



# **TIBCO ActiveMatrix<sup>®</sup> Service Grid**

## **Release Notes**

*Software Release 3.4.0*

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# TIBCO Documentation and Support Services

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## How to Access TIBCO Documentation

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

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

## Product-Specific Documentation

Documentation for TIBCO ActiveMatrix® Service Grid is available on the <https://docs.tibco.com/products/tibco-activematrix-service-grid> page.

Use of the following features, installation profiles and development tools requires a TIBCO ActiveMatrix Service Grid license:



- TIBCO ActiveMatrix Policy Director Governance, TIBCO ActiveMatrix SPM Dashboard, and TIBCO ActiveMatrix SPM Runtime Server profiles; and
- TIBCO ActiveMatrix Service Grid development tools for Java, Webapp and Spring components.

Customers with only a TIBCO ActiveMatrix Service Bus license are not licensed to use these features, tools or profiles.

The following documents form the documentation set:

- *TIBCO ActiveMatrix Service Grid Concepts*: Read this manual before reading any other manual in the documentation set. This manual describes terminology and concepts of the platform. The other manuals in the documentation set assume you are familiar with the information in this manual.
- *TIBCO ActiveMatrix Service Grid Development Tutorials*: Read this manual for a step-by-step introduction to the process of creating, packaging, and running composites in TIBCO Business Studio.
- *TIBCO ActiveMatrix Service Grid Composite Development*: Read this manual to learn how to develop and package composites.
- *TIBCO ActiveMatrix Service Grid Java Component Development*: Read this manual to learn how to configure and implement Java components.
- *TIBCO ActiveMatrix Service Grid Mediation Component Development*: Read this manual to learn how to configure and implement Mediation components.
- *TIBCO ActiveMatrix Service Grid Mediation API Reference*: Read this manual to learn how to develop custom Mediation tasks.
- *TIBCO ActiveMatrix Service Grid Spring Component Development*: Read this manual to learn how to configure and implement Spring components.
- *TIBCO ActiveMatrix Service Grid WebApp Component Development*: Read this manual to learn how to configure and implement Web Application components.
- *TIBCO ActiveMatrix Service Grid REST Binding Development*: Read this manual to learn how to configure and implement REST components.
- *TIBCO ActiveMatrix Service Grid Administration Tutorials*: Read this manual for a step-by-step introduction to the process of creating and starting the runtime version of the product, starting TIBCO ActiveMatrix servers, and deploying applications to the runtime.
- *TIBCO ActiveMatrix Service Grid Administration*: Read this manual to learn how to manage the runtime and deploy and manage applications.

- *TIBCO ActiveMatrix Service Grid Hawk ActiveMatrix Plug-in*: Read this manual to learn about the Hawk plug-in and its optional configurations.
- *TIBCO ActiveMatrix Service Grid Policy Director Governance Custom Actions*: Read this manual to learn how you can configure and enforce policies for ActiveMatrix and external services hosted in third party containers, using TIBCO ActiveMatrix Policy Director Governance.
- *TIBCO ActiveMatrix Service Grid Service Performance Manager API Reference*: Read this manual to learn how to use the SPM APIs.
- *TIBCO ActiveMatrix Service Grid Error Codes*: Read this manual to know more about the error messages and how you could use them to troubleshoot a problem.
- *TIBCO ActiveMatrix Service Grid Installation and Configuration*: Read this manual to learn how to install and configure the software.
- *TIBCO ActiveMatrix Service Grid Security Guidelines*: Read this manual to learn more about security guidelines and recommendations for TIBCO ActiveMatrix Service Grid.
- *TIBCO ActiveMatrix Service Grid Release Notes*: Read this manual for a list of new and changed features, steps for migrating from a previous release, and lists of known issues and closed issues for the release.

### **How to Contact TIBCO Support**

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- For an overview of TIBCO Support, visit <http://www.tibco.com/services/support>.
- For accessing the Support Knowledge Base and getting personalized content about products you are interested in, visit the TIBCO Support portal at <https://support.tibco.com>.
- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to <https://support.tibco.com>. If you do not have a user name, you can request one by clicking Register on the website.

### **How to Join TIBCO Community**

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

# New Features

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The following new features have been added in the ActiveMatrix 3.4.0 release. Some of the features were first added in ActiveMatrix 3.3.1 and have been indicated as such.

## Integrated TIBCO ActiveMatrix Platform

TIBCO ActiveMatrix 3.4.0 is embedded with Policy Director Governance, which provides functionality similar to previously standalone product TIBCO Policy Director (PD). This enables dynamic policy-based SOA governance by allowing users to manage and enforce cross-functional requirements such as security and compliance independent of their implementation and deployment. Policy Director Governance can be installed as a Profile using the TIBCO ActiveMatrix Installer and can be configured using TIBCO Configuration Tool. For details, refer to the [Create TIBCO ActiveMatrix Policy Director Governance Administrator Server](#) section in *TIBCO ActiveMatrix Service Grid Installation and Configuration*.

TIBCO Service Performance Manager server is also integrated with ActiveMatrix 3.4.0 platform and can be installed using the ActiveMatrix 3.4.0 platform installer. For details on configuring TIBCO Service Performance Manager using the TIBCO Configuration Tool, refer to the [Configure TIBCO Service Performance Manager Components](#) section in *TIBCO ActiveMatrix Service Grid Installation and Configuration*.

The TIBCO Service Performance Manager dashboard, that was originally part of TIBCO Service Performance Manager server, is also a part of the ActiveMatrix platform starting ActiveMatrix 3.3.1. It can be installed through the TIBCO ActiveMatrix Installer. A new installation profile is created to install TIBCO Service Performance Manager dashboard separately. Using the dashboard, you can monitor assets, view measurements, and author rules. For details, refer to the [TIBCO Service Performance Manager Dashboard](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Product Upgrade

You can use the new TIBCO Configuration Tool-based approach for upgrading your existing setup to ActiveMatrix 3.4.0, and downgrading from ActiveMatrix 3.4.0 to prior supported ActiveMatrix versions, in a robust and seamless manner. This approach is available starting ActiveMatrix 3.3.1.

For details on what the Upgrade/Downgrade entails, refer to the [Upgrade and Downgrade](#) section in *TIBCO ActiveMatrix Service Grid Installation and Configuration*.

## Optimization for Large Scale Environments

In ActiveMatrix 3.4.0, there have been significant performance improvements in ActiveMatrix Administrator GUI and backend, specifically in case of TIBCO ActiveMatrix enterprises consisting of over 1000 Nodes. The initialization time and memory usage for Policy Director Governance Service have also been optimized, contributing to improved startup performance for large scale setups.

The following areas were optimized for large scale setups in ActiveMatrix 3.3.1:

- Optimization in notification processing when supporting large number of Hosts and Nodes within an enterprise
- Optimization in ActiveMatrix Administrator UI to reduce the time it takes to load
- Enhancement of ActiveMatrix Administrator CLI to include timeouts to terminate long-running CLI tasks in large scale setups
- Optimizations in updating Notification Transport, Server Configuration, and internal HTTP Connector Configuration
- Ability to View and Download the TRA File of a host or node using ActiveMatrix Administrator UI
- Ability to create and manage remote TIBCO Hosts

- Ability to manage and update a Host's and Node's JVM arguments using ActiveMatrix Administrator UI and CLI
- Optimization in Hawk ActiveMatrix Plugin to reduce the memory usage

In ActiveMatrix 3.3.1, the **Infrastructure > Hosts** screen included a drop down for machine names. The drop down is optimized to additionally lists the hosts by installation state (Not Installed) or by machine name.

### Assessing the Health of Applications

Starting ActiveMatrix 3.3.1, you can assess the health of applications in terms of their back-end services and shared resource instances. The health check request is invoked on a service endpoint. The status of the participating services, references, and shared resources is returned in a response.

Health check includes:

- Status reporting for failure scenarios (for example: health check not supported, EMS connectivity Issues, and so on.)
- Health check timeout at global and granular level
- Caching health check response for SOAP/HTTP and SOAP/JMS endpoints
- Custom health check operation via annotations: ActiveMatrix also supports creation of annotated health check methods for Java implementation type, which can be executed during a health check Invocation to provide a customized health check response.
- Ability to ping SOAP/HTTP and SOAP/JMS endpoints
- Health check specific logging.

Health check can be invoked on ActiveMatrix applications (and application chains) comprising following component types:

- Binding Types (BTs): SOAP/HTTP, SOAP/JMS (for SOAP Versions 1.1 and 1.2)
- Implementation Types (ITs): TIBCO ActiveMatrix® BPM, Java, Mediation, and Spring. Note that only ProcessFlow components from BPM applications are applicable for health check.
- Shared Resources (RTs): JDBC, JMS Connection/Destination

In ActiveMatrix 3.4.0, the service health check feature comes with a new graphical user interface (GUI) that can be accessed conveniently from ActiveMatrix Administrator UI. The support is extended to REST Binding Type (BT) endpoints (including the support for caching and ping functionality).

For both SOAP and REST endpoints, service health check "ping" operation is also available over HTTP GET in addition to HTTP POST, making the invocation more lightweight.

ActiveMatrix 3.4.0 onwards, service health check is enabled by default.

For details, refer to the [Service Health Check](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

### Enterprise Deployment Health Check

TIBCO ActiveMatrix 3.3.1 supports Enterprise Deployment Health Check to help you assess the overall health of an enterprise, with a focus on ActiveMatrix Administrator. With this feature, you can gather comprehensive metadata and runtime configuration information of the ActiveMatrix Administrator at various levels (to include hosts, nodes, environments), carry out realtime test deployments, and review all the collected information in a comprehensive report, to better equip yourself in making decisions about substantial upcoming deployments.

ActiveMatrix 3.4.0 provides a new graphical user interface to invoke an Enterprise Deployment Health Check, and encompasses all the health check operations.

For details, refer to the [Enterprise Deployment Health Check](#) section in *TIBCO ActiveMatrix Service Grid Administration*.



## OSGi Diagnostics Check

Using the new UI-based OSGi diagnostic tool introduced in ActiveMatrix 3.4.0, you can inspect ActiveMatrix enterprise from the perspective of diagnosing and troubleshooting failures related to interdependencies between various runtime entities, right from the Administrator UI. It provides an easy-to-use interface for accessing OSGi information which is typically hidden behind complex console commands, the outcome of which is difficult to parse.

For details, refer to the [OSGi Diagnostic Tool](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Monitoring Enterprise Status

Starting ActiveMatrix 3.3.1, using ActiveMatrix Administrator, you can check the status of all ActiveMatrix entities (nodes, hosts, applications, and resource instances, and the enterprise) from a single page. To access this page, open ActiveMatrix Administrator UI and navigate to **Infrastructure > Enterprise Status**.

For details, refer to the [Monitoring the Status of Entities from a Single Page](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Enterprise Search

Starting ActiveMatrix 3.4.0, ActiveMatrix Administrator comes with a built-in search functionality. This functionality can be used to search various entities in the ActiveMatrix enterprise based on their name, type, runtime state and other parameters, and also carry out certain context-specific actions on the searched entities. For details, refer to the [Searching for Entities in an Enterprise](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Synchronizing Node Feature List

Using the 3.4.0 ActiveMatrix Administrator CLI you can synchronize the node Feature list displayed in ActiveMatrix Administrator UI (Navigate to **Infrastructure > Nodes > Configuration > Features** tab or **Infrastructure > Software Management > Features > View By Nodes** tab to view) with the runtime node's feature list (Run the `tibcohost` shell command `describeEnabledProductFeatures` to view), in the event that the lists are out of sync. This is usually a result of using the `tibcohost` command for enabling or disabling features on the runtime node. For details, refer to the [Synchronizing node Feature List](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Removing Dependency on Messaging Bus

If the applications you intend to run in the ActiveMatrix enterprise are never virtualized, that is, never distributed across multiple nodes, then the messaging bus connectivity for the nodes and the virtualization queues created as a result, pose an unnecessary overhead and need for housekeeping. Starting ActiveMatrix 3.4.0, you can create enterprises that do not use the underlying messaging bus. All the environments in such an enterprise, and the nodes under them, consequently do not use the messaging bus either.

You may also choose to create an enterprise that uses the messaging bus, but contains one or more environments (and subsequently nodes) that do not use messaging bus. If messaging bus, or virtualization is not used by a node, environment or enterprise, certain restrictions apply, for example, you cannot distribute applications in an enterprise or environment that does not use messaging bus. Certain policies that rely on the messaging bus, such as "Virtualize", do not work as expected.

For information during installation and configuration stage, refer to the [Create TIBCO ActiveMatrix Administrator Server](#) section in *TIBCO ActiveMatrix Installation and Configuration*.

For information during administration stage, refer to the respective sub-sections in the [Managing Environments](#), [Managing Nodes](#) and [Managing Applications](#) sections of *TIBCO ActiveMatrix Service Grid Administration*.

## Viewing policies applied to an Application

Starting ActiveMatrix 3.4.0, in the "Policy Set" pane of the application in ActiveMatrix Administrator UI, you can view the policies applied to the application from TIBCO Business Studio, both embedded and inline. Policies can be viewed at the application sub-components' levels by expanding the application in the left pane. For details, refer to the [Viewing Policies Applied to an Application](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Downloading Logs of Administrator Entities

Using ActiveMatrix 3.4.0 Administrator UI and CLI you can download all the logs related to an application as an aggregated archive that combines logs from the nodes on which the application is deployed, the hosts managing those nodes, and SystemNode. The `viewaction.html` page is also part of the archive, and displays all the user actions associated with the application.

For details, refer to the [Downloading Logs for an Application](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

Using the Enterprise Status page (In the ActiveMatrix Administrator UI, navigate to **Infrastructure > Enterprise Status**), you can also download logs, thread dumps and TRA files of hosts and nodes within the enterprise. Logs for applications can also be downloaded. Starting ActiveMatrix 3.3.1, you can download the TRA file of a host or node from the Host tab and Node tab of the Enterprise Status page.

For details, refer to the [Host Tab](#), [Node Tab](#) and [Application Tab](#) sub-sections in the [Monitoring the Status of Entities from a Single Page](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Support for REST Binding Type in TIBCO ActiveMatrix

Starting ActiveMatrix 3.3.1, REST binding type is fully integrated in TIBCO ActiveMatrix, that is, REST bindings can be added in TIBCO Business Studio and deployed in TIBCO ActiveMatrix Administrator without any additional changes at the time of product installation.

In ActiveMatrix 3.4.0, REST binding type support is extended to Administrator Command Line Interface (CLI) as well as GUI. With this, REST service bindings can be added in ActiveMatrix Administrator. Additionally, ActiveMatrix Administrator also supports the execution of service health check for REST bindings, including caching and ping.

For details, refer to the [Service Health Check](#) in *TIBCO ActiveMatrix Service Grid Administration*.

HTTP-based policies, such as Basic Authentication for REST service bindings, and Basic Credential Mapping for REST reference bindings are also supported starting ActiveMatrix 3.4.0.

REST bindings can also be monitored via the TIBCO Service Performance Manager dashboard.

To make accessing ActiveMatrix REST Services easier, Swagger support is introduced for REST BT via ActiveMatrix Administrator UI as well as TIBCO Business Studio starting ActiveMatrix 3.4.0. For details, refer to the [REST Bindings](#) section in *TIBCO ActiveMatrix Service Grid Administration*, and the [Generating a Swagger JSON File from TIBCO Business Studio](#) section in *TIBCO ActiveMatrix Service Grid REST Binding Development*.

## Validating JDBC Resource Template Configuration

ActiveMatrix 3.4.0 Runtime Platform provides the option to validate the configuration of JDBC resource templates and corresponding resource instances by performing a test connection on the resource while it is being installed. This way, if the configuration is incorrect, for example, wrong credentials are specified, then the Resource Instance installation fails, thus giving you an opportunity to update the configuration and not waiting until there is a business failure at invocation time. The validation can be disabled if required. For details, refer to the [Disabling Test Connection to a JDBC Resource](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Jetty Upgrade

In ActiveMatrix 3.3.1, the Jetty version for HTTP Connector resource templates is upgraded from 6.1.26 to 9.2.15. The Servlet version (`javax.servlet`) is upgraded from 2.0 to 3.1.

In ActiveMatrix 3.4.0, the Jetty version is further upgraded to 9.2.25. The Servlet version (`javax.servlet`) remains 3.1.

For details, refer to the [Configuring and Preparing HTTP Connector for Jetty 9](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Support for Single Sign-on (SSO) using OpenID Connect

ActiveMatrix 3.4.0 supports Single Sign-on (SSO) using OpenID Connect with JSON Web Tokens (JWT) for WebApp Implementation Type (IT) and REST Binding Type (BT) endpoints. This is supported with the use of OpenID Authentication policy set and underlying "OpenIDAuthentication" resource template, thus streamlining its usage for a single Application, or group of Applications to participate in SSO.

For details, refer to the [Single Sign-On to SOA Applications using OpenID Connect](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Support for Single Sign-on (SSO) using SAML SSO Web Profile

SSO can also be orchestrated in ActiveMatrix 3.4.0 using Security Assertion Markup Language (SAML) SSO Web Profile, with SAML 2.0, for WebApp Implementation Type (IT) endpoints. This includes the support for encryption and signing in accordance with the SAML 2.0 SSO Web Profile. This is also enforced with the use of SAML SSO Web Profile Authentication Policy.

For details, refer to the [Single Sign-On to SOA Applications using SAML SSO Web Profile](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Assessing Node Health

ActiveMatrix 3.4.0 introduces the notion of aggregated node health, comprising the cumulative status of the entities, such as application fragments, deployed on the node and synchronization status of the node. This aggregated status can deem the node as `Healthy`, indicating that none of the entities deployed on the node have failed, or `Not Healthy`, when one or more entities are in failed state. Node health may also be marked as `In Progress` and `Unknown` depending on the status of the entities.

It can be accessed via GUI as well as Command Line Interface (CLI), and can be used to troubleshoot failures. For details, refer to the [Viewing an Aggregated Status of a Node](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## "Read-only" and "suspended" modes for ActiveMatrix Enterprise

ActiveMatrix 3.4.0 provides you the option to put your ActiveMatrix setup in "read-only" mode, that is, none of the user actions you carry out have any effect on the state of the enterprise. All "write" operations, such as creating or deleting a node, are blocked.

ActiveMatrix 3.4.0 also provides the option to suspend an enterprise in order to take a backup before planned upgrades, no longer requiring to shut it down, thus avoiding disruptions in business continuity. The "suspended" mode restricts all user actions that can alter the state of the enterprise, such as application deployment or upgrade, ensuring that storage entities, namely the backend database and file system, are in a synchronized state, effectively resulting in a consistent backup. Once the backup is complete, the suspended actions resume as expected.

For details, refer to the [Suspending or Unsuspending an Enterprise](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## New TIBCO Business Studio Version

In ActiveMatrix 3.3.1, TIBCO Business Studio is upgraded to support Eclipse 4.4.1.

In ActiveMatrix 3.4.0, TIBCO Business Studio is further upgraded to support Eclipse 4.7.1a. For details about Eclipse Oxygen 4.7.1.a, see <https://projects.eclipse.org/releases/oxygen>.

On Linux, the minimum version of GTK required is 2.24.0.

For details, refer to the [Using TIBCO Business Studio](#) section in *TIBCO ActiveMatrix Service Grid Installation and Configuration*.

## Swagger Support for REST Service Bindings

ActiveMatrix 3.4.0 TIBCO Business Studio also provides support for generating Swagger specification for REST Service Bindings. The specification can be used in any Swagger client to invoke ActiveMatrix REST Services.

For details, refer to the [Generating a Swagger JSON File from TIBCO Business Studio](#) section in *TIBCO ActiveMatrix Service Grid REST Binding Development*.

## Reference Injection for WebApp IT Components

TIBCO Business Studio provides the option to inject References into WebApp Implementation Type (IT) component implementations of the Web Application Resource or Archive (WAR) type. To achieve this, you need to enable this feature from the Studio Preferences as it is disabled by default, and carry out some additional steps when creating the WAR which are used for the component implementation, pertaining to @Reference annotations. For details, refer to the [Enabling a Reference Injection](#) section in *TIBCO ActiveMatrix Service Grid Web Application Component Development*.

## Updating existing Third-party JDBC Drivers

Existing JDBC Drivers can be upgraded in the resource template of an ActiveMatrix node using TIBCO ActiveMatrix 3.4.0 Administrator Command Line Interface (CLI). The new JDBC Drivers need to be configured using the "Configure Third-Party Driver" wizard of the TIBCO Configuration Tool before upgrade. For details, refer to the [Upgrading a Third-party JDBC Driver using the CLI](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

Support for the following JDBC Driver versions is added to ActiveMatrix 3.4.0:

- Oracle 12C R2 JDBC Driver 12.2.0
- DB2 11 JDBC Driver 4.24.92
- Microsoft SQL Server JDBC Driver 7.0.0

## Updated Ant Version

The Ant version used internally by ActiveMatrix 3.4.0 is updated to 1.9.9. Ant is used to launch the "Administrator CLI Script Generation" wizard from TIBCO Business Studio, the TIBCO Configuration Tool, and Enterprise Deployment Health Check.

