in

Support for validation checks of Gold input files

Validation checks are now implemented when you rename or move the Gold input file within a workspace.

Support for deploying an application with different versions

You can now deploy the same application with different versions in TIBCO Enterprise Administrator using the Maven plug-in.

Support for validation checks of Input XML files

Validation errors are now thrown when you rename or move the Input XML file on Process starter activities within a workspace.

Support for Dependency Exclusions is added

This release adds support for Dependency Exclusions on top level POM.

For more information, see [Dependency Exclusions](#) in the *TIBCO ActiveMatrix BusinessWorks™ Maven Plug-in*.

## Palette

Support for Basic Authentication in the HTTP responses

A new tag **HttpOnly** has been added when using Basic Authentication for the Set-Cookie attribute in HTTP responses. Also, a **secure** tag is added when using SSL.



## Runtime

Support for disabling or enabling the input and output data storage using REST APIs

When using Stats collection, the input and output data storage can now be disabled or enabled for audit events using REST APIs.

## Release 6.9.1

### General

Auto-complete fixable after selecting recommended elements via existing internal QF for Smart Mapper.

For Smart Mapper, after selecting a recommended element which is a convertible type of the current target element, you can use the existing internal QF that automatically casts it. This can help you to avoid an extra click.

Support for Oracle JRE 11.0.18

Earlier, Oracle JRE 11.0.16.0.1 was supported. Now, Oracle JRE 11.0.18 is shipped with this release.

### Administration

Support for enabling/configuring Profile Encryption via KeyStore.

The KeyStore file is now uploaded into the ActiveMatrix BusinessWorks database after enabling/configuring profile encryption.

### Design Time

Provision of creating test suite/test files for newly created folders.

Users can now create test suite/test files for newly created folders under the 'Tests' folder.

Provision of module property picker for input XML files.

Users are now provided with a module property picker to provide test input XML files on process starter activities.

## Palette

Enabling basic authentication for HTTP Receiver activity sub-paths.

The basic authentication for the HTTP Receiver activity having sub-paths can be enabled by selecting the **Apply Policy to Subpaths** checkbox in the Advance tab.

Change in the cardinality of Allow header in Send HTTP Request activity.

The Send HTTP Request activity fails with an "Activity output data validation" error when invoking a service responding with a repeated Allow header element.

The cardinality for Allow header field is now set to Repeating (\*) in the Output Editor of Send HTTP Request activity.

Support for OAuth 2.0 with HTTP Client shared resources.

OAuth 2.0 is now supported with HTTP Client shared resources for REST reference binding, Invoke REST API, and Send HTTP Request.

## Runtime

Support for DSR command via Admin CLI.

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

## Release 6.9.0

### Design Time

Support is added for multiple XSD schemas with duplicate target namespaces.

When the user has multiple XSD schemas with duplicate target namespaces, TIBCO Business Studio™ for BusinessWorks™ application fails to validate them; whereas, when an application EAR is deployed, it throws an error.

Now, a Preference is added in TIBCO Business Studio for BusinessWorks application wherein either an Error, a Warning, or an Ignore option is provided in this scenario.

### Design Time

Enabling Memory Saving Mode by default

The Memory Saving Mode is enabled now by default in Design time and Runtime.

### Palette

Upgrade to PostgreSQL 6.0 driver.

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

## 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.

## 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	<p>Earlier, while invoking a service using HTTPS, the error message returned by invoke was not very useful to identify the problem.</p> <p>Now, an improved error message occurs for SOAP Client using HTTP and HTTPS.</p>
---	--

## Release 6.8.0

### Administration

Support is added to enable and disable OpenTelemetry from Admin CLI and Admin UI.	<p>Earlier, support was added to enable and disable OpenTracing from Admin CLI and Admin UI.</p> <p>Now, the support is added for OpenTelemetry.</p>
---	--

Change in the content arrangement in a backup .zip file.	<p>Earlier, while backing up profile, an application profile name used to change to profile_&lt;application_name&gt;&lt;application_version&gt;.substvar and for appinstance, it used to change to profile_&lt;application_name&gt;&lt;application_version&gt;_&lt;appnode_name&gt;.substvar</p> <p>Now, in backup .zip file, all the artifacts are arranged in a folder to maintain exact configurations.</p>
--	--

Change in the default transport layer.	<p>Earlier, the default transport layer between the BWAgent and the AppNode was UDP.</p> <p>Now, the default transport layer is REST.</p>
--	---

## General

Change in the default setting of the <b>Always run in background</b> check box.	<p>Earlier, the <b>Always run in background</b> check box located at Window &gt; Preferences &gt; General was clear by default.</p> <p>Now, the <b>Always run in background</b> check box is by default selected.</p> <p>Clear the check box to view progress bars for some events.</p>
---	---

## Palette

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

## Release 6.7.0

### Administration

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

## General

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

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

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)**.

## 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.

---

## Migration

---

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

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

---

# Deprecated and Removed Features

---

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

- [Deprecated Features](#)
- [Removed Features](#)

## Deprecated Features

### Release 6.10.0

- No feature has been deprecated in this release.

### Release 6.9.1

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

### Release 6.9.0

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

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

### Release 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.

### 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 6.10.0**

- Support for Progress DataDirect drivers has been removed from this release.  
For more information, see "Migrating existing JDBC applications with Progress DataDirect Drivers" in the *TIBCO ActiveMatrix BusinessWorks™ Bindings and Palettes Reference*.

### **Release 6.9.1**

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

### **Release 6.9.0**

- The Password Grant feature has been removed in this release.
- The Analyzer feature has been removed in this release.

### **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 Runtime](#)
- [General](#)
- [Maven Plug-in](#)
- [Migration](#)
- [Palette](#)
- [Policies](#)

## Administration

This topic lists the closed issues related to Administration.

### Release 6.10.0

Key	Summary
AMBW-48662	App instances do not start after modifying the Date/Time module property in TIBCO Enterprise Administrator and go into a Start-failed state.
AMBW-48243	The <code>bw.engine.enable.activity.input.output.data.for.audit.events</code>

Key	Summary
	property does not work when set to "true" or "false" in the TIBCO Enterprise Administrator UI and CLI.
AMBW-48041	The Warning symbol is not displayed on the Domain page when an application is in the stopped state on the TIBCO Enterprise Administrator UI.
AMBW-39930	An error "Failed to obtain AppSpace TRA file" is thrown while taking a backup of Domain from CLI and TIBCO Enterprise Administrator in FTL mode.

