TIBCO Silver® Fabric Enabler for Adapter for SAP

Release Notes

Software Release 3.0.0
April 2016

Two-Second Advantage®

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Preface

TIBCO Silver Fabric Enabler for Adapter for SAP is a complementary software component.Using TIBCO Silver Fabric Enabler for Adapter for SAP, you can deploy TIBCO ActiveMatrix® Adapter for SAP projects in cloud environments based on TIBCO Silver Fabric. Also, you can leverage Silver Fabric capabilities to accelerate deployments of TIBCO ActiveMatrix® Adapter for SAP projects, to enforce its industry best practices and to provide elastic optimization of computing resources.

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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 if you have a valid maintenance or support contract.

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New Features

Release 3.0

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

- **Supports TIBCO Runtime Agent 5. 9 and 5.10 along with EMS optional distribution** With TIBCO Runtime Agent 5.9 and 5.10 support, you can get the latest supported distributions of TIBCO Administrator™, TIBCO EMS, TIBCO Rendezvous®, TIBCO Hawk®, and TIBCO Runtime Agent™ without waiting for an update or the TIBCO Runtime Agent common roll-up compressed file archive. Previously, Silver Fabric TIBCO Runtime Agent 5.8 was only bundled as part of TIBCO Runtime Agent common roll-up.
- **Supports Application Management** The basic configuration page has new options. The Option **Delete Application Configuration at Shutdown** undeploys and removes all the applications deployed on the TIBCO Logical Machine at component shutdown.
  The Option **Do Not Redeploy Existing EAR File at Startup** avoids redeployment of the EAR file, whenever the TIBCO Logical Machine restarts.
- **Supports Process Management** The Option **Force Kill of Adapter for SAP Process by Engine Daemon on Shutdown** is added on the basic configuration page. It forcefully kills the enabler for the adapter for the SAP component processes at shutdown, if the regular stop is not successful.
  Even though the enabler for the adapter for the SAP component engine is always stopped at shutdown if Hawk is down, the enabler for the adapter for the SAP component engine stops abruptly resulting in orphan engines. To avoid such orphan engines, the engine daemon kills the adsap process forcefully. This is done if the regular stop is not successful.
  Also, **Force Kill of TIBCO Hawk Agent Process by Engine Daemon on Shutdown** is added on the hawk agent running condition page. This option is used if the regular stop is not successful.
- **Component Upgrade** Supports the upgrade of components created with previous versions. You can create runtime components from different versions.
- **Supports upload of the Hawk MicroAgent plug-in file** Using this enhancement, you can upload Hawk MicroAgent Plugin configuration in the `hma_plugin_dir file`. Also, using this, the Hawk Agent can execute the specific Hawk MicroAgent plugin uploaded in the SAP Adapter Enabler component. This feature is optional.

Release 2.0

The following are features of the TIBCO Silver Fabric Enabler for Adapter for SAP 2.0 release:

- **Supports TIBCO Silver Fabric 5.5.x**
- **Distribution support** - Supports all released versions of TIBCO ActiveMatrix Adapter for SAP Distribution for TIBCO Silver Fabric (6.x and 7.0).
- **Enables connection with SAP Java Connector (SAP JCo)** - Enables use of SAP-compatible Java components and Java applications with the TIBCO ActiveMatrix Adapter for SAP release version 7.0.
- **Supports Global Variable Provider** - Specify application archive deployment variables with a Java Archive specified by REST invocation. This allows for late-binding of global variables specific to the implementation.
- **REST API Continuous Deployment -** Script deployment, start, stop and undeployment of Components. REST API parameters enable scripting of continuous deployment of your archives according to your precise engine requirements and specifications.
- **Archive Scaling** - Archive scaling rules can be defined for scaling up and scaling down Engines with TIBCO ActiveMatrix Adapter for SAP. 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 SAP 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 to monitor TIBCO ActiveMatrix Adapter for SAP deployments.
- **Supports Component Upgrade** - Components created with TIBCO Silver Fabric Enabler for Adapter for SAP release version 1.0.0 may be easily upgraded to use 2.0.0 features.

