



TIBCO Spotfire[®] Server Release Notes

Software Release 12.4.0

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TIBCO Spotfire Server Release Notes

The release notes for this product version are provided to inform you of new features, known issues, and issues from previous releases that have been closed.

These release notes are for TIBCO Spotfire® Server version 12.4. They cover Microsoft Windows and Linux installations.

Spotfire® Server is a Tomcat web application that runs on Windows and Linux operating systems. It is the administrative center of any TIBCO Spotfire® implementation. In addition to providing the tools for configuring and administering the Spotfire® environment, Spotfire Server facilitates the services that make it possible for users to access, blend, and visualize their data, creating analyses that provide actionable insight.

New Features

The following new features have been added in version 12.4 of TIBCO Spotfire® Server.

For details about new Spotfire features, see [What's New in TIBCO Spotfire](#) in the TIBCO Community.

Key	Version	Summary
SPOT-1795	12.4.0	<p>New command to validate JDBC data source templates</p> <p>With the <code>validate-data-source</code> CLI command, you can validate a JDBC data source template for Information Services. When you run the command, Spotfire performs a test connection to an external data source, with the settings and JDBC driver specified in a data source template <code>.xml</code> file. The test can help you assess if the data source template is valid, and if it is compatible with the data source and JDBC driver, before you add the data source template to the Spotfire configuration.</p>
TSS-30501	12.4.0	<p>New parameters for OAuth2 in Information Services</p> <p>When you use an OAuth2 identity provider for authentication in Information Services data sources, it is now possible to pass the URL of the OpenID Connect Discovery Document or the OAuth2 Metadata, and the URL of the OAuth2 Token Endpoint to drivers.</p>
TSS-31910	12.4.0	<p>Change log level configuration for multiple instances</p> <p>You can now select multiple Automation Services or Web Player service instances under <i>Nodes</i> in the <i>Monitoring & Diagnostics, Overview</i> page, and set or reset the log level configuration for multiple instances simultaneously.</p>

Changes in Functionality

The following are important changes in functionality in version 12.4 of Spotfire Server.

Key	Version	Summary
TSS-32160	12.4.0	<p>Spotfire Web Client User Guide moved to Spotfire Analyst</p> <p>The path to the <i>Spotfire Web Client User Guide</i>, previously called <i>Spotfire Business Author and Consumer User Guide</i>, has been changed. It is now available under Spotfire Analyst on docs.tibco.com, instead of under Spotfire Server.</p> <p>The new path to the latest version of the <i>Spotfire Web Client User Guide</i> is: https://docs.tibco.com/pub/sfire-analyst/latest/doc/html/en-US/TIB_sfire_client/index.html</p> <p>Note that links pointing to the latest version of a specific help topic must be updated to still show the latest web client help. For example, if you had a link pointing to This is Spotfire before, you must change the path after "/pub/" from "/spotfire_server/latest/doc/html/en-US/TIB_sfire_bauthor-consumer_usersguide/bauthcons/topics/en-US/this_is_spotfire.html" to "/sfire-analyst/latest/doc/html/en-US/TIB_sfire_client/client/topics/en-US/this_is_spotfire.html".</p>

Deprecated and Removed Features

Deprecated features

The table lists features that are deprecated and will be removed in a future release of Spotfire.