## Release 6.9.1

Key	Summary
AMBW-45898	The "USERNAME" column is missing in the CommandHistory table of the Oracle CreateSQL script for LINUX installation.

## Release 6.9.0

Key	Summary
AMBW-43962	Multiple occurrences of query calls to retrieve AppSpace from TIBCO® Enterprise Administrator or bwadmin console have been reduced to minimize delay and improve performance.
AMBW-34773	Admin UI displays promoted module properties for an application as undefined%.

## 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 AppInstance 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 (%).
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 6.10.0

Key	Summary
AMBW-49116	Duplicate authorization has now been removed from the TCP trace.
AMBW-48942	When a REST service is invoked with invalid Query/Path parameters, the Catch All block in the service is not executed.
AMBW-48936	The attributes that are present at the root element level are missing in the output of Invoke activity while invoking a REST service having XML as the response content type.
AMBW-48920	Unable to retrieve WSDL in ActiveMatrix BusinessWorks version 6.9.0 for the attached project.
AMBW-48638	<p>The expected JSON response is not obtained in the following cases:</p> <ul style="list-style-type: none"> <li>• An array of strings has only one element, which is set explicitly to "nil" and the <b>Use Empty Values for Null</b> checkbox in the REST Service Binding response tab is selected.</li> <li>• The array of strings and array of objects have only one element set to "nil", and the <b>Use Empty Values for Null</b> checkbox is unselected.</li> </ul> <p>Both the scenarios give expected results now. For the second scenario, set the <code>com.tibco.bw.restjson.array.null=true</code> property in the VM arguments of TIBCO Business Studio for BusinessWorks to get the expected result.</p>
AMBW-38146	The Content-Type header set in the Input tab of REST Reference binding's Invoke activity is not reflecting at runtime.
AMBW-32475	When "Null" as an input value is passed for some of the elements in a REST service, it is converted to an empty value in the output.

Key	Summary
BWCE-6100	<p>From a REST service with POST operation having Content-Type as "application/json", if the JSON formatted text contents are sent to the REST client in response, then it is being received as normal text instead of JSON formatted contents.</p> <p><b>Note:</b> If an invalid JSON, which is a simple string is provided in the response, the Swagger UI shows a parsing-related error, can't parse JSON. Raw result: along with the response value; which is the expected behavior. The response value must be configured with the correct JSON format. For example, {"name": "abc"}.</p>

## Release 6.9.1

Key	Summary
AMBW-48168	<p>When migrating TIBCO ActiveMatrix BusinessWorks 5.x SOAP project to 6.x, the input mappings on the Invoke activity are lost, causing an issue while invoking the SOAP service.</p> <p><b>Note:</b> The input of the "_configData" element from the ActiveMatrix BusinessWorks 5 project must be provided as an input in the SOAP Reference Binding -&gt; Request Context -&gt; endpointURI field.</p>
AMBW-48167	<p>An error "TIBCO-BW-FRWK-400030: Error destroying binding [RestService1], &lt;CausedBy&gt; java.lang.NullPointerException" is thrown after the application restart when some changes are made to an already running application having multiple REST services with similar resource service paths.</p>
AMBW-48157	<p>The anyType element in the input editor of the SOAP service, which is expected to receive any kind of requested XSD data structure is not mapping the received data in any element, resulting in an empty output from OnMessageStart.</p>



Key	Summary
AMBW-48028	The Error Code is not reflected in the FaultDetails/MsgCode element when a REST service fails due to a bad request.
AMBW-48017	Data types are missing during the Generation of XSD from the Swagger file containing JSON schema object with properties referring to other models.
AMBW-47607	To address security vulnerabilities in the snakeyaml-1.33.jar file, the SnakeYAML jar has been updated to version 2.0.

## Release 6.9.0

Key	Summary
AMBW-46622	Invoking SOAP service fails with "Failed to initialize SoapReferenceBinding - TIBCO-BW-SCHEMA-RESOLVER-500201: WSDL not found" error.
AMBW-46604	The ProcessStack field under the FaultDetails tab is not populating the correct Process Name in the fault details when the process has two service bindings with the same operation.
AMBW-46557	The XML parser in TIBCO ActiveMatrix BusinessWorks™ does not recognize the boolean value and treats it as a whitespace.
AMBW-46371	On installing TIBCO ActiveMatrix BusinessWorks™ 6.7.0 HF-005, whitespaces are getting trimmed in the output.
AMBW-46046	When a process has multiple reference bindings with "Enable DefaultFaultElement" and "Enable CustomFaultElement" selected ONLY in one of the bindings, the fault in the Catch block throws design-time errors.
AMBW-22981	When invoking a REST service's GET operation with Content-Type as "application/json" having response as "string" type, the response content-type changes to "text/plain".

Key	Summary
	<p><b>Note:</b> If an invalid JSON i.e. a simple string is provided in the response, the Swagger UI shows a parsing-related error, "can't parse JSON. Raw result:" along with the response value; which is the expected behavior. The response value must be configured with the correct JSON format, for example:</p> <pre>{"name": "abc"}</pre>

## 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 "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.

Key	Summary
AMBW-43403	The XSD generation, and Service or Reference binding creation operation are no more blocked, by avoiding parsing of <code>"#/components/examples"</code> .

