TIBCO Spotfire® 5.5

Deployment and Administration Manual

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TIBCO Spotfire is covered by U.S. Patent No. 6,014,661 and U.S. Patent No. 7, 216,116. Other patent(s) pending.

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Contents

1 Introduction

1.1 What is Spotfire Deployment and Administration?

Spotfire deployment includes deploying packages that will be automatically downloaded by Spotfire clients, creating users and groups, setting up licenses, and setting up the library.

Spotfire administration includes tasks like adding new users and groups to the system, manage lincenses, and upgrading to new versions.

All of these tasks are performed using different tools. This manual introduces these tools and explains what tasks to perform in each of them. Further assistance can be found in the online help of each tool.

1.2 The Spotfire Administrator

The Spotfire Admin is a Spotfire user with administrative privlileges. He or she is responsible for adding users and groups, configuring up licenses and preferences and deploying new packages. The Spotfire Admin can be identical to the Spotfire Server administrator, but does not have to be. When the Spotfire Server is installed, the Server administrator assigns Spotfire Admin privileges to a Spotfire user (and creates it if necessary). This user becomes the first Spotfire Admin. He or she can then assign Admin privileges to other Spotfire users at need.

2 TIBCO Spotfire Administrative Tools

2.1 Overview

There are three different tools used to perform Spotfire administrative tasks. It is important that Spotfire Admins are familiar with all of them.

2.2 TIBCO Spotfire Administration Console

Each TIBCO Spotfire Server has a web-based administration UI called the TIBCO Spotfire Administration Console. This tool is used to set up users (unless users and groups are handled by an external mechanism such as an LDAP server) and groups, and to create and upload deployments. It can be reached by a standard web browser using the URL `http://spotfireserver/spotfire/administration/`, where `spotfireserver` is the hostname of one of your Spotfire Servers. It does not matter which server in the cluster you use; changes made to one server will be stored in the Spotfire Database and available to all servers. If there is a load balancer in front of the Spotfire Servers, you should use its hostname in place of `spotfireserver`.

2.3 TIBCO Spotfire Administration Manager

In the Spotfire client, there is an administration tool called the Administration Manager. This tool is used to set up licenses and preferences. It is also possible to create new users and groups in this tool. It is found on the Tools menu in the Spotfire client.

2.4 TIBCO Spotfire Library Administration

In the Spotfire client, there is also an administation tool called the Library Administration. This tool is used to administer the Spotfire Library. The Library is a feature that allows Spotfire users to publish and share analyses and data with each other.

The content of the Library can be exported and imported using the Library Administration tool. This can be used as a backup function.

2.5 TIBCO Spotfire Server Logs and Diagnostics

For each TIBCO Spotfire Server you can view logs and diagnostics in the Server Logs and Diagnostics tool, available at the URL `http://spotfireserver:80/spotfire`. Replace spotfireserver with the name of the Spotfire Server.

Log in with a user that has either Spotfire Administrator or Spotfire Diagnostics Administrator permissions. For more information about Spotfire permissions and administrator roles, see the section "Setting Up Groups" on page 12.

Server Logs will provide detailed information about what is happening on the server, such as access logs, SOAP communication, Information Links that are used, etc.

Diagnostics will provide information about the server itself, such as information about the Database Server, Operating System, TIBCO Spotfire Server, Cluster Configuration, Application Server, System, and Java version.

Note: Any changes made to the log configuration using this tool will be reverted upon restart of the Spotfire Server. Changing the default log level must be done by manually editing a configuration file on the Spotfire Server. See the **TIBCO Spotfire Server - Installation and Configuration Manual** for more information about this.

3 Setting Up TIBCO Spotfire

3.1 Overview

<u>UPGRADING FROM 3.0, 3.1, 3.2, 3.3, 4.0, 4.5 or 5.0?</u>

TIBCO Spotfire 5.5 requires Microsoft .NET Framework 4. The TIBCO Spotfire 5.5 installer will install this, if not present on the machine.

If you are upgrading from TIBCO Spotfire 3.0, 3.1, 3.2, 3.3, 4.0, 4.5 or 5.0 to 5.5, all you need to do is deploy new Spotfire packages to the server. However, before you do this, you must also install the .NET Framework 4 on all the machines running TIBCO Spotfire. See the section "Deploying Spotfire Packages" on page 8 for detailed instructions on how to deploy packages.

You will need the "full" version of .NET Framework 4. The "Client Profile" version will not work.

Note that TIBCO Spotfire 5.5 requires TIBCO Spotfire Server 5.5.

Starting with 3.1, there is a new Spotfire Administration tool called Administration Console. You should read the section "TIBCO Spotfire Administrative Tools" on page 5 to familiarize yourself with this new tool.

