

# TIBCO Spotfire® Statistics Services Release Notes

*Software Release 7.11.1  
October 2018*

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# 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>.

## TIBCO Spotfire Statistics Services documentation

The following documents for this product can be found in the TIBCO Documentation Library:

- *Release Notes*
- *System Requirements*
- *Installation and Administration*
- *Package Management for the TIBCO Spotfire® Environment*
- *User's Guide*
- *Java API Reference*
- *C# API Reference*
- *URL API Reference*
- *SpotfireUtils Package Reference*
- *Release Notes*
- *License Agreement*

## TIBCO Enterprise Runtime for R documentation

The following documents for TIBCO® Enterprise Runtime for R can be found in the TIBCO Product Documentation website.

- *TIBCO® Enterprise Runtime for R Technical Documentation*
- *Language Reference (HTML)*
- *Differences Between TIBCO® Enterprise Runtime for R and Open-Source R (HTML)*
- *Release Notes (PDF)*
- *License Agreement (PDF)*

The following documents for integrating with third-party products are also available in PDF format.

- *Technical Note: Configure KNIME to use TIBCO® Enterprise Runtime for R*
- *Technical Note: Configure RStudio to use TIBCO® Enterprise Runtime for R*
- *Technical Note: Configure SparkR to use TIBCO® Enterprise Runtime for R*

## Spotfire documentation

The following documents for this product can be found in the TIBCO Documentation Library for TIBCO Spotfire® Analyst and TIBCO Spotfire® Server:

- *TIBCO Spotfire® Analyst User's Guide*

- *TIBCO Spotfire® API Reference*
- *TIBCO Spotfire® Administration Manager User's Guide*
- *TIBCO Spotfire® Cobranding*
- *Running TIBCO Spotfire® on Citrix XenApp™*
- *TIBCO Spotfire® Server Release Notes*
- *TIBCO Spotfire® License Agreement*

### **TIBCO Spotfire Server documentation**

The following documents for this product can be found in the TIBCO Documentation Library:

- *TIBCO Spotfire® Server and Environment Installation and Administration*
- *TIBCO Spotfire® Server and Environment Basic Installation*
- *TIBCO Spotfire® Cobranding*
- *TIBCO Spotfire® Server Web Services API*
- *TIBCO Spotfire® Server Server Platform API*
- *TIBCO Spotfire® Server Information Services API*
- *TIBCO Spotfire® Server REST API*
- *TIBCO Spotfire® Server Release Notes*
- *TIBCO Spotfire® Server License Agreement*

### **System Requirements for Spotfire Products**

For information about the system requirements for Spotfire products, visit <http://spotfi.re/sr>.

### **Release Version Support**

Some release versions of TIBCO Spotfire products are designated as long-term support (LTS) versions. LTS versions are typically supported for up to 36 months from release. Defect corrections will typically be delivered in a new release version and as hotfixes or service packs to one or more LTS versions. See also <https://docs.tibco.com/products/tibco-spotfire-general>.

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

You can contact TIBCO Support in the following ways:

- 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](https://community.tibco.com). For a free registration, go to <https://community.tibco.com>.

For quick access to TIBCO Spotfire content, see <https://community.tibco.com/products/spotfire>.

# TIBCO Spotfire Statistics Services Release Notes

New and changed features for TIBCO Spotfire® Statistics Services are described in this document.

## New Features

This release introduces the following new features.

- This release of Spotfire Statistics Services sets default properties that restrict running arbitrary scripts that could cause harm by accessing the file system or the internet. It also sets a default property that allows only data function calls sent to TIBCO Spotfire®. See [Changes in Functionality](#) and *TIBCO Spotfire® Statistics Services Installation and Administration* for more information.
- Spotfire Statistics Services updated the Java Runtime Environment to 8 Update 181.
- Spotfire Statistics Services updated Apache Tomcat to version 8.5.32.
- You can now use the Spotfire data type Currency in data functions if your Spotfire Statistics Services is configured to use the open-source R engine. It is converted to a numeric.
- You can now use the Spotfire Statistics Services data type LongInteger in a data function if your Spotfire Statistics Services is configured to use either the TERR or open-source R engine. It is converted to an integer.
- This release of Spotfire® Statistics Services includes the Spotfire S+ (S-PLUS) language package for backwards compatibility only. It will be removed in future releases.

## Deprecated and Removed Issues

TIBCO Spotfire® Statistics Services version 7.11.1 includes the following deprecated features.

This release of Spotfire® Statistics Services includes the Spotfire S+ (S-PLUS) language package for backwards compatibility only. It will be removed in future releases.

## Changes in Functionality

TIBCO Spotfire® Statistics Services version 7.11.1 includes the following changes in functionality.