## Release 6.8.0

Key	Summary
AMBW-43816	For REST application deployed on an AppNode, the <code>bw-flowlimit-executor-provider</code> threads are not destroyed and keep on increasing even after starting and stopping an application.
AMBW-43397	<p>You can now decide whether to send SOAP headers or not in the SOAP Envelope of the service. Set the – <code>Dbw.binding.soap.client.invoke.send.headers</code> property as a VM argument in TIBCO Business Studio for BusinessWorks or in the <code>config.ini</code> file to <code>false</code> to stop sending SOAP headers.</p> <p>By default, the property value is set as <code>true</code>.</p>
AMBW-43238	<p>Empty header is passed in response in the SOAP envelope even if you don't configure the SOAP service with Headers.</p> <p>To not send empty headers set the property <code>bw.binding.soap.client.reply.empty.header.override=true</code>.</p>
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 <code>operationID</code> 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

Key	Summary
	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	<p>After migration, the org.apache.axiom.om.OMException: Unable to determine SOAP version error occurred when an attachment style was MTOM.</p> <p>Add the following property:</p> <pre>bw.binding.soap.client.reply.mtom.contenttype.override=true.</pre>
AMBW-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.
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>

Key	Summary
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	<p>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.</p>
AMBW-39038	<p>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.</p>

## Core Design Time

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

### Release 6.10.0

Key	Summary
AMBW-48700	<p>Unable to load TIBCO Cloud Integration API Modeler APIs for all supported regions except the US West region.</p>
AMBW-48504	<p>The string function "matches" gives a different output after upgrading from ActiveMatrix BusinessWorks version 6.5.1 to 6.8.1.</p> <p>Add the following properties in the <b>Debug Configurations Window &gt; Arguments &gt; VM arguments</b> tab of TIBCO Business Studio for BusinessWorks to get the results that match the previous BW version:</p>

Key	Summary
	<ul style="list-style-type: none"> <li>-Dbw.xml.regex.disable-syntax-checking=true</li> <li>-Dbw.xml.regex.disable-explicit-anchors=true</li> </ul> <p><b>Note:</b> For running the project via TIBCO Enterprise Administrator, add the following properties in the bwappnode.tra file:</p> <ul style="list-style-type: none"> <li>bw.xml.regex.disable-syntax-checking=true</li> <li>bw.xml.regex.disable-explicit-anchors=true</li> </ul>
AMBW-48110	The previously saved changes from the "Export-Package" section in the manifest.mf file are removed when modification is done in the projects.
AMBW-48031	BusinessWorks Client fails to hit TIBCO Flogo Enterprise service when both are copied from one organization to another.
BWCE-6295	In TIBCO Business Studio for BusinessWorks, the Special Folder option does not appear when a new folder is created in an application.
BWCE-5858	The original mapped fault schema in the <b>Throw</b> activity is lost after it is changed to a different schema.
BWCE-5857	While building the JAR or EAR files, the dependency of JAR with No-MANIFEST.MF causes some issues.
BWCE-5795	When you try to create two resources of different types with the same name, an EMF Validation error occurs stating the shared resource name is not unique in the project's context.
BWCE-5791	When you try to rename or move jks files on Key Store Configuration OR rename or move Key Store Configuration resources on SSL Client Configuration, then all the references to these are updated automatically.
BWCE-5540	The BWDesignUtility displays extra errors which do not appear in TIBCO Business Studio for BusinessWorks.

## Release 6.9.1

Key	Summary
AMBW-48034	The previously saved changes from the "Export-Package" section in the <code>manifest.mf</code> file are removed when modification is done in the projects.
AMBW-47723	A Null pointer error is thrown when promoting module properties with no/empty default value.
AMBW-47541	TIBCO Business Studio for BusinessWorks throws a StackOverflow error when it builds the workspace after importing a specific project.
AMBW-47019	When updating the XSLT version from 1.0 to 2.0, errors are thrown as "Invalid conversion from string?   string? to item" relating to type-casting values from one type to another.
AMBW-34062	An error is thrown when running an application having additional space in the element name of the schema.
BWCE-5423	While creating a new custom xpath function, the activator class does not get generated even if the Generate Activator Class check box is selected.
BWCE-5385	When the <code>pom.xml</code> file is generated for an application, it refers to an older version of "com.tibco.bw.palette.shared" jar.
BWCE-5352	Iterate cannot be used in a group over a list when the elements are derived from abstract types to map inputs, because it does not have the variable type configured in the <code>currentElement</code> .
BWCE-5297	While using the Maven plug-in, when there are redundant dependencies configured in the <code>pom.xml</code> file of an application, the workspace keeps displaying the message "Validating External Shared Modules from Maven Dependencies" indefinitely.

## Release 6.9.0

Key	Summary
AMBW-46540	When you add external JAR files in Shared Module, the Export-Package entry from the <code>manifest.mf</code> file is removed.
AMBW-45943	When you rename a module or application property group as "Application", TIBCO Business Studio for BusinessWorks crashes. It is a reserved keyword now and a validation error message is displayed.
BWCE-4847	When application modules have any external dependencies such as shared modules and custom xpath functions, these dependencies do not get imported automatically into the workspace.
BWCE-4726	A validation error is thrown when an activity has invalid name and the error message is not clear.

## 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 End activity, a new variable with an optional error report type is created and that variable takes precedence over the normal error variable.



Key	Summary
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 <b>EAR</b> generation operation does not time out for large projects.
AMBW-44475	ActiveMatrix BusinessWorks throws an error when mapping the <b>JDBC Query</b> activity's output to the <b>Iterate</b> group.
AMBW-43710	On running an application, the <b>Activity</b> output data validation error is displayed when the <b>JDBC Query</b> activity is used with the <b>Iterate</b> group.
AMBW-43195	The <b>system:validate</b> 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 <b>Input</b> tab of the <b>Call Process</b> activity is not displayed.
AMBW-42293	The <b>XSLT</b> is out of sync with schema component properties error continues to occur even after a quick fix is applied post-migration.

Key	Summary
AMBW-42115	The last modified date of an API in the API Explorer tab is incorrect.
AMBW-42089	TIBCO Business Studio for BusinessWorks displays incorrect build order of modules when the projects are imported using the bwdesign utility.

## 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 <code>tib:evaluate</code> 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 <code>CatchAllFaultDetails</code> 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.

*(Continued)*

Key	Summary
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 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 Runtime

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

## Release 6.10.0

Key	Summary
AMBW-48899	The startup time of the BusinessWorks application increases after using a larger schema.
AMBW-48714	When two SOAP applications are started on the same AppNode simultaneously, then one of them fails to start.
AMBW-48648	The application configured with the property <code>bw.independent.component.startup=true</code> goes into a stopping state when any of the shared resources are not available.
AMBW-48486	BusinessWorks application having "Activator" as the only component remains in the Stopping state.
AMBW-48484	The checkpoint-related data is deleted from the <code>pg_largeobject</code> table after enabling the <code>bw.engine.enable.checkpointdata.delete</code> property for the PostgreSQL database.
AMBW-47920	ActiveMatrix BusinessWorks 6.x application with heavy XSLT mapping takes more than 15 minutes to start.
AMBW-46361	An NPE error is thrown in AppNode logs for Group mode with the Oracle database.
AMBW-28658	The AppNode logs fail to log an error/reason for the impaired state of an application.

