



SpiraTeam® Administration Guide

Version 4.0

Inflectra Corporation

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1. Introduction

SpiraTeam® is an integrated Application Lifecycle Management (ALM) system that manages your project's requirements, releases, test cases, issues and tasks in one unified environment:

SpiraTeam® contains all of the features provided by SpiraTest® - our highly acclaimed quality assurance system and SpiraPlan® - our agile-enabled project management solution. With integrated customizable dashboards of key project information, SpiraTeam® allows you to take control of your entire project lifecycle and synchronize the hitherto separate worlds of development and testing.

This administration guide outlines how to setup a working installation of either SpiraTeam®, SpiraTest® or SpiraPlan®, and how to perform routine administrative tasks.

It assumes a basic understanding of how to setup and administer a Windows 2003 Server®, Windows 2008 Server®, Windows XP® workstation or Windows Vista® workstation, and also assumes that you have access to a valid Administrator level account.

For information on how to use the features of SpiraTeam®, SpiraTest® or SpiraPlan®, please refer to the *SpiraTeam® User Manual* instead.

2. Installing SpiraTeam®

This section outlines how to prepare your system for installation of SpiraTeam®, how to actually install the software using the provided installation package, and finally how to ensure that your web-server is correctly configured to ensure secure operation.

The first sub-section will outline what hardware and software configurations are supported and the exact installation sequence for the different versions of Windows Server. The second sub-section will explain how to load the SpiraTeam® software onto the server, and discuss common problems and solutions.

The minimum hardware and software requirements for running the SpiraTeam® system are:

Server Requirements	
Requirement	Minimum Specification
Processor:	Intel® or AMD® x86 or x64 compatible processor
Memory:	2 GB, 4 GB recommended
Operating System:	Windows Server 2012 (recommended) Windows Server 2008 R1 & R2 (recommended) Windows Server 2003 R1 & R2 Windows 8, 7, Vista, XP Professional* (for demoing)
Service Packs:	Windows Server 2003 SP2
Database:	Microsoft SQL Server 2012 Microsoft SQL Server 2012 Express Edition Microsoft SQL Server 2008 Microsoft SQL Server 2008 Express Edition Microsoft SQL Server 2005 Microsoft SQL Server 2005 Express Edition
Web Server:	Internet Information Services (IIS) 5.1 or higher ASP.NET Web Extensions 4.0 or higher
Client Requirements	
Requirement	Minimum Specification
Web Browser:	Internet Explorer 7.0+ Mozilla Firefox 3.0+ Google Chrome (Desktop and Android) Apple Safari 3.0 (Desktop and iOS) Opera 9.0+
Other Components:	Microsoft Excel 2003+ (optional) Microsoft Word 2003+ (optional) Microsoft Project 2003+ (optional) Java Plug-In 1.6 (for screenshot capture applet)

*Note that SpiraTeam® can be loaded onto either Windows Server or Professional editions, provided that the IIS web-server is installed and that SQL Server is available as a database engine. However Windows Vista (except Ultimate edition) and Windows XP Professional can only support a maximum of 5

concurrent user web sessions. In general unless there are only going to be a couple of client machines hitting the server, we recommend using Windows Server 2008 or 2012.

2.1. System Prerequisites

Assuming that you have already installed the appropriate version of Microsoft Windows onto your computer (or that has been pre-installed for you), you need to then make sure that the various prerequisites have been correctly added to your installation before trying to install SpiraTeam®. The SpiraTeam® installer will check to ensure that the various prerequisites are in place, and will abort the installation if any are missing, indicating to you what action needs to be taken.

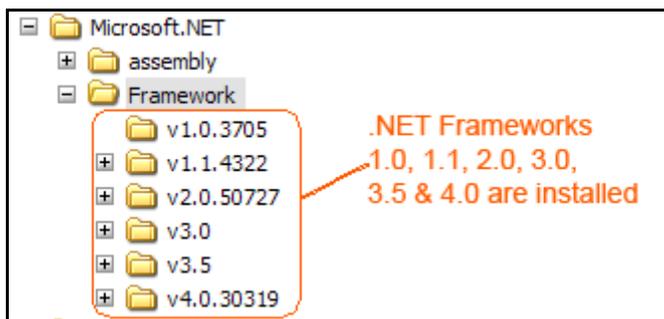
We recommend that you install / configure the prerequisites in the following order:

- Install the .NET Framework v4.0
- Install SQL Server 2012, 2008 or 2005
- Install the latest version of Internet Explorer that your server OS allows
- Ensure that IIS is installed
- Ensure that ASP.NET 4.0 is enabled

2.1.1. Install the .NET Framework v4.0

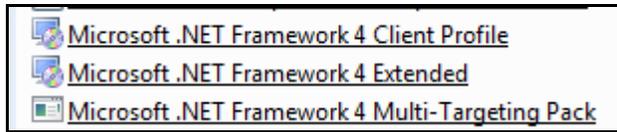
On Windows Server 2008 and 2012 installations as well as on Windows 8, 7, and Vista installations, Microsoft .NET Framework v4.0 is usually installed as part of the factory configuration, whereas on earlier operating systems, you might need to manually add the .NET 4.0 components to the factory configuration.

To see which version of the Microsoft .NET framework installed, open up Windows Explorer® and navigate to C:\WINDOWS\Microsoft.NET\Framework and then the subfolders listed will indicate which version(s) of the framework you have installed:



To install the .NET Framework, launch Internet Explorer and enter the URL: <https://www.inflectra.com/CustomerArea>. Once you have logged-in to the customer area, under the “My Downloads” section there will be hyperlinks to download and install the appropriate version of the .NET Framework (version 4.0 at time of writing). Click on the option to download and install the .NET Framework, and follow the instructions provided. Once you have completed the install, verify that the installation was successful by looking in the “Administrative Tools” folder as illustrated above. You also need to make sure that .NET 4.0 has been installed if necessary.

Please make sure that the **Full .NET 4.0 Framework** is installed and not just the **.NET 4.0 Client Profile**. You can check which is installed by going to Start > Control Panel > Programs & Features and then looking for the different .NET 4.0 Framework components that are installed:



If you only see the “Microsoft .NET Framework 4 Client Profile” and not the “Microsoft .NET Framework 4 Extended”, then you need to install the additional .NET 4.0 components that are needed for server-based applications such as SpiraTeam to run.

2.1.2. Install SQL Server 2012, 2008 or 2005

Install the appropriate version of the database software, following the instructions provided with the installation. We recommend SQL Server 2012 / 2008® Express Edition® for most users. This free version of SQL Server will offer sufficient performance for most installations and can be easily downloaded from either the customer area of our website (<http://www.inflectra.com/CustomerArea>) or directly from the Microsoft® web-site at <http://www.microsoft.com/express/sql>.

2.1.3. Install Internet Explorer

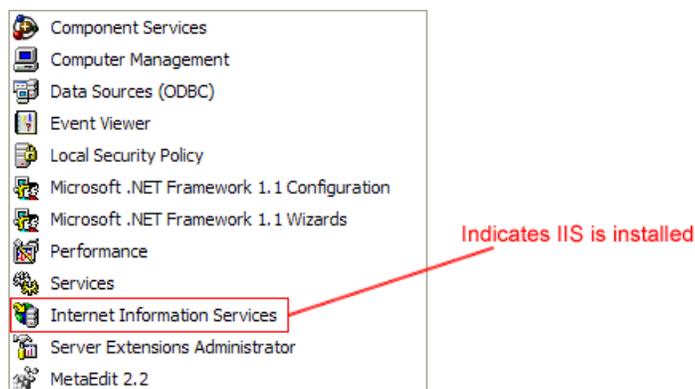
Install the latest version of the Internet Explorer web browser that is supported by your version of Windows. You are free to use Internet Explorer, Mozilla Firefox, Apple Safari, Google Chrome or Opera with SpiraTeam®. Other browsers (Netscape, Konqueror, etc.) may work with SpiraTeam®, but they have not been exhaustively tested for compatibility by Inflectra®.

2.1.4. Ensure that IIS is installed

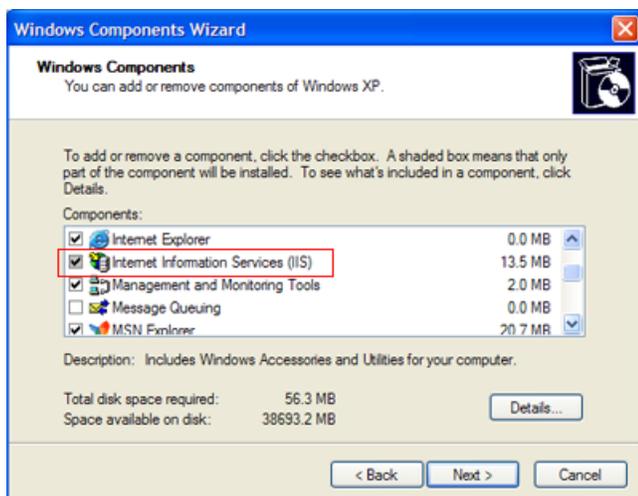
On Windows Server installations, IIS is usually installed as part of the factory configuration, whereas on Windows Vista and XP installations, you typically need to manually add the components to the factory configuration. The steps that you need to take to verify its installation are listed below for each operating system:

a) Windows XP or 2003 Server

To check if you have IIS installed, click Start > Control Panel > Administrative Tools. Under the “Administrative Tools folder”, you should see an icon for “Internet Information Services”. If you don’t see this icon, then it means that you need to add IIS to your computer:



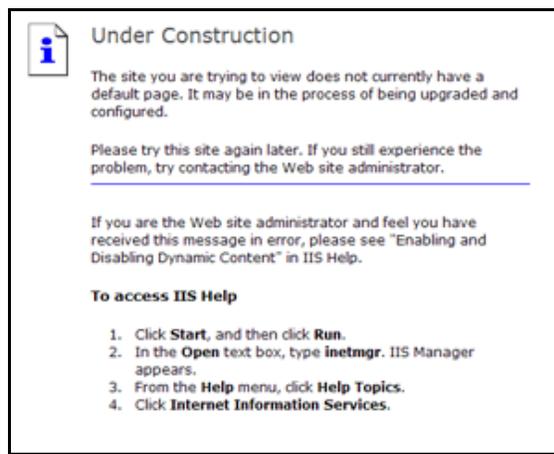
To install IIS, you need to click Start > Control Panel > Add or Remove Programs, then choose the option to “Add / Remove Windows Components” as illustrated below:



Check the box marked either “**Internet Information Services (IIS)**” or “**Application Server**”, and click the <Next> button to install the missing Windows components. Once the installation has completed, IIS will now be installed on your system. To verify that this is the case, type <http://localhost> into the address bar of Internet Explorer on your computer. You should see a screen displaying the initial IIS startup page:



Windows XP IIS Default Page



Windows 2003 Server IIS Default Page

If you don't see this page, but instead see an IIS error page (e.g. Internal Server Error 500), please refer to *Appendix A – Troubleshooting IIS* to fix your IIS installation before following the rest of this installation guide.

On Windows 2003 Server you may also need to go into the Web Service Extensions folder and make sure that ASP.NET 4.0 is marked as 'Allowed'. If you receive an HTTP 404 (Page Not Found) error when running SpiraTeam® then it usually means that ASP.NET 4.0 is marked as Prohibited.

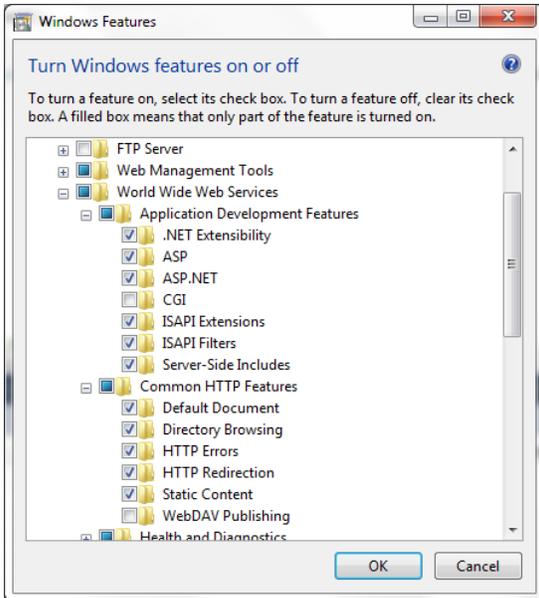
b) Windows Vista or 2008 Server

To check if you have IIS installed, click Start > Control Panel > Administrative Tools. Under the “Administrative Tools folder”, you should see an icon for “Internet Information Services (IIS) Manager”. If you don't see this icon, then it means that you need to add IIS to your computer:

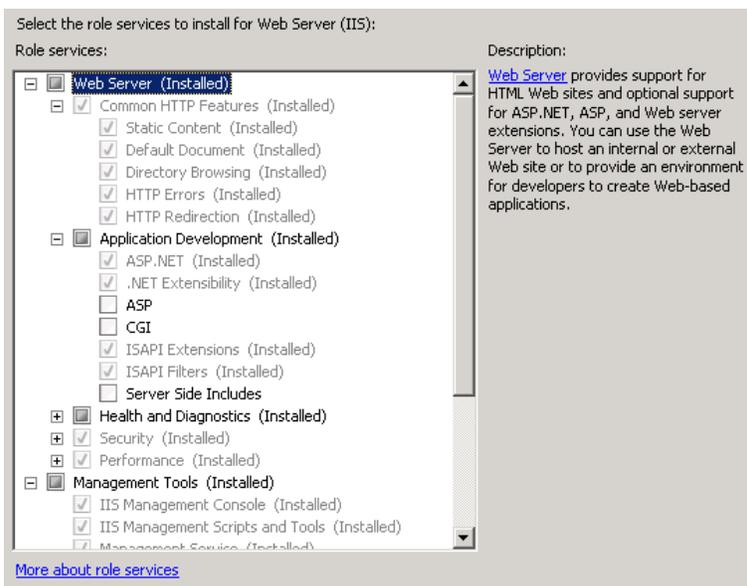


Indicates that IIS is installed

On **Windows 8, 7 or Vista**, to install IIS, you need to click Start > Control Panel > Programs and Features, then choose the option to “Turn Windows features on or off”. This will bring up the list of features and roles that can be configured on the server:



On **Windows Server 2012 or 2008**, you need to click on Server Manager, then under the “Roles” heading, choose the option to “Add Role” followed by selecting the new role “Web Server / IIS”. Then click “Next” to bring up the role configuration screen:



Make sure that the following features are enabled:

- Common HTTP Features
 - ▷ Static Content
 - ▷ Default Document
 - ▷ HTTP Errors
 - ▷ HTTP Redirection
- Application Development
 - ▷ ASP.NET
 - ▷ .NET Extensibility
 - ▷ ISAPI Extensions
 - ▷ ISAPI Filters
- Management Tools
 - ▷ IIS Management Console
 - ▷ IIS Management Service

To verify that this IIS is now installed, type <http://localhost> into the address bar of Internet Explorer on your computer. You should see a screen displaying the initial IIS startup page:

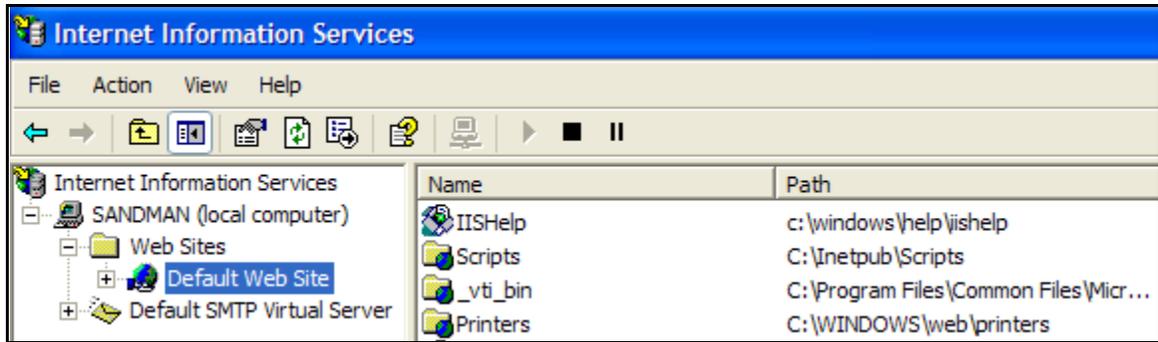


2.1.5. Ensure that ASP.NET is installed

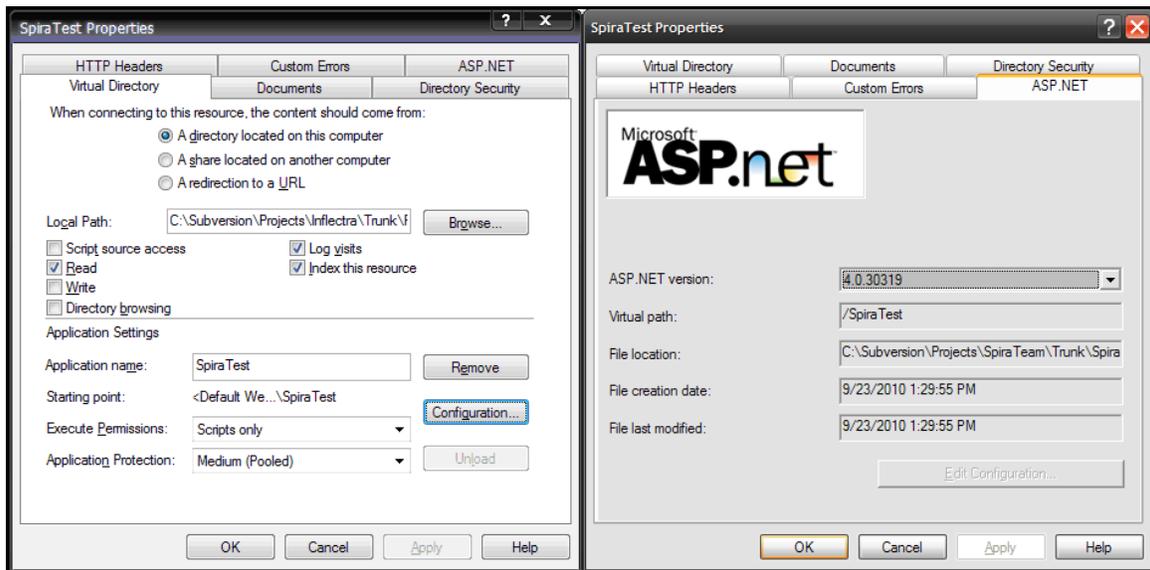
Now that you have both IIS and .NET installed, you need to make sure that the Active Server Pages (ASP.NET) components that allow IIS to access the .NET framework have been correctly configured. If you installed .NET *after* IIS then ASP.NET is typically configured for you, but if you installed IIS afterwards, then further manual steps may be necessary. The settings are different depending on which version of Windows you are using:

a) Windows XP or 2003 Server

To verify that ASP.NET has been correctly configured, click on Start > Control Panel > Administrative Tools > Internet Information Services to launch the IIS administrative console:

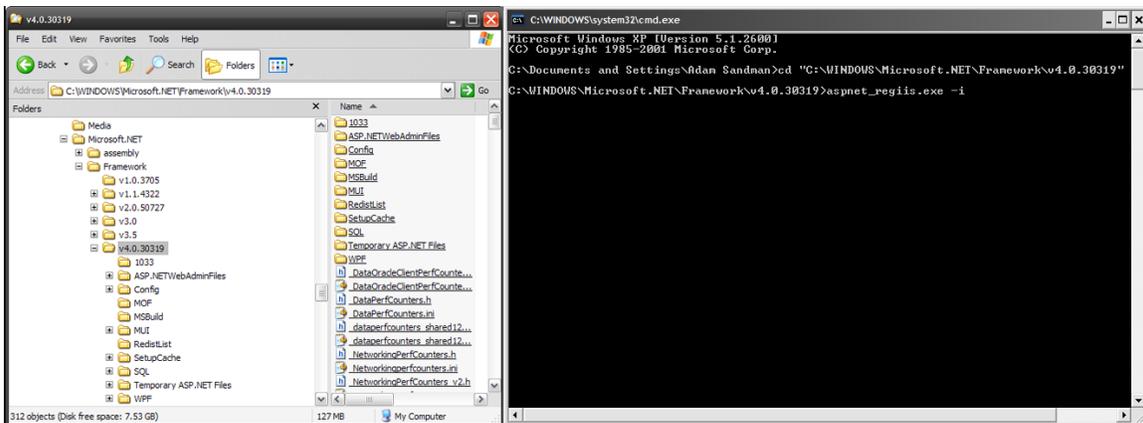


Expand the name of the web-server (marked as local computer), expand the "Web Sites" folder, right-click on "Default Web Site" and choose the "Properties" link. This will bring up the IIS configuration dialog-box with the 'Virtual Directory' tab highlighted. Then click on the 'ASP.NET' tab if it is listed:



If ASP.NET 4.0 is correctly configured you will see the ASP.NET tab, and it will list the ASP.NET version as being '4.0.30319' as illustrated above. If you don't see this tab, you either don't have ASP.NET configured, or you have an earlier version of ASP.NET (v1.1 or v2.0) configured.

To configure ASP.NET 4.0 for an existing IIS website, you need to open up Windows Explorer and navigate to the folder containing the .NET Framework. So, for example, if you have .NET Framework v4.0 installed, you would navigate to **C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319**. Now, you need to open up a Windows command prompt by clicking Start > Programs > Accessories > Command Prompt. This will open up the command prompt window:

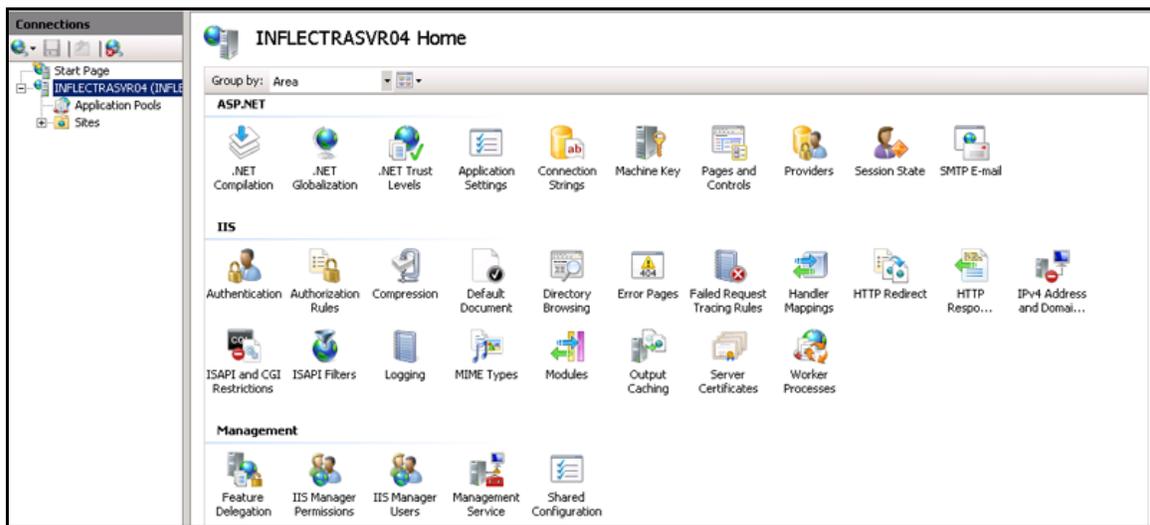


Now change the directory in the command window to the folder name in windows explorer (i.e. type **cd C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319** where the version number matches the version number of the framework you have installed). Once you have changed the directory to the appropriate folder, simply type **aspnet_regiis.exe -i** to configure ASP.NET. You can now verify that ASP.NET has been installed by checking the IIS management console (as described above).

For 64-bit versions of Windows, please use C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319

b) Windows Vista, 7 or 2008 Server

To verify that ASP.NET has been correctly configured, click on Start > Control Panel > Administrative Tools > Internet Information Services (IIS) Manager to launch the IIS administrative console:



You should see a section called “ASP.NET” occupying the top third of the IIS screen. If not, then you need to go back to section 2.1.3 and make sure that you chose the option to install ASP.NET when installing IIS.

2.2. Installing the Software

Now that all the prerequisites have been correctly installed, you are now ready to install SpiraTeam® onto your system. To perform the installation, you will need the installation package downloaded from the Inflectra® website, the name of the organization that the software is licensed to, and the actual license key code which will be available in the customer area of the Inflectra® website.

To start the installation, double-click on the SpiraTeam® installation package (it will have a filename of the form SpiraTestPlanTeam-vX.X.X.X.msi), and the Windows Installer will display the following dialog box:

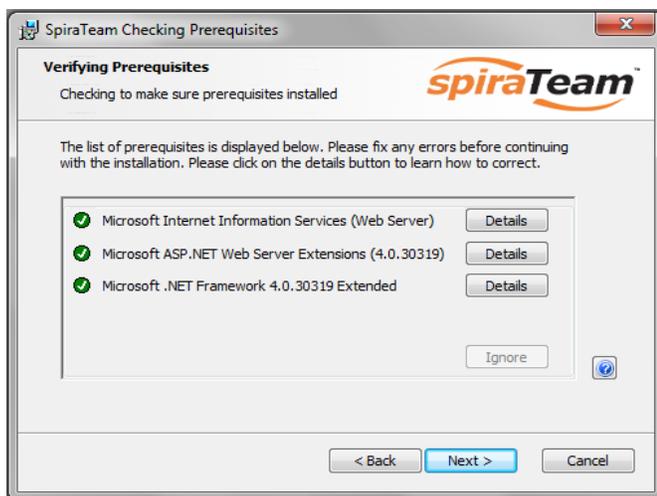


If you are upgrading from an earlier version of SpiraTeam®, the dialog box will be similar except that it will instead let you know that you are upgrading from an earlier version to the current one:



In this instance the installer will update the program files on your computer and migrate your data into the new version seamlessly. If for any reason you **don't see the upgrade message** and you have an existing installation, don't continue, but instead **contact Inflectra® customer support first**. This will ensure that your existing data is not overwritten by a clean install.

In either case, click the <Next> button to start the installation wizard which will gather information from you regarding how you want to setup the system, before actually installing the web-server files and database components. The next page of the installation wizard will display a list of all the required pre-requisites and whether the installer could find them or not:



If any of the prerequisites were not correctly installed, the installer will display a red cross icon next to the missing component(s). If this happens, please refer to section 2.1 for installation of any prerequisites. If for any reason you have the prerequisite installed but the installer was not able to find it (this can occasionally happen on certain environments), click the <Ignore> button to proceed with the installation.

Once the prerequisites have been correctly installed, clicking <Next> will bring you to the next page in the installation wizard:



The next screen in the installation wizard outlines the SpiraTeam® End User License Agreement (EULA). Please read this carefully as it describes the legal contract between you – the user of the software – and Inflectra® Corporation, the developer and publisher. Once you have read the agreement and understood your rights and obligations, select the radio button marked “I accept the terms in the License Agreement” and click the <Next> button.

The following screen will be displayed:



You need to choose the product that you will be installing – SpiraTest®, SpiraPlan® or SpiraTeam®. This is important because the license key for each product is different.

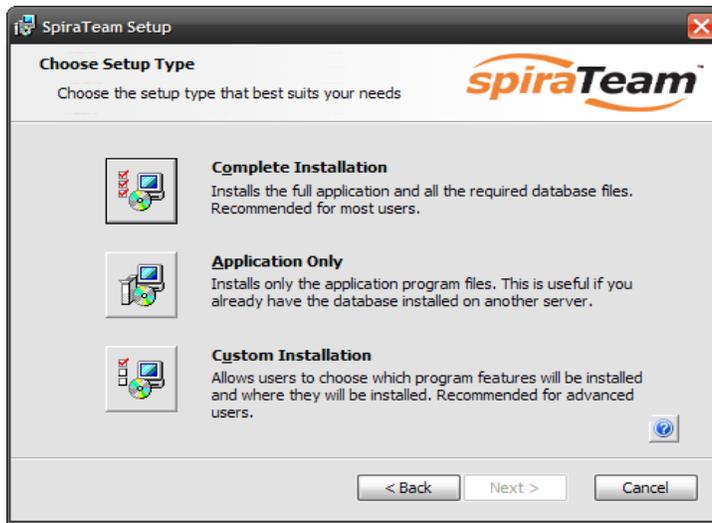
Once you have chosen the product, the following screen will be displayed:



You need to enter your full name, the **organization that was issued the software license**, and finally the full hexadecimal license key that was provided with the software. Once you click <Next>, the installer will verify that all three were entered, and that the license key matches the product being installed and that it matches the organization name. The installer will warn you of any discrepancies, but will allow you to proceed; however after installation, the system will not operate until a correct license key is entered.

If for any reason you are unable to get the provided license key to work, please contact Inflectra® customer support immediately and they will resolve the issue.

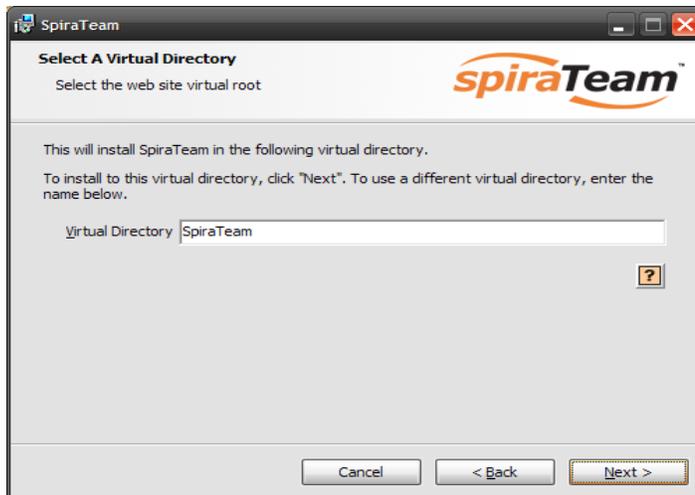
After clicking <Next>, you will be given the choice of installation to perform:



By default, the installer will install all of the SpiraTeam® features onto the target system, so we recommend choosing “Complete Installation”, which will both install the complete system – application and database. For advanced users who want to change the folder to which the system is installed (by default it is C:\Program Files\SpiraTeam), change the name of the database created (by default it will be SpiraTeam) or to prevent the installation of the optional web-services data integration modules, you can choose the “Custom Installation” option, which allows you to change those settings prior to installation.

The “Application Only” installation is useful when you need to move the application to a different server, but want to leave the database installed on the same server. In this case you can use the “Application Only” installation on the new server, and once the installation is completed, change the name of the database pointed to in the “Web.Config” file to the existing database server.

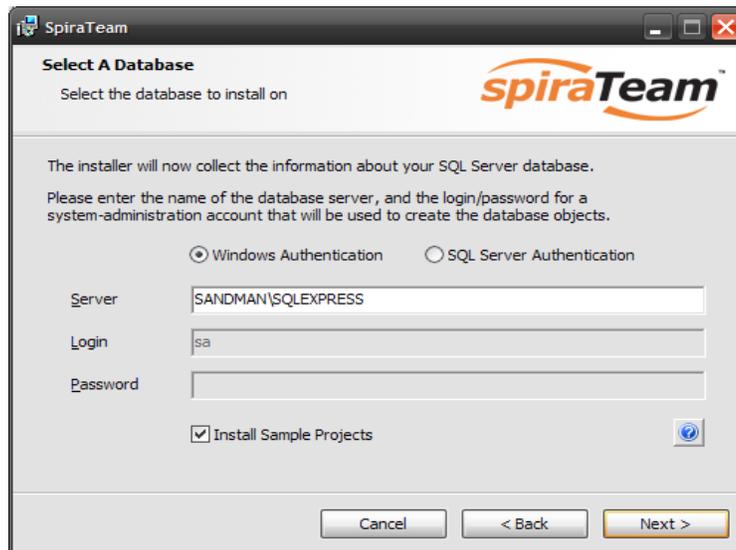
This manual assumes that the “Complete Installation” option is chosen, in which case the following screen is displayed:



This screen allows you to change the name of the web-site URL that will be user to access the system. By default, users would need to type into their browsers: <http://<server name>/SpiraTeam>. Should you want to have a different name – other than SpiraTeam – change the name in the Virtual Directory box,

otherwise simply accept the default name and click <Next>. Note: The installer will check to make sure that the name you have chosen is not already in use, and will warn you if it is.

Upon clicking <Next>, you will be taken the database connection screen:



You can connect to the SQL Server database using either Windows Authentication or SQL Server Authentication, and the process is slightly different for each mode:

2.2.1. Windows Authentication

This is the easiest option when the application and database will be residing on the *same* server. In this case, choose the “Windows Authentication” option and the Login/Password boxes will be disabled. In this case, the installer will connect to the database using your current Windows login to create the application database objects, and SpiraTeam® will connect to the database during normal operation using either the ASPNET or NETWORK SERVICE Windows accounts (it depends on the version of the operating system).

2.2.2. SQL Server Authentication

This is the easiest option when the application and databases will be residing on *different* servers across the network. In this case, choose “SQL Server Authentication” and provide a SQL Server Login that has Database Owner (DB-Owner) permissions – e.g. the built in System Administrator (SA) account. The installer will use this DB-Owner account to create the database objects, and SpiraTeam® will use a special login (called SpiraTeam by default) for normal application operations.