You should also read the section "Spotfire Licenses" on page 18 for an overview of the licenses and features in TIBCO Spotfire 5.5.

TIBCO Spotfire 5.5 requires TIBCO Spotfire Server 5.5.

When the Spotfire Server is installed and configured, there are a number of tasks that need to be performed before users can log in and use Spotfire:

1 Deploying Spotfire packages.

2 Installing TIBCO Spotfire on a computer.

3 Setting up Users, Groups, Licenses and Preferences.

4 Setting up the Spotfire Library.

5 Installing TIBCO Spotfire for all users.

Each of these steps is described in detail below.

3.2 Deploying Spotfire Packages

When a user logs into TIBCO Spotfire, the client will check for new software packages on the server and automatically update the client with them. It is important that these packages are deployed to the server for the clients to work properly. After installing TIBCO Spotfire Server, the Spotfire Admin must create an initial deployment. It is also important that any client hotfixes released by TIBCO, or any other add-on software, are deployed to the server.

When installing the Spotfire Server for the first time, one **deployment area** exists, the **default deployment area**, and the name of that area is set to "Production". Deployment areas can then be set for groups in the Spotfire database, and when one is set for a group, all group members can access the deployments in that area.
**Note**: It is not possible to specify a deployment area for the Deployment Administrator and Administrator groups. These groups can access all deployment areas.

It is possible to add, delete and rename deployment areas. The default deployment area can be changed, but not removed. The default deployment area is ignored for a user as soon as a deployment area is specified for a group the user belongs to. If no deployment area is set for a group, the group members get the default deployment area.

Deployment areas are assigned to groups in the Groups tab and when a user logs in to the Spotfire Client the following will happen:

- If a deployment area is specified for one, and only one, of the groups the user is a member of, the user will get the packages for the area specified and will not be prompted to choose deployment area.

- If more than one deployment area is available because the user belongs to several groups with different deployment areas assigned, the user will be prompted to choose between the deployment areas set for the different groups.

- If no deployment area is specified for any of the groups the user belongs to, the user gets the default deployment area.

Example: Multiple Deployment Areas
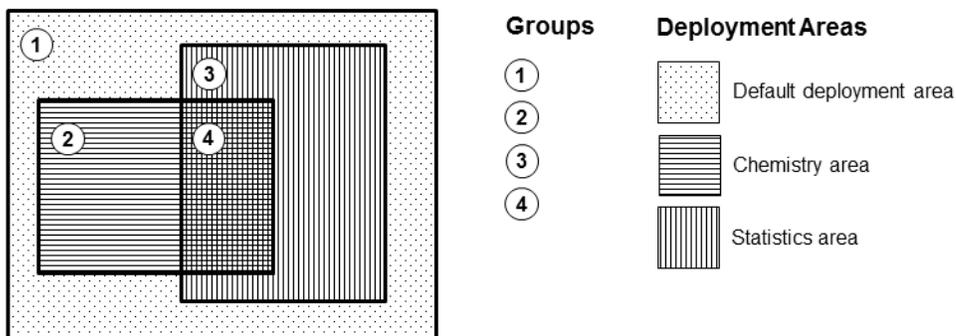
- Group 1
  No deployment area is assigned and the users will get the default deployment area when logging in to TIBCO Spotfire. Users will not be prompted to select deployment area.

- Group 2
  Users will get the Chemistry deployment area when logging in to TIBCO Spotfire. Users will not be prompted to select deployment area.

- Group 3
  Users will get the Statistics deployment area when logging in to TIBCO Spotfire. Users will not be prompted to select deployment area.

- Group 4
  Users will be prompted to select between the Statistics and the Chemistry deployment areas when logging in to TIBCO Spotfire.

If for example a group of users cannot run a certain version of the Spotfire client or if you want a specific group of "early adopters" try out a new version of the Spotfire client, this can be done smoothly by assigning a specific Deployment Area to those groups since other users will not be affected by this. By assigning different deployment areas to different groups it is also possible to have fine grained control over what deployments are available to the user.

A test area can be created and used as a staging server, and when confident that everything works as it should, you can move that deployment to areas "in production".

It is recommended to carefully think through how to set up the deployment areas and make sure that users as rarely as possible are prompted to choose deployment area.

This section describes how to create a deployment. Further help is also available in the Administration Console online help.

▶ **To Deploy Spotfire Packages**

1 Open the Administration Console located at `http://spotserver/spotfire/administration` (where spotserver is the name of one of your spotfire servers) in a web browser.

