

# TIBCO Business Studio™

## Release Notes

*Software Release 3.6.0  
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# Preface

## Topics

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- [Typographical Conventions, page vi](#)
- [Connecting with TIBCO Resources, page viii](#)

## Typographical Conventions

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The following typographical conventions are used in this manual.

Table 1 General Typographical Conventions

Convention	Use
<i>TIBCO_HOME</i> <i>STUDIO_HOME</i>	<p>Many TIBCO products must be installed within the same home directory. This directory is referenced in documentation as <i>TIBCO_HOME</i>. The default value of <i>TIBCO_HOME</i> depends on the operating system. For example, on Windows 7 systems, the default value is C:\Program Files (x86)\tibco</p> <p>TIBCO Business Studio installs into a directory within <i>&lt;TIBCO_HOME&gt;</i>. This directory is referenced in documentation as <i>STUDIO_HOME</i>. The default value of <i>STUDIO_HOME</i> depends on the operating system. For example on Windows 7 systems, the default value is C:\Program Files (x86)\TIBCO\studio-bpm-35.</p>
code font	<p>Code font identifies commands, code examples, filenames, pathnames, and output displayed in a command window. For example:</p> <p>Use MyCommand to start the foo process.</p>
<b>bold code font</b>	<p>Bold code font is used in the following ways:</p> <ul style="list-style-type: none"> <li>• In procedures, to indicate what a user types. For example: Type <b>admin</b>.</li> <li>• In large code samples, to indicate the parts of the sample that are of particular interest.</li> <li>• In command syntax, to indicate the default parameter for a command. For example, if no parameter is specified, MyCommand is enabled: MyCommand [<b>enable</b>   disable]</li> </ul>
<i>italic font</i>	<p>Italic font is used in the following ways:</p> <ul style="list-style-type: none"> <li>• To indicate a document title. For example: See <i>TIBCO ActiveMatrix BusinessWorks Concepts</i>.</li> <li>• To introduce new terms For example: A portal page may contain several portlets. <i>Portlets</i> are mini-applications that run in a portal.</li> <li>• To indicate a variable in a command or code syntax that you must replace. For example: MyCommand <i>PathName</i></li> </ul>

Table 1 General Typographical Conventions (Cont'd)

Convention	Use
Key combinations	<p>Key name separated by a plus sign indicate keys pressed simultaneously. For example: Ctrl+C.</p> <p>Key names separated by a comma and space indicate keys pressed one after the other. For example: Esc, Ctrl+Q.</p>
	<p>The note icon indicates information that is of special interest or importance, for example, an additional action required only in certain circumstances.</p>
	<p>The tip icon indicates an idea that could be useful, for example, a way to apply the information provided in the current section to achieve a specific result.</p>
	<p>The warning icon indicates the potential for a damaging situation, for example, data loss or corruption if certain steps are taken or not taken.</p>

## Connecting with TIBCO Resources

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### How to Join TIBCOmmunity

TIBCOmmunity is an online destination for TIBCO customers, partners, and resident experts. It is a place to share and access the collective experience of the TIBCO community. TIBCOmmunity offers forums, blogs, and access to a variety of resources. To register, go to <http://www.tibcommunity.com>.

### How to Access TIBCO Documentation

You can access TIBCO documentation here:

<http://docs.tibco.com>

### How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, contact TIBCO Support as follows:

- For an overview of TIBCO Support, and information about getting started with TIBCO Support, visit this site:

<http://www.tibco.com/services/support>

- If you already have a valid maintenance or support contract, visit this site:

<https://support.tibco.com>

Entry to this site requires a user name and password. If you do not have a user name, you can request one.

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Check the TIBCO Product Support web site at <http://support.tibco.com> for product information that was not available at release time. Entry to this site requires a username and password. If you do not have a username, you can request one. You must have a valid maintenance or support contract to use this site.

## Topics

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- [New Features, page 2](#)
- [Changes of Functionality, page 5](#)
- [Deprecated and Removed Features, page 12](#)
- [Migration and Compatibility, page 14](#)
- [Closed Issues, page 16](#)
- [Known Issues, page 44](#)

## New Features

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This section lists features added at Release 3.6.0.

- [TIBCO Business Studio](#)
- [TIBCO Forms](#)
- [Process Manager](#)
- [Platform](#)

### TIBCO Business Studio

TIBCO Business Studio allows you to take advantage of the new features which have been introduced in TIBCO ActiveMatrix BPM Version 2.2.0.

#### Support for Apple MAC OS X Platform

Support is provided for TIBCO Business Studio on the Apple MAC OS X platform. See *TIBCO Business Studio Installation Guide*.

#### Support for Eclipse 3.7 (Indigo)

Support for Eclipse 3.7 (Indigo) is added in this release. This means that some Properties tabs have changed. **Advanced** Properties tabs are now renamed **Resource**; existing **Resource** tabs are renamed **Work Resource**. See "Reference" in the *TIBCO Business Studio Modeling Guide*.

#### Ability to Reschedule Timer Events

You can reschedule the timeouts of timer-events on user-tasks (including the work item deadline). This can be achieved by selecting timers to reschedule from a non-cancelling signal event on the same user task. See "Working with Events " in the *TIBCO Business Studio Modeling Guide*.

#### Creation of Business Services Available for Event Handlers

You can now generate a business service for inbound catch intermediate and receive tasks in the same way that you already can for message start events. See "Working with Events " in the *TIBCO Business Studio Modeling Guide*.

## Openspace Gadget Development Project

The new Openspace gadget project development feature and plugin has been added to TIBCO Business Studio installation. See *TIBCO Business Studio Installation Guide*.

Openspace Gadget Development feature enables following

- Users can develop openspace Gadgets using the BPM Web Client framework in GWT environment.
- Users can compile the gadgets using GWT framework and deploy the gadgets into BPM that makes the gadget spec available through a URL
- In Openspace users can use the URL to contribute the gadget.

## Scripted Deployment

TIBCO Business Studio enables you to create deployment scripts. You can assign one or more existing deployable resources to a deployment project, and then use that project to produce build and deployment Apache Ant™ scripts that can be used to deploy multiple studio projects of a product from the command-line. This process makes it easy to repeatedly deploy the same set of projects during development and testing, or to deploy a set of projects to multiple BPM servers in a production environment. See "Scripted Deployment" in *TIBCO ActiveMatrix BPM - BPM Deployment*.

## Mixed Construct for XSD and WSDL Files

Added support for the "mixed" construct for both XSD and WSDL files when importing into TIBCO Business Studio and running in TIBCO ActiveMatrix BPM. See *TIBCO Business Studio Modeling Guide*.

## Allow XSD Imports/Includes from http Location

Imports and includes are now allowed from a http location - for example:

```
xs:include
schemaLocation="http://myServer22.com:8080/SharedResources/Schemas/Container/Public/MessageHeader.xsd"/.
```

See *TIBCO Business Studio Modeling Guide*.

## Service API Change / Application Upgrade

A comparison tool now checks the compatibility of a service (and thus the feasibility of an application upgrade). It allows changes to the WSDL where it would not cause process instance upgrade compatibility issues. See "WSDL Change Considerations for Application Upgrade" in *TIBCO Business Studio BPM Implementation Guide*.

## User Interface Enhancements

You can drag and drop a BOM entity onto a User task or process diagram background (and underneath create a data field in the process). This provides similar functionality to that previously only available for process data and the organization model data. See *TIBCO Business Studio Modeling Guide*.

## TIBCO Forms

### Dynamic Validation of Forms

TIBCO Forms now supports substitution variables in validation messages; for example, "{0} is not a valid value, must be between {1} and {2}". In addition, messages may be configured as keys referencing display strings in external resource bundles.

For more information, see the *Validating Data in a Form* section in the *Tasks* chapter of *TIBCO Business Studio Forms User's Guide*.

### Forms Entry and Validation Enhancements

TIBCO Forms now supports:

- API access to messages in the messages pane. This helps you add and edit your own messages.

For more information, see the *Reference* chapter of *TIBCO Business Studio Forms User's Guide*.

- Validating input in a grid pane without losing focus on the cell.
- Clickable validation messages that set the focus on the control responsible for the validation error.

For more information, see the *Validating Data in a Form* section in the *Tasks* chapter of *TIBCO Business Studio Forms User's Guide*.

### Resource Bundles

It is now possible to add support for new languages to TIBCO Forms, independent of a TIBCO Forms release, by adding a resource bundle. This:

- Enables a new language for the common resource bundle to be deployed.
- Enables you to override values of the keys in the built-in common resource bundle, allowing you to override the standard messages provided by TIBCO. You can also add custom key-value pairs to the common resource bundle.

For more information, see the *Customizing Property Resource Bundles* section in the *Tasks* chapter, and the *Common Resource Keys* section in the *Reference* chapter of *TIBCO Business Studio Forms User's Guide*.

## New Forms APIs

In this release, there are new APIs as follows:

- New utility methods that can be used in validations
- A logging API that can be used in custom clients
- An API that provides additional functionality in programmatically setting the focus on controls in grid panes
- APIs that can dynamically add custom messages to message panes
- A method that returns the base URL to the Presentation Resources folder of the project, in which the custom control is defined.

For more information, see the *Reference* chapter of *TIBCO Business Studio Forms User's Guide*.

## Process Manager

### Performance

A change to the way that the BPM Process Engine extracts data improves its performance in task scheduling.

## Platform

### Management of Older Hosts and Nodes

ActiveMatrix Administrator supports full compatibility with hosts and nodes on prior versions of ActiveMatrix (3.1.5 and higher). In other words, ActiveMatrix Administrator server in this version can manage ActiveMatrix runtime hosts and nodes of versions 3.1.5, 3.2.0 and 3.3.0, including the creation of new nodes of a specific older version. This means there are no longer restrictions on partially upgrading of your existing ActiveMatrix enterprise. After upgrading the ActiveMatrix Administrator servers to the latest version, you can now make the choice to upgrade the rest of your enterprise gradually in a phased manner, or to retain your existing nodes and applications without upgrading at all.

The ability to partially upgrade an enterprise aligns itself well with the use-cases for

multi-tenancy, also described next.

## Multi-tenancy

Multi-tenancy support enables serving multiple client-organizations (tenants) with a single instance of the TIBCO ActiveMatrix.

### Isolation of Hosts

A registered TIBCO Host can now be restricted for visibility to specific Environments. ActiveMatrix Administrator now provides a way to associate a Host to specific Environments. When a Host is associated with an Environment it becomes visible to that Environment while creating new nodes. Otherwise it remains hidden, disallowing new nodes from being created on that Host.

Multi-tenant systems need good isolation across tenants, and the Host-Environment association can be used to restrict your enterprise assets based on the tenant's Environment.

### Resource Template Scoping

In a similar way to substitution variable scoping, Resource Templates can now be created at 3 scopes - global (enterprise-wide), environment or an application. Resource templates are configurations meant for sharing. By creating them at an appropriate scope, you can restrict their visibility and provide isolation across Environments, which is a requirement for a multi-tenant system.

Here is how scopes for Resource Templates work:

- Global resource templates - visible across all Environments for the purpose of creating resource instances, promoting the widest sharing.
- Environment scoped resource templates - visible only within an Environment, but sharable across applications in that Environment.
- Application-scoped resource templates - have special behavior that resource instances are automatically created when the application is deployed to nodes, and automatically uninstalled when the application is undeployed from nodes. The resource templates are closely tied to the lifecycle of the application itself. These do allow sharing across applications, with some restrictions.

## SOAP

### W3C SOAP/JMS

TIBCO Business Studio and TIBCO ActiveMatrix Administrator provide the option to choose between TIBCO's SOAP/JMS and W3C SOAP/JMS on SOAP binding type and a target service while adding a binding to a service.

The W3C SOAP/JMS Specification is available at: <http://www.w3.org/TR/soapjms/>

### MTOM (Message Transmission Optimization Mechanism)

MTOM (Message Transmission Optimization Mechanism) is now supported on the SOAP Binding. This can be used to send or receive binary data as attachments.

The MTOM Specification is available at: <http://www.w3.org/TR/soap12-mtom/>

### Multiple Correlation Schemes for SOAP/JMS

SOAP Binding Type now supports multiples Correlation Schemes for SOAP/JMS service and reference binding. The supported correlation schemes are:

- MessageID-to-CorrelationID (Send a request message and create a message listener with message ID as the selector which is the default behavior)
- CorrelationID-to-CorrelationID (Create a correlation ID for the request message and create a message listener with this correlation ID as the selector)
- Infer-from-Request (applicable only to the service side)

### Overriding SOAP Reference URI

An endpoint URI is the URL of an external service that is accessed by a business service. Support is available for changing the endpoint URI for SOAP-HTTP reference from the Administrator UI and using command-line.

### TIBCO Hawk ActiveMatrix Plug-in

TIBCO Hawk ActiveMatrix Plug-in is now embedded in TIBCO ActiveMatrix. Separate installation is not required. See the *TIBCO Hawk ActiveMatrix Plug-in User's Guide* for more information about configuring and using this plug-in.

The plug-in now supports Hawk 5.0 in addition to Hawk 4.9.

## HTTP

- Support for HTTP Proxy on the Composite Reference is provided.

- HTTP and SOCKS V4/V5 proxies can now be configured for HTTP Client Resource Templates.

## Single Sign-On

Single Sign-on functionality is now supported for SiteMinder and IWA (Integrated Windows Authentication) using Kerberos. This includes SSO support for WebApps, PaaS services, RESTful services, and the Java Connector API.

## WebApp Implementation Type

- SSO is supported for WebApps hosted on WebApp IT that use SAML, SiteMinder, and Kerberos/SPNEGO tokens.
- WebApps can now be configured with web.xml to create OSGi Plug-ins.
- Thread context class loading (TCCL) is now supported for OSGi-based Web Apps.

## Miscellaneous

- Virtualization queues created by user applications are now cleaned up when the applications are deleted.
- The creation and execution of scripts to build and deploy DAAs is now supported.
- Java 7 is now supported.

## Mediation

- Support for Intents
- AutoMediate Tool – Support added for ANT tasks.
- Custom XPath functions – Support for creating custom XPath functions.
- Improved wizards for creating custom mediation tasks.
- Mediation Fault Path – Includes a timeout fault that catches any timeouts encountered while executing the target operation.
- gXML: a Java API for the XQuery Data Model (XDM) and eXtensible Markup Language (XML) Processing. gXML provides a cohesive suite of XML processors including XPath, XSLT, and XQuery.
- Support for multiple message exchange patterns.
- Manage Context – Access security and context information directly within mediation flows.

## SOA Developer Studio

- Composite implementation type – reuse components in ActiveMatrix composites
- Composite debugger
- Declarative policy intents
- QOS intents
  - At least once
  - At most once
  - Transacted one way
- Logical distribution editor
- Fully scriptable composite creation including create and import projects, create and distribute DAAs

## Web Application

The Web application component integrates Java EE web applications into the TIBCO ActiveMatrix platform. The integration conforms to the SCA Java EE Integration Specification

([http://www.osoa.org/download/attachments/35/SCA\\_JAVAEE\\_Integration\\_V100.pdf?version=1](http://www.osoa.org/download/attachments/35/SCA_JAVAEE_Integration_V100.pdf?version=1)).

- The web application component supports the Java Servlet 2.5 Specification (<http://jcp.org/aboutJava/communityprocess/mrel/jsr154/index2.html>).
- Support for top-down implementation - Start with a WSDL and generate a web application component implementation
- Support for bottom-up implementation - leverage an existing web application as a component. The existing web application could be a WAR (Web ARchive) file, WTP (Web Tools Platform) Project, or an OSGi-fied web application
- Support for properties
- Invoking a reference operation

## Changes of Functionality

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### TIBCO Business Studio

#### **tbs.importProject** Task

When you deploy a project, you can use the new **tbs.importProject** task (replacing the **sds.importProject** task used previously). This supports the importing of TIBCO Business Studio projects from archives (.zip, .tar, .tar.gz) and project folder structures, in the same way as the 'Existing Studio Projects into Workspace' wizard. This provides a more stable import that automatically migrates projects from previous TIBCO Business Studio versions and in the correct order which can prevent initial build issues.

### TIBCO Forms

- Relative bindings are now replaced with absolute ancestor pane value bindings. With this change, it is now easier to move form elements within the form. The drag and drop functionality also has been improved to handle such drops intelligently.
- A new button is now added to the Business Studio main toolbar that copies the preview URL of the displayed form. Clicking the button copies the URL to the system clipboard, from where it can be later pasted into the address bar of a browser to view the form.
- It is now possible to render a read-only view of form data. For more details, see the *API for Scripting* section in *TIBCO Business Studio Forms User's Guide*.