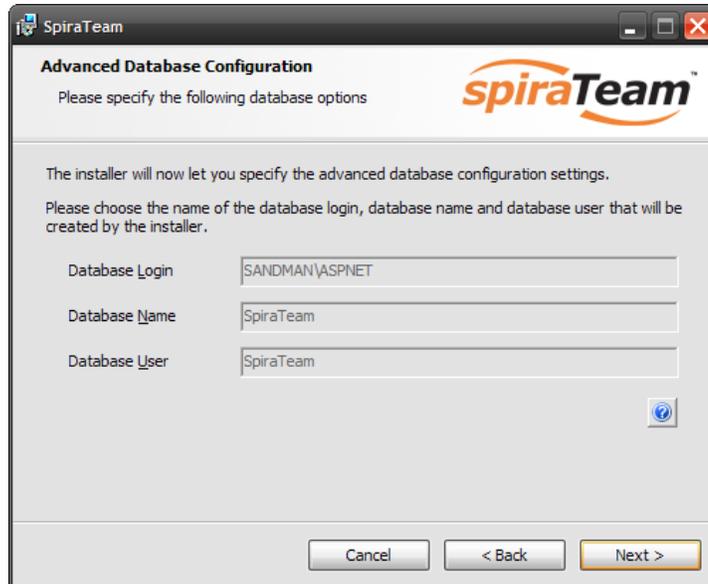
2.2.3. For Either Mode

In the “Server” box, you need to enter the name of the Microsoft SQL Server instance that is running on your system; the installer will default it to the hostname of the server (which in many cases will be correct). The easiest way to find out the database server name is to open up the SQL Server Administrative console (typically by clicking Start > Programs > Microsoft SQL Server > Enterprise Manager) and look for the name of the server.

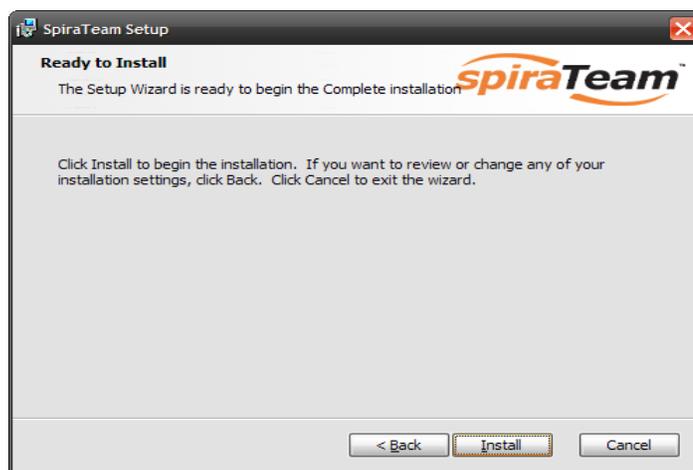
For SQL Server 2005/2008 Express edition installations, the Server name is usually the name of your computer followed by “\SQLEXPRESS”, so for example, if your computer is called MyComputer, the server name would be MyComputer\SQLEXPRESS. Omitting the second part (called the instance name) would lead to a “host not found” error.

You can also choose whether to install the sample projects or not – typically we recommend installing the sample projects for evaluation installations and excluding them for production installs.

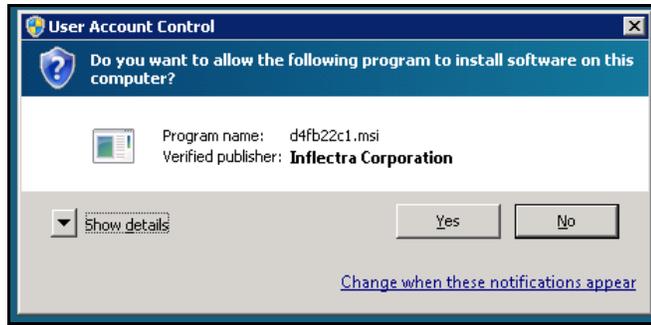
Once you have entered the various pieces of information, click <Next>. The installer will attempt to connect to the database using the provided information, and it will display an error message if any of the information is incorrect. Assuming the information is correct, the following screen will be displayed:



This page lets you customize the name of the database login, database name and database user that the application will create. If you chose the "Custom Installation", then the fields will be editable, otherwise they will be read-only. Also if you chose "Windows Authentication" then the Database Login field will be set to the built-in Windows account associated with ASP.NET for the specific operating system being installed on (and cannot be changed). Once you have reviewed this page and made any changes, you should click <Next> to proceed:

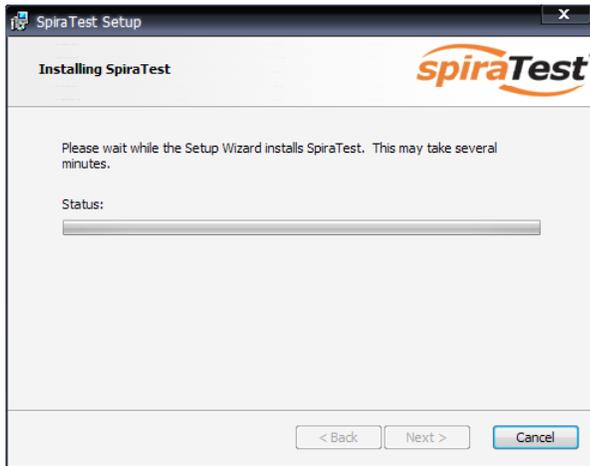


Click the **<Install>** button to actually begin the process of installing SpiraTeam® onto your system. If you are installing SpiraTeam® onto a version of Windows that has the **User Access Control (UAC)** enabled, then you will first be prompted to confirm that you want to install a new piece of software. Click the option that confirms you want to proceed with the install:



Click the “Yes” button to confirm that you want to install the software package.

The installer will then display a progress bar that gradually fills as the installation proceeds:



Once the installation is complete, the following message will be displayed:



Click the <Finish> button to complete the installation.

Congratulations! You have successfully installed SpiraTeam® onto your system. If you type <http://localhost/SpiraTeam> into your browser you should see the SpiraTeam® login page, as illustrated in the *SpiraTeam® User Manual*. If for any reason you don't see the login page, please refer to *Appendix A – Troubleshooting IIS* or contact Inflectra® Technical Support using one of the methods described at our website <http://www.inflectra.com/Support>.

2.3. Security Considerations

The Microsoft Internet Information Services (IIS) web-server and SQL Server database are powerful tools to managing web-based applications. However it is important to make sure that they are correctly secured to prevent unauthorized access to applications being hosted on them. This is a fast changing field and beyond the scope of this guide to address, however we recommend reading the following article for details on how to secure IIS:

http://www.windowsecurity.com/articles/Installing_Securing_IIS_Servers_Part1.html

In addition to the steps outlined in this article, it is important to note that by default, all web pages served by IIS using the HTTP protocol are unencrypted, and as such, the usernames and passwords used by SpiraTeam® to log into the application can be read by network sniffing tools. If you are using SpiraTeam® purely within an intranet environment, this may not be an issue. However if you are externally hosting SpiraTeam® onto a publicly accessible website, we recommend installing a Secure Sockets Layer (SSL) encryption certificate, and restricting all web-traffic to the secure HTTPS protocol instead. For details on how to perform this task, please refer to *Appendix B - Installing an SSL Certificate*.

3. System Administration

Now that you have successfully installed SpiraTeam®, this section of the guide outlines how to perform the typical system-wide administrative tasks necessary for setting up projects in the system, managing users and verifying the license information. To perform these tasks, you need to login to the system with a username that has “System Administration” permissions. The special “Administrator” username is created by the installer for this very purpose. You should initially login to SpiraTeam® with the username `administrator`, and the password `PleaseChange`. It is recommend that this password be changed as soon as possible to something that is secure yet memorable by clicking on the “User Profile” link – see the SpiraTeam® User Manual for more details.

Once you have logged in as the Administrator, you need to click the “Administration” link above the main navigation bar. This will display the Administration home page:

Project Name ▲▼	Project Group ▲▼	Creation Date ▲▼	Active ▲▼	Project # ▲▼	Operations
<input type="text"/>	-- Any --	<input type="text"/>	-- Any --	PR <input type="text"/>	
Legacy Application	External Projects	1-Dec-2005	No	PR000004	> Select Edit Copy Delete
Library Information System	Internal Projects	1-Dec-2005	Yes	PR000001	> Select Edit Copy Delete
Sample Application One	Internal Projects	1-Dec-2005	Yes	PR000002	> Select Edit Copy Delete
Sample Application Two	External Projects	1-Dec-2005	Yes	PR000003	> Select Edit Copy Delete

The Administration home page is divided into two main areas – the left hand navigation bar that contains links to all the available administration options (grouped under folders) and the main pane that displays the available settings for the selected option. By default, the “View/Edit Projects” administration screen will be displayed in the main pane.

The options available to you in the left hand navigation bar will vary depending on your level of administrative privileges. If you have the “system administration” privilege granted, then all the options will be available, whereas if you are just a “project owner”, only those options relating to managing a specific project will be available.

When you first install the system, the three main tasks you will need to perform as the system administrator are creating/editing projects, creating/editing users and then adding the users as members of the various projects. These tasks typically need to be performed before any other users can use the system, since there will be no logins or projects available other than the sample ones provided during the installation.

Each of the individual administrative options is described in turn below:

3.1. Projects

3.1.1. View/Edit Projects

The following screen is displayed when you choose the “View/Edit Projects” link from the Administration sidebar navigation:

View / Edit Projects

The following projects have been created in the system. To edit an existing project, please click on the 'Edit' link.
To create a new project, click on the [Add] button.

Project Name ▲▼	Project Group ▲▼	Creation Date ▲▼	Active ▲▼	Project # ▲▼	Operations
<input type="text"/>	-- Any --	<input type="text"/>	-- Any --	PR <input type="text"/>	
Legacy Application	External Projects	1-Dec-2005	No	PR000004	> Select Edit Copy Delete
Library Information System	Internal Projects	1-Dec-2005	Yes	PR000001	> Select Edit Copy Delete
Sample Application One	Internal Projects	1-Dec-2005	Yes	PR000002	> Select Edit Copy Delete
Sample Application Two	External Projects	1-Dec-2005	Yes	PR000003	> Select Edit Copy Delete

[Filter](#) [Add](#) [Clear Filters](#)

This screen displays the list of projects in the system (both inactive and active) together with their project group, date of creation and active status. Clicking on either the “Select” link in the right-hand column or the name of the project will change the currently selected project to one clicked, and any project-specific administration tasks will be applied to this project.

You can filter the list of projects by either choosing an active status, project group, or entering a portion of the name or date into the appropriate text box. When you click the <Filter> button, the list of projects will be filtered by the criteria you entered. You can clear the filter selection by clicking the <Clear Filters> button. To sort the list of projects, just click on the appropriate arrow icon located in the header row of each field (one each for ascending / descending) In addition, the list of projects is paginated into groups of fifteen (15). You can step through the different pages by clicking the page numbers at the bottom of the project list.

To permanently delete a project, you should click the “Delete” link to the right of the project details. This is irreversible and will delete all the artifacts associated with the project. If you want to temporarily delete a project, simply set its Active flag to ‘No’ instead. To make a copy of a project to reuse its test cases, releases, test sets and requirements, simply click the “Copy” link to the right of the project. *Note that this will not make a copy of any historical information, test runs or incidents.*

To add a new project to the system, simply click the <Add> button at the bottom of the project list, and a new screen will be displayed that allows you to enter the new project information:

Add/Edit Project | New Project

[<< Back To Project List](#)

Please review the information listed below and make any changes if necessary.
Once you have finished, click [Update/Insert] to confirm them.

Project Name*:

Description:

Project Group:

Web Site:

Template*: Default Based on Existing Project

Legacy Application
Choose the default template will load the standard workflows and incident lists. Choosing an existing project as the template will copy across that project's custom properties, workflows and incident fields for use in the new project.

Active Project*:

[Insert](#) [Cancel](#)

You need to enter a name for the project (which cannot be the same as any already in use); select which project group it belongs to and optionally enter a detailed description and/or web-site URL. You should initially make sure that the project is marked as “Active”. In addition, you can choose to either use the “default template” or to use an existing project as the template. Using an existing project as the template will copy across the workflows, user membership, custom properties, document types, document folders, data synchronization and other configuration settings that you want to reuse in the new project. Once you are satisfied with the information, click the <Insert> button to actually create the new project.

In a similar way, to edit the details of an existing project, simply click the “Edit” hyperlink in the right hand column of the project list box, and you will be taken to the following screen that allows you modify the project details:

Add/Edit Project | Library Information System
[<< Back To Project List](#)
 Please review the information listed below and make any changes if necessary. Once you have finished, click [Update/Insert] to confirm them.

Project Name*:

Description: **B** *I* U |

Project Group*:

Web Site:

Template*: Default Based on Existing Project

Choose the default template will load the standard workflows and incident lists. Choosing an existing project as the template will copy across that project's custom properties, workflows and incident fields for use in the new project.

Active Project*:

On this screen you can edit the name, description, project group, website URL and active status. Once you have made the necessary changes, click the <Update> button to commit them. If you decide that you want to ignore the changes, click the <Cancel> button and the changes will be discarded.

3.1.2. Edit Project Groups

The following screen is displayed when you choose the “Edit Project Groups” link from the Administration sidebar navigation:

Edit Project Groups
 The following project groups have been created in the system. To edit an existing project group, please click on the 'Edit' link. To create a new project group, click on the [Add] button.

Project Group Name ▲▼	Web Site ▲▼	Default ▲▼	Active ▲▼	Group # ▲▼	Operations
<input type="text"/>	<input type="text"/>	-- Any -- ▼	-- Any -- ▼	PG <input type="text"/>	
Default Group		Yes	Yes	PG000001	> Edit Delete
External Projects		No	Yes	PG000003	> Edit Delete
Internal Projects	http://www.libraryinformationsystem.org	No	Yes	PG000002	> Edit Delete

This screen displays the list of project groups in the system (both inactive and active) together with their web site URL, date of creation and active status. Project Groups are used to relate projects that are in the same department/division/organization or are for a common customer, client, etc. When projects are in the same group, a user that is a member of the project group can see the special Project Group Dashboard that displays key metrics from all the projects in the group combined. Also such users will have observer-level access to the contained projects without needing to be explicitly added to each project.

You can filter the list of project groups by either choosing an active status, or entering a portion of the name, web-site or date into the appropriate text box. When you click the <Filter> button, the list of project groups will be filtered by the criteria you entered. You can clear the filter selection by clicking the <Clear Filters> button. To sort the list of project groups, just click on the appropriate arrow icon located in the header row of each field (one each for ascending / descending) In addition, the list of project groups is paginated into groups of fifteen (15). You can step through the different pages by clicking the page numbers at the bottom of the project list.

To permanently delete a project group, you should click the “Delete” link to the right of the project group details. Any projects contained in the group will not be deleted, but instead just moved to the default project group. There has to be at least one project group in the system at all times, so the project group designated as the ‘default’ one will not be available for deletion.

To add a new project group to the system, simply click the <Add> button at the bottom of the project group list, and a new screen will be displayed that allows you to enter the new project group information:

The screenshot shows a web form titled "Edit Project Group | New Project Group". At the top left, there is a link "<< Back To Project Group List". Below the title, a message reads: "Please review the information listed below and make any changes if necessary. Once you have finished, click [Update/Insert] to confirm them." The form contains the following fields and controls:

- Group Name*:** A text input field.
- Description:** A rich text editor with a toolbar containing options for font color, size, bold, italic, underline, bulleted list, numbered list, link, unlink, and source code.
- Web Site:** A text input field.
- Active*:** A dropdown menu with "Yes" selected.
- Default*:** A dropdown menu with "No" selected.
- At the bottom right, there are two buttons: "Insert" and "Cancel".

You need to enter a name for the project group and optionally enter a detailed description and/or web-site URL. You should initially make sure that the project group is marked as “Active”. In addition, you can choose to make this project group the default one (meaning that it cannot be deleted and projects get added to it when their groups are deleted). Once you are satisfied with the information, click the <Insert> button to actually create the new project group.

In a similar way, to edit the details of an existing project group, simply click the “Edit” hyperlink in the right hand column of the project group list box, and you will be taken to the following screen that allows you modify the project group details:

The screenshot shows a web form titled "Edit Project Group | Internal Projects". At the top left, there is a link "<< Back To Project Group List". Below the title, a message reads: "Please review the information listed below and make any changes if necessary. Once you have finished, click [Update/Insert] to confirm them." The form contains the following fields and controls:

- Group Name*:** A text input field containing "Internal Projects".
- Description:** A rich text editor with a toolbar. The description text is "Contains the library project and sample application one".
- Web Site:** A text input field containing "www.libraryinformationsystem.org".
- Active*:** A dropdown menu with "Yes" selected.
- Default*:** A dropdown menu with "No" selected.
- At the bottom right, there are two buttons: "Update" and "Cancel".

On the top part of this screen you can edit the name, description, website URL, active status and default status. Once you have made the necessary changes, click the <Update> button to commit them. If you decide that you want to ignore the changes, click the <Cancel> button and the changes will be discarded.