## Updated Tomcat® Version

TIBCO ActiveMatrix 3.4.0 supports Apache Tomcat® version 7.0.82. The Tomcat server used by the TIBCO Service Performance Manager dashboard has been upgraded from 7.0.77 to 7.0.90.

The following features are available starting ActiveMatrix 3.3.1:

## Host Manager

Starting ActiveMatrix 3.3.1, TIBCO Host Manager offers new commands to manage TIBCO Runtime Hosts and Nodes in large scale Enterprises. The commands allow the user to start and stop Hosts, and the Nodes managed by them, in various modes.

For details, refer to the [Host Manager](#) section in *TIBCO ActiveMatrix Service Grid Installation and Configuration*.

## Host Lifecycle Management

Starting ActiveMatrix 3.3.1, TIBCO ActiveMatrix Administrator allows lifecycle management of TIBCO host instances on remote machines via Administrator. This includes the ability to create, edit, install, start, stop, uninstall and delete TIBCO host instances.

To use this lifecycle management, you need at least one pre-created TIBCO host instance on a remote machine that is registered with TIBCO ActiveMatrix Administrator (done via TIBCO Configuration Tool). Then, using this instance, TIBCO ActiveMatrix Administrator can create additional TIBCO host instances on the remote machine and can perform lifecycle operations.

For details, refer to the [Managing Hosts](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Exporting and Importing Configuration Data

Starting ActiveMatrix 3.3.1, you can export and import configuration data from TIBCO ActiveMatrix Administrator using Administrator.

You can export ActiveMatrix objects such as environments, nodes, applications, and resource templates to CLI scripts. The CLI scripts can be modified as needed and then executed using ANT on the same or a different ActiveMatrix enterprise. This recreates the objects based on the exported archive. You can export data using the ActiveMatrix Administrator UI (by navigating to **Administrator Configuration > Admin Server > General** tab and clicking **Export Wizard**) or using the ActiveMatrix Administrator CLI with the provided Ant task. For details, refer to the [Export and Import](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Copying PFU (Preparing for Undeploy) Components across BPM Nodes

Typically when the TIBCO ActiveMatrix BPM user adds a new BPM node to existing BPM setup, the existing BPM applications are redistributed to the newly added BPM node, due to the symmetric nature of BPM applications. The components of the BPM applications that are in the 'Preparing For Undeploy (PFU)' state, however, are not automatically redistributed.

TIBCO ActiveMatrix 3.3.1 provides a simplified ActiveMatrix Administrator CLI-based solution using which components in the 'Preparing For Undeploy (PFU)' state can be redistributed in a single, automatic step. The BPM users still have to perform the prerequisite steps of creating the new BPM node type and mapping the `amx.bpm.app` application to the newly created BPM node. For details, refer to the [Copying Preparing for Undeploy \(PFU\) Components across BPM Nodes](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Restarting a Host or Node

For large deployments, you might need to change the configuration of a host or node frequently and then restart the host or node to make sure the changes are reflected in the ActiveMatrix Administrator. Starting ActiveMatrix 3.3.1, you can restart a host or node using the ActiveMatrix Administrator GUI or CLI and easily apply all the changes related to the host or node. For details, refer to the [Restarting a TIBCO Host](#) and [Restarting a node](#) sections in *TIBCO ActiveMatrix Service Grid Administration*.

## Updating the JVM Configuration of a Host and Node

You can modify JVM and all user-specific Java properties for hosts and nodes using the ActiveMatrix 3.3.1 Administrator UI or CLI. For details, refer to the [Updating the JVM Configuration of a Host](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Editing the Notification Transport Server Configuration

ActiveMatrix 3.3.1 provides a more stable approach for updating the Notification Transport Server Configuration, especially when updating large scale setups. At present, this approach is available only through the ActiveMatrix Administrator CLI.

For details, refer to the [Editing the Notification Transport Server Configuration using the CLI](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Updating Internal HTTP Connector Configuration

The ActiveMatrix 3.3.1 Administrator CLI provides a more stable approach for updating an internal HTTP connector, particularly for a large scale setup. For details, refer to the [Updating Internal HTTP Connector Configuration](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Reconnecting to the Notification Server

You can reconnect to the Notification Transport server using ActiveMatrix 3.3.1 Administrator UI and CLI. Reconnecting to the Notification Server involves recreating all the connections from ActiveMatrix Administrator to the Notification Server and refreshes the status of all entities.

This feature can be used to fix inconsistent status of ActiveMatrix Administrator and Runtime, and lost status of task execution. For details, refer to the [Reconnecting to EMS](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Viewing and Managing DAA Files

In TIBCO ActiveMatrix 3.3.1 Administrator, a new tab under **Infrastructure > Software Management** enables you to view and manage DAA files. In addition, you can also download DAA files. These capabilities are available through the ActiveMatrix Administrator GUI as well as CLI.

## Uninstalling Features using Wildcards

Using the TIBCO ActiveMatrix 3.3.1 Administrator CLI, you can uninstall (mark for uninstall) or disable a feature from a node by specifying the version as a wildcard (\*). For example, specifying a version of 1.0.\* uninstalls (marks for uninstall) all features whose version starts with 1.0.

## List of Plugins in Software Management Feature Tab

A list of plugins for each feature version is listed in the Feature List. You can see the plugin list under **Infrastructure > Software Management > Features** tab in TIBCO ActiveMatrix 3.3.1 Administrator UI.

## Date Display for Features

The date display for node features listed in Feature List for each node in TIBCO ActiveMatrix 3.3.1 Administrator UI under **Infrastructure > Nodes > Configuration > Feature** tab has changed. New columns (Modified On, Modified By, Deployed On, and Deployed By) have been added to the **Node > Configuration > Features** screen.

## Appending the Host Name to the Executable Process

TIBCO ActiveMatrix 3.3.1 Administrator allows appending of the TIBCO host instance name to the tibcohost executable process. For details, refer to the [Monitoring the Status of Entities from a Single Page](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Creating Multiple Nodes with the Same Name

TIBCO ActiveMatrix 3.3.1 Administrator allows creation of two or more nodes with the same name on a single TIBCO host instance, where the Nodes belong to different environments. For details, refer to the [Creating Multiple Nodes with the Same Name](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Emitting 'Sender Identifier' Information

For SOAP service endpoints, TIBCO ActiveMatrix 3.3.1 emits a field from each SOAP request that identifies the sender of the request to TIBCO Service Performance Manager. This "Sender Identifier" field helps TIBCO Service Performance Manager gather statistics based on the 'Sender' of the request, for instance, the number of requests the endpoint has received from a particular sender. This feature is supported for SOAP/HTTP and SOAP/JMS endpoints, for SOAP versions 1.1 and 1.2.

For details, refer to the [Emitting 'Sender Identifier' Information](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Schema Validation for SOAP Messages

In ActiveMatrix 3.3.1 you can validate both incoming and outgoing SOAP messages against the WSDL schema at the SOAP binding level itself before continuing on to other ActiveMatrix components. This feature can be enabled from TIBCO Business Studio as well as ActiveMatrix Administrator and is supported for SOAP/HTTP and SOAP/JMS service and reference bindings, for SOAP versions 1.1 and 1.2.

For details, refer to the [Schema Validation for SOAP Messages](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## SOAP Headers for Declared Faults

SOAP Headers can be defined for Declared Faults, using "Message" context parameters in TIBCO Business Studio starting ActiveMatrix 3.3.1. The message parts corresponding to the context parameters are mapped to SOAP Headers at runtime in case of declared faults, similar to request and response.

## Compression Support for SOAP and REST Binding Types

ActiveMatrix 3.3.1 provides compression support for request and response messages for SOAP/HTTP and REST/HTTP binding types.

## "Stand By" State of HTTP Connector

The behavior of HTTP Connector is enhanced in ActiveMatrix 3.3.1 to work better with an external HTTP load balancer. An HTTP Connector stops listening to client connections when there are no service endpoints or applications available to serve the requests. In other words, if all the applications using an HTTP Connector are stopped (or undeployed), the HTTP Connector also stops. For this case, an external HTTP load balancer can detect the unavailability of the endpoint, mark it as offline, and stop routing requests to it. When applications are started, the HTTP connector automatically starts listening on its port, such that the external HTTP load balancer can detect the endpoint as online and start routing requests to it. The 'Stand By' state for HTTP Connectors represents the stopped state.

Upon installation, an HTTP Connector appears in the 'Stand By' state. When the first Application using the HTTP Connector starts up, the HTTP Connector changes the state to the 'Running' state. When the last Application using the HTTP Connector is stopped, the HTTP Connector goes back to the 'Stand By' state.

For details, refer to the [Runtime States](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Specifying the Maximum Pool Size

In TIBCO ActiveMatrix 3.3.1 Administrator UI, Maximum Pool Size can be specified for a JMS Connection Factory Resource Template. The new field is available when creating a new JMS Connection Factory Resource Template. The value of Maximum Pool Size can also be updated for existing JMS Connection Factory Resource Templates.

## Updating Threading Policy Timeout

Starting ActiveMatrix 3.3.1, you can update Threading Policy timeout values during or after deployment time using Administrator. The timeout values must be specified in milliseconds.

Properties can be changed directly through the ActiveMatrix Administrator UI or by setting them in the node's TRA file for the node on which the application is deployed. For details, refer to the [Threading Policy](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Support for "Never Virtualize" Policy

ActiveMatrix 3.3.1 provides the "Never Virtualize" policy, which applies to Service and Reference Virtualization Bindings (BT) and ensures that the messaging bus is never used for delivering messages. For "Never Virtualize" policy to be applied, the communicating entities must always be on the same node. Any policy that relies on the use of the messaging bus, for example, "At Least Once" policy and "Transacted One Way" policy, cannot be applied in conjunction with "Never Virtualize" policy.

## Graceful node Shutdown

Starting ActiveMatrix 3.3.1, when a shutdown operation is executed on a TIBCO ActiveMatrix Runtime node, the node stops gracefully. Nodes can be shutdown gracefully from the ActiveMatrix Administrator UI or CLI. For details, refer to the [Graceful Node Shutdown](#) section in *TIBCO ActiveMatrix Service Grid Administration*.

## Stopping of Nodes Configured for Manual Setup

Prior to ActiveMatrix 3.3.1, when a host was stopped, all nodes managed by that host were stopped irrespective of their startup mode, that is, Nodes configured for manual startup were also stopped. To prevent the stopping of Nodes configured for manual startup, a new TRA property `com.tibco.amx.decouple.Manual.Nodes` is introduced in ActiveMatrix 3.3.1.

This property is used during host startup and shutdown to determine the behavior of the Nodes configured for manual startup. As a result, the lifecycle of these Nodes is decoupled from the host lifecycle, and as a result, the nodes do not get affected when the host is stopped/started, and their shutdown/startup can be handled manually.

## Other TIBCO Business Studio Enhancements

You can find out the version of TIBCO Business Studio using which a project was created. This information is stored in a hidden `.version` file which is added to the SOA and Java implementation project folders. This file contains important information about the project, such as timestamp, Studio version, and Eclipse Platform version of creation or modification.

When the user generates the Administrator CLI script for a DAA using the new Studio, a new attribute called `propertyType` is added to each `<Property>` element in the `<projectName>.deployment-config.xml` file starting ActiveMatrix 3.3.1.

TIBCO Business Studio also supports adding of features by extending the Target Platform. As a result, the Debugger can provision features from the extended Target Platform. A Target Platform can be added or modified using the **Windows > Preferences > Plug-in Development > Target Platform** page.



## **Java 8 Support for TIBCO ActiveMatrix Runtime and TIBCO Business Studio**

Starting TIBCO ActiveMatrix 3.3.1, Java 8 is supported out-of-the-box for both the Runtime, and TIBCO Business Studio. In case of TIBCO Business Studio, users can import existing projects (created using TIBCO Business Studio in prior versions of ActiveMatrix) into the new TIBCO Business Studio, and update them to use Java 8 language features.

For details, refer to the [Using TIBCO Business Studio](#) section in *TIBCO ActiveMatrix Service Grid Installation and Configuration*.

## **TIBCO ActiveMatrix Updater Tool for Java Runtime Environment (JRE)**

The TIBCO ActiveMatrix Updater Tool for Java Runtime Environment (JRE), that was originally available as a separate installer, is available as a part of the TIBCO ActiveMatrix installation starting TIBCO ActiveMatrix 3.3.1. The tool can be used to update the JRE version of the ActiveMatrix environment.

For details, refer to the [Updating JRE Version](#) section in *TIBCO ActiveMatrix Service Grid Installation and Configuration*.

## **Support for SQL Server 2017**

TIBCO ActiveMatrix Service Grid now supports SQL Server 2017 AlwaysON Availability Groups with JDBC 7.0.0.

## **Support for Db2 11**

TIBCO ActiveMatrix Service Grid now supports Db2 11. The driver version supported is 4.24.92.

## **Support for PostgreSQL (Starting with TIBCO ActiveMatrix Hotfix 002)**

TIBCO ActiveMatrix Service Grid now supports PostgreSQL versions 11.5 and 10.7 using JDBC driver 42.2.8. (postgresql-42.2.8.jar).

## **Support for Oracle Database Server 18c and 19c (Starting with TIBCO ActiveMatrix Hotfix 002)**

TIBCO ActiveMatrix Service Grid now supports Oracle Database Server 18c and 19c using respective drivers.

## **Support for Oracle Database Server 12c with Transparent Application Failover (TAF) (Starting with TIBCO ActiveMatrix Hotfix 002)**

TIBCO ActiveMatrix Service Grid now supports Oracle Database Server 12c with Transparent Application Failover (TAF) using Oracle 12C R2 JDBC Driver 12.2.0. This is certified for TIBCO ActiveMatrix runtime only. There is no TIBCO Configuration Tool (TCT) support. Contact TIBCO Support for enabling Oracle OCI driver with TAF feature.

## Changes in Functionality

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The following are changes in functionality in this release.

### ADMIN-HOME Property in the CLI Scripts

You must now update the following property in all existing CLI scripts to point to the correct version of ActiveMatrix Administrator:

```
<property name="ADMIN-HOME" value="<path to ActiveMatrix Administrator>"/>
```

Some actions, such as uploading DAA, might fail if the ADMIN-HOME property points to an older version of the ActiveMatrix Administrator. For example, if the ADMIN-HOME property is set to ActiveMatrix Administrator 3.3.0 in the CLI script, uploading and deploying applications on ActiveMatrix Administrator 3.4.0 might fail.

### Dependency on JRE implementations for Java XML APIs

Starting with this release, for Java XML APIs, the ActiveMatrix platform code now depends on implementations provided by the underlying JRE instead of depending on vendor-specific implementations. You must, however, continue to add the `javax.xml` packages of the user application as the packages are not available directly in an OSGi environment.

For the Java and Spring implementation types, add the `javax.xml` packages to the `META-INF/MANIFEST.MF` file. For details on the procedure, refer to the *TIBCO ActiveMatrix® Service Grid Java Component Development Guide*.

For the Web Application implementation type, add the `javax.xml` package to the `.requirements` file. For details on the procedure, refer to the *TIBCO ActiveMatrix® Service Grid WebApp Component Development Guide*.

# Deprecated and Removed Features

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Following features have been deprecated or removed in this release.

## **Metrics Collection Runtime (MCR) Functionality**

The Metrics Collection Runtime (MCR) functionality has been deprecated. All MCR-specific pages, widgets, and check boxes that appeared when configuring ActiveMatrix Administrator using the TIBCO Configuration Tool have been removed.

## **ActiveMatrix Administrator Dashboard**

The TIBCO ActiveMatrix Administrator dashboard (**Dashboards > Infrastructure**) has been deprecated.

You can check the status of all ActiveMatrix entities (nodes, hosts, applications, and resource instances) from the **Infrastructure > Enterprise** Status page. From this page, you can also search for entities in an Enterprise and perform specific actions on them.

## **Publishing to UDDI Server**

The ability to publish Application Services to Universal Description, Discovery and Integration (UDDI) Server using TIBCO ActiveMatrix Administrator has been deprecated.

# Migration and Compatibility

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For instructions on how to migrate from a previous release to the current release, refer to the *ActiveMatrix Service Grid Installation and Configuration Guide*.

## **Product Compatibility**

TIBCO ActiveMatrix 3.4.0 is compatible with the following product versions:

- TIBCO Enterprise Message Service™ 8.5.1 (Starting with TIBCO ActiveMatrix Hotfix 002)
- TIBCO Hawk® 6.1.0

## **Support for Spring Security Release**

The Spring version supported by TIBCO ActiveMatrix Service Grid has been upgraded from 2.5.6 to Spring security release 2.5.6.Sec03.

## Closed Issues

The table lists closed issues in this release.

Key	Summary
AMRP-5676	<p>In TIBCO ActiveMatrix BPM setup, when the Java property <code>com.tibco.amx.cf.enable.virtualizationAddress.versioning</code> was set to true for the BPMNode, a <code>NullPointerException</code> was seen in the Node logs when an operation was invoked immediately following the undeployment and redeployment of the user's BPM Application, or after BPMNode restart. This issue is specific to ActiveMatrix BPM environments and has now been addressed.</p>
AMRP-5615	<p>While updating JVM arguments from TIBCO ActiveMatrix Administrator GUI or CLI, the order of JVM arguments was not maintained, duplicate JVM arguments were allowed and JVM arguments in different units were not allowed. With this fix, all above issues have been addressed.</p>
AMRP-5601	<p>For any authentication request, by default, the ActiveMatrix platform allowed HTTP GET method requests. There was no way to disable the HTTP GET method requests.</p> <p>Now, you can control the URI names for which HTTP GET method can be disabled for authentication requests. This can be controlled by using the Java property, <code>com.tibco.governance.authentication.disable.get.URI</code>.</p> <p>The Java property can be set in the node's TRA file or the ActiveMatrix Administrator UI as follows.</p> <ul style="list-style-type: none"> <li>• Node's TRA file           <p>In the runtime node's TRA file, set the property <code>com.tibco.governance.authentication.disable.get.URI</code> to comma-separated URI names for which HTTP GET method is disabled. A * at the end of a URI indicates that the URI names that start with the pattern mentioned in the property are disabled. The following example implies URI names starting with <code>abc</code> or <code>xyz</code> are disabled.</p> <pre>com.tibco.governance.authentication.disable.get.URI= abc,abc/,/xyz/*</pre> </li> <li>• ActiveMatrix Administrator UI           <p>Set the property using the ActiveMatrix Administrator UI via <b>Infrastructure &gt; Nodes &gt; Select Node &gt; Configuration &gt; JVM Configuration</b>.</p> <ul style="list-style-type: none"> <li>– Property: <code>com.tibco.governance.authentication.disable.get.URI</code></li> <li>– Value: comma-separated URI names</li> </ul> </li> </ul>

Key	Summary
AMRP-5585	<p>If TibcoHost was installed as a Windows service on a Windows machine, it failed intermittently while uninstalling the host and the following error was displayed:</p> <pre>TIBCO-AMX-INFRA-002114: Unable to rename the node's directory &lt;TIBCO_CONFIG_HOME&gt;\tibcohost\&lt;TH_INSTANCE_FOLDER&gt;\data_3.2.x\host \plugins to &lt;TIBCO_CONFIG_HOME&gt;\tibcohost\&lt;TH_INSTANCE_FOLDER&gt; \data_3.2.x\host\plugins.tmp0 before deletion</pre> <p>This error is specific to the Microsoft Windows operating system and is a result of the file locking mechanism in Microsoft Windows operating system. To address this, in case a file or folder lock is detected in the file system, ActiveMatrix Administrator now retries to uninstall the host up to 10 times with a delay of 1 second between tries.</p>
AMRP-5579, AMX-16047	<p>Using the new UI-based OSGi diagnostic tool introduced in ActiveMatrix 3.4.0, you can inspect ActiveMatrix enterprise from the perspective of diagnosing and troubleshooting failures related to interdependencies between various runtime entities, right from the ActiveMatrix Administrator UI. It provides an easy-to-use interface for accessing OSGi information which is typically hidden behind complex console commands, the outcome of which is difficult to parse.</p> <p>For details, refer to the <a href="#">OSGi Diagnostic Tool</a> section in <i>TIBCO ActiveMatrix Service Grid Administration</i>.</p>
AMRP-5558	<p>When the TIBCO ActiveMatrix Runtime processes the commands issued by the Administrator (RDA), a file lock issue occurred as a result of the file management system on Windows OS. This resulted in indefinite wait while executing Administrator CLI. With this fix, the Runtime layer is now able to send appropriate error notifications about the failure back to Administrator, so that the Administrator can process the failure and the CLI process can be terminated in a timely manner.</p>
AMRP-5556	<p>In a TIBCO ActiveMatrix setup, if a copy of a node folder existed under the &lt;TIBCO_CONFIG_HOME&gt;/tibcohost/&lt;TH_INSTANCE_FOLDER&gt;/data_3.2.x/nodes, tibcohost commands such as describeNodes incorrectly considered the copied node folder as a valid node artifact during processing.</p> <p>This resulted in unused or corrupt data within the copied node folder being read, with various errors showing up in the logs. For example:</p> <pre>TIBCO-AMX-HPA-000270: there is no process associated with node &lt;Copied Node Folder Name&gt;</pre> <p>With this fix, a node folder is considered for processing only if a node-to-JMX connection mapping is found for the node name. Stray folders are not considered as valid node artifacts.</p>
AMRP-5555	<p>In a TIBCO ActiveMatrix environment, if a plugin jar is corrupted, the provisioning of the Features containing the corrupted jar as member bundles would fail without providing any information about the corrupted jar. The exception message printed in the logs, which was too generic, has now been fixed. The exception message now provides the exact details of the jar file. For example:</p> <pre>TIBCO-AMX-INFRA-000262: Error calculating checksum for file /apps/ tibco/components/shared/1.0.0/plugins/test_1.1.1.001.jar</pre>