Key	Version	Summary
TSS-28133	12.4.0	<p>The CLI parameter <code>-t</code> or <code>--tool-password</code> of the <code>s3-download</code> command is deprecated and will be removed in a future version. Using this parameter results in a warning message about the deprecation.</p> <p>Deprecated since Spotfire 11.4.0.</p>
TSS-29565	12.4.0	<p>The <code>getReturnEndpoint()</code> method of the <code>CustomWebAuthenticatorInitContext</code> API class is deprecated and will be removed in a future release. Please use the new method with the same name in the <code>WebAuthenticationContext</code> API class instead.</p> <p>Deprecated since Spotfire 11.6.0.</p>
TSS-30402	12.4.0	<p>In a future release an upgrade will be done to the namespaces defined in the Jakarta EE 9 project.</p> <p>If you have custom code deployed on the Spotfire server, this means that some of your code might need to be altered and rebuilt.</p> <p>Several important third party components are upgraded to use new namespaces defined in the Jakarta EE 9 project. A future release will start using these upgraded components. When using the upgraded components it is important to know that some, but not all, imports of <code>javax.</code> must be changed to <code>jakarta.</code> For example, <code>javax.servlet.http.HttpServletRequest</code> must be changed to <code>jakarta.servlet.http.HttpServletRequest</code>.</p> <p>A list of components that will be changing namespace can be found here: https://wiki.eclipse.org/Jakarta_EE_Maven_Coordinates</p> <p>Deprecated since Spotfire 10.10.11, 11.4.6 & 11.8.0.</p>
TSS-31202	12.4.0	<p>The following API methods have been deprecated. They contain references to Java EE 8 and that will not work in a future version of TIBCO Spotfire Server based on the newer Jakarta EE 9 or later:</p> <ul style="list-style-type: none"> Object <code>AuthenticationContext.getAttribute(String name)</code>: The usage of the attribute name <code>javax.servlet.request.X509Certificate</code> is deprecated. The attribute name and the returned class type will both change to <code>jakarta.servlet.request.X509Certificate</code> in Jakarta EE 9 or later. Enumeration<String> <code>getAttributeNames()</code>: The attribute name <code>javax.servlet.request.X509Certificate</code> is deprecated. It will change to <code>jakarta.servlet.request.X509Certificate</code> in Jakarta EE 9 or later. Cookie[] <code>getCookies()</code>: The method is deprecated as the returned class type <code>javax.servlet.http.Cookie</code> will change to <code>jakarta.servlet.http.Cookie</code> in Jakarta EE 9 or later. Use the String <code>getHeader("Cookie")</code> method invocation instead. <p>Deprecated since Spotfire 12.0.0.</p>
TSS-32187	12.4.0	<p>The <code>com.spotfire.server.security.AuthenticationContext.getRequestSessionId()</code> method is deprecated and will be removed in a future version.</p> <p>Deprecated since Spotfire 12.4.0.</p>

Removed features

The following features have been removed in this version of Spotfire.

Key	Version	Summary
SPOT-3058	12.4.0	<p>TIBCO ODBC drivers for Apache Spark SQL, Apache Cassandra, and MongoDB</p> <p>The TIBCO Drivers package, which includes ODBC drivers for Apache Spark SQL, Apache Cassandra, and MongoDB, is removed. The drivers are no longer included with Spotfire.</p> <p>If you use any of these drivers for accessing data in Spotfire today, you should switch to using different drivers as soon as possible. As you prepare to migrate, you can continue using the TIBCO ODBC drivers that you have already downloaded, but no new versions will be released to address potential issues.</p> <p>Migration instructions</p> <p>Migrate to a different driver using the following steps.</p> <p><i>Apache Spark SQL</i></p> <p>To access data with the connector for Apache Spark SQL, install one of the other supported drivers. See the system requirements.</p> <ul style="list-style-type: none"> • Install the new driver on all computers where you will access the data in Spotfire. You do not need to edit your data connections in Spotfire when you change drivers. <p><i>MongoDB</i></p> <p>To access data from MongoDB in Spotfire, use the connector for MySQL with the ODBC driver for MongoDB Connector for BI. See the system requirements.</p> <ol style="list-style-type: none"> 1. Install the MongoDB Connector for BI driver on all computers where you will access data from MongoDB in Spotfire. 2. In a Spotfire installed client, create a new data connection to your MongoDB data with the connector for MySQL (Connect to > MongoDB Connector for BI). Save the data connection to the library, for reuse in all your analysis files. 3. Open the analysis file you need to update. On the Data canvas, replace your old MongoDB data source with data from your new connection in the library. <p><i>Apache Cassandra</i></p> <p>To access data from Apache Cassandra, you must use a different driver.</p> <ol style="list-style-type: none"> 1. After installing the new driver, create a new DSN for the data you need to access. 2. Share the DSN, and install the driver, on all computers where you will access the data in Spotfire. 3. In a Spotfire installed client, open the analysis file you need to update. 4. On the Data canvas, replace your old Apache Cassandra data source, and use Load data from ODBC, OLE DB, or ADO.NET data provider to connect to your new Apache Cassandra data DSN.

Third Party Software Updates

The following third party software (TPS) components have been added or updated in version 12.4 of Spotfire Server.

