

Spotfire Service for Python Release Notes

Software Release 1.22.0

Contents

Release Notes..... 3

 New Features..... 3

 Changes in Functionality..... 4

 Deprecated and Removed Features..... 5

 Migration and Compatibility..... 5

 Third Party Software Updates..... 6

 Closed Issues..... 7

 Known Issues..... 8

Spotfire Documentation and Support Services..... 9

Legal and Third-Party Notices..... 10

Release Notes

Spotfire analyses that take advantage of Python scripts are available for web client users through the Spotfire® Service for Python version 1.22.

These release notes cover new features, changes, closed issues, and known issues for this release of the Spotfire Service for Python.



The Spotfire Service for Python is licensed under the product Spotfire® Statistics Services. Although you must have the appropriate Spotfire® Statistics Services license, you do not need to install the Spotfire Statistics Services product itself to install and run Spotfire Service for Python in your Spotfire® Server deployment.

New Features

There are no new features in version 1.22 of the Spotfire Service for Python.

Changes in Functionality

The following are changes in functionality in version 1.22 of the Spotfire Service for Python.

Key	Version	Summary
TERRSRV-1497	1.22.0	<p>Python package changes in the updated spotfire package</p> <p>In <code>spotfire</code> Python package versions 2.2.0 and later, the following changes were made, which might affect your existing data functions:</p> <ul style="list-style-type: none"> Export of geographic data (for example, <code>GeoDataFrame</code> objects from the <code>geopandas</code> package) from Python back into Spotfire now performs less processing. The export process will no longer create (or recreate) the <code>XMin</code>, <code>XMax</code>, <code>XCenter</code>, <code>YMin</code>, <code>YMax</code>, and <code>YCenter</code> columns nor most of the additional table and column properties. If these columns are required, or if you are creating a geocoding table, you can use the new public function <code>set_geocoding_table</code>: <pre>import spotfire import geopandas as gpd geodata = gpd.GeoDataFrame(...) spotfire.set_geocoding_table(geodata)</pre> <ul style="list-style-type: none"> Information about a data function's configured inputs and outputs has now been made available to a data function at execution time. The global variables "<code>spotfire_inputs</code>" and "<code>spotfire_outputs</code>" now contain read-only sequences of objects which describe each input or output (modifying the contents of these variables will not change the behavior of Spotfire; the objects themselves only have read-only properties). For example: <pre>out = {'Kind': [], 'Name': [], 'Type': []} for i in spotfire_inputs: out['Kind'].append("input") out['Name'].append(i.name) out['Type'].append(i.type) for o in spotfire_outputs: out['Kind'].append("output") out['Name'].append(o.name) out['Type'].append("unknown")</pre> <ul style="list-style-type: none"> A new module, <code>spotfire.support</code>, has been added to the <code>spotfire</code> package which gathers information about your Python execution environment and puts it into a troubleshooting bundle for sharing with Spotfire Support. You might be asked to generate such a bundle if you open a case involving Python data functions with Spotfire Support; they will provide you with the proper Python code for your environment.
TERRSRV-1580	1.22.0	<p>Unification of environment variable names for the data function services</p> <p>The environment variable name to specify the max log file size has been unified for all the data function services, and therefore has been changed from <code>LOGGING_SERVICELOG_MAX_SIZE</code> to <code>LOGGING_SERVICELOG_SIZE</code> in applicable cases.</p>