### Process Manager

#### **System Actions**

New system actions have been introduced in order to protect the ProcessManagerService API operations that make bulk changes to process instances. The following new system actions are available:

System Action	Operation
bulkCancelProcessInstances	cancelProcessInstances
bulkResumeProcessInstances	resumeProcessInstances
bulkSuspendProcessInstances	suspendProcessInstances

See the *TIBCO ActiveMatrix BPM Developer's Guide* for details.

## Platform

- On some operating system platforms, you must download Oracle Java 7 Elliptic Curve Cryptography (ECC) LGPL separately. Oracle ships the SunEC (an ECC implementation) library as part of JRE 7. The SunEC library is covered by a different license (LGPL). Install this library to take advantage of ECC. The TIBCO Universal Installer automatically downloads the library for you from [download.tibco.com](http://download.tibco.com) during installation.

If you do not wish to use the Elliptic Curve Cryptography library, you may delete the library named `libsunec.so` (on Solaris and Linux systems) or `sunec.dll` (on Windows systems) or `libsunec.dylib` (on MacOS) from the TIBCOJRE bin directory reserved for native libraries.

Note: IBM's implementation of Java 7 includes ECC, but ECC does not fall under a separate license as it does in Oracle's implementation.

- As of 3.2.0, the internal HTTP load balancer is no longer required when replicating TIBCO ActiveMatrix Administrator servers.

## Deprecated and Removed Features

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This section describes deprecated features (if any), and lists features, if relevant, that may be useful alternatives to the deprecated features. **Any use of a deprecated feature should be discontinued as it may be removed in a future release.** You should avoid becoming dependent on deprecated features and become familiar with the suggested alternative features.

This section also lists features that are removed (if any).

### TIBCO Business Studio

#### Deprecated Features

The following features are deprecated in this release.

##### Process Interface Message Event

The process interface message event feature is now deprecated.

Using process interface message events might be used to define a 'common web service interface' that is re-usable by several processes, but there are various restrictions related to multiple processes presenting the same web service operations as their 'API'. You can use a user defined WSDL to achieve the same thing.

#### Removed Features

The following features are removed in this release.

The TIBCO General Interface (GI) Channel has been removed from Forms.

### SOA Platform

- Support for the following platforms is deprecated:
  - Solaris (32-bit)
  - SPARC (32-bit)

- The following are no longer supported:
  - Oracle Solaris 9
  - Windows Server 2003
  - Windows Vista
  - IBM AIX 5.3
  - Java 6
- TIBCO Enterprise Message Service™ 5.1.5 is not supported for use with TIBCO ActiveMatrix version 3.3.0.
- In TIBCO ActiveMatrix Administrator, the **Infrastructure > Enterprise Graphical** view has been deprecated due to limited use cases and its dependency on Microsoft Silverlight. The view will be removed in future releases.

## Migration and Compatibility

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### TIBCO Business Studio

Projects are automatically migrated when you use the **Import > Existing Studio Projects into Workspace** option.

It is possible that projects you do not import may not be migrated automatically. See the Problems marker on the Problems view for more information.

You can migrate projects created in a previous version of the product with a single action: right-click on the Problems marker on the Problems view and use **Quickfix**. See the *TIBCO Business Studio Process Modeling Guide* for more information.

### TIBCO Business Studio Forms

Forms are automatically migrated to a new format version (2.5.0), in which all relative bindings have been replaced by their equivalent ancestor pane value binding. The migration also sets an explicit pane value data type on those ancestor panes. This migration is done to avoid the appearance of problem markers on such bindings, which have a negative impact on the performance of Form Designer (especially the Mappings tab).

For information about migrating forms created in previous version, see *TIBCO Business Studio Forms User's Guide*.

### Platform

You must reboot the server before installing ActiveMatrix version 3.3.0 on an AIX platform if you have launched TIBCO Configuration Tool immediately before installation of release 3.3.0.

### TIBCO Business Studio

- Projects created using TIBCO Business Studio-ActiveMatrix version 3.x can be opened in TIBCO Business Studio-ActiveMatrix version 3.3.0. You can deploy applications (DAAs) developed in TIBCO Business Studio-ActiveMatrix versions 3.0.x and 3.1.x to nodes in the 3.2.0 environment.

Projects created using TIBCO Business Studio-ActiveMatrix version 2.x.x can be imported into TIBCO Business Studio-ActiveMatrix version 3.3.0 and migrated to 3.3.0 format. For information on how to migrate projects, see *Composite*

### *Development.*

Refer *Installation and Configuration* for information on upgrading from an earlier version.

- ActiveMatrix projects created in versions prior to 3.2.0 that use Java, Spring or WebApp components encounter an Null Pointer Exception (NPE) dialog when imported into any ActiveMatrix version running on JRE 1.7 or later. This is caused by the incompatibility of JRE 1.7 with the JAR format of the DataBinding JARs generated by ActiveMatrix versions prior to 3.3.0. This may happen if you have upgraded to JRE 1.7 or installed an ActiveMatrix version that includes JRE 1.7, such as version 3.3.0.

To avoid this issue:

1. Open the **Problems** view.
2. Look for instances of the following error message: JAR file incompatible with JRE/JDK 1.7 due to containing entries with empty name. One such message is generated for each offending JAR file.
3. Right-click on one of these messages and select a quick fix to apply. There are three quick fixes available (all three back up old JARs):

**Fix JAR for JRE/JDK 1.7 compatibility**—This option fixes only the selected JAR (that is, the JAR you clicked to apply the quick fix).

**Fix all library JARs in project for JRE/JDK 1.7 compatibility**—This option fixes all of the offending JARs in the same project as the selected JAR (that is, the JAR you clicked to apply the quick fix).

**Fix all library JARs in workspace for JRE/JDK 1.7 compatibility**—This option fixes all of the offending JARs in the workspace.

## Closed Issues

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The section lists issues that were closed in this release.

- [TIBCO Business Studio](#)
- [TIBCO Business Studio Forms](#)
- [Process Manager](#)
- [Platform](#)

## TIBCO Business Studio

### TIBCO Business Studio

#### Issues Closed in 3.6.0

Key	Summary
SCF-151 (1-F0D4YF)	Duplicate Resource name between Generated Services and Service Descriptors folder gives a validation error that does not indicate the problem, also has no quick fix to suit the problem.
XPD-5307	DAA generation fails if a BOM class attribute has the same name suffixed with "Type" as another attribute in the same class (e.g. "attr" and "attrType" attributes in same class).
XPD-5260 (1-F39RH5)	Elements (with a hyphen in their name) that contain anonymous simple types cause BDSGeneration to fail.
XPD-5175	Unable to deploy organization model or user application from TIBCO Business Studio to a second BPM Environment.
XPD-5163 (1-EZGFM9)	Need validation error for OR gateway merge with downstream incoming sequence flow.
XPD-5138 (1-EYN6HL)	BOM generation from WSDLs to BOM is unable to deal with an attribute in a complex type that refers to a simple type in a different package that has same name as the complex type.
XPD-5089 (1-EI27EL)	Script validation and content assist are broken when multi-valued complex children are modeled as in-line attributes.

Key	Summary
XPD-5068 (1-EY1107)	BPM JavaScript methods ScriptUtil.addWorkingTime() and ScriptUtil.removeWorkingTime() are available at design-time but not at run-time.
XPD-4970 (1-EUMSVL)	Out of Memory exception when a cyclic dependency exists lower down in the referenced xsds.
XPD-4956 (1-CXCFL3 1-CVGWR3 1-CMY8RX 1-DIRJ0F)	Support XSD imports of the form "..\x\y.xsd" (i.e. that have ../ in their imports), i.e. imports and include with paths relative to the importing wsdl/xsd.
XPD-4935 (1-ERBZSL)	On export DAA should ensure that the correct target platform is set in TIBCO Business Studio.
XPD-4922 (1-ET7LIK)	Errors logged by WSDL to BOM conversion are unhelpful.
XPD-4907 (1-ES8YSQ)	WSDL to BOM to XSD does not produce accurate result when top level element has anonymous complex type with reference to top-level-element of the same name as the other top level element and "Type".
XPD-4903 (1-ER0FEV)	ActiveMatrix BPM complex processes (with flows that are ultimately invalid for ActiveMatrix BPM deployment) can cause the flow-analyzer to take a very long time, which can in turn lock up the user interface.
XPD-4867 (1-ECT7WH)	Endpoint uri fails with errors on composite file when DAA is generated.
XPD-4845 (1-EQQATB)	TIBCO Business Studio XPDL file validation hangs when there is a participant with SOAP transport with spaces in the endpoint URL.
XPD-4772 (1-ENJ235)	Process interfaces are not ActiveMatrix BPM runtime artefacts and therefore there should be no need to have processes in same package in order to ensure there is a BPEL/composite component for the XPDL.
XPD-4731 (1-EYIZHJ)	Cannot access content assist list in the script task after using some operators (* and /) which could be used for calculation. Also TIBCO Business Studio hangs if by mistake you type double quotes and press <b>Ctrl+Space</b> for the content assist list.

Key	Summary
XPD-4675	<p>Validation for fault messages containing multiple parts should be generated on the WSDL prior to DAA generation.</p> <p>If you have WSDLs with SOAP doc-literal bindings (or generated WSDLs where process api participant indicates the same) and operations whose in/out/fault messages have multiple parts - then you will receive problem markers in the process and then again during export DAA.</p>
XPD-4564 (1-EI7WLT)	If a wsdl located under sub-folders under the service descriptors folder is referenced from a service task, it shows "Awaiting generation of business object model for operation parameters" in the mappings section.
XPD-4551 (1-EF4MUV)	Validation for an element followed by '##xsd any' with multiplicity unbounded is not working correctly.
XPD-4542	Creation of a BOM from a standard database import (via the import wizard) fails because a BOM is created but classes are not fully generated.
XPD-4538	Cannot change properties of a process-interface's formal parameter as it throws an exception.
XPD-4528 (1-EEP87N)	A quick fix is required for bi-directional association to change it to uni-directional composition as it creates problems with the uml model creating a mismatch between the diagram editor and properties sheet.
XPD-4521 (1-EEV7RS)	There is a problem when a sub-folder within a special folder that does not contain the file type expected that causes DAA generation to be unavailable.
XPD-4495	TIBCO Business Studio for Analysts: save of an MAA after deleting project(s) does not work.
XPD-4484 (1-ECT7WH)	There are issues with mixed HTTP and JMS bindings in generated WSDLs.
XPD-4356 (1-E9LOQR)	Complex type with same name as anonymous-type-top-level-element in other schema is incorrectly tagged as anonymous type (later causes StringOutOfBounds Exception when performing BOM2XSD transform).
XPD-4355	"No more handles" error leads to TIBCO Business Studio becoming unusable when a number of editors (more than 30) are opened.
XPD-4323 (1-E7QVIF)	Missing element anonymous complex type content in BOM to XSD copy of schema after Wsdl >BOM >XSD is performed.

Key	Summary
XPD-4242 (1-DWBZ19)	When importing a concrete JMS transport based WSDL file from a web service task the operation picker does not show the operations.
XPD-4284 (1-E55XP9)	Database task parameter creation does not create a result set BOM if there is no BOM special folder present.
XPD-4280 (1-E53Q99)	TIBCO Business Studio should provide validation to avoid the possibility of sub-folders in the process packages folder.
XPD-4275 (1-E5A3H7)	Cannot delete broken mappings for catch error event from mapper itself (this can only be done using quick fix).
XPD-4269 (1-E5AZL1)	Data fields unexpectedly become array types on conversion from a parameter after refactoring a user task to a sub-process and then converting its parameters to data fields.
XPD-4256 (1-E4HQJ1)	Hover text in the palette for end events is incorrect.
XPD-4076 (1-DXXNUB)	Validation rule required as we do not support intermediate cyclic timer events unless they are a boundary event to an activity
XPD-4014	An error sometimes occurs when updating the indexer pop-up with a batch update exception on project import.
XPD-3972 (1-DTKWX9)	TIBCO Business Studio does not correctly create WSDLs if using parameters in a process interface defined in another project.
XPD-3913	Occasionally, when loading TIBCO Business Studio with a new workspace, the labels and images relating to 'Process Templates' do not appear, either on the 'Select Template' page of the project creation wizard or under the 'Business Process Fragments' heading of the 'Fragments' view. The nodes for these templates will be visible but the corresponding labels will be blank and when selected the preview panel will display a "No Description" message.
XPD-3732 (1-DM4E7B 1-DP3E29)	WSDL to BOM import through wizard fails when WSDL contains cyclic dependency between imported schemas.
XPD-3102 (1-CMY8RX)	Allow XSD imports of the form <code>&lt;xs:include schemaLocation="http://myServer22.com:8080/SharedResources/Schemas/Container/Public/MessageHeader.xsd"/ &gt;</code> .

Key	Summary
XPD-2903	Sometimes when you click on <b>File &gt; Switch Workspace &gt;</b> submenus are displayed, but then you cannot select anything since no focus is available on submenus.
XPD-2849 (1-BX8OT1)	Additional Instances script has incorrect validation (for example, if you create a Multiple Instance User Task and set the "Additional Instances" script to a calculation, you get an incorrect error message).
XPD-2403 (1-BKFDWP)	Process Modeler: Database service task useability enhancements for Stored Procedure setting and SQL setting.
XPD-2307	At times the TIBCO Business Studio workspace can get locked during building of the workspace. There is an issue with JDIT's Java Model Manager which ends up in a deadlock when setting a class path during the build. See the Eclipse bug report for more details:  <a href="https://bugs.eclipse.org/bugs/show_bug.cgi?id=249930">https://bugs.eclipse.org/bugs/show_bug.cgi?id=249930</a>
XPD-2064 (1-DWL75D)	Access of Enumerations in a static way can create problems if there are two enumerations with same name in different packages..
XPD-2010	Once you have deployed a user application to the BPM runtime, the application can only be subsequently upgraded if its service interface (defined by the WSDLs used to expose its services) has not changed.  It is now possible to make some changes to BPM applications that affect the application's service interface(s) provided that these are upgrade-compatible with the existing deployed application. See "WSDL Change Considerations for Application Upgrade" in the <i>TIBCO Business Studio BPM Implementation Guide</i> .
XPD-589	Eclipse 3.4.2 is not compatible with Xulrunner 1.9 as reported by <a href="https://bugs.eclipse.org/bugs/show_bug.cgi?id=262929">https://bugs.eclipse.org/bugs/show_bug.cgi?id=262929</a> . Xulrunner is typically installed as part of the Firefox browser and v1.9 is used by Firefox v3.5 and above. The compatible versions of Xulrunner are shown here: <a href="http://www.eclipse.org/swt/faq.php#browserlinux">http://www.eclipse.org/swt/faq.php#browserlinux</a> .

## TIBCO Business Studio Forms

### Design-Time Issues Closed in Version 2.5.0

This section lists issues that were closed for TIBCO Business Studio Forms in this release.

Defect #	Summary/Workaround
FORM-6035	Large forms with many problem markers suffered severe performance problems when opening, editing and saving them in Form Designer.
FORM-6033	Forms not migrated during project import may require manual migration.
FORM-5944	A workspace preference was needed to govern the order of execution of rules of embedded forms.
FORM-5899	When a BOM class contained a multi-valued attribute with a user-defined primitive type, the JavaScript editor incorrectly treated the object as a List, instead of treating it as an Array, similar to other arrays of primitive values.
FORM-5796	The documentation for the <code>setVisible()</code> method for controls was not complete.
FORM-5735	When using the Google Chrome Frame Plugin with Microsoft Internet Explorer, the forms preview functionality in TIBCO Business Studio did not work if the plugin was enabled. Disabling the plugin was not reliably detected.
FORM-5730	It was possible to get false problem markers on a project due to duplicate BOM JavaScript created from BOM models generated from WSDLs. This occurred when editing WSDLs in the project after BOM models were originally generated from them.
FORM-5722	For custom controls that do not support the "focus" capability, it was still possible to invoke the <code>setFocus()</code> method on instances of that control type in form action scripts. A problem marker indicated that the control does not support the focus capability in this case.
FORM-5702	In some cases, problem markers did not accurately reflect the restricted panes set for custom controls.
FORM-5414	For panes marked for deferred rendering, the use of <code>pane.getControls()</code> , <code>pane.getPanes()</code> , <code>pane.getParent()</code> , and <code>control.getParent()</code> did not work as expected. The return value for these methods was either <code>null</code> or an empty array prior to the pane actually being rendered. There was no warning issued in the JavaScript editor when using these methods.

Defect #	Summary/Workaround
FORM-5196	The sample data JSON file was not correctly generated when BOMs were nested and class names were matching. An additional comma was generated for a reference to a class that had no attributes. This resulted in an exception when the form was viewed on Internet Explorer.
FORM-4914	StackOverflowException was thrown while editing classes defined in BOMs within two projects which had a cyclical dependency.
FORM-4743	Validation messages did not support substitution, and they were not dynamic.
FORM-4456	It was not easy to customize the values in the common resource bundle. Users had to copy the bundle to the <b>Presentation Resources</b> folder, specify the values that they needed to override. Then they had to remove the default common bundle, and add the new one on every single form. This did not work with default forms.

