

# **TIBCO Silver<sup>®</sup> Fabric**

## **Enabler Release Notes**

*Software Release 5.6*  
*January 2017*

## Important Information

SOME TIBCO SOFTWARE EMBEDS OR BUNDLES OTHER TIBCO SOFTWARE. USE OF SUCH EMBEDDED OR BUNDLED TIBCO SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED TIBCO SOFTWARE. THE EMBEDDED OR BUNDLED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER TIBCO SOFTWARE OR FOR ANY OTHER PURPOSE.

USE OF TIBCO SOFTWARE AND THIS DOCUMENT IS SUBJECT TO THE TERMS AND CONDITIONS OF A LICENSE AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED SOFTWARE LICENSE AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER LICENSE AGREEMENT WHICH IS DISPLAYED DURING DOWNLOAD OR INSTALLATION OF THE SOFTWARE (AND WHICH IS DUPLICATED IN LICENSE.PDF) OR IF THERE IS NO SUCH SOFTWARE LICENSE AGREEMENT OR CLICKWRAP END USER LICENSE AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME.

This document contains confidential information that is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of TIBCO Software Inc.

TIBCO, TIBCO Silver, Two-Second Advantage, GridServer, FabricServer, GridClient, GridBroker, FabricBroker, LiveCluster, VersaUtility, VersaVision, SpeedLink, Federator, and RTI Design are either registered trademarks or trademarks of TIBCO Software Inc. in the United States and/or other countries.

EJB, Java EE, J2EE, and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

TIBCO products may include some or all of the following:

Software developed by Terence Parr.

Software developed by the Apache Software Foundation (<http://www.apache.org/>).

This product uses c3p0. c3p0 is distributed pursuant to the terms of the Lesser General Public License. The source code for c3p0 may be obtained from <http://sourceforge.net/projects/c3p0/>. For a period of time not to exceed three years from the Purchase Date, TIBCO also offers to provide Customer, upon written request of Customer, a copy of the source code for c3p0.

Software developed by MetaStuff, Ltd.

Software licensed under the Eclipse Public License. The source code for such software licensed under the Eclipse Public License is available upon request to TIBCO and additionally may be obtained from <http://eclipse.org/>.

Software developed by Info-ZIP.

This product includes Javassist licensed under the Mozilla Public License, v1.1. You may obtain a copy of the source code from <http://www.jboss.org/javassist/>

This product includes software licensed under the Common Development and Distribution License (CDDL) version 1.0. The source code for such software licensed under the Common Development and Distribution License (CDDL) version 1.0 is available upon request to TIBCO.

Software developed by Jason Hunter & Brett McLaughlin.

Software developed by JSON.org.

Software developed by QOS.ch.

Software developed by the OpenSymphony Group (<http://www.opensymphony.com/>).

This product includes WSDL4J software which is licensed under the Common Public License, v1.0. The source code for this software may be obtained from TIBCO's software distribution site.

Software developed by the Indiana University Extreme! Lab (<http://www.extreme.indiana.edu/>).

Software developed by Jean-loup Gailly and Mark Adler.

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only.

THIS SOFTWARE MAY BE AVAILABLE ON MULTIPLE OPERATING SYSTEMS. HOWEVER, NOT ALL OPERATING SYSTEM PLATFORMS FOR A SPECIFIC SOFTWARE VERSION ARE RELEASED AT THE SAME TIME. SEE THE README FILE FOR THE AVAILABILITY OF THIS SOFTWARE VERSION ON A SPECIFIC OPERATING SYSTEM PLATFORM.

THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. TIBCO SOFTWARE INC. MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS DOCUMENT AT ANY TIME.

THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "READ ME" FILES.

This Product is covered by U.S. Patent No. 6,757,730, 7,093,004, 7,093,004, and patents pending.

Copyright © 1999-2017 TIBCO Software Inc. All rights reserved.