Key	Summary
AMRP-5545	<p>When applications that use HTTP Client resource template were deployed and invoked by sending multiple requests, the output of the <code>TibcoHost describeDeployedResourcePools</code> command always returned 0 for 'Pool allocated size' and 'Pool active size'. Also, 'Pool maximum size' always displayed the default Maximum Pool size value (20). As a result, it was not possible to determine the number of active connections catering to the requests and total connections kept alive in the connection pool.</p> <p>This issue has now been fixed. Now, when connection pooling is used, the execution of the <code>tibcohost describeDeployedResourcePools</code> command returns the correct values for 'Pool maximum size' (value of maximum total connections), 'Pool allocated size' (number of connections kept alive) and 'Pool active size' (number of connections currently catering to the requests).</p> <p>When connection pooling is not used, the execution of the <code>tibcohost describeDeployedResourcePools</code> command returns Zero (0) for 'Pool maximum size', 'Pool allocated size' and 'Pool active size'. As connection pooling is not used, monitoring connection pool statistics is not required.</p>
AMRP-5542	<p>In case of TIBCO ActiveMatrix SOA projects containing Java Implementation Type (IT) or Spring Implementation Type (IT) configured with a JAXB Data Binding, if the Port Type(s) used by the Java IT or Spring IT Component were defined using multiple complex WSDLs, the underlying JAXB layer had memory management issues, such as object references not being removed from the memory, resulting in no garbage collection. This lead to high memory usage at runtime. These issues have now been fixed and high memory usage is no longer seen.</p>

Key	Summary
AMRP-5537	<p>In TIBCO ActiveMatrix BPM, a process can be updated by adding a new operation to the WSDL. For process instances created and started for newer versions of such applications, request messages accumulated in the internal messaging queue and the following error message was seen in the BPM node logs:</p> <pre>org.osoa.sca.ServiceRuntimeException: TIBCO-AMX-CF-010002: Missing target for operation</pre> <p>With this fix, if the Java property <code>com.tibco.amx.cf.enable.virtualizationAddress.versioning</code> is set to <code>true</code> on the BPM node, the error message is no longer shown and process instances of the new version of the application are successfully created, started and processed as expected.</p> <p>If the Java property is not specified, the default value is <code>false</code>. The Java property can be set in the node's TRA file or the ActiveMatrix Administrator UI as follows.</p> <ul style="list-style-type: none"> <li>• Node's TRA file <p>Set the property <code>com.tibco.amx.cf.enable.virtualizationAddress.versioning</code> to <code>true</code> in the runtime node's TRA file as follows:</p> <pre>java.property.com.tibco.amx.cf.enable.virtualizationAddress.versioning=true</pre> </li> <li>• ActiveMatrix Administrator UI <p>Set the property using the ActiveMatrix Administrator UI via <b>Infrastructure &gt; Nodes &gt; Select Node &gt; Configuration &gt; JVM Configuration</b>.</p> <ul style="list-style-type: none"> <li>– Property: <code>com.tibco.amx.cf.enable.virtualizationAddress.versioning</code></li> <li>– Value: <code>true</code></li> </ul> </li> </ul>
AMRP-5517	<p>Due to a bug in Teneo third-party library, the Teneo Session Factory did not honor the JPA annotation for Hibernate ID Generator. This issue has now been fixed.</p>
AMRP-5510	<p>As part of this enhancement, the <code>SSO_ID</code> cookie is now secured when HTTP Connector resource template is configured with SSL.</p>



Key	Summary
AMRP-5463	<p>Server Name Indication (SNI) is now supported and enabled by default in the HTTP Client resource template.</p> <p>To disable the support, set the Java property in the node's TRA file or the ActiveMatrix Administrator UI as follows.</p> <ul style="list-style-type: none"> <li>• Node's TRA file           <p>Set the property <code>com.tibco.amf.httpclient.disableSNI</code> to true in the runtime node's TRA file as follows.</p> <pre>java.property.com.tibco.amf.httpclient.disableSNI=true</pre> </li> <li>• ActiveMatrix Administrator UI           <p>Set the property using the ActiveMatrix Administrator UI via <b>Infrastructure &gt; Nodes &gt; Select Node &gt; Configuration &gt; JVM Configuration</b>.</p> <ul style="list-style-type: none"> <li>- Property: <code>com.tibco.amf.httpclient.disableSNI</code></li> <li>- Value: <code>true</code></li> </ul> </li> </ul>
AMRP-5207	<p>Running the <code>tibcohost spawn</code> command with the <code>-clearCache</code> option resulted in the following error:</p> <pre>Error reading tibcohost.tra file. TIBCO-AMX-HPA-CLI-000141: The tibcohost process failed to start. OS exit code 0. Try calling the tibcohost executable directly with the argument --debug to collect more information. Verify the location and accessibility of the JVM library in error.</pre> <p>With this fix, the <code>tibcohost spawn</code> command works with the <code>-clearCache</code> option as expected. The command successfully spawns the TibcoHost in the background even when the <code>-clearCache</code> option is used.</p>
AMSG-9686	<p>Using Administrator CLI you can now synchronize the Node Feature list displayed in Administrator UI with the Runtime Node's Feature list, in the event that the lists are out of sync. This is usually a result of using the <code>tibcohost</code> command for enabling or disabling Features on the Runtime Node. For details, refer to the <a href="#">Synchronizing Node Feature List</a> section in <i>TIBCO ActiveMatrix Service Grid Administration</i>.</p>
AMX-17074, AMX-16595, AMX-16253	<p>ActiveMatrix 3.4.0 now supports Oracle 12c R2. The driver version supported is 12.2.0.</p>
AMX-16914	<p>The Ant version used internally by ActiveMatrix 3.4.0 has been updated to 1.9.9.</p>

Key	Summary
AMX-16647, DSS-985	<p>With JRE 1.8 update 172, TIBCO ActiveMatrix TibcoHost failed to start with following error:</p> <pre>java.security.UnrecoverableKeyException: Rejected by the jceks.key.serialFilter or jdk.serialFilter property</pre> <p>This failure is now addressed with the addition of the property <code>jceks.key.serialFilter</code>. If the property is added to end of <code>&lt;TIBCO_HOME&gt;/amx/3.3/scripts/rpflauncher_classpath_3.3.0.tra</code> for all the <code>&lt;TIBCO_HOME&gt;</code>s within the enterprise as follows, the error is no longer seen.</p> <pre>java.property.jceks.key.serialFilter=com.tibco.**;java.lang.Enum;j ava.security.KeyRep;java.security.KeyRep \$Type;javax.crypto.spec.SecretKeySpec;!*</pre> <p>The same property must be added to the end of <code>&lt;TIBCO_HOME&gt;/tct/1.4/TIBCOConfigurationTool.ini</code> when TIBCO Configuration Tool (TCT) is involved, that is:</p> <pre>- Djceks.key.serialFilter=com.tibco.**;java.lang.Enum;java.security. KeyRep;java.security.KeyRep\$Type;javax.crypto.spec.SecretKeySpec;! *</pre>
AMX-16264	TIBCO ActiveMatrix now supports invocation of Administrator web service via standalone JAX-WS client.
AMX-16227	The classloading issues related to using common context for WebApp Implementation Type (IT) are now addressed.
AMX-16226	TIBCO Business Studio provides the option to inject References into WebApp Implementation Type (IT) component implementations of the Web Application Resource or Archive (WAR) type. To achieve this, you need to enable this feature from the Studio Preferences as it is disabled by default, and carry out some additional steps when creating the WAR which will be used for the component implementation, pertaining to <code>@Reference</code> annotations. For details, refer to the <a href="#">Enabling a Reference Injection</a> section in <i>TIBCO ActiveMatrix Service Grid Web Application Component Development</i> .
AMX-16093	During an upgrade, the upgrade script stopped and failed to upgrade hosts when it encountered the error "Source resource does not exist". This has now been resolved and the upgrade to 3.4.0 succeeds as expected.
AMX-16091	Upgrading the setup from 3.1.5 to 3.3.0 to 3.4.0 version was not supported. This is now supported.
AMX-15841	<p>After upgrading to ActiveMatrix 3.4.0, the <code>amx_jre_updater discover</code> command did not work as expected.</p> <p>This issue is now fixed. When the <code>amx_jre_updater discover</code> command is run from <code>&lt;TIBCO-Home&gt;/amx/3.4/bin</code>, it returns the JRE location correctly.</p>


Key	Summary
AMX-15292	<p>Accented French characters were not displayed correctly in the TIBCO ActiveMatrix BPM workspace, which resulted in incorrect output. This issue occurred only when the <code>com.tibco.amx.messageflow</code> logger level was set to DEBUG or TRACE.</p> <p>With this fix, the correct characters are displayed in the BPM workspace (BPM Inbox, task submission section, and so on) irrespective of the logger level.</p>
AMX-14619	<p>The <code>tibcohost describeDeployedConnectors</code> command has been enhanced to include threadpool statistics in addition to the HTTP Connector information.</p> <p>To execute the command:</p> <pre data-bbox="509 600 1477 653">&lt;CONFIG_HOME&gt;\tibcohost\Admin-amxadmin-instanceOne\host \bin&gt;tibcohost.exe describeDeployedConnectors -nodeName SystemNode</pre>
BJMS-1575	<p>When a JMS Message was sent to an ActiveMatrix application containing a Promoted Service with JMS Binding Type (BT) configured with In-Only operations, a <code>NullPointerException</code> was seen in the logs. Moreover, no fault response was returned as the issue arises only for In-Only operations, that is, operations with no reply.</p> <p>With this fix, the <code>NullPointerException</code> is no longer seen and the message processing is carried out by the configured Implementation Type (IT) as expected.</p> <div data-bbox="509 953 1461 1142" style="border-left: 1px solid black; border-right: 1px solid black; padding: 5px;">  <p>As a workaround for this issue, it was advised to manually set the "Error Action" for JMS Binding to "Retain Message in Service Destination" via TIBCO Business Studio, and then rebuild the DAA. This workaround resulted in consequent errors. With the above fix, no other issues occur and workarounds are not required for end-to-end message processing.</p> </div>
DSS-975	<p>In TIBCO ActiveMatrix Administrator, the HTTP Client resource template could not be configured to connect to an HTTPS server that supported only TLSv1.2. The <b>Configure SSL</b> wizard failed to connect to the HTTPS URL to get the certificates.</p> <p>With this fix, you can configure the HTTP Client resource template with an SSL Client Provider that supports TLSv1.2 protocol.</p> <p>Additionally, an HTTPS Connector supporting TLSv1.2 protocol can be created from ActiveMatrix Administrator UI or CLI by configuring the SSL Server Provider property, <code>SSL Protocol=TLSv1.2</code>. Even though the TLSv1.2 option is not available in the Administrator UI drop-down list, you can manually type in "TLSv1.2" in the value field.</p>
HKAM-340	<p>When monitoring a <code>TibcoHost</code> created through the CLI in TIBCO Hawk ActiveMatrix Plug-in for TIBCO Hawk (HKAM), the host restarted automatically when the CLI <code>stop</code> command was executed for <code>TibcoHost</code>. This issue is now fixed.</p>
HKAM-335	<p>For the <code>getComponentInfo</code> and <code>getBindingInfo</code> methods, the History section in a subscribed window was not updated with the new binding status.</p> <p>This issue is now fixed and the History section is updated according to the application and binding state.</p>

Key	Summary
HKAM-327	<p>In TIBCO Hawk ActiveMatrix Plug-in, when you changed the node state from the ActiveMatrix Administrator, the History section did not get updated with new rows and new values in the subscribed window.</p> <p>This issue is now fixed and the History section is now being updated for specified time intervals. Additionally, state changes are shown correctly with every update.</p>
MED-3350, EMPR-164	<p>When certain TIBCO Business Studio projects containing Mediation Transform tasks created in TIBCO Business Studio 3.6.0 (corresponding with TIBCO ActiveMatrix 3.2.0) were imported in TIBCO Business Studio 3.6.1 (corresponding with TIBCO ActiveMatrix 3.3.0), and if you clicked on the <b>Input</b> tab of the Transform task, the following error message was displayed:</p> <p><code>Runtime Exception...See Error log for stack.</code></p> <p>No details were recorded in the error Log of TIBCO Business Studio. Even when the JRE incompatibility issues were fixed using "Quick Fix", the NullPointerException (NPE) persisted when you clicked on the <b>Input</b> tab of the Transform task. This issue is now fixed and neither errors are seen with imported projects.</p>
PD-4363	<p>In large scale ActiveMatrix enterprise setups with TIBCO Policy Director Governance (PD) 1.1.0, it was observed that while restarting the ActiveMatrix SystemNode, the PD Governance Service was taking close to an hour to initialize. This was observed on a setup spanning over 250 hosts that managed an upward of 800 nodes and hosted more than 1500 applications. The database queries related to initialization were taking very long to execute and the TEMP table space usage grew close to 5 GB during the time.</p> <p>The database queries have now been optimized to filter out unwanted Governance Objects (GO), and with this fix, the initialization time for Governance Service has now significantly reduced along with the TEMP table space usage. As a result, the SystemNode restart time has reduced and is now within a reasonable range for an enterprise of this size.</p>
PD-4307	<p>If ActiveMatrix Administrator was configured with TIBCO Policy Director Governance, removing an application from an Object Group did not remove the Governance Control on the application, especially if there was another application on the same node that had the same Governance Control. As a result of the Governance Control still being present, the policy was still being incorrectly enforced on the removed application, resulting in erroneous behavior.</p> <p>With this fix, the underlying database entries are now correctly updated for the removed application and the policy is not enforced on the removed application.</p>
PD-4292	<p>In TIBCO ActiveMatrix Administrator, when you select <b>Governance</b> for an application, the governance control status was displayed. It did not display the activation status of a governance control. Starting with 3.4.0, you can see the Activation Status of a governance control as Active or Inactive.</p>
PD-4286	<p>In ActiveMatrix Administrator, when you click <b>Governance &gt; Governance Controls</b>, it was not possible to view the list of all the target objects with governance control status.</p> <p>You can view the list of all the objects with governance control status now by clicking the <b>Open In New Window</b> button.</p>

Key	Summary
PD-4284	<p>ActiveMatrix Administrator did not display the deployment progress of Governance Control in the GUI.</p> <p>This issue is now fixed. You can see the deployment status in TIBCO ActiveMatrix Administrator by selecting Governance &gt; Governance Control.</p> <ul style="list-style-type: none"> <li>• When Governance Control is in the deploying, undeploying, or deployed state, it shows number of successful, failed, in progress and total members. It is hidden when the Governance Control is in the draft or undeployed state.</li> <li>• It is seen as per deployment for Activated and Deactivated governance control.</li> </ul>
PD-4283	<p>In a TIBCO ActiveMatrix environment with TIBCO ActiveMatrix Policy Director 1.1.0, on the Governance Controls page in Policy Director UI, objects could not be sorted based on the column fields (Object, Deployed on Service Container, and status). For example, if a Governance Control had more than 1000 targets and the deployment failed on some of these targets, the only way to identify the targets on which the deployment had failed was to manually scroll through the entire list, which is time-consuming in a large scale setup.</p> <p>With this fix, the objects on the Governance Controls page can now be sorted based on the column fields (Object, Deployed on Service Container, and status).</p>
PD-4282, PD-4338	<p>There have been significant performance improvements in Administrator GUI and backend, specifically in case of TIBCO ActiveMatrix enterprises consisting of over 1000 Nodes. The initialization time and memory usage for Policy Director Governance Service has also been optimized, contributing to improved startup performance for large scale setups.</p>
PD-4271	<p>After applying TIBCO ActiveMatrix 3.3.0 Hotfix 019, the "GC overhead limit exceeded" error was seen on SystemNode if either:</p> <ul style="list-style-type: none"> <li>• TIBCO Policy Director Governance, or</li> <li>• the System application "com.tibco.amx.mcr.aggregator", or</li> <li>• both</li> </ul> <p>were part of the TIBCO ActiveMatrix Administrator configuration.</p> <p>The error was caused by a memory leak which has now been fixed, and the "GC overhead limit exceeded" error is no longer seen on well-tuned setups.</p>
PD-4261	<p>If TIBCO ActiveMatrix Administrator was configured with TIBCO Policy Director Governance, when a dynamic Object Group was created and the initial list of members was added to the Object Group, it was observed that after an unknown duration of time, any new members that match the criteria of the Object Group were not being added to the existing or newly created Object Group(s). This was because the internal Governed Object cache did not get updated for the newly deployed application due to the SQL error <code>ORA-01795: maximum number of expressions in a list is 1000</code>. The Object Group members are calculated based on this Governed Object cache.</p> <p>With this fix, the issue is no longer seen and the expected members that match the criteria are seen in the Object Group. Above SQL error is also no longer seen.</p>

Key	Summary
PD-4253	<p>When TIBCO ActiveMatrix Administrator was started in a large-scale enterprise that contained TIBCO Policy Director Governance, some of the deployed applications did not show up in the Governed Object groups. This occurred because the initialization of some Governance-related services failed with a <code>java.lang.StackOverflowError</code> exception.</p> <p>This has now been fixed and the exception is no longer seen during TIBCO ActiveMatrix Administrator startup.</p>
PD-4250	<p>When creating a proxy application from a concrete WSDL that contains <code>&lt;soap:header&gt;</code> elements in <code>&lt;wsdl:input&gt;</code> and <code>&lt;wsdl:output&gt;</code> messages in addition to <code>&lt;soap:body&gt;</code>, message context parameters are created for each <code>&lt;soap:header&gt;</code> to map the messages. In case a <code>&lt;wsdl:input&gt;</code> or <code>&lt;wsdl:output&gt;</code> message contained multiple headers referring to the same message as shown below, duplicate message context parameters were being generated in the proxy application's composite.</p> <pre data-bbox="507 730 1481 905"> &lt;wsdl:output&gt;   &lt;soap:body parts="bodyPart" use="literal"/&gt;   &lt;soap:header message="tns:headerMessage" part="header1" use="literal"/&gt;   &lt;soap:header message="tns:headerMessage" part="header2" use="literal"/&gt; &lt;/wsdl:output&gt; </pre> <p>As seen in above example, both <code>&lt;soap:header&gt;</code> elements point to the same <code>&lt;message&gt;</code> "tns:headerMessage". This resulted in a failure to process the <code>&lt;soap:header&gt;</code> at runtime, which in turn caused the proxy application to not propagate the headers received from the external service back to the invoking client.</p> <p>With this fix, the message context parameters generated for the proxy application are unique, thus addressing the issue of missing Headers.</p>
PD-4187	<p>If TIBCO ActiveMatrix Administrator was configured with TIBCO Policy Director Governance, if the user ran the Sync utility located at <code>&lt;TIBCO_HOME&gt;/administrator/3.3/scripts/governance/util/sync</code> (executing delete and sync actions for Governed Objects), the Governed Objects of type "AgentInstance" were not being synchronized for Platform applications <code>com.tibco.amx.platform</code> of each of the runtime nodes after the sync action. This was due to the fact that the utility iterated over all the level 1 application folders (such as "System"), and that the platform application is by default inside the application folder <code>System/amx.platform.apps</code>, that is, level 2. This resulted in policy deployment failure with the error: <code>Failed to resolve agent instance.</code></p> <p>With this fix in ActiveMatrix Administrator, when you run the Sync utility, the data of all ActiveMatrix Administrator entities gets collected by recursively traversing all application folder levels, thus synchronizing the "AgentInstance" Governed Objects for platform applications.</p>

Key	Summary
PER-2176	<p>TIBCO ActiveMatrix BPM users were unable to log on to TIBCO ActiveMatrix BPM Openspace/Workspace if the setup contained a node which was created with the same name as a previously force-uninstalled and force-deleted node. This issue occurred because the post-uninstall database cleanup was not being carried out by Administrator in case of force option.</p> <p>With this fix, the database entries associated with the particular node are cleaned up as expected, and users can successfully log on to the setup.</p>
PER-2172	<p>When ActiveMatrix Administrator tried to install a Resource Instance (RI) with dependency on non-existent Resource Instance(s), the underlying policy enforcement layer tried to synchronize all entities in Administrator. This is unnecessary, and impacts the performance when it comes to large scale setups containing thousands of entities. This issue has now been addressed.</p>
RSBT-656, RSBT-654	<p>When deploying a service with a REST Reference Binding, a NullPointerException occurred. In a DAA file containing a REST Reference Binding, if the REST Resource Configuration (RRC) file corresponding to the Binding contains an Error (Declared Fault) definition which does not specify the HTTP status code, it resulted in deployment failure (NullPointerException).</p> <p>In ActiveMatrix Administrator, specifying HTTP status code is mandatory for error definitions. Therefore, this fix addresses the NullPointerException by providing a more meaningful exception.</p>