## Process Manager

### Issues Closed in Version 2.2.0

Key	Summary
BX-2966 (1-EFKTCB)	The Variables view does not show variables information when debugging a process.
BX-2964 (1-F6USD9)	Events following an Exclusive Event gateway do not appear properly in Event Collector.
BX-2886 (1-EX6M6F)	Process Management API : return a more informative error message for operationFailedFault reply.
BX-2881 (1-F081RP)	BPEL converter doesn't handle the local data fields for the embedded sub-process (except for the multi-instance loop)
BX-2852 (1-CSYBJH)	Got "...Unknown time format` error when trying to use DateTimeUtil.
BX-2832 (1-CXCFL3)	"...xsd resource does not exist" error is seen in the logs while generating a DAA.
BX-2825 (1-DG7B3B)	Special characters in the description field causing emptyBpel file generated error.

Key	Summary
BX-2820 (1-EUYNJL)	Enforce mandatory parameters for reusable sub-process task.
BX-2806 (1-ET7LRD)	Process does not terminate correctly in the presence of XOR Event Based Gateway (Pick) that gets skipped.
BX-2800 (1-EU3LUX)	Database Activity: Users should be able to call stored procedures in a Package.Procedure format and not just a Schema.Procedure.
BX-2794 (1-EFKTCB)	The process launcher cannot initialize Data Field inputs.
BX-2786 (1-ES5QCI)	If you use the "Reply Immediately With Process Id" feature, the engine may return an invalid process Id if the transaction commit fails.
BX-2781 (1-ESY4DD)	Return limits for listProcessInstances() should be documented.
BX-2766 (1-E856ML)	When process start activities do not have a name, Xpdl2Bpel needs to generate a unique name.
BX-2764 (1-EJGZ1H)	Need to defend against Javascript keywords in WSDL.
BX-2762 (1-EQY09D)	WSDL has a Xpath correlation property query that has an invalid prefix "ns1".
BX-2759 (1-EQRATF 1-E0FBJQ 1-EPND8D)	Deployment optimization to handle the transaction timeouts caused by Hibernate.
BX-2750 (1-EPTWIX)	The Terminate event does not properly cancel immediate start sub-processes.
BX-2748 (1-ENJ2AD)	Process Manager listProcessInstanceAttributes response time needs improvement.
BX-2739 (1-CVGWS5)	When a schema instance xsi:schemaLocation refers to a xsd is used in a WSDL, that xsd is not copied in the .processOut folder when the DAA is generated.
BX-2727 (1-E00OUB)	Sometimes the debugger cannot get the process template from runtime, leading to an error.

Key	Summary
BX-2720 (1-ENO785)	Process control flow could not be successfully analyzed.
BX-2704 (1-EJQKAK)	CorrelationSet in BPEL is missing the property namespace prefix when multiple processes share the same correlation property name.
BX-2685 (1-EJW925)	Timer event with a constant period of microseconds fails.
BX-2680 (1-EIR6DN)	A catch event (for example, timer or message) on the boundary of another task (Service task, Embedded Subprocess, etc) resulting in a concurrency condition which results in multiple paths being followed incorrectly.
BX-2666 (1-EB94C7)	Sort order for process management query is incorrect.
BX-2653 (1-EI38YT)	For stored procedures, not able to pass the correct value of a parameter whose type is INOUT.
BX-2645 (1-EH1V3F)	Process migration hangs when trying to migrate a process that has nested sibling tasks.
BX-2633 (1-EFRDO3 1-EHQ0QN)	For the pageflow engine, BDS/BOM complex objects need to be serialized for parameters mapped from the parent process to sub-process to avoid issues with different versions of BOM classloaders in different projects.
BX-2625 (1-EFT4UT)	Unable to route back in progress error process flow could not be successfully analyzed.
BX-2584 (1-EAR2PN)	When there are multiple correlation fields of the same complex part, PropertyAlias were added to the WSDL in inconsistent order, causing "change in interface" error.
BX-2566 (1-E9XYRT)	Need to register the service agent with the service manager in case of a stop/start scenario
BX-2548 (1-DLB2EF 1-E2FTVP 1-E6UY2F 1-ED3L2N)	Enforce mandatory parameters.
BX-2540 (1-E2F9R9)	Set exitOnStandardFault="no" for the BPEL processes generated from TIBCO Business Studio BPM.

Key	Summary
BX-2539 (1-E93EPB 1-E0EUIF 1-E8Y63B 1-E45JCR)	BOM data field associated with error event in a sub-process causes deployment error.
BX-2526 (1-DZ9BKN)	Email task requires <HTML> tags around the contents in the body of the email.
BX-2421 (1-EB94C7)	If process queries are used with the "OR" operator and custom attributes they can return an incorrect or duplicate result set.
BX-2342 (1-DES6IR)	In the query using boolean operator, expecting space before closed paranthesis when passing input for queryProcessInstances API.
BX-2211 (SR 1-D8CL61) (SR 1-DK8PF5)	A temporary variable in an assignment with the same name as the WSDL message and part name causes an error during deployment.
BX-1877 (1-CBN7MV 1-ER6YV9)	Need to handle the passing of an array to a stored procedure.
PVM-475 (1-EDSBDR)	Request queue items not processed in FIFO fashion in certain conditions.
PVM-447 (1-EVY043)	Pageflow throws "java.lang.IllegalStateException: Since ids are not pre-resolved, parent >indicator should point to one of my ancestors, but doesn't."
PVM-429 (1-EMWCOH)	A suspended process that has any pending work items would continuously reschedule, increasing the size of the request queue table.
PVM-416 (1-EB94C7)	AQL pagination fails with ClassCastException "java.lang.String cannot be cast to java.lang.Number" for certain queries.
PVM-412 (1-EGWMCP)	Request Queue item cleanup is outpaced by queue buildup causing database space issues on Oracle.
PVM-395 (1-EFQG23)	Setting a BOM attribute with a non-alphabetic character in the second position in the name causes a problem with BPM Javascript tasks
PVM-383 (1-DWZI1C)	Order by query on PVM_INST_TASK causes high database usage.

## Platform

### Installer

Key	Summary
TOOL-1626	The <code>clean-up</code> target was not invoked while creating or replicating ActiveMatrix Administrator.
TOOL-1403	The <b>Edit TIBCO ActiveMatrix Administrator Server Configuration</b> screen of TIBCO Configuration Tool used the default JMX port number as 6051, instead of the actual configured port.
TOOL-1341	TIBCO configuration using the console mode now works correctly.
TOOL-1331	The test connection to the SSL enabled SQLServer2008 no longer fails when using a trust keystore file generated using the Create a Trust Store option in TIBCO Configuration Tool.
TOOL-920	There was no option in TIBCO Configuration Tool to specify Enterprise Message Service Connection Factory used for the Monitoring and Logging service.
TOOL-1337	When you run TIBCO Configuration Tool after installing the product in the same TIBCO_HOME of an earlier product installation, the <b>Select products to deploy</b> option no longer lists duplicate entries for the available product components (such as, Mediation IT). These entries do not include the version numbers.
AMRP-2775	Virtualization queues are created by Messaging Bus when components are deployed on node. These queue are shared between nodes when same component is distributed across them. During undeployment of the component, queues created are now removed.

### Documentation

Key	Summary
BJMS-1492	<p>The JMS Binding Reference section now includes the following note applicable for both Request and Reply messages:</p> <p>If Request or Reply message destination type is set to Queue or Topic and JMS Provider does not support dynamic queue or topic creation or the user of provider does not have create permissions, create a queue or topic before deploying the application.</p>

Key	Summary
BJMS-1491	<p>In the documentation &gt; JMS Binding Reference &gt; table "Configuration for Reply JMS message, applicable for In-Out MEP" &gt; Destination Type &gt; the description of the property now reads:</p> <p>The Type of JMS destination, Queue, Topic or JNDI. For direct destinations use Queue or Topic. For JNDI resource template, use JMS Destination Resource template.</p> <p>By default, destination type is 'Same as Request Message'.</p> <p><b>Note:</b> 'Same as Request Message' option indicates that Reply Message Destination Type is same as Request Message Destination Type. In CLI script, there is no such option. You must select Queue, Topic, or JNDI.</p> <p>Required MEP:</p> <ul style="list-style-type: none"><li>• In-Out (Service, Reference)</li></ul>

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## Runtime

Key	Summary
AMRP-4713	The Thread-Pool and JMS AtLeastOnce policies no longer prevent error messages from being delivered into an error queue when they're configured in a one-way MEP in a Mediation component service.
AMRP-4669	The <code>-Nodeutil7:listEndpoints</code> command listed nothing even when the application had a binding defined.
AMRP-4625	The <code>describeHost</code> command (used with the <code>tibcohost</code> executable) no longer returns the incorrect hotfix version, which only occurred in some cases.
AMRP-4605	Undeploying and deleting TIBCO ActiveMatrix BPM user applications no longer occasionally fails due to a low-level provisioning error.
AMRP-4527	JDBC resource instance connection pool now gives a warning message when usage exceeds 80% of capacity.
AMRP-4521	In ActiveMatrix 3.2.0 Hotfix 2, new nodes created had over 100 empty bundles under <code>org.eclipse.osgi/bundles</code> .
AMRP-4452	At times, the Business Process Management nodes could not be stopped, and the nodes had to be manually killed after 15 minutes.
AMRP-4406	Some projects that ran correctly on a node failed in the rapid application environment and threw a <code>NullPointerException</code> .
AMRP-4399	A <code>StackOverflowError</code> exception was thrown while deploying a particular DAA of an SOA project. Now, the error is handled gracefully.
AMRP-4397	Stale or failed connections in connection pools no longer cause transactions to roll back.
AMRP-4390	Messages are now removed from the queue once consumed by the component.
AMRP-4385	In ActiveMatrix 3.2.0, the load balancer did not work when a composite was invoked using virtualization binding.
AMRP-4378	Node startups are no longer affected when initialization depends on some file system time stamps.

Key	Summary
AMRP-4361	<p>There is now an OSGi command available to regenerate the Policy database on demand.</p> <p>Please see the following steps for enabling the OSGi console, regenerating the Policy database, and disabling the OSGi console (after the hotfix has been installed and applied). Before starting, the TIBCO Host and all of its nodes must be running.</p> <ol style="list-style-type: none"> <li>Open a command window and change to           <pre>CONFIG_HOME/tibco/data/tibcohost/InstanceName/host/bin</pre> </li> <li>Enable the OSGi console on the BPM Node:           <pre>./tibcohost snpc -nodeName <i>NodeName</i> -properties osgi.console=<i>portNumber</i></pre> <p>where:</p> <p><i>NodeName</i> is the name of your BPM Node.  <i>portNumber</i> is any free TCP port; a typical portNumber value is 1112</p> </li> <li>Stop the BPM Node:           <pre>./tibcohost stopNodes -nodeName <i>NodeName</i> -wait -1</pre> </li> <li>Remove the existing Policy database folder from file system. Find the PolicyAgentRuntimeDB folder under the <code>CONFIG_HOME/tibcohost/nodes/NodeName/work/cf/</code> directory and delete it:           <pre>rm -rf CONFIG_HOME/tibcohost/nodes/NodeName/work/cf/UUID/work/PolicyAgentRuntimeDB</pre> </li> <li>Start the BPM Node:           <pre>./tibcohost startNodes -nodeName <i>NodeName</i> -wait -1</pre> </li> <li>Open an OSGi console on the BPM Node:           <pre>telnet localhost <i>portNumber</i></pre> </li> </ol>

Key	Summary
AMRP-4361 (continued)	<p>7. Run the OSGi command to rebuild the Policy database by entering the following at the <code>osgi</code> prompt:</p> <pre data-bbox="391 302 534 322"><b>rebuildPolicyDB</b></pre> <p>8. Disconnect from the OSGi console:</p> <pre data-bbox="391 414 482 435"><b>disconnect</b></pre> <p>9. Disable the OSGi console on the BPM Node:</p> <ol style="list-style-type: none"> <li>Set the property to disable the OSGi console on the next restart: <pre data-bbox="434 574 996 595">./tibcohost sncp -nodeName <i>NodeName</i> -properties osgi.console=</pre> </li> <li>Stop the BPM Node: <pre data-bbox="434 687 901 708">./tibcohost stopNodes -nodeName <i>NodeName</i> -wait -1</pre> </li> <li>Restart the BPM Node: <pre data-bbox="434 800 901 821">./tibcohost startNodes -nodeName <i>NodeName</i> -wait -1</pre> </li> </ol> <p>The OSGi console should be always be disabled after use to avoid creating a security "hole."</p>
AMRP-4339	Known valid script tasks in TIBCO ActiveMatrix BPM user applications no longer occasionally fail after application upgrades.
AMRP-4336	In Rapid Application Development, you could not invoke a nested composite when a promoted service and the nested composite's promoted service used the same binding name. In this case, the SOAP UI request was unresponsive.
AMRP-4330	The SystemNode no longer hangs and gets stuck in Starting state during an upgrade. This occurred because the node was prematurely processing the RDA command before the RDA command file was written to disk. The node no longer prematurely reads the RDA command file to prevent this issue.
AMRP-4303	Upgrading applications with dependent components no longer fails when the dependent components are in a Preparing for Undeploy state.
AMRP-4283	The SOAP/JMS Binding Type now receives the timeout signal when the threading policy is configured on the component reference and the component and composite reference are deployed on different nodes.

Key	Summary
AMRP-4266 AMRP-4649	InvalidTransactionException no longer occurs during the processing of the reply message when a component that requires a global transaction has a reference that is virtualized; the transaction is now properly suspended on the request thread and resumed on the reply thread.
AMRP-4265	In the 3.3.0 version of the release, the following entries were removed from the SystemNode.tra file: <ul style="list-style-type: none"> <li>• java.property.javax.net.ssl.trustStore=E:/programs/bwse592/tibcohost/3.1/templates/admin.default.ssl.trust.store.ts</li> <li>• java.property.javax.net.ssl.trustStoreType=JCEKS</li> <li>• java.property.javax.net.ssl.trustStorePassword=#!!lIDFtm1IzoO9hFkLI83SMqigDHIE/V/</li> </ul> To make the UDDI server SSL-enabled, add these properties manually.
AMRP-4260 WSBT-539	When parameterOrder is specified in the portType, client requests to the SOAP endpoint no longer fail.
AMRP-4246	The SOAP/JMS Binding on the reference-side now supports time-out. Users can configure the timeout through the "Threading Policy" on the component reference.
AMRP-4245 WSBT-536	The SOAP/JMS Binding on the reference-side now supports time-out. Users can configure the timeout through the <b>Threading Policy</b> on the component reference.
AMRP-4142	A FileNotFoundException no longer occurs when ActiveMatrix service is invoked from BPM using virtualized binding.
AMRP-4095	Idle connections are now eliminated from the JDBC connection pool after a reasonable period, preventing the buildup of unused connections in the pool. The default value for the JDBC resource property POOL_IDLE_TIMEOUT is now set according to the correct unit (minutes). Previously, the default value was erroneously set to an incorrect unit (ms).
AMX-13875	Installing the hotfix on top of TIBCO BusinessWorks Service Engine installed with SOA Development profile (Design-time), no longer results in the warning: <b>ANT Task: Installing TIBCO Business Studio using p2 provisioning has failed.</b>
AMX-12817	You can now configure a service or reference binding transport for SOAP over JMS.
AMX-12491	Creating an application from TIBCO Business Studio or ActiveMatrix Administrator no longer fails when WSDL and XSD files have namespaces that contain the following character: #.
AMX-12254	Using console mode to install an ActiveMatrix 3.2.0 hotfix is now supported.

Key	Summary
AMX-12132	Removing a node from an existing TIBCO ActiveMatrix BPM application distribution no longer loses the Organizational Model mappings and prevents the users from logging in.
AMX-12067	<p>Upgrading the BPM product and/or BPM user applications with interdependencies no longer causes BPM user applications to get stuck in the <code>Waiting for Dependencies</code> state.</p> <p>This can manifest itself as work items that cannot be opened with a <code>Cannot find classloader map</code> error or processes that cannot be started or continued.</p>
AMX-12025	<p>Upgrade target <code>upgrade-enterprise</code> is now supported in combination with setting the <code>artifact.download.port</code> Ant property, regardless of how many nodes are involved.</p> <p>This property can be used to specify the port number used to communicate with the system being upgraded. You can set this property with <code>-D</code> on the ant command line when running the upgrade scripts.</p>
AMX-12026	<p>When installing this hotfix after installing ActiveMatrix 3.1.5-based products on an existing system but BEFORE running the upgrade scripts, you can now choose a particular network Interface to use when upgrading a remote node.</p> <p>The new property <code>artifact.download.host.name</code> can be used to specify the IP address or hostname associated with the network interface used to communicate with the system being upgraded. You can set this property with <code>-D</code> on the ant command line when running the upgrade scripts.</p>
AMX-12027	The ActiveMatrix Administrator server's backup task no longer backs up all old backup folders that might cause processing delays and growth in file size.
AMX-8723 WSBT-485	Topic destinations are no longer supported for SOAP/JMS bindings. TIBCO Business Studio now raise a validation error if a user attempts to map JNDI destinations to topics.
PER-1913 PER-1889	SOAP requests that have a signed SAML token with bearer confirmation method are now validated correctly.