TIBCO Software Inc. Confidential Information



# Contents

<b>Preface</b> .....	<b>vii</b>
Related Documentation .....	viii
TIBCO Silver Fabric Documentation .....	viii
Other Documentation and Help .....	viii
Typographical Conventions .....	x
Connecting with TIBCO Resources .....	xiii
How to Join TIBCOCommunity .....	xiii
How to Access All TIBCO Documentation .....	xiii
How to Contact TIBCO Support .....	xiii
<b>Release Notes</b> .....	<b>1</b>
New Features .....	2
Spotfire Enabler Version 2.1.3 .....	2
Spotfire Enabler Version 2.1.2 .....	2
Spotfire Enabler Version 2.1 .....	2
Release 5.6.1 ASP.NET Enabler .....	3
Release 5.6 JBoss EAP .....	3
Release 5.6 WebLogic .....	3
Release 5.6 WildFly/JBoss Enabler .....	3
Release 5.6 .....	3
Release 5.5 .....	3
Release 5.0 .....	4
Changes in Functionality .....	5
Deprecated and Removed Features .....	6
Migration and Compatibility .....	7
Closed Issues .....	8
Known Issues .....	11



# Preface

TIBCO Silver<sup>®</sup> Fabric offers the flexibility and scalability of the public cloud with the security and control of your own data center. It brings the elasticity of cloud computing to your organization – supporting existing solutions within your current infrastructure while automatically scaling resources to meet demand.

## Topics

---

- [Related Documentation, page viii](#)
- [Typographical Conventions, page x](#)
- [Connecting with TIBCO Resources, page xiii](#)

## Related Documentation

---

This section lists documentation resources you may find useful.

### TIBCO Silver Fabric Documentation

The following documentation is included with Silver Fabric in Adobe Acrobat (PDF) format. To view the guides, log in to the Administration Tool and go to **Admin > Documentation**. The PDF files are also on the Broker at `livecluster/admin/docs`. The following documents form the Silver Fabric documentation set:

- *Introducing Silver Fabric* Contains an introduction to Silver Fabric, including definitions of key concepts and terms, such as Applications, Components, Engines, and Brokers. Read this first if you are new to Silver Fabric.
- *TIBCO Silver® Fabric Installation Guide* Covers installation of Silver Fabric for Windows and Unix, including Brokers, Engines, and pre-installation planning.
- *TIBCO Silver® Fabric Tutorial* Tutorial for using Silver Fabric.
- *TIBCO Silver® Fabric Cloud Administration Guide* Covers Silver Fabric cloud administration, configuration of Engines, Containers, and Components, and configuration and use of Private Cloud Manager (PCM). Also covers security, general maintenance, performance tuning, and database administration.
- *TIBCO Silver® Fabric Developer's Guide* Developer-related topics such as logging and debugging, using the Admin API, and the Container SDK.
- *TIBCO Silver® Fabric User's Guide* Covers Silver Fabric use and operation, including management of Engines, Containers, Components, and Applications.
- *TIBCO Silver® Fabric Tomcat Container Guide* Covers installation and configuration of applications run on the Tomcat Container.
- *TIBCO Silver® Fabric Command Line Container Guide* Covers installation and configuration of applications run on the Command Line Container.

### Other Documentation and Help

Additional help and information is available from the following sources:

- *Silver Fabric Administration Tool Help* Context-sensitive help is provided throughout the Silver Fabric Administration Tool by clicking the Page Help button located on any page.



- *API Reference* Silver Fabric API reference information is available in the Silver Fabric SDK in the `api` directory in JavaDoc format. You can also view and search them from the Silver Fabric Administration Tool; log in to the Administration Tool and go to **Admin > Documentation**.

# Typographical Conventions

The following typographical conventions are used in this manual.

Table 1 General Typographical Conventions

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

Table 1 General Typographical Conventions (Continued)




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

Table 2 Syntax Typographical Conventions

Convention	Use
[ ]	An optional item in a command or code syntax. For example: <code>MyCommand [optional_parameter] required_parameter</code>
	A logical OR that separates multiple items of which only one may be chosen. For example, you can select only one of the following parameters: <code>MyCommand param1   param2   param3</code>

Table 2 Syntax Typographical Conventions

Convention	Use
{ }	<p>A logical group of items in a command. Other syntax notations may appear within each logical group.</p> <p>For example, the following command requires two parameters, which can be either the pair param1 and param2, or the pair param3 and param4.</p> <pre>MyCommand {param1 param2}   {param3 param4}</pre> <p>In the next example, the command requires two parameters. The first parameter can be either param1 or param2 and the second can be either param3 or param4:</p> <pre>MyCommand {param1   param2} {param3   param4}</pre> <p>In the next example, the command can accept either two or three parameters. The first parameter must be param1. You can optionally include param2 as the second parameter. And the last parameter is either param3 or param4.</p> <pre>MyCommand param1 [param2] {param3   param4}</pre>

## Connecting with TIBCO Resources

---

### How to Join TIBCOCommunity

TIBCOCommunity is an online destination for TIBCO customers, partners, and resident experts, a place to share and access the collective experience of the TIBCO community. TIBCOCommunity 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 TIBCOCommunity, you can access the documentation for all supported product versions here:

<http://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. Entry to this site requires a username and password. If you do not have a username, you can request one. You must have a valid maintenance or support contract to use this site.