Key	Summary
RSBT-641	<p>In a scenario where Mediation Implementation Type component was wired to a REST Binding Type Reference, and the Reference Binding received a fault message from an external service, the HTTP Status Code for which was not specified in the REST Resource Configuration (RRC) file, the exchange became unresponsive and the requesting client did not receive any response.</p> <p>With this enhancement, the fault handling for REST Reference Bindings has been improved to handle faults that are not listed in the RRC file. For example, if the RRC file contains error entries for HTTP status codes 401 and 402 respectively, and the REST Reference Binding receives a fault with HTTP status code 404, the fault is propagated to the Mediation Implementation Type and subsequently, the requesting client (depending on the Mediation Implementation Type).</p> <p> At least one declared fault (error with valid HTTP status code) must be specified in the RRC file to achieve the expected behavior.</p> <p>To enable this enhancement, set the Java property <code>com.tibco.amf.runtime.bindingtype.rest.enableExtendedUndeclaredFaultSupport</code> to <code>true</code> in the runtime node. The default value of this property is <code>false</code>.</p> <p>The Java property can be set in the node's TRA file or the ActiveMatrix Administrator UI as follows.</p> <ul style="list-style-type: none"> <li>• Node's TRA file           <p>Set the property</p> <pre>java.property.com.tibco.amf.runtime.bindingtype.rest.enableExtendedUndeclaredFaultSupport</pre>           to <code>true</code> in the runtime node's TRA file as follows:           <pre>java.property.com.tibco.amf.runtime.bindingtype.rest.enableExtendedUndeclaredFaultSupport=true</pre> </li> <li>• ActiveMatrix Administrator UI           <p>Set the property using the ActiveMatrix Administrator UI via <b>Infrastructure &gt; Nodes &gt; Select Node &gt; Configuration &gt; JVM Configuration</b>.</p> <ul style="list-style-type: none"> <li>– Property:               <pre>com.tibco.amf.runtime.bindingtype.rest.enableExtendedUndeclaredFaultSupport</pre> </li> <li>– Value: <code>true</code></li> </ul> </li> </ul>
SDS-7745	<p>In TIBCO Business Studio, <code>NullPointerException</code> was seen during the 'Deploy Project' workflow when 'Offline Server' was selected in the 'Administrator Connection Configuration' tab.</p> <p>With this fix, no error is seen and deployment scripts are generated without any error.</p>



Key	Summary
SDS-7742	<p>As part of the Java Implementation Type code regeneration in TIBCO Business Studio, XML bean and interface jars are generated for all the data types and PortTypes defined in the WSDL and XSD files used in the SOA projects. When migrating SOA projects from TIBCO ActiveMatrix Service Grid 2.3 to ActiveMatrix 3.4.0 Studio, the Java IT implementation is regenerated to comply with the 3.4.0 best practices.</p> <p>If the WSDLs used by the SOA projects contain XSD files that in turn import other XSD files and so on, NullPointerException errors were seen during code generation for some of the Java ITs. These errors are a result of optimizations that were introduced in TIBCO ActiveMatrix 3.2.0 to promote reuse of XML beans across the XSD files in order to reduce the size of the implementation.</p> <p>To address this problem, a property has been introduced to disable the reuse of beans across XSD files and avoid missing dependency issues with certain WSDL and XSD files as seen in the reported issue.</p> <p>With this, XML beans are generated for each XSD and the data types it contains, and there is no reuse across XSDs for common data types.</p> <p>To enable this fix, add the <code>com.tibco.amx.disable.reuse.jars.for.schema</code> property to the <code>&lt;TIBCO_HOME&gt;/studio/5.0/eclipse/configuration/config.ini</code> file and set it to true as follows:</p> <pre>com.tibco.amx.disable.reuse.jars.for.schema=true</pre> <p>Restart the TIBCO Business Studio with a clean flag as follows:</p> <pre>&lt;TIBCO_HOME&gt;/studio/5.0/eclipse/TIBCOBusinessStudio.exe -clear</pre> <p>Clean the workspace and the SOA projects in TIBCO Business Studio using the <b>Project &gt; Clean</b> dialog.</p>
SDS-7709	<p>If <code>javax.xml.soap.MessageFactory</code> was used for creating a SOAP Message in the Java Implementation Type of an ActiveMatrix Composite, execution failed with the following error:</p> <pre>javax.xml.soap.SOAPEXception: Unable to create message factory for SOAP: Provider com.sun.xml.messaging.saaj.soap.ver1_1.SOAPMessageFactory1_1Impl not found</pre> <p>The failure was seen in the TIBCO Business Studio Rapid Application Development (RAD) environment as well as with runtime nodes. This issue has now been fixed.</p> <p>As a part of the fix, the Business Studio user must add an import-package for the <code>javax.xml.soap</code> package (version "5.0.0") in the META-INF\MANIFEST.MF of the Java Implementation Type Plugin project, as follows:</p> <pre>Import-Package: javax.xml.soap;version="5.0.0"</pre>
SDS-7690	<p>In TIBCO Business Studio, accessing the <b>Help &gt; Help Contents</b> page resulted in an HTTP 500 error. This happened because of the following known issue in Eclipse: <a href="https://bugs.eclipse.org/bugs/show_bug.cgi?id=442310">https://bugs.eclipse.org/bugs/show_bug.cgi?id=442310</a>.</p> <p>This issue is now fixed.</p>

Key	Summary
SDS-7632	<p>When you generate an ActiveMatrix Administrator CLI script from a DAA file, you can now see a new attribute <code>propertyType</code> in the <code>&lt;Property&gt;</code> element of the <code>&lt;projectName&gt;.deployment-config.xml</code> file.</p> <p>Before the fix, the <code>&lt;Property&gt;</code> element appeared as follows:</p> <pre data-bbox="507 384 1479 436">&lt;Property name="Component1_Property1" value="NewJDBCResource" xsi:type="amxdata:Property"/&gt;</pre> <p>With this fix, the <code>propertyType</code> attribute is added to the <code>&lt;Property&gt;</code> element as follows:</p> <pre data-bbox="507 531 1479 604">&lt;Property name="Component1_Property1" propertyType="JdbcDataSource" value="NewJDBCResource" xsi:type="amxdata:Property"/&gt;</pre>
SDS-7626	<p>In ActiveMatrix 3.3.1, TIBCO Business Studio used Java 8 as JRE. In Java 8, access to external schema is restricted. This issue is now resolved.</p>
SDS-7624	<p>In ActiveMatrix 3.3.1 when an application was tested with the Web Service Explorer by using "Debug in RAD", it returned an "HTTP 500" error. This happened because of the following known issue in Eclipse:</p> <p><a href="https://bugs.eclipse.org/bugs/show_bug.cgi?id=442310">https://bugs.eclipse.org/bugs/show_bug.cgi?id=442310</a></p> <p>This issue is now resolved.</p>
SDS-7438	<p>The <code>daaLoc</code> parameter of the <code>sds.generateDeploymentScript</code> script did not accept an absolute path. Paths had to be provided relative to the workspace. With this fix, the <code>daaLoc</code> parameter accepts an absolute path so that the DAA file can be kept in any folder instead of a workspace project folder.</p>
TAP-15699	<p>When you successfully logged on to the ActiveMatrix Administrator and the logger <code>com.tibco.amx.login</code> was set to level <code>WARN</code>, the <code>SystemNode</code> log showed a spurious and incorrect <code>WARN</code> message of failed authentication. When logger <code>com.tibco.amx.login</code> was set to <code>INFO</code> level, no message was printed to indicate successful authentication.</p> <p>This issue has now been fixed by introducing a check for authentication status before printing log messages of any level. With this fix, a failure message is printed only if there is an authentication failure when logging on to ActiveMatrix Administrator.</p>
TAP-15685	<p>For TIBCO ActiveMatrix host and node, the user was able to delete the root logger configuration which resulted in incorrect logger configuration in runtime.</p> <p>With this fix, the root logger cannot be deleted and the exception <code>Not allowed to delete Root Logger</code> is thrown when the user attempts to delete the root logger.</p>

Key	Summary
TAP-15673	<p>When an application is deleted in ActiveMatrix Administrator, the application's DAA is not deleted by default along with it, even if no other application uses the DAA. A new <code>cleanupDAA</code> option is now introduced for the attribute <code>options</code> of the Delete Application target. When deleting the application with <code>options</code> set to <code>cleanupDAA</code>, the DAA is removed if the application being deleted is the only one using the DAA. Starting ActiveMatrix 3.4.0, setting the <code>options</code> attribute of the <code>AMXAdminTask</code> of the Delete Application target to <code>cleanupDAA</code>, removes the DAA if the application being deleted is the only one using the DAA. This is executed as a part of the Delete Application task. The <code>cleanupDAA</code> option can be set in the Delete Application <code>&lt;AMXAdminTask&gt;</code> as follows:</p> <pre data-bbox="507 562 1481 919"> &lt;target name="delete.app"&gt; &lt;AMXAdminTask remote="true" propsFile="\${basedir}/remote_props.properties" action="delete" dataFile="\${basedir}/cli_data.xml" objectSelector="Environment//Application" overwrite="true" merge="true" createIfNotExists="true" options="cleanupDAA" force="true" failOnError="true"/&gt; &lt;/target&gt; </pre> <p>For information about <code>delete</code> and other actions to manage applications, refer to <code>TIBCO_HOME\administrator\3.4\samples\application_build.xml</code>.</p>

Key	Summary
TAP-15660	<p>The installation of JDBC resource instances in ActiveMatrix Administrator UI completed successfully even if the configuration of the underlying JDBC resource template was invalid. For instance, if the specified database credentials or connection URL were invalid, the problem was not caught at the time of resource instance installation but only when the resource instance was actually used by the parent application, thus causing potential business impact in production.</p> <p>With this enhancement, the underlying runtime layer validates the database configuration parameters at the time of resource instance installation by performing a test connection. If the parameters are incorrect, the resource instance installation fails. This error propagates back to the user via ActiveMatrix Administrator thus giving you an opportunity to correct the configuration before it causes business disruption. To disable this enhancement at a resource template level, set the <code>disableValidateConnectionOnInit</code> attribute to <code>true</code> in the JDBC resource template configuration via ActiveMatrix Administrator CLI as follows:</p> <pre data-bbox="507 701 1481 1104"> &lt;ResourceTemplate name="JDBCResourceTemplate1" description="JDBC Resource Template" maxConnections="8888" sslJNDIName="" disableValidateConnectionOnInit="true" xsi:type="typ:JdbcResourceTemplate" xmlns:type="http://tibco.com/amadministrator/command/line/ types"&gt; &lt;TargetScope type="Enterprise"/&gt;   &lt;Direct     &lt;Direct       dbUrl="jdbc:oracle:thin:@dbhostname:1521:orcl"         isTransactional="false"         jdbcDriver="oracle.jdbc.OracleDriver"         loginTimeout="2"/&gt;       &lt;InlineCredentials username="baduser" password="****"/&gt;     &lt;/Direct&gt;   &lt;/Direct&gt; &lt;/ResourceTemplate&gt; </pre> <p>The default value of this attribute is <code>false</code>. To disable this enhancement for all resource templates, set the property <code>com.tibco.admin.jdbc.disable.validate.connection.oninit</code> to <code>true</code> in the SystemNode TRA file as follows:</p> <pre data-bbox="507 1264 1481 1314"> java.property.com.tibco.admin.jdbc.disable.validate.connection.oni nit=true </pre> <p>The property can also be set for the SystemNode using the ActiveMatrix Administrator UI via <b>Infrastructure &gt; Nodes &gt; Select Node &gt; Configuration &gt; JVM Configuration</b>.</p> <ul data-bbox="507 1457 1481 1533" style="list-style-type: none"> <li>• Property: <code>com.tibco.admin.jdbc.disable.validate.connection.oninit</code></li> <li>• Value: <code>true</code> The default value of this property is <code>false</code>.</li> </ul>
TAP-15631	<p>When TIBCO ActiveMatrix Administrator Server was configured with HTTPs using TLSv1.2 protocol, ActiveMatrix Administrator Command Line (CLI) invocation failed with <code>SSLHandshakeException</code>, because ActiveMatrix Administrator CLI did not support TLSv1.2.</p> <p>With the fix, ActiveMatrix Administrator CLI can now successfully connect to Administrator server using TLSv1.2 protocol without any additional configuration.</p>

Key	Summary
TAP-15554	<p>ActiveMatrix 3.4.0 Runtime Platform now provides the option to validate the configuration of JDBC Resource Templates (RT) and corresponding Resource Instances (RI) by performing a test connection on the resource while it is being installed. This way, if the configuration is incorrect, for example, wrong credentials are specified, then the Resource Instance installation will fail, thus giving you an opportunity to update the configuration and not waiting until there is a business failure at invocation time. The validation can be disabled if required. For details, refer to the <a href="#">Disabling Test Connection to a JDBC Resource</a> section in <i>TIBCO ActiveMatrix® Service Grid Administration</i>.</p>
TAP-15539	<p>DAA upload to TIBCO ActiveMatrix Administrator was not governed by permission. This has now been fixed and only users authorized to upload DAAs can now do so.</p>
TAP-15538, TAP-15752	<p>When you update a resource template in ActiveMatrix Administrator UI, a dialog box pops up using which you can select the affected resource instances for reinstallation, and affected applications for restart. Subsequently, selected resource instances are reinstalled and affected applications are restarted. If the resource template is heavily used in the environment, ActiveMatrix Administrator takes a long time to generate and execute the reinstallation and restart tasks.</p> <p>With this fix, if the affected applications have more than 1000 entities, a warning message is displayed informing you that the affected nodes (that is, nodes on which selected resource instances are installed) will be restarted, instead of the applications, to speed up the entire process.</p>
TAP-15536, TAP-15548	<p>In TIBCO ActiveMatrix Administrator, when a resource template (RT) is updated by the user, a popup warning message is shown to inform the user that the consequent resource instance (RI) reinstallation and application restart will take a long time, especially if the RT in question is heavily used and in a large scale setup. The user is also advised to go with the option of restarting the node(s) on which the application(s) are deployed, instead of restarting each application, via the <b>Apply changes in resource template to runtime</b> wizard.</p>
TAP-15522	<p>You cannot download certain files from ActiveMatrix Administrator by using the external port.</p>
TAP-15478	<p>When creating a new TIBCO ActiveMatrix BPM node, a NullPointerException was thrown due to the use of custom Substitution Variables (SVARs) by existing nodes for shared resources. Moreover, the failure was abrupt and the root cause was not revealed.</p> <p>With this fix, the error is appropriately handled and NullPointerException is not seen.</p>


Key	Summary
TAP-15465	<p>The task creation process for application deployment in ActiveMatrix Administrator takes a significant amount of time in case of large applications. Additionally, the creation process did not record any actions in the logs which made it difficult to track the application deployment process.</p> <p>With this fix, important aspects of application deployment are recorded in the logs to help you track application deployment for large applications easily. Entries related to various deployment details are logged at INFO level in the <code>SystemNode.log</code> using the <code>com.tibco.amx.admin.api.application</code> logger.</p>
TAP-15423	<p>ActiveMatrix Administrator took a long time to deploy a huge application. With this fix, deployment time has been reduced significantly.</p>
TAP-15414	<p>If the ActiveMatrix Administrator database contained orphaned endpoint or CapabilityLink entities, then <code>ORA-02292: integrity constraint error</code> was observed when force-undeploying applications.</p> <p>With this fix, applications can be force-undeployed successfully even if orphaned endpoint or CapabilityLink entities are present, as these entities are deleted with application itself.</p>
TAP-15413	<p>If the TIBCO ActiveMatrix Administrator database contained orphaned endpoint or CapabilityLink entities, the <code>ORA-02292: integrity constraint error</code> was observed when force-deleting applications.</p> <p>With this fix, applications can be force-deleted successfully even if orphaned endpoint or CapabilityLink entities are present, as these entities are deleted with application itself.</p>
TAP-15374	<p>When using ActiveMatrix Administrator CLI, if a JVM argument was set with a blank value for a node (<code>jvmArg="-Damx.securitymanager.enabled="</code>) in the <code>node_data.xml</code>, the "Install or Sync" action failed with a <code>StringIndexOutOfBoundsException</code> exception.</p> <p>With this fix, the node performs the "Install or Sync" action correctly without any JVM arguments.</p>
TAP-15299	<p>In the ActiveMatrix Administrator, if the number of Administrator "<code>taskResult</code>" entries exceeded the default limit (10000), Administrator triggers <code>TaskResult</code> cleanup to remove the older <code>taskResults</code> and <code>UserAction</code> entries, and keeps the latest <code>UserAction</code> for each ActiveMatrix Administrator entity. During a <code>CopyPFU</code> operation, this <code>TaskResult</code> cleanup was triggered and the latest <code>UserAction</code> was removed for targeted Node. This is because there were some <code>PrepareForUndeploy (PFU)</code> tasks pending on the node, and it resulted in failure to complete the <code>CopyPFU</code> action, as the expected <code>UserAction</code> on target node was no longer available in the ActiveMatrix Administrator database.</p> <p>With this fix ActiveMatrix Administrator does not remove the latest <code>UserAction</code> for the target node even if <code>TaskResult</code> cleanup is triggered, thus ensuring that the corresponding <code>CopyPFU</code> action does not fail.</p>

Key	Summary
TAP-15294	<p>ActiveMatrix Administrator task creation for application deployment and upgrade was not being logged, making it difficult to track their progress through the <code>optPreFlight</code>, <code>startPreFlight</code> and <code>deploy</code> stages, especially in case of large applications, such as BPM applications. Starting ActiveMatrix 3.4.0, logs are printed at various milestones of application deployment and upgrade.</p> <p>The tracking logs can be viewed in <code>SystemNode.log</code> (located at <code>CONFIG_HOME\tibcohost\instanceName\data_3.2.x\nodes\SystemNode\logs\SystemNode.log</code>) under the <code>com.tibco.amx.admin.api.application</code> logger at INFO level for <code>SystemNode</code>. You will find logs describing the various stages of progress, such as "Starting <code>optPreFlight</code>", "<code>optPreFlight</code> is completed", "Begin <code>startPreFlight</code>", "<code>startPreFlight</code> is completed", "Validating" various aspects such as application distribution, bindings, substitution variables and capabilities, followed by deployment and undeployment.</p>
TAP-15293	<p>In TIBCO ActiveMatrix Administrator, when distributing an already-deployed application to a new node, Administrator was performing validations for existing nodes even though the application was in sync. Since these validations were unnecessary and excessive, they have now been skipped as part of this fix.</p>
TAP-15278	<p>In TIBCO ActiveMatrix BPM setup, creation of a new BPM Runtime Node was hanging if its parent TIBCOHost had a prior Node that was force-uninstalled and force-deleted. This occurred because an Administrator Task dependency of a Node from a different TIBCOHost was incorrectly being appended to the TIBCOHost in question. With this fix, no such dependencies of Nodes from other TIBCOHosts are added when a Node is force-uninstalled and force-deleted, and future Node creations under the TIBCOHost in question, will no longer hang or fail.</p>
TAP-15175	<p>In ActiveMatrix Administrator, if the WSDL file location was changed during application upgrade, the deployment of the application failed. With this fix, the application deployment goes through successfully after upgrade even if WSDL file location has been changed in the new version of application.</p>
TAP-15169	<p>In ActiveMatrix Administrator UI, a feature could be deleted even if it was used by an application that is not deployed. When such an application was exported, the export task failed with an error indicating that the feature was missing.</p> <p>With this fix, deleting a feature which is used by an application, whether deployed or not deployed, is no longer permitted. Administrator CLI with <code>force</code> option can be used to force delete a feature. Additionally, if a feature used by an application that is not deployed has been deleted, the exporting application task no longer fails; it simply exports the application and DAA without the deleted feature, and adds a warning message to the export task report.</p>