Key	Version	Summary
TSS-32345	12.4.0	<ul style="list-style-type: none"> Redshift JDBC driver updated to version 2.1.0.12 Progress DataDirect Oracle JDBC driver updated to version 6.0.0.000977 Progress DataDirect DB2 JDBC driver updated to version 5.1.4.000413 Progress DataDirect MySQL JDBC driver updated to version 5.1.4.000266 Progress DataDirect SQL Server JDBC driver updated to version 6.0.0.001071
TSS-32300	12.4.0	<ul style="list-style-type: none"> Amazon AWS SDK updated to 2.20.32 Apache Commons Codec updated to 1.15 Apache Commons FileUpload updated to 1.5 Apache Log4j2 updated to 2.20.0 Apache mcat updated to 9.0.73 ASM updated to 9.5 Azure BLOB storage updated to 12.21.1 FasterXML Jackson Core updated to 2.14.2 Jetty updated to 9.4.51.v20230217 Metrics Core updated to 4.2.18 Nimbus Jose JWT updated to 9.31 PostgreSQL JDBC driver updated to 42.6.0 RSyntaxTextArea updated to 3.3.3 Simple Logging Facade for Java updated to 2.0.7 Snakeyaml updated to 2.0 Spring Framework updated to 5.3.26 uap-java updated to 1.5.4
TSS-32301	12.4.0	<ul style="list-style-type: none"> Angular updated to 15.2.3 autoprefixer updated to 10.4.14 ngx-toastr updated to 16.1.0 tslib updated to 2.5.0 worker-timers updated to 7.0.63 zone.js updated to 0.13.0

Closed Issues

The table lists important closed issues in version 12.4 of Spotfire Server.

Key	Version	Summary
TSS-29998	12.4.0	<p>If you have multiple Information Services data source templates with identical names (type-name), you cannot open the Information Designer in Spotfire Analyst.</p> <p>This issue is fixed, and now you can see only the first data source template with the same name in Information Designer. To be able to use your other data source templates with identical names, you must change their names.</p>
TSS-31994	12.4.0	<p>When a reverse proxy or load balancer in front of the Spotfire Server has a relatively short request timeout, some requests (such as saving or loading large analysis files to the Spotfire library) can result in a (504) Gateway Timeout error in the Spotfire client, even if the actual operation is successful on the server side.</p>
TSS-32148	12.4.0	<p>The report generated from the command <code>check-external-library</code> displays orphan files in an external library source as type <code>Embedded+Resource</code>, but does not include the original file type.</p>
TSS-32157	12.4.0	<p>If you use external Apache Ignite clustering mode (the default), starting Spotfire Server can be slow, especially if there is significant latency towards the Spotfire Server database.</p>
TSS-32170	12.4.0	<p>Custom OIDC scopes cannot be removed through the TIBCO Spotfire Server Configuration Tool if the only remaining scopes are the default ones (oidc, profile and email).</p>
TSS-32194	12.4.0	<p>A specified RSS feed is not displayed on the <i>Login</i> page and an error message is shown if the RSS feed contains less than 3 items.</p>
TSS-32218	12.4.0	<p>When upgrading using the node manager upgrade tool, the node manager logging level is not transferred to the new installation.</p>
TSS-32250	12.4.0	<p>When executing the <code>external-download</code> CLI command and external storage not is configured, an incorrect error message is shown.</p>
TSS-32287	12.4.0	<p>It is not clear which parameters should be defined within the "services" block in the <code>default.conf</code> file, in the help topic Automatically installing services and instances.</p>
TSS-32292	12.4.0	<p>When the system property <code>java.io.tmpdir</code> is set to <code>relative</code>, unpacking cobranding packages in the <code>.cab</code> format fails.</p>
TSS-32318	12.4.0	<p>Inefficient search index updates can lead to poor performance after a large number of very small library items are imported.</p>
TSS-32319	12.4.0	<p>Excessive path look-ups can lead to poor performance after a large number of very small library items are imported.</p>

Known Issues

The following are known issues in version 12.4 of Spotfire Server:

Key	Version	Summary
TSAS-1123	12.4.0	<p>Encrypting services' configuration files not supported on Linux</p> <p>You cannot encrypt configuration files for Automation Services and Web Player Services on Linux.</p>
TSS-23602	12.4.0	<p>A Spotfire Server restart affects jobs being executed by Automation Services</p> <p>In the Automation Services area of the administration interface, if an Automation Services job is in the <code>IN_PROGRESS</code> state, and all of the servers in the cluster stop running or are restarted, the job remains in the <code>IN_PROGRESS</code> state in the Activity view even after the servers are back online.</p> <p>Workaround: Right-click the activity, and then click Clear selected activity to clear the job activity from the Activity view.</p>
TSS-26972	12.4.0	<p>Java changes affect updating node manager from 10.9 to 10.10 or later</p> <p>Updating the node manager from Nodes & Services from a 10.9 or earlier release to a 10.10 release or later is not supported due to updated Java versions.</p> <p>Workaround: To update the node manager to version 10.10 or later, you must install it on each computer, and then run the node manager upgrade tool.</p>