In addition, the lower part of the screen allows you to view/edit the users that are members of the group and also see which projects are in the group:

a) Group User Membership

This tab allows you to see which users are members of the group and which group role they have:

User Membership		Project List	
✓	Full Name	User Name	Project Group Role
<input type="checkbox"/>	Fred Bloggs	fredbloggs	Group Owner
<input type="checkbox"/>	System Administrator	administrator	Group Owner

The two project group roles are “Executive” and “Group Owner”:

- **Executive** – This role allows the user to see the dashboard for this project group, which contains all the key metrics for the contained projects displayed in an aggregated manner. Please see the *SpiraTeam User Manual* for more details on this dashboard. In addition, the user is automatically granted ‘observer’ permissions for all the projects in the group.
- **Group Owner** – This role consists of all the permissions granted to the “Executive” role above, but in addition allows the user to make changes to the Project Group itself in the Administration section.

To change the role of an existing project group member, just change the role in the drop-down list and click [Update]. To remove a member from the group, just select the appropriate checkboxes and click [Delete]. Finally, to add a new user to the group, click on the [Add] button:

Add Project Group Membership | Internal Projects

[<< Back To Project Group Membership](#)

The following users are NOT members of this project group.
Please select a role for the users you want to add to the project group and click [Add]:

First Name ▲▼	MI ▲▼	Last Name ▲▼	User Name ▲▼	User # ▲▼	Project Role
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	US <input type="text"/>	
Joe	P	Smith	joesmith	US000003	-- Select Role --

You now should narrow down the list of users by entering filter criteria and clicking [Filter]. Once you have located the appropriate user(s), just select a group role for them from the drop-down list and click [Add] to add them to the group in the specified role.

b) Group Project List

This tab allows you to see the list of projects that are contained within the current group. Clicking on the name of the project will take you to the details page for that project:

User Membership		Project List		
Project Name	Web Site	Creation Date	Active	Project #
Library Information System	http://www.libraryinformationsystem.org	1-Dec-2005	Yes	PR000001
Sample Application One	http://www.tempuri.org	1-Dec-2005	Yes	PR000002

3.1.3. Planning Options

This screen is available for installations of SpiraPlan® and SpiraTeam® only (not SpiraTest®) and allows you to configure the schedule and calendar options for the various project estimation and planning modules. The settings are specific to each project:

Project Planning Options | Library Information System [\(Change Project\)](#)

The following schedule and calendar options are currently being used by this project. To change the settings, just modify the values and then click [Update] to commit the changes.

Once you are happy with the changes, it is recommended you refresh the schedule and progress information in the project through the [Data Caching](#) administration screen.

Work Hours Per Day*:

Work Days Per Week*:

Non-Working Hours Per Month*:

Effort Calculations*: Include Task Effort
 Include Incident Effort

Time Tracking*: Enabled For Tasks
 Enabled for Incidents

Default Effort*: Requirements (Planned Effort)
 Tasks (Estimated Effort)

Auto-Create Tasks*: Create a new task when Requirement becomes 'In-Progress'

This page allows you to make changes to the following settings:

- **Work Hours Per Day** – this setting allow you to specify how many work hours should be used when converting an effort calculation from hours to calendar days. For example a 12 hour task will occupy two days if you set the working hours per day to 6 hours, whereas the same task will occupy 1 ½ days only if you set the working hours per day to 8 hours.
- **Work Days Per Week** – this setting allows you to specify how many days in the week are *typically* worked on the project. By default the system assumes a 5-day (Mon-Fri) working week, but if your organization works Saturdays (for example), you may want to switch to a 6-day working week. If you want to use partial days, then just round up to the nearest day and add non-working hours (see below) to compensate.
- **Non-Working Hours Per Month** – this setting allows to specify how many non-working hours *typically* need to be accounted for. This is useful if you want to have a working week that contains a fractional number of days or if you have recurring activities that need to be removed from each month. *Note that if you have specific holidays, vacation days that need to be accounted for, it is better to use the Release/Iteration non-working time feature instead.*
- **Effort Calculations** – When calculating how much effort has been scheduled in a release or iteration, the system will aggregate the individual effort values (both estimated and actual) for all the task and incident artifacts associated with the release/iteration. This setting allows you to specify if you want only task or incident effort values to be included in the release/iteration total. This is useful if your project management methodology requires that incident effort values be excluded from the total.
- **Time Tracking** – SpiraTeam® has an integrated time tracking system that allows the easy entry of the hours spent on all assigned incidents and tasks in one place (see the *SpiraTeam User Manual* for more details on this feature). This setting allows administrators to specify if they want the integrated time tracking features enabled for both incidents or tasks (or neither).

- **Default Effort** – Normally when you create a new Requirement or Task in the system it will be given an empty initial estimated effort. However if many requirements or tasks are typically based on a standard size, then as a time-saver, the system will let you specify a default estimated effort that will be used when a new requirement or task is created.
- **Auto-Create Tasks** – When you change the status of a Requirement in the system to “In-Progress” the system will automatically add a default Task to that requirement if no tasks already exist. This is a useful shortcut that makes planning with requirements easier in the case when the requirements are of a size where they don’t need to be formally decomposed into multiple developer tasks. However if you don’t want the system to automatically create tasks in, you can deselect the option for the current project and it will turn off the feature.

3.1.4. Project History

This page displays a list, by default in chronological order, of changes made to items within the selected project.

At this time, only changes made to Requirements, Tasks, Incidents, Test Cases, Test Steps, Test Sets, Releases, and Automation Hosts are recorded. Certain changes are to these artifacts are not recorded, such as location changes (indenting, outdenting), and comment additions.

Displaying 1 - 15 out of 15 items. Refresh | Apply Filter | Clear Filter

✓	Change ID ▲▼	Change Date ▲▼	Changed By ▲▼	Artifact Type ▲▼	Artifact ID ▲▼	Change Type ▲▼
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	-- Any --	-- Any --	<input type="text"/>	-- Any --
<input type="checkbox"/>	#15	27-May-2011	System Administrator	Incident	3	Deleted
<input type="checkbox"/>	#14	27-May-2011	System Administrator	Incident	3	Modified
<input type="checkbox"/>	#13	2-May-2006	Fred Bloggs	Incident	7	Modified
<input type="checkbox"/>	#12	2-May-2006	Fred Bloggs	Requirement	4	Modified
<input type="checkbox"/>	#11	2-May-2006	Fred Bloggs	Test Step	3	Modified
<input type="checkbox"/>	#10	2-May-2006	Fred Bloggs	Release	1	Modified
<input type="checkbox"/>	#9	2-May-2006	Fred Bloggs	Test Case	2	Modified
<input type="checkbox"/>	#8	5-Mar-2005	Fred Bloggs	Incident	7	Modified
<input type="checkbox"/>	#7	5-Mar-2005	Fred Bloggs	Incident	6	Modified
<input type="checkbox"/>	#6	4-Mar-2005	Joe P Smith	Incident	7	Modified
<input type="checkbox"/>	#5	4-Mar-2005	Fred Bloggs	Incident	6	Modified
<input type="checkbox"/>	#4	4-Mar-2005	Joe P Smith	Requirement	4	Modified
<input type="checkbox"/>	#3	4-Mar-2005	Joe P Smith	Test Step	3	Modified
<input type="checkbox"/>	#2	4-Mar-2005	Joe P Smith	Test Case	2	Modified
<input type="checkbox"/>	#1	4-Mar-2005	Joe P Smith	Release	1	Modified

Show rows per page Displaying page of 1

There are a handful of change types recorded and displayed here:

- **Modified:** The most common, this means that one or more fields in this artifact were changed. Note that if a standard field and a custom field were changed at the same time, it will generate two separate entries, one for the standard fields, one for the custom fields.
- **Added:** This means that this artifact was added, created in the system, either by using the New menu option or by copying. Pasting an item that was cut will not result in an Added entry being created.
- **Rollback:** This items means that the artifact was rolled back to a specific event in the history.
- **Deleted:** This entry is created when an artifact is deleted from the system.

- **Undelete:** This entry is created when an artifact was deleted and then undeleted, making it live in the system again.
- **Purged:** This entry is created (and all other history items are removed) when a deleted artifact is purged from the system. Purged items are removed from the database, and cannot be recovered.

Note: When upgrading from a version before v3.1, each individual field changed will be considered a unique change, due to how previous versions recorded history. However, as soon as the application is upgraded, simultaneous changes will be grouped together based on their last-update date.

This screen allows the administrator several options:

- *Viewing Details:* The detail screen for each change set can be viewed by clicking on the change ID #. This will take you to the history details screen, described below.
- *Revert:* This button will roll back all items in the list that are checked. You must have at least one row checked to revert. See the section on reverting below.
- *Purge All:* This button will permanently purge all deleted items from the database. Once items are purged, they cannot be restored.

3.1.4.1 History Details Screen

The history details screen displays information on the selected change set:

History Details | Library Information System [\(Change Project\)](#)

The details for this changeset are listed below.

This artifact has been deleted.

Change: 14	Change Date: 5/27/2011 10:36:30 AM	
User: System Administrator	Change Type: Modified	
Artifact: Incident [IN:3]	Field Set: Standard Fields	

Change Actions

Field Name ▲▼	Old Value ▲▼	New Value ▲▼
Priority		2 - High
Severity		3 - Medium
Type	Incident	Enhancement
Detected By	Fred Bloggs	System Administrator
Detected Release	1.0.1.0	1.0.1.0.0001

The History Details screen will show basic information as well as fields that were changed in this change set. Shown here is the Change ID, the date and time that the change was made, the user that made the change, the change type, the artifact affected, and the set of fields affected.

If a set of fields were affected (Standard or Custom), then the list of fields will be listed below. In the example above, the change was a Modification, and 5 fields were changed. In other change types, no fields will be displayed.

If the artifact is still available in the system, you can click the Artifact or click the 'View Item' button in the toolbar to view the item as it is currently. However, if the item has been deleted, a warning label will be

displayed (as above in the example screenshot), the View Item links will be disabled, and a new option, "Purge" will appear on the toolbar.

3.1.4.2 Purging Items

Items that have been deleted by any user still remain in the database, but do not affect statistics or reports, and do not show up in reports and cannot be viewed. The artifacts are still in the database, however, and can be restored by clicking on the Restore button in the toolbar.

Purging an individual item can only be done while viewing one of its history detail screens. Once an item is purged, you will be taken back to the history list screen. All the previous history items for the artifact will be removed, and replaced with a single "Purged" history item.

Items that are purged cannot be restored into the database, as unique identifiers will be wiped from the database, so be sure that you are sure you want to purge an item before doing so.

You can purge all items in the project at once by clicking the "Purge All" button located on the History List page. This will take some time depending on how many deleted items are in your database, and it is recommended that the database files be compressed in SQL Management Studio afterwards to free up space and compress clustered indexes.

3.1.4.3 Reverting Items

Reverting an artifact will attempt to reset all fields back to the selected change set, reverting all changes made after the selected change set as well. In certain cases, the artifact will not be able to be reverted – cases like this could be caused by other items having been deleted or purged. (For example, if Requirement #1 was linked to Release #4, and that Release does not exist anymore.) In cases like this, no fields will be reverted and the artifact will remain unchanged.

Reverting an item will cause it to be undeleted if it has been deleted.

You can revert multiple items from the History List page – however, the only items that can be reverted back are Deletes and Modifications. All other types will be ignored. When selecting multiple items, you can select more than a single change set for a specific artifact, the artifact will be rolled back to the earliest change set selected.

3.1.5. Project Data Tools

This page contains several different data management tools that can be used to identify certain data issues in the system and correct them. There are two main sections to this page – Data Caching and Indentation Hierarchy:

Data Tools | [\(Change Project\)](#)

In order to improve the performance of the application, certain types of data is cached. Sometimes after making changes to the underlying data, you might want to refresh the cached information. To do that, click on one of the links below:

- > Refresh the [Test Status Cache](#)
- > Refresh the [Task Progress Cache](#)

Sometimes corrupted indentation information can cause missing or duplicated rows in tables. If any of the flags below show 'Error', you can click on the link to try to fix them:

- > Requirements: [OK \(Correct\)](#)
- > Test Cases: [OK \(Correct\)](#)
- > Test Sets: [OK \(Correct\)](#)
- > Releases: [OK \(Correct\)](#)

a) Data Caching

In order to improve the performance of SpiraTeam®, certain types of project data are cached. If for any reason you make changes to test cases, test runs or tasks in the system through the database, you may need to update the cached values for test execution status and task progress that are displayed on the requirements and releases pages. To refresh the execution status or task progress data, click on the appropriate “Refresh” link illustrated above.

b) Indentation Hierarchy

The Requirement and Test Case pages use an “Indent” system for managing the hierarchy of information. This allows requirements and test cases to be nested under parent items and be rapidly searched and filtered on. Sometimes if a move/copy operation is interrupted (due to a network outage, etc.) the hierarchy may get corrupted. If so, you’ll see a red **Error** message instead of the Green **OK**. If that happens, just click on the appropriate “Correct...” hyperlink and the system will correct the indent levels for you.

3.2. Users

3.2.1. View / Edit Users

The following screen is displayed when you choose the “View/Edit Users” link from the Administration sidebar navigation:

View / Edit Users (Import Users From an LDAP Server)

The following approved users exist in the system. To edit an existing user, please click on the 'Edit' link next to his/her name.
To create a new user either click on the [Add] button or choose the option to Import from an LDAP server.

To see any pending new user requests, click on the 'Pending Requests' item in the left hand navigation.

First Name ▲▼	MI ▲▼	Last Name ▲▼	User Name ▲▼	Admin ▲▼	Email ? ▲▼	Department ▲▼	User # ▲▼	Active ▲▼	Operations
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	-- Any -- ▼	-- Any -- ▼	<input type="text"/>	US <input type="text"/>	-- Any -- ▼	
Amy	E	Cribbins	amycribbins	No	No	Software Engineering	US000013	No	> Edit
Bernard	P	Tyler	bernardtyler	No	No	Software Engineering	US000011	No	> Edit
Donna	W	Harkness	donnaHarkness	No	No	Software Engineering	US000006	No	> Edit
Fred		Bloggs	fredbloggs	No	No	QA	US000002	Yes	> Edit
Henry	J	Cooper	henrycooper	No	No	Software Engineering	US000012	No	> Edit
Jack		Van Stanten	jackvanstanten	No	No	Software Engineering	US000007	No	> Edit
Joe	P	Smith	joesmith	No	No	QA	US000003	Yes	> Edit
Martha		Noble	marthanoble	No	No	Software Engineering	US000010	No	> Edit
Ricky		Pond	rickypond	No	No	Software Engineering	US000005	No	> Edit
Roger	Q	Ramjet	rogerramjet	No	No	Software Engineering	US000004	No	> Edit
Rory		Jones	roryjones	No	No	Software Engineering	US000009	No	> Edit
Rose	T	Smith	rosesmith	No	No	Software Engineering	US000008	No	> Edit
System		Administrator	administrator	Yes	Yes		US000001	Yes	> Edit

[Filter](#) [Add](#) [Clear Filter](#)

This screen displays the list of users in the system (both inactive and active) together with their first name, middle initial, last name, username (login), administrative permission status and active status.

You can filter the list of users by either choosing an administrative / active status, or entering a portion of the first name, middle initial, last name or username into the appropriate text box. When you click the <Filter> button, the list of users will be filtered by the criteria you entered. You can clear the filter selection by clicking the <Clear Filters> button. To sort the list of users, just click on the appropriate arrow icon located in the header row of each field (one each for ascending / descending). In addition, the list of users is paginated into groups of fifteen (15). You can step through the different pages by clicking the page numbers at the bottom of the user list.

To add a new user to the system, simply click the <Add> button at the bottom of the user list, and a new screen will be displayed that allows you to enter the new user information:

Add/Edit User | New User

Please review the information listed below and make any changes if necessary. Once you have finished, click [Update/Insert] to confirm them.

First Name*:
Middle Initial:
Last Name*:
User Name*:
Department:
Email Address*:
Email Enabled*: Yes ▾
System Administrator*: No ▾
Active*: Yes ▾
Locked Out*: No ▾
RSS Token: Enable RSS Feeds
 [Generate New](#)

[Insert](#) [Cancel](#)

Passwords & Security

Change Password

New Password*:
Confirm Password*:
Passwords are required to be a minimum of 6 characters in length.
 Passwords are required to have a minimum of 0 non-alphanumeric characters.

Change Password Question & Answer

Password Question*:
Password Answer*:

On this screen, you can enter the name, email address, password, password reset question and answer for the new user. If you want the user to be able to subscribe to items in the system as RSS feeds, you should also make sure that the “Enable RSS Feeds” checkbox is selected and a GUID token is displayed in the text-box underneath.

In a similar way, to edit the details of an existing user, simply click the “Edit” hyperlink in the user list box, and you will be taken to the following screen that allows you modify the user details:

Add/Edit User | Fred Bloggs

Please review the information listed below and make any changes if necessary. Once you have finished, click [Update/Insert] to confirm them.