Key	Summary
TAP-15166	<p>Previously in TIBCO ActiveMatrix Administrator, when the System Application <code>com.tibco.amx.mcr.aggregator</code> was deployed on the TIBCO ActiveMatrix SystemNode or the Java property <code>amx.governance.sync.app.optimized.disable</code> was set to "true" in the System node's TRA file, and an application containing 1 or more policies was deployed on a Runtime node (created after the Java property <code>com.tibco.admin.nodesevice.duplicate.node.name</code> was set to <code>true</code> in the SystemNode TRA file), the deployment of the application failed with the following exception:</p> <pre>org.hibernate.NonUniqueResultException: query did not return a unique result</pre> <p>With this fix, the exception is no longer seen during deployment of such applications in scenario described above.</p>
TAP-15161	<p>The <b>Software Management &gt; DAA</b> page in ActiveMatrix Administrator took a long time to load.</p> <p>With this fix, the time taken to load the page is significantly reduced.</p>
TAP-15159	<p>If applications containing policies were undeployed on a node (created after the Java property <code>com.tibco.admin.nodesevice.duplicate.node.name</code> was set to <code>true</code> in the System node TRA file), the undeploy action failed with the error:</p> <pre>Failed to execute onRemoveCommandCompleted</pre> <p>and the policy was not successfully applied after redeploying the application. With this fix, this error does not occur when applications with policies are undeployed and policies are working fine after the applications are redeployed on nodes described above.</p>
TAP-15156, TAP-15154	<p>TIBCO ActiveMatrix Administrator, in case of BPM applications with multiple Reference Binding versions, showed the binding path of the latest version as the binding path of all the versions. The starting or stopping of any binding version, would start or stop all the versions.</p> <p>With this fix, ActiveMatrix Administrator shows the correct binding path for each version of the reference binding. Consequently, the starting or stopping of a particular binding version affects only the selected binding version, and all other versions remain as they were.</p>
TAP-15143	<p>While creating a Keystore Provider resource template and uploading the keystore file, a popup indicating the following error was shown "Error 500 INTERNAL_SERVER_ERROR", but the exact cause of the error was not displayed. One of the reasons this issue can occur is when you do not have write permission to the <code>&lt;CONFIG_HOME&gt;\admin\amxadmin\shared\temp</code> directory. With this fix, the exact error is shown indicating the missing write permission.</p>
TAP-15095	<p>For an Identity Provider resource template, you could not set the value of <code>BinarySecurityToken</code> (<code>wssEnableProtectToken</code>) through the ActiveMatrix Administrator UI or CLI.</p> <p>With this fix, the value of <code>BinarySecurityToken</code> can now be set while creating an Identity Provider resource template using the ActiveMatrix Administrator UI and CLI. The default value for this field is <code>true</code>.</p>



Key	Summary
TAP-15057	While upgrading to a higher ActiveMatrix version, if one of the older services had the name <code>TIBCO ActiveMatrix Admin-amxadmin-instanceOne</code> , the <code>startAllHosts</code> command failed.
TAP-14908	A TIBCO ActiveMatrix BPM application can have multiple versions of an application, the versions of which can be in different states. Of these, the states "Prepare For Undeploy" state and "Running" are considered to be "in use". If you browse to the <b>Software Management &gt; Application Template</b> tab of Administrator UI, the application versions in "Prepare For Undeploy" state were not shown as "in use". With this fix, the "Prepare For Undeploy" application versions are also shown as "in use".
TAP-14905	<p>If you tried to remove any application DAA, feature or template with a missing feature dependency from the <b>Software Management</b> tab, ActiveMatrix Administrator threw an exception.</p> <p>With this fix, users can now remove any application DAA, feature or template in the ActiveMatrix Administrator even if a feature dependency is missing.</p>
TAP-14371	Using the Enterprise Status page (In the ActiveMatrix Administrator UI, navigate to <b>Infrastructure &gt; Enterprise Status</b> ), you can download logs, thread dumps and TRA files of hosts and nodes within the enterprise. Logs for applications can also be downloaded. For details, refer to the <a href="#">Host Tab</a> , <a href="#">Node Tab</a> and <a href="#">Application Tab</a> sub-sections in the <a href="#">Monitoring the Status of Entities from a Single Page</a> section of <i>TIBCO ActiveMatrix Service Grid Administration</i> .
TAP-14360, TAP-14675	Using ActiveMatrix Administrator UI and CLI you can now download all the logs related to an application as an aggregated archive, that combines logs from the nodes on which the application is deployed, the hosts managing those nodes, and SystemNode. The <code>viewaction.html</code> page is also part of the archive, and displays all the user actions associated with the application. For details, refer to the <a href="#">Downloading Logs for an Application</a> section in <i>TIBCO ActiveMatrix Service Grid Administration</i> .
TAP-14351, AMRP-5575	<p>ActiveMatrix 3.4.0 introduces the notion of aggregated node health, comprising the cumulative status of the entities, such as application fragments, deployed on the node and synchronization status of the node. This aggregated status can deem the node as <code>Healthy</code>, indicating that none of the entities deployed or running on the node have failed, or <code>Not Healthy</code>, when one or more entities are in failed state. Interim statuses such as <code>In Progress</code> and <code>Unknown</code> are also available.</p> <p>Node Health goes beyond the "state" of the node, and views it in the context of its contents. It can be accessed via GUI as well as Command Line Interface (CLI), and can be used to troubleshoot failures. For details, refer to the <a href="#">Viewing an Aggregated Status of a Node</a> section in <i>TIBCO ActiveMatrix Service Grid Administration</i>.</p>

Key	Summary
TAP-13133	<p>Deploying an TIBCO ActiveMatrix BPM application a second time after an earlier upgrade failure that was not cleaned up using force undeploy no longer prematurely removes the endpoints of the older version. Instead, users see a validation error, and the second deploy action is blocked.</p> <p>The error message is as follows:</p> <pre>Not allowed to deploy the version '&lt;new version&gt;' of application '&lt;app name&gt;'. This version may have failed to deploy earlier, and if so it should be force undeployed first.</pre> <div style="border-left: 1px solid #0070C0; padding-left: 10px; margin-top: 10px;">  <p>Force undeploy destroys BPM data for a given version, which means all existing work items and process instances of the current version are cancelled. Force undeploy must be used only when you are sure that the BPM data for the version you are force undeploying is not needed and its loss is acceptable. Otherwise, contact TIBCO Support.</p> </div>
TAP-12993	<p>Installing a JDBC resource instance went into an infinite loop in the following scenario:</p> <ul style="list-style-type: none"> <li>• if the JDBC resource template was created with SSL</li> <li>• if the SSL Client Provider and JDBC resource instance name were the same for the JDBC resource template</li> </ul> <p>With this fix, TIBCO ActiveMatrix Administrator throws an exception instead of going into an infinite loop.</p>
TAP-12973	<p>You can now remove a feature using wildcard in the TIBCO ActiveMatrix Administrator CLI configuration file when the force attribute is set to <code>true</code> even if the feature is enabled on any node. When the force attribute is set to <code>false</code> only those features that are not enabled on any of the nodes are deleted.</p>
TAP-12895	<p>When installing a node on a secure BPM environment (SSL-enabled Administrator using a SSL-enabled Enterprise Messaging Server (EMS)), errors were seen. These have now been resolved.</p>

Key	Summary
WSBT-1151	<p>By default in TIBCO ActiveMatrix the SOAP/HTTP Reference Binding Type (BT), that is, the SOAP/HTTP client, sets the SOAP Action header name to <code>soapaction</code> when constructing a SOAP request. The value of the header is set to the SOAP Action of the targeted service endpoint's operation. This created a problem when communicating with certain third-party legacy service providers, that expected the SOAP Action header name to be <code>SOAPAction</code>.</p> <p>To address this problem, the property <code>com.tibco.amf.bindingtype.soap.httpclient.setHTTPHeaderAsSOAPAction</code> has been introduced to set the SOAP Action header name to <code>SOAPAction</code> instead of <code>soapaction</code>. When this property is set to <code>true</code>, the header name is set to <code>SOAPAction</code>, thus allowing successful end-to-end communication with non-ActiveMatrix third-party legacy service providers.</p> <p>To enable the fix, set the Java property <code>com.tibco.amf.bindingtype.soap.httpclient.setHTTPHeaderAsSOAPAction</code> to <code>true</code> in the Runtime node's TRA file as follows:</p> <pre>java.property.com.tibco.amf.bindingtype.soap.httpclient.setHTTPHeaderAsSOAPAction=true</pre> <p>The property can also be set for the Runtime node using the Administrator UI via <b>Infrastructure &gt; Nodes &gt; Select Node &gt; Configuration &gt; JVM Configuration</b>.</p> <ul style="list-style-type: none"> <li>Property: <code>com.tibco.amf.bindingtype.soap.httpclient.setHTTPHeaderAsSOAPAction</code></li> <li>Value: <code>true</code></li> </ul>
WSBT-1148	<p>In an ActiveMatrix enterprise with Policy Director Governance 1.1.0, when Health Check was invoked on SOAP Binding Type (BT) endpoints secured with WSS Authentication Signature Verification, the health check invocation failed with the exception: Policy enforcement failed to authenticate the request. This was a result of the internal request message processing for health check execution, which resulted in tampering of the request message after it had been signed by the client.</p> <p>With this fix, the signature verification is carried out before the message is internally modified for health check execution, and the exception is no longer seen.</p>
WSBT-520	<p>The WSDL definition names used in the abstract and concrete WSDL definitions were different. This issue has been fixed and the SOAP service name in the composite uses the same name as defined in the abstract WSDL.</p> <p>When generating concrete WSDL for SOAP Service Binding Type in TIBCO ActiveMatrix, users can specify any namespace for the concrete WSDL, since this namespace is externalized. The value can be same as abstract, or different, depending on the business need.</p>

## Known Issues

The table lists known issues in this release of TIBCO ActiveMatrix.

Key	Summary
AMRP-5628	<p><b>Summary:</b> The node status does not include custom features during the sequential checks when determining node health.</p> <p><b>Workaround:</b> None</p>
AMRP-5445	<p><b>Summary:</b> If a Node Start action has been performed and the messaging bundle is found to be in a Stopped state, the ActiveMatrix Administrator CLI hangs as the EMS messaging bundle is not loaded in the OSGi. This happens due to a limitation in the ActiveMatrix platform.</p> <p><b>Workaround:</b> Re-install the node as the node is in a corrupt state.</p>
AMRP-5043	<p><b>Summary:</b> The timeout value of a promoted service or a component service cannot be updated when a promoted service or a component service is promoted.</p> <p><b>Workaround:</b> Specify the timeout value using the application-level property. For example, if the name of an application is <code>weatherApp</code>, the following property can be specified for the promoted service or component service that is promoted:  <code>java.property.weatherApp.invocationTimeoutInMilliseconds</code>.</p> <p>For example,  <code>java.property.weatherApp.invocationTimeoutInMilliseconds=12000</code> sets the timeout value to 2 minutes.</p>
AMRP-4754	<p><b>Summary:</b> If a service provider and a service consumer exist in the same BPM application, undeploying the application might 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>
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 is a web service implementation with REST enabled, you might 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 28 Aug 2013 16:52:32,824 [Framework Event Dispatcher] [INFO ] stdout - at org.eclipse.osgi.framework.util.SecureAction.getZipFile(SecureActi on.java:291) 28 Aug 2013 16:52:32,824 [Framework Event Dispatcher] [INFO ] stdout - at org.eclipse.osgi.baseadaptor.bundlefile.ZipBundleFile.basicOpen(Zi pBundleFile.java:87)</pre> <p><b>Workaround:</b> Restart the node in which the application is deployed.</p>

Key	Summary
AMRP-4736	<p><b>Summary:</b> You might not be able to start ActiveMatrix BPM 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:  <pre>tibcohost.exe --uninstall</pre></li> <li>3. Install the windows service again by executing:  <pre>tibcohost.exe --install</pre></li> </ol>
AMRP-4013	<p><b>Summary:</b> Acceptor threads for HTTP connectors might consume excessive amounts of CPU. The processing performance of any node that uses an HTTP connector experiencing this issue might be affected when asynchronous IO is involved.</p> <p><b>Workaround:</b> Edit the HTTP Connector resource template to use blocking IO. For more information, see the section "Managing Resource Templates" in <i>TIBCO ActiveMatrix Service Grid Administration</i>.</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: <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>
AMX-17606	<p><b>Summary:</b> If you have upgraded from an earlier version of TIBCO ActiveMatrix Service Grid including hotfixes to TIBCO ActiveMatrix Service Grid 3.4.0, when you downgrade from TIBCO ActiveMatrix Service 3.4.0 to the earlier version, you cannot revert the hotfixes applied earlier using <code>revertPatch</code> command.</p> <p><b>Workaround:</b> None</p>
AMX-17411	<p><b>Summary:</b> When the <code>java.property.com.tibco.amx.decouple.Manual.Nodes</code> property is set to <code>true</code> in the TRA file, the SystemHost gets downgraded but the SystemNode fails to downgrade.</p> <p><b>Workaround:</b></p> <ol style="list-style-type: none"> <li>1. Set the following property:  <pre>java.property.com.tibco.amx.decouple.Manual.Nodes=false</pre></li> <li>2. Restart ActiveMatrix Administrator.</li> <li>3. Upgrade SystemHost to 3.4.0 and downgrade again.</li> </ol>

Key	Summary
AMX-17409	<p><b>Summary:</b> Consider that an ActiveMatrix Administrator server is upgraded to 3.4.0 from a prior version and this server is downgraded with a wrong ActiveMatrix Administrator port. In this case, if you do not test the connection to the ActiveMatrix Administrator server before the downgrade, the TIBCO Configuration Tool downgrade process hangs when checking ActiveMatrix Administrator initialization at the "Checking for Admin initialization..." step.</p> <p><b>Workaround:</b> Kill the TIBCO Configuration Tool and provide correct information for ActiveMatrix Administrator configuration. For example, port, SSL information, and so on. Run the downgrade wizard again.</p>
AMX-17393	<p><b>Summary:</b> When SAML Single Sign On configuration is enabled, if you delete the browser cookies, after re-directing from error page to landing page, you are not prompted for login credentials.</p> <p><b>Workaround:</b> Logout from the previous browser session.</p>
AMX-17365	<p><b>Summary:</b> After upgrading to ActiveMatrix 3.4.0, the ActiveMatrix 3.3.0 Hotfix&lt;x&gt; runtime host fails to be downgraded back with the following error:</p> <pre data-bbox="512 827 1481 951">product feature com.tibco.amf.sharedresource.extensions.runtime.tibcohost.product. feature 3.3.xx.000 contains a release unit com.tibco.amf.hpa.core.runtime.services.feature 1.5.0.003 that does not exist in the machine model</pre> <p><b>Workaround:</b> Always select the <b>Mediation Runtime</b> option while installing the <b>Runtime Host</b> profile for the remote hosts.</p>
AMX-17351	<p><b>Summary:</b> Even after downgrading from 3.4.0 to a lower version and uninstalling 3.4.0, the <b>Configure TIBCO Service Performance Manager - V2.3</b> option is available in the TIBCO Configuration Tool. If you click the option, a Null Pointer exception is thrown.</p> <p><b>Workaround:</b> None. Do not click the <b>Configure TIBCO Service Performance Manager - V2.3</b> option.</p>
AMX-17343	<p><b>Summary:</b> If one of the EMS servers fails on an Amazon Web Services (AWS) setup, the status of some nodes is shown as <code>LOST_Contact</code>.</p> <p><b>Workaround:</b> Reconnect the EMS connections by clicking <b>Admin Configuration &gt; Admin Server &gt; Transport Configuration tab &gt; Administrator Reconnect</b>. After the reconnection, all the entities are shown as online.</p>
AMX-17323	<p><b>Summary:</b> The <b>TIBCO ActiveMatrix Governance Agent for TIBCO BusinessWorks Notification</b> screen of the <b>Create TIBCO ActiveMatrix Policy Director Administrator Server - V3.4</b> wizard is removed in 3.4.0. However, some shared resources related to this screen (EMS ConnectionFactory, JMS Destination, JNDI Connection) are created in ActiveMatrix Administrator. These shared resources are added as an application property and can be viewed from the ActiveMatrix Administrator UI:</p> <ul data-bbox="512 1776 1436 1854" style="list-style-type: none"> <li>• Application name: <code>com.tibco.ampd.ogp.de</code></li> <li>• Properties: <code>bwJmsSharedResource</code> and <code>bwAgentAdapterJmsDestination</code></li> </ul> <p><b>Workaround:</b> The shared resources created by the screen are not used for anything. You can ignore them.</p>

Key	Summary
AMX-17316	<p><b>Summary:</b> After the uninstallation of ActiveMatrix Service Grid 3.4.0, some files and folders are not removed from TIBCO_HOME. For example, the <code>tibamx_hostmanager.properties</code> file from the <code>TIBCO_HOME/amx/3.4/scripts</code> and <code>TIBCO_HOME/tct/1.6</code> directories is not removed.</p> <p><b>Workaround:</b> None</p>
AMX-17226	<p><b>Summary:</b> On IBM AIX, if the <b>Deploy Log Service</b> option is selected and you create the ActiveMatrix Administrator server, the following error is displayed:</p> <p>Error Loading Extension Registry error</p> <p><b>Workaround:</b> Clear the <b>Deploy Log Service</b> option when creating the ActiveMatrix Administrator server.</p>
AMX-17182	<p><b>Summary:</b> In the TIBCO Configuration Tool, host names or DNS names cannot have underscores in their names. As a result, TIBCO Configuration Tool fails if the name of the <b>Available Group Listener</b> contains underscores while configuring the AlwaysOn Database Setup in SQL Server 2017.</p> <p><b>Workaround:</b> Do not use underscores in the name of the <b>Available Group Listener</b> while configuring the AlwaysOn Database Setup on SQL Server 2017.</p>
AMX-17144	<p><b>Summary:</b> On Microsoft Windows, when you try to update JRE by using TIBCO Configuration Tool, occasionally the following error occurs:</p> <p>Caused by: TIBCO-AMX-TOOLS-JREUPDATER-000048: Cannot write to the file. E:\AMX_v43\amx\3.4\scripts\rpflauncher_classpath_3.4.0.tra.</p> <p><b>Workaround:</b> Run the command two or three times until it succeeds.</p>
AMX-17120	<p><b>Summary:</b> Occasionally because of manual intervention or execution of certain scripts, the network time of the machine where Active Directory Federation Services (ADFS) or WebApp is hosted might be out of sync and result in authentication failure for response being too old or from future.</p> <p><b>Workaround:</b> The network time of the machine must be synchronized. For Linux, the synchronization must happen with the Network Time Protocol server. For Windows, use the Windows time service. There are standard operating system level procedures for synchronizing the machine network time.</p>
AMX-16828	<p><b>Summary:</b> If you invoke a REST service binding with an OpenID Policy through a SOAP client such as SoapUI, it always sends an Access Token, which is an opaque token. Access Tokens are not, currently, supported.</p> <p><b>Workaround:</b> Use the ID Token (which is a JWT token) generated by the Access Token URI to send the request in SoapUI.</p>
AMX-16800	<p><b>Summary:</b> On a replication setup, when upgrading from 3.3.0 to 3.4.0, the primary ActiveMatrix Administrator server does not get started correctly after a successful upgrade.</p> <p><b>Workaround:</b> Restart the ActiveMatrix Administrator server.</p>

Key	Summary
AMX-16672	<p><b>Summary:</b> Double downgrade is not supported. For example, downgrading from 3.4.0 to 3.3.1 to 3.3.0 fails with the following errors:</p> <pre>TIBCO-AMX-CLI-000944: Failed to downgrade TIBCO Host instance(s). TIBCO-AMX-CLI-000942: Downgrade TIBCO Host instance &lt;instance name&gt; is not possible.</pre> <p><b>Workaround:</b> None</p>
AMX-16634	<p><b>Summary:</b> For an upgraded TIBCO host, the <code>tibcohost describeHost</code> command incorrectly shows the upgrade status as None.</p> <p><b>Workaround:</b> None</p>
AMX-16542	<p><b>Summary:</b> After upgrading TIBCO Business Studio to TIBCO ActiveMatrix 3.4.0, it is no longer supported on the Mac operating system.</p> <p><b>Workaround:</b> None</p>
AMX-16505	<p><b>Summary:</b> On a replicated setup, if one of the servers is downgraded, the version of the TIBCO ActiveMatrix REST BT Administrator Plug-in shows as 3.4.0 instead of showing the older version.</p> <p><b>Workaround:</b> None</p>
AMX-16084	<p><b>Summary:</b> The Service Performance Manager (SPM) dashboard does not work with EMS fault tolerance mode.</p> <p><b>Workaround:</b> None</p>
AMX-16083	<p><b>Summary:</b> If a Java project has errors (faults) configured in RRC and has execution environment as JAVASE-1.6 or lower, DAA generation fails.</p> <p><b>Workaround:</b> To generate the DAA file, make sure that the <code>RequiredExecutionEnvironment</code> field in the <code>Manifest.MF</code> file is empty. It allows you to create the DAA and deploy it at runtime.</p>
AMX-16017	<p><b>Summary:</b> When 3.4.0 is installed over 3.3.0 with Hotfix 17 applied to it, if all the check boxes (3.3.0, Hotfix 17, and 3.4.0) are selected in the Custom Uninstall dialog box, the following error is displayed during the TIBCO ActiveMatrix SPM Dashboard uninstallation:</p> <pre>ANT Task: TIBCO ActiveMatrix Pre-Uninstallation - ActiveMatrix SPM Dashboard has failed.</pre> <p><b>Workaround:</b> Uninstall the products in the following order:</p> <ol style="list-style-type: none"> <li>1. 3.4.0</li> <li>2. 3.3.0 Hotfix 17</li> <li>3. 3.3.0</li> </ol>



