TIBCO Statistica™ Release Notes

Software Release 13.4.0

May 2018

Two-Second Advantage®

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Important Information

Contents

TIBCO Documentation and Support Services

Documentation for this and other TIBCO products is available on the TIBCO Documentation site. This site is updated more frequently than any documentation that might be included with the product. To ensure that you are accessing the latest available help topics, visit:
https://docs.tibco.com

How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, contact TIBCO Support:

- 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.

How to Join TIBCO Community

TIBCOmmunity is an online destination for TIBCO customers, partners, and resident experts. It is a place to share and access the collective experience of the TIBCO community.

https://www.tibcommunity.com

Overview

Statistica 13.4.0 is a minor release.

Starting with this release, new product names are available. Statistica is moving from solution names to persona names. As customers purchase or renew their licensing / maintenance, they may see these new names.

The old product names contained the feature "interactive dashboards" (visualization designer). This feature is an optional add-on to the new product names.

The table below maps old product names to new product names

Old Product Name	New Product Name
TIBCO Statistica™ Professional	TIBCO Statistica™ Desktop
TIBCO Statistica™ Expert - Quality Control	TIBCO Statistica™ Analyst
TIBCO Statistica™ Expert - Data Science	TIBCO Statistica™ Modeler
TIBCO Statistica™ Enterprise	TIBCO Statistica™ Data Scientist
TIBCO Statistica™ Pharma	TIBCO Statistica™ Comprehensive

New Feature - TIBCO Statistica™ Extension for TIBCO Spotfire®

For customers who own TIBCO Spotfire® and TIBCO Statistica™, it is now possible to call a Statistica workspace from a Spotfire dashboard. This allows Statistica to be a no-code analytic engine for Spotfire users. This new feature is named TIBCO Statistica™ Extension for TIBCO Spotfire®.

Technical Note: The Statistica Extension contains two Spotfire packages. The packages are intended for Spotfire Analyst to be deployed through Spotfire Server 7.11 or above. These packages are only for 64-bit Windows platforms.

The administrator for the Spotfire Server will need to select *Individual file download* from https://edelivery.tibco.com/storefront/eval/tibco-spotfire-server/prod10256.html and then download *TIBCO Statistica Extension for TIBCO Spotfire Software* (contains two .spk packages).

Please note that for this initial release Spotfire users will be able run analyses backed by Statistica workspaces locally (on the workstation where Spotfire Analyst is installed), but not on the Spotfire Server (i.e. through the web browser, published in Spotfire Library).

Read the "What is new" documentation on https://docs.tibco.com/products/tibco-statistica-13-4-0 for more information on configuring this feature.

New Features – All Products

The following new features are in all Statistica products.

Workspace Templates

The Get Data template has updated annotations and the new Spotfire Data Connection node.

Three new templates were created for workspaces: Data Preparation, Model Building, Publish Models.
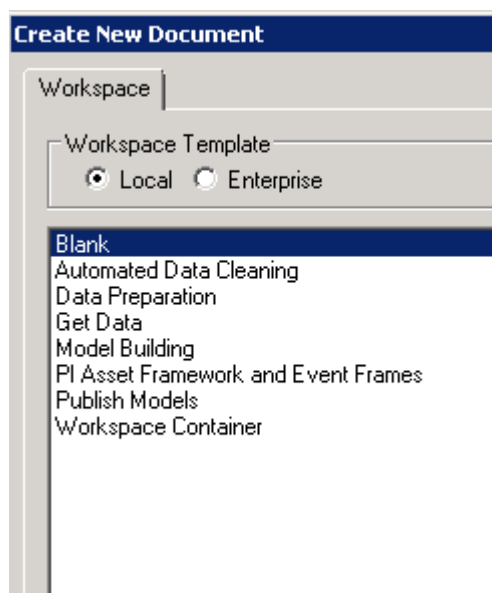
New Example Workspaces