Key	Version	Summary
TSS-29819	12.4.0	<p>Users authenticated through Kerberos with delegation require special handling for accessing certain services</p> <p>In the following situations, Spotfire users cannot view certain analysis files in the web client:</p> <ul style="list-style-type: none"> The user is authenticated using Kerberos with delegation. The user wants to view an analysis that accesses a TERR service node. <p>Workaround: Give Read permission for the private key of the Web Player Node certificate to users.</p> <p>Procedure:</p> <ol style="list-style-type: none"> On the computer running the Web Player node manager, open a command window as an administrator. Enter mmc. In the Console dialog box that opens, click File > Add/Remove > Snap-ins. In the Add or Remove Snap-ins dialog box, select Certificates, and then click Add. In the Certificates snap-in dialog box, select Computer account, and then click Next. In the Select Computer dialog box, click Finish. In the Add or Remove Snap-ins dialog box, click OK. In the Console Root window, click Certificates (Local Computer) to view the certificate stores for the computer. Go to Certificates (<i>Local Computer</i>) \ Personal \ Certificates, and then right-click the certificate that was issued by "TIBCO Spotfire Signing CA". Select All Tasks > Manage Private Keys. In the Permissions dialog box, under Group or user names, select a group that contains all Spotfire users that need to run analyses using the TERR service. Under Permissions for Name, select the Allow check box in the Read row, and then click OK. In the Spotfire administration interface or in the Windows Services dialog box, restart the Web Player node.
TSS-30350	12.4.0	<p>Very high display resolution affects ability to repair or uninstall Spotfire Server</p> <p>Repair or uninstallation of the Spotfire Server and/or the node manager does not work on computers with a high display resolution, such as 3840 x 2160 pixels. The repair/uninstall dialogs in the installers are not shown as expected and there is no way to proceed with the repair/uninstallation.</p> <p>Workaround: Temporarily switch to a lower display resolution, such as 1920 x 1080 pixels.</p>
TSS-30734	12.4.0	<p>Proxy server configuration</p> <p>When using a proxy server between the Spotfire Server and a Web Player or Automation Services service deployed on Linux, the services will use the operating system proxy configuration. Only the username and password for the proxy can be configured in the configuration files of the services.</p>

Key	Version	Summary
TSS-31285	12.4.0	<p>Network-related issues and unexpected attempts to reconnect in containerized Spotfire Server and Spotfire Web Player</p> <p>When the <code>spotfire-webplayer</code> is under heavy load, or if the load increases suddenly, you can experience <code>spotfire-webplayer pod livenessProbe</code> failures or network-related issues between the <code>spotfire-server</code> and <code>spotfire-webplayer</code> pods, and the <code>spotfire-webplayer pod</code> can restart prematurely. Usually, this problem is caused by CPU throttling in Kubernetes/Linux cgroups/Completely Fair Scheduler. When this situation occurs, users can experience reconnection attempts.</p> <p>Workaround</p> <p>To avoid or minimize CPU throttling, ensure that the <code>spotfire-webplayer</code> and <code>spotfire-server</code> do not specify a value for <code>resources.limits.cpu</code>, and increase the <code>spotfire-webplayer livenessProbe</code> failure window by increasing the values for <code>periodSeconds</code> and/or <code>failureThreshold</code>.</p> <p>Depending on the scenarios you observe, you can decrease the <code>spotfire-webplayer</code> CPU strained levels (see <code>WebPlayer_AverageCpuLoadStrainedLimit</code> in <code>Spotfire.Dxp.Worker.Host.dll.config</code> and <code>cpuAverageTimeSpan</code> in <code>Spotfire.Dxp.Worker.Web.config</code>) so that the load is distributed earlier among the running <code>spotfire-webplayer</code> pods, or so that analyses are put in scheduled updates.</p> <p>In addition, increasing <code>System.Threading.ThreadPool.MinThreads</code> in <code>Spotfire.Dxp.Worker.Host.runtimeconfig.json</code> to a larger value, (for example, 100 or 200, depending on the load) helps in some scenarios.</p> <p>Example</p> <p>Spotfire.Dxp.Worker.Host.runtimeconfig.json</p> <pre> { "runtimeOptions": { "tfm": "net6.0", "frameworks": [{ "name": "Microsoft.NETCore.App", "version": "6.0.0" }, { "name": "Microsoft.AspNetCore.App", "version": "6.0.0" }] }, "configProperties": { "System.Drawing.EnableUnixSupport": true, "System.GC.Server": true, "System.Reflection.Metadata.MetadataUpdater.IsSupported": false, "System.Runtime.Serialization.EnableUnsafeBinaryFormatterSerialization": true, "System.Threading.ThreadPool.MinThreads": 100 } } </pre> <p>For a containerized Spotfire Server (CDK), see the README files for information about exporting the current file, and then apply it after modification using a command like the following:</p> <pre> helm upgrade ... --set-file=config.'Spotfire\Dxp\Worker\Host\ runtimeconfig.json'=Spotfire.Dxp.Worker.Host.runtimeconfig.json </pre>
TSS-32020	12.4.0	<p>Exception during CDK upgrade</p> <p>You can see the error message "Database connection is not using a valid certificate" during a containerized Spotfire (CDK) upgrade. A nonvalid certificate causes the CDK upgrade to fail.</p> <p>Workaround: To upgrade the CDK, you must either trust the certificate or set the flag <code>encrypt=false</code> in the connection string.</p>