2 Log in as a Spotfire Admin.

3 Select the tab **Deployment**.

4 Select an existing **Deployment Area** from the Deployment Area list or create a new **Deployment Area** to which you want to deploy packages

   Note: It is recommended to use an area that is not in production, especially if you are upgrading from a previous version of TIBCO Spotfire. You can for example create a "test deployment area" and later copy the deployment from that "test area" after you have installed a TIBCO Spotfire client and verified that the deployment is downloaded and installed upon login.

5 If there are any old packages in the environment, click the **Clear** button to remove all packages.

   Comment: If you have any third-party packages that you know will work with this version of TIBCO Spotfire, you can keep these. In this scenario, rather than clicking the **Clear** button, you should remove unwanted packages one by one.

6   Click the **Add** button.

Response: An **Add to Deployment** dialog appears.

7   Click the **Browse** button.

Response: A **File Upload** dialog appears.

8   Browse to a package file (.spk) or a distribution file (.sdn) that you want to include in the deployment.

A distribution file (.sdn file) is made up of package files (.spk files) that may have dependencies on one another. The **Spotfire.Dxp.sdn** distribution is the most frequently encountered example of a distribution file and is located in the deployment kit folder **TIB_spotdeploy_5.5.0_win\Products\TIBCO Spotfire Distribution**.

9   Click **OK** in the **Add to Deployment** dialog to upload and add the file to the distribution.

Response: The list of packages is updated with the contents of the file.

10   Remove any unwanted files from the list by selecting them and clicking the **Remove** button.

11   Click the **Validate** button in the lower left corner to make sure the deployment is not damaged or corrupted in any way.

12   Click the **Save** button in the lower left corner to save and publish the deployment.

Response: The **Save Deployment dialog** appears.

13   Enter a version number and a description for the deployment and click the **OK** button.

See also the online help of the Administration Console.

3.3   Installing TIBCO Spotfire on a Computer

You must now install a TIBCO Spotfire client on your computer, to verify that the deployment you have created works, and to get access to the Administration Manager and the Library Administration tools.

TIBCO Spotfire is installed using an installer found in the `\Products\TIBCO Spotfire Installer` folder of the Spotfire distribution.

▶   **To Install TIBCO Spotfire on a Computer**

1   Copy the Client Installer folder to your local disk, and run the setup.exe file.

Response: The installer starts, and the Welcome screen is shown.

2   Click **Next** to continue.

3　Read the TIBCO Spotfire license agreement. Select the **I accept** radio button to accept and click **Next** to continue.

4　Specify the **URL** of your TIBCO Spotfire Server. Click Next to continue.

　　Comment:　If there are several TIBCO Spotfire Servers installed, and a load balancer in place in front of them, specify its URL.

5　Click **Install** to start the installation.

6　When TIBCO Spotfire has been installed, click **Finish** to close the installer.

　　Response:　TIBCO Spotfire is now installed.

　　You should now start TIBCO Spotfire on your computer and log into the deployment area to which packages were deployed in "Deploying Spotfire Packages" on page 8. In the following instructions it is assumed that packages were deployed to an area named "test".

　　Log in to the "test" deployment area on your server to verify that login works and that you receive Spotfire package updates.

1　Start TIBCO Spotfire.

　　Response:　TIBCO Spotfire starts and displays a login dialog.

2　Click **Manage Servers...**

　　Response:　The **Manage Servers** dialog appears.

3　Click the button **Add...**

　　Response:　The **Add Server** dialog appears.

4　Enter the URL to your Spotfire Server.

5　Click **OK**.

6　Click **OK**.

7　Enter your Username and Password to log into the Spotfire Server.

8　Click **Login**.

　　Response:　You are logged into the Spotfire Server. You should also receive package updates from the deployment in the Test Environment.

　　　　　　Note: You may be prompted to select a **Deployment Area**. See the example in "Example: Multiple Deployment Areas" on page 8.

　　Comment:　Package "updates" may in fact be "downgrades", if the files deployed to the server are older than the installed TIBCO Spotfire. This can be a useful in a situation where an administrator for some reason wants to downgrade all clients. It is however not possible to downgrade to a lower major

version, for example from 5.5 to 5.0, or even to log into a server with a deployment with a lower major version number than the client. For this reason, you must deploy 5.5 packages to the server before you can log into it with a 5.5 client.

If all this seems to work and you wish to copy the deployment to the **Default Deployment Area**, go back to the Administration Console and do the following:

1   In the Administration Console, select the **Deployment** tab.

2   Select the "test" area.

3   Click the **Copy** button.

    <u>Response:</u>   The **Copy Deployment** dialog appears.

4   Select to copy the deployment to the **Default Deployment Area**.

5   Click **OK**.

    <u>Response:</u>   The content of the "test" area is copied to the production area.

Tip: When you receive new updates from TIBCO or from a third-party, deploy these updates to the Test Environment and test them before you copy them to the Production Environment. This way you can test a new deployment without disturbing your Spotfire users.