TIBCO Spotfire® Data Science (SDS) does in-database analytics and Hadoop big data analytics. Statistica now has an example that demonstrates calling an SDS workflow from a Statistica workspace. Why do this? SDS can pre-process the "big data" and then hand-off the results to Statistica for further analysis.
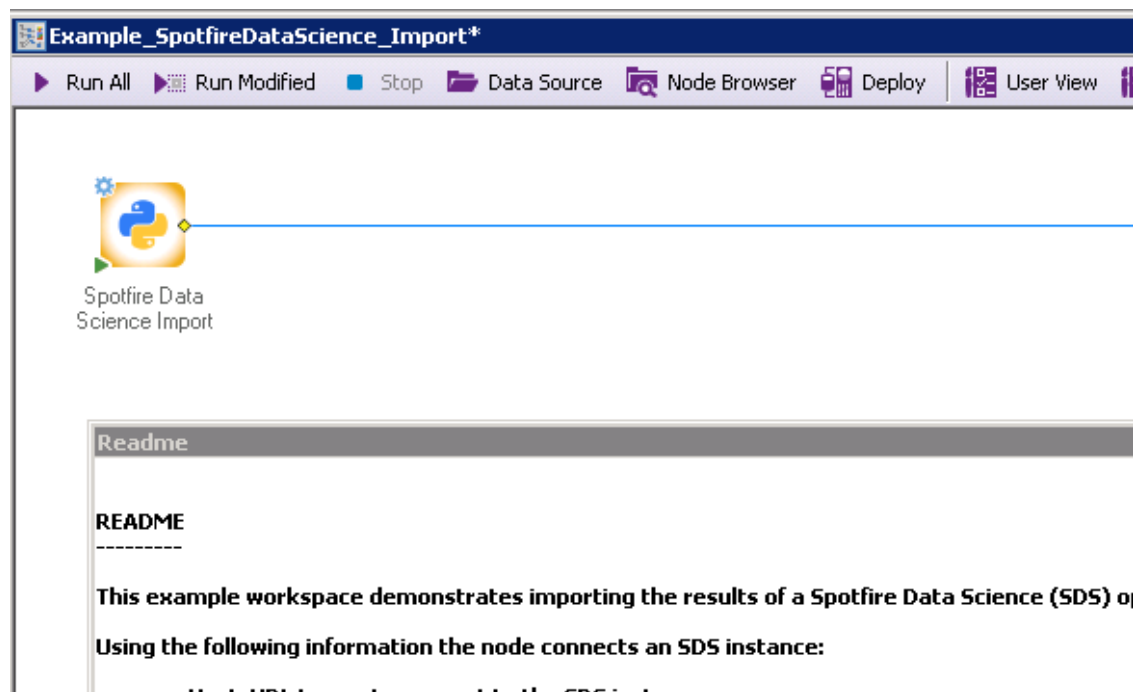
Another new example workspace shows how Code Nodes work for Python, R, IronPython and C#. The workspace name is *Example_InputsOutputsAndParametersInCodeNodes*.
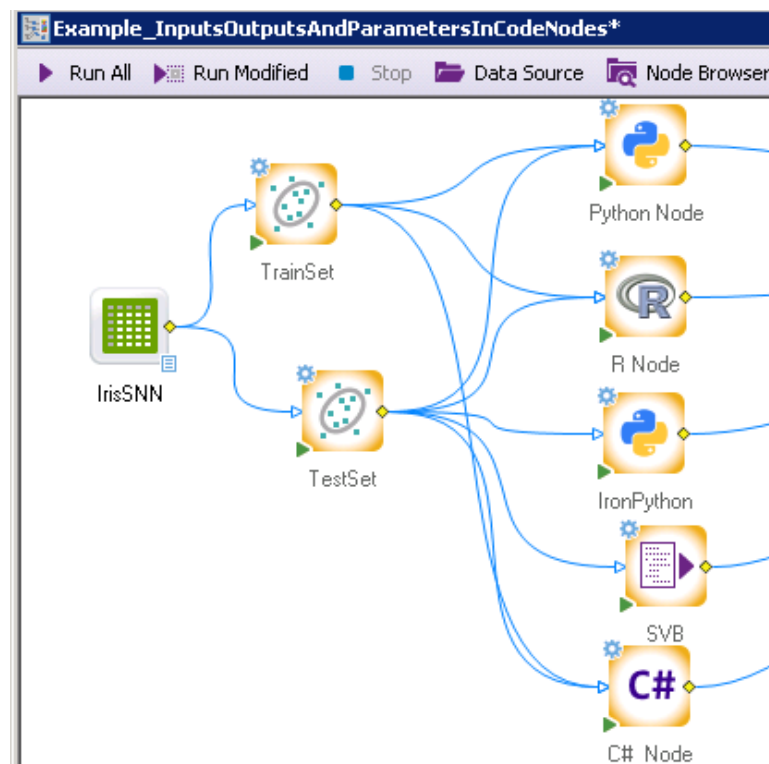
New Workspace Nodes