Migration and Compatibility

The documentation contains detailed instructions for migrating from a previous release.

Spotfire Server

See "Upgrading Spotfire" in the [Spotfire Server and Environment - Installation and Administration help](#).

Important: Upgrading from versions earlier than Spotfire 12.3

In Spotfire version 12.3, the included Microsoft JDBC Driver for SQL Server was upgraded to a version with important changes to the default settings for encryption. If you upgrade Spotfire from a version earlier than 12.3, and you use the Microsoft JDBC Driver for SQL Server in your environment (to connect to the Spotfire database, the action logging database, Information Services data sources, or the default join database), before you upgrade Spotfire, read the following topic: [Upgrading to 12.3 and later: Fixing Microsoft SQL Server JDBC driver-related issues](#)

Important: Applying version-specific hotfixes.

As of Spotfire Server version 10.3.0, server hotfixes can be applied only on the specific service pack version that they are created for. For example: If you currently have version 10.3.1, you can apply server hotfixes only for the 10.3.1 version, such as 10.3.1 HF-001, 10.3.1 HF-002, and so on. If you want a hotfix of a different service pack level, such as 10.3.2 HF-001, you must first make sure to upgrade to that service pack (10.3.2) before applying the hotfix.

Newer and older versions of Spotfire Analyst client can be used to connect to the current version of Spotfire Server in order to upgrade or downgrade the client packages. However, it is recommended to always run the same version of client and server in production environments. See [System Requirements](#).

Spotfire Automation Services

Version 12.4 of Spotfire Automation Services should be installed for compatibility with version 12.4 of TIBCO Spotfire.

For instructions on how to upgrade to version 12.4 Spotfire Automation Services, see "Updating Services" in the *Spotfire Server and Environment - Installation and Administration* help.

Spotfire Qualification

Version 12.4 of Spotfire Qualification should be installed for compatibility with version 12.4 of TIBCO Spotfire.

For instructions on how to upgrade to version 12.4 of Spotfire Qualification, see the [Spotfire Qualification - Installation Guide](#).

TIBCO Documentation and Support Services

For information about the Spotfire products, you can read the documentation, contact TIBCO Support, and join the TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the [TIBCO Product Documentation](#) website, mainly in HTML and PDF formats.

The website is updated frequently and is more current than any other documentation included with the product.

TIBCO Spotfire Documentation

The documentation for all Spotfire products is available on the [TIBCO Spotfire® Documentation](#) page. This page takes you directly to the latest version of each document.

To see documents for a specific Spotfire product or version, click the link of the product under 'Other versions', and on the product page, choose your version from the top right selector.

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/pub/spotfire/general/LTS/spotfire_LTS_releases.htm.

How to Contact TIBCO Support

Get an overview of [TIBCO Support](#). You can contact TIBCO Support in the following ways:

- 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.

System Requirements for Spotfire Products

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

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>.

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

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