3.4   Setting Up Users

During Spotfire Server installation and configuration, Spotfire Authentication is set up. Spotfire can authenticate users using either internal authentication (Spotfire Database) or external authentication (LDAP directory or Windows Domain). If internal authentication is used, you can add and delete users and change their passwords using either the Administration Console or the Administration Manager. If external authentication is used, users are imported into the Spotfire Database when they first log in. You cannot remove imported users from within the Spotfire system.

Users can be managed in the Administration Console or in the Administration Manager on the Users tabs in both tools. Refer to their online helps for detailed instructions.

3.5   Setting Up Groups

Spotfire groups are used to organize users. Groups can be synchronized from an external source, such as an LDAP directory or a Windows Domain, or created and managed locally in the Spotfire Database. This is set up during Spotfire Server installation. Synchronized groups cannot be deleted from within the Spotfire system. You can, however, create local Spotfire groups and place imported users and synchronized groups in them. This is important when you set licenses on groups in the next section.

Groups can be managed in the Administration Console or in the Administration Manager on the Groups and Groups and Licenses tabs respectively. Refer to their online helps for detailed instructions.

Roles and Special Groups

In the Spotfire System, there are a number of special groups that are present at installation time and that are not possible to remove. These groups define different roles. Roles can be viewed as different sets of tasks the members of the groups are supposed to and allowed to perform. To assign a role to a user, simply add him or her to one of the special groups listed below. Note that some roles require not only membership in the groups, but also that a certain license is set on the group in question. For more information about licenses, see the next section.

Role	Description
Administrator	Membership in this group grants all permissions described below in addition to administration of preferences, licenses, and user directory. **Important:** This group must have the TIBCO Spotfire License enabled to be able to administer the Spotfire system. **Note:** In version 3.2 and onward, membership in this group also grants Library Administrator permissions.
Library Administrator	Membership in this group grants full permission to the Library, and the permission to import and export Library content. **Important:** This group must have the TIBCO Spotfire Library Administrator License enabled to be able to administer the Library.
Deployment Administrator	Membership of this group grants permission to deploy packages to the server(s). Note that these users can deploy to any area on the server, as well as delete any existing deployment.
Diagnostics Administrator	Membership of this group grants permission to view server logs and diagnostics, as well as to set server logging configurations. It also grants permission to view information in the Web Player diagnostics page. **Note**: The number of logging configurations available can be decided by the server administrator. For more information about this see the **TIBCO Spotfire Server Installation and Configuration Manual**.

Impersonator	Membership of this group grants permission to Impersonate. It is recommended that users that belongs to this group does not have additional privileges. See the **TIBCO Spotfire Server Installation and Configuration Manual** for more information about Impersonation.
Web Player Administrator	Membership in this group grants permission to view Web Player diagnostics and to set up Scheduled Updates tasks.
Scheduled Updates Users	Membership in this group grants permission to perform Scheduled Updates.
Script Author	Membership in this group grants permission to author scripts. The user must also have the **Author Scripts** license in order to author scripts. **Note:** Scripts executed by the Web Player can essentially do anything deployed packages can do. Therefore you should only grant this permission to trusted users.

In addition to the special groups defining roles, there is also one other special group:

Everyone	This group contains all users in the Spotfire system. Thus it is not possible to remove users from it.

3.6 Setting Up Licenses

Spotfire licenses control what features are available to users. Licenses are always configured per group, never on individual users. When a user logs in, only the features enabled to the groups the user belongs to appear in Spotfire. You should apply licenses to groups when you create them. Because groups can belong to groups, licenses are inherited from the parent group.