Release 1.0

The following are features of the TIBCO Silver Fabric Enabler for Adapter for SAP 1.0 release:

- **Supports Connections with SAP Servers**

  Unicode versions(32-bit and 64-bit platforms)

  — SAP CRM 7.0, 2007 (RFC/BAPI and IDoc interfaces support only)

  — SAP SRM 7.0

  — SAP SCM 7.0

  — SAP ECC 6.0 or higher 6.0.x

  Non-Unicode versions(32-bit and 64-bit platforms)

  — SAP CRM 7.0, 2007(RFC/BAPI and IDoc interfaces support only)

  — SAP SRM 7.0

  — SAP SCM 7.0

  — SAP ECC 6.0 or higher 6.0.x

  The TIBCO ActiveMatrix Adapter for SAP also supports the SAP Remote Function, Call SDK for Unicode and non-Unicode libraries for run time. You can download the SAP RFCSDK 6.40, 7.10, or 7.20 Unicode libraries from SAP service marketplace.

- **Quick Environment Setup on Multiple Machines** Using TIBCO Silver Fabric Enabler for Adapter for SAP you can quickly set up a complete TIBCO ActiveMatrix Adapter for SAP environment on multiple machines. TIBCO Administrator can then deploy TIBCO ActiveMatrix Adapter for SAP projects into this environment using traditional tools, such as the TIBCO Administrator user interface or its command-line tools.

- **Supports all TIBCO Silver Fabric platforms** The TIBCO Silver Fabric Enabler for Adapter for SAP can be installed on any operating system, where the supported versions of TIBCO Silver Fabric are installed. Refer to the *TIBCO Adapter for SAP Distribution for TIBCO Silver® Fabric Readme* for information on the TIBCO Silver® Fabric Engine platforms that may be targeted.

- **Supports TIBCO Enterprise Messaging Service** The TIBCO Silver Fabric Enabler for Adapter for SAP 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 SAP Components running on TIBCO Silver Fabric Engines.

- **TIBCO Domain Logical Machines (TLM)** Using this, you can specify unique machine names for machines. Developers can use TLM to target their deployment work and unit testing to a single Silver Fabric engine.

  Also, using this, you can create 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.

- **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** New product distributions may be downloaded and deployed without the requirement of a new enabler. They can be downloaded from download.tibco.com.

- **Support for Fault Tolerance** TIBCO Silver Fabric Enabler for Adapter for SAP ensures that if faults occur due to hardware failure or network connectivity issues for example, those 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** TIBCO Administrator is restarted automatically, based on server status or in case of abnormal conditions, without a TIBCO Silver Fabric Engine restart. Automated Silver Fabric Engine restart is also supported.

- **Automated TIBCO Hawk Agent restart** The TIBCO Hawk Agent can be restarted automatically, based on server status or in case of abnormal conditions, without a TIBCO Silver Fabric Engine restart. Automated Silver Fabric Engine restart is also supported.

Changes in Functionality

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

3.0

TIBCO Silver Fabric Enabler for Adapter for SAP 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 SAP to create a component for TIBCO Silver Fabric Enabler for Adapter for SAP.

2.0

There were no changes in functionality for 2.0.0 release.