First Name*:
Middle Initial:
Last Name*:
User Name*:
Department:
Email Address*:
Email Enabled*: No ▾
System Administrator*: No ▾
Active*: Yes ▾
Locked Out*: No ▾
RSS Token: Enable RSS Feeds
 [Generate New](#)

[Update](#) [Cancel](#)

On this screen you can edit the first name, middle initial, last name, username, email address, system administration status and active status. Once you have made the necessary changes, click the <Update> button to commit them. If you decide that you want to ignore the changes, click the <Cancel> button and the changes will be discarded.

In addition, there are **three tabs** that allow you to add/remove the user from projects, change the user's password information and update the data-mapping used when synchronizing artifacts that are assigned or created by the current user.

If you click on the "Project Membership" tab you will be shown a list of projects that the user is currently a member of:

The screenshot shows the 'Project Membership' tab selected. Below the tabs are three buttons: 'Update', 'Add', and 'Delete'. The main content is a table with the following data:

✓	Project Name	Active	Project #	Project Role
<input type="checkbox"/>	Library Information System	Yes	PR000001	Manager
<input type="checkbox"/>	Sample Application One	Yes	PR000002	Developer
<input type="checkbox"/>	Sample Application Two	Yes	PR000003	Tester

You can change the role that the user has on the various projects, by simply choosing the appropriate role from the drop-down list and then clicking [Update]. To remove the user from a project, simply select its checkbox and then click [Delete]. To add a user to a new project, simply click on the [Add] button and then choose the project and associated role from the list of projects on the screen that is displayed:

The screenshot shows the 'Add User Project Membership' screen for Roger Smith. It includes a 'Back To User Details' link and a message: 'The user is NOT a member of the following projects. Please select a role for the projects you want to add this user to, then click [Add]:'. Below this is a table with the following data:

Project Name	Web Site	Creation Date	Active	Project #	Project Role
Legacy Application		1-Dec-2005	No	PR000004	-- Select Role --
Sample Application One	http://www.tempuri.org	1-Dec-2005	Yes	PR000002	-- Select Role --
Sample Application Two		1-Dec-2005	Yes	PR000003	-- Select Role --

At the bottom right, there are 'Add' and 'Cancel' buttons.

Then click [Add] to add the selected project(s) to the user's project membership.

To change the user's password (if the user is managed by SpiraTeam) or LDAP information (if managed by an external LDAP directory server), click on the "Passwords and Security" tab:

The screenshot shows the 'Passwords & Security' tab selected. It contains several form fields and checkboxes:

- LDAP Managed User
- LDAP DN:
- Change Password
- New Password*:
- Confirm Password*:
- Passwords are required to be a minimum of 6 characters in length.
- Passwords are required to have a minimum of 0 non-alphanumeric characters.
- Change Password Question & Answer
- Password Question*:
- Password Answer*:

On this tab you can either update a user's password (and associated password reset question and answer) or their LDAP Distinguished Name (DN). You can also use this screen to switch a user from LDAP-Managed mode to SpiraTeam-Managed mode.

In LDAP-Managed mode you enter the fully Distinguished Name (DN) for that user in your corporate LDAP server and provide no password. SpiraTeam® will then query your corporate LDAP server for the password information, reducing the number of passwords that a user needs to remember. Please see the sections on *“Importing LDAP Users”* and *“LDAP Configuration”* for more details.

To view/change the list of usernames that a user has in an external bug-tracking system, click on the *“Data Mapping”* tab. This section is used by the SpiraTeam data-synchronization service to map incidents from SpiraTeam to other bug-tracking systems

Please see the *SpiraTeam External Bug-Tracking Integration Guide* for more details on using the data-mapping tab.

3.2.1.1. Importing LDAP Users

If your organization already has an LDAP compatible user management system in place (e.g. Windows Active Directory, Novell eDirectory, OpenLDAP, IBM Tivoli, etc.), then instead of having to manually enter users one by one into SpiraTeam®, you can simply import them from your LDAP Server. Before doing this however, you need to first setup the LDAP configuration (see the section on LDAP Configuration below).

Once you have setup your LDAP server configuration in SpiraTeam®, clicking on the *“Import Users From and LDAP Server”* will bring up the following screen:

<input checked="" type="checkbox"/>	Common Name ▲▼	Login ▲▼	First Name ▲▼	Middle Initial ▲▼	Last Name ▲▼	Email Address ▲▼	Distinguished Name
<input type="checkbox"/>							
<input type="checkbox"/>	Henry Ford	henryford	Henry		Ford		CN=Henry Ford,CN=Users,CN=SpiraTest,O=Inflectra,C=US
<input type="checkbox"/>	NigellMansell	nigelmansell	Nigel	R. Q.	Mansell	nmansell@spiratest.com	CN=NigellMansell,CN=Users,CN=SpiraTest,O=Inflectra,C=US
<input type="checkbox"/>	sysadmin	sysadmin				sysadmin@spiratest.com	CN=sysadmin,CN=Users,CN=SpiraTest,O=Inflectra,C=US

This screen lists all the users available in the LDAP server that have not been already imported into SpiraTeam®. The users are listed by name along with their login, email address and fully distinguished LDAP name (DN). You can narrow down the list by entering partial name matches in any of the fields displayed and clicking [Filter] and/or you can sort the results by clicking on the directional arrows in the field headings.

Select the checkbox of any users you want to import and click <Import> to complete the operation. These users can now login to SpiraTeam® and use their existing LDAP login and password information.

3.2.2. Project Membership

The following screen is displayed when you choose the “Project Membership” link from the Administration sidebar navigation:

Project Membership | Library Information System [\(Change Project\)](#)

The following users are members of this project. To change their role, just select the value in the dropdown and click Update. To add a new user to the project, click [Add]. To remove existing users, select their checkboxes and click [Delete].

✓	Full Name	User Name	Project Role
<input type="checkbox"/>	Fred Bloggs	fredbloggs	Manager
<input type="checkbox"/>	Joe P Smith	joesmith	Observer
<input type="checkbox"/>	System Administrator	administrator	Project Owner

[Update](#) [Add](#) [Delete](#)

This screen displays the name of the current project together with a list of all the users who are currently members of the project along with their currently assigned project role. If you want to modify the membership for a different project, simply click the “Change Project” link to be taken back to View/Edit Projects screen where you can select a different project.

To modify the role of a user assigned to the project, simply change the role for that user’s entry in the drop-down menu and click the <Update> button. To remove a user from the project, simply check the box to the left of the user’s name and click the <Delete> button. Note that this only removes them from the project, not the entire system.

To add a user to the project, so that can access its information, simply click the <Add> button and you will be taken to the following screen that lists all the users in the system that are not currently members of the project:

Add Project Membership | Sample Application Two [\(Change Project\)](#)

[<< Back To Project Membership](#)

The following users are NOT members of this project. Please select a role for the users you want to add to the project and click [Add]:

First Name ▲▼	MI ▲▼	Last Name ▲▼	User Name ▲▼	User # ▲▼	Project Role
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	US <input type="text"/>	
Fred		Bloggs	fredbloggs	US000002	Project Owner
Joe	P	Smith	joesmith	US000003	Tester
Roger	Q	Ramjet	rogerramjet	US000004	-- Select Role --

[Filter](#) [Clear Filters](#) [Add](#) [Cancel](#)

You now should narrow down the list of users by entering filter criteria and clicking [Filter]; you can also sort the results to make viewing easier. Once you have located the appropriate user(s), just select a project role for them from the drop-down list and click [Add] to add them to the project in the specified role.

3.2.3. Active Sessions

Often an administrator of the system will want to know how many users are currently logged into the system, especially on installations licensed by concurrent-user. Clicking on the ‘Active User Sessions’ administration option will display a list of all the users who currently have active sessions in the system:

Active User Sessions

The following users currently have active sessions on this instance of SpiraTeam:

First Name	Last Name	User Name	Session ID	Interface	Last Logon	User #	Operations
Fred	Bloggs	fredbloggs	izyb2b55nqmgqb45qfc2mm55	Web Application	1/14/2010 12:16:52 PM	US000002	End Session
System	Administrator	administrator	33jfkrowddgwz45r1d5aa33	Web Application	1/14/2010 11:56:33 AM	US000001	End Session

To end a user's session, please click on the appropriate 'End Session' link above.

Each user is displayed along with their user ID, whether they're connected through the application or via a third-party add-on, and the date they last logged-in. The administrator is able to forcibly end a user's session using the 'End Session' link to the right of their name. Clicking this link will result in that user being logged out when they try and perform an operation in the system. **Warning: You should make sure that the user is not actively using the system to prevent any unsaved data being lost.**

3.2.4. Pending Requests

If you have enabled the ability for users to register for new SpiraTeam accounts themselves (see section 3.8.6 – Security Settings), clicking on the "Pending Requests" administration option allows you to view a list of all the outstanding requests for new user accounts:

View Pending User Requests

The following new user requests exist in the system. To approve a user click the 'Approve' link, to deny a request click on the 'Delete' link.

First Name ▲▼	MI ▲▼	Last Name ▲▼	User Name ▲▼	Email ? ▲▼	User # ▲▼	Active ▲▼	Operations
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	-- Any -- ▼	US <input type="text"/>	-- Any -- ▼	> Approve Delete
Roger		Smith	rsmith	Yes	US000031	Yes	

Filter Clear Filter

For each pending user request you can choose to either Approve or Deny the request:

- **Approve** – clicking this option will approve the user. They will get an email letting them know that they have been approved and can now log into the system.
- **Delete** – clicking this option will delete the pending user request from the system.

3.2.5. View / Edit Roles

There are six (6) default project roles that a user may be assigned to a project with:

- **Project Owner** – the same rights as a Manager, but in addition can access the project administration tools
- **Manager** – can see all screens and add/edit all artifacts, but cannot access project administration tools
- **Developer** – can see all screens, but can only add/edit incidents, tasks and tests and change requirement coverage
- **Tester** – can see all screens, but can only add/edit incidents and execute tests. Note: cannot delete incidents, only a Manager can do that.
- **Observer** – can see all screens, but cannot perform any write operations (insert / update / delete)
- **Incident User** – can only view and edit incidents. This user cannot even see the project's requirements, tasks, test cases or releases.

Note: The System Administrator is automatically added to every project as a Project Owner, and can never be removed as Project Owner, made inactive or made a different role on the project.

You can make changes to the permissions associated with each of these default roles, and also create as many additional roles as you like. To customize the roles in your installation of SpiraTeam®, simply click on the “View / Edit Roles” link in the Administration sidebar navigation:

View / Edit Roles				
Role Name	Description	Active	ID	Operations
Project Owner	Can see all screens, create/modify all artifacts, and can access the project administration tools	Yes	RX000001	> Edit Delete
Manager	Can see all screens and create/modify all artifacts, but cannot access project administration tools	Yes	RX000002	> Edit Delete
Developer	Can see all screens, but can only create/modify incidents and tests and change requirement coverage	Yes	RX000003	> Edit Delete
Tester	Can see all screens, but can only create/modify incidents and execute tests. Note: cannot delete existing incidents	Yes	RX000004	> Edit Delete
Observer	Can see all screens, but cannot perform any write operations (create / modify / delete)	Yes	RX000005	> Edit Delete
Incident User	Can only create/modify/view incidents. This role cannot see a project's requirements, test cases or releases.	Yes	RX000006	> Edit Delete

[Add Role](#)

The screen lists all of the roles currently configured in the system (both active and inactive) together with the name, description, and an active flag. You can create new roles by clicking the <Add> button which will create a new default role entry in the list. You can edit the name, description and associated permissions of a role by clicking on the appropriate “Edit” link. You can delete an existing role, by clicking the “Delete” link. Note that you cannot delete any of the default roles, but can instead make them inactive.

Clicking on the edit link will take you to the following screen:

Edit Role Details | Tester

Please review the information listed below and make any changes if necessary. Once you have finished, click [Update] to confirm them.

Role Name*:

Description:

Project Admin*: Specifies whether this role has project administrative permissions

Limited View*: Specifies whether this role has limited view permissions. Use this for roles that should only let a user see their own created/assigned items and nothing else in the project.

Active*: Specifies whether this role is active or not

On the top of the screen, you can edit the name, description, project admin, limited view and active flags:

- **Project Admin** – this flag denotes whether this role has administration-level access to the project (for example the project owner role has this set by default)
- **Limited View** – this flag denotes that the role has a restricted view of the project, with the user only allowed to see the artifacts that they have either *created* or been *assigned*
- **Active** – This flag denotes if the role is active in the system

Underneath you can specify the various artifact-specific permissions for the role:

Artifact Permissions

This role can perform the following operations on the various artifacts:

Artifact Type	Create	Modify All	Delete	View	Modify Owned
Requirement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Test Case	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Incident	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Release	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Test Run	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Task	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test Step	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Test Set	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Automation Host	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

These permission options allow you to specify if a user can **create**, **modify**, **delete** or **view** each of the artifacts in the system. If a user does not have view permissions for the artifact, then the corresponding tab in the system will also be disabled. There are two kinds of Modify permission available:

- **Modify All** – this option specifies that the user can modify all the artifacts of this type in the project (e.g. the user can edit all test cases)
- **Modify Owned** – this option specifies that the user can modify only the artifacts in the project that were either created or assigned to this user (e.g. the user can edit only the requirements they created or have been assigned)

Note: The permission needed to execute a test case is the “Create + Test Run” permission since that initiates the creation of a new test run.

In addition, there are some artifact-wide permissions that can be specified for each role:

Other Permissions

This role can perform the following operations throughout the system:

Artifact Type	Add	Edit	Delete	View
Document	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-
Document Folder	-	<input checked="" type="checkbox"/>	-	-
Comment	<input checked="" type="checkbox"/>	-	-	-
Source Code	-	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>

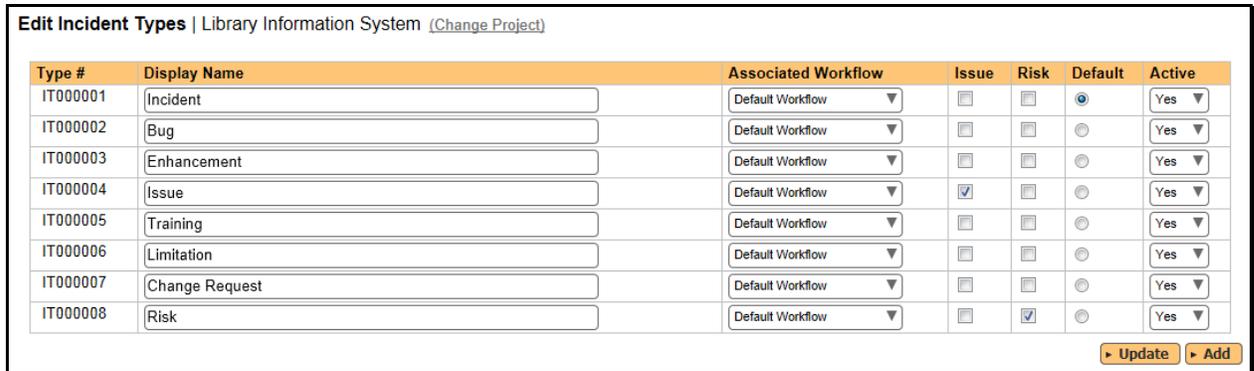
This section lets you specify if the role allows users to add new documents to the project, edit existing documents, delete documents, edit the document folders, and view/edit source code revisions.

3.3. Incidents

In addition to being able to create custom properties and values for incidents (same as for all artifacts in SpiraTeam®), you can also change the values populated in many of the standard fields used in the incident tracker – types, statuses, priorities and severities. The process for changing each of these is described below:

3.3.1. Edit Types

The following screen is displayed when you choose the “Edit Types” link from the Incidents section of the administration sidebar:



Type #	Display Name	Associated Workflow	Issue	Risk	Default	Active
IT000001	Incident	Default Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	Yes
IT000002	Bug	Default Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Yes
IT000003	Enhancement	Default Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Yes
IT000004	Issue	Default Workflow	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Yes
IT000005	Training	Default Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Yes
IT000006	Limitation	Default Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Yes
IT000007	Change Request	Default Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Yes
IT000008	Risk	Default Workflow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	Yes

The screen displays a list of all the defined incident types for the current project. By default the screen will be populated with the standard SpiraTeam® incident types. To edit an existing incident type, simply change the name, associated workflow, issue check-box, risk check-box, set a default type and/or change the active flag then click <Update>.

You can't delete an existing incident type, but to prevent it appearing in any drop-down-lists, all you need to do is change its active flag to “No” and click <Update>. To add a new incident type, click the <Add> button and a new row will be added to the list which you can now edit.

The associated workflow drop-down list allows you to specify which workflow the incident type will follow. This is a very powerful feature since it allows you to configure different workflows for different incident types; i.e. a bug may follow a workflow geared to identification and resolution, whereas a risk may only need a much simpler set of steps and actions.

The issue and risk check-boxes allow you to specify if the incident type is an issue or risk-type, which means it is would be eligible for display in the issue or risk section of the project home page respectively. The default radio button allows you to specify which incident type should be the default for newly created incidents. This is the type that a new incident will be set to unless changed by the creator of the incident. Note that you must have at least one active incident type, and you cannot set an inactive type as the default.