Example:
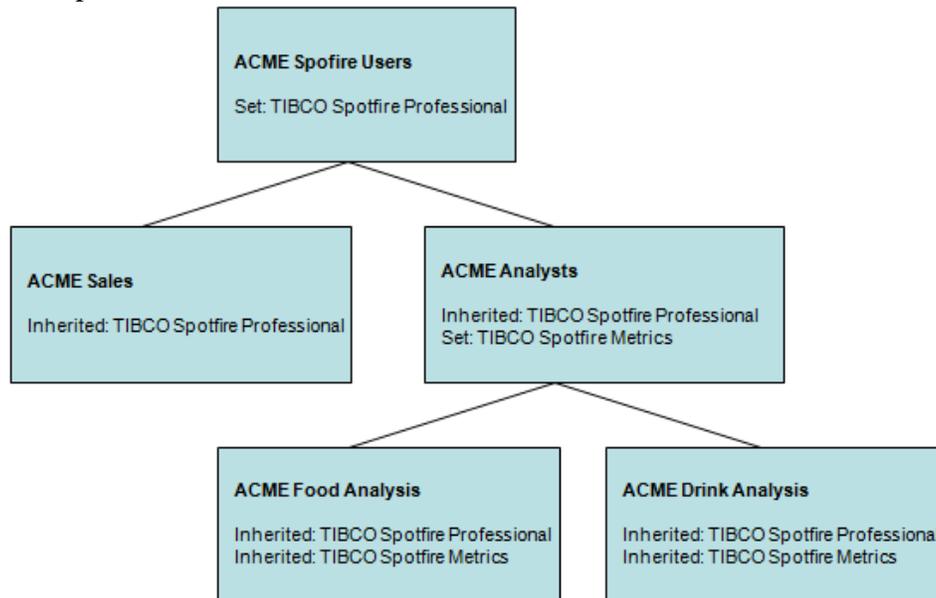
In this example, the license TIBCO Spotfire Professional is set on the group ACME Spotfire Users. This license is then inherited by all groups belonging to the ACME Spotfire Users group, situated below it in this illustration. The license TIBCO Spotfire Metrics is set on the group ACME Analysts and inherited by its child groups, ACME Foold Analysts and ACME Drink Analysts.

When initially setting up Spotfire Licenses, it is a good idea to set licenses as "high up" in the hierarchy as possible, to take full advantage of group inheritance.

Licenses are set on the Groups and Licenses tab in the Administration Manager in the Spotfire client. For detailed instructions on how to use this tool, see its online help.

For a full list of Spotfire licenses, see the section "Spotfire Licenses" on page 18.

3.7 Setting Up Preferences

Spotfire Preferences control the Spotfire experience. It includes which font to use for labels, the default marker shape of scatter plots, and many other things. They are set on groups and inherited just like licenses.

Preferences are set on the Preferences tab in the Administration Manager in the Spotfire client. For detailed instructions on how to use this tool, see its online help.

Note: Users may set preferences in the Spotfire client. Preferences set in the Administration Manager come into effect if a user has not set preferences.

3.8 Setting up Connection to TIBCO Spotfire Statistics Services

TIBCO Spotfire 5.5 provides support for connecting to TIBCO Spotfire Statistics Services. Most settings regarding this are set in the TIBCO Spotfire client. See its online help for more information about this. URLs to Statistics Services servers running S-PLUS or R engines are however also configurable as Spotfire Preferences in the Administration Manager. On the Preferences tab, select the group for which the URLs should be set and then select the tab **Preferences**. Find the **TIBCO Spotfire Statistics Services** in the list and click **Edit**. Enter the URL to the TIBCO Spotfire Statistics Services server running a S-PLUS engine and/or the TIBCO Spotfire Statistics Services server running a R engine. For detailed instructions on how to use the Administration Manager, see its online help.

Concerning R:

R is available under separate open source software license terms and is not part of TIBCO Spotfire. As such, R is not within the scope of your license for TIBCO Spotfire. R is not supported, maintained, or warranted in any way by TIBCO Software Inc. Download and use of R is solely at your own discretion and subject to the free open source license terms applicable to R.

3.9 Setting Up the Spotfire Library

The Library is where users store and share analyses. A Spotfire Admin, or a Library Admin assigned by the Spotfire Admin, should set up the library before the users start storing analyses here. This includes building a folder structure with appropriate permissions for the different groups to read and write to the different folders. By setting "owner" permissions for a certain group to a number of folders, you can delegate responsibility for that part of the Library to a certain group within your organization.

Library Admins

Library Admins are Spotfire users belonging to the special Library Administrator group. Library Admins have sufficient permissons to create folders on the root level of the Library, and also have full access to the entire Library. As a Spotfire Admin, you could make yourself a Library Admin, or delegate this responsibility to others.

Design Guidelines

The key to a successful Library design is structure. How you structure your Library is up to you, but here are a few suggestions:

- By department. This would, for instance, allow all engineers to access the same analyses.
- By project. This would allow all users working in the same project to access the same analyses. Using inheritance, you could allow different sub-projects to access their parent project files, and still restrict sister-projects from reaching each other's material.

- By geography. This would allow, for instance, different offices to have access to different parts of the Library.

It is usually a good idea to have the Library structure reflect the structure of your organization.