- Batch Synchronization: This node is used for aligning batches of time-dependent sequences. This technique uses one batch from the input data set as a reference and compares it with the other batches.
- Dynamic Time Warping: This node is used for aligning two datasets with different time scales. This technique is useful for MSPC analyses.
- Publish Models: This node publishes PMML models to TIBCO® Artifact Management Server. Users can and manage models with Statistica, then execute models against streaming data with TIBCO StreamBase®.
- Spotfire Data Connection: Spotfire Data Connections can now be used as data sources. See https://community.tibco.com/wiki/tibco-spotfire-data-access for a list of possible Spotfire data sources.

Workspace Node Changes

- Box-Cox: new options added to send statistics and/or Box-Cox transformations downstream for further analysis
- Cox Proportional Hazards: validation completed, beta label removed
- Distribution Fitting: validation completed, beta label removed
- Lasso Regression: validation completed, beta label removed
- Multivariate Statistical Process Control Deployment: validation completed, beta label removed
  - Known issue STAT-4147; Node will not work with "Database Connector" node as a data source. The "Database Connector" node was formerly named "Streaming DB Connector".
- Nonlinear Estimation: validation completed, beta label removed
  - Known issue STAT-4209; Nonlinear estimation -> User-specified regression, custom loss function is incorrectly displaying "Invalid number of start values" when more than 2 parameters need to be estimated.
  - Known issue STAT-4210; Nonlinear estimation -> User-specified regression, custom loss function incorrectly displays "the option is not available in conjunction with ...." when the option *Asymptotic standard errors / Eta for finite diff.approx., 1.0 E* are checked
- Reporting Tables: validation completed, beta label removed
- Spotfire Data Import: This node was renamed to *Import Spotfire*
- Spotfire Data Export: Use the *Export Data* node to export data into a Spotfire SBDF file. The Spotfire Data Export node was removed from the node browser.
- Stepwise Multiple Regression: This node now allows residual sheets to be a downstream document for further analysis.