3.3.2. Edit Statuses

The following screen is displayed when you choose the “Edit Statuses” link from the Incidents section of the administration sidebar:

Edit Incident Statuses | Library Information System [\(Change Project\)](#)

Status #	Display Name	Open	Default	Active
IS000001	<input type="text" value="New"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	Yes ▼
IS000002	<input type="text" value="Open"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	Yes ▼
IS000003	<input type="text" value="Assigned"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	Yes ▼
IS000004	<input type="text" value="Resolved"/>	<input type="checkbox"/>	<input type="radio"/>	Yes ▼
IS000005	<input type="text" value="Closed"/>	<input type="checkbox"/>	<input type="radio"/>	Yes ▼
IS000006	<input type="text" value="Not Reproducible"/>	<input type="checkbox"/>	<input type="radio"/>	Yes ▼
IS000007	<input type="text" value="Duplicate"/>	<input type="checkbox"/>	<input type="radio"/>	Yes ▼
IS000008	<input type="text" value="Reopen"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	Yes ▼

[Update](#) [Add](#)

The screen displays a list of all the defined incident statuses for the current project. By default the screen will be populated with the standard SpiraTeam® incident statuses. To edit an existing incident status, simply change the name, open check-box, set it as the default status and/or change the active flag then click <Update>.

You can't delete an existing incident status, but to prevent it appearing in any drop-down-lists, all you need to do is change its active flag to "No" and click <Update>. To add a new incident status, click the <Add> button and a new row will be added to the list which you can now edit.

The open check-box allow you to specify if the incident status should be considered open or not, which means it is would be eligible for display in the various sections of the user's home page and the project home page that list open incidents. The default radio button allows you to specify which incident status should be the default for newly created incidents. This is the status that a new incident will be set to when first created, and acts as the first step in the incident workflow. Note that you must have at least one active incident status, and you cannot set an inactive status as the default.

3.3.3. Edit Priorities

The following screen is displayed when you choose the "Edit Priorities" link from the Incidents section of the administration sidebar:

Edit Incident Priorities | Library Information System [\(Change Project\)](#)

Priority #	Display Name	Color	Active
IP000001	<input type="text" value="1 - Critical"/>	# f47457 	Yes ▼
IP000002	<input type="text" value="2 - High"/>	# f29e56 	Yes ▼
IP000003	<input type="text" value="3 - Medium"/>	# f5d857 	Yes ▼
IP000004	<input type="text" value="4 - Low"/>	# f4f356 	Yes ▼

[Update](#) [Add](#)

The screen displays a list of all the defined incident priorities for the current project. By default the screen will be populated with the standard SpiraTeam® incident priorities. To edit an existing incident priority, simply change the name, color and/or change the active flag then click <Update>. Note that you can either enter the hexadecimal RRGGBB code for the color or use the pop-up color picker.

You can't delete an existing incident priority, but to prevent it appearing in any drop-down-lists, all you need to do is change its active flag to "No" and click <Update>. To add a new incident priority, click the <Add> button and a new row will be added to the list which you can now edit.

3.3.4. Edit Severities

The following screen is displayed when you choose the “Edit Severities” link from the Incidents section of the administration sidebar:

Edit Incident Severities | Library Information System ([Change Project](#))

Severity #	Display Name	Color	Active
IV000001	<input type="text" value="1 - Critical"/>	# <input type="text" value="f47457"/> 	Yes ▾
IV000002	<input type="text" value="2 - High"/>	# <input type="text" value="f29e56"/> 	Yes ▾
IV000003	<input type="text" value="3 - Medium"/>	# <input type="text" value="f5d857"/> 	Yes ▾
IV000004	<input type="text" value="4 - Low"/>	# <input type="text" value="f4f356"/> 	Yes ▾

[Update](#) [Add](#)

The screen displays a list of all the defined incident severities for the current project. By default the screen will be populated with the standard SpiraTeam® incident severities. To edit an existing incident severity, simply change the name, color and/or change the active flag then click <Update>. Note that you can either enter the hexadecimal RRGGBB code for the color or use the pop-up color picker.

You can't delete an existing incident severity, but to prevent it appearing in any drop-down-lists, all you need to do is change its active flag to “No” and click <Update>. To add a new incident severity, click the <Add> button and a new row will be added to the list which you can now edit.

3.4. Workflows

Clicking on the “Edit Workflows” link in the Administration sidebar navigation brings up the list of defined incident workflows for the current project. A workflow is a predefined sequence of incident statuses linked together by “workflow transitions” to enable a newly created incident to be reviewed, prioritized, assigned, resolved and closed, as well as to handle exception cases such as the case of a duplicate or non-reproducible incident. The workflow list screen for a sample project is illustrated below:

Edit Workflows | Library Information System ([Change Project](#))

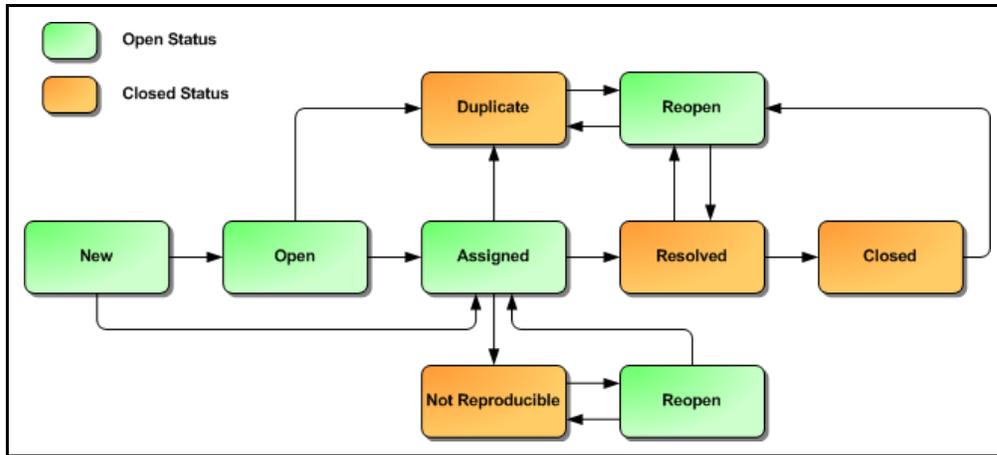
There are the various workflows available in the project. To add a new workflow, click the Add button, to edit an existing workflow, click on the Steps hyperlink.

Workflow Name	Default	Notify	Active	Workflow #	Operations
<input type="text" value="Default Workflow"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	Yes ▾	WK000001	Steps Copy Delete
<input type="text" value="Copy of Default Workflow"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	Yes ▾	WK000005	Steps Copy Delete

[Cancel](#) [Save](#) [Add Workflow](#)

To modify the name, default status, notify and/or active flags, simply change the values in the appropriate text-box, radio-button, check-box or drop-down list and click the <Update> button. To add a new workflow, simply click the <Add> button and a new workflow will be created with the standard SpiraTeam® steps and transitions.

You can have as many workflows as you like in a project, but only one can be marked as the default. Each incident type is assigned to a workflow; this allows you to have different incident types follow different paths from creation of closure. However when a new incident type is created, it will be initially associated with the project's default workflow. The steps and transitions that make up the default workflow are illustrated in the diagram below:



The notify flag is used to tell SpiraTeam® whether that particular workflow should have email notifications turned on or off. You define what transitions and which recipients should receive the emails in the workflow transition editor (see below), but you can globally turn on/off notifications here as well. This is useful if you find that the notifications are becoming an annoyance, or if the email server is unavailable for a period of time.

Note: You can only assign an active workflow to an incident type, and similarly you cannot make a workflow inactive that is currently linked to an incident type. This is important as all incident types need to be linked to an active workflow at all times.

3.4.1. Edit Workflow Details

Clicking on the <Steps> button of an inactive workflow brings up the following screen that lists all the workflow steps and workflow transitions that comprise the workflow:

View/Edit Workflow Steps | Default Workflow [\(Change Project\)](#)
[<< Back to Workflow List](#)

This displays all the incident status steps for this particular workflow:

Step Name	Transitions	Status #	Operations
Assigned	Duplicate Incident (Delete) >> Duplicate Resolve Incident (Delete) >> Resolved Unable to Reproduce (Delete) >> Not Reproducible	IS000003	> Add Transition
Closed	Reopen Incident (Delete) >> Reopen	IS000005	> Add Transition
Duplicate	Reopen Incident (Delete) >> Reopen	IS000007	> Add Transition
New (Default)	Assign Incident (Delete) >> Assigned Review Incident (Delete) >> Open	IS000001	> Add Transition
Not Reproducible	Reopen Incident (Delete) >> Reopen	IS000006	> Add Transition
Open	Assign Incident (Delete) >> Assigned Duplicate Incident (Delete) >> Duplicate	IS000002	> Add Transition
Reopen	Assign Incident (Delete) >> Assigned Duplicate Incident (Delete) >> Duplicate Resolve Incident (Delete) >> Resolved Unable to Reproduce (Delete) >> Not Reproducible	IS000008	> Add Transition
Resolved	Close Incident (Delete) >> Closed Reopen Incident (Delete) >> Reopen	IS000004	> Add Transition

This page lists in the left-most column all the various incident statuses defined for the project. The next column lists all the possible transitions that can occur *from that status*. In addition, with each transition is listed the name of the resulting *destination status* that the transition leads to. E.g. from the assigned status, depending on your role (see later) you can move the incident to either duplicate, resolves or not-reproducible depending on which transition the user takes.

Clicking on the name of a step or transition takes you to the appropriate details page (see below) where you can set the properties of the step or transition respectively. To delete an existing transition, simply click the <Delete> button after the transition name, and to add a new transition, click the <Add Transition> button in the Operations column.

3.4.2. Edit Workflow Transition

When you click on the transition name link from the previous screen, you are taken to the workflow transition details screen:

The top part of the screen is the “workflow browser” which illustrates how the transition relates to the workflow as a whole. It displays the current transition in the middle, with the originating and destination steps listed to either side. Clicking on either incident status name will take you to the appropriate workflow step details page. This allows you to click through the whole workflow from start to finish without having to return to the workflow details page.

This part of the screen lets you change the name of the transition and specify the subject line of any email notifications sent as part of this transition. To view the list of special tokens that can be used in the email subject, click on the “Display Email Subject Special Tokens” hyperlink:

The following are all available tokens for incidents and their meanings. Tokens not in this list will be taken out of the final message. Click on a token to insert it into the current cursor position in the editor above.			
\$(ActualEffort)	The actual effort, in HH:MM.	\$(Build)	The build that the incident was fixed in
\$(ClosedDate)	The artifact closed date.	\$(CompletionPercent)	The percent complete.
\$(Description)	The description of the artifact.	\$(DetectedRelease)	The detected release name.
\$(EstimatedEffort)	The estimated effort, in HH:MM.	\$(ID#)	The ID# of the item.
\$(IncidentType)	The Incident type.	\$(Name)	The name of the artifact.
\$(NotifyTo)	The notification receiver's name.	\$(Opener)	The name of the Opener.
\$(Owner)	The name of the Owner.	\$(Priority)	The artifact's Priority.
\$(Product)	The name of the application.	\$(ProjectName)	The name of the project.
\$(RemainingEffort)	The remaining incident effort	\$(Resolution)	Currently not used.
\$(ResolvedRelease)	The resolved release name.	\$(Severity)	The artifact's Severity.
\$(StartDate)	The start date of the artifact.	\$(URL)	URL to link to artifact.
\$(VerifiedRelease)	The verified release name.		

Each transition has a series of conditions which need to be satisfied for a user to actually execute the transition (i.e. move the incident from the originating status to the destination status):

Conditions	
The following users / roles are allowed to execute this transition:	
Condition Type	Condition Data
The detector of this Incident can execute:	No ▾
The owner of this Incident can execute:	Yes ▾
Users with the specified roles can execute:	Project Owner: <input type="checkbox"/>
	Manager: <input type="checkbox"/>
	Developer: <input type="checkbox"/>
	Tester: <input type="checkbox"/>
	Observer: <input type="checkbox"/>
	Incident User: <input type="checkbox"/>
Update	

Each transition also has a set of notification rules that allow you to specify who should get an email notification if the transition is executed.

Notifications	
The following users / roles are notified by email when this transition is executed:	
Notification Type	Notification Data
The detector of this Incident is notified:	Yes ▾
The owner of this Incident is notified:	No ▾
Users with the specified roles are notified:	Project Owner: <input type="checkbox"/>
	Manager: <input type="checkbox"/>
	Developer: <input type="checkbox"/>
	Tester: <input type="checkbox"/>
	Observer: <input type="checkbox"/>
	Incident User: <input type="checkbox"/>
Update	

Both the conditions and notifications allow you to set three types of user role:

- The detector of the incident can be allowed to execute the transition, and/or be notified when the transition occurs. For example, when an incident is marked as Resolved, the detector should be the only one who's allowed to move it to Closed. Similarly when an incident is moved from Assigned to Resolved, the detector should probably be notified so that he knows to log in and verify that it has been resolved satisfactorily.
- The owner of the incident can be allowed to execute the transition, and/or be notified when the transition occurs. For example, when an incident is marked as Assigned, the assigned owner should be the only one who's allowed to move it to Resolved. Similarly when an incident is moved from Open to Assigned, the owner should probably be notified so that he knows to log in and begin resolving the incident.
- A user with a specified role can be allowed to execute the transition, and/or be notified when the transition occurs regardless of whether they are the detector or owner. For example a user with role "Manager" might want the power to close all incidents regardless of ownership status, and might also want to be notified when any incident is marked as Not-Reproducible.

You can set any of these conditions by changing the drop-down list and/or check-boxes and clicking the appropriate <Update> button.

3.4.3. Edit Workflow Step

When you click on the incident status name link from either of the previous screens, you are taken to the workflow step details screen:

Edit Workflow Step Details | Assigned

[<< Back to Workflow Steps List](#)

Assign Incident (WT2)

>

Assign Incident (WT3)

>

Assigned (IS3)

>

Assign Incident (WT13)

>

Duplicate Incident (WT7)

>

Resolve Incident (WT5)

>

Unable to Reproduce (WT6)

The top part of the screen is the “workflow browser” which illustrates how the step relates to the workflow as a whole. It displays the current incident status in the middle, with the possible originating and destination transitions listed to either side. Clicking on either workflow transition name will take you to the appropriate workflow transition details page. This allows you to click through the whole workflow from start to finish without having to return to the workflow details page.

This page allows you to define the behavior of the various incident fields (i.e. those that are a standard part of SpiraTeam® such as Priority):

Incident Fields

The following Incident fields are hidden/disabled/required at this step in the workflow:

Field Name	Hidden	Disabled	Required
Actual Effort	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fixed Build	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closed On	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Description	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Detected Release	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Est. Effort	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Type	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Name	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Detected By	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Owned By	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Priority	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Remaining Effort	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Comments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resolved Release	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Started On	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Verified Release	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[Update](#)

This page also allows you to define the behavior of the various incident custom properties for this particular step in the workflow:

Incident Custom Properties

The following Incident custom properties are hidden/disabled/required at this step in the workflow:

Name	Type	Hidden	Disabled	Required
Notes	Text	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operating System	MultiList	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Web Browser	MultiList	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internal?	Boolean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rank	Integer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review Date	Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulty	List	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reviewer	User	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decimal	Decimal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[Update](#)

You can set each of the fields/custom properties as being:

- **Hidden** – The field / custom property will not be displayed when the incident is in this status
- **Disabled** – The field / custom property will be displayed, but will be greyed-out and read-only
- **Required** – The field / custom property will be required when the incident is in this status

Note that you cannot set a field/property as being required and either disabled or hidden since this would prevent a user from ever updating the incident. For example, when an incident is in the New status, you might make the owner field hidden (since a detector shouldn't need to know who will ultimately own it), when it gets to the Open status, you might make the field active, and when it gets to the Assigned status, you might make it active and required. This allows you to tailor the information gathered to the appropriate place in the workflow.

To actually make these changes, all you need to do is select the appropriate checkboxes in the list of fields and custom properties and click the corresponding <Update> button.

3.5. Notifications

This section allows the administrator and project owner to configure email server configuration, email notification content, and when notifications are sent. Server configuration and artifact templates can only be changed by the system Administrator. However, notification events can be configured by the project owner.

3.5.1 Email Configuration

The Email Configuration page is split into two sections. The first section covers email notification details, and the second section configures how email from the application is sent.

Email Configuration

By default, SpiraTeam will use the default IIS SMTP Virtual Server to send outgoing email notifications to users in the system. However, it can also be configured to send emails through an external SMTP server directly.