4 Spotfire Licenses

4.1 List of all Spotfire 5.5 Licenses and Features

There are ten Spotfire licences in total:

TIBCO Spotfire Clinical	Enables TIBCO Spotfire Clinical.
TIBCO Spotfire Web Player	Enables TIBCO Spotfire Web Player.
TIBCO Spotfire Enterprise Player	Enables TIBCO Spotfire Enterprise Player, a TIBCO Spotfire client running with a subset of all features included in TIBCO Spotfire Professional. For technical reasons, this license is also required to run TIBCO Spotfire Web Player.
TIBCO Spotfire Professional	Enables TIBCO Spotfire Professional, which includes all the standard features in the TIBCO Spotfire client, except the features included in the license TIBCO Spotfire Enterprise Player. It is important that any groups with this license enabled also have the TIBCO Spotfire Enterprise Player enabled.
TIBCO Spotfire Metrics	Enables additional calculation tools.
TIBCO Spotfire Extensions	Enables usage of custom extensions which may be added by developers in your organization. When new custom license features are deployed to the TIBCO Spotfire Server, they will appear under this license.
TIBCO Spotfire Information Modeler	Enables tools and permissions to create and edit database connections for information links.
TIBCO Spotfire Administrator	Enables access to the Administration Manager and the Library Administration tool (the administration tools available within the Spotfire client). **Important:** To administer the Spotfire system, this license is not enough. The user must also be a Spotfire Admin, that is a member of the special Administrator group. If the users needs full access to the Library, he or she must also be a member of the special Library Administrator group.
TIBCO Spotfire Qualification	Enables TIBCO Spotfire Qualification.
TIBCO Spotfire Connectors	Enables users to connect and analyze data in-database.

Each of these licenses consists of a number of license features. These features are listed below, grouped with each license.

TIBCO Spotfire Clinical

Open Oracle Clinical Data	Enables a user to open Oracle Clinical data.
	Note: Sold as a separate license.

TIBCO Spotfre Web Player

TIBCO Spotfire Web Player	License to use the Web Player.
External updates of analysis files in TIBCO Spotfire Web Player	Enables a user to perform updates of analys files through the Web Player Server Updater Service API.

TIBCO Spotfire Enterprise Player

Open File	Enables the File > Open... menu item and makes files available in the list of most recently used files. Without this, a user cannot open files from within Spotfire. (This is mainly used in certain Citrix environments.)
Open from Library	Allows a user to open a file from the Spotfire Library.
Open Linked Data	Allows a user to open an analysis file with linked data.
Save Spotfire Analysis File	Allows a user to save a Spotfire Analysis file. (This specific license feature also enables/disables the "Open in Spotfire" button in the Spotfire Web Player)
Save to Library	Allows a user to save a file to the Spotfire Library.
Export to PowerPoint	Allows a user to export to Microsoft PowerPoint.
Export to PDF	Allows a user to export to PDF
Export Image	Allows a user to export a visualization as an image.
Export Data	Allows a user to export or copy the data used in a visualization.
Print	Allows a user to print visualizations to paper.
Details on Demand	Allows a user to display the Details-on-Demand panel.
Undo/Redo	Allows a user to Undo/Redo actions
Bookmarks	Allows a user to work with bookmarks.
Capture Private Bookmarks	Allows a user to work with private bookmarks.

Capture Private and Public Bookmarks	Allows a user to work with private and public bookmarks.
Change Password	Allows a user to change password.
Share to tibbr®	Allows a user to share visualizations via tibbr®.
Collaboration Panel	Allows a user to use the Collaboration Panel.

TIBCO Spotfire Professional

Open File Data	A user can always open *.dxp files from the Open menu provided the "Open File" license feature is enabled. This license feature enables a user to also open *.sfs, *.sdf,*.txt, *.csv, *.xml, and *.xls files, and to paste data from the clipboard.
Open Database Data	Allows a user to open data from databases.
Open Information Links	Allows a user to open data from Information Links.
Open Custom Made File	Allows a user to open custom made files.
Replace Data	Enables the File > Replace Data Table... menu item. The available submenu alternatives

are determined by the four "Open..." license functions above. |
| **Merge Data** | Allows a user to insert and merge additional data to an open analysis. This is done

from the Replace Data Table and Insert Column/Rows options. |
Insert New Column	Allows a user to insert a new column of data to an open analysis.
Manage Data Tables	Allows a user to add and work with more than one data table in an analysis
Load Data on Demand	Allows a user to load data from information links on demand.
Create Information Link	Allows a user to create a new information link using predefined elements.
Create Page	Allows a user to create a new Page.
Create Table	Allows a user to create a new Table visualization.
Create Graphical Table	Allows a user to create a new Graphical Table visualization.