Key	Summary
PER-1908 PER-1920	<p>The Nonce and Created elements can now be optionally added when a Basic Credential Mapping or WSS Credential Mapping policy is used to insert a UsernameToken in the SOAP security header.</p> <p>The Nonce and Created elements must be explicitly disabled when a Basic Credential Mapping or WSS Credential Mapping policy is used to insert a UsernameToken in the SOAP security header.</p> <p>You can configure a Basic Credential Mapping or WS-Security Consumer Credential Mapping policy to have the UsernameToken without the Nonce and Created elements by copying the template below and modifying the parameters appropriately. See the Policy Sets, Policy Templates Reference section in the <i>Composite Development</i> guide for more information about configuring policy sets.</p>
PER-1803	Policy components stored in agent databases are now automatically restored when the agent database is regenerated. Users can regenerate the agent database by searching for the <code>GovernanceAgentRuntimeDB</code> folder in the node's work area, backing it up, and then deleting it. The agent database will be recreated the next time the node is started.
PER-1793 PER-1792	When a Basic Credential Mapping or WSS Credential Mapping policy is used to insert a UsernameToken in a SOAP security header, the Nonce and Created element now appears in the UsernameToken element.
PER-1786	The Authorization policy template now allows comma separated values in the role attribute.
PER-1699	Credential Mapping no longer fails with a <code>NullPointerException</code> in random instances.
PER-1698	While authenticating SAML tokens, ActiveMatrix 3.1.5 rejected an unsigned SAML1.1 token when the policy applied was <b>Unsigned SAML 1.1 Authentication</b> .
DSS-814	Propagation of Kerberos-authenticated security context in virtualized environments is now fixed.
DSS-802 DSS-803	Messages that have valid signatures for both Sender-Vouches and Holder-of-Key methods are now processed so that the correct method is used for the authenticated principal.
DSS-756	Any signed messages containing <code>xsi:type</code> can now be verified.
DSS-754	Service invocations will no longer fail due to policy failures with specially-formatted, signed SAML assertions.
DSS-750	When using a replicated ActiveMatrix Administrator, resource instances no longer fail to install if the primary Administrator is down.

Key	Summary
DSS-744	Keystores accessible through https URLs can be accessed in IBM JREs as well.
DSS-713	Direct references to SAML tokens are supported and conform to Basic Security Profile 1.1.
DSS-704	A wrong valueType is no longer used to sign and verify SAML 2.0 tokens. The valueType now conforms to WSS SAML Token Profile 1.1.
DSS-663	Keystore Provider refresh did not work as expected. Changes to the keystore file on the disk did not get picked up.
DSS-662	If the audit service is invoked when running around 1000 process instances, a <code>ConcurrentModificationException</code> was thrown.
MCR-1999	While creating the Administrator, the <code>SystemNode.log</code> threw multiple trivial errors, that did not have an impact on the creation.
MCR-1998	Deploying a Business Process Management application on a node failed when a Business Process Management server was created that used an existing Administrator server.
MCR-1947	When an already deployed application is redeployed to an additional node, policy enforcement for policies distributed through TIBCO ActiveMatrix Policy Director now works for newly created bindings on the additional node.
MCR-1939 MCR-1945	Redeployment of an application no longer results in policy enforcement failures for policies distributed through TIBCO ActiveMatrix Policy Director.
TRUP-367 TRUP-364	Publishing to a UDDI registry where bindings are distributed across multiple nodes no longer results in an exception.
TRUP-354	ActiveMatrix services are now published correctly in the registry of TIBCO ActiveMatrix Lifecycle Governance Registry Foundation.
WSBT-849	When you upgraded and deployed an application, the binding failed to start during deployment and threw a <code>NullPointerException</code> .
WSBT-828	The Endpoint URI field defined in the SOAP Binding with HTTP Transport now may contain a single token or no token at all, for example, <code>/sample</code> or <code>/</code> .
WSBT-638	SOAP 1.1. endpoints now correctly respond with a version mismatch error when receiving a SOAP 1.2 message.

Key	Summary
WSBT-611	While adding or editing a binding in Administrator (Add > Binding, <b>Edit &gt; Binding</b> ), <b>DUPS_OK_ACKNOWLEDGE</b> and <b>CLIENT_ACKNOWLEDGE</b> were listed as possible Acknowledgement Mode options.
WSBT-598	For in-only MEP, when you add a binding on the reference side, only one JMS Destination resource (that is, the JMS Outbound Destination) should be created. However, two JMS Destination resources were being created (that is, JMS Outbound Destination and JMS Inbound Destination).
WSBT-584	With SOA Developer Studio (SDS) in TIBCO ActiveMatrix 3.0, you could select a non-supported WSDL, RPC/Encoded.
WSBT-547	<p>When you add a new binding with a new URI to an existing binding in Administrator, Administrator did not validate the URI to check whether it ended with a / and a "404" error was displayed.</p> <p>All URIs must have a context root, which is the segment immediately following the port. For example, <code>http://localhost:80/abc/</code>. Here <code>/abc</code> is the context root and <code>/</code> is the path for the service internally.</p> <p>For other URIs which have a context root, you need not terminate with a <code>/</code>. For example, <code>http://localhost:80/abc/xyz</code>. Here, the context root is <code>/abc</code> and <code>/xyz</code> is the path used for the service internally.</p>

## JMS

Key	Summary
BJMS-1500 BJMS-1509	<p>POOL_IDLE_TIMEOUT and POOL_BLOCKING_TIMEOUT properties for the connection factory resource instance can now be added in <code>SystemNode.tra</code> file.</p> <p>POOL_IDLE_TIMEOUT is the time after which the idle connections are closed, in minutes.</p> <p>The default is 5 minutes. The property for POOL_IDLE_TIMEOUT is <code>java.property.com.tibco.amf.sharedresource.jms.connection.pool.idletimeout</code>.</p> <p>POOL_BLOCKING_TIMEOUT is the maximum amount of time a requestor will wait for a connection when the pool is at maximum, in milliseconds. The default is 60000 ms (i.e., 1 minute). The property for POOL_BLOCKING_TIMEOUT is <code>java.property.com.tibco.amf.sharedresource.jms.connection.pool.blockingtimeout</code>.</p>
BJMS-1478	If the temporary reply destination on service side is invalid, the JMS binding reply delivery no longer goes into infinite loop.
BJMS-1474	If the temporary reply destination on the service side is invalid, the JMS binding reply delivery no longer goes into an infinite loop.
BJMS-1340	A particular XML over JMS project which worked in release 3.0.2 does not work in 3.1.x. As the payload does not match the schema, the project does not work in 3.1.x. No fix is done for this defect.
BJMS-848	In the <code>mutablecontext.setParameter()</code> Plain Old Java Object (POJO), when you add a context parameter name with a trailing space, the JMS binding reference does not read the value at runtime. The trailing space needs to be trimmed in the Java code.
BJMS-763	For a JMS Transacted OneWay policy, when Enterprise Message Service is restarted after a crash and the transaction commit fails, the reason in the error message is now provided.
BJMS-753	A WebSphere MQ 7 JMS driver installed via TIBCO Configuration Tool now works with WebSphere MQ 6.0 server. Topic on Inbound side deploys, and message exchange happens.
BJMS-734	The timeout setting in JMS Binding Reference is redundant. However, this setting will not be changed in order to maintain backward compatibility.
BJMS-645	If a node crashes while a transaction is running on node start up, the redelivery count is no longer set back to 'zero'.

Key	Summary
BJMS-641	Deploying a new application containing a JMS reference binding after restarting Enterprise Message Service referred from JMS Connection Factory resource instance no longer fails with 'IllegalStateException: Connection is being closed' in the node log.
BJMS-640 and BJMS-764	Applications are now undeployed successfully after EMS crashes.
BJMS-610	When migrating JNDI application properties and JMS resource templates that are configured for SSL to 3.x, the SSL configuration is now migrated.
BJMS-547	JMS Destination and Destination Configuration resource instances now check the connection to JMS server at the time of resource instance installation.
BJMS-546	JMS Connection Factory Configuration and JNDI Connection resource instances now check the connection to JMS server at the time of resource instance installation.
BJMS-417	After unwiring a JMS service from JMS reference, reference properties are now deleted.
BJMS-332	When a resource instance is created from a resource template with bad configuration, an error is reported on resource instance installation.
BJMS-238	JMS bindings now allow you to select header or property name for Bag and Message context parameter types in the Context Variable Mapping screen.
BJMS-203	When the JNDI name of the resource instances supporting a SOAP/JMS binding are not provisioned in the TIBCO Enterprise Message Service, the behavior is no longer different for SSL and non-SSL connections.
BJMS-1492	<p>The following note, applicable for both Request and Reply messages, is now present in <i>TIBCO ActiveMatrix Composite Development</i> and <i>TIBCO ActiveMatrix Administration</i>, in the Advanced Settings for JMS Binding table:</p> <p>If Request or Reply message destination type is set to Queue or Topic or Topic and JMS Provider does not support dynamic queue or topic creation or the user of provider does not have create permissions, create a queue or topic before deploying the application.</p>
BJMS-1485	While creating JNDI Resource Template in TIBCO ActiveMatrix Administrator UI, you can now configure <b>JNDI Name of Identity Provider that supplies credentials</b> as authentication credentials.
BJMS-1484	While editing a Service Binding with a single operation WSDL, if you click on the Advanced Tab, the Binding can now be saved.

Key	Summary
BJMS-1482	<p>In TIBCO ActiveMatrix Administrator, values for some of the fields on JMS Service and JMS Reference Binding are now displayed correctly.</p> <ul style="list-style-type: none"> <li>Service Binding: Default non-over ridden value of Durable Subscription on Operation level is displayed as "inherited".</li> <li>Reference Binding: Request Message fields (Message Type, Delivery Mode and Message Priority) when over-ridden are intermittently displayed as "inherited" while Message Expiration is displayed as -1.</li> </ul>
BJMS-1479	For projects created in TIBCO ActiveMatrix(R) Service Grid 3.2.0, JMS Binding uses RequestDestination and ReplyDestination terminology. When the JNDI name for the RequestDestination/ReplyDestination does not exist, JMS Binding no longer logs old property names (Inbound Destination/Outbound Destination).
BJMS-1469	For projects created in TIBCO ActiveMatrix Service Grid 3.1.2, JMS Binding no longer logs ConnectionFactory properties names as RequestConnectionFactory and ReplyConnectionFactory instead of 3.1.2 terminology - ConnectionFactory and ConnectionFactoryConfiguration.
BJMS-1348	For a JMS Binding application configured with JMS At Least Once Policy, if node crashes and starts up, message redelivery count is no longer set back to zero.
BJMS-1257	JMS Binding can now be edited from Administrator UI.
BJMS-1175	For JNDI Connection Application Properties, the Save button is now enabled if the value of a property is edited.

## Mediation

Key	Summary
MED-3275 MED-3266	For a one-way MEP operation, invoke tasks on the fault path no longer fail, and tasks after the invoke task are now processed.
MED-3254	<p>Invoking a service deployed on some nodes, gave the following exception:</p> <pre>com.tibco.mediation.task.rt.fault.TaskFault: java.lang.Exception: TIBCO-AMX-IT-MEDIATION.COMMON-700002: This xml document does not appear to be valid input for the specified transformation</pre>

Key	Summary
MED-3175	The XPath function <code>tib:render-xml(&lt;node&gt;, &lt;omitXmlDeclaration&gt;, &lt;indent&gt;)</code> is now available for Mediation projects.
MED-3163	<p>Importing Mediation projects no longer results in either of the following error messages:</p> <p>problem while loading the file</p> <p>Error - Invalid mediation resource</p> <p>Previously, such errors occurred when importing Mediation projects in some cases.</p>
MED-3158 MED-3063	The composite generated by the AutoMediate tool now contains context parameters for the header elements. WSDLs are now generated correctly through TIBCO Business Studio as well as with the ActiveMatrix Administrator.
MED-3156	The default non-trivial namespace is now explicitly declared if it is followed by a child in no namespace, and the DOM is now created with the correct default prefix.
MED-3152 MED-3160	Requirements for composite services created using WSDL port types with At-Least-Once operation input/output/faults message parts that have references to external schemas are now getting created correctly, so those services will now work correctly.
MED-3149 MED-3159	WSDLs can reference other WSDLs, as well as schemas. The AutoMediate tool used to generate proxy services is now able to handle dependent schemas that reference one another in a cycle, such as when a WSDL depends on schema A, which depends on schema B, while schema B also depends on schema A.
MED-3146	If you tried to set <code>context</code> when the fault path has timed out, Mediation flow displayed <code>NullPointerException</code> .
MED-3144	The <code>tib:evaluate()</code> XPath function is now available. This function addresses several use cases, such as allowing users to assign different types to exchange variables and to use the function from the design-time mapper.
MED-3136	When there are multiple schemas on a WSDL file, the substitution of a complex type now displays all types of the schema.
MED-3135 MED-3151	The BWSE Invoke partner is now able to capture a fault when the mediation component is using the element substitution in the fault schema.
MED-3134	You can now successfully set Mediation Message Context parameters for Output and Fault paths. Previously, you could only so do for Input paths.

Key	Summary
MED-3063 MED-3158	The composite generated by the AutoMediate tool now contains context parameters for the header elements. WSDLs are now generated correctly through TIBCO Business Studio as well as with the ActiveMatrix Administrator.
MED-2994	A project took longer to clean up due to validating the Mediation step.
MED-2888	Mediation IT did not extract or display a correlation ID.
GXML-94	The gXML XiNode bridge no longer throws an <code>UnsupportedOperationException</code> during transformations.
GXML-93	When working with Mediation components, the schema validation failed on <code>minInclusive</code> and <code>maxInclusive</code> facets for <code>xs:duration</code> .

## SOA Developer Studio

Key	Summary
SDS-7277	If the same resource instance was shared in RAD, it failed with an error.
SDS-7265	You can now see Deploy Editor resources after running Generate Script from another Deploy Editor.
SDS-7255	Deploying SOA applications no longer fails when using the Deploy Project script if the required shared resources are already created.
SDS-7030	In a scenario where ActiveMatrix-Mediation called ActiveMatrix-BPM, the reference WSDL configuration failed to detect any WSDL in the <code>Generated Services</code> folder of the BPM project in the same workspace.
SDS-6993	TIBCO Business Studio no longer refuses to connect to TIBCO ActiveMatrix Administrator when configured with load balancer.
SDS-6704	When two composites were connected through virtualization binding, the <b>Wiring Configuration</b> dialog did not display the application resource to bind with the virtualization under the Deploy module of TIBCO Business Studio.
SDS-6687	If two composites were connected through virtualize binding in an application, deploying the application DAA through TIBCO Business Studio, failed with an error.

Key	Summary
SDS-6679	If the <code>createDAA</code> script was generated from a composite which referred to WSDL/schema in a separate project, the WSDL/schema project was not imported in the <code>importProject</code> target.
SDS-6597	Validation that prevents erroneous code generation for component properties for Java, Spring, and WebApp components is now performed.
SDS-6583	Work folders no longer remain in users' temporary directories after Java code generation completes.
SDS-6576	Data binding JARs are no longer generated once per each port type during component generation. This caused the component generation process to take significantly longer than necessary.
SDS-6570	The <b>Select Port Type</b> dialog of the WSDL Interface property did not list the WSDLs from other projects in the workspace.
SDS-6561	Previously, WSDLs with included schemas that did not have defined target and default namespace declarations were not packaged with the DAA and caused a <code>FileNotFoundException</code> . If not present, target and default namespaces are now added to included schemas, and WSDLs with such schemas are now packaged properly.
SDS-6554	When displaying SOAP End-Point URLs in the Administrator Explorer the first URL is no longer displayed for all end points.
SDS-6530	Projects no longer fail to deploy when they are deployed using TIBCO Business Studio without specifying the default port of 443.
SDS-6508	Refreshing an Administrator server in TIBCO Business Studio no longer results in a <code>NullPointerException</code> . This only occurred in some situations where two or more deployment servers were pointed to the same Administrator URL.
SDS-6479	Generating code for projects created using ActiveMatrix 3.1.5 no longer results in <code>NullPointerExceptions</code> .
SDS-6342	Users can now delete a set of shared resource templates without affecting the use of the Project Explorer. Previously, doing so created a <code>NullPointerException</code> in metadata logs and caused the Project Explorer to be unusable.
SDS-6322	When <b>Help &gt; About TIBCO Business Studio</b> is selected, the correct release version of TIBCO Business Studio now displays.
SDS-6298 AMX-8720	A composite containing a reference with a SOAP/JMS binding can now be run in RAD.