Other Enhancements

Key	Summary	Module
STAT-4019 [109110]	Include Weight variable info in result spreadsheet header	Analysis results
STAT-5906	Node browsers were renamed and removed. Items that are listed in the *All* node browser are tested and validated (tests documented). 1. Renamed*: All Validated Procedures* to *All* node browser 2. Removed: *Beta Procedures* node browser 3. Renamed*: Scripted Procedures* node browser to *Legacy Procedures*.	Workspace
STAT-4301 [109356]	Added status bar while opening Advanced Query Builder	Query
STAT-5351	Added ability to add reference line at percentage	Graphs
STAT-4720 [106497]	Add an option to adjust the df for the number of estimated parameters. Note: Customer reported this as a bug. This was determined to be an enhancement (i.e. add new option) because the Statistica results are validated against multiple resources. There is a resource, http://www.itl.nist.gov/div898/handbook/pmc/section4/pmc4481.htm, which matches the customer's report. This is why we decided to offer a new user interface option. Here is the customer's description of the issue. When an ARIMA(p, 0, q) model is fitted to a time series then incorrect p-values are reported next to Q statistics (Ljung-Box test) on the autocorrelation plot of residuals. The error follows from not deducting p and q from the number of freedom degrees of chi-square distribution of Q. If the number of lag minus the number of estimated parameters is less than or equal to 0, then no p-value can be computed.	Analysis/Time Series-Forecasting
STAT-6021	Add a new method for MDX queries within Statistica Query	Query
STAT-4066 [106964]	Added wild cards for variable ranges in "V1:Vx" convention in spreadsheet and transformation functions; statmax, statmin, mean, median, stddev, validn, sum, perc25, and perc75. Wildcards must be quoted.	Spreadsheets
STAT-4758 [108562]	Added RoundSig(number, sig_fig) and RoundSigEven(number, sig_fig) spreadsheet functions.	Spreadsheets

Key	Summary	Module
STAT-3909, STAT-4760 [108646]	Add ability for AutoFilter capable to select multiple unique values	Spreadsheets
STAT-4228 [109292]	With a Python code node, added ability to retrieve data structures up to 2 dimensions. This is translating into a Statistica spreadsheet. Anything beyond 2 dimensions will fail. Prior version of Statistica could only retrieve pandas data frames.	Workspace
STAT-5679	Python code node's error handling is improved. The ErrorLog is displayed even if warnings are generated without any errors.	Workspace
STAT-5723	This is a performance improvement for the Python code node. We have a technique to avoid a complete copy of the entire data structure.	Workspace

New Features – Analyst, Data Scientist, and Comprehensive

The following new features are in Statistica Analyst, Statistica Data Scientist, and Statistica Comprehensive products.

New Workspace Nodes

- PI Event Frame Data: PI Event Frames provides an easy way to capture process events and related system data. When you open a new workspace look for the template named *PI Asset Framework and Event Frames* to get started.

Workspace Node Changes

- ETL Time-indexed: validation completed, beta label removed

Other Enhancements

Key	Summary	Module
STAT-2970 [108150]	Add ability to search for variable name in tree view. Look for Find option.	Rules Builder
STAT-3969 [109010]	Minor user interface change. Save to Enterprise and Save to Enterprise (Include Java) into two different menu items	Rules Builder

New Features – Modeler, Data Scientist and Comprehensive
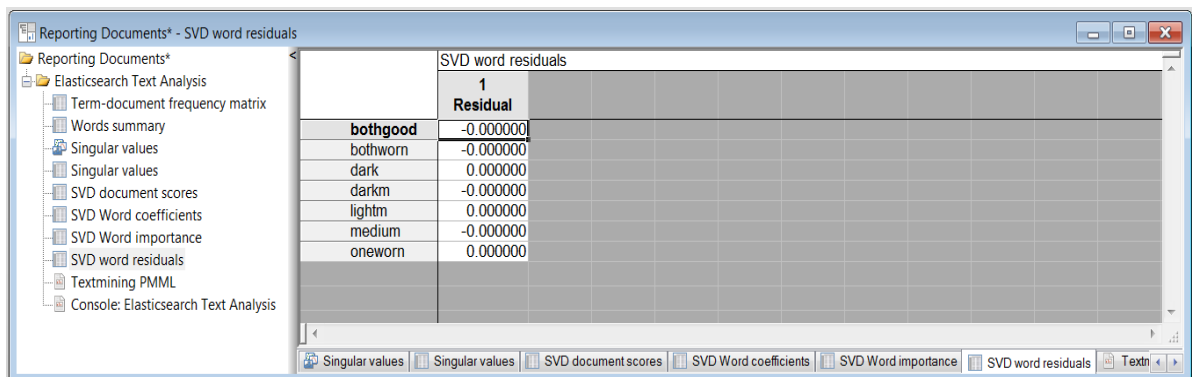
The following new features are in Statistica Modeler, Statistica Data Scientist, and Statistica Comprehensive products.