Key	Version	Summary
TERRSRV-1620	1.22.0	<p>NumPy package changes might lead to overflow errors unless data functions are updated</p> <p>This version of the Spotfire Service for Python includes an update of the NumPy Python package to version 2.2.4. This change might lead to an <code>OverflowError</code> when doing arithmetic operations with Python scalars in existing Python data functions in certain cases.</p> <p>Starting in NumPy version 2.0.0, operations involving NumPy arrays and Python scalars now follow stricter and more predictable promotion rules, as described in NEP 50 – Promotion rules for Python scalars. This means that inputs that previously were casted to a scalar value in Python will no longer be so automatically. As a Python data function author, you must check and adjust your Python data functions to be compatible with NumPy 2.2.4.</p> <p>For example, imagine that you had a Python data function script with a construction like the following:</p> <pre>out=input + 2147483648</pre> <p>When running this script with a column input of the type 'Integer', you will now get an error, because the number 2147483648 is out of range for an integer:</p> <pre>Traceback (most recent call last): File "<stdin>", line 1, in <module> OverflowError: Python integer 2147483648 out of bounds for int32</pre> <p>One way to handle this is to modify the data function as follows:</p> <pre>out = input.astype("Int64") + 2147483648;</pre>

Deprecated and Removed Features

From time to time, features are deprecated or removed from the Spotfire Service for Python. This topic provides more information about deprecated and removed features in version 1.22.

Deprecated features

No features have been deprecated in this release.

Removed features

No features have been removed in this release.

Migration and Compatibility

The Spotfire Service for Python version 1.22 has been tested with version 14.5 of Spotfire Server.



This version of the Spotfire Service for Python is not tested with earlier versions of Spotfire Server.

See [System Requirements](#) for more information.

Third Party Software Updates

The following third party software (TPS) components have been added or updated in version 1.22 of the Spotfire Service for Python.

Key	Version	Summary
TERRSRV-1208	1.22.0	Java updated to Eclipse Temurin 21
TERRSRV-1494	1.22.0	<ul style="list-style-type: none"> • Apache Commons Compress updated to 1.27.1 • Apache Commons IO updated to 2.18.0 • Apache HttpComponents Client updated to 5.4.3 • Apache Log4j updated to 2.24.3 • ASM updated to 9.7.1 • Bouncy Castle Crypto APIs updated to 1.80 • Eclipse Jetty updated to 12.0.18 • FasterXML/Jackson Annotations updated to 2.18.3 • FasterXML/Jackson Core updated to 2.18.3 • FasterXML/Jackson Databind updated to 2.18.3 • Guava: Google Core Libraries for Java updated to 33.4.0-jre • OSHI Core updated to 6.7.1 • Java API Client for Docker updated to 3.5.0 • Micrometer Registry JMX updated to 1.14.5 • Micrometer Registry Prometheus updated to 1.14.5 • Simple Logging Facade for Java updated to 2.0.17 • Spring Boot updated to 3.4.4 • Spring Framework updated to 6.2.4 • Python interpreter updated to 3.12.9 • Python packages: <ul style="list-style-type: none"> – NumPy updated to 2.2.4 – packaging version 24.2 added – pandas updated to 2.2.3 – pip updated to 25.0.1 – python-dateutil updated to 2.9.0.post0 – pytz updated to 2025.2 – setuptools updated to 78.1.0 – six updated to 1.17.0 – spotfire (Package for Building Python Extensions to Spotfire) updated to 2.3.0 – tzdata updated to 2025.2 – wheel updated to 0.45.1

Key	Version	Summary
TERRSRV-1630	1.22.0	<ul style="list-style-type: none"> • certifi version 2025.1.31 added • dtaidistance version 2.3.13 added • geographiclib version 2.0 added • geopandas version 1.0.1 added • geopy version 2.4.1 added • patsy version 1.0.1 added • pyogrio version 0.10.0 added • pyproj version 3.7.1 added • scipy version 1.15.2 added • shapely version 2.0.7 added • statsmodels version 0.14.4 added • supersmoother version 0.4 added

Closed Issues

The table lists closed issues in version 1.22 of the Spotfire Service for Python.