## Release 6.9.1

Key	Summary
AMBW-48181	The activator process is slow when running an activity with large XML data in Debug mode.
AMBW-43215	For the SAP application, If the SAP component is not available, then the application goes into an impaired/start failed state.

## Release 6.9.0

Key	Summary
AMBW-46544	Application deployed to AppSpace configured in FT-group mode and FTL as group provider activates more than one active instance on restarting FTL servers configured in FT mode.
AMBW-46534	When Appnodes are configured in FT-group, the wrong Component status is shown differently on TIBCO® Enterprise Administrator UI and via REST API calls.
AMBW-46530	SOAP/JMS service throws an error, "cache cannot be null.stacktrace : java.lang.AssertionError: cache cannot be null" when the JMS receiver configured to the queue has a lot of pending messages more than the relative flow limit set for the component.
AMBW-46514	Heap memory increases due to memory leaks while using Notify and ReceiveNotification activities.
AMBW-46502	<p>At runtime in ftgroup mode with weighted property, when the application contains a service-based sub-process call in a process, the Fault Tolerance mechanism stops working post secondary fail-over.</p> <p>A property named "bw.engine.ftgroup.activator.servicesubprocess" is now provided to fix this issue.</p>
AMBW-	Applications with subprocess calls without the Spawn option are moving into an

Key	Summary
46207	unresponsive state in group persistence appspaces because of logical deadlock.
AMBW-45361	The stopapp/startapp OSGi commands are not working in TIBCO ActiveMatrix BusinessWorks™ 6.7.x and 6.6.x code bases.
AMBW-39684	An "Attribute DataType cannot be null" error occurs when coercion is used for the "anyType" element in the iteration loop.
AMBW-36995	Variables inside the iterate loop do not reset after each iteration when they are not executed again.

## 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	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.  Set the <code>com.tibco.bx.engine.recovery.failure.threshold</code> property to a value

Key	Summary
	between 31 to 180 seconds.
	<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 <code>config.ini</code> file:</p> <pre>com.tibco.bx.lockWaitNotify=true com.tibco.bw.throttle.notify.activity=true com.tibco.bw.throttle.wait.activity=true</pre> <p>Use the throttle properties when default configuration is used .</p> <p>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>Some of the ActiveMatrix BusinessWorks jobs are not processed intermittently when an application has <b>Wait</b> and <b>Notify</b> activities.</p> <p>To avoid the deadlock scenario, TIBCO recommends to set the <code>com.tibco.bx.lockWaitNotify=true</code> property and the value of <code>bw.engine.db.maxConnection</code> property = twice the value of <code>bw.engine.threadCount</code>.</p>
AMBW-	On stopping the application, an application cannot call the delete method of the



Key	Summary
43102	shared resource when the shared resource uses module property in one of the fields.
AMBW-43101	The BW.MODULE.NAME and BW.MODULE.VERSION module properties return empty values.
AMBW-43099	The Iterate group in a subprocess generates incorrect output when two different processes call the same subprocess containing the Iterate group at the same time.
AMBW-42919	After new installation and setup of AppSpaces and the AppNodes, the AppNodes that have "group" settings cannot start and display the following error: Unable to find CheckpointModelFactory: DB.
AMBW-42506	Modifications done inside a running application in TIBCO Business Studio for BusinessWorks displays the Process not found error.
AMBW-42106	AppNode APIs now provide complete stack trace in a thread dump.
AMBW-41286	TIBCO Business Studio for BusinessWorks throws NullPointerException while running a project with different nested subprocesses.

## 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	The <code>&lt;msgCode&gt;</code> tag under <code>FaultDetails</code> could not capture the actual <code>msgCode</code> value.

Key	Summary
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-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 AppNode.
AMBW-41045	After upgrading, the <b>Transform XML</b> activity took more memory and generated the Out of Memory Exception.
AMBW-40793	An application could not be started when its status was STARTFAILED.
AMBW-40362	An application using WSDL from a shared module failed to restart and displayed the <code>java.lang.IllegalStateException: BundleContext is no longer valid</code> error.
AMBW-40232	The conversation handler failed when multiple AppNodes were set up in a group persistence mode.
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 AppNode's <code>config.ini</code> file.</p> <p>By default, the value is false.</p>
AMBW-38813	The performance was degraded in the <b>Iterate Group</b> activity.
AMBW-36149	<p>When an application had a persistent shared module in the group mode, the following error occurred intermittently:</p> <p>PVM-MODEL-102700.</p>
AMBW-33830	After migration, the <b>Repeat</b> group used in a calling process displayed <code>java.sql.SQLException</code> 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 6.10.0

Key	Summary
AMBW-49326	The "XSLT Out of Sync" error does not get fixed even after carrying out a <b>Quick Fix</b> .
AMBW-49101	<p>The XSLT has a mismatch in the process file where one of the elements is missing in the Partbinding located in inputBinding. In certain situations, the Mapper's XSLT may miss the last param name needed for the XSLT document.</p> <p>After updating or resetting the process, you can see the param name="BackendStub" in the Partbinding. The param name="BackendStub" does not appear in the Partbinding of the text file of the process MappingOnReplyTask.bwp until the process gets reset or updated.</p>
AMBW-48917	Preceding zeros are being trimmed in the <b>String</b> field of Mapper.
AMBW-45622	The Wait Activity does not reset its timeout in a loop.
BWCE-5850	An application is not complete if an activity in a process has multiple transactions of type "Success with no matching condition". Now an error validation message is shown in TIBCO Business Studio for BusinessWorks.