Key	Summary
SDS-6295	When a WSDL was referred from another project, selecting the <b>Quick Fix &gt; Add Project References</b> for the referred WSDL project did not refresh all the references and workspace.
SDS-6257	Custom features for applications are now correctly provisioned when those applications are upgraded and deployed via TIBCO Business Studio.
SDS-6175	The Proxy configuration settings did not propagate to the execution of CLI in TIBCO ActiveMatrix Administrator.
SDS-5979	The Context Parameter used the fixed path to the WSDL message order. So when there was a change in the order in which the parts appeared in WSDL, it caused an error.
SDS-5963	When an ActiveMatrix application used the WSDL, containing the boolean restriction pattern 0 1, TIBCO Business Studio did not throw an error.
SDS-5948	If the name of the workspace contained a single quote ('), TIBCO Business Studio failed to create a DAA for the custom feature.
SDS-5828	The failed resource instances were available for binding in the <b>DAA Deployment</b> wizard of TIBCO Business Studio.
SDS-5817	It was not possible to save an SOA project using the Ctrl+Shift+S key combination.  This key combination was overridden by the promote service shortcut key. For promoting component service or component reference, use Ctrl+Shift+P.
SDS-5799	The drop-down list on the <b>Wiring Configuration</b> page of <b>Administrator CLI Script Generation</b> failed to expand. To expand the list, you had to click it only after right-clicking or clicking elsewhere on the page.
SDS-5788	By default, all the sub-options on the <b>Asset Type Selection</b> dialog of the ActiveMatrix BPM Developer Project wizard were cleared.  This is an ActiveMatrix BPM issue.
SDS-5787	If the <b>Service Descriptors</b> check box was cleared on the <b>Asset Type Selection</b> dialog of the ActiveMatrix BPM Developer Project wizard, the created SOA project did not have a composite file.
SDS-5773	The name of a promoted service in a composite file did not change as per the selected port type/WSDL.

Key	Summary
SDS-5746	If a deployed application was deleted from ActiveMatrix Administrator, deployment threw the error, "Application does not exist, cannot perform action." Refresh the model in TIBCO Business Studio after making changes to a deployed application.
SDS-5564	Exporting bundles from the workspace no longer results in out of memory exceptions.
SDS-5551	TIBCO Business Studio prevented the use of Update Site mechanism.
SDS-5060	Validation rules now check property names for hyphen characters for Java, Spring and WebApp component types only, and no longer erroneously check them for other composite or component types.
SDS-5015	When generating an Administrator CLI script if you alternate between creating two HTTP Connector resource instance names when overriding the HTTP Connector property setting, TIBCO Business Studio no longer generates a data file that contains two ResourceInstance elements but only one matching ResourceTemplate element. Therefore, executing the script no longer fails with a resource instance does not exist error.
SCF-81	When DAA was generated for a project with a WSDL that used a schema instance, it failed with errors on the composite file.
XPD-1600	If you drag and drop a WSDL file to another folder and move it back, or move it to Mediation Flows folder, you can now use the WSDL file to set the port types of services and references.

## Web Application

Key	Summary
IWAP-561	CSS stylesheets in WebApp components are now processed correctly in Internet Explorer 9 because the Content-Type is now set correctly to text/css.

## Known Issues

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The tables in this section list known issues in this release.

- [TIBCO Business Studio](#)
- [TIBCO Business Studio Forms](#)
- [Process Manager](#)
- [Platform](#)

## TIBCO Business Studio

### TIBCO Business Studio

The table in this section lists issues related to TIBCO Business Studio in this release.

Key	Summary/Workaround
SCF-226	<p><b>Summary:</b> On HP-UX, command line DAA generation fails in headless mode with 'java.lang.NoClassDefFoundError: org/eclipse/ui/plugin/AbstractUIPlugin'.</p> <p><b>Workaround:</b></p> <p>These are the requirements to run TIBCO Business Studio on HP-UX:</p> <ul style="list-style-type: none"> <li>• GTK+ (and corresponding GCC library) needs to be installed. According to eclipse FAQ: GTK+ 2.4.1 (or newer) and its dependencies are required. (See: <a href="http://www.eclipse.org/swt/faq.php#gtkstartup">http://www.eclipse.org/swt/faq.php#gtkstartup</a>).</li> </ul> <p>Please see the following link for detail instruction how to install GTK+ on HP-UX:</p> <p><a href="http://www-01.ibm.com/support/docview.wss?uid=swg21634676">http://www-01.ibm.com/support/docview.wss?uid=swg21634676</a></p> <ul style="list-style-type: none"> <li>• GTK+ (and corresponding GCC library) needs to be added to the LD_LIBRARY_PATH (if they are not on the path already). You can do this by issuing a command similar to:           <pre>export LD_LIBRARY_PATH=/opt/hp-gcc-4.7.0/lib:/opt/gtk2.6/lib:\$LD_LIBRARY_PATH</pre>           (Please make sure that you use the the actual paths where corresponding libraries are installed on your system.)         </li> <li>• Although TIBCO Business Studio is used only for command line DAA export it require X Window to be running and if you don't have/want graphical display you can use Virtual Frame Buffer (for example: Xvfb (xorg-x11-server-Xvfb)).</li> <li>• When running <code>amx_eclipse_ant</code> you need to add the following parameters:           <pre>-os hpux -ws gtk -arch ia64_32</pre>           This will make sure that correct operating system, windowing system and architecture values are used.         </li> </ul>
SCF-223	<p><b>Summary: Import &gt; Service Import Wizard &gt; Import From URL &gt; <i>&lt;ftp url&gt;</i></b> does not work.</p> <p><b>Workaround:</b> Download the file from the ftp site and save it somewhere on the local file system. Import the wsdl from local file system.</p>

Key	Summary/Workaround
SDS-7265	<p><b>Summary:</b> Deploy Editor not listing resources if opened after running 'Generate Scripts' from another .deploy editor.</p> <p><b>Workaround:</b> Close all the existing deploy editors and then open one which you want to configure/generate script for.</p>
SDS-7255	<p><b>Summary:</b> SOA App deployment fails from 'Deploy Project' script if required shared resources are already created.</p> <p><b>Workaround:</b> Create required RI from embedded RT from DAA. i.e. you should not have RT with same name in DAA as well as in admin with Global or Environment scope.</p>
SDS-7214	<p><b>Summary:</b> Re-provisioning custom features option is not applicable for BPM DAAs.</p> <p><b>Workaround:</b> None.</p>
SDS-7184	<p><b>Summary:</b> 'Force Undeploy' action/target is required for Deploy Projects action.</p> <p><b>Workaround:</b> None.</p>
XPD-5377	<p><b>Summary:</b> Studio for Analysts html help is missing some topics on installation procedures in the Installation guide.</p> <p><b>Workaround:</b> Refer to the pdf for <i>TIBCO Business Studio for Analysts Installation</i> for full information.</p>

Key	Summary/Workaround
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XPD-5376

**Summary:** 'Deploy Project - import-and-deploy target script failed on HP-UX

**Workaround:**

These are the requirements to run TIBCO Business Studio on HP-UX:

- GTK+ (and corresponding GCC library) needs to be installed. According to eclipse FAQ: GTK+ 2.4.1 (or newer) and its dependencies are required. (See: <http://www.eclipse.org/swt/faq.php#gtkstartup>).

Please see the following link for detail instruction how to install GTK+ on HP-UX:

<http://www-01.ibm.com/support/docview.wss?uid=swg21634676>

- GTK+ (and corresponding GCC library) needs to be added to the LD\_LIBRARY\_PATH (if they are not on the path already). You can do this by issuing a command similar to:

```
export LD_LIBRARY_PATH=/opt/hp-gcc-4.7.0/lib:/opt/gtk2.6/lib:$LD_LIBRARY_PATH
```

(Please make sure that you use the the actual paths where corresponding libraries are installed on your system.)

- Although TIBCO Business Studio is used only for command line DAA export it require X Window to be running and if you don't have/want graphical display you can use Virtual Frame Buffer (for example: Xvfb (xorg-x11-server-Xvfb)).
- When running `amx_eclipse_ant` you need to add the following parameters:

```
-os hpux -ws gtk -arch ia64_32
```

- Add the following arguments to 'application.args' property in `_${TIBCO-HOME}/studio/${STUDIO-VERSION}/eclipse/amx_eclipse_ant.tra` file:

```
-os hpux -ws gtk -arch ia64_32
```

For example, the `application.args` property should look similar to the following:

```
application.args=-install "C:/apps/TIBCO/studio-bpm-3.6.0/studio/3.6/eclipse" -application org.eclipse.ant.core.antRunner -os hpux -ws gtk -arch ia64_32
```

This will make sure that correct operating system, windowing system and architecture values are used.

XPD-5338

**Summary:** Deploy Project - Redeploy action does not work if the application is upgraded and you have active process instances.

**Workaround:** Stop any running instances of all the previous versions of the application before performing delete/re-deploy.

It is recommended to use re-deploy ONLY when there is single version of application present in the system.

Key	Summary/Workaround
XPD-5333	<p><b>Summary:</b> The port-type name determines the name of the promoted service in the generated application. Renaming a port-type will change the name of the service and therefore the runtime will see this as a new promoted service in the application being deployed, rather than an existing service being upgraded.</p> <p><b>Workaround:</b> None.</p>
XPD-5332	<p><b>Summary:</b> (Mac OS x) Double click on MAA or opening a MAA file with TIBCO Business Studio for Analyst launches the Studio for Analyst but does not open the MAA file.</p> <p><b>Workaround:</b> Launch TIBCO Business Studio for Analyst first and then open the MAA using the "Open an existing MAA" option.</p>
XPD-5315	<p><b>Summary:</b> Exporting BPM project documentation from the command line on Mac OS X does not work.</p> <p><b>Workaround:</b> Export documentation from within TIBCO Business Studio IDE or use the product for another operating system.</p>
XPD-5304	<p><b>Summary:</b> Not able to complete outstanding active instances with virtual web service call following undeploy (preparing for undeploy).</p> <p><b>Workaround:</b> Place your provider and consumer process in different projects.</p>
XPD-5237	<p><b>Summary:</b> Installation Profile Selection should not allow selecting only OpenSpace Gadget Development.</p> <p><b>Workaround:</b> Make sure that BPM Development Tools is selected together with OpenSpace Gadget Development feature (for more details see the <i>TIBCO Business Studio Installation Guide</i>).</p>
XPD-5159	<p><b>Summary:</b> Documentation required for sample scripts for shared resource create/install and SVN checkout.</p> <p><b>Workaround:</b> None.</p>
XPD-5131	<p><b>Summary:</b> Currently scripts are generated with TargetApplication Name and Environment Name in each application's CONFIG.xml file.</p> <p><b>Workaround:</b> For multi-tenancy, either change these parameters in all applications' CONFIG.xml file or re-generate scripts.</p>
XPD-5112	<p><b>Summary:</b> You should get a prompt to clean and rebuild projects when Presentation Channels are updated. If you do not do this, new artifacts will not be built.</p> <p><b>Workaround:</b> After you update a presentation channel, you need to do <b>project &gt; clean</b>.</p>

Key	Summary/Workaround
XPD-4730	<p><b>Summary:</b> You cannot create an Enumeration type with a name that either exists as an XSD type (e.g. Language) or and internal BOM type (e.g. Duration) as it results in errors.</p> <p><b>Workaround:</b> None.</p>
XPD-4380	<p><b>Summary:</b> An error "deleting resources" is thrown on trying to overwrite an existing DAA during DAA generation to an external location. This is an intermittent issue.</p> <p><b>Workaround:</b> Best practise would be not to choose the same location or to clear the old version first.</p>
XPD-4204	<p><b>Summary:</b> When you import projects from Subversion within TIBCO Business Studio, there are a number of problem markers on the project, which do not go away on a single project clean.</p> <p><b>Workaround:</b> Clean the project more than once.</p>
XPD-4195	<p><b>Summary:</b> When you try to open the documentation URL within TIBCO Business Studio on Linux 64 (SUSE), there is an error.</p> <p><b>Workaround:</b> Use the TIBCO Business Studio preferences to point it to an external browser rather than the default internal browser.</p>
XPD-4177	<p><b>Summary:</b> Searching for text or file(s) using <b>Search &gt; File &gt; File Search</b> results in exceptions during the search.</p> <p><b>Workaround:</b> Create a new workspace.</p>
XPD-4077	<p><b>Summary:</b> If a pageflow is called (from a user task or another pageflow) and it is in another project than the caller then currently its associated forms are embedded in the caller's project. This might cause old (embedded) forms to be provided after update of a dependent project(s) which called pageflows.</p> <p><b>Workaround:</b> Update the caller project and then it should include updated forms from dependent project(s).</p>
XPD-4019	<p><b>Summary:</b> If a class attribute has a fixed value, a validation should be thrown while mapping to it, otherwise the issue is seen at runtime.</p> <p><b>Workaround:</b> None.</p>
XPD-4011	<p><b>Summary:</b> A change in the primitive type advanced tab property in an externally referenced BOM causes DAA generation to fail due to a BOM to BDS generation failure.</p> <p><b>Workaround:</b> None.</p>

Key	Summary/Workaround
XPD-3987	<p><b>Summary:</b> An export of TIBCO Business Studio documentation creates BOM editor images which are blackened.</p> <p><b>Workaround:</b> Open the models in TIBCO Business Studio associated editors first (so the notation model is correctly created).</p> <p>If the documentation generation was done previously then you might need to open the model in a text editor first, delete the diagram notation model and then open it in an appropriate TIBCO Business Studio editor (the default diagram model should be correctly recreated).</p>
XPD-3918	<p><b>Summary:</b> Directly editing a user defined schema that is imported into a WSDL does not update the generated BOM.</p> <p><b>Workaround:</b> Delete the generated BOMs and perform a clean build on the project.</p>
XPD-3912	<p><b>Summary:</b> Within the Project Explorer view, an error indicator may be observed against the node for the 'Process Packages' special folder even though no Error is listed in the Problems view.</p> <p><b>Workaround:</b> In these instances no genuine error exists and the marker can be safely ignored and the parent project successfully modified and deployed.</p>
XPD-3903	<p><b>Summary:</b> If you have an xsd:choice with an element followed by an xsd:any, when you import the WSDL, it generates the BOM but with attributes having multiplicity (0..1) which triggers the validation rule which asks to set equivalent min and max values.</p> <p><b>Workaround:</b> None.</p>
XPD-3143	<p><b>Summary:</b> In Linux (RHEL) you get errors and a prompt to exit the workbench when you click on the Email tab to configure Email (Service Task).</p> <p><b>Workaround:</b> Use the 32 bit version of TIBCO Business Studio.</p>
XPD-3094	<p><b>Summary:</b> Service side bindings in a composite file are generated using the abstract parts of the WSDL whereas Reference side bindings are generated using the concrete parts of the WSDL. This causes a problem because of the mismatch between service and reference bindings.</p> <p><b>Workaround:</b> Change the service side binding to have model information set from concrete details present in the concrete WSDL.</p>
XPD-2980	<p><b>Summary:</b> When indexer errors occur it is not possible to set an external reference Organization Model to a participant as project import breaks the reference.</p> <p><b>Workaround:</b> Re-start TIBCO Business Studio.</p>

Key	Summary/Workaround
XPD-2893	<p><b>Summary:</b> After adding a new class to the BOM it is intermittently not possible to access its attributes in the script task using the content assist.</p> <p><b>Workaround:</b> Complete the script without using content assist.</p>
XPD-2429	<p><b>Summary:</b> When using TIBCO Business Studio on Linux 32/64 bit, making any changes in the Process Editor and saving any changes causes "Concurrent Modification Exception".</p> <p>This is caused by a known issue in the Eclipse Platform (<a href="https://bugs.eclipse.org/bugs/show_bug.cgi?id=245596">https://bugs.eclipse.org/bugs/show_bug.cgi?id=245596</a>).</p> <p><b>Workaround:</b> None - this issue does not cause any known adverse effects, other than adding errors to the error log.</p>
XPD-1852	<p><b>Summary:</b> There is a problem in Windows with extension association, that if a <b>studio-doc.exe</b> or <b>StudioForAnalyst.exe</b> file is assigned to an <b>.maa</b> file extension, that exact <b>.exe</b> file will remain the default <b>.exe</b> file. If you use the <b>Open with...</b> option, and choose a different <b>.exe</b> from a different location/installation, the very first one assigned is the one used. This could cause problems if multiple versions of TIBCO Business Studio are installed.</p> <p><b>Workaround:</b> Manually change the path to the <b>studio-doc.exe</b> or <b>StudioForAnalyst.exe</b> file in the registry by changing the properties:</p> <p>For <b>StudioForAnalyst.exe</b>:</p> <p>Computer\HKEY_CLASSES_ROOT\Business Object Model\shell\open\command</p> <p>For <b>studio-doc.exe</b>:</p> <p>Computer\HKEY_CLASSES_ROOT\Applications\studio-doc.exe\shell\open\command</p> <p>Also, change the default value to the correct <b>studio-doc.exe</b> or <b>StudioForAnalyst.exe</b> file location.</p> <p>This problem does <b>not</b> affect the shortcut provided by TIBCO Business Studio to open Studio For Analysts, it is just found when using the <b>Open with...</b> option in the context menu of a <b>.maa</b> file.</p>

