TIBCO Silver® Fabric Enabler for Adapter for Database

Release Notes

Software Release 3.0.0
December 2015

Two-Second Advantage®

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Contents

Preface . . . . . **v**

Connecting with TIBCO Resources vi
How to Join TIBCOmmunity vi
How to Access All TIBCO Documentation vi
How to Contact TIBCO Support vi

Release Notes **1**

New Features 2
Release 3.0 2
Release 2.5 2
Release 2.0 3
Release 1.0 3
Changes in Functionality 5
3.0.0 5
Deprecated and Removed Features 6
Migration and Compatibility 7
Closed Issues 8
Known Issues 10

Preface

TIBCO Silver® Fabric Enabler for Adapter for Database is a complementary software component created for use with TIBCO Silver® Fabric. It allows TIBCO ActiveMatrix® Adapter for Database projects to be deployed in cloud environments based on TIBCO Silver Fabric and leveraging TIBCO Silver Fabric capabilities. This accelerates deployment of TIBCO ActiveMatrix® Adapter for Database environments and projects, enforces its industry best practices, and provides elastic optimization of computing resources.

Topics

- Connecting with TIBCO Resources, page vi

Connecting with TIBCO Resources

How to Join TIBCOmmunity

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

How to Access All TIBCO Documentation

After you join TIBCOmmunity, you can access the documentation for all supported product versions here:

https://docs.tibco.com/

How to Contact TIBCO Support

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

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

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

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

  https://support.tibco.com

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

Release Notes

Check the TIBCO Product Support web site at https://support.tibco.com for product information that was not available at release time.

Access to this site is restricted to designated customer contacts, but you can request a user login when you have a valid maintenance or support contract.

Topics

- New Features, page 2
- Changes in Functionality, page 5
- Deprecated and Removed Features, page 6
- Migration and Compatibility, page 7
- Closed Issues, page 8
- Known Issues, page 10

New Features

This section lists the major features of TIBCO Silver Fabric Enabler for Adapter for Database.

Release 3.0

The following features are provided in this release.

- Supports TIBCO Silver Fabric version 5.7.0
- Supports TIBCO Runtime Agent 5.9.x, 5.10, and EMS optional distribution
- Deletes application configuration at the shutdown
- You can avoid deployment of application at startup using a new option, **Do Not Redeploy Existing EAR File at Startup**
- You can kill the ADB process and Hawk processes forcefully
- You can upload the HMA plug-in file
- You can pass more than one value to VariableProvider
- Supports all released versions of TIBCO ActiveMatrix® Adapter for Database Distribution for TIBCO Silver Fabric (6.x and 7.1.x)

Release 2.5

The following are the features of the TIBCO Silver Fabric Enabler for Adapter for Database 2.5 release:

- **Supports TIBCO Silver Fabric 5.5.x**
- **Distribution support** - Supports all released versions of TIBCO ActiveMatrix® Adapter for Database Distribution for TIBCO Silver Fabric (6.x and 7.0).
- **Upload JDBC drivers for publishing -** Upload the JDBC drivers required for your project and specify the extended classpath for the target.
- **Continuous Deployment** - REST API parameters enable scripting of continuous deployment of your archives according to specific requirements.
- **Archive Scaling** - Archive scaling rules can be defined for scaling up and scaling down engines with TIBCO ActiveMatrix® Adapter for Database. Deploy new service instances of an archive in load balance mode (scaling up) or undeploy (scale down) service instances that were scaled up.

- **Statistics -** Gathers and reports statistics from each ActiveMatrix Adapter for the database service instance deployed by TIBCO Silver® Fabric to support automated rule-based scaling from archive statistics.
- **TIBCO Hawk AMI** - Supports configuration and use of TIBCO Hawk AMI.

Release 2.0

Features made available in the TIBCO Silver Fabric Enabler for Adapter for Database 2.0 release:

- **TIBCO Domain Logical Machines (TLM)** Enables creation of a pool of TIBCO Domain Logical Machines (TLM).
- **Fast TLM Restart** Supports fast TLM restart for engines from shared drives. Planned TLM restarts are streamlined so that large numbers of applications with multiple archives each can be restarted more quickly.
- **Component Scaling** Gathers and reports statistics from each TIBCO ActiveMatrix® Adapter for Database service instance deployed by TIBCO Silver® Fabric to support automated rule-based scaling from component and application archive statistics.
- **Component Upgrade** Supports upgrade of Components created with previous versions. Allows creation of runtime components from different versions.
- **NFS for ODBC** Supports Network File Share (NFS) for ODBC.ini file.

Release 1.0

Features made available in the TIBCO Silver Fabric Enabler for Adapter for Database 1.0 release:

- **Quick Environment Setup on Multiple Machines** TIBCO Silver Fabric Enabler for Adapter for Database allows you to quickly set up a complete TIBCO ActiveMatrix® Adapter for Database environment on multiple machines.
- **Supports all TIBCO Silver Fabric platforms** The TIBCO Silver Fabric Enabler for Adapter for Database can be installed on any operating system where supported versions of TIBCO Silver Fabric are installed. Refer to the *TIBCO Adapter for Database Distribution for TIBCO Silver® Fabric Readme* for information on the TIBCO Silver® Fabric Engine platforms that may be targeted.
- **Provides for scalable ODBC configurations** TIBCO Silver Fabric Enabler for Adapter for Database uses your uploaded `ODBC.ini` to quickly configure new

Silver Fabric Engine Components on UNIX based operating system platforms with path and connection configuration settings.