Key	Summary	Module
STAT-3900 [108713]	Added Predictor Variables Summary as downstream document for further analysis.	Weight of Evidence
STAT-4033 [109153]	Added new option "Collect sensitivity information" on Advanced tab. This allows user to explore how significant a particular split is.	Analysis/Interactive Trees

New Features – Data Scientist and Comprehensive

The following new features are in Statistica Data Scientist, and Statistica Comprehensive products.

New node: Elasticsearch Text Analysis; it replicates core features of the existing Text Miner nodes (and hence can replace them) while providing performance and scaling benefits. However please note that it requires an existing installation of the open-source Elasticsearch service (https://www.elastic.co). Alternatively, you can use a Cloud provider of your choice to stand up a ready-to-use Elasticsearch instance in the cloud.
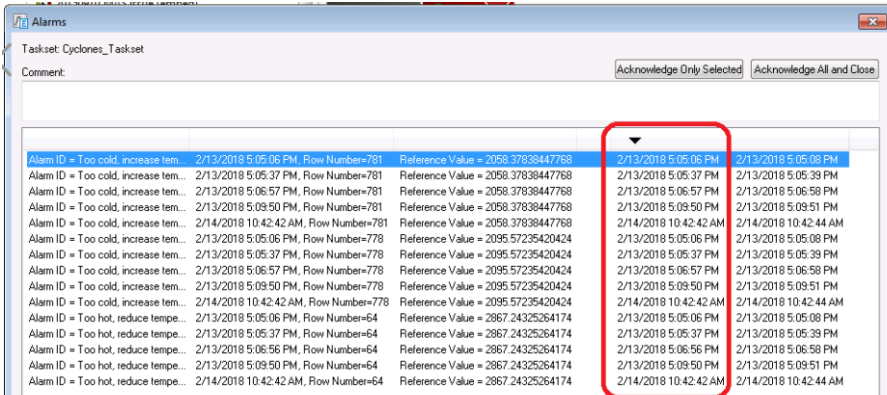
There is one known issue: STAT-6658; "Error message should not display"

1. Open workspace with Elasticsearch Text Analysis node, run the node
2. Open Elasticsearch Text Analysis parameter dialog,
3. Navigate to Results > Summary, Uncheck Frequency matrix : word <=> document option.
4. Click OK and Run Elasticsearch Text Analysis node.
5. An error message displayed saying "Failed to perform Concept extraction"
6. Click OK to close the error message
7. Run the node again: it now runs successfully without error.

New Features – TIBCO Statistica™ Server

Key	Summary	Module
STAT-5363, STAT-5380	This is a performance improvement. When extracting data from a Data Configuration two large temporary files were created with past versions. If needed, only one temporary file will be created in 13.4	Enterprise Manager, Data Configuration, Spreadsheet
STAT-3896 [108665]	When a workspace was run from Enterprise Manager, the organizing folders were lost in the resulting workbook. Now when you create a new SVB Analysis Configuration (save the workspace as a new object), the workspace will create the output in folders.	Enterprise Manager
STAT-3970 [109013]	Added System option for setting maximum text length while retrieving data for BLOB/CLOB columns.	Enterprise Manager
STAT-4166 [107042], STAT-4153 [109213]	Search function in Statistica Enterprise Manager is now more specific for rules. Rules can be embedded within rules. The search will only find the original rule set which contains the search term. NOTE: Customer must redeploy rules from Rules Builder into Enterprise Manager. The rules must be saved into the new format for searching.	Enterprise Manager
STAT-4203 [107295]	Added ability to filter the Audit log by: • object type • old value • new value • sequence number	Enterprise Manager
STAT-4699 [105211]	Launch Data Entry button from Enterprise Manager now opens a browser to the server.	Enterprise Manager
STAT-5100	Performance improvement. Reduced reading CSINI when running an Analysis Configuration.	Enterprise Manager
STAT-5658	If you type/paste a full path to an object in the search dialog, Enterprise Manager only searches in that specific folder	Enterprise Manager