Key	Summary
AMX-16016	<p><b>Summary:</b> Downgrading SystemHost from ActiveMatrix 3.4.0 to an earlier version fails if the CONFIG_HOME where the SystemHost is present contains other runtime hosts that are bound to a different ActiveMatrix Administrator server instead of the ActiveMatrix Administrator server from the selected CONFIG_HOME.</p> <p><b>Workaround:</b> Ensure that all the runtime hosts that are in the selected CONFIG_HOME must be bound to the ActiveMatrix Administrator Server from the same CONFIG_HOME.</p>
AMX-15975	<p><b>Summary:</b> Even when the command line interface is used, the notification transport update fails with the following error message:</p> <pre data-bbox="512 575 1481 730">TIBCO-AMX-ADMIN-021085: Failed to update the notification transport!, Caused by: TIBCO-AMX-ADMIN-021281: The number of hosts in this enterprise is more than 10. Please use the Administrator Command Line Interface for updating the Notification Transport.</pre> <p><b>Workaround:</b> None</p>
AMX-15840	<p><b>Summary:</b> After upgrading from 3.2.0 to 3.4.0, the Mediation application template shows version as 3.4.0.007 instead of 3.5.0.007.</p> <p><b>Workaround:</b> None</p>
AMX-15806	<p><b>Summary:</b> When a DAA created in 3.3.0 with <code>javax.servlet</code> is run as a composite application in 3.4.0 (<b>Deployment Artifacts</b> &gt; right-click the DAA file &gt; <b>Debug As</b> &gt; <b>Composite application</b>), RAD starts but fails with Provisioning Node errors.</p> <p><b>Workaround:</b> Re-create the DAA in 3.4.0.</p>
AMX-15775	<p><b>Summary:</b> In 3.4.0, an HTTP connector is created as non-blocking by default. That is, the <b>Use Non-Blocking IO Sockets</b> check box on the <b>Advanced</b> tab is selected by default. When this check box is selected, the <b>Acceptor Threads</b> field on the <b>General</b> tab is disabled and 1 is used as the default number of <b>Acceptor Threads</b>.</p> <p>For an internal HTTP connector, if the <b>Use Non-Blocking IO Sockets</b> check box is cleared and a value greater than 1 is specified in the <b>Acceptor Threads</b> field, all except one of the acceptor threads are in a blocked state.</p> <p><b>Workaround:</b> Keep the <b>Use Non-Blocking IO Sockets</b> check box on the <b>Advanced</b> tab cleared.</p>
AMX-15756	<p><b>Summary:</b> During installation using the GUI mode, a name cannot be specified for the installation environment.</p> <p><b>Workaround:</b> Install using the Silent installation mode if you want to specify an environment name.</p>

Key	Summary
AMX-15614	<p><b>Summary:</b> When creating an ActiveMatrix Administrator server by using TIBCO Configuration Tool, if the Oracle user name has quotes (" ") and hyphen (-), TIBCO Configuration Tool fails to create the ActiveMatrix Administrator server and returns the following error:</p> <p>Caused by: java.sql.SQLException: ORA-00942: table or view does not exist</p> <p><b>Workaround:</b> Avoid using quotes (" ") and hyphen (-) in the user name.</p>
AMX-15592	<p><b>Summary:</b> For HP-UX machines, the Patch Manager functionality to shutdown TIBCOHost instances before running the commands <code>applyPatch</code> and <code>revertPatch</code> is not supported. For the same commands, the ability to start the TIBCOHost instances after running the commands is also not supported. That is, if <code>applyPatch</code> or <code>revertPatch</code> commands are run with the <code>-handleStart</code> or <code>-handleStop</code> arguments, the commands does not work as expected. In this case, the shutdown and startup of TIBCOHost instances must be handled manually.</p> <p><b>Workaround:</b> Run the <code>applyPatch</code> and <code>revertPatch</code> command without <code>-handleStart</code> and <code>-handleStop</code> arguments, and handle shutdown and startup of TIBCOHost instances manually.</p>
AMX-15569	<p><b>Summary:</b> The <code>-ignoreNodeStartupMode</code> argument of the Host Manager's <code>startAllHosts</code> command does not work for a Microsoft Windows NT host. For a Microsoft Windows NT host, it starts a node configured for automatic startup but does not start a node configured for manual startup.</p> <p><b>Workaround:</b> Start Microsoft Windows NT host or service manually.</p>
AMX-15379	<p><b>Summary:</b> If application <code>App1</code> with promoted service <code>Service1</code> containing a SOAP/HTTP binding <code>Binding1</code> is deployed in environment <code>Env1</code>, and another application <code>App1</code> with promoted service <code>Service1</code> containing a SOAP/JMS binding <code>Binding1</code> is deployed in environment <code>Env2</code>, the TIBCO ActiveMatrix SPM dashboard shows an incorrect binding type for the application <code>App1</code> deployed in <code>Env2</code>. That is, the dashboard shows the binding type as SOAP/HTTP instead of SOAP/JMS. This issue applies to promoted references as well. Additionally, it applies to all binding types - SOAP/HTTP, SOAP/JMS, and JMS.</p> <p><b>Workaround:</b> None</p>

Key	Summary
AMX-15261	<p><b>Summary:</b> On a machine which has a TIBCO ActiveMatrix 3.3.0 Hotfix installed, while upgrading to ActiveMatrix BPM 4.0.0, the TIBCO ActiveMatrix version is downgraded if all the following options are selected:</p> <ul style="list-style-type: none"> <li>• <b>Upgrade ActiveMatrix TIBCO Host Instance</b></li> <li>• <b>Upgrade ActiveMatrix Administrator</b></li> <li>• <b>Upgrade Nodes Hosting ActiveMatrix BPM Instance</b></li> <li>• <b>Upgrade ActiveMatrix BPM Instance Application [Upgrading Database]</b></li> </ul> <p><b>Workaround:</b></p> <ol style="list-style-type: none"> <li>1. Stop tibcohost.</li> <li>2. Apply the TIBCO ActiveMatrix 3.3.0 Hotfix again by running the patch manager.</li> <li>3. Start tibcohost.</li> <li>4. From ActiveMatrix Administrator, check systemnode and bpmnode. The expected hotfix version is displayed.</li> <li>5. Launch TIBCO Configuration Tool to upgrade to ActiveMatrix BPM 4.0.0. Select the last two options: <ul style="list-style-type: none"> <li><b>Upgrade Nodes Hosting ActiveMatrix BPM Instance</b></li> <li><b>Upgrade ActiveMatrix BPM Instance Application [Upgrading Database]</b></li> </ul> </li> </ol>
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 hosts file. The location of the hosts 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:</p> <pre>jdbc:sqlserver:// 192.167.71.42:1433;databaseName=db1;failoverPartner=192.167.71.60</pre> <p>To ensure that 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 hosts file:</p> <pre>192.167.71.42 amx-db42 192.167.71.60 amx-db60</pre>

Key	Summary
AMX-11970	<p><b>Summary:</b> In a replicated ActiveMatrix Administrator server setup, if you deploy to the system node applications with policies applied on them, the policies are not enforced after upgrade.</p> <p><b>Workaround:</b> First undeploy and then redeploy these applications after upgrading all system nodes.</p>
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 Provider URL 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>
BJMS-636	<p><b>Summary:</b> The show connection command in the TIBCO Enterprise Message Service administration tool <code>ems-admin</code> does not contain "ClientID" value for connections created by JMS resource instances for outbound connections.</p> <p><b>Workaround:</b> None</p>

Key	Summary
BJMS-603	<p><b>Summary:</b> ActiveMatrix 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 following message is displayed and the service does not start:</p> <pre data-bbox="515 478 1481 531">javax.jms.IllegalStateException: Not allowed to use transacted session on routed queues</pre> <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 configuration parameter:</p> <pre data-bbox="515 688 1185 720">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 reassign the WSDL file to existing JMS binding.</p>
DSS-982	<p><b>Summary:</b> Changing or updating the TIBCO Credential Server (TCS) certificate results in host security failure.</p> <p><b>Workaround:</b> None</p>
DSS-813	<p><b>Summary:</b> While upgrading to ActiveMatrix release 3.3.0, you might see benign errors similar to the following example:</p> <pre data-bbox="515 1161 1481 1213">[ERROR]com.tibco.trinity.runtime.base.provider.identity.CipherSupport</pre> <p><b>Workaround:</b> Such errors are harmless and do not mean that the upgrade failed. No action is required.</p>
HKAM-411	<p><b>Summary:</b> On the Solaris operating system, the AMXNode microagents are not shown in the Hawk Display.</p> <p><b>Workaround:</b> None</p>
HKAM-402	<p><b>Summary:</b> After upgrading ActiveMatrix 3.3.0 to ActiveMatrix 3.4.0, when you call the getConfig method, the Monitoring Application State is shown as NOT CONFIGURED.</p> <p><b>Workaround:</b> Before upgrading to ActiveMatrix 3.4.0, apply ActiveMatrix 3.3.0 Hotfix 10 or higher.</p>

Key	Summary
HKAM-397	<p><b>Summary:</b> When Hawk ActiveMatrix Plug-in (HKAM) is used for large scale systems, tibhawkagent stops automatically with the following error</p> <p>RV: DrainQueue: out of memory.</p> <p><b>Workaround:</b> If HKAM is configured with more than 10 hosts, increase memory of tibhawkagent.</p> <p>To change memory of tibhawkagent:</p> <ol style="list-style-type: none"> <li>1. Open tibhawkagent.tra located at &lt;hawk.config.home&gt;/tibco/cfgmgmt/hawk/bin.</li> <li>2. Change values of -XX:MaxPermSize, java.heap.size.initial and java.heap.size.max based on number of hosts.</li> </ol> <p>For 60 hosts, the following values are recommended:</p> <ul style="list-style-type: none"> <li>• java.heap.size.max = 4 GB</li> <li>• -XX:MaxPermSize = 1 GB</li> </ul>
HKAM-389	<p><b>Summary:</b> After a Notification Transport Server Configuration update, the TIBCOHost's HKAM rulebases point to the previous Notification Transport Server Configuration.</p> <p><b>Workaround:</b> After a Notification Transport Server Configuration update, you must manually update the TIBCOHost's HKAM rulebases.</p>
HKAM-384	<p><b>Summary:</b> When HKAM is configured on a large scale setup, invoking a method on a Host microagent fails with a timeout.</p> <p><b>Workaround:</b> Change the default HKAM rulebase for host and node. Make it event-driven rather than polling at a fixed interval.</p>
HKAM-374	<p><b>Summary:</b> On Windows Server 2008 R2, if a node belongs to a host created with a Windows NT service, invocation of the following methods on the node microagent fails with a StatsDataAdapter is null error:</p> <ul style="list-style-type: none"> <li>• changeMonitoringConfig</li> <li>• getBindingOperationStats</li> <li>• getComponentOperationStats</li> <li>• getConfig</li> </ul> <p><b>Workaround:</b> None</p>

Key	Summary
HKAM-373	<p><b>Summary:</b> When QIN update is performed on a host which is already configured with HKAM, the EMS related information in the hawkems&lt;host_name&gt;.hma file points to the old notification server.</p> <p><b>Workaround:</b> Change the EMS values for -user, -encryptedPassword, and -server of the new notification server manually in the hawkems-&lt;host_name&gt;.hma file.</p> <pre data-bbox="512 447 1481 600"> &lt;arg&gt;-user&lt;/arg&gt; &lt;arg&gt;\${new_username}&lt;/arg&gt; &lt;arg&gt;-encryptedPassword&lt;/arg&gt; &lt;arg&gt;\${new_password}&lt;/arg&gt; &lt;arg&gt;-server&lt;/arg&gt; &lt;arg&gt;\${new_notification_server_url}&lt;/arg&gt; </pre>
HKAM-343	<p><b>Summary:</b> On Solaris, hawk.log shows the following error and method invocation for CLEventPublisherMicroAgent does not return any data:</p> <pre data-bbox="512 720 1481 800"> Error loading microagent from com.tibco.hawk.microagent.commonlogging.publisher.CLEventPublisher MicroAgent: java.lang.IllegalArgumentException </pre> <p><b>Workaround:</b> None</p>
HKAM-337	<p><b>Summary:</b> For a node, you cannot view statistics for a WebApp component using the onComponentOperationStats Hawk method.</p> <p><b>Workaround:</b> None</p>
HKAM-336	<p><b>Summary:</b> For a node, you cannot view statistics for a WebApp component using the getComponentOperationStats Hawk method.</p> <p><b>Workaround:</b> None</p>
HKAM-266	<p><b>Summary:</b> If the ActiveMatrix Administrator server or TibcoHost instance is configured to use SSL-enabled Enterprise Message Service on AIX platform, and Hawk 5.0 is installed, then starting Hawk Agent fails with an error.</p> <p><b>Workaround:</b> Use Hawk 4.9 instead of Hawk 5.0.</p>
HKAM-264	<p><b>Summary:</b> You cannot change the timeout of method invocation for Custom microagent.</p> <p><b>Workaround:</b> None</p>
HKAM-253	<p><b>Summary:</b> Hawk Display shows multiple entries for node Service microagent when rulebases for TibcoHost or nodes are invoked after the TibcoHost or node crash.</p> <p><b>Workaround:</b> Click <b>Done</b>, and open the microagent again. Alternatively, restart Hawk Display.</p>
HKAM-251	<p><b>Summary:</b> Continuous error messages are seen in the hawk.log file after starting tibhawkagent.exe on HAWK 5.0. Hawk 5.0 is unable to run powershell.exe used in TibcoHost rulebase.</p> <p><b>Workaround:</b> Prefix powershell.exe in the rulebase of the TibcoHost with the absolute path of powershell.exe.</p>

Key	Summary
HKAM-250	<p><b>Summary:</b> When using Hawk 5.0, logs are not generated in the <code>CONFIG_HOME/hkam/&lt;host_instance_name&gt;/logs</code> folder. The Hawk Agent shows errors related to <code>slf4j</code> in the Hawk logs.</p> <p><b>Workaround:</b> Remove the <code>slf4j</code> jars and jars with different versions of <code>slf4j</code> from the agent classpath.</p>
HKAM-249	<p><b>Summary:</b> The Stop Reason and Reason Code arguments are not updated for the <code>onNodeEvent</code> method after calling <code>stopNode</code>.</p> <p><b>Workaround:</b> None</p>
HKAM-242	<p><b>Summary:</b> Hawk 5.0 cannot find Windows PowerShell.</p> <p><b>Workaround:</b> Prefix <code>powershell.exe</code> in the rulebase of the TibcoHost with the absolute path of <code>powershell.exe</code>.</p>
HKAM-237	<p><b>Summary:</b> On creating a node in the ActiveMatrix Administrator web interface, its rulebase is created in the <code>CONFIG_HOME/hkam/&lt;host_instance_name&gt;/rulebases</code> folder. If the node is deleted, the <code>HAWK.log</code> file continuously produces errors.</p> <p><b>Workaround:</b> Manually delete the rulebase to avoid error entries in the <code>HAWK.log</code> file.</p>
HKAM-193	<p><b>Summary:</b> Hawk ActiveMatrix Plug-in displays some ActiveMatrix applications or components in runtime state as uninstalled, but ActiveMatrix Administrator or <code>nodeutil</code> do not show these applications.</p> <p><b>Workaround:</b> Restart Hawk Agent to clear the cache.</p>
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 might see an error similar to the following example in the logs:</p> <pre data-bbox="517 1289 1481 1388">[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 Properties &gt; Implementations tab is 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 is 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>



Key	Summary
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 ActiveMatrix Administrator:</p> <ol style="list-style-type: none"> <li>1. In TIBCO Business Studio, open the project containing the Web Application component.</li> <li>2. Promote the defaultConnector property to a composite level: <ol style="list-style-type: none"> <li>a. Select the defaultConnector property on the component.</li> <li>b. Right-click and select <b>Promote</b>.</li> </ol> </li> <li>3. Make the composite property a substitution variable so it can be substituted in TIBCO Administrator before deployment.</li> <li>4. Right-click on composite and select <b>Create DAA</b>.</li> <li>5. In ActiveMatrix Administrator, make sure a connector with the same name is created in ActiveMatrix Administrator and deployed on to the node before the Web Application DAA is deployed.</li> </ol>
MCR-2002	<p><b>Summary:</b> If you have configured Microsoft SQL Server 2012 as a database for Administrator, invoking a custom DAA might result in harmless exceptions similar to the following examples:</p> <pre>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). at com.microsoft.sqlserver.jdbc.SQLServerException.makeFromDatabaseEr ror(SQLServerException.java:216) at com.microsoft.sqlserver.jdbc.SQLServerStatement.getNextResult(SQLS erverStatement.java:1515) at com.microsoft.sqlserver.jdbc.SQLServerPreparedStatement.doExecuteP reparedStatement SQLServerPreparedStatement.java:404)</pre> <p><b>Workaround:</b> None</p>
MCR-1995	<p><b>Summary:</b> If you have configured IBM DB2 as an external database, you might see harmless exceptions similar to the following examples in SystemNode.log:</p> <pre>Retrying database transaction after error: Processing of metric requestsIn for event com.tibco.governance.amxserviceprobe.ServiceProbeInstruments.Servi ceRequestIn failed for measure Total and time window Since Started Time Window Retrying database transaction after error: Processing of metric faults for event com.tibco.governance.amxserviceprobe.ServiceProbeInstruments.Servi ceExecutionTime failed for measure Total and time window Since Started Time Window</pre> <p><b>Workaround:</b> Such exceptions are benign and do not require any action.</p>

Key	Summary
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 might fail.</p> <p><b>Workaround:</b> Replicate your configuration before upgrading to ActiveMatrix release 3.3.0.</p>
MCR-1823, TAP-10602	<p><b>Summary:</b> The value for the uptime displayed in the infrastructure dashboard screens are accounted from the time a request is made to the application by invoking the endpoint or through an internal call from another application.</p> <p>If an application is deployed and not used, the value for uptime is 0.</p> <p><b>Workaround:</b> None</p>
MCR-1422	<p><b>Summary:</b> If nodes are restarted when the SystemNode is down, the Uptime and Since Started statistics are not reset.</p> <p><b>Workaround:</b> Either make sure that the system node is running using admin replication or restart the applications for which incorrect statistics are seen.</p>
MCR-1350	<p><b>Summary:</b> The number of components reported for a given node in the Enterprise Graphical View includes components that belong to the ActiveMatrix Platform Application. The Dashboard component count does not include these components.</p> <p><b>Workaround:</b> None</p>
MCR-1226	<p><b>Summary:</b> The <b>Endpoint</b>, <b>Service</b>, and <b>References</b> tabs display an incorrect value for <b>Avg Comp Process Time</b> when extended monitoring is enabled. The value displayed is <b>Req Comp Time</b>.</p> <p><b>Workaround:</b> The correct average component processing time is available in the <b>Components</b> and <b>Applications</b> tabs.</p>
MCR-1205	<p><b>Summary:</b> If the TibcoHost is shutdown while the dashboard is running, the following error message is seen in the SystemNode log files:</p> <pre data-bbox="512 1335 1481 1388">[ERROR] org.apache.axis2.engine.AxisEngine - bean:name=govObjFilterServiceMBean</pre> <p><b>Workaround:</b> None. This error can be safely ignored.</p>
MCR-1204	<p><b>Summary:</b> Stopping the TibcoHost instance occasionally causes exceptions to be thrown in the log file. During a graceful stop of TibcoHost instance there might be some exceptions in the log file with the root cause. For example:</p> <pre data-bbox="512 1577 1481 1629">Caused by: java.lang.RuntimeException: Statistics aggregator is closing down, rolling back transaction</pre> <p><b>Workaround:</b> Ignore the error.</p>
MCR-1162	<p><b>Summary:</b> Statistics for Web Application components do not display in the dashboard.</p> <p><b>Workaround:</b> None</p>

Key	Summary
MCR-876	<p><b>Summary:</b> Status value is Unknown and uptime is empty when the same application is deployed on two nodes across environments.</p> <p><b>Workaround:</b> Change the application name during deployment. It must be unique for an enterprise for dashboard to show correct status and uptime.</p>
MCR-800	<p><b>Summary:</b> When a component reference is promoted, component reference metrics show zero values. All metrics are shown on the promoted reference and reference endpoint.</p> <p><b>Workaround:</b> View metrics on the promoted reference.</p>
MCR-753	<p><b>Summary:</b> In the <b>Dashboards &gt; Infrastructure</b> screens the application request count includes requests counts from all services promoted to application level. In addition, it incorrectly includes reference invocations count from all references promoted to application level.</p> <p><b>Workaround:</b> None</p>
MCR-521	<p><b>Summary:</b> If a node is stopped or started several times while SystemNode is down, the last stop or start time of SystemNode is used to calculate the node's uptime percentage. Other stops and starts are missed and not used in uptime calculation.</p> <p><b>Workaround:</b> Configure the ActiveMatrix Administrator server in fault tolerant mode.</p>
MED-3306	<p><b>Summary:</b> SOA projects created by the AutoMediate Tool might 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>
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-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
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 <b>Project &gt; Clear</b> from the menu bar and the validation restarts. The error markers disappear, unless there are actual problems that remain.</p>
MED-1736	<p><b>Summary:</b> Dragging and dropping a WSDL onto a mediation flow results in the following error:</p> <p>Receive Wrong Transfer data</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>
PD-4435	<p><b>Summary:</b> When the Basic or UsernameToken Authentication Governance Control is enforced on the object group with a WebApp and REST binding member, the policy does not work when used as UsernameToken Authentication but works when used as Basic Authentication.</p> <p><b>Workaround:</b> None</p>
PD-4431	<p><b>Summary:</b> A policy is not enforced for an application if the application is deployed before deploying the Policy Director Governance server.</p> <p><b>Workaround:</b> None</p>
PD-4429	<p><b>Summary:</b> Even after successfully downgrading from 3.4.0 to ActiveMatrix 3.3.0 (with Hotfix 23 and Policy Director Hotfix 02 installed), the following plug-ins show 3.4.0 as the version:</p> <ul style="list-style-type: none"> <li>• TIBCO ActiveMatrix Operations Governance Platform Administrator plug-in</li> <li>• TIBCO ActiveMatrix Administrator Governance Policy Director admin plug-in</li> </ul> <p><b>Workaround:</b> This issue does not have a functional impact; everything works as expected.</p>
PD-4423	<p><b>Summary:</b> Logging policy is not supported by the ActiveMatrix Administrator server (with ActiveMatrix Policy Director Governance services) of ActiveMatrix 3.4.0 when the server is configured with SSL-enabled Enterprise Message Service.</p> <p><b>Workaround:</b> None</p>