Deprecated and Removed Features

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

Migration and Compatibility

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

Components created with release 2.0 of TIBCO Silver Fabric Enabler for Adapter for SAP 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
```

For more information on Migration and Compatibility, refer to *TIBCO Silver Fabric Enabler for Adapter for SAP User's Guide.*

Closed Issues

The following table describes issues that are closed in respective release versions.

Key	Summary/Workaround	Version
SFSP-148	**Summary** Drop-down for choosing EMS optional distribution was not populated when the component was created using ant scripts.	3.0.0
SFSP-132	**Summary** TIBCO ActiveMatrix Adapter for SAP component does not start with ldap specified in Database URL for the domain storage like `jdbc:oracle:thin:@ldap://Machine:1234/SFSP,cn=OracleContext,dc=somedc`	3.0.0
SFSP-131	**Summary** NPE when check-in if upgrade is needed.	3.0.0
SFSP-130	**Summary** The "**Fast TLM Restart**" was not executed as wrong upgrade was detected.	3.0.0
SFSP-129	**Summary** TIBCO SAP adapter engine crashed when TIBCO ActiveSpaces loaded the `OpenSSL` libraries.	3.0.0
SFSP-128	**Summary** Optimization of the `updateActivationInfoProperties.` Calls to `updateActivationInfoProperties` are reduced at the broker.The enabler calls `updateActivationInfoProperties` only if there is a change in the static route. Static route changes include deployment/undeployment or starting/stopping of an archive.	3.0.0
SFSP-123	**Summary** Even if different values are set for `DB_MIN_CONNECTIONS` and `DB_MAX_CONNECTIONS` in 'TIBCO Silver Fabric Enabler for SAP adapter' than the values set in 'Silver Fabric Enabler for TIBCO Administrator', the values do not make any effect.	3.0.0
SFSP-122	**Summary** `tibhawkhma` process was not getting killed or was not shutdown when a SAP or admin stack was restarted by the Silver Fabric user interface.	3.0.0

Key	Summary/Workaround	Version
SFSP-121	**Summary** Running the `AppManage` command from the SAP adapter Enabler, the `ps` of the process showed the password unexpectedly.	3.0.0
SFSP-120	**Summary** There were excessive number of inactive connections in database.	3.0.0
SFSP-118	**Summary** Empty folders under Application Management in TIBCO administrator GUI were deleted when SAP adapter component was shutdown. • If the runtime variable `CLEANUP_EMPTY_DIRECTORY_ON_SHUTDOWN` was created and set to false, empty directories were not deleted for SAP adapter component shutdown. • If the runtime variable `CLEANUP_EMPTY_DIRECTORY_ON_SHUTDOWN` was set to `true` or not present (default), then the orphan directories were properly deleted.	3.0.0
SFSP-117	**Summary** An NPE in the `AppManageExtension` caused an archive scaling management failure for SAP adapter archives.	3.0.0
SFSP-116	**Summary** Value of the property '`application.start.dir`' in the application tra file was changed incorrectly when an SAP adapter component was restarted using the **FAST TLM** restart option.	3.0.0
SFSP-115	**Summary** Full stops or periods "." in the Application name were replaced with "`2E`" and prevented proper deployment and archive scaling.	3.0.0
SFSP-114	**Summary** When an application name contained folders and was deployed using REST on two different TLM it generated a wrong application name.	3.0.0
SFSP-143	**Summary** When you create the SAP adapter component, TIBCO Optional Distributions should not be displayed for TRA 5.8 and below.	3.0.0
SFSP-124	**Summary** Tibhawk HMA RV parameters were not updated	3.0.0

Key	Summary/Workaround	Version
SFSP-48 Customer report SR: 1-EMVDBF also SFBW-719	**Summary** In certain situations, when connections with Hawk failed, multiple attempts to reconnect with Hawk consumed file descriptors that were not released. Now the Hawk Console Domain is set correctly and system resources are released properly.	2.0.0
SFSP-49	**Summary** Statistics returned a list of values that were not aggregated. This is not fixed.	2.0.0
SFSP-50	**Summary** When a large number of processes ran for a long time, statistical collection had stopped. This issue is now fixed.	2.0.0
SFSP-51	**Summary** HawkConsole discovers all the BW AMI running on the machine. In order to differentiate communications between the different Hawk Agent running on the machine we now expose three RV parameters that are used to set the -ami_rvd_session parameter of the `hawkagent.cfg`. AMI_HAWK_SERVICE RendezVous Service parameter (if empty the ami_rvd_session is not changed) AMI_HAWK_DAEMON RendezVous Daemon parameter AMI_HAWK_NETWORK RendezVous Network	2.0.0

Known Issues

The following table describes known issues for the respective release versions.