Key	Summary/Workaround
XPD-1549	<p><b>Summary:</b> On some installations, clicking on some controls in a property sheet cause an SWT error dialog to appear.</p> <p><b>Workaround:</b></p> <ol style="list-style-type: none"><li>1. If, when clicking on a control in a property sheet, an SWT error message is displayed (for example Unhandled event loop exception org.eclipse.swt.SWTERROR) then:<ol style="list-style-type: none"><li>a. Click <b>OK</b> to this dialog.</li><li>b. If another Internal-Error dialog is displayed (An SWT error has occurred. You are recommended to exit the workbench...) asking whether to exit the workbench, click <b>No</b>.</li></ol></li><li>2. Reselect the process background, and then the object you had originally selected.<ol style="list-style-type: none"><li>a. Next time you wish to use the control in the property sheet that caused the problem, pre-activate the Properties view by clicking on the <b>Properties</b> view tab-header first.</li><li>b. You should now be able to use the property sheet controls as normal.</li></ol></li></ol>
XPD-707	<p><b>Summary:</b> Cannot import into TIBCO Business Studio WSDLs with more than one binding per service.</p> <p><b>Workaround:</b> Avoid having more than one binding for any given published service.</p>
XPD-475	<p><b>Summary:</b> The Business Object Modeler does not allow you to enter default values as very large numbers or in scientific notation for Fixed Length (BigInteger) and Fixed Point (BigDecimal) types. For example, the maximum value you can enter at design-time for a default value on a 32 bit Signed Integer is 2147483647. If you enter 2147483648 or greater then the designer reverts to the last stored default value.</p> <p><b>Workaround:</b> None.</p>
XPD-1	<p><b>Summary:</b> When there are multiple overview URLs present, which is allowed based on the uddi v3 schema, some of them may not be WSDL-type URLs.</p> <p><b>Workaround:</b> Only a URL using the "wsdlInterface" value is a WSDL URL that can be imported. If a urlType is text, TIBCO Business Studio should not try to import WSDL documentation from such a URL.</p>

Key	Summary/Workaround
WRM-2991	<p><b>Summary:</b> In TIBCO Business Studio, when you try to export a project that uses business data to a DAA:</p> <ul style="list-style-type: none"> <li>the export fails, even though the projects have no error markers, and</li> <li>on the <b>Problems</b> tab, "Package <i>name</i> does not exist in the plugin" errors are shown against a resource MANIFEST.MF in one or more of the associated .BDS projects.</li> </ul> <p><b>Workaround:</b> To resolve this problem:</p> <ol style="list-style-type: none"> <li>Manually clean the project. (Use <b>Project</b> &gt; <b>Clean</b>.)</li> <li>Export the project to a DAA again.</li> </ol>
WRM-2787	<p><b>Summary:</b> In TIBCO Business Studio, the following error is displayed when a WSDL is imported:</p> <p>WSDL 1.1 : BDS cannot process this WSDL as it has problems: XML Schema contains an unsupported Complex Type restriction of another Complex Type.</p> <p>The error occurs because the base version of the Eclipse Modeling Framework (on which the BDS Plug-ins are based) does not support:</p> <ul style="list-style-type: none"> <li>multiple xsd:any elements nested within the same complex object. (This can be the case if there are nested sequences.)</li> <li>the extension of an object with an xsd:any defined where there is also an xsd:any in the complex object that extends it.</li> </ul> <p><b>Workaround:</b> Do not use these constructs in a schema that is to be imported into TIBCO Business Studio.</p>
WRM-2311	<p><b>Summary:</b> In TIBCO Business Studio, you cannot assign Text to Signed Integer on a mapper screen. (This should be allowed but with a warning.)</p> <p><b>Workaround:</b> Perform the mapping using a script. The script should use:</p> <pre>Number(textField)</pre> <p>to convert the text value to a numeric value suitable for mapping to a signed integer.</p>
SDS-4993	<p><b>Summary:</b> You cannot choose a shared resource instance when deploying from TIBCO Business Studio with a Web Component node running on a second host.</p> <p><b>Workaround:</b> Manually type in the name of the shared resource instance you want to use.</p>

Key	Summary/Workaround
SDS-4982	<p><b>Summary:</b> Multiple shared resource instances will appear in the late binding screen when TIBCO Business Studio is connected to a BPM runtime configured in a HA/FT environment.</p> <p><b>Workaround:</b> Enter the value you require in the combo box for selecting the resource instance. (You can look for the resource instance name in the Admin Explorer view and type in that value.)</p>
SDS-6827	<p><b>Summary:</b> There is a problem building and importing mediation models especially in headless environment. This is caused because the in memory version of the Mediation model assumes it is loaded in a UI (main thread) which is not necessarily the case.</p> <p><b>Workaround:</b> The workaround for UI mode is to clean the project. This will generally have the effect of choosing a different thread which typically has the correct in memory version set.</p> <p>There is no workaround for headless mode.</p>
SDS-6643	<p><b>Summary:</b> On some occasions it is possible that when importing mediation projects you might see an error reported.</p> <p><b>Workaround:</b> Clean/build the project.</p>
SDA-326	<p><b>Summary:</b> A new decision flow is unusable due to a version problem error when you create a Decisions service project in TIBCO Business Studio.</p> <p><b>Workaround:</b> Perform the Quick-Fix.</p>
SDA-333	<p><b>Summary:</b> Command line generation of TIBCO Business Studio ActiveMatrix Decisions Add-ins projects does not work.</p> <p><b>Workaround:</b> None.</p>
INST-382	<p><b>Summary:</b> If you choose to install Asset Central during TIBCO Business Studio installation, the Asset Central configuration utility does not come up during installation, and the installation hangs.</p> <p><b>Workaround:</b> Close the window to exit the installation.</p>
INST-350	<p><b>Summary:</b> When you select the Asset Central feature for installation in TIBCO Business Studio, the installation completes successfully without bringing up the Asset Central configuration screen. The Asset Central configuration utility then fails to launch from the Start menu.</p> <p><b>Workaround:</b> To configure Asset Central, go to <code>\$\$STUDIO_HOME/studio/3.5/assetcentral/assetcentral</code> and run <b>configure.bat</b></p>

## TIBCO Business Studio Forms

### Design-Time Known Issues in Version 2.5.0

The table in this section lists known issues related to TIBCO Business Studio Forms observed at design time.

Defect #	Summary/Workaround
FORM-6122	<p><b>Summary:</b> Renaming a form model element and moving it immediately causes an exception.</p> <p><b>Workaround:</b> Click <b>Undo</b>. TIBCO Business Studio shows a quick fix for the error marker. Select <b>Reload the working copy</b> to avoid this exception.</p> <p>NOTE: Unsaved changes are lost in this process.</p>
FORM-6103	<p><b>Summary:</b> You may see incorrect decorations for runtime control validations in the preview for projects imported from TIBCO Business Studio 3.5.5 or earlier.</p> <p><b>Workaround:</b> Restart TIBCO Business Studio after importing the projects to clear up the runtime validations.</p>
FORM-5980	<p><b>Summary:</b> On Mac OS X and Linux, the commands under the <b>Form</b> sub-menu in the context menu for <b>User Tasks</b> and <b>Page Tasks</b> become disabled immediately after invoking some of the commands in the sub-menu.</p> <p><b>Workaround:</b> This occurs only if you attempt to invoke another command immediately after the first. In this case, shifting the focus away from and then back to the user task makes the commands available again.</p>
FORM-5743	<p><b>Summary:</b> Component Library projects that specify custom controls can only reference resources that are located in the same project as the Component Library. This can cause a problem with some JavaScript frameworks if you use the same framework in multiple Component Library projects.</p> <p><b>Workaround:</b> If you have multiple Component Libraries that use the same underlying JavaScript framework (For example: jQuery), locate those libraries in the same project and make sure they all reference the same copy of the underlying JavaScript framework in that project.</p>
FORM-5717	<p><b>Summary:</b> At runtime, presumably only one version of a Component Library can be loaded within the same browser session.</p> <p><b>Workaround:</b> If later versions of a process need to use an updated version of a library, then that library should be renamed to avoid a conflict with the earlier version of the library.</p>

Defect #	Summary/Workaround
FORM-5553	<p><b>Summary:</b> Dragging a form data field onto the Form Designer canvas creates an auto-named form parameter bound to the generated user interface (UI) component. To use the generated UI with the dragged data field, you need to first delete the created parameter and then manually bind the data field value to the top-level generated component value. In the case of a complex data field, this component will be a pane; once bound to the data field, any relative child bindings will function correctly.</p> <p><b>Workaround:</b> None.</p>
FORM-5552	<p><b>Summary:</b> Forms do not deal explicitly with choice constructs in imported schemas. This means that it is possible to submit a form that violates a choice constraint in the underlying XSD schema.</p> <p><b>Workaround:</b> For any forms that provide a user interface that populates attributes or objects that participate in a choice construct, explicitly add validations to prevent the end-user from entering data that violate the constraint. It may also be necessary to delete values directly from the model to prevent invalid data from being submitted back to the server.</p>
FORM-5280	<p><b>Summary:</b> When embedded forms use Integer or Decimal types, "Unexpected token" exceptions are logged in the TIBCO Business Studio Error Log during project Distributed Application Archive (DAA) generation and during form preview. If neither embedding nor embedded forms have corresponding markers in the Problems view, the Error Log entries may be safely disregarded.</p> <p><b>Workaround:</b> None. The Distributed Application Archive (DAA) is successfully generated and these exceptions do not affect the Forms functionality.</p>
FORM-5128	<p><b>Summary:</b> API for returning layout properties does not reflect the actual setting in the form model. This applies to the following methods on controls and panes:</p> <ul data-bbox="345 1107 571 1281" style="list-style-type: none"><li>• <code>getBackgroundColor()</code></li><li>• <code>getFontColor()</code></li><li>• <code>getFontName()</code></li><li>• <code>getFontSize()</code></li><li>• <code>getFontWeight()</code></li></ul> <p>These values will only return whatever value was set previously through the corresponding <code>set</code> method. If those values are set explicitly at design time, then those values are implemented via CSS and are not reflected in the corresponding <code>get</code> method.</p> <p><b>Workaround:</b> To get layout properties using the API, you need first to set the value using the corresponding <code>set</code> method.</p>

Defect #	Summary/Workaround
FORM-4893	<p><b>Summary:</b> If a user modifies the Move, Rename or Delete command by deselecting the 'Clear/Update forms references to affected resource(s)' change, the consequential 'unresolved reference' problem markers may not appear. This will happen if these references had already been loaded into memory.</p> <p>For further information, refer <i>Forms User's Guide &gt; Concepts &gt; Cross-Resource References</i>.</p> <p><b>Workaround:</b> Restart TIBCO Business Studio and clean+rebuild the project(s) containing the referencing form(s).</p>
FORM-4716	<p><b>Summary:</b> An embedded form is not permitted to have user interface settings (since it does not exist at runtime).</p> <p><b>Workaround:</b> None. The panes and controls in an embedded form do not support custom font settings and custom layout settings. Any such user interface settings are flagged with problem markers.</p>
FORM-4510	<p><b>Summary:</b> When a computation action is created directly under a default rule, an erroneous problem decorator is shown in the Outline view for that rule. There is no problem marker displayed either in the Problems view or on the form/project within the Project Explorer. This problem decorator can be ignored and does not affect any of the forms functionality.</p> <p><b>Workaround:</b> Close and reopen the form. Rename the rule, and save it. This removes the problem decorator.</p>

## Process Manager

The table in this section lists issues related to the TIBCO Business Studio - Process Manager in this release.

Key	Summary/Workaround
BX-2978	<p><b>Summary</b> Debugger: If a project has been deployed and breakpoints are set on the pageflow/business service, and then the application is upgraded through TIBCO Business Studio, the breakpoints previously set are removed.</p> <p><b>Workaround</b> Terminate the debugger and restart it after the process is re-deployed so that the breakpoints are in sync again.</p>

Key	Summary/Workaround
BX-2967	<p><b>Summary</b> When you have two versions of an application - V1 and V2 with V2 having event handlers and added mandatory parameters, process instances that migrate from V1 to V2 might go into 'Halted' state with an error - 'No value set for mandatory IN/INOUT parameter'.</p> <p><b>Workaround</b></p> <ul style="list-style-type: none"><li>• The parameters added in V2 should be non-mandatory</li><li>• The parameters added in V2 can be mandatory but at the interface of the tasks where the process instance migrates, the parameters should be made INOUT - non-mandatory.</li></ul>
BX-2956	<p><b>Summary</b> Mapping between incompatible types like BPM attribute to POJO list could result in ExpressionEvaluationError.</p> <p><b>Workaround</b> Add a script task before the java service task to build the source data as an array of Java objects out of the BDS list, before mapping it to the POJO method parameter.</p>
BX-2507	<p><b>Summary</b> Data in the database and server's response can not display correct characters outside the character set supported by the default system encoding. This could cause the extended message to be displayed incorrectly.</p> <p><b>Workaround</b> None.</p>

## Platform

### Installer

Key	Summary/Workaround
INST-164	<p><b>Summary</b> The TIBCO Universal Installer does not display the products to be installed correctly.</p> <p><b>Workaround</b> Note the discrepancies. There is no action required.</p>
MCR-1943	<p><b>Summary</b> If you have upgraded to ActiveMatrix release 3.3.0 from a prior version and attempt to replicate the upgraded configuration, deploying the replicated configuration may fail.</p> <p><b>Workaround</b> Replicate your configuration before upgrading to ActiveMatrix release 3.3.0.</p>
SDS-5917	<p><b>Summary</b> The installer downloads Hibernate and Eclipse LPGL assemblies required by TIBCO Business Studio and TIBCO Configuration Tool. In a suite installation scenario, if you unzip all product archives into the same directory, you might overwrite the 3.1.5 installer with a 3.1.2 installer. The 3.1.2 installer won't download the required assemblies, which will lead to failure of TIBCO Business Studio and TIBCO Configuration Tool.</p> <p><b>Workaround</b> When you unzip all products in the same directory while preparing for a suite install, make sure you preserve the installer binary from the most recent product installation. When you run the installation, the version of the 3.1.5 installer in the About dialog is 2.9.4.</p>

### Runtime

Key	Summary/Workaround
AMRP-4754	<p><b>Summary</b> If a service provider and a service consumer exist in the same BPM application, undeploying the application may undeploy the service provider even though the service consumer still requires the service provider.</p> <p><b>Workaround</b> Separate the service consumer and the service provider so that they're both in two separate user applications.</p>