Key	Summary
PD-4420	<p><b>Summary:</b> On the <b>Governance</b> tab of the ActiveMatrix Administrator UI, the applications that have policies applied to them incorrectly show their undeployed policies as <i>Active</i>.</p> <p><b>Workaround:</b> None</p>
PD-4371	<p><b>Summary:</b> OpenID Connect authentication is not supported via Policy Director Governance in this release. Consequently, the following operation in TIBCO ActiveMatrix Administrator fails:</p> <p><b>Governance &gt; New &gt; Authentication By OpenID</b></p> <p><b>Workaround:</b> None</p>

Key	Summary
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 might see the following error:</p> <pre>PolicyEnforcement Failed to Authenticate the request.</pre> <p><b>Workaround:</b> 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> <p><b>Schema</b></p> <pre>&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> <p><b>WSDL Message</b></p> <pre>&lt;wsdl:message name="PUTSecurity"&gt; &lt;wsdl:part name="Security" element="s2:Security"/&gt; &lt;/wsdl:message&gt;</pre> <p><b>WSDL Input in Binding</b></p> <pre>&lt;soap:header message="tns1:PUTSecurity" part="Security" use="literal"/&gt;</pre> <p>For example:</p> <pre>&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>

Key	Summary
PER-714	<p><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><b>Workaround:</b> You can either:</p> <ul style="list-style-type: none"> <li>• Deploy these references in different nodes</li> <li>• Configure these references with different HTTP client resource instance configurations</li> </ul>
PER-632	<p><b>Summary:</b> For proper policy enforcement, every composite containing a web application component must have a different context root.</p> <p><b>Workaround:</b> None</p>
PER-609, PER-623	<p><b>Summary:</b> The <code>UsernameTokenAuthentication</code> and <code>WSSProvider</code> are incompatible policies. These policies have redundant functionality, but they cannot co-exist on the same SOAP service.</p> <p><code>UsernameTokenAuthentication</code> authenticates using only the username token in the WS-Security header.</p> <p><code>WSSProvider</code> authenticates using any available information in the WS-Security header.</p> <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-583	<p><b>Summary:</b> For bundled policies added in this release, if the resource instance(s) used in the policy is reinstalled, policy enforcement fails.</p> <p><b>Workaround:</b> Redeploy the application after reinstalling the resource instance(s).</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>
PER-49	<p><b>Summary:</b> When configuring an LDAP Authentication resource template in Administrator, the option to generate SAML 1.1 assertion is not supported by platform policies.</p> <p><b>Workaround:</b> When configuring an LDAP Authentication resource template, accept the default setting to generate SAML 2.0 tokens.</p>

Key	Summary
RSBT-784	<p><b>Summary:</b> Open ID authentication is not supported when invoking REST Service Bindings using the Swagger UI. Only basic authentication is supported.</p> <p><b>Workaround:</b> None</p>
RSBT-779	<p><b>Summary:</b> For a REST binding, when using the POSTMAN REST client, the basic or username token authentication policy is not enforced if you do not provide authentication.</p> <p><b>Workaround:</b> None</p>
RSBT-721	<p><b>Summary:</b> In the Swagger UI, if SSL is enabled over a REST binding that uses the self-signed certificate and you send a request over HTTP, it returns the following error:</p> <pre data-bbox="512 659 1481 688">TypeError: Failed to fetch</pre> <p><b>Workaround:</b> Add the certificate as an exception in the browser.</p>
RSBT-719	<p><b>Summary:</b> In Swagger UI, on selecting parameter <code>content-type</code> as <code>application/bjson</code>, the schema is not populated with the correct BJSON format.</p> <p><b>Workaround:</b> You can manually form the request payload of type Badgerfish JSON (<code>application/bjson</code>) to get a proper response.</p>
RSBT-716	<p><b>Summary:</b> To test an endpoint, when you select the request <code>content-type</code> as <code>application/xml</code>, an XML request payload is generated in the Swagger UI. The payload does not include the namespace for the elements that are defined in an imported XSD, that is, namespace is not pre-populated in the payload.</p> <p><b>Workaround:</b> Manually provide a namespace for such elements.</p>
RSBT-603	<p><b>Summary:</b> When the Java property <code>com.tibco.amf.runtime.bindingtype.rest.extendedJsonConversion</code> is set to <code>true</code> for a runtime node in the REST Resource Configuration (.RRC) file for a reference binding, and if the POST request contains a JSON array with exactly one JSON element in it (as specified below), the JSON array is treated as a single, non-array element. This results in a <code>NullPointerException</code> at runtime when multiple elements are sent as part of the request.</p> <p>Erroneous usage:</p> <pre data-bbox="512 1472 1481 1524">{"addRequestOperation": {"Arrays":[{"Key":"key1", "Value": "value1"}]}}</pre> <p><b>Workaround:</b> In the RRC file, specify multiple elements in the JSON Array element as follows</p> <p>Correct usage:</p> <pre data-bbox="512 1667 1481 1719">{"addRequestOperation": {"Arrays":[{"Key":"key1", "Value": "value1"}, {"Key":"key2", "Value": "value2"}]}}</pre> <p>With this change, the Array object is treated as a JSON array at runtime and the <code>NullPointerException</code> is not seen.</p>



Key	Summary
RSBT-408	<p><b>Summary:</b> A Null Pointer Exception is thrown when a Pass Through Mode sample project is deployed in RAD.</p> <p><b>Workaround:</b> Deploy the project in ActiveMatrix Administrator.</p>
RSBT-398	<p><b>Summary:</b> A REST service binding is updated after an operation is added to a WSDL.</p> <p><b>Workaround:</b> None</p>
RSBT-391	<p><b>Summary:</b> After renaming an RRC file through the Process Explorer, the name of the file is updated in the reference &gt; <b>Bindings</b> tab &gt; <b>Rest Resource Configuration File</b> link.</p> <p><b>Workaround:</b> None</p>
RSBT-382	<p><b>Summary:</b> If the RRC file name begins with xml, an error is thrown while generating the Java implementation.</p> <p><b>Workaround:</b> None</p>
RSBT-371	<p><b>Summary:</b> When a context parameter is added or edited, the following message is displayed at the promoted reference:</p> <p style="background-color: #f0f0f0; padding: 2px;"><code>Regenerated context parameter mappings</code></p> <p>When you click the message, the mappings are created but the error message does not disappear.</p> <p><b>Workaround:</b> Clean the project.</p>
RSBT-368	<p><b>Summary:</b> In the RRC file, if an operation name begins with a '/', an exception is thrown.</p> <p><b>Workaround:</b> None</p>
RSBT-363	<p><b>Summary:</b> While creating a REST binding on a promoted service, clicking <b>Next</b> does not result in any action.</p> <p><b>Workaround:</b> Click <b>Finish</b>.</p>

Key	Summary
RSBT-358	<p><b>Summary:</b> The following data types in a generated XSD do not match the data types in the JSON payload:</p> <ol style="list-style-type: none"> <li>1. unsignedByte mapped to short</li> <li>2. nonpositiveinteger mapped to float</li> <li>3. nonnegativeinteger mapped to float</li> <li>4. unsignedshort mapped to int</li> <li>5. gYear mapped to short</li> <li>6. negativeinteger mapped to float</li> <li>7. unsignedlong mapped to float</li> <li>8. positiveinteger mapped to float</li> <li>9. boolean mapped to string</li> </ol> <p><b>Workaround:</b> Edit the XSD file manually to reflect the correct datatypes.</p>
RSBT-346	<p><b>Summary:</b> Error messages for duplicate resource names or operation names are not displayed immediately when configuring a REST resource configuration (.rrc) file. Similarly, the error message does not go away automatically when the duplicate resource names or operation names are removed.</p> <p><b>Workaround:</b> Perform a clean operation.</p>
RSBT-231	<p><b>Summary:</b> While adding a binding, when the pass through mode is enabled, a note or warning indicating that any existing WSDL on the component reference is replaced by the pass through WSDL is not displayed.</p> <p><b>Workaround:</b> None</p>
RSBT-230	<p><b>Summary:</b> The <b>HTTP Client</b> textbox is not cleaned up after the resource template is deleted from the <b>Resource Templates</b> folder.</p> <p><b>Workaround:</b> None</p>
RSBT-58	<p><b>Summary:</b> If you upload a DAA that includes a REST binding, ActiveMatrix Administrator does not check whether HTTP connector resource instances exist for HTTP connectors defined for the REST binding. Later, when you attempt to deploy this DAA, the deployment fails because of the missing resource instance.</p> <p><b>Workaround:</b> Create an HTTP connector resource instance in the ActiveMatrix Administrator GUI. While configuring the REST binding in TIBCO Business Studio, the name of the resource instance must match the user-specified HTTP connector name.</p>
SDS-7799	<p><b>Summary:</b> While generating a CLI script, if you add a new server, a <code>Null Pointer Exception</code> is thrown.</p> <p><b>Workaround:</b> After adding a new server, click on the <b>Refresh</b> button.</p>
SDS-7796	<p><b>Summary:</b> When an application with a SSL-enabled HTTP connector tries to connect to a deployment server, the connection fails.</p> <p><b>Workaround:</b> None</p>


Key	Summary
SDS-7781	<p><b>Summary:</b> After you successfully migrate SOA projects from ActiveMatrix 2.x to ActiveMatrix 3.4.0 in TIBCO Business Studio, WS_Samples of 2.x result in implementation errors.</p> <p><b>Workaround:</b> None</p>
SDS-7780	<p><b>Summary:</b> After you successfully migrate SOA projects from ActiveMatrix 2.x to ActiveMatrix 3.4.0 in TIBCO Business Studio, DAA generation fails for the EmployeeVacation (2.x) Sample project.</p> <p><b>Workaround:</b> None</p>
SDS-7779	<p><b>Summary:</b> After you successfully migrate SOA projects from ActiveMatrix 2.x to ActiveMatrix 3.4.0 in TIBCO Business Studio, SoapException 2.x sample project results in implementation errors.</p> <p><b>Workaround:</b> None</p>
SDS-7776	<p><b>Summary:</b> After importing a 3.1.5 or 3.2.0 Java sample project in 3.4.0 TIBCO Business Studio, the following error is displayed:</p> <pre>JAR file incompatible with JRE/JDK 1.7 due to containing entries with the empty name.</pre> <p><b>Workaround:</b></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: <pre>JAR file incompatible with JRE/JDK 1.7 due to containing entries with empty name.</pre> <p>One such message is generated for each offending JAR file.</p> </li> <li>3. Right-click all these messages and select a quick fix to apply.</li> </ol>
SDS-7763	<p><b>Summary:</b> When you launch TIBCO Business Studio in a new workspace and click <b>Help &gt; Search</b> for the first time, a NullPointerException is returned.</p> <p><b>Workaround:</b> None</p>
SDS-7729	<p><b>Summary:</b> While running Ant files in TIBCO Business Studio, the following error is returned :</p> <pre>Launching &lt;projectName&gt;&lt;ant.deployment-build.xml' has encountered a problem, Launch configuration &lt;projectName&gt;&lt;ant.deployment-build.xml references non-existing project &lt;projectName&gt;</pre> <p>This is because of a bug in the Eclipse platform 4.7.1a (<a href="https://bugs.eclipse.org/bugs/show_bug.cgi?id=522581">https://bugs.eclipse.org/bugs/show_bug.cgi?id=522581</a>).</p> <p><b>Workaround:</b> Run the Ant file using the <b>Run in the same JRE as the workspace</b> option in the Create, manage, and run configurations dialog box. Alternatively, change the project containing the build.xml to a Java project by adding <code>&lt;nature&gt;org.eclipse.jdt.core.javanature&lt;/nature&gt;</code> to the list of <code>&lt;natures&gt;</code> in the .project file and then restart Eclipse.</p>

Key	Summary
SDS-7725	<p><b>Summary:</b> If the 3.4.0 TIBCO Business Studio is used to load a workspace that was created using 3.3.0 TIBCO Business Studio, running RAD (Rapid Application Deployment) fails with the following error because the 3.3.0 workspace contains JRE 1.7 information:</p> <pre>Unsupported minor version</pre> <p><b>Workaround:</b> Change the workspace JRE to Java 1.8.</p>
SDS-7685	<p><b>Summary:</b> If a Java project uses the Java 8 specific syntax in the code, the DAA file cannot be generated with execution environment as JavaSE-1.8. However, Java 8 syntax and compilation is supported.</p> <p><b>Workaround:</b> To generate the DAA file with Java 8 code, make sure the <code>RequiredExecutionEnvironment</code> field in the <code>Manifest.MF</code> file is empty. This allows you to create the DAA and deploy it at runtime.</p> <ul style="list-style-type: none"> <li>• For a newly created project, the <code>RequiredExecutionEnvironment</code> field in the <code>Manifest.MF</code> file is empty.</li> <li>• For an existing project, if Java 8 specific code is added, remove the <code>RequiredExecutionEnvironment</code> entry in the <code>Manifest.MF</code> file.</li> </ul>
SDS-7680	<p><b>Summary:</b> For a Custom Mediation task, generation of the DAA fails.</p> <p><b>Workaround:</b> While creating the Custom Mediation task, make sure the <code>RequiredExecutionEnvironment</code> field in the <code>Manifest.MF</code> file is empty. This allows you to create the DAA and deploy it at runtime.</p>
SDS-7669	<p><b>Summary:</b> In the ActiveMatrix Administrator CLI, upgrading the existing application did not update the Contact and Description fields in DAA.</p> <p><b>Workaround:</b> In the <code>SystemNode.tra</code> file, set the following property:</p> <pre>java.property.com.tibco.amx.admin.application.update.description.contact.during.upgrade=true</pre>
SDS-7640	<p><b>Summary:</b> When an existing project is imported into a workspace and Java 8 code is added to it, the following error is returned while creating the DAA:</p> <pre>Exporting bundles failed</pre> <p><b>Workaround:</b> To generate the DAA file with Java 8 code, make sure the <code>RequiredExecutionEnvironment</code> field in the <code>Manifest.MF</code> file is empty. This allows you to create the DAA and deploy it at runtime.</p>

Key	Summary
SDS-6729, SDS-6992	<p><b>Summary:</b> 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.</p> <p><b>Workaround:</b></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:           <pre>JAR file incompatible with JRE/JDK 1.7 due to containing entries with empty name.</pre>           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):           <ul style="list-style-type: none"> <li>• 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).</li> <li>• 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).</li> <li>• Fix all library JARs in workspace for JRE/JDK 1.7 compatibility-This option fixes all of the offending JARs in the workspace.</li> </ul> </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 Project &gt; Clean.</li> </ol>
SDS-6264	<p><b>Summary:</b> If the Web Application component is added by right clicking on the composite, the Generate Servlet Implementation option is not available under the Quick Fixes option.</p> <p><b>Workaround:</b> Select the Web Application component, right-click, and select Generate Servlet Implementation.</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> Deploy the application from ActiveMatrix Administrator. The application state is in a partially running state instead of running - which is the expected behavior.</p>
SDS-3890	<p><b>Summary:</b> Sometimes, the following message is returned in the error log:</p> <pre>Unbanded EventLoop Exception</pre> <p><b>Workaround:</b> None. Ignore the error.</p>

Key	Summary
SVCP-84	<p><b>Summary:</b> The TIBCO ActiveMatrix Service Performance probe on the Administrator node does not receive self-shutdown notifications sent from TibcoHost. This occurs because the Service Performance Manager probe component on the Administrator node responsible for such communication shuts down before it can send the notification.</p> <p><b>Workaround:</b> None</p>
TAP-16041	<p><b>Summary:</b> In the <code>deploy-application</code> target of <code>application_build.xml</code> file, if the <code>force</code> attribute is set to <code>true</code>, then application deployment is successful even if the required resource instance is not available. This issue is applicable if the resource instance required for an application is defined in the policy set.</p> <p><b>Workaround:</b> When deploying an application, set the <code>force</code> attribute to <code>false</code> in the <code>deploy-application</code> target of <code>application_build.xml</code> file. Setting the <code>force</code> attribute to <code>false</code> checks for all dependencies required by an Application.</p>
TAP-15885	<p><b>Summary:</b> Accessing ActiveMatrix Administrator Dashboards ( <b>Dashboard &gt; Infrastructure</b>) results in the following error:</p> <pre>Dashboard Bundle not Available. Please reload the browser. TypeError: Cannot read property 'Container' of undefined</pre> <p><b>Workaround:</b> Access ActiveMatrix Administrator Dashboards using the procedure mentioned in "Accessing Administrator Dashboards" section of the <i>TIBCO ActiveMatrix Service Grid Administration</i> guide.</p>
TAP-15863	<p><b>Summary :</b> On Microsoft Windows, when HSQLDB is used and the Log Service is enabled, the following error is intermittently seen in the <code>CONFIG_HOME \tibcohost\&lt;instance_name&gt;\data_3.2.x\nodes\SystemNode\logs\SystemNode.log</code> of the ActiveMatrix enterprise:</p> <pre>TIBCO-AMX-HPA-014016: Uncaught exception in thread Thread [LoggingThread,5,Job_Executor] java.lang.IllegalStateException: No uri</pre> <p>After this error is seen, <b>Governance &gt; Log Viewer</b> (logservice) does not work from the ActiveMatrix Administrator UI and the following error is returned:</p> <pre>Loading log service list failed. You have no permission to visit logviewer or the log service admin plugin is not available.</pre> <p><b>Workaround :</b> None</p>
TAP-15842	<p><b>Summary:</b> If you create an enterprise that uses a messaging bus and then create an environment that does not use the messaging bus, the <b>Configure enterprise without a messaging bus</b> check box on the <b>Admin Configuration &gt; General</b> tab is disabled.</p> <p><b>Workaround:</b> None</p>
TAP-15834	<p><b>Summary:</b> When using the Microsoft Edge browser, when creating an Object Group of Policy Director Governance by specifying the search criteria to find the matched group members, if you click the + button to build the search criteria, the <b>attribute</b> and <b>operator</b> drop-downs are not populated with the correct values.</p> <p><b>Workaround:</b> None</p>

Key	Summary
TAP-15833	<p><b>Summary:</b> When using the Microsoft Edge browser, when building the search criteria to find the matched group members, the X button does not clear the drop-down boxes used to specify the search criteria.</p> <p><b>Workaround:</b> None</p>
TAP-15827	<p><b>Summary:</b> If you have upgraded to ActiveMatrix 3.4.0, and then created a new Host or Node, some default loggers are missing on the newly created Host or Node.</p> <p><b>Workaround:</b> Before creating the new Host, copy the <code>DefaultLogConfiguration.properties</code> file on every TibcoHost instance on which the ActiveMatrix Administrator server is running.</p> <p>Copy the file from <code>&lt;TIBCO_HOME&gt;\administrator\3.4\templates\</code> and paste it into <code>&lt;CONFIG_HOME&gt;\admin\amxadmin\private\&lt;instanceName&gt;\</code>.</p>
TAP-15822	<p><b>Summary:</b> You cannot deploy an ActiveMatrix 3.4.0 DAA on ActiveMatrix 3.3.1 Administrator, ActiveMatrix 3.3.0 Administrator or ActiveMatrix 3.3.0 Hotfix 23 Administrator that uses Java 8.</p> <p><b>Workaround:</b> None</p>
TAP-15817	<p><b>Summary:</b> When using the Microsoft Edge browser on Windows 10, the Metrics Collection Runtime dashboard is not displayed.</p> <p><b>Workaround:</b> None</p>
TAP-15664	<p><b>Summary:</b> On Solaris Sparc, <b>Get Admin Information</b> use test of Enterprise Deployment Health Check fails with the following error:</p> <pre>Couldn't obtain phys addr</pre> <p><b>Workaround:</b> None</p>