Create Cross Table	Allows a user to create a new Cross Table visualization.
Create Bar Chart	Allows a user to create a new Bar Chart visualization.
Create Line Chart	Allows a user to create a new Line Chart visualization.
Create Combination Chart	Allows a user to create a new Combination Chart visualization.
Create Pie Chart	Allows a user to create a new Pie Chart visualization.
Create Scatter Plot	Allows a user to create a new Scatter Plot visualization.
Create 3D Scatter Plot	Allows a user to create a new 3D Scatter Plot visualization.
Create Map Chart	Allows a user to create a new Map Chart visualization.
Create Treemap	Allows a user to create a new Treemap visualization.
Create Heat Map	Allows a user to create a new Heat Map visualization.
Create Parallel Plot	Allows a user to create a new Parallel Coordinate Plot visualization.
Create Summary Table	Allows a user to create a new Summary Table visualization.
Create Text Area	Allows a user to create a new Text Area.
Action Links	Allows a user to create Action Links.
Change Column Selector	Allows a user to interact with column selectors and data table selectors in a visualization. It also allows a user to adjust binning sliders and hierarchy sliders, and to alter the order of multiple columns on an axis.
Simple Visualization Properties	Allows a user to change plot properties using the axis selectors, or to drag and drop columns from other visualizations or the Filter Panel. (This license feature also enables everything in the Change Column Selector license feature.)
Advanced Visualization Properties	Allows a user to change all plot properties via the Visualization Properties dialog. (This license feature also enables everything in the Change Column Selector and Simple Visualization Properties license feature.)
Error Bars	Allows a user to display error bars in a visualization.

Simple Filter Panel Properties	Allows a user to change filter type.
Advanced Filter Panel Properties	Allows a user to hide, move and group filters, and access the Filtering Scheme Properties dialog and Organize Filters dialog.
Simple Data Properties	Grants access to the Edit > Column Properties dialog.
Advanced Data Properties	Enables additional functionality in the Column Properties dialog, such as, Details, Edit, Freeze Columns, Insert, Column Properties, Sort Order and Hierarchies.
Advanced Document Properties	Grants access to the Edit > Document Properties dialog, the Tools > Options dialog and also allows the user to assign a filtering scheme to a page.
Tags	Allows a user to work with Tags.
Use Custom Made Tools	Allows a user to open custom made tools.
Change Exportability for Web Player Table Data	Allows a user to specify whether the data in a Table, Summary Table or Cross Table, should be able to be exported if the analysis is opened in the Spotfire Web Player. If disabled, a default value or preference will determine if the data in the table can be exported from the Web Player. Set these preferences from the Preferences tab.
Lists	Allows a user to work with Lists.
Load Data from ActiveSpaces	Allows a user to load data from TIBCO ActiveSpaces.

TIBCO Spotfire Metrics

Create Box Plot	Allows a user to create a new Box Plot visualization.
Advanced Aggregation Methods	Provides more aggregation methods in addition to the standard Sum, Average, Count and Unique Count.
Custom Expressions	Grants access to the Custom Expressions option on the column selectors.
Set Column From Marked	Grants access to the Column from Marked option on the column selectors.
Line Similarity	Grants access to the Line Similarity tool.
K-Means Clustering	Grants access to the K-Means Clustering tool.
Hierarchical Clustering	Allows a user to use hierarchical clustering.

Data Relationships	Grants access to the Data Relationships tool.
Curve Draw	Allows a user to add a curve to a visualization by entering an expression for the curve.
Curve From Data Table	Allows a user to add a curve to a visualization by importing it from a data table.
Straight Line	Allows a user to add a Straight Line Fit to visualizations.
Polynomial Curve	Allows a user to add a Polynomial Curve to visualizations.
Logistic Regression Curve	Allows a user to add a Logistic Regression Curve to visualizations.
Power Curve	Allows a user to add a Power Curve to visualizations.
Gaussian Curve	Allows a user to add a Gaussian Curve to visualizations.
Logarithmic Curve	Allows a user to add a Logarithmic Curve to visualizations.
Exponential Curve	Allows a user to add a Exponential Curve to visualizations.
Register Data Functions	Allows a user to register data functions.
Execute Data Functions	Allows a user to execute data functions. **Note:** If you do not grant this license, you should NOT grant licenses for **Enable Local TERR Engine**, **Predictive Modeling**, or **Insert Predicted Columns**.

Enable Local TERR Engine	Allows a user to specify that an analysis (during authoring or deployment) uses a local instance of the TIBCO Enterprise Runtime for R engine (rather than running on the available TIBCO Enterprise Runtime for R engine in Spotfire Statistics Services).
	TIBCO Enterprise Runtime for R for Spotfire data functions (enabled through the **Register Data Functions** and **Execute Data Functions** licences) require access to a TIBCO Spotfire Statistics Services configured with a TIBCO Enterprise Runtime for R engine, even if users should be allowed to use the local engine.
	If this license is not granted, then all TIBCO Enterprise Runtime for R for Spotfire data functions are executed using the TIBCO Enterprise Runtime for R engine available on TIBCO Spotfire Statistics Services, regardless of the **Use locally installed Enterprise Runtime for R** setting in the **Tools > Options - Data Functions** dialog.
	If this license is granted, the engine choice is determined by the state of the **Use locally installed Enterprise Runtime for R** check box in the **Tools > Options - Data Functions** dialog.
	If this license is not granted, you should not grant licenses for **Predictive Modeling** and **Insert Predicted Columns**; otherwise, users might encounter irregularities.