## Release 6.9.1

Key	Summary
AMBW-48156	The dateTime() function throws "[FORG0001] Invalid value for cast/constructor" error for the input value "xsd:dateTime("2022-12-20T17:14:50.Z")". Set the property <code>-Dbw.xml.datetime.allowMissingFracSeconds=true</code> to overcome the error while parsing the date and time for the input value. By default, this property is false.
AMBW-47854	Application with an iterate group running in Debug mode throws an Out of memory error.
AMBW-47303	In the ActiveMatrix BusinessWorks 6.6.1 release notes, the wrong syntax, <code>bw.application.activity.validateInput[.&lt;ApplicationName&gt;[.&lt;ApplicationVersion&gt;][.&lt;ModuleName&gt;.&lt;ProcessName&gt;[.&lt;ActivityName&gt;]]]</code> to support turning off XML validation up to activity level was mentioned. The correct syntax for the system property that has to be set at the appnode level to turn on/off XML validation at the activity level is <code>bw.application.activity.validateInput[.&lt;ApplicationName&gt;[.&lt;ApplicationVersion&gt;][.&lt;PackageName&gt;.&lt;ProcessName&gt;[.&lt;ActivityName&gt;]]]</code> .
AMBW-46900	To address security vulnerabilities, the <code>maven-shared-utils-3.2.1.jar</code> file has been upgraded to CVE-free <code>maven-shared-utils-3.3.3.jar</code> in <code>assembly_tibco_com_tibco_org_eclipse_maven_feature_p2</code> .
AMBW-36024	Tests tab and icon shown for mocked activities are missing when importing a project configured using Maven in a workspace.

## Release 6.9.0

Key	Summary
AMBW-46579	When an integer value is mapped to a decimal element, the fractional values are always present even though there is no fractional part in the mapping.

Key	Summary
AMBW-46474	TIBCO Rendezvous® (RV) projects throw NullPointerException with version RV 8.6.0.
AMBW-45744	The Timer Trigger process blocks when the EMS connection is lost.
AMBW-44570	TIBCO ActiveMatrix BusinessWorks™ throws an error when a long-type value is mapped in the "int" type for XPath.
AMBW-40485	The XSLT Transform activity fails to recognize and transform certain data from the input XML string.
AMBW-28277	The XSLT Transform activity skips certain data from the input XML string.
BWCE-4934	A ClassNotFoundException occurs during Maven testing when a shared module has a Java class and it is called using the Java Invoke activity.
BWCE-4848	The Maven plug-in does not pick dependency versions from the parent pom.xml file.

## 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

Key	Summary
	element, resulting in empty output from RVSubscriber.
AMBW-45449	The Rendezvous Subscriber activity fails to process messages that are generated with the third-party Rendezvous publishers.
AMBW-45414	Unable to map the iterator element value on transition post-migration.
AMBW-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 <code>optional-nil</code> elements.</p>

Key	Summary
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.
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>

Key	Summary
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.
AMBW-42903	<p>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:</p> <p>\$\$\$\$\$ ERROR occurred while converting between Axiom and BW preferred node type.</p>
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	<p>The \$ParseXml/primitive&gt;sum(\$ParseXml/NewElement) expression generates incorrect results with XPath 2.0 when the following VM arguments are set in TIBCO Business Studio for BusinessWorks: –</p> <p>Dbw.application.activity.validateInput=false and –</p> <p>Dbw.application.activity.validateOutput=false</p>
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	<p>The activity input data validation error occurred when converting a double value to a decimal value and the <code>-Dbw.application.activity.validateOutput=false</code> property was set in the <code>config.ini</code> file.</p> <p>A new <code>-Dbw.xml.decimal.allowDoubleExponent</code> property is added.</p> <p>Set the <code>-Dbw.xml.decimal.allowDoubleExponent</code> property to <code>true</code> along with the <code>-Dbw.application.activity.validateOutput=false</code> in the <code>config.ini</code> file.</p>
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-41223	<p>The <code>trim()</code> mapper function in the <b>Group by</b> clause failed and generated the XSLT transformation error at run time.</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-41221	<p>The input tab mappings were not visible for activities when the <code>if</code> condition in the XPath function was empty.</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>

Key	Description
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 STARTFAILED.
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	<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 AppNode's config.ini file.</p> <p>By default, the value is false.</p>
AMBW-39898	The XSD resolver could not process the id attribute in the xs:group element.
AMBW-39494	<b>Summary:</b> The <code>current-dateTime()</code> 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	<p>When an application had a persistent shared module in the group mode, the following error occurred intermittently:</p> <p>PVM-MODEL-102700.</p>

Key	Description
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.

## Maven Plug-in

This topic lists the closed issues related to Maven Plug-in.

### Release 6.10.0

Key	Description
AMBW-48707	Non-readable POM file error is thrown when importing the CXF project from the Maven repository.
BWCE-5863	While running the Unit Tests for ActiveMatrix BusinessWorks 6.8.1 with Maven plug-in 2.9.2, inconsistencies are observed in the BW Coverage reports.

## Migration

This topic lists the closed issues related to Migration.

## Release 6.10.0

Key	Description
AMBW-49083	The Migration utility fails with an error while migrating a project containing DTD.
AMBW-48400	The <b>HTTP Client Name</b> field is blank in the SOAP Binding post migration.
AMBW-48367	The SOAP endpoint URI field displays the value from the concrete WSDL instead of the value in the global variable.
AMBW-33063	The schema location value is missing in the WSDL Inline Schema post migration from the import statement.

## Release 6.9.1

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

## 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> <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.
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 <code>\$error_&lt;activityname&gt;</code> was not migrated and failed to fetch error details from the <b>Local Transaction</b> group.
AMBW-41022	After migration, the subprocess containing the <code>padfront()</code> 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 <code>faultDetails</code> 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 ( <code> </code> ) was converted to the <code>"or"</code> 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 6.10.0

### HTTP Palette

Key	Summary
AMBW-48843	Duplicate authorization has been removed from the HTTP request header.
AMBW-36475	In the HTTP Server scenario with a Repetition count of "1" and a Basic Authentication policy applied, a "heap memory leak" error is detected.

### JDBC Palette

Key	Summary
AMBW-48893	JDBC stored procedures throw a timeout error when using the AS400JDBC custom driver.

### JMS Palette

Key	Summary
AMBW-48991	GetJMSQueueMessage throws a Timeout exception when messages are pending in the queue on a JMS Local transaction.
AMBW-48683	When JMS Connection Configuration is passed from a Shared Module in JMS Activity using Module Property, it throws a "Connection not specified" error on the UI.
AMBW-36686	When the JMS connection is not secured or invalid details are passed under the Naming provider URL, an error is thrown after clicking <b>Test Connection</b> .