Key	Summary/Workaround
AMRP-4744	<p><b>Summary</b> If you upgrade ActiveMatrix BPM to release 2.2.0 and ActiveMatrix to release 3.3.0, and upgrade a pre-existing user application so that it's a web service implementation with REST enabled, you may see exceptions similar to the following in the logs during the reply message event although the response is successfully received:</p> <pre>[INFO ] stdout - java.io.IOException: Exception in opening zip file: C:\ProgramData\amx-bpm-2.1.0v12\tibco\data\tibcohost\Admin-AMX BPM-AMX BPM Server\data_3.2.x\nodes\BPMNode\work\cf\cdfa6b9e-d49d-4764-8623-fa331f8820c3\bundle</pre> <p>28 Aug 2013 16:52:32,824 [Framework Event Dispatcher] [INFO ] stdout - at org.eclipse.osgi.framework.util.SecureAction.getZipFile(SecureAction.java:291)</p> <p>28 Aug 2013 16:52:32,824 [Framework Event Dispatcher] [INFO ] stdout - at org.eclipse.osgi.baseadaptor.bundlefile.ZipBundleFile.basicOpen(ZipBundleFile.java:87)</p> <p><b>Workaround</b> Restart the node in which the application is deployed.</p>
AMRP-4736	<p><b>Summary</b> You may not be able to start amxbpm as a Windows Service after upgrading to ActiveMatrix release 3.3.0 from release 3.1.5 (or previous releases) or ActiveMatrix BPM release 2.2.0 from release 2.1.0 (or previous releases).</p> <p><b>Workaround</b> If you encounter this issue:</p> <ol style="list-style-type: none"> <li>1. Launch a command prompt where <code>tibcohost.exe</code> is located.</li> <li>2. Uninstall existing ActiveMatrix BPM windows service by executing <code>tibcohost.exe --uninstall</code></li> <li>3. Install the windows service again by executing <code>tibcohost.exe --install</code></li> </ol>
AMRP-4707	<p><b>Summary</b> If you use TIBCO Configuration Tool to configure an ActiveMatrix Administrator Server, entering the full IPv6 address of the local host in the Network Adapter field may result in exceptions similar to the following example:</p> <pre>java.lang.IllegalArgumentException: No closing ']' for https://[2001:cafe::103/amxadministrator.httpbasic/</pre> <p><b>Workaround</b> In the Network Adapter field, enter <code>[::]</code> instead of the machine's full IPv6 address.</p>
AMRP-4639 DSS-811	<p><b>Summary</b> The default JSSE provider for Oracle's Java 7 has introduced a bug with the Diffie Hellman Ephemeral (DHE) key exchange. (See the description in Oracle's bug database for more information: <a href="http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=8013059">http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=8013059</a>) Establishing ciphers like <code>TLS_DHE_RSA_WITH_AES_128_CBC_SHA</code> sometimes fails and gives the error message <code>Received fatal alert: bad_record_mac</code>. By default, SSL connections with TIBCO EMS Server prefer the stream cipher RC4. You can overwrite this behavior by explicitly choosing the ciphers either in SSLClient RT or in the EMS Server.</p> <p><b>Workaround</b> By default, no workaround is needed. If you do choose explicit ciphers, avoid the DHE ciphers so that you do not run into this occasional Java 7 bug. Unaffected ciphers include <code>TLS_RSA_WITH_AES_128_CBC_SHA</code>, amongst others.</p>

Key	Summary/Workaround
AMRP-4445	<p><b>Summary</b> If you create and install an HTTPConnector resource instance for a runtime node and assign it a port that is also used as an external or internal HTTP port of SystemNode, users will encounter a 404 error when attempting to log in to TIBCO ActiveMatrix Administrator after the TIBCO Host instance has been restarted.</p> <p><b>Workaround</b> To avoid this issue:</p> <ol style="list-style-type: none"> <li>1. Stop the TIBCO Host instance.</li> <li>2. Go to <code>CONFIG_HOME\tibcohost\tibco_host_instance_name\data_3.2.x\host\plugins</code></li> <li>3. Delete, move (or backup with a different name) the plugin whose name takes the following form: <p style="margin-left: 40px;"><code>ri_HTTPConnector_Resource_InstanceName_NodeName_*****.jar</code></p> </li> <li>4. Start the TIBCO Host instance.</li> </ol> <p>Users should be able to log in to TIBCO ActiveMatrix Administrator.</p> <p>You may also need to modify the HTTPConnector resource template to use a port that is not being used by an existing instance such as SystemNode or a runtime node.</p>
AMRP-4013	<p><b>Summary</b> Acceptor threads for HTTP connectors may consume excessive amounts of CPU. The processing performance of any node that uses an HTTP connector experiencing this issue may be affected when asynchronous IO is involved.</p> <p><b>Workaround</b> Edit the HTTP Connector Resource Template to use blocking IO. See the chapter Resource Templates in <i>Administration</i> for more information.</p>
AMRP-3828	<p><b>Summary</b> If you enter incorrect configuration data for a JDBC resource, it is not verified by any tools during resource creation or installation and the runtime reports a failure when an application tries to access the resource.</p> <p><b>Workaround</b> Ensure that the configuration supplied to the JDBC resource template is correct.</p>
AMRP-3788	<p><b>Summary</b> The LDAP resource template pool properties are not used when initializing the connection pool.</p> <p><b>Workaround</b> Configuring the connection pool using system properties specified for the target node applies them to all instances deployed to that node.</p> <p>Refer to the Oracle documentation for more information:</p> <p><a href="http://docs.oracle.com/javase/jndi/tutorial/ldap/connect/config.html">http://docs.oracle.com/javase/jndi/tutorial/ldap/connect/config.html</a></p>

Key	Summary/Workaround
AMRP-3721	<p><b>Summary</b> The LDAP shared resource does not reconnect automatically to its associated LDAP server.</p> <p><b>Workaround</b> Reinstall the LDAP shared resource instance and then restart all dependent applications. Or, restart the node.</p>
AMX-14346	<p><b>Summary</b> Suite installation of ActiveMatrix Service Grid 3.3.0 and ActiveMatrix BPM 2.2.0 fails with the following error: More than one active 'Finish' task has been defined.</p> <p><b>Workaround</b> Do not install ActiveMatrix BPM and ActiveMatrix Service Grid at the same time using the Suite Installer.</p>
AMX-14345	<p><b>Summary</b> Upgrading the second system node in a replicated Administrator setup can fail with exception(s) similar to the following example:</p> <pre data-bbox="318 630 1283 812"> java.lang.IllegalStateException: org.springframework.beans.factory.BeanCreationException: Error creating bean with name 'urn:amx:SystemEnvironment/amx.platform-app/GovernanceAgent/pepHttp/HttpFilterComponent_1.3.0': TIBCO-AMX-IT-JAVA-SPRING-801001: Invocation of init method failed; nested exception is java.lang.NoClassDefFoundError: javax/xml/transform/TransformerFactoryConfigurationError Start component 'wtplogservice' on node 'SystemNodeReplica' failed : java.lang.IllegalArgumentException: Exception during web application initialization. Deployment of web application failed </pre> <p><b>Workaround</b> Upgrade the second system node again.</p>
AMX-14344	<p><b>Summary</b> When upgrading an installation that has TIBCO Enterprise Message Service (EMS) configured to use SSL, upgrading the Administrator (done as part of the SystemNode upgrade) may fail due a fatal EMS connection error described in Known Issue DSS-811. This is caused because of a Java 7 bug, related to Ephemeral Diffie Hellman based ciphers, documented in Oracle's bug database.</p> <p><b>Workaround</b> The failure is only seen during the upgrade process, and not during normal runtime operation, hence a workaround is required only in the former scenario.</p> <p>If upgrading process fails, apply this workaround and then re-run the upgrade script for the SystemNode.</p> <p>Update the EMS server configuration to exclude ciphers using Ephemeral Diffie Hellman. You can exclude ciphers by using:</p> <pre data-bbox="318 1307 1283 1350"> ssl_server_ciphers = !DHE-RSA-AES128-SHA:!DHE-DSA-AES128-SHA:!DHE-RSA-AES256-SHA:!DHE-DSA-AES256-SHA:ALL </pre> <p>For more information, see the <i>TIBCO Enterprise Message Service User's Guide</i>, chapter "Using the SSL Protocol," section "Specifying Cipher Suites."</p> <p>The workaround can be removed after a successful upgrade.</p>

Key	Summary/Workaround
AMX-14310 DSS-817	<p><b>Summary</b> ActiveMatrix release 3.3.0 packages IBM JRE 1.7.0 SR2. If you are running ActiveMatrix on an AIX platform and install Unlimited Jurisdiction Policy (UJP) files, you may encounter errors.</p> <p><b>Workaround</b> If you encounter errors, you must install the appropriate version of the UJP files for that build of the JRE.</p> <p>Errors similar to the following example indicate that the version of the UJP files is <i>not</i> the appropriate version for the installed JRE:</p> <pre>Caused by: java.lang.SecurityException: Jurisdiction policy files are not signed by trusted signers! at javax.crypto.b.a(Unknown Source) at javax.crypto.b.a(Unknown Source) at javax.crypto.b.access\$600(Unknown Source) at javax.crypto.b.\$0.run(Unknown Source) at java.security.AccessController.doPrivileged(AccessController.java:254) ... 28 more</pre> <p>If you see such errors, you must install the appropriate version of the UJP files.</p>
AMX-13851	<p><b>Summary</b> If you use Microsoft SQL Server 2012 as an external database server and use its Mirror Mode to establish a connection to a secondary failover database server, TIBCO ActiveMatrix Administrator fails to connect to either database server.</p> <p><b>Workaround</b> In addition to providing the JDBC URL of the mirrored servers in SQL Server 2012, you must set the IP and hostname of both the primary and secondary database servers in the <code>hosts</code> file. The location of the <code>hosts</code> file depends on the operating system:</p> <ul style="list-style-type: none"> <li>• Windows: <code>ROOT_DIR\system32\drivers\etc\hosts</code></li> <li>• UNIX/Linux: <code>/etc/hosts</code></li> </ul> <p>For example, you have two database servers. The primary server's IP is 192.167.71.42 and its hostname is <code>amx-db42</code>; the secondary server's IP is 192.167.71.60 and its hostname is <code>amx-db60</code>. You would provide the following JDBC URL for these two mirrored primary and secondary servers: <code>jdbc:sqlserver://192.167.71.42:1433;databaseName=db1;failoverPartner=192.167.71.60</code>.</p> <p>To ensure that TIBCO ActiveMatrix Administrator successfully connects to both servers and allows for seamless switching between them using SQL statements, you must add the following entries to the <code>hosts</code> file:</p> <pre>192.167.71.42 amx-db42 192.167.71.60 amx-db60</pre>

Key	Summary/Workaround
AMX-11984 TAP-12831	<p><b>Summary</b> You are not able to replicate the Administrator server after upgrading from an earlier 3.1.x version.</p> <p><b>Workaround</b> Follow these before attempting the replication procedure:</p> <ol style="list-style-type: none"> <li>1. Import <code>basic_cli.xml</code> in <code>sharedWorkFolder_build.xml</code>.            Modify the line  <pre>&lt;import file="{admin.samples.directory}/admin-scripts-base.xml"/&gt;</pre>           to <pre>&lt;import file="basic_cli.xml"/&gt;</pre> </li> <li>2. Edit <code>sharedWorkFolder_data.xml</code> <ol style="list-style-type: none"> <li>a. Remove the <code>ApplicationFolder</code> element.</li> <li>b. Change the artifact server app name from <code>com.tibco.amx.platform.artifactserver</code> to <code>amx.artifactserver.app</code>.</li> <li>c. Change the name of the internal HTTP connector name in the substitution variable element from <code>TIBCO ActiveMatrix Internal HTTP Connector Resource</code> to <code>tibco.admin.http.connector.internal</code>.</li> </ol> </li> </ol>
AMX-11980	<p><b>Summary</b> (Windows only) When executing the <code>upgrade-tibcohost</code> script, you have to use the same case (either uppercase or lowercase) to define <code>-Dtibco.config.mgmt.home</code> that you had used earlier. The original path can be discovered by examining the value of property <code>hpa.client.securityConfigFile</code> in <code>CONFIG_HOME/tibcohost/instanceName/host/th/hpaclientcli.properties</code>.</p> <p><b>Workaround</b> None.</p>
AMX-11970	<p><b>Summary</b> In a replicated Administrator server setup if you deploy to the system node applications with policies applied on them, those policies are not enforced after upgrade.</p> <p><b>Workaround</b> First undeploy and then redeploy these applications after upgrading all system nodes.</p>
DSS-813	<p><b>Summary</b> While upgrading to ActiveMatrix release 3.3.0, you may see benign errors similar to the following example:</p> <pre>[ERROR]com.tibco.trinity.runtime.base.provider.identity.CipherSupport</pre> <p>Such errors are harmless and do not mean that the upgrade failed. No action is required.</p> <p><b>Workaround</b> None.</p>

Key	Summary/Workaround
MCR-2002	<p><b>Summary</b> If you have configured Microsoft SQL Server 2012 as a database for Administrator, invoking a custom DAA may result in harmless exceptions similar to the following examples:</p> <p>Caused by: com.microsoft.sqlserver.jdbc.SQLServerException: Violation of UNIQUE KEY constraint 'UQ_Mcr2Stat__1C012A471DC5DDE4'. Cannot insert duplicate key in object 'dbo.Mcr2StatisticsMetric'. The duplicate key value is (93, 21, 22, 3, -1).</p> <p>at com.microsoft.sqlserver.jdbc.SQLServerException.makeFromDatabaseError(SQLServerException.java:216)  at com.microsoft.sqlserver.jdbc.SQLServerStatement.getNextResult(SQLServerStatement.java:1515)  at  com.microsoft.sqlserver.jdbc.SQLServerPreparedStatement.doExecutePreparedStatement(SQLServerPreparedStatement.java:404)  ... 44 more</p> <p><b>Workaround</b> None.</p>
MCR-1995	<p><b>Summary</b> If you have configured IBM DB2 as an external database, you may see harmless exceptions similar to the following examples in SystemNode.log:</p> <p>Retrying database transaction after error: Proceccing of metric requestsIn for event  com.tibco.governance.amxserviceprobe.ServiceProbeInstruments.ServiceRequestIn failed for measure Total and time window Since Started Time Window</p> <p>Retrying database transaction after error: Proceccing of metric faults for event  com.tibco.governance.amxserviceprobe.ServiceProbeInstruments.ServiceExecutionTime failed for measure Total and time window Since Started Time Window</p> <p>Such exceptions are benign and don't require any action.</p> <p><b>Workaround</b> None.</p>

## JMS

Key	Summary/Workaround
BJMS-1490	<p><b>Summary</b> JNDI Resource Template using Custom Property for LDAP Provider URL will not get installed.</p> <p><b>Workaround</b> Provide URL in the <b>Provider URL</b> field on the Resource Template.</p>
BJMS-1382	<p><b>Summary</b> If JMS Binding configured with JMS AL Least Once Policy is undeployed before the redelivery count is exhausted, and deployed again, the message is not redelivered.</p> <p><b>Workaround</b> None.</p>
BJMS-1374	<p><b>Summary</b> If JMS Binding is configured with JMS At Least Once Policy and the EMS Provider URL used for connection is fault tolerant, the message is not redelivered in case EMS crashes.</p> <p><b>Workaround</b> None.</p>
BJMS-755	<p><b>Summary</b> Enterprise Message Service XA Resources from orphaned transactions do not disappear after transaction timeout from Enterprise Message Service server. They are seen on the Enterprise Message Service server as a part of show transactions command.</p> <p><b>Workaround</b> Re-start the Enterprise Message Service server. As there is no locking in messaging associated with an XA resource, this issue is not serious.</p>
BJMS-736	<p><b>Summary</b> When a 2.x project containing a JMS binding is migrated to 3.x the JNDI resource template required for looking up the destination are not created and the generated warning does not clearly state that JNDI resource templates need to be created.</p> <p><b>Workaround</b> Manually create JNDI resource templates required for defining inbound and outbound destination configurations.</p>
BJMS-726	<p><b>Summary</b> On re-starting Enterprise Message Service, for in-flight messages, transaction does not get committed. Re-delivery happens and message is forwarded to error queue.</p> <p><b>Workaround</b> Recover the requests from the error queue.</p>
BJMS-718	<p><b>Summary</b> For JMS Binding, the SDS UI allows you to set Context Parameters of type Message. This is not supported for JMS Binding.</p> <p><b>Workaround</b> Do not use type Message for Context Provisioning related to JMS Binding.</p>

Key	Summary/Workaround
BJMS-636	<p><b>Summary</b> The <code>show connection</code> command in the TIBCO Enterprise Message Service administration tool <code>ems-admin</code> doesn't contain "ClientID" value for connections created by JMS resource instances for outbound connections.</p> <p><b>Workaround</b> None.</p>
BJMS-603	<p><b>Summary</b> Administrator does not validate that an application with JMS Transacted One-Way policy set should be deployed on a single node.</p> <p><b>Workaround</b> Ensure that the JMS binding that has a JMS Transacted One-Way Policy is deployed on the same node as that of component(s), it is wired to.</p>
BJMS-355	<p><b>Summary</b> When a JMS service is deployed in LB setup over routed queues, the "<code>javax.jms.IllegalStateException: Not allowed to use transacted session on routed queues</code>" message is displayed and the service does not start.</p> <p><b>Workaround</b> Enterprise Message Service does not support transactions on routed queue consumers. Enterprise Message Service 6.0 added an explicit check to prevent this. You can restore the old behavior by setting the following main configuration parameter:</p> <pre>allow_unsupported_tx_routed_q_consumers = true</pre>
BJMS-139	<p><b>Summary</b> If you rename an operation in a WSDL file, JMS bindings on composite services and references are not updated correctly.</p> <p><b>Workaround</b> Create new JMS binding after renaming the WSDL operation or re-assign the WSDL file to existing JMS binding.</p>

## Mediation

Key	Summary/Workaround
MED-3306	<p><b>Summary</b> SOA projects created by the AutoMediate Tool may fail to be deployed by the tool if the projects have SOAP over JMS bindings.</p> <p><b>Workaround</b> Re-create all JMS Connection Factory and Destination resources in TIBCO Business Studio.</p>