Predictive Modeling	Allows a user to create, edit and manage Regression and Classification Models.
	If this license is not granted, the **Regression Modeling** and **Classification Modeling** menu items will not appear.
	Even if a user lacks this license, any existing analyses containing results from the predictive modeling tools will continue to function and update based on the data as necessary. (That is, the underlying data functions continue to work.)
	If this license is granted, you should also grant licenses for **Execute Data Functions** and **Enable Local TERR Engine**.
Insert Predicted Column	Allows a user to use a predictive model in an analysis to add predicted columns to a data table.
	If this license is not granted, the **Predicted Columns** menu item under **Insert** will not appear.
	Even if a user lacks this license, any existing analyses containing predicted columns will continue to function and update based on the data as necessary. (That is, the underlying data functions continue to work.)
	If this license is granted, you should also grant licenses for **Execute Data Functions** and **Enable Local TERR Engine**.

TIBCO Spotfire Extensions

Access to Extensions	This license enables users to view and use custom extensions which may be added by developers at your company. When new custom license features are deployed on the Spotfire Server, they will appear under this license. You can then enable or disable each individual license feature if you wish.
Accord	Allows a user to use the Accord tool.
Author Scripts	Allows a user to author scripts. The user must also be a member of the **Script Author** group in order to author scripts.
	Note: Scripts executed by the Web Player can essentially do anything deployed packages can do. Therefore you should only grant this permission to trusted users.
Automation Services Job Builder Tool	Gives a user access to the Automation Services Job Builder tool.

ChemDraw	Allows a user to use the ChemDraw tool.
ChemIQ	Allows a user to use the ChemIQ tool.
ChemistryViewer	Allows a user to use the ChemistryViewer tool.
ExportToSDF	Allows a user to use the ExportToSDF tool.
Marvin	Allows a user to use the Marvin tool.
Qualification Compare Tool	Allows a user to use Qualification Compare.
Qualification Export Tool	Allows a user to use Qualification Export.
SDFParser	Allows a user to use the SDFParser tool.
StructureSearch	Allows a user to use the StructureSearch tool.
Symyx® Draw (MDL)	Allows a user to use the Symyx® Draw (MDL) tool.

TIBCO Spotfire Information Modeler

Administration	Allows a user to modify data sources, joins and other elements when working with Information Links. Note: The user must also have the Create Information Link feature enabled, to access the tool itself.
Prompt for Parameter	**Note:** The user must also have the Create Information Link feature enabled, to access the tool itself.

TIBCO Spotfire Administrator

Administration	Note: The user must also have the Create Information Link feature enabled, to access the tool itself.
Library Administration	Grants access to the Library Administration tool and its functionality.

TIBCO Spotfire Qualification

TIBCO Spotfire Qualification	Allows users to verify that analyses in TIBCO Spotfire yields the same results on different installations of TIBCO Spotfire. **Note**: Sold as a separate license.

TIBCO Spotfire Connectors

ADS Composite Information Server	Allows a user to add connections to ADS Composite Information Server and analyze data in-database. **Note**: This is an additional connector that can be deployed on the server. It is not embedded in the standard Spotfire distribution.
IBM Netezza	Allows a user to add connections to IBM® Netezza® and analyze data in-database. **Note**: This is an additional connector that can be deployed on the server. It is not embedded in the standard Spotfire distribution.
Microsoft SQL Server	Allows a user to add connections to Microsoft® SQL Server® and analyze data in-database.
Microsoft SQL Server Analysis Services	Allows a user to add connections to Microsoft® SQL Server® Analysis Services and analyze data in-database.
Oracle	Allows a user to add connections to Oracle® and analyze data in-database.
Oracle MySQL	Allows a user to add connections to Oracle® MySQL and analyze data in-database. **Note**: This is an additional connector that can be deployed on the server. It is not embedded in the standard Spotfire distribution.
PostgreSQL	Allows a user to add connections to PostgreSQL® and analyze data in-database. **Note**: This is an additional connector that can be deployed on the server. It is not embedded in the standard Spotfire distribution.
SAP BW	Allows a user to add connections to SAP® Business Information Warehouse (SAP BW) and analyze data in-database. **Note**: This is an additional connector that can be deployed on the server. It is not embedded in the standard Spotfire distribution.
Teradata	Allows a user to add connections to Teradata® and analyze data in-database.