### Parse Palette

Key	Summary
BWCE-6072	<p>The Parse Data activity fails when a child element of the main container element in the XML schema that is referred in the DataFormatResource is of ComplexType.</p> <p>A new property <code>com.tibco.bw.palette.parse.data.checkSchema</code> is added to use the new mechanism to validate/check schema. With property set to true, an exception occurs for complex type schemas.</p>

### XML Palette

Key	Summary
BWCE-6046	The Transform XML activity does not handle the XSLT variable correctly while transforming the Input.
BWCE-5356	<p>The <code>xsi:type</code> schema in the XML file does not conform with schema definitions for the ParseXML activity. To add the namespace, open the Preference-&gt;BusinessWorks-&gt;Validation page, and enable the Add schema's Namespace imports to dependency for new activities option in TIBCO Business Studio for BusinessWorks. Then add a new activity that uses or reference the element from the schema that uses or imports the particular namespace.</p>

## Release 6.9.1

### Java Palette

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



### JDBC Palette

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

### JMS Palette

Key	Summary
AMBW-42975	The <code>installdriver.xml</code> script is unable to install jars required for <code>jms.ibmmq.runtime</code> .

### Parse Palette

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

**REST and JSON Palette**

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

**XML Palette**

Key	Summary
AMB W-47422	<p>Unable to disable XML validation at activity level since Parse XML is not enforcing the properties in TIBCO ActiveMatrix BusinessWorks™.</p> <p>Use the following property to disable the XML validation at the activity level for Parse XML activity,</p> <p>–</p> <p>Dbw.application.activity.validateOutput.&lt;appName&gt;.application.&lt;appVersion&gt;.&lt;packagename&gt;.&lt;processname&gt;.&lt;activityname&gt;=false</p>

**Release 6.9.0****HTTP Palette**

Key	Summary
AMBW-46677	The Send HTTP Request activity fails to send image files in the mimeType because of the missing "filename" parameter in the content-disposition header at runtime.
AMBW-46605	The endpoint URL is generated as "HTTPS" instead of "HTTP" when the Confidentiality field on the HTTP Connector shared resource is configured with the module property value set to "false".
BWCE-4842	If a REST service is configured with Blocking Queue Size on service binding, then after accepting a certain number of requests, the remaining are not rejected. To achieve the expected behavior, the number of requests to be processed must be

### HTTP Palette

Key	Summary
	<p>equal to the addition of the Max QTP value on the HTTP Connector shared resource and BQS value at binding.</p> <p>For example, if 50 requests are processed at any given time, and the Max QTP is 10, then the Blocking Queue Size on service binding must be set to 40.</p> <p>For applications with a service using HTTP Palette activities, you need to set the following property,</p> <p><code>-Dbw.engine.http.jetty.blockingQueueSize=&lt;BQS_intger_value&gt;</code> in the VM arguments.</p> <p><b>Note:</b> If the above property is used for REST service, then its value must be the same as the Blocking Queue Size on service binding.</p>

### Java Palette

Key	Summary
AMBW-46550	Java object reference passed from parent process to subprocess fails to work.
AMBW-44678	The SOAP Invoke MTOM throws a Java heap space out of memory error with large payloads of 800 MB.
AMBW-36726	The output schema for JavaToXML activity is not generated if there is a defined public method without a defined respective member variable.
AMBW-33916	The JavaToXML activity fails to generate the schema for classes with no member variables.

### JDBC Palette

Key	Summary
AMBW-	JDBC Transaction Group does not end the database session when JDBC Call

**JDBC Palette**

<b>Key</b>	<b>Summary</b>
46797	Procedure times out.
AMBW-46201	JDBC Update Activity inserts a "NULL" value instead of an empty string into the database.

**JMS Palette**

<b>Key</b>	<b>Summary</b>
AMBW-46727	TIBCO ActiveMatrix BusinessWorks™ application fails with a specific error, "Can not change client ID" when Client ID is set in EMS Server Level.

**Mail Palette**

<b>Key</b>	<b>Summary</b>
AMBW-46731	The Send Mail input credentials are not overriding with SMTP shared resource credentials.

**REST and JSON Palette**

<b>Key</b>	<b>Summary</b>
AMBW-46603	When an XML file containing nested double quotes (") is passed as an input to Render JSON activity with Generic schema type, it does not get escaped in the output JSON string.
AMBW-46602	The Render JSON activity is unable to transform "&apos;" from the XML string to single quote (') in Generic mode.
AMBW-46580	Runtime throws a "JsonParserException" error on Parse JSON activity with Generic mode when the content to be parsed is larger than 512 characters. The character limit is now increased by default to 1024 characters.

### REST and JSON Palette

Key	Summary
	To parse a large JSON file (for example, more than 1024 characters), the user has to pass the below property in the TIBCO Business Studio™ for BusinessWorks™ VM arguments to increase the default cache size: com.tibco.plugin.restjson.json.setCacheSize = <Integer value>

### XML Palette

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

## 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.

**JDBC Palette**

<b>Key</b>	<b>Summary</b>
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**

<b>Key</b>	<b>Summary</b>
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.

**JMS Palette**

Key	Summary
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 <code>Numeric overflow</code> 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-	TIBCO Business Studio for BusinessWorks now supports overloaded procedures



### JDBC Palette

Key	Summary
42443	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 – Dbw.xml.jsonrest.multiple-ns.removensprefix=true 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 xmlns="" at the root level of the schema.</p>
AMBW-43994	The Value-of max(xsd:int*) expression returned as a scientific notation value when the <b>Transform XML</b> activity has bigger numbers in input.
AMBW-	The <b>Parse XML</b> activity gives error when the input file encoding was UTF-8-BOM

## XML Palette

Key	Summary
41240	and the <b>Validate Output</b> check box was selected.  Set the <code>-Dbw.application.activity.validateOutput.treeValidation=true</code> property as a VM argument when validating an output XML.
AMBW-33245	An error occurs when the YearMonth datatype is typecasted with the <code>xsd:string</code> ().

## Release 6.7.0

## FTP Palette

Key	Summary
AMBW-38106	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.