- **Supports TIBCO Enterprise Messaging Service** The TIBCO Silver Fabric Enabler for Adapter for Database works well with TIBCO EMS whether it is deployed as a dependent TIBCO Silver Fabric Component using the TIBCO EMS Enabler or TIBCO EMS is external to the TIBCO ActiveMatrix® Adapter for Database Components running on TIBCO Silver Fabric Engines.
- **TIBCO Domain Logical Machines (TLM)** enables specification of a unique machine name for individual development environment machines. TLM enables developers to target their deployment work and unit testing to a single Silver Fabric Engine.
- **SSL for TIBCO Administrator supported** HTTPS can be used with either Self-Signed or Certificate Authority generated certificates.
- **LDAP Configuration Supported** TIBCO Administrator Domain creation supports LDAP integration by UI or uploaded XML file configuration.
- **Separated Enabler Container and Distributions** at download.tibco.com New product distributions may be downloaded and deployed without the requirement of a new enabler.
- **Support for Fault Tolerance** TIBCO Silver Fabric Enabler for Adapter for Database ensures that if faults occur for reasons of hardware failure or network connectivity issues for example, that deployments can be configured to automatically respond by attempting to restart processes or by starting new application stacks on Engines according to fault tolerance settings.
- **Automated TIBCO Administrator restart** The TIBCO Administrator is restarted automatically based on server status or in case of abnormal conditions without need for a TIBCO Silver Fabric Engine restart. Automated Silver Fabric Engine restart is also supported.
- **Monitor Component and Engine Statistics** The TIBCO Silver Fabric Broker monitors Component statistics gathered by TIBCO Hawk. Statistical measures of TIBCO ActiveMatrix Adapter for Database activity allows for thresholds and triggers to set automated runtime responses to conditions that call for actions like scaling up or paring down the cloud based on the volume of messaging or other measures of load.
- **Automated TIBCO Hawk Agent restart** The TIBCO Hawk Agent can be restarted automatically based on server status or in case of abnormal conditions without need for a TIBCO Silver Fabric Engine restart. Automated Silver Fabric Engine restart is also supported.
- **Configure.xml exposed for Silver Fabric experts** The TIBCO Silver Fabric Enabler for Adapter for Database provides a way for experts to configure Distributions from the TIBCO Silver Fabric Administrator interface.

Changes in Functionality

The following are the changes in functionality in TIBCO Silver Fabric Enabler for Adapter for Database.

3.0.0

TIBCO Silver Fabric Enabler for Adapter for Database does not provide TIBCO Administrator container or enabler. It does not bundle the admin component `gridlib` any more.

You can use TIBCO Silver Fabric Enabler for TIBCO Administrator to create TIBCO Administrator component first and then use TIBCO Silver Fabric Enabler for Adapter for Database to create a component for TIBCO Silver Fabric Enabler for Adapter for Database.

Deprecated and Removed Features

No features are deprecated or removed in version 3.0.0 of TIBCO Silver Fabric Enabler for Adapter for Database.

Migration and Compatibility

There are no migration procedures in version 3.0.0 of TIBCO Silver Fabric Enabler for Adapter for Database.

Components created with release 2.5 of TIBCO Silver Fabric Enabler for Adapter for Database can be upgraded to utilize features of the 3.0.0 release.

You can upgrade the product manually to the latest version by setting the following parameter:

```
UPGRADE_TO_LATEST_VERSION_MANUALLY = true
```

Closed Issues

The following table describes issues that are closed in this release.

Key	Summary
SFDB-171	When an application name contained folders and was deployed using REST on two different TLM it generated a wrong application name.
SFDB-169	TIBCO Adapter for Database component does not start with ldap specified in Database URL for the domain storage like `jdbc:oracle:thin:@ldap://Machine:1234/SFDB,cn=OracleContext,dc=someodc`
SFDB-167	Value of the property '`application.start.dir`' in the application tra file was changed incorrectly when an Adapter for Database component was restarted with FAST TLM restart option.
SFDB-165	Null Pointer Exception in the upgrade was detected. When tra property `start.application.dir` of the `adbagent.tra` is empty, the enabler throws a null pointer exception and restarts.
SFDB-163	Even if different values are set for `DB_MIN_CONNECTIONS` and `DB_MAX_CONNECTIONS` in 'TIBCO Silver Fabric Enabler for Adapter for Database' than the values set in 'Silver Fabric Enabler for TIBCO Administrator', the values do not make any effect.
SFDB-162	Running the AppManage command from the Adapter for Database Enabler, the ps of the process showed the password unexpectedly.
SFDB-161	Archive scaling failed due to a temporary file conflict.
SFDB-160	Empty folders under Application Management in TIBCO administrator GUI were deleted when Adapter for Database component was shutdown. • If the runtime variable `CLEANUP_EMPTY_DIRECTORY_ON_SHUTDOWN` is created and set to false, empty directories will not be deleted on Adapter for Database component shutdown. • If the runtime variable `CLEANUP_EMPTY_DIRECTORY_ON_SHUTDOWN` is set to true or not present (default), then orphan directories are properly deleted.
SFDB-159	An NPE in the AppManageExtension caused an archive scaling management failure for Adapter for Database archives.
SFDB-147	The "**Fast TLM Restart**" was not executed as wrong upgrade was detected.