In version 7.11.1 of Spotfire® Statistics Services, by default, the following properties are set. For more information about these properties, see the `spserver.properties` reference ("Server properties") in the *TIBCO Spotfire® Statistics Services Installation and Administration Guide*.

| Property   | Description   |
|--|---|
| <code>terr.restricted.execution.mode=true</code>                               | If you specify TIBCO® Enterprise Runtime for R (TERR™) ( <code>engine.type=TERR</code> ) in your installation, then the TERR™ engine stops and reports and error if it is sent an expression that it determines is potentially malicious. |
| <code>expression.service.enabled=false</code>                                  | This default setting removes the ability to run unrestricted expressions.   |
| <code>function.service.whitelist=SpotfireConnector/execSpotfireAnalytic</code> | This default setting allows only data function calls sent to Spotfire Statistics Services from TIBCO Spotfire®.   |

In most cases, if you use Spotfire Statistics Services only for sending data functions from Spotfire to Spotfire Statistics Services, then you should experience no failures resulting from these new default



property settings. Check the log file in the case of errors or any failure to run a data function or expression.

Review the documentation for these properties prior to changing the default settings in the file `conf/spserver.properties`.

## Migration and Compatibility

This topic lists the migration and compatibility issues for TIBCO Spotfire® Statistics Services 7.11.1.

For information about migrating server properties, `.jar` files, and data from an earlier installation, see the *TIBCO Spotfire® Statistics Services Installation and Administration Guide*.

For a list of tested third-party software and systems, see the *TIBCO Spotfire® Statistics Services System Requirements*.

We tested the TSSS connector Eclipse plug-in with Eclipse versions 3.6 to 4.2.2 (Juno). You can use the plug-in for remote package submission. See the *TIBCO Spotfire® Statistics Services User's Guide* for more information.

### Compatibility

This release of Spotfire Statistics Services includes changes to the default settings in `spserver.properties` that can cause errors or failures to run statistical analyses. These changes are detailed in [Changes in Functionality](#) on page 8.

## Closed Issues

TIBCO Spotfire® Statistics Services version 7.11.1 includes the following closed issues.

| Key       | Description  |
|-----------|--|
| TSSS-2466 | The process that deletes old directories under <code>results/</code> and <code>sessions/</code> now also deletes old files under <code>artifacts/spotfire/</code> . This can be useful when using older versions of Spotfire that would not delete data from data functions in some situations. The frequency between checking these files, and the file age for deleting in all of these cases, is controlled by the <code>spserver.properties</code> options <code>webdav.cleanup.run.interval.minutes</code> and <code>webdav.cleanup.time.to.live.minutes</code> . |
| TSSS-2496 | An data function sent to Spotfire from Spotfire® Statistics Services could result in an unexpected failure if the data came from multiple sources and one of the data sources contained no columns.  |
| TSSS-2481 | The startup scripts have been modified to disable a feature in rJava 0.9.9 that prevented Spotfire Statistics Services from starting with open-source R and rJava 0.9.9.   |

## Known Issues

The section lists known issues in this release.

| Issue                         | Information and Workaround  |
|-------------------------------|---|
| Data limit for SPXML strings. | If you are using the Spotfire Statistics Services Java or C# API to send data through Spotfire Statistics Services, you must limit the data to a size that can be sent using SPXML. If the data exceeds the allowed size of 512,000 bytes, the API throws an exception. |

| Issue  | Information and Workaround   |
|--|--|
| <p>The TERR engine can fail on startup on Redhat Enterprise Linux 5</p>  | <p>If you are running Spotfire Statistics Services on Redhat Enterprise Linux 5, you can encounter a problem with the TERR engine failing on startup. This is an issue with certain versions of Java (such as version 1.8.0_171). The error is displayed as follows:</p> <pre data-bbox="691 369 1481 747"># # A fatal error has been detected by the Java Runtime Environment: # # SIGSEGV (0xb) at pc=0x0000003ac2cbbfa5, pid=17668, tid=1074792768 # # JRE version: 8.0_171-b15 # Java VM: Java HotSpot(TM) 64-Bit Server VM (23.25-b01 mixed) # mode linux-amd64 compressed oops) # Problematic frame: # C [libstdc++.so.6+0xbbfa5] __cxa_allocate_exception+0x55 #</pre> <p>You can work around this problem by adding the following code to the file <code>init.d/spserver</code>, immediately after the first line</p> <pre data-bbox="691 831 1481 915">#!/bin/sh: LD_PRELOAD=libstdc++.so.6 export LD_PRELOAD</pre> |
| <p>Reported uninstallation error could be incorrect on UNIX or Linux</p> | <p>On UNIX or Linux platforms, the uninstaller might report that some items could not be removed. Due to platform open file semantics, the installer might be able to remove all files and directories, but not be able to correctly detect the removal.</p>   |
| <p>Manual startup on UNIX or Linux might be required</p>                 | <p>In some cases, the Spotfire Statistics Services installation on UNIX or Linux does not result in the service starting, even if the installer specifies startup. In this case, the server administrator can start the service manually by running the following command from the installation directory:</p> <pre data-bbox="691 1283 1481 1314">init.d/spserver start</pre>   |
| <p>Unicode limitations with SAS and MATLAB</p>                           | <p>Arbitrary Unicode characters in column names can be mangled by both SAS and MATLAB.</p> <ul data-bbox="691 1455 1481 1755" style="list-style-type: none"> <li>• If you use SAS, you can address this issue by using alphanumeric characters in the column names and using arbitrary Unicode characters in the labels associated with the columns.</li> <li>• If you use MATLAB, note that version 7.11.1 allows creation and manipulation of strings with arbitrary Unicode characters; however, for structure names (used for storing column names), arbitrary Unicode characters are mangled. This is due to a limitation of MATLAB.</li> </ul>   |