This page allows you to change these mail server settings:

E-Mail Notifications Active?	<input type="text" value="Yes"/>	<small>If disabled, SpiraTeam will not send out any messages.</small>
From E-Mail Address*:	<input type="text" value="administrator@mycompany.com"/>	<small>The address that emails will be sent from. Replies to this address will not be monitored.</small>
Reply-To E-Mail Address:	<input type="text"/>	<small>The Reply-To field that emails sent will contain. Blank will leave header field blank in messages.</small>
Send HTML Emails?	<input type="text" value="Yes"/>	<small>If enabled, emails will be sent out in HTML. Otherwise, plain text.</small>
Allow Users Control of Receiving Emails?	<input type="text" value="Yes"/>	<small>If enabled, users will be given the option to deny receiving emails from the system.</small>

- **Email Notifications Active?** – Defaults to Yes. If changed to No, the system will not send out any emails, regardless of other settings. Note that this means that new user requests will not get sent either.
- **From Email Address** – This is the email address specified in the ‘From:’ field of email notifications sent from the application.
- **Reply-To Email Address** – This is the address specified in the ‘ReplyTo:’ field for notification emails sent from the application.
- **Send HTML Emails?** – Defaults to Yes. This option specifies whether HTML or Plain-Text emails are sent from the system.
- **Allow Users Control of Receiving Emails?** – Defaults to Yes. This specifies whether or not a user can modify their profile to not receive any emails from the system. If set to no, users’ preference will be enabled and locked out.

Mail Server

Please leave all the following fields empty if you want to use the default IIS SMTP Virtual Server:

Host Name:	<input type="text"/>	<small>The SMTP host name of your mail server.</small>
Port Number:	<input type="text" value="25"/>	<small>The SMTP port number to use. Blank to use default of 25.</small>
SSL Connection:	<input type="text" value="No"/>	
User Name:	<input type="text"/>	<small>If your SMTP requires authentication, this is your username.</small>
Password:	<input type="text"/>	<small>If your SMTP requires authentication, this is your password.</small>

To use the internal IIS's default virtual SMTP server, leave all fields blank. The virtual server must then be configured to use proper SMTP server and network configuration. If you want the application to contact an SMTP server directly, use the following fields:

- **Host Name** – This is the SMTP server to connect to.
- **Port Number** – This is the port number to use, blank uses the default port 25.
- **SSL Connection** – Whether or not to use an SSL connection with the server. Be sure that the SMTP server's SSL certificate is trusted on the application server.
- **User Name** – When using an authentication method, this is the username to log in as.
- **Password** – When using an authentication method, this is the password to use.

Example settings for connecting to Gmail/Google Mail for sending notifications:

- ❖ **Host Name:** smtp.gmail.com
- ❖ **Port Number:** 587
- ❖ **SSL Connection:** Yes
- ❖ **User Name:** <account>@gmail.com
- ❖ **Password:** <account password>

3.5.2 Notification Templates

Notification templates are used by notification events, and are defined system-wide for each artifact type.

Notification Templates

Here you can specify the e-mail notification templates sent out for each Artifact type. To edit the template, select the Edit Template link.
To send a test e-mail using the template, select the Test Template link. The test e-mail will be sent using the first item in the project.

Artifact Type	Prefix	Operations
Requirement	RQ	Edit Test
Test Case	TC	Edit Test
Incident	IN	Edit Test
Task	TK	Edit Test
Test Set	TX	Edit Test

To edit a template, click the Edit link. To send a test email notification to yourself using the specified template, click the Test link.

Clicking the Edit link will take you to a page similar to the following. Depending on the artifact type you selected, the list of available fields will vary.

Notification Templates | [Return to Template List](#)

The template below will be sent whenever an event is matched for an artifact Requirement. Tokens in the template will be substituted when an e-mail is set. Otherwise, the template will be sent as-is to assigned users and roles.

-- Font -- -- Size -- **B** *I* U | [List] [List] [List] | [Link] [Unlink] [Image] | [Undo] [Redo] [Print]

`${Product}`
Requirement: `${Name}` (`${ProjectName}`)
`${Description}`

The following are all available tokens for Requirements and their meanings. Tokens not in this list will be taken out of the final message. Click on a token to insert it into the current cursor position in the editor above.

<code>\${Author}</code>	The name of the Author	<code>\${Comments}</code>	Currently not used.
<code>\${Description}</code>	Descriptive text	<code>\${EventName}</code>	The name of the event that fired the notification.
<code>\${ID#}</code>	The ID# of the item.	<code>\${Importance}</code>	The current Importance
<code>\${Name}</code>	Name of the Requirement	<code>\${NotifyTo}</code>	The notification receiver's name.
<code>\${Owner}</code>	The name of the Owner	<code>\${PlannedEffort}</code>	Planned effort in HH:MM
<code>\${Product}</code>	The name of the application.	<code>\${ProjectName}</code>	The name of the project.
<code>\${Release}</code>		<code>\${ScopeLevel}</code>	The current Status
<code>\${TaskActualEffort}</code>	Assigned Task's actual effort in HH:MM	<code>\${TaskEstimatedEffort}</code>	Assigned Task's planned effort in HH:MM
<code>\${TaskProjectedEffort}</code>	Assigned Task's projected effort	<code>\${TaskRemainingEffort}</code>	Assigned Task's remaining effort
<code>\${URL}</code>	URL to link to artifact.		

On this screen you are presented with the same rich text editor available elsewhere in the application. Displayed in it is the current template (with template tags showing) for the artifact. Template tags start with a \$ (dollar sign) and then a string name enclosed in () parentheses. When email notifications are sent, tokens will be replaced with specific information from the artifact that the notification is being sent for. Invalid tokens will be stripped from the template text. Clicking a token in the list will insert it in the current position in the textbox for easy selecting and editing.

If HTML notifications are disabled, the template will be converted to plain text before sending.

When finished, click the update button to save your new template. The new template will take effect immediately.

3.5.3 Notification Events

The Notification Events section is where project managers can set up when and to whom notifications are sent out to users of the system. Clicking on the Notification Event link will present you with a list of all events defined for the current project:

Notification Events | Sample Application Two [\(Change Project\)](#)

The following notification events have been defined for this project. To activate or deactivate an event or change assigned fields or users, click the 'Edit' link.

Event Name	Artifact	On Creation?	Active?	Operations
Incident: Newly Created	Incident	Yes	Yes	Edit Delete
Incident: Owner Assigned	Incident	No	Yes	Edit Delete
Requirement: Newly Created	Requirement	Yes	Yes	Edit Delete
Requirement: Owner Assigned / Importance	Requirement	No	Yes	Edit Delete
Test Case: Executed	Test Case	No	Yes	Edit Delete
Task: Newly Created	Task	Yes	Yes	Edit Delete
Task: Owner or Priority Changed	Task	No	Yes	Edit Delete
Test Set: Newly Created	Test Set	Yes	Yes	Edit Delete
Test Set: Execution Changed	Test Set	No	Yes	Edit Delete

[Add](#)

Note that these events do not override nor cancel any notifications configured for Incident Workflows. To adjust settings based on Incident Status changes and workflow steps, please go to the [View/Edit Workflow](#) page.

>> [Go to Edit Workflows](#)

Note: These events can handle all changes to any of the artifacts except changes handled by Status changes to Incidents. Incident status changes are handled through the Workflow configuration.

When clicking on the Edit link or Add button, you will be presented with the event details screen:

Notification Event Details | Incident: Owner Assigned

[<< Back to Notification Event List](#)

Event details are listed below. You can edit the fields and users and wither or not this event is fired on creation, but once created the Artifact Type cannot be changed.

Once finished, click [Update] or [Insert] to save your changes.

Event Name:

Artifact Type: This event will be attached to this artifact type.

On Creation? Whether this event is fired on a new artifact creation.

Active? Whether this event is active or not.

Subject Line: The subject-line of the e-mail notification. Tokens used in the email template can be used in the subject line.

The top section defines general configuration items for the event:

- **Event Name:** used to name the event, only used for administrative purposes.
- **Artifact Type:** The artifact type this event is attached to. Once an event is created, the artifact type cannot be changed.
- **On Creation?** If set to yes, this event will fire when an artifact is created, as well as when any configured fields are changed.
- **Active?** If set to yes, this event is active and will send notifications when configured fields are modified.
- **Subject Line:** The subject line of the notification email.

The Artifact Fields will let you configure which fields will cause this notification to send an email notification:

Artifact Fields:

This event will be active if any of the selected fields are changed.

Field	Notify On Change?
Severity	<input type="checkbox"/>
Priority	<input type="checkbox"/>
Type	<input type="checkbox"/>
Detected By	<input type="checkbox"/>
Owned By	<input checked="" type="checkbox"/>
Detected Release	<input type="checkbox"/>
Resolved Release	<input type="checkbox"/>
Verified Release	<input type="checkbox"/>
Name	<input type="checkbox"/>

Selected fields are treated in an OR-based query, so that if you have two or more fields checked for an event, the event will send a notification if **either** of the two fields are changed. Depending on the artifact type configured above, the available fields will vary.

The last section is the configuration of whom to send the notifications to:

Users and Project Roles:

When a selected field is changed, the following users or roles will be notified.

User / Project Role	Enabled?
Artifact Opener or Creator:	<input type="checkbox"/>
Artifact Owner:	<input checked="" type="checkbox"/>
Project Roles:	
Project Owner:	<input checked="" type="checkbox"/>
Manager:	<input type="checkbox"/>
Developer:	<input type="checkbox"/>
Tester:	<input type="checkbox"/>
Observer:	<input type="checkbox"/>
Incident User:	<input type="checkbox"/>

If a user belongs to more than one group or they have manually signed up to receive notifications to any changes in the artifact, they will only receive one notification for the artifact change.

3.6. Documents

SpiraTeam® includes a built-in web-based document management system that allows you to upload and share documents between project team members. These documents are stored in folders, categorized by

a series of user-defined meta-tags and can also be associated with other artifacts in the system (e.g. requirements, incidents, etc.).

The set of administrative options located under the “Documents” heading allow the Project Owner to configure how the documents are organized in their particular project.

3.6.1. Edit Document Types

When users upload documents into a SpiraTeam project, they are required to specify the type of document that is being uploaded. The list of document types is configurable by the Project Owner for each individual project.

When you click on Documents > Edit Types, you can edit the list of types available:

Document Type #	Name*	Description	Default*	Active*
DT000001	Default	The default document type for a project	<input type="radio"/>	No
DT000002	Functional Specification	Functional specification for the system. Can be performance or featu	<input checked="" type="radio"/>	Yes
DT000003	Screen Shot		<input type="radio"/>	Yes
DT000004	Stack Trace		<input type="radio"/>	Yes
DT000005	UML Diagram	UML documents such as sequence diagram, state diagram, use-ca:	<input type="radio"/>	Yes
DT000006	Screen Layout		<input type="radio"/>	Yes

By default, each project will be created with a single document type called ‘Default’. You can add additional document types and/or change the name of the ones already created. If you decide that you no longer want to use a specific document type, you can set its active flag to “No”.

The only requirement is that each project needs to have at least one active document type available, and that there is one active type designated as the default type. The default type is the option that will be initially selected when a user uploads a file / URL to the project.

3.6.2. Edit Document Folders

In addition to associating the documents in the system with a “document type”, they can also be organized into a hierarchy of folders. Clicking on Documents > Edit Folders allows the Project Owner to create / modify the folder structure into which users can upload the documents for sharing and collaboration:

Edit Document Folders | Library Information System [\(Change Project\)](#)

The following document folder have been created in this project. Please click on the link to edit an existing folder, or click on the [Add] button to create a new folder in the project:

Document Folder #	Name	Operations
DF000001	Root Folder	> Edit Delete
DF000007	Design Documents	> Edit Delete
DF000008	Misc Documents	> Edit Delete
DF000003	Screen Captures	> Edit Delete
DF000002	Specifications	> Edit Delete
DF000004	Test Results	> Edit Delete
DF000005	Error Messages	> Edit Delete
DF000006	Web Links	> Edit Delete

[▶ Add](#)

Initially, new projects are created with a single folder called “Root Folder”, under this folder, you can click the [Add] button to add additional folders, “Edit” to change the name and/or location of an existing folder, or “Delete” to permanently remove a folder. *Note that deleting a folder will remove all its subfolders and any documents contained in the folder and subfolders.*

When you click on either [Add] or “Edit”, you will be taken to the following screen that allows you to edit the details of the new/modified folder:

Add/Edit Document Folder | Design Documents

Please review the information listed below and make any changes if necessary. Once you have finished, click [Update/Insert] to confirm them.

Folder Name*:

Parent Folder:

[▶ Update](#) [▶ Cancel](#)

The first field allows you to specify the name of the folder as it will be displayed to users in the system, and the second field allows you to tell the system which parent folder should contain the new folder. You cannot make the root folder a child of an existing folder, and there can only be a single root folder per project.

3.7. Custom Properties

SpiraTeam allows you to customize all of the artifacts in the system (requirements, test cases, incidents, etc.) by adding user-defined custom properties in addition to the built-in fields. You can create a variety of different types of custom properties. This section describes how you setup different custom lists and custom properties in your projects.

Artifacts in SpiraTeam can have up to 30 different custom properties per artifact-type, per project. There are different types of custom properties allowed:

- **Text:** Normal or Rich-Text field.
- **Integer:** Whole-Number entry.
- **Decimal:** Fractional number entry (currency, etc.)
- **Boolean:** Simple yes/no (on/off) checkbox.
- **Date:** Date selector.
- **List:** Custom List selector.
- **Multi-List:** Custom List selector that allows multiple values.
- **User:** List of assignable users.

Each custom property can have optional settings applied to it. Optional settings are as follows. (Note that not all settings are allowed for all property types.)

- **Default:** The default value when a new artifact is created.
- **Allow Empty:** Whether or not an empty value is allowed.
- **Precision:** (Decimal Only) How many decimal places is allowed (or the value is rounded to).
- **Minimum Value:** The minimum value allowed.
- **Maximum Value:** The maximum value allowed.
- **Minimum Length:** The minimum length of the data required in the field.
- **Maximum Length:** The maximum length of the data allowed in the field.
- **Rich Text:** Whether or not the text field allows HTML or not.
- **Custom List:** The defined Custom List for the field that users can select from.

Important: Note that setting 'Allow Empty' to No will override any *workflow step* definitions, and will always require a value to be entered in, even if the workflow is configured to have the field disabled!

3.7.1. Edit Custom Lists

If you are planning on having any list based custom properties in your project, then you first need to create and populate the custom project lists that the user will be able to select from. These lists are stored separately from the individual artifact types so that you can have one set of values (e.g. list of operating systems under test) be reused by multiple artifact types.

The following screen is displayed when you choose the "Edit Custom Lists" link from the Administration sidebar navigation:

Edit Custom Lists | Library Information System ([Change Project](#))

The following custom lists have been created in this project. To add a new custom list, please click on the "Add List" option, to remove a custom list click the appropriate "Remove" button and to edit a custom list (including its values), click on the "Edit Values" button.

List #	List Name	# Values	Actions
[CL:000001]	Difficulty	3	Edit Values Remove
[CL:000002]	Requirement Type	2	Edit Values Remove
[CL:000003]	Test Type	3	Edit Values Remove
[CL:000004]	Operating System	7	Edit Values Remove
[CL:000005]	Web Browser	4	Edit Values Remove
[CL:000006]	Step Type	2	Edit Values Remove
			> Add List

The screen displays all the custom lists currently defined within the project, together the number of values associated with each list. By default the screen will initially be empty so the first thing you need to do is click <Add List> to create a new custom list:

[<< Back to Custom Lists](#)

Edit Custom List Values | New List

List Name:

The following custom values have been created for this list. Please make any changes and click [Save].
To remove an existing custom list value just click the 'Remove' link.
To add a new value, click the 'Add Value' link at the bottom of the grid.

List Value #	Value	Actions
<i>No list values defined. Add Value</i>		
		> Add Value

[Save](#) [Cancel](#)

After changing the name of the list, you can either click <Save> to commit the change, or click the <Add Value> option to add some list values:

[<< Back to Custom Lists](#)

Edit Custom List Values | Database Platforms

List Name:

The following custom values have been created for this list. Please make any changes and click [Save].
 To remove an existing custom list value just click the 'Remove' link.
 To add a new value, click the 'Add Value' link at the bottom of the grid.

List Value #	Value	Actions
[PV:000022]	<input type="text" value="SQL Server"/>	Remove
[PV:000023]	<input type="text" value="My SQL"/>	Remove
[PV:000024]	<input type="text" value="Oracle"/>	Remove
		> Add Value

[Save](#) [Cancel](#)

This is the set of values that the user will select from the drop-down list when the custom property is displayed:

To add a new custom list value, click the <Add Value> button and a new row will be added to the list which you can now edit. To edit an existing custom list value, simply change the name in the textbox and click <Save>. To remove a custom list value, simply click on the “Remove” hyperlink.

To edit an existing custom list, you just need to click on the “Edit Values” hyperlink to display the custom list name and list of associated values (which is the same screen as the one displayed for a new list). To remove a custom list from the project, just click on the “Remove” hyperlink next to the custom list and the list and all its associated values will be deleted from the project.