Key	Summary
SFDB-146	TIBCO Adapter for Database engine crashed when TIBCO ActiveSpaces loaded the `OpenSSL` libraries.
SFDB-145	When the component was stopped or deactivated, all the Hawk or Adapter for Database engine processes could not be stopped or shut down.
SFDB-144	There was no way to delete application configuration at shutdown or to stop redeployment of the existing EAR file at startup. The 3.0.0 version provides the following options: • Delete Application Configuration at shutdown • Don't Redeploy existing EAR file at startup
SFDB-141	When editing an 'Adapter for Database' component with `OptionalDistribution`, the component wizard always unselected the BW plug-ins by default in Internet Explorer version 11. These plug-ins always needed to be reselected for editing.
SFDB-91	Full stops/periods "." in the Application name were replaced with "`2E`" and prevented proper deployment and archive scaling.
SFDB-27	Sometimes a connection error caused problems with DB2 data sources run on a 64-bit Solaris SPARC platform. This problem has not been reproducible. This was probably related to a connection problem and was reported on the classic product as well.
SFDB-16	Failed to start the TIBCO ActiveMatrix Adapter for Database (ADB) instance when the engine location contained a space character.

Known Issues

The following are the known issues for TIBCO Silver Fabric Enabler for Adapter for Database.

Key	Summary/Workaround
SFDB-158	**Summary** The distributions for TIBCO Runtime Agent 5.10 based Silver Fabric Enablers do not package the `tools` folder, so the enabler cannot find `tools/wrapper/<32 or 64>/wrap`. As a result, the enabler cannot copy the wrapper from TRA to the `bwengine` file or to adapter. **Workaround** Use TRA 5.10.0.0.1 distribution.
SFDB-157	**Summary** Uploading a file to the basic configuration page refreshes the page automatically and then clears all the options that were already checked. **Workaround** None
SFDB-94	**Summary** The distribution TIBCO ActiveMatrix Adapter for Database for TIBCO Silver Fabric release 7.0 does not support use of the following statistics: `ADADB Archive MaxQueueSize`, `ADADB Archive QueueCount`, `ADADB MaxQueueSize`, and `ADADB QueueCount`, even though they appear in the TIBCO Silver Fabric Enabler for Adapter for Database component wizard UI. **Workaround** Use other statistics for archive scaling.

Key	Summary/Workaround
SFDB-78 1-F19Z5V	**Summary** Domain Migration for domains created with TIBCO Runtime Agent 5.7 for use with TIBCO Runtime Agent 5.8 Domain migration is required to run TIBCO Administrator and TIBCO Runtime Agent 5.8 with a domain that was created with TIBCO Administrator and TIBCO Runtime Agent 5.7. With the proper runtime variable setting the TIBCO Administrator Enabler detects that a migration is necessary and executes the migration. **Workaround** As migration is a process that migrates data, ensure that you back up the domain data before the data migration is executed with the restart of TIBCO Administrator Enabler. **Steps for the migration:** 1. Create or upgrade a TIBCO Administrator Enabler component that has TIBCO Administrator and TIBCO Runtime Agent distribution version 5.8.x 2. Add the runtime variable **`EXECUTE_MIGRATION`** and set it to "true". — If you choose to upgrade the component, restart the existing enabler that runs TIBCO Administrator and the TIBCO Runtime Agent 5.7 distribution. — If you choose to create a new component, stop the existing enabler that runs TIBCO Administrator and the TIBCO Runtime Agent 5.7 distribution and start the new component that runs TIBCO Administrator and TIBCO Runtime Agent 5.8 distribution. The component must run in the same "Admin Root path for FT" The enabler then executes the migration scripts. Please note that this is an action that is performed only once per domain. It cannot be undone.
SFDB-28	**Summary** When the odbc.ini file is renamed on the TIBCO Silver Fabric Engine installed on Unix platforms, the ADB Adapter Service does not start. **Workaround** Do not change the name of the `odbc.ini` file. If you must rename it, change the TIBCO Silver Fabric Engine property `tibco.env.ODBC.ini` to the path with the changed name.
SFDB-17	**Summary** Sometimes the ADB Adapter service fails to start on a Windows 64-bit platform when TIBCO Administrator and ADB are deployed on different physical machines. **Workaround** Run TIBCO Administrator and ADB applications on the same machine.