| Issue  | Information and Workaround   |
|--|--|
| Memory limitations                           | <p>When you are running R code, you might encounter slowness or failing code because of inadequately assigned system resources. You can correct this problem by setting the following options in the file <code>RHOME/etc/Rprofile.site</code> on UNIX or Windows:</p> <ul style="list-style-type: none"> <li>• Increase the memory limit to 4000MB by adding the following code: <pre>library(utils) memory.limit(4000)</pre> </li> <li>• Adjust the java heap size to 2GB by adding the following code: <pre>options(java.parameters = "-Xmx2g")</pre> </li> </ul> <p>Adjust these settings according to your machine's capabilities.</p>  |
| Slow at first startup                        | <p>Spotfire Statistics Services unpacks and deploys the statistical engines the first time the server is started. This causes longer than typical startup times on initial startup. Future restarts of the server will be much faster.</p>   |
| APIs assign a default user name and password | <p>In this version of the Spotfire Statistics Services APIs, the constructors require authentication credentials to work properly. We highly recommend that you use API constructors that include the username and password arguments, even if authentication is not enabled on your server.</p> <p>If you use a constructor without providing username or password, the constructor provides defaults. (<code>username</code> is "nobody" and <code>password</code> is a randomly-generated unique ID.) Note that you can use the default username to call methods, such as <code>delete</code> or <code>getJobs</code>, that take username as an argument to manage users' jobs.</p> |

| Issue  | Information and Workaround  |
|--|---|
| <p>TIBCO Spotfire® Statistics Services Local Adapter</p> | <ul style="list-style-type: none"> <li>• When you start the Spotfire Statistics Services Local Adapter, the dialog displays the Local Adapter's URL. It might take another few seconds for this URL to register. If you click the link, and you see an error, wait a few seconds and try the URL again. This issue is especially evident the first time you start it after installing it.</li> <li>• The Spotfire Statistics Services Local Adapter does not support TERR. (The TERR engine is provided with Spotfire.)</li> <li>• In some cases, when you try to start the server process from Spotfire Statistics Services Local Adapter, the process does not start because no Java process is detected. You will see an error if this problem occurs. Click <b>Start</b> again.</li> <li>• If you run any other process on the same port (by default, 8080), the process does not start, and you will see an error. Check that no other service is using the port you specify and try again.</li> <li>• If you install the Spotfire Statistics Services Local Adapter using Windows Vista or Windows 7, you must be logged on as an administrator. If you are not, the installation fails.</li> <li>• In some cases, uninstalling the Spotfire Statistics Services Local Adapter might prompt you to restart your computer. This issue occurs if the server's Java processes are running during the uninstallation. Check the Task Manager Processes tab to make sure the Spotfire Statistics Services Local Adapter is not running before proceeding with uninstalling.</li> <li>• If you cannot run calculations, but you can see the service landing page (the URL for which appears in the application's user interface), the Local Settings directory may be corrupted. Delete this directory and reinstall the Spotfire Statistics Services Local Adapter.</li> </ul> |
| <p>Using style sheets for displaying job results</p>     | <p>Some browsers, such as Firefox, have problems rendering a page with a stylesheet that does not belong to the same domain. Server administrators must ensure the stylesheet is available from a URL that is always in the same domain with the server (or a cluster URL) used to service the request.</p> <p>Note that if users try to retrieve a list of jobs with such a browser, and they see only blank pages, they can always view the page's XML source to display valid data.</p>  |