Key	Summary/Workaround
MED-2972	<p><b>Summary</b> The Set Exchange Variable task shows a null element if the project is partially imported and is missing the Exchange variable schema</p> <p><b>Workaround</b> Import the missing exchange variable schema and reconfigure the exchange variables.</p>
MED-2946	<p><b>Summary</b> When using context parameters a spurious error marker appears on the Mediation Editor.</p> <p><b>Workaround</b> This marker can be ignored.</p> <p>Run <b>Project &gt; Clean</b> to remove the error markers.</p>
MED-2935	<p><b>Summary</b> The default selection for a new mediation implementation does not default to the Mediation Flows folder.</p> <p><b>Workaround</b> The user has to choose a location for the new mediation each time.</p>
MED-2907 MED-2885	<p><b>Summary</b> The Mediation editor does not reload changes to the XSD unless the project is restarted.</p> <p><b>Workaround</b> To resolve this:</p> <ol style="list-style-type: none"> <li>1. Import all projects into the workspace.</li> <li>2. Restart TIBCO Business Studio.</li> <li>3. Run <b>Project&gt; Clean &gt; Clean all projects</b></li> </ol>
MED-2826	<p><b>Summary</b> Some valid XPath expressions in Mediation projects are erroneously returned as errors rather than warnings.</p> <p><b>Workaround</b> None.</p>
MED-2055	<p><b>Summary</b> The Transform task does not handle the Byte Order Mark (BOM) in external stylesheet files.</p> <p><b>Workaround</b> Open the stylesheet in a text editor and save it manually in a format without using BOM.</p>
MED-1827	<p><b>Summary</b> Deploying a mediation application that uses custom XPath functions and if the custom XPath function plug-in is not deployed, results in errors at the time of deployment.</p> <p><b>Workaround</b> None.</p>

Key	Summary/Workaround
MED-1739	<p><b>Summary</b> When adding a PortType with many (about 50+) operations, the validation begins before the mediation flow is fully updated. This causes error markers to appear on the mediation operations when no actual problems exist.</p> <p><b>Workaround</b> Select Project/Clear from the menu bar and the validation will restart. The error markers will disappear, unless there are actual problems that remain.</p>
MED-1736	<p><b>Summary</b> Dragging and dropping a WDSL onto a mediation flow results in Receive Wrong Transfer data errors.</p> <p><b>Workaround</b> None.</p>
MED-1703	<p><b>Summary</b> Creating schema using the <b>Create</b> button creates the schema for CMT model plugin wizard but does not set it.</p> <p><b>Workaround</b> Once the schema is created, you can browse and select the schema in the wizard to set it for both Input and Output Schemas in the plugin wizard.</p>
MED-1652	<p><b>Summary</b> The Message type context property does not specify an unbound Message even though the selection list contains all Message elements in the WSDL. An unbound Message is one that is not used for Input, Output, or Fault parts.</p> <p><b>Workaround</b> Only select unbound Message elements for context properties.</p>

## SOA Developer Studio

Key	Summary/Workaround
XPD-5331	<p><b>Summary</b> Deploying DAAs or applications with the characteristics listed below in ActiveMatrix BPM 2.2.0 runtime may result in the following error during runtime: No request message is found to add the username token.</p> <ul style="list-style-type: none"> <li>• The DAA or application was created in TIBCO Business Studio prior to version 3.6.0.</li> <li>• The DAA or application contains a Web Service invocation (that is, the application is a consumer)</li> <li>• The application has a UsernameToken policy type in its security configuration</li> </ul> <p><b>Workaround</b> Open the project in TIBCO Business Studio 3.6.0, build the DAA, and upgrade the existing application.</p>

Key	Summary/Workaround
XPD-1858	<p><b>Summary</b> When opening a native file browse dialog on RedHat Linux for the first time, TIBCO Business Studio can crash.</p> <p><b>Workaround</b> Type the path to the file in the text control.</p>
SDS-6992 SDS-6729	<p><b>Summary</b> ActiveMatrix projects created in versions prior to 3.2.0 that use Java, Spring or WebApp components encounter a Null Pointer Exception (NPE) dialog when imported into any ActiveMatrix version running on JRE 1.7 or later. This is caused by the incompatibility of JRE 1.7 with the JAR format of the DataBinding JARs generated by ActiveMatrix versions prior to 3.3.0. This may happen if you have upgraded to JRE 1.7 or installed an ActiveMatrix version that includes JRE 1.7, such as version 3.3.0.</p> <p><b>Workaround</b> To avoid this issue:</p> <ol style="list-style-type: none"> <li>1. Open the <b>Problems</b> view.</li> <li>2. Look for instances of the following error message: <i>JAR file incompatible with JRE/JDK 1.7 due to containing entries with empty name.</i> One such message is generated for each offending JAR file.</li> <li>3. Right-click on one of these messages and select a quick fix to apply. There are three quick fixes available (all three back up old JARs): <ol style="list-style-type: none"> <li>a. <b>Fix JAR for JRE/JDK 1.7 compatibility</b>—This option fixes only the selected JAR (that is, the JAR you clicked to apply the quick fix).</li> <li>b. <b>Fix all library JARs in project for JRE/JDK 1.7 compatibility</b>—This option fixes all of the offending JARs in the same project as the selected JAR (that is, the JAR you clicked to apply the quick fix).</li> <li>c. <b>Fix all library JARs in workspace for JRE/JDK 1.7 compatibility</b>—This option fixes all of the offending JARs in the workspace.</li> </ol> </li> <li>4. After applying a quick fix, some errors related to the component class may still be seen. To clean up these errors, select the project that has the errors and select <b>Project &gt; Clean</b>.</li> </ol>
SDS-6729	<p><b>Summary</b> Importing projects created in TIBCO Business Studio prior to ActiveMatrix release 3.2.1 into TIBCO Business Studio results in Null Pointer Exceptions. This is caused by null entries in data binding JARs generated prior to ActiveMatrix release 3.2.1. Such JARs only cause this issue when running JRE 1.7</p> <p><b>Workaround</b> To resolve this issue, right-click on the error and apply the available quick fix.</p>

Key	Summary/Workaround
SDS-6264 IWAP-212	<p><b>Summary</b> If the Web Application component is added by right clicking on the composite, the <b>Generate Servlet Implementation</b> option is not available under the <b>Quick Fixes</b> option.</p> <p><b>Workaround</b> Select the Web Application component, right-click, and select <b>Generate Servlet Implementation</b>.</p>
SDS-5896 MED-3065	<p><b>Summary</b> If you create a DAA from a project that references resources in a closed project, the DAA will be incomplete and it will not be possible to create an application from the DAA.</p> <p><b>Workaround</b> Do not close related projects before building a DAA and make sure that all related projects are available in the workspace.</p>
SDS-5866	<p><b>Summary</b> When one of the nodes participating in a high availability configuration is stopped and an application is deployed via TIBCO Business Studio, the deployment never completes.</p> <p><b>Workaround</b> If you deploy from Administrator the application state will be partially running state instead of running - which is the expected behavior.</p>
SDS-5848	<p><b>Summary</b> Clicking the hyperlink for a resource template name in the SOAP reference property sheet opens up incorrect resource template with the same name.</p> <p><b>Workaround</b> Open the resource template by going to Resource Templates folder and double-clicking the resource template name.</p>
SDS-5780	<p><b>Summary</b> Deployment server displays connected when it is not connected.</p> <ol style="list-style-type: none"> <li>1. Create a deployment server and validate with Test Connection, but do not check the Save Password checkbox</li> <li>2. Right-click on the deployment server and select <b>Connect</b>.</li> <li>3. You will be prompted for a password. Enter an invalid password.</li> <li>4. Click <b>OK</b> on the authentication error message that appears.</li> <li>5. In the Properties tab, the server state will display connected.</li> <li>6. Right-click the deployment server. The dynamic menu option of Disconnect is displayed. However it should be Connect since you are not connected to the server.</li> </ol> <p><b>Workaround</b> The property sheet is not being refreshed. Switch away from the property sheet and return.</p>
SDS-3890	<p><b>Summary</b> Sometimes there is an "Unhandled EventLoop Exception" in the error log.</p> <p><b>Workaround</b> None. Ignore the error.</p>

Key	Summary/Workaround
SDS-3511	<p><b>Summary</b> TIBCO Business Studio does not support substitution variables of the format %%keystoreURL%%/JKS/server-CAs.jks.</p> <p><b>Workaround</b> Set the value in Administrator.</p>
PER-1931	<p><b>Summary</b> Nonce is not supported for messages sent from TIBCO ActiveMatrix BusinessWorks to ActiveMatrix BPM. Therefore, if you use TIBCO ActiveMatrix BusinessWorks as a client to invoke an ActiveMatrix BPM process as service, you may see the following error: PolicyEnforcement Failed to Authenticate the request.</p> <p><b>Workaround</b> If this occurs, modify the WSDL generated by ActiveMatrix to add the following Schema, WSDL Message, and WSDL Input in Binding to successfully invoke an ActiveMatrix BPM service from TIBCO ActiveMatrix BusinessWorks.</p> <ul style="list-style-type: none"> <li>• <b>Schema:</b> <pre data-bbox="389 666 1172 1168"> &lt;xsd:schema elementFormDefault="qualified" targetNamespace="http://schemas.xmlsoap.org/ws/2002/07/secext"&gt;   &lt;xsd:import namespace="http://schemas.xmlsoap.org/ws/2002/07/utility"/&gt;   &lt;xsd:element name="Security" type="s2:Security"/&gt;   &lt;xsd:complexType name="Security"&gt;     &lt;xsd:sequence&gt;       &lt;xsd:element minOccurs="0" maxOccurs="1" name="UsernameToken" type="s2:UsernameToken"/&gt;     &lt;/xsd:sequence&gt;   &lt;/xsd:complexType&gt;&lt;xsd:complexType name="UsernameToken"&gt;     &lt;xsd:sequence&gt;       &lt;xsd:element minOccurs="0" maxOccurs="1" name="Username" type="xsd:string"/&gt;       &lt;xsd:element minOccurs="0" maxOccurs="1" name="Password" type="xsd:string"/&gt;     &lt;/xsd:sequence&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:schema&gt; </pre> </li> <li>• <b>WSDL Message:</b> <pre data-bbox="389 1260 848 1347"> &lt;wsdl:message name="PUTSecurity"&gt;   &lt;wsdl:part name="Security" element="s2:Security"/&gt; &lt;/wsdl:message&gt; </pre> </li> </ul>

Key	Summary/Workaround
PER-1931 (continued)	<ul style="list-style-type: none"> <li>• <b>WSDL Input in Binding:</b> <pre data-bbox="439 267 1036 288">&lt;soap:header message="tns1:PUTSecurity" part="Security" use="literal"/&gt;</pre> <p data-bbox="439 328 579 352">For example:</p> <pre data-bbox="439 397 1158 868">&lt;wsdl:binding name="ProcessPackageProcess_EP" type="tns1:ProcessPackageProcess"&gt;   &lt;soap:binding style="rpc" transport="http://schemas.xmlsoap.org/soap/http"/&gt;   &lt;wsdl:operation name="CatchMessageEvent"&gt;     &lt;wsdl:documentation/&gt;     &lt;soap:operation style="rpc" soapAction="CatchMessageEvent"/&gt;     &lt;wsdl:input&gt;       &lt;soap:header message="tns1:PUTSecurity" part="Security" use="literal"/&gt;       &lt;soap:body use="literal" parts="in1"/&gt;     &lt;/wsdl:input&gt;     &lt;wsdl:output&gt;       &lt;soap:body use="literal" parts="out1"/&gt;     &lt;/wsdl:output&gt;   &lt;/wsdl:operation&gt; &lt;/wsdl:binding&gt; &lt;soap:header message="tns1:PUTSecurity" part="Security" use="literal"/&gt;</pre> </li> </ul>
PER-714	<p data-bbox="394 900 1308 1022"><b>Summary</b> Multiple SOAP references deployed in a single node sending different credentials to a single SOAP service protected with Basic Authentication Policy could result in erroneous authentication failures for some of the references even if they are sending valid credentials.</p> <p data-bbox="394 1046 848 1071"><b>Workaround</b> There are two workarounds:</p> <ul style="list-style-type: none"> <li>• Deploy these references in different nodes.</li> </ul> <p data-bbox="394 1144 419 1168">or</p> <ul style="list-style-type: none"> <li>• Configure these references with different HTTP Client resource instance configurations.</li> </ul>
PER-632	<p data-bbox="394 1282 1222 1341"><b>Summary</b> For proper policy enforcement, every composite containing a web application component must have a different context root.</p> <p data-bbox="394 1366 611 1390"><b>Workaround</b> None.</p>

Key	Summary/Workaround
PER-609	<p><b>Summary</b> Incompatible policies: <code>UsernameTokenAuthentication</code> and <code>WSSProvider</code>.</p>
PER-623	<p>These two policies have redundant functionality, but they cannot co-exist on the same SOAP service.</p> <ul style="list-style-type: none"> <li>• <code>UsernameTokenAuthentication</code> authenticates using only the username token in the WS-Security header.</li> <li>• <code>WSSProvider</code> authenticates using any available information in the WS-Security header.</li> </ul> <p>Both policies remove the WS-Security header from the message after successful authentication. If both policies are in effect at the same service, when the first one (<code>WSSProvider</code>) succeeds, the second (<code>UsernameTokenAuthentication</code>) must fail, because the WS-Security header is no longer available. This failure causes request messages with proper credentials to fail erroneously.</p> <p><b>Workaround</b> Do not apply the policies <code>WSSProvider</code> and <code>UsernameTokenAuthentication</code> together at the same SOAP service.</p>
PER-557	<p><b>Summary</b> The policy <code>AuthorizationByRole</code> does not support nested groups.</p> <p>Suppose user A is a member of group B, which is a subgroup of group C. If group C has access permission to request an operation, and user A attempts to request that operation, then the request fails. That is members of group B do not inherit access permission from group C.</p> <p><b>Workaround</b> Configure access permissions directly in each subgroup (in this example, in group B).</p>
AMX-6683	<p><b>Summary</b> Some SOAP client test tools do not generate the right WSDL message when WSDL constructs are of Doc/Literal with the message part referring to type causing unpredictable behavior.</p> <p><b>Workaround</b> Use a SOAP client test tool as close as possible to the real SOAP clients for testing, rather than changing the WSDL construct to allow the test tool scenarios to work.</p>

## Web Application

Key	Summary/Workaround
IWAP-725	<p><b>Summary</b> (ActiveMatrix BPM only) If you change a substitution variable (such as <code>%%httpConnectorPort%%</code>) from a hardcoded value (such as 443)—or vice versa—in an HTTP Connector resource template, Workspace and Openspace fail to open and you may see an error similar to the following example in the logs:</p> <pre>[ERROR] com.tibco.n2.rtc.ap.ActionProcessor - [ERROR] - {WS_REQUEST_EXCEPTION} - Workspace caught an Exception - {extendedMessage='Invalid Security Context: Missing requested attribute</pre> <p><b>Workaround</b> Redeploy the application and restart Workspace and Openspace.</p>
IWAP-669	<p><b>Summary</b> If you add a WebApp component to an imported project created in ActiveMatrix 3.2.0 that already has a WebApp component, every time you select the newly added WebApp component after selecting the original WebApp component the Thread Context Class Loader Type drop-down list in the <b>Properties &gt; Implementations</b> tab will be disabled.</p> <p><b>Workaround</b> Deselect the newly added WebApp component (by selecting any area on the canvas that is not the original WebApp component from the imported project), then select the newly added WebApp component again. The Thread Context Class Loader Type drop-down list should be enabled.</p>
IWAP-223	<p><b>Summary</b> In the <code>web.xml</code> file, <code>resource-ref</code> elements are not supported.</p> <p><b>Workaround</b> None.</p>
IWAP-72	<p><b>Summary</b> The WebApp component does not have an option to modify the Web Application connector during deployment in TIBCO Administrator UI.</p> <p><b>Workaround</b> To configure or change the connector name in TIBCO Administrator:</p> <ol style="list-style-type: none"> <li data-bbox="392 1107 1306 1168">1. In TIBCO Business Studio, open the project containing the Web Application component.</li> <li data-bbox="392 1185 1306 1315">2. Promote the <code>defaultConnector</code> property to a composite level: <ol style="list-style-type: none"> <li data-bbox="435 1237 1306 1272">a. Select the <code>defaultConnector</code> property on the component.</li> <li data-bbox="435 1289 1306 1315">b. Right-click and select <b>Promote</b>.</li> </ol> </li> <li data-bbox="392 1333 1306 1394">3. Make the composite property a substitution variable so it can be substituted in TIBCO Administrator before deployment.</li> <li data-bbox="392 1411 1306 1446">4. Right-click on composite and select <b>Create DAA</b>.</li> <li data-bbox="392 1463 1306 1550">5. In TIBCO Administrator, make sure a connector with the same name is created in TIBCO Administrator and deployed on to the node before the Web Application DAA is deployed.</li> </ol>