New Features – TIBCO Statistica™ Monitoring & Alerting Server

Key	Summary	Module
STAT-4266 [107461]	Add additional target type, "auxiliary alarm detail", that will include additional information in email notification.	MAS Email
STAT-4277 [109305]	Option to sort listed alarms based on any column header	MAS Alarms

New Features - TIBCO Statistica™ Data Entry Server

Key	Summary	Module
STAT-4830	Performance improvements; support Oracle result cache and remove unnecessary queries.	Data Entry
STAT-4837	Performance improvements; more indexes added	Data Entry
STAT-5030	Add ability to edit a BlindID field in the primary sample New IIS option ChangeSampleBlindId added. Set this option to true and users with permissions of Data Entry Admin (EDE), Historical Edit (HEDIT), or System Admin (SADM) can make this change. Both Primary and Matching Sample's Blind IDs get changed with the update.	Data Entry

Installing

Before installing Statistica 13.4.0, ensure that your system meets the minimum system requirements below.

We recommend the 64-bit version of Statistica with 64-bit processor and operating system. If the 32-bit version of Statistica must be used, we recommend running it in a 64-bit environment for better performance.

If you own TIBCO Statistica Server, download 13.4 from https://edelivery.tibco.com/storefront/eval/tibco-statistica-server/prod11760.html. This downloads the installer for Statistica Document Management System 1.0.10.0 (SDMS). This installer adds the ability to version and approve objects within the Statistica Enterprise Manager application.

Also, review https://support.tibco.com/s/article/Changing-TCP-IP-port-used-by-WebSTATISTICA-service. It may be necessary to change a port number after installation.

Installation and configuration documentation for TIBCO Statistica Server are located at https://docs.tibco.com/products/tibco-statistica-document-management-system.

Upgrading

Before upgrading to Statistica 13.4.0, ensure that your system meets the minimum system requirements below.

Customers who have Statistica 12.0.65.4 or later installed on their computers can upgrade to 13.4.0. The installer will ask if the customer wants to upgrade the installation. The customers must select the checkbox agreeing to upgrade the older Statistica installation.

Customers with older versions must uninstall Statistica and then install Statistica 13.4.0. Contact https://support.tibco.com to request Statistica 13.4.0 keys.

If you have TIBCO Statistica Server installed, write down the port number in WebStatisticaPub\wwwroot\config.php before starting the upgrade. There is a known issue when upgrading to 13.4: upgrade resets to the default port number 8081. If Statistica Server (WebStatistica) is using a different port number, update config.php after the upgrade. See https://support.tibco.com/s/article/Changing-TCP-IP-port-used-by-WebSTATISTICA-service for more information.

If you own TIBCO Statistica Server, download 13.4 from https://edelivery.tibco.com/storefront/eval/tibco-statistica-server/prod11760.html. This downloads the installer for Statistica Document Management System 1.0.10.0 (SDMS). This installer adds the ability to version and approve objects within the Statistica Enterprise Manager application. Customers who have SDMS 1.0.6.0, 1.0.7.0, 1.0.8.0 or 1.0.9.0 installed only need to run the 1.0.10.0 installer to upgrade.

Customers who have SDMS 1.0.2.3 or 1.0.4.0 installed can upgrade by following these instructions:

1. Run Statistica installer and upgrade the Statistica installation.
2. Request "access code to add SDMS licensing" on https://support.tibco.com
3. When you receive the access code, follow the emailed instructions on how to apply the code.
4. Run the SDMS 1.0.10.0 installer, which will upgrade the SDMS files.
5. Copy ClientSTAT.tmp file from FlexLM server directory (example, C:\Program Files (x86)\Statistica\FLEXlm) to SDMS server directory. The file should be renamed to stat.lic.
6. Restart SDMS service.