## 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.

### HTTP Palette

Key	Summary
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 request using the Jetty HTTP Client library in the <b>HTTP Client</b> shared resource.</p>

### 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	<p>The JDBC connection created against the database increased beyond the configured value when any of the following cases occurred:</p> <ul style="list-style-type: none"> <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-41215	The Null Pointer Exception was thrown when re-connecting the database with an 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 <code>java.sql.SQLException</code> at runtime when the Database URL had forward slashes in the <code>sslTrustStoreLocation</code> 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>
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	<p>The <b>Parse JSON</b> activity could not parse a JSON key having a value of array type with length more than 512 characters.</p>
AMBW-40618	<p>Logs for the <b>Invoke REST API</b> activity now also display the response body information. Set the following logger in the <code>logback.xml</code> file:</p> <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 6.9.1

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

## Release 6.9.0

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

## Release 6.6.1

Key	Description
AMBW-39090	A SAML message was not forwarded and generated the following error: Error unmarshalling a SAML assertion.
AMBW-38857	The Heap Out of Memory message was thrown for faulted jobs while using the <b>SOAP/HTTP Invoke</b> activity with Policy Basic Authentication.
AMBW-37873	The performance was degraded when the authentication was done with LDAP.

# 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-49047	<b>Summary:</b> HTTPS AppNode fails to start on the remote machine. <b>Workaround:</b> Change the keystore path location in the AppNode's <code>config.ini</code> file of the remote machine.
BWCE-5592	<b>Summary:</b> Unable to add Activity execution stats on PCF environment. <b>Workaround:</b> None
AMBW-47153	<b>Summary:</b> Monitoring-related error occurs in <code>bwagent console\logs</code> after enabling process monitoring and running the agent in DEBUG Mode. <b>Workaround:</b> None



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 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>

Key	Description
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> <p><b>Workaround:</b> Use FTL transport for process monitoring.</p>
AMBW-32594	<p><b>Summary:</b> On the Process Monitoring page, the Datetime value in the MM/DD/YYYY format for filtering jobs does not work.</p> <p><b>Workaround:</b> Use the datetime value as displayed in the database</p>
AMBW-32071	<p><b>Summary:</b> Failed to Upload Large EAR file larger than 10MB with MariaDB.</p> <p><b>Workaround:</b> Use any other database.</p>
AMBW-32057	<p><b>Summary:</b> Agent Count is getting increased for AppSpace after restoring Domain.</p> <p><b>Workaround:</b> None</p>
AMBW-31832	<p><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.</p> <p><b>Workaround:</b> None</p>
AMBW-31831	<p><b>Summary:</b> In Process Monitoring, sometimes, because of uid issue references are not highlighted and input or output data might not displayed.</p> <p><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.</p>

Key	Description
AMBW-31600	<p><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.</p> <p><b>Workaround:</b> None</p>
AMBW-31493	<p><b>Summary:</b> User is getting considered as Role in file based authorization.</p> <p><b>Workaround:</b> None</p>
AMBW-30759	<p><b>Summary:</b> Failed to get AppNode Config.ini file's property details by REST API.</p> <p><b>Workaround:</b> None</p>
AMBW-30398	<p><b>Summary:</b> Unable to register BWAgent from the command line on some 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>

Key	Description
	<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.
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™ 6x.</p>
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-46861	<p><b>Summary:</b> When invoking a REST service created with a Swagger file having an "array" tag under the Components/Schemas section, the "array" tag is not reflected in the runtime Swagger file.</p> <p><b>Workaround:</b> Add the "array" tag in the generated runtime Swagger file manually</p>

Key	Description
	if you need to create a REST service/reference binding.
AMBW-46806	<p><b>Summary:</b> Accept header value for Fault response is not honored in Swagger UI when the OAS 3.0 REST service configured with multiple response formats is hit.</p> <p><b>Workaround:</b> Use Postman Client to hit the service and pass the Accept Header according to the expected response content-type.</p>
AMBW-46721	<p><b>Summary:</b> When creating a top-down REST service with an OAS 3.0 JSON file having response header parameters and multiple response formats, the parameters are not reflected in the service binding.</p> <p><b>Workaround:</b> None</p>
AMBW-46663	<p><b>Summary:</b> If an OAS 3.0 REST service is created using a JSON file having anyOf/oneOf keywords with one of the schema referred with "\$ref" and another sub-schema as "inline", then the inline schema is not reflected in the Reply activity.</p> <p><b>Workaround:</b> None</p>
AMBW-46607	<p><b>Summary:</b> If an OAS 3.0 REST service is created using a Swagger file having inline schema with "oneOf/anyOf" or nesting with "allOf", then the schema elements are not resolved in the Input tab of the Reply activity.</p> <p><b>Workaround:</b> None</p>
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> <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>

Key	Description
	<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-44739	<p><b>Summary:</b> The description provided for form parameters on REST 3.0 service binding is not reflected on the reference binding as well as on top-down service binding's Form Parameters table.</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>

Key	Description
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> <p>This workaround is not applicable for the Binary Response format.</p>
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>

Key	Description
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-32760	<p><b>Summary:</b> On creating SOAP Reference Binding with the concrete WSDL generated at run time with multilevel schema imports, the java.lang.NullPointerException is displayed when clicking the reference binding.</p> <p><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 http://schemas.xmlsoap.org/soap/encoding/ 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-	<p><b>Summary:</b> When the WSDL uses multiple parts in the Request body of an</p>



Key	Description
23104	operation, a design time validation error occurs on the generated SOAP reference binding. The application works fine at run time.  <b>Workaround:</b> None
AMBW-13607	<b>Summary:</b> REST Doc UI is not supported on Firefox browser. <b>Workaround:</b> Use other browsers for the Doc UI.
AMBW-13572	<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. <b>Workaround:</b> Check the raw message that contains the correct error code.
AMBW-13485	<b>Summary:</b> REST Doc UI does not support browsers like Internet Explorer. <b>Workaround:</b> Use Chrome browsers for the Doc UI.
AMBW-8982	<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. <b>Workaround:</b> None

## General

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

Key	Description
AMBW-49418	<b>Summary:</b> An error "Connection to the derby db failed" is thrown when the old workspace is opened i.e. the workspace created prior to ActiveMatrix BusinessWorks 6.10.0 containing the SmartMapper project that uses the Remoted DB feature with the provided DD driver URL.  <b>Workaround:</b> To proceed further, in the error popup, click OK and in the Preference tab, change the DB details to the native driver URL. Then restart TIBCO Business Studio for BusinessWorks.