## Topics

---

- [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 11](#)

## New Features

---

This section lists features added since the last major (4.1) release of this product.

### Spotfire Enabler Version 2.1.3

- Spotfire Web Player 7.0.2 is now supported.
- Distribution for Spotfire Web Player 7.0.1 is no more supported.

### Spotfire Enabler Version 2.1.2

- Microsoft Windows Server 2012 R2 is now supported.
- Spotfire Web Player 7.0 is now supported.
- Spotfire Web Player 5.0 is no longer supported.

### Spotfire Enabler Version 2.1

- Spotfire Web Player 6.0 and 6.5 are now supported.
- Spotfire Web Player 4.5 is no longer supported.
- The default IIS `applicationHost.config` file processing has been changed from 'REPLACE' to 'MERGE'. In addition, the default source `applicationHost.config` provided with the Enabler to be merged into the pre-existing IIS `applicationHost.config` file now has an empty body with the just the root open and close entity (`<configuration></configuration>`). The result is that the existing `applicationHost.config` file is backed up prior to the Enabler making any changes and all changes are made to the existing file so that pre-existing IIS web applications or third-party software such as a SiteMinder Agent are preserved.
- Single Sign-On Support is achieved by integrating with Spotfire's Kerberos Single Sign-On Support. Both Delegation and Impersonation modes are supported. Choose the desired mode in the 'Authentication Scheme' list in the Component wizard. Your Spotfire server must have been preconfigured to support the chosen mode. See the Spotfire Server installation guide for more information. Also, see the Spotfire Web Player Installation guide for more information regarding the advantages and disadvantages of either mode.
- The Enabler wizard now supports a schedule per analysis file.
- A new wizard page has been added which allows for a schedule file to be uploaded along with a regular expression that is used to match an Engine host



name. At activation time, when the Engine host name matches the regular expression the corresponding schedule file will be used to configure the Spotfire Web Player's scheduled updates feature. The Enabler does not verify that the file uploaded schedule conforms to Spotfire's `ScheduledUpdates.xml` schema.

### Release 5.6.1 ASP.NET Enabler

- Microsoft Windows Server 2012 R2 is now supported.

### Release 5.6 JBoss EAP

- JBoss EAP 6.4.1 is now supported.

### Release 5.6 WebLogic

- WebLogic 12.1.3 is now supported.

### Release 5.6 WildFly/JBoss Enabler

- WildFly 8.2 is now supported.

### Release 5.6

- The runtime context variable `DEFAULT_LOG_PATTERNS` can now be specified on the Component or the Enabler to provide the list of default log file patterns available in the Component wizard. The default delimiter is a comma but can be changed with the runtime context variable `DEFAULT_LOG_PATTERNS_DELIMITER`.
- Engine properties are now available to an Enabler by using the methods within the `ContainerUtils` class.
- `AbstractContainer.isActivating()` is now available for Enablers that need to know if archive methods are being run at startup versus continuous deployment.

### Release 5.5

- Enablers can now be removed from the Admin UI, Admin API, CLI and REST services.

- The Spotfire Enabler now has a custom wizard for easier configuration of Components.

## **Release 5.0**

- Applications are now called Stacks. Application Components are now called Components.
- Deploy and Undeploy actions have been renamed to Publish and Unpublish.

## Changes in Functionality

---

For details on changes in functionality since the last major release of this product, see the section Upgrading Silver Fabric in the *Silver Fabric Installation Guide*.

## Deprecated and Removed Features

---

For details on deprecated and removed features since the last major release of this product, see the section Upgrading Silver Fabric in the *Silver Fabric Installation Guide*.

## Migration and Compatibility

---

For details on how to migrate from a previous release to the current release, see the section Upgrading Silver Fabric in the *Silver Fabric Installation Guide*.

## Closed Issues

---

The tables in this section list issues that were closed in the named releases.