Customers with older versions of SDMS should open a support request, https://support.tibco.com, to plan their upgrade of SDMS. The support engineer will need the Statistica version number and SDMS version number.

Operating Systems Supported

Statistica follows Microsoft's lifecycle. Based on this policy, the following Windows operating systems are supported.

- Microsoft Windows™ 7 Service Pack 1
- Microsoft Windows™ 8.1
- Microsoft Windows™ 10
- Microsoft Windows Server 2012™
- Microsoft Windows Server 2016™

System Requirements

Before installing or upgrading to Statistica 13.4, ensure that your system meets the following minimum hardware and software requirements.

We recommend the 64-bit version of Statistica with 64-bit processor and operating system. If the 32-bit version of Statistica must be used, we recommend running it in a 64-bit environment for better performance.

ⓘ | **IMPORTANT**

The 32-bit version of Statistica requires processor support for the SSE2 instruction set.

The optional advanced hardware graphics support for transparency requires a graphics card that supports Direct2D.

For integration with Python please use 2.7.11 or 3.5.1. Panda 0.18.1 is also recommended for the extension functions. The comtypes module is required for Python integration.

For R integration, R 3.2.1 is recommended.

For H2O integration, H2O 3.10.4.7 and sparkling-water-2.1.7 are recommended. This runs Spark 2.1.0.

Statistica Single User or Client Workstation

Minimum hardware requirements for standard client configuration

Requirement	Details
Processor	500 MHz; Note: 32-bit version of Statistica requires processor support for the SSE2 instruction set
Memory	4 GB RAM
Hard disk space for installation	10 GB
Minimum Scratch/Temporary Disk Space	50 GB recommended per user
Operating System	Microsoft Windows™ 7 SP1 or above

Recommended hardware requirements for standard client configuration

Requirement	Details
Processor	2.0 GHz, 64-bit, quad core or more
Memory	8 GB RAM or more
Hard disk space for installation	10 GB
Minimum Scratch/Temporary Disk Space	50 GB recommended per user
Operating System	Microsoft Windows™ 10

Statistica Server Database Sizing and Location

Statistica Server requires deployment of a metadata database schema on an ODBC compliant database. Most commonly, it will be deployed on the existing customer DBMS infrastructure, such as Oracle or SQL Server. The system can also deploy SQL Server Express. It supports other DBMS systems as well.

Customers who own Statistica Server also own licensing for the Statistica Document Management Server (SDMS) for managing version and approval history. Installing SDMS is optional, and it has a separate database schema, which is usually deployed to the same DBMS system where the metadata database has been deployed.

The database sizing requirements vary on usage. The actual metadata describing the Statistica objects is small, but the tablespace can be used to store reports and files (Excel, scripts) within the database (stored as BLOBs), which can increase the overall size.

The Statistica Server and the metadata database should be installed within the same local area network for performance reasons. The location of the data to be analyzed should also be reviewed when deciding where to install Statistica Server and the metadata database. Depending on the situation, customers may decide to install within their data center or at a local office to avoid transporting large amounts of data over a slow network.

Recommended metadata schema database sizing

Requirement	Details
Initial tablespace	1 GB, grow 1 GB intervals
If explicit cap required	100 GB but may need to grow over time
Operating system	Microsoft Windows™ Server 2012 or later

The Statistica Document Management Server schema contains only metadata about the individual document storage. The document storage is kept outside the database; therefore, SDMS tablespace requirements are minimal.

Recommended SDMS schema database sizing

Requirement	Details
Initial tablespace	100 MB
Network Bandwidth	100 MBits/s or faster
Operating system	Microsoft Windows™ Server 2012 or later

Statistica Server

The Statistica Server is an analytic engine service with a web-based user interface. It allows users to consume analytic tasks interactively or schedule them for automated processing.