Key	Description
AMBW-49366	<p><b>Summary:</b> The generated mock output or gold input file gets overwritten when two activities have the same name in the application.</p> <p><b>Workaround:</b> None</p>
AMBW-48925	<p><b>Summary:</b> When a module property is directly mapped to an activity input without creating a process property, the mapping line is not seen.</p> <p><b>Workaround:</b> None</p>
AMBW-48217	<p><b>Summary:</b> When the shared resource takes time to connect to the Database or Server, intermittently an error "Init module failed for module" is thrown at runtime even though the values provided in the shared resource are correct.</p> <p><b>Workaround:</b> Introduce a sleep or re-run the application manually using startcomp OSGI commands.</p>
AMBW-47025	<p><b>Summary:</b> After creating the Maven test file, if the user renames the TIBCO ActiveMatrix BusinessWorks™ Process name, the change is not reflected. The user cannot test run the same.</p> <p><b>Workaround:</b> Re-create the test file after renaming the process.</p>
AMBW-46231	<p><b>Summary:</b> When two properties from two different modules having a common name are promoted, only one property gets promoted and seen under the application.</p> <p><b>Workaround:</b> Keep each property name unique before promoting in a batch.</p>
BWCE-5076	<p><b>Summary:</b> For RHEL 9.x, the check box selection for any BusinessWorks activity is not visible.</p> <p><b>Workaround:</b> None</p>
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</p>

Key	Description
	for BusinessWorks then restart it.
AMBW-43862	<p><b>Summary:</b> EMF Validation does not work for imported existing projects by using Module Property to Keystore URL.</p> <p><b>Workaround:</b> Reassigning the same module property resolves the validation error.</p>
AMBW-43860	<p><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.</p> <p><b>Workaround:</b> None</p>
AMBW-43779	<p><b>Summary:</b> Unit testing does not start when a connection is not successful for the HTTP Receiver being mocked.</p> <p><b>Workaround:</b> None</p>
AMBW-43743	<p><b>Summary:</b> Unit testing framework does not support Java palette activities.</p> <p><b>Workaround:</b> None.</p>
AMBW-43118	<p><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.</p> <p><b>Workaround:</b> Use Runtime swagger file to create the service.</p>
AMBW-42385	<p><b>Summary:</b> You can't launch TIBCO Business Studio for BusinessWorks after adding it into Dock in MAC OS.</p> <p><b>Workaround:</b> None.</p>
AMBW-42174	<p><b>Summary:</b> Customization of template for an unencrypted project template fails.</p> <p><b>Workaround:</b> Import the template directly in TIBCO Business Studio for BusinessWorks and rename it as per your requirement.</p>
AMBW-42046	<p><b>Summary:</b> Encryption Setting Window shows no editable fields when opened by clicking on the Lock Icon if TIBCO Business Studio™ for BusinessWorks™ is not in</p>

Key	Description
	<p>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 <code>-clean</code> does not work with TIBCO_</p> <p>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 o --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 collectapppnodedata 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 <code>\$DataGen/group/bool2 != "false"</code>, 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</p>

Key	Description
	reference. <b>Workaround:</b> Instead of an external reference binding, use binding reference.
AMBW-28264	<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. <b>Workaround:</b> None
AMBW-27253	<b>Summary:</b> The <b>Identity Provider</b> field in the <b>WSS Consumer</b> policy resource does not support module properties. <b>Workaround:</b> None
AMBW-25219	<b>Summary:</b> Multiple <b>End</b> activities use the same variable in TIBCO ActiveMatrix BusinessWorks™. <b>Workaround:</b> None
AMBW-25073	<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. <b>Workaround:</b> Specify the server configuration details as literal value or module properties.
AMBW-24508	<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. <b>Workaround:</b> None
AMBW-19746	<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. <b>Workaround:</b> Enforce the default encoding of AppNode JVM to UTF-8 by adding - Dfile.encoding=UTF-8 in the bwappnode.tra file.
AMBW-19540	<b>Summary:</b> When a project contain abstract and concrete WSDL using same target namespace, a validation error is generated.

Key	Description
	<b>Workaround:</b> None
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</b> &gt; <b>Switch</b></p>

Key	Description
	<b>Workspace.</b>
	<b>Workaround:</b> Retry by switching the workspace.

## 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 <code>\$Map-Data/ConditionType[last()]</code> 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</p>

Key	Description
	<p>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 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>

Key	Description
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-30476	<p><b>Summary:</b> After migration, the input mapping for the <b>End</b> activity which refers to 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</p>

Key	Description
	<p>BusinessWorks.</p> <p><b>Workaround:</b> SOAP functionality in ActiveMatrix BusinessWorks 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 and process the headers as context data. You can do this manually to complete the migrated project.</p>

## Palette

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

Palette HTTP	
Key	Description
AMBW-48345	<p><b>Summary:</b> If multiple applications are deployed on TEA in a single appnode, the Smart Engine report for "Acceptor Thread Trigger" is not generated for all the applications. It gets generated only for the application which is invoked first.</p> <p><b>Workaround:</b> None</p>
AMBW-46027	<p><b>Summary:</b> ActiveMatrix BusinessWorks does not throw an exception for the invalid HTTP header value sent by the HTTP service.</p> <p><b>Workaround:</b> None</p>
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>



### Palette HTTP

Key	Description
	<b>Workaround:</b> None
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>

JDBC Palette	
Key	Description
	<b>Workaround:</b> Use native drivers.
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, <code>JDBCConnectionNotFoundException</code> 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>
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>

### Mail Palette

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

## XML Palette

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

# 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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Documentation for TIBCO products is available on the [Product Documentation website](#), mainly in HTML and PDF formats.

The [Product Documentation website](#) is updated frequently and is more current than any other documentation included with the product.

## Product-Specific Documentation

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

- *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*
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- *TIBCO ActiveMatrix BusinessWorks™ Refactoring Best Practices*
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