Key	Summary
TAP-15645	<p><b>Summary:</b> When a TIBCO ActiveMatrix enterprise has customized system host and system node names (for example: SystemNode1, SystemNode2, or AdminNode) and the system node does not fully start in a TIBCO ActiveMatrix enterprise, the following error message is displayed on the TIBCO ActiveMatrix Administrator web page:</p> <p>404 page not found</p> <p> Prior to TIBCO ActiveMatrix 3.3.0 Hotfix 13, when a user tried to access a TIBCO ActiveMatrix Administrator web page while it is still loading or the user specified a wrong URL (correct with respect to IP address and port number), a "404 page not found" HTTP error response was returned. Starting with TIBCO ActiveMatrix 3.3.0 Hotfix 13, in the same situation, a new 404 page is displayed. This new 404 page automatically redirects the user to the login page once TIBCO ActiveMatrix Administrator is fully initialized and ready for service. However, this feature applies only to environments where the System Nodes use the default node names, that is, SystemNode and SystemNodeReplica. For System Nodes with customized node names, the old behavior ("404 page not found" error page) remains.</p> <p><b>Workaround:</b> Periodically, refresh the ActiveMatrix Administrator web page to determine whether ActiveMatrix Administrator was completely initialized and is ready for service.</p>
TAP-15563	<p><b>Summary:</b> After upgrading ActiveMatrix Administrator from 3.1.5 to 3.4.0, you can start or stop a host from the ActiveMatrix Administrator GUI. However, 3.1.5 hosts that are not upgraded yet, cannot be started or stopped from the ActiveMatrix Administrator GUI.</p> <p><b>Workaround:</b> Start or stop the host by using the <code>tibcohost</code> command.</p>
TAP-15523	<p><b>Summary:</b> TIBCO ActiveMatrix Administrator &gt; <b>Infrastructure</b> &gt; <b>Health Check</b> page does not open in Internet Explorer. However, it displays a link to open the page in a new tab.</p> <p><b>Workaround:</b> Open <code>http://localhost:8120/amxadministrator/amxmonitor.jsp</code> in a new tab to view the Health Check page.</p>
TAP-15503	<p><b>Summary:</b> In the Google Chrome browser, when creating an Object Group of Policy Director Governance by specifying the search criteria to find the matched group members, if you click the + button to build the criteria, the <b>attribute</b> drop-down box is not populated with the correct values.</p> <p><b>Workaround:</b> None</p>
TAP-15488	<p><b>Summary:</b> In TIBCO ActiveMatrix Administrator, some description fields do not work with Chrome 66.0.3359.139 or higher versions.</p> <p><b>Workaround:</b> None</p>



Key	Summary
TAP-15420	<p><b>Summary:</b> In TIBCO ActiveMatrix Administrator, when you navigate to <b>Infrastructure &gt; Enterprise Status &gt; Application</b> tab and click <b>Download Logs</b>, the requested application logs are not downloaded and the following error is displayed:</p> <pre data-bbox="512 365 1481 394">Cause: java.util.concurrent.TimeoutException.</pre> <p><b>Workaround:</b> None</p>
TAP-15060	<p><b>Summary:</b> After successfully downgrading to a previous version, you must uninstall the higher version.</p> <p><b>Workaround:</b> None</p>
TAP-14874	<p><b>Summary:</b> After reconnecting to EMS, ActiveMatrix Administrator shows the correct status but the Action History continues to show "In Progress(n)".</p> <p><b>Workaround:</b> None</p>
TAP-14772	<p><b>Summary:</b> Even when the Notification transport update was completed successfully using the ActiveMatrix Administrator CLI, the following error message was displayed:</p> <pre data-bbox="512 877 1481 1031">TIBCO-AMX-ADMIN-021085: Failed to update the notification transport!, Caused by: TIBCO-AMX-ADMIN-021281: The number of hosts in this enterprise is more than 10. Please use the Administrator Command Line Interface for updating the Notification Transport.</pre> <p><b>Workaround:</b> None</p>
TAP-14766	<p><b>Summary:</b> Ideally, in TIBCO ActiveMatrix, you should update the Notification Transport for all TIBCOHosts in the enterprise. If a particular TIBCOHost has to be updated using the <code>hosts</code> option from ActiveMatrix Administrator CLI, you must update the SystemHost's Notification Transport first, and then proceed with updating the Notification Transport for other TIBCOHosts.</p> <p>If SystemHost is not updated first, while updating Remote TIBCOHosts, ActiveMatrix Administrator CLI might show the update as having been completed successfully, but the TIBCOHosts might not actually be updated.</p> <p><b>Workaround:</b> Update the Notification Transport for the SystemHost first.</p>
TAP-14699	<p><b>Summary:</b> When the Java property <code>java.property.com.tibco.amx.decouple.Manual.Nodes</code> is not set to <code>true</code> in the <code>tibcohost.tra</code> file, the status of a Manual Node is marked as Stopped even when it is Running (Node process remains in task manager).</p> <p><b>Workaround:</b> None</p>
TAP-14242	<p><b>Summary:</b> When you log in to ActiveMatrix Administrator server using SSL-enabled LDAP authentication realm, returns a non-fatal <code>ClassNotFoundException</code> in the SystemNode log.</p> <p><b>Workaround:</b> None</p>

Key	Summary
TAP-14052	<p><b>Summary:</b> The uninstall action does not work as expected with a wildcard if the given feature versions have strict (1.0.0) and qualified strict (1.0.0.01) versions together.</p> <p>In a wildcard behavior, the following behavior is observed:</p> <p>If the user has two versions for the same featureId in the form of 1.0.0 (Strict version without qualifier) and 1.0.0.001 (Strict version with qualifier), precedence is given to 1.0.0.001 only and 1.0.0 is not uninstalled.</p> <p><b>Workaround:</b> To uninstall 1.0.0 explicitly, perform the same action again.</p>
TAP-13994	<p><b>Summary:</b> The Hostname in the Management URL of a TibcoHost instance gets replaced with the Hostname of its source TibcoHost, when TibcoHost Instance is installed successfully.</p> <p><b>Workaround:</b> None</p>
TAP-13942	<p><b>Summary:</b> On the &lt;Host&gt; -&gt; &lt;ResourceInstance&gt; page and <b>Shared Objects -&gt; Resource Templates -&gt; Resource Instances</b> tab, environment or duplicate node information is not displayed.</p> <p><b>Workaround:</b> On the <b>Details</b> pane of &lt;Host&gt; -&gt; &lt;ResourceInstance&gt; page and <b>Shared Objects &gt; Resource Templates &gt; Resource Instances</b> tab, navigate to the tree view in the left side pane. This tree view provides the exact node name: &lt;Environment Name&gt;_&lt;node name&gt;.</p>
TAP-13910	<p><b>Summary:</b> While exporting Logging Appenders, one logging appender &lt;CustomName&gt;_Root is exported when the following conditions are met:</p> <ul style="list-style-type: none"> <li>• host name of the replicated admin server is changed from the default SystemHostReplica to a custom name.</li> <li>• Include System Objects option is NOT selected.</li> </ul> <p><b>Workaround:</b> None</p>
TAP-13828	<p><b>Summary:</b> When installing or uninstalling a node, the most recent state of the node is displayed in the <b>Action History</b> column and not in the <b>Node State</b> column. For example, after uninstalling a node, the <b>Node State</b> is <b>Not Installed</b> while the action is in progress. This happens when there are incomplete tasks for an action but the node state has already changed.</p> <p><b>Workaround</b> Refer to the most recent state displayed in the <b>Action History</b> column instead of the <b>Node State</b> column.</p>
TAP-13777	<p><b>Summary:</b> If the TibcoHost name in the ActiveMatrix Administrator GUI and run time is different and the TibcoHost name from the ActiveMatrix Administrator GUI is specified in the CLI data, the install/start/uninstall actions fail.</p> <p><b>Workaround:</b> None</p>
TAP-13696	<p><b>Summary:</b> If a Management URL is unreachable and you try to unregister the TibcoHost, a warning message about the unreachable URL is not displayed.</p> <p><b>Workaround:</b> None</p>

Key	Summary
TAP-12878	<p><b>Summary:</b> If you import a resource template into an upgraded user application that did not previously contain a resource template (that is, if no resource templates had previously been imported into the application), the scope of the imported resource template is automatically set to Global, rather than Application. This occurs even if you specify Application scope in the CLI.</p> <p><b>Workaround:</b> After the resource template is imported (to Global scope), change its scope as required (to Application scope, for example) in the ActiveMatrix Administrator UI. To do this:</p> <ol style="list-style-type: none"> <li>1. Go to <b>Shared Objects &gt; Resource Templates</b>.</li> <li>2. Select the imported resource template.</li> <li>3. Click <b>Change Scope</b>, and change the scope to the Application or Environment level as required.</li> </ol>
TAP-12860	<p><b>Summary:</b> If you have a main process and a subprocess application and one or more dependent main process applications deployed in ActiveMatrix version 3.1.5 (and any ActiveMatrix BPM version between 1.3.0 and 2.1.0), then upgrade the BPM platform version to ActiveMatrix BPM 2.2.0 (ActiveMatrix 3.3.0), and subsequently attempt to upgrade the subprocess, you will see a warning similar to the following example:</p> <pre data-bbox="512 932 1481 1058">TIBCO-AMX-ADMIN-012430: Provided capability 'com.example.my.subprocess.pe.capability' provided by component 'MySubAppProcessFlow' cannot be removed. It is being used by the following components:Component 'MyMainAppProcessFlow' from application 'com.example.my.mainapp.process</pre> <p>This warning is issued erroneously and can be safely ignored. The subprocess is upgraded successfully and the main processes runs as expected, provided the subprocess maintains the same major version number as before.</p> <p><b>Workaround:</b> None</p>

Key	Summary
TAP-12858	<p><b>Summary:</b> The logging configuration of a node, host, or application (which is stored in the node, host, or application's <code>log4j.xml</code>; for example, <code>node-log4j.xml</code>) might enter into an inconsistent state if the node, host, or application uses a JMS appender that is configured with an SSL-enabled EMS server. In this case, the logging configuration uses an HTTP URL to refer to a keystore that's hosted on the Administrator. This HTTP URL is the internal HTTP connector URL of the Administrator.</p> <p>Changing the configuration of the internal HTTP connector (for example, to enable SSL or change the port number) causes the URL configured in the logging configuration (<code>log4j.xml</code>) to become invalid or out of synch. The logging configuration of each affected node, host, or application needs to be updated or it will fail to connect to EMS. Currently this is not done automatically.</p> <p><b>Workaround:</b> You must manually save and apply the logging configuration for each node, host, or application that uses a JMS appender. To do this:</p> <ol style="list-style-type: none"> <li>1. In the ActiveMatrix Administrator UI, go to the logging configuration for the node, host, or application that is in the situation described above.</li> <li>2. Change a value in the logging configuration that makes the node, host, or application go out of sync.</li> <li>3. Click <b>Save</b>.</li> <li>4. Click <b>Apply</b>. This pushes the new logging configuration, with a new HTTP URL, to the node, host, or application.</li> </ol>
TAP-12738	<p><b>Summary:</b> If you delete a binding using the ActiveMatrix Administrator UI, that binding is still visible in the SPM dashboard with a <code>Down</code> status. This occurs because the Delete notification for the ActiveMatrix binding component is not being emitted.</p> <p><b>Workaround:</b> None</p>
TAP-12714	<p><b>Summary:</b> ActiveMatrix Administrator does not properly undeploy applications with missing feature dependencies.</p> <p><b>Workaround:</b> To avoid this issue, go to <b>Node &gt; Configuration &gt; Features</b> and remove the feature with <code>Marked for Install</code> and a blank value for <code>Type</code>. You should be able to undeploy the application with no issues.</p>
TAP-12702	<p><b>Summary:</b> If you use TIBCO Configuration Tool to edit the ActiveMatrix Administrator database settings, the following harmless error might appear in <code>SystemNode.log</code>:</p> <pre>Could not open Hibernate Session for transaction.</pre> <p><b>Workaround:</b> None</p>

Key	Summary
TAP-12319	<p><b>Summary:</b> When deploying an application, ActiveMatrix Administrator automatically installs resource instances if there are resource templates with scope to the application. If the resource template installation fails, then application deployment also fails. For example, if the HTTP connector has a port conflict, it fails to start.</p> <p><b>Workaround:</b> For HTTP connector port conflicts use substitution variables to assign different port numbers for each node to avoid port conflicts. Then, uninstall the application and redeploy it.</p>
TAP-12087	<p><b>Summary:</b> Making changes to the configuration of a JDBC service resource template that is a dependency for a running application might cause that application to enter a Stopped state.</p> <p><b>Workaround:</b> Manually restart the stopped application.</p>
TAP-10830	<p><b>Summary:</b> When wiring a reference to a service in the same application that has a SOAP binding using an HTTP Connector that does not exist results in the following exception:</p> <pre data-bbox="515 814 1477 919">Error generating the WSDL for binding SOAPService_Binding1, Caused by: Could not find resource instance with name httpConnector when generating WSDL for binding SOAPService_Binding1 on service NewService</pre> <p><b>Workaround:</b> Create the HTTP connector before creating the application.</p>
TAP-10800	<p><b>Summary:</b> When creating an Administrator server with an Oracle database the following error messages are seen in the SystemNode log files:</p> <pre data-bbox="515 1077 1477 1602">SystemNode 30 Jul 2012 16:42:48,287 [WAR-Deployer-Thread] [ERROR] org.hibernate.tool.hbm2ddl.SchemaUpdate - Unsuccessful: create index AdmnCnfig_sttsNtifactinTrnsprt on "ADMINCONFIG" ("NTFCTNTRNSPRT_STTSNTFCTNTRNS_D") SystemNode 30 Jul 2012 16:42:48,287 [WAR-Deployer-Thread] [ERROR] org.hibernate.tool.hbm2ddl.SchemaUpdate - ORA-00955: name is already used by an existing object SystemNode 30 Jul 2012 16:42:48,303 [WAR-Deployer-Thread] [ERROR] org.hibernate.tool.hbm2ddl.SchemaUpdate - Unsuccessful: create index AMXdmnsrPrfrncs_prvisnvslectin on "AMXADMINUSERPREFERENCES" ("PRVISNVSLCTIN_PRVISNVSLCTIN_ID") SystemNode 30 Jul 2012 16:42:48,303 [WAR-Deployer-Thread] [ERROR] org.hibernate.tool.hbm2ddl.SchemaUpdate - ORA-00955: name is already used by an existing object SystemNode 30 Jul 2012 16:42:48,319 [WAR-Deployer-Thread] [ERROR] org.hibernate.tool.hbm2ddl.SchemaUpdate - Unsuccessful: create index ApplicationFolder_childFolders on "APPLICATIONFOLDER" ("APPLICATIONFOLDER_PARENT_E_ID") SystemNode 30 Jul 2012 16:42:48,319 [WAR-Deployer-Thread] [ERROR] org.hibernate.tool.hbm2ddl.SchemaUpdate - ORA-01408: such column list already indexed</pre> <p><b>Workaround:</b> These errors can be safely ignored as the indexes are created.</p>

Key	Summary
TAP-10767	<p><b>Summary:</b> HTTP Connector resource instances that are referenced by properties whose names are not specific, such as <code>HttpInboundConnectionConfig</code> or <code>httpConnector</code>, are not recognized by Administrator as HTTP Connectors while displaying information. As a result these HTTP Connectors are not displayed in the Administrator UI as dependencies where expected.</p> <p>Also, you can delete any such HTTP Connector even when it has dependent applications.</p> <p><b>Workaround:</b> Use property names such as <code>HttpInboundConnectionConfig</code> or <code>httpConnect</code> to refer to HTTP Connectors resource instances. Additionally when deleting a HTTP Connector resource instances manually check whether other applications are dependent on it.</p>
TAP-10751	<p><b>Summary:</b> Executing the scripts generated by the DDL Script Generator for Microsoft SQL Server displays errors reporting a failure to create foreign key constraints.</p> <p>Also, even if the generated scripts are not used, error messages are seen in the <code>SystemNode</code> log file logged in <code>SystemNode.log</code> regarding failure to create foreign key constraints.</p> <p><b>Workaround:</b> None. These errors can be ignored as a failure to create foreign key constraints does not impact product functionality.</p>
TAP-10663	<p><b>Summary:</b> Heterogeneous environments with mixed JREs are not supported. Sun JRE is not compatible with IBM JRE when it comes to storing secret keys in a Java keystore. This causes a problem when the server running on Sun JRE stores a username and password in its global identity keystore and a host and node running on IBM JRE attempts to access that username and password. The reverse, Administrator JRE would have the same problem.</p> <p><b>Workaround:</b> Ensure that, TibcoHost instances, and nodes are all using JREs provided by the same vendor.</p>
TAP-7644	<p><b>Summary:</b> You might see the following error message when undeploying an application:</p> <pre data-bbox="512 1346 1481 1419">[ERROR] com.tibco.amf.admin.server.axis2.RPCMessageReceiver - Error occurred in Administrator... about to throw AxisFault for this exception</pre> <p><b>Workaround:</b> Refresh the browser. This error message can be safely ignored.</p>
TAP-7571	<p><b>Summary:</b> Users who have permissions only to view an application and an environment but do not have permissions to view a node are not able to see the list of selected nodes when distributing an application.</p> <p><b>Workaround:</b> Permissions to view the node have to be explicitly granted by a superuser.</p>
TAP-7423	<p><b>Summary:</b> You might see errors in dashboard dialog box when using the Dashboard.</p> <p><b>Workaround:</b> Click OK to proceed using the Dashboard. This error message can be safely ignored.</p>

Key	Summary
TAP-6584	<p><b>Summary:</b> When the extended monitoring is enabled the two new periodic windows (24 hours and 7 days) do not show on some Dashboard tabs.</p> <p><b>Workaround:</b> Refresh the browser.</p>
TAP-5653	<p><b>Summary:</b> Updating the value of a substitution variable for the Timeout property in a JMS or SOAP/JMS binding in a deployed application does not take effect after the application is redeployed.</p> <p><b>Workaround:</b> Undeploy and deploy the application.</p>
TAP-4890	<p><b>Summary:</b> In the dashboards, a text filter is ignored when you maximize or minimize a gadget.</p> <p><b>Workaround:</b> Re-enter the text filter.</p>
TAP-4645	<p><b>Summary:</b> On the <b>Dashboards &gt; Infrastructure</b> screens, resource instances cannot be filtered by promoted reference or promoted service.</p> <p><b>Workaround:</b> In the Application Screen, check properties of the reference or service bindings.</p>
WSBT-1149	<p><b>Summary:</b> Web service reliable messaging does not work in TIBCO ActiveMatrix Service Grid 3.4.0.</p> <p><b>Workaround:</b> None</p>
WSBT-1134	<p><b>Summary:</b> In case of SOAP bindings, context parameters of Type "Message" can be defined using "Message/Part" from the WSDL used by the binding. These message context parameters can be used for declared unbound SOAP headers. The body of a SOAP message is also defined using "Message/Part" configuration from the WSDL used by the binding. Using the same "Message/Part" configuration for the SOAP header and the SOAP body results in incorrect behavior while generating the SOAP message, that is, either the &lt;Header&gt; or the &lt;Body&gt; element might be empty. This applies to SOAP request, SOAP response and SOAP fault messages.</p> <p>For example, if the body of the SOAP response is configured with Message="GetSOAPResponse"/Part = "param1" in the WSDL and the context parameter of Type "Message" is defined with the same Message/Part Definition "GetSOAPResponse/param1", the generated SOAP response message might contain empty &lt;Header&gt; or &lt;Body&gt; element.</p> <p><b>Workaround:</b> None However, if distinct "Message/Part" pair are used for SOAP header and body, this issue does not occur. For example, if the body of the SOAP response is configured with Message="GetSOAPResponse"/Part = "param1" in the WSDL and the context parameter of Type "Message" is defined with Message/Part Definition "GetSOAPHeader/headerparam1", the generated SOAP response message contains both &lt;Header&gt; and &lt;Body&gt; elements.</p>
WSBT-1112, WSBT-1117	<p><b>Summary:</b> For SOAP bindings containing all in-only operations, the <b>Enable Response Message Validation</b> field in ActiveMatrix Administrator and TIBCO Business Studio is not applicable.</p> <p><b>Workaround:</b> At present, this field is not disabled for SOAP bindings containing all in-only operations and, if selected, does not have any effect.</p>

Key	Summary
WSBT-888	<p><b>Summary:</b> Substitution Variables are not available for all the fields in SOAP Service and Reference Bindings. On the Service side, Substitution Variables are supported for the following fields:</p> <ul style="list-style-type: none"> <li>• Enable Request Message Validation</li> <li>• Enable Response Message Validation</li> <li>• Sender Identified Expression</li> </ul> <p>On the Reference side, Substitution Variables are supported for the following fields:</p> <ul style="list-style-type: none"> <li>• Enable Request Message Validation</li> <li>• Enable Response Message Validation</li> <li>• Filespec of Endpoint URL</li> </ul> <p><b>Workaround:</b> None</p>
WSBT-881	<p><b>Summary:</b> Policies and policy sets cannot be added, edited, or deleted via the ActiveMatrix Administrator UI. Policy set properties can be viewed but not added, edited, or deleted.</p> <p><b>Workaround:</b> Edit policy sets and properties in TIBCO Business Studio.</p>
XPD-5331	<p><b>Summary:</b> Deploying DAAs or applications with the following characteristics in ActiveMatrix BPM 2.2.0 runtime might result in a <code>No request message is found to add the username token</code> error at runtime:</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</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>
XPD-1858	<p><b>Summary:</b> When opening a native file browse dialog on RedHat Linux for the first time, can crash.</p> <p><b>Workaround:</b> Type the path to the file in the text control.</p>