### Enablers

Closed in Release	Key	Summary
5.6.0	FS-6877	The runtime context variable <code>INCOMPATIBLE_CONTAINERS</code> has been deprecated. <code>INCOMPATIBLE_ENABLERS</code> should be used instead.
5.6.0	FS-8151	The J2EE Example Component now uses the 5.6 version of the Tomcat 6 Enabler. Previous versions of Silver Fabric that install with the JAR archive will need to upgrade the example to the newer Enabler using the Change Enabler action on the Components page.
5.6.0	FS-8310	The order of properties in an Enabler's config file were sometimes reordered. Property order is now retained. Note that comments in a properties file are still stripped.
5.6.0	FS-8446	The <code>ArchiveLocator</code> class has been changed to allow arbitrary URL strings to be specified instead of exclusively using the <code>java.net.URL</code> class. In particular, <code>setURL()</code> and <code>getURL()</code> have been changed to set the URL string and return the URL string instead.
5.5.1	FS-7969	The <code>DOCTYPE</code> declaration for XML files processed by file configuration is now maintained even if only one of the <code>PUBLIC</code> or <code>SYSTEM ID</code> attributes are specified.
5.5.1	FS-8041	The runtime context variable <code>DEFAULT_LOG_PATTERNS</code> can now be specified on the Component or the Enabler to provide the list of default log file patterns available in the Component wizard. The default delimiter is a comma but can be changed with the runtime context variable <code>DEFAULT_LOG_PATTERNS_DELIMITER</code> .
5.5.1	FS-8044	Removing a Component from the Ad Hoc Stack now sets the proper deactivation code on the Enabler: <code>COMPONENT_REMOVED_FROM_STACK</code> .
5.5.1	FS-8162	The J2EE Example Component now uses the 5.5.2 version of the Tomcat 6 Enabler. Previous versions of Silver Fabric that apply the service pack with the jar will need to upgrade the example to the newer Enabler using the Change Enabler action on the Components page.

Closed in Release	Key	Summary
5.5.0	FS-7122	Enabler life cycle methods no longer need to set the context class loader before executing.
5.5.0	FS-7246	Patches can no longer be applied to Components or Enablers that don't have the patch property enabled.
5.5.0	FS-7379	The Engine now prints a warning message for empty ConfigFiles elements in configure.xml files instead of causing a failed activation.
5.5.0	FS-7433	Adding more than one node in an 'Add Node' action in the configure.xml no longer replaces '<' and '>' with entity references.
5.5.0	FS-7443	The Engine did not log the activation failure message when the RESTART_ENGINE_ON_DEACTIVATION flag was enabled.
5.5.0	FS-7460	ScriptStatisticProvider classes that are added by the UI when using script statistics are now documented in the SDK so they can be added manually.
5.5.0	FS-7555	<command-path> was removed from the grid-library.dtd since it is not supported.
5.0.1	FS-6933	BROKER_URL and ContainerUtils.getSystemProperty(String) are now available in the Engine runtime context for variable substitution.
5.0.0	FS-5359	Using a '\$' at the end of a regular expression in configure.xml no longer causes a parsing error.
5.0.0	FS-5838	Archives are no longer required to be specified in the baseDir attribute for configFiles in configure.xml.
5.0.0	FS-5976	Configuring XML files in the configure.xml did not preserve the DTD declaration.
5.0.0	FS-5981	Calling checkpointApplicationLogs() without defining log file patterns no longer throws an NPE.
5.0.0	FS-6032	DeployArchive() was only called when the installArchivesViaFileCopy property of the Archive Feature Info was set to true.
5.0.0	FS-6085	Log messages when using static routes instead of HTTP_PORT are no longer printed as warnings.

Closed in Release	Key	Summary
5.0.0	FS-6092	XPath attributes 'before' and 'after' were not resolved for velocity substitution in the configure.xml.
5.0.0	FS-6107	The variable AIX_JAVA_OPTIONS has been removed from the JBoss and WebLogic Enablers since it is no longer used.
5.0.0	FS-6118	Dependencies returned from <code>getDynamicGridlibDependencies()</code> were not copied to the work directory when <code>COPY_DEPENDENCIES_TO_WORK_DIRECTORY</code> was set to true.
5.0.0	FS-6166	The <code>grid-library.xml</code> os flag is no longer missing from TIBCO grid libraries which causes a warning level log message.
5.0.0	FS-6243	TIBCO Enablers are no longer missing description text.
5.0.0	FS-6444	XPath actions were not applied to all matching nodes, only the first.
5.0.0	FS-6521	Script engines were not validated for implementing the <code>Invocable</code> and <code>Compilable</code> interfaces.



## Known Issues

---

There are no known issues in this release.