Key	Summary/Workaround	Version
SFSP-152	**Summary** Permission is denied when you start SAP adapter ear file from Solaris sparc and Solaris X86 platforms with TRA distribution 5.10 **Workaround** set executable for the service instance manually. Then start the application.	3.0.0
SFSP-134	In the **Pre-Install Summary** page, the required disk space mentioned is 689KB. This is not enough for SFSP installation.	3.0.0
SFSP-79	**Summary** When a published and running component is changed to enable "Fast TLM Restart" it fails to restart. **Workaround** before enabling "Fast TLM Restart" for the component, undeploy all applications that were deployed using the TIBCO Administrator UI for that machine and then the component restarts.	2.0.0
SFSP-87	**Summary** When the TIBCO Administrator component with RV transport is running in FT mode it can make an extra running instance persist after upgrade of the enabler for SAP component from 1.0 to 2.0. **Workaround** Before upgrading to enabler version 2.0.0, upload a zipped application archive that contains an `AppFullPath` in the properties file and then perform the upgrade of the component to the 2.0.0 version.	2.0.0
SFSP-75	**Summary** Occasionally, the domain data on Windows platforms cannot be cleared after stopping TIBCO Administrator or TIBCO Adapter for SAP components. **Workaround** Manually clear the domain data from de-allocated Windows platforms.	2.0.0
SFSP-84	**Summary** When using REST API to deploy a second instance of an enterprise archive (*.ear) file on a second machine, the execution makes the original instance restart. **Workaround** Because this only happens on the second archive deployment, one could purposefully execute the REST command a second time to deploy the archive to another machine from the start so that the failure point is past.	2.0.0

Key	Summary/Workaround	Version

SFSP-67	**Summary** SAP application fails to start if service ports are not specified for SAP Gateway Service and the SAP Message Service when using TIBCO Adapter for SAP Distribution for TIBCO Silver Fabric version 7.0.0. These port specifications are required and if not present the following exception is thrown:
	`R3AdapterConfiguration Warn [Adapter] AER3-970004 Server Exception:`
	`Gateway Host: <HostIP>`
	`Gateway Service: <ServiceID>`
	`Program ID: <ProgID>`
	`Error Message: Server startup failed at <timestamp>.`
	`This is caused by either a) erroneous server settings, b) the backend system has been shutdown, c) network problems. Will try next startup in 2 seconds.`
	`Could not start server: Connect to SAP gateway failed`
	`Connection parameters: TPNAME=<ProgID> GWHOST=<HostIP> GWSERV=<HostIP>`
	
	`ERROR service '<HostIP>' unknown`
	`TIME <timestamp>`
	`RELEASE 720`
	`COMPONENT NI (network interface)`
	`VERSION 40`
	`RC -3`
	`MODULE nixxsl.cpp`
	
	This is caused by known issue: ASAP-2469.
	
	Workaround The port number for the following services must be specified:
	• SAP Gateway Service: Always required for server connections.
	• SAP Message Service: Required when you use a client connection and the connection is using Logon Groups.
	
	You must create TCP/IP services in the services file of the operating system, with name **sapmsSID** and **sapgwSID** for each SAP service required. Where SID represents the message or gateway service ID. For example, if the gateway service is running an SAP application server where the system number is 01, then the service name required would be sapgw01.
	
	The location of the services file depends on the operating system:
	• Windows: `WINDOWS_HOME\system32\drivers\etc\services`
	• UNIX: `/etc/services`
	
	The TCP/IP services must be created unless you installed the SAP GUI on the same engine before and the port numbers were already specified.
		2.0.0

Key	Summary/Workaround	Version
SFSP-40	**Summary** Runtime changes to engine allocation or threshold deactivation don't remove engines when the number of runtime instances was at a previously allowed min or max. **Workaround** Use TIBCO Administrator to remove Engines. Compliance with the new allocation or threshold deactivation rule set will resume properly.	1.0.0
SFSP-41	**Summary** When a TLM is restarted with a BusinessWorks Application Service that was uploaded from the Admin GUI, the BW service will start running even if the setting for state after TLM restart was set to "Stopped"	1.0.0
SFSP-42	**Summary** If there is no application deployed on the TLM, undeploying the TLM BW component does not remove the machine from TIBCO Administrator. Machines are never deleted from the domain. **Workaround** To remove the machine from the TIBCO Administrator use the remove machine feature which is available from TIBCO Administrator Manager machine management.	1.0.0