We recommend that Statistica software be run on a server dedicated to the Statistica License Manager, and the Statistica Document Management Server (SDMS). The goal is to avoid sharing server resources with any other services.

This server may be referred to as the Statistica Application Server to avoid confusing it with the software product named Statistica Server.

Minimum hardware requirements

Requirement	Details
Processor	1 GHz
Memory	4 GB RAM
Hard disk space for installation	10 GB
Minimum Scratch/Temporary Disk Space	50 GB or more
Network Bandwidth	100 MBits/s or faster
Operating System	Microsoft Windows™ Server 2012 or later

Recommended hardware requirements

Requirement	Details
Processor	2.0 GHz, 64-bit, quad core or more
Memory	8 GB RAM
Hard disk space for installation	10 GB
Minimum Scratch/Temporary Disk Space	100 GB or more
Network Bandwidth	100 MBits/s or faster
Operating System	Microsoft Windows™ Server 2016

Software requirements

Requirement	Details
Microsoft Internet Information Server (IIS)	Installed and configured to run ISAPI and CGI applications. Read TIB_stat_13.4.0_configuration_statistica_server.pdf
Microsoft .NET Framework	Install 3.5 and 4.6.1

IMPORTANT

System Requirements are based on an average size implementation.

Statistica Live Score

The Statistica Live Score Server is the analytic engine that receives and executes the Web Service (SOAP) scoring calls for Statistica Live Score. The analytic projects that the server executes are stored in the Statistica Server's metadata database.

We recommend that Statistica Live Score software be run on a server dedicated to Statistica Live Score, independent from any other application software. This is a transaction server with an API. It does not have a user interface.

Minimum hardware requirements

Requirement	Details
Processor	1 GHz
Memory	4 GB RAM
Hard disk space for installation	10 GB
Minimum Scratch/Temporary Disk Space	50 GB or more
Network Bandwidth	100 MBits/s or faster
Operating System	Microsoft Windows™ Server 2012 or later

Recommended hardware requirements

Requirement	Details
Processor	2.0 GHz, 64-bit, quad core or more
Memory	8 GB RAM
Hard disk space for installation	10 GB
Minimum Scratch/Temporary Disk Space	100 GB or more
Network Bandwidth	100 MBits/s or faster
Operating System	Microsoft Windows™ Server 2016

ⓘ **IMPORTANT**

System Requirements are based on an average size implementation. Statistica Live Score applications often benefit from additional cores, depending on how many simultaneous requests are expected.

The Statistica Live Score is part of the Statistica Server platform. Installation of the Statistica Server Application Server must occur prior to the installation of the Live Score Server.

Statistica Monitoring and Alerting Server (MAS)

We recommend that Statistica MAS software be run on a server dedicated to Statistica MAS, independent from any other application software. Users will log onto a web browser to review the generated alerts. Alerts can also be configured to be sent by email.

Minimum hardware requirements

Requirement	Details
Processor	1 GHz
Memory	4 GB RAM
Hard disk space for installation	10 GB
Minimum Scratch/Temporary Disk Space	50 GB or more
Network Bandwidth	100 MBits/s or faster
Operating System	Microsoft Windows™ Server 2012 or later

Recommended hardware requirements

Requirement	Details
Processor	2.0 GHz, 64-bit, quad core or more
Memory	8 GB RAM
Hard disk space for installation	10 GB
Minimum Scratch/Temporary Disk Space	100 GB or more
Network Bandwidth	100 MBits/s or faster
Operating System	Microsoft Windows™ Server 2016

ⓘ **IMPORTANT**

The Statistica Monitoring and Alerting Server (MAS) is part of the Statistica Server platform. Installation of the Statistica Server Application Server must occur prior to the installation of the MAS Server.