Key	Version	Summary
TERRSRV-1162	1.22.0	The socket connection between the service and the engine is not encrypted.
TERRSRV-1242	1.22.0	<p>When migrating from the TIBCO Software Statistic Services (TSSS) server to instead use the data function services, warnings for packages are shown when executing some data functions.</p> <p>This has now been addressed by adding a <code>disable.warning.alert</code> property for the TERR, R, and Python services, to allow disabling of warnings. The default is <code>false</code>. To disable warnings, this property must be set to <code>true</code>.</p>
TERRSRV-1496	1.22.0	There is no information in the documentation about the fact that packages that require post-install steps, such as pywin32 , cannot be installed using a Spotfire SPK but must be installed manually in the installed Spotfire application for Windows or the Spotfire Service for Python.
TERRSRV-1579	1.22.0	The service does not stop completely when you try to roll back a node manager update, which can lead to a failed rollback and an offline node manager.
TERRSRV-1612	1.22.0	<p>When running a data function in Spotfire, there is little or no information shown in the client about the engine queue and cap size, or if there are any sessions waiting for the engine to be available.</p> <p>This information can be important if the queue size is low compared to the inflow of new sessions to the service.</p>

Known Issues

The following are known issues in version 1.22 of the Spotfire Service for Python.

Key	Version	Summary
TERRSRV-1393	1.22.0	<p>Change in assembly method in pip package manager results in warnings</p> <p>A change to the method used to correctly assemble SPK packages might result in additional warnings from the <code>pip</code> package manager of the form:</p> <pre>WARNING: Target directory <<temporary location>>\<<package>> already exists. Specify --upgrade to force replacement.</pre> <p>(The text of the warning can vary depending on the contents of the third-party wheel packages, and can vary based on the operating system.)</p> <p>This warning is not an issue and can be ignored.</p>
TERRSRV-1638	1.22.0	<p>Plot created with pyplot persists between data functions</p> <p>A plot created in a data function using the function <code>pyplot</code> from <code>matplotlib</code> can persist between data functions unless the plot is explicitly cleared.</p> <p>Workaround: If the buffer retains the plot, you can clear it explicitly by including the command <code>plt.clf()</code> in your data function.</p>
TERRSRV-538	1.22.0	<p>"Unable to write data" error message</p> <p>Error message "Unable to write data to the transport connection: An established connection was aborted by the software in your host machine."</p> <p>If you see this error, then the data being uploaded to the service is too large. When a Spotfire data function is run, it sends the relevant data from Spotfire to the service for processing. The service has a file size upload limit, the default of which is 100 MB. When a data function is run with data that exceeds this limit, the service returns the error.</p> <p>Workaround: An administrator can change this upload limit if needed by creating a custom configuration. For more information, see the topic "File size upload limit" in the service <i>Installation and Administration</i> guide.</p> <p>If users see this error message, the administrator can consider creating a custom configuration that increases the limits for both of the following properties:</p> <ul style="list-style-type: none"> <code>spring.servlet.multipart.max-file-size</code>: The total file size for upload cannot exceed the value for this setting. <code>spring.servlet.multipart.max-request-size</code>: The total request size for a multipart file upload cannot exceed the value for this setting. <p>Note: At a certain point, the Java Heap size fails to handle very large files. The threshold for this behavior is dependent on the amount of RAM the service node has. When the Java Heap Size is exceeded, the following error message is displayed.</p> <pre>Error from Remote Service: Internal Server Error (500) - java. lang.OutOfMemoryError: Java heap space</pre>

Spotfire Documentation and Support Services

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

How to Access Spotfire Documentation

Documentation for Spotfire and 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.

Spotfire Documentation

The documentation for all Spotfire products is available on the [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 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://spotfi.re/lts>.

How to Contact Support for Spotfire Products

You can contact the Support team in the following ways:

- For accessing the Support Knowledge Base and getting personalized content about products you are interested in, visit the support portal at <https://spotfi.re/support>.
- For creating a Support case, you must have a valid maintenance or support contract with Cloud Software Group, Inc. You also need a user name and password to log in to <https://spotfi.re/support>. 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 <https://spotfi.re/sr>.

How to join the Spotfire Community

The Spotfire Community is the official channel for Spotfire customers, partners, and employee subject matter experts to share and access their collective experience. The 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 Spotfire products. In addition, users can submit and vote on feature requests from within the [Ideas Portal](#). For a free registration, go to <https://spotfi.re/community>.

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