3.7.2. Edit Custom Properties

This option is used to actually define the custom properties associated with each artifact type in the project. The following screen is displayed when you choose the “Edit Custom Properties” link from the Administration sidebar navigation:

Edit Custom Properties | Library Information System ([Change Project](#))

The following custom properties are currently defined for the selected artifact type. To view the custom properties for a different artifact type, click the appropriate link in the grid below.

You can add, edit or remove custom property definitions by clicking the appropriate link in the grid below:

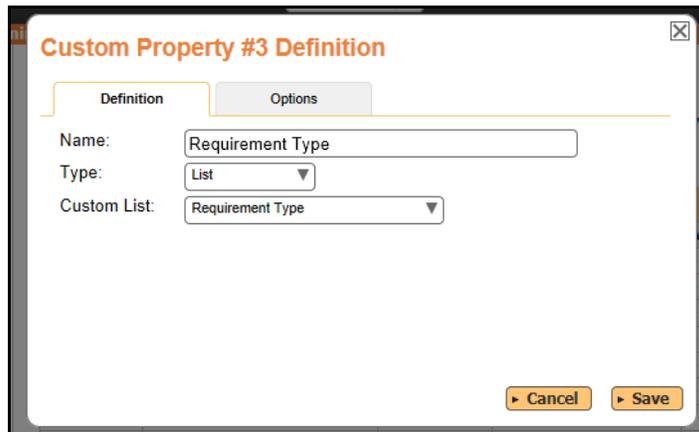
Artifact Type:

Field #	Property Name	Type	Legacy Name	Actions
1	URL	Text	TEXT_01	> Edit Definition Remove
2	Difficulty	List	LIST_01	> Edit Definition Remove
3	Requirement Type	List	LIST_02	> Edit Definition Remove
4	Notes	Text	TEXT_02	> Edit Definition Remove
5	Review Date	Date		> Edit Definition Remove
6	Decimal	Decimal		> Edit Definition Remove
7				> Add Definition
8				> Add Definition

The screen displays a list of all the possible custom properties for a particular artifact type for the current project. Each artifact type (requirement, test case, etc.) can have up to thirty (30) custom properties of various types.

Initially the screen will default to showing the existing custom properties for a project's Requirements; to change the list to a different artifact type (e.g. Incidents), all you need to do is change the artifact type in the drop-down-list. This will refresh the list to show the custom properties for that artifact type.

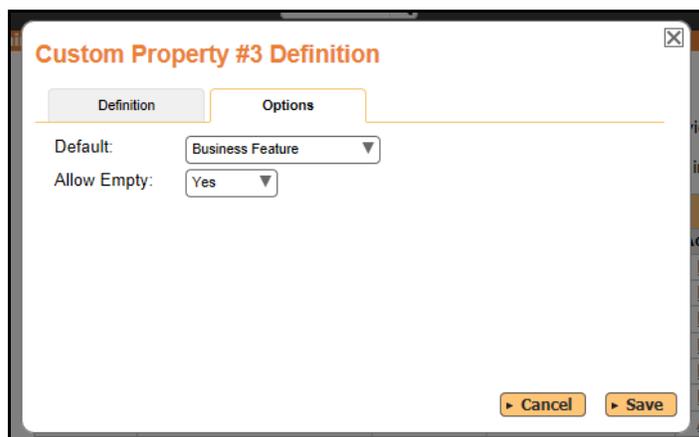
To edit an existing custom property definition or add a new definition, click the “Edit Definition” link for a specific property, and the following dialog will be displayed:



The screenshot shows a dialog box titled "Custom Property #3 Definition" with a close button in the top right corner. It has two tabs: "Definition" (selected) and "Options". Under the "Definition" tab, there are three fields: "Name:" with a text input containing "Requirement Type", "Type:" with a dropdown menu set to "List", and "Custom List:" with a dropdown menu set to "Requirement Type". At the bottom right, there are two buttons: "Cancel" and "Save".

The fields visible will vary depending on the type of custom property you have selected, but every custom property will need to have a Name and a Type. The Name is the caption that will be shown to the user when viewing or editing the artifact. The type is the type of data the field allows. If the custom property is either a List or Multi-List type, you will need to choose the associated Custom List that you previously defined.

Under the Options tab will be available options that can be set for the custom property:



The screenshot shows the same dialog box, but with the "Options" tab selected. Under the "Options" tab, there are two fields: "Default:" with a dropdown menu set to "Business Feature", and "Allow Empty:" with a dropdown menu set to "Yes". At the bottom right, there are two buttons: "Cancel" and "Save".

When finished, click the 'Save' button and you will be returned to the Custom Property list.

Important: When changing a custom property's type or removing a custom property, the data is not actually removed from the artifact. Therefore, if you change a custom property from a date type to a text custom property, the field will display the old date value until it is changed by the user.

3.8. System

3.8.1. General Settings

The general settings page allows you to configure SpiraTeam® to better match your environment and setup. In the current version, you can specify the default language, configure the folder used to store document attachments and also the type of text editing for the longer, descriptive text fields used in the application (e.g. a test case's description):

General Settings

This page allows you to modify the general SpiraTeam system settings:

Default Culture:
The culture used to determine which number/date formats to use and which language to use

Default Timezone:
The timezone used to determine how dates and times are displayed in the system.

Web Server URL*:
The base URL used to access SpiraTeam (e.g. http://myserver/SpiraTeam)

Attachments Folder*:
The folder used to store file attachments (e.g. C:\Program Files\SpiraTeam\Attachments)

Rich Text Editing*:
 Use rich-text editing for artifact descriptions
 Use rich-text editing for test step list

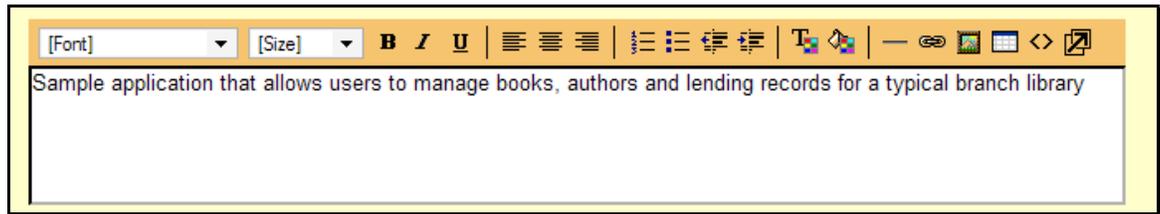
Display Build During Test Execution*:

Auto Unassign Tests*:
 Passing a test case unassigns it from its owner
 Completing a test set unassigns it from its owner

Event Log Retention*: days
The number of days that error messages are retained in the system event log.

- **Default Culture** – SpiraTeam can display information in a variety of different languages (assuming that the appropriate language packs have been installed) and number formats. By default, SpiraTeam will use the regional settings (language and number formats) of the operating system it has been installed on. However, you can override this default by choosing the appropriate culture from the list of options displayed in the drop-down list. *Note: The list of culture options does not reflect the available language packs, so in some cases, the setting will only change the number formats.*
- **Default Timezone** – SpiraTeam stores all dates and times internally in Universal Coordinated Time (UTC) and can therefore display dates/times adjusted for different timezones. By default, SpiraTeam will display dates in the timezone specified in the operating system it has been installed on. However, you can override this default by choosing the appropriate display timezone from the list of options displayed in the drop-down list.
- **Web Server URL** – This is the URL that your users use to access the system. Do not put the /Login.aspx or any other page here, as this URL is used to generate links to pages in the application.
- **Attachments Folder** - By default when SpiraTeam® is installed, the document attachments uploaded in the system get stored inside the C:\Program Files\SpiraTeam\Attachments folder located inside the main SpiraTeam® installation root. However you may want to have the documents stored on a remotely mounted drive or on a different hard disk partition. In which case you can simply change the folder pointed to in the text-box illustrated above and then click [Update] to commit the change.

- **Rich Text Editing** - When editing certain text fields inside the system, the user is presented with a 'rich-text' interface that allows them to set the formatting of the text using a toolbar:



In addition this toolbar includes the option to insert bulleted lists, tables, links to other websites and other text effects. However this functionality can cause certain pages in the application to load more slowly on some browsers (e.g. Internet Explorer 6.0 or earlier) – especially on the test case details screen, which has rich-text editors for each of the test steps.

If you experience performance issues, you can use the configuration options on this page to turn off rich-text editing for just the test steps (which causes the most performance issues) or for both the test steps and for the various other description text-boxes. You can change this setting at any time, but any existing formatted text will appear as HTML markup if you switch from rich-text to back to plain-text on an existing installation.

- **Display Build During Test Execution** – During test execution the system can display a drop-down list of builds associated with the selected release. If you are using SpiraTeam in conjunction with a build server such as Jenkins/Hudson, you should choose “Yes”, otherwise we recommend hiding the list of builds (to avoid confusing your testers) by choosing “No”.
- **Auto Unassign Tests** – When a tester passes an assigned test case or all the test cases in an assigned test set the system by default will automatically un-assign the test case / test set from the user. To prevent this from happening, simply change the setting to “No”.
- **Event Log Retention** – As described in section 3.8.7, SpiraTeam comes with a built-in diagnostic event log. By default the system will only retain the last 30-days of events to avoid wasting storage space. You can adjust the retention period in this section to match your organization’s policies.

3.8.2. File Type Icons

The “File Types List” administration page allows you to view all the different filetypes that are recognized by SpiraTeam and add or edit the associated icon, name, description and MIME type:

Extension	Icon	Description	Mime Type	Operations
		Other File Type	application/octet-stream	
ai		Adobe Illustrator	application/illustrator	Edit Delete
asp		Active Server Page	text/plain	Edit Delete
aspx		ASP Page	text/plain	Edit Delete
bmp		BMP Image	image/bmp	Edit Delete
c		C Source	text/plain	Edit Delete
chm		Compiled Help	application/octet-stream	Edit Delete
cpp		C++ Source	text/plain	Edit Delete
cs		C# Source	text/plain	Edit Delete
css		Stylesheet	text/plain	Edit Delete
dll		Assembly	application/octet-stream	Edit Delete

If you click on the “Edit” hyperlink next to a filetype, or click on the <Add> button at the bottom of the screen, the system will display the page that lets you add or edit a filetype entry:

Edit / Add File Type | [Return to Template List](#)

This is the definition for the file type with the given extension. Entering in values here simply helps with displaying correct file information on the Source Control and Documents pages with attachments. All fields are required, blank fields will be set to the default. The icon image must exist on the web server in the active theme directory under "Filetypes".

Filetype ID:

File Extension:

File Description:

Mime Type:

File Icon Image:

On this page you can enter/edit the file extension that's used to recognize the type of file uploaded, the description of the file type (displayed in popup tooltips), the MIME type (used to determine how the browser handles the file type) and the path to the icon image. Once you are satisfied with the values, you can click on the <Update> button to confirm the changes.

3.8.3. Edit Reports

The "Edit Reports" administration page lets you create custom reports in the system, that your users can run in the various projects they have access to. Note that the report definitions themselves are global to the system and therefore available in all projects.

Edit Reports

This page displays the various reports that are available in the system. The reports listed as 'Default' are part of the system and cannot be modified, however you can add a new report or copy an existing report for modification using the options below.

Category	Name	Active	Default	Operations
	Requirement Reports Copy of Requirements Detailed	✓		> Edit Copy Delete
	Requirement Reports Requirements Detailed	✓	✓	> View Copy
	Requirement Reports Requirements Plan	✓	✓	> View Copy
	Requirement Reports Requirements Summary	✓	✓	> View Copy
	Requirement Reports Requirements Traceability	✓	✓	> View Copy
	Test Case Reports Printable Test Scripts	✓		> View Copy
	Test Case Reports Test Case Detailed	✓	✓	> View Copy
	Test Case Reports Test Case Summary	✓	✓	> View Copy
	Test Case Reports Test Case Traceability	✓	✓	> View Copy
	Test Case Reports Test Run Detailed	✓	✓	> View Copy
	Test Case Reports Test Run Summary	✓	✓	> View Copy
	Test Case Reports Test Set Detailed	✓	✓	> View Copy
	Test Case Reports Test Set Summary	✓	✓	> View Copy
	Incident Reports Incident Detailed	✓	✓	> View Copy
	Incident Reports Incident Summary	✓	✓	> View Copy
	Task Reports Task Detailed	✓	✓	> View Copy
	Task Reports Task Summary	✓	✓	> View Copy
	Release Reports Release Detailed	✓	✓	> View Copy
	Release Reports Release Plan	✓	✓	> View Copy
	Release Reports Release Summary	✓	✓	> View Copy
				> Add New Report

The list of report definitions contains both the standard (default) reports that ship with the system and any custom reports that you have defined. However any of the reports listed with the "Default" option checked will not be editable. So, if you want to modify one of the built-in reports to make it better suit your needs, you should instead click on the "Copy" hyperlink next to the report and make a copy of the report that you can then modify. You can view any of the default reports by clicking on the associated "View" hyperlink.

To edit an existing non-default report, click on the "Edit" hyperlink. To add a new report from scratch, simply click on the "Add New Report" option at the bottom of the list. Either of these will take you to the Report editing screen:

Report Details | Copy of Requirements Detailed

This page displays the details of a specific report. For user-defined reports you can specify the formats, define the sections and provide a header/footer that should be included:

Name:*

Description:

Header:

Footer:

Active:*

Category:*

The top-half of this screen (illustrated above) lets you specify the name of the report, the long description (displayed in tooltips but not in the report itself) and a rich-text footer and header. The header and footer will be displayed at the top and bottom of the generated report.

In addition, you can specify whether the report is active (and therefore can be used in the SpiraTeam reports center) and which report category heading the report will appear in. This is also used to determine which role(s) are able to run the report (e.g. a user that has permissions to view requirements will be able to run all reports listed under the "Requirement Reports" category).

The lower-half of the screen displays the list of formats, standard sections and custom sections that make up the report:

Formats:*

Format
<input checked="" type="checkbox"/> Adobe Acrobat
<input checked="" type="checkbox"/> HTML
<input type="checkbox"/> MS-Excel 2003+
<input type="checkbox"/> MS-Excel 2007+
<input checked="" type="checkbox"/> MS-Word 2003+
<input checked="" type="checkbox"/> MS-Word 2007+
<input checked="" type="checkbox"/> XML

Standard Sections:*

Name	Active	Operations
Project Overview	✓	> Customize Delete
Requirements Details	✓	> Customize Delete
> Add New Standard Section		

Custom Sections:*

Name	Active	Operations
> Add New Custom Section		

The list of formats is fixed in the system, you can simply choose which formats this specific report will be available in. The reporting engine will take care of converting your report into the target format, you just need to specify which type(s) are applicable.

a) Standard Sections

The list of **standard sections** contains a list of the various pre-defined report sections that are to be included in the report. A standard section consists of a set of nested queries and embedded elements that will return back data. For example, the “Requirements Details” section consists of a list of all the requirements in a project, together with the associated test cases, tasks, custom properties, attachments, discussions, change history, source code revisions and other related items.

With a standard section, you cannot change the underlying data query, but you can change the header, footer and XSLT template used to format the results:

Add/Edit Standard Section

Name: Requirements Details > [Create Default Template](#)

Description: This section displays all of the requirements in a document format with embedded tables for each of the associated elements.

Header: -- Font -- -- Size -- B I U | [List] [Table] [Image] [Link] [Unlink] [Print] [Fullscreen] [Refresh] [Close]

Header: null

Footer: -- Font -- -- Size -- B I U | [List] [Table] [Image] [Link] [Unlink] [Print] [Fullscreen] [Refresh] [Close]

Footer: null

Template: <?xml version="1.0" encoding="utf-8"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform" xmlns:msxsl="urn:schemas-microsoft-com:xslt" exclude-result-prefixes="msxsl">
<xsl:template match="//RequirementData">
<xsl:for-each select="//Requirement">
<div>
<xsl:attribute name="style">

You need to enter the XSLT Template for displaying the retrieved data as HTML. When you first add the section, the default template for this section will be included. You can modify

Update Cancel

When you either click on “Add New Standard Section” or the “Customize” link next to an existing standard section, the popup dialog illustrated above will be displayed. On this page you can change the following fields:

- **Name** – Choose the name of the standard report section you want to use from the dropdown list. Changing the name of the section will automatically update the Description field below.
- **Description** – This is the description of the report section, it is not displayed in the final report.
- **Header** – This is the header that will be displayed *before* the dynamic data retrieved as part of the report section. You can enter in formatted rich text in this field.
- **Footer** – This is the footer that will be displayed *after* the dynamic data retrieved as part of the report section. You can enter in formatted rich text in this field.
- **Template** – This is the eXtensible Markup Language Stylesheet Transform (XSLT) used to transform the raw XML data from the report query into the final HTML display format. When you choose/change the name dropdown list, clicking on the “Create Default Template” will populate this field with the default template used to render the data.

When you first create a new standard report section, we recommend using the option to “Create Default Template”. This will then allow you to run the report in the main reports center and have all the available data fields displayed in the standard format. If you would like to customize the content of the section, you have several options:

- **Customize Header/Footer** – if you want to keep the data and layout as-is, you can simply add a custom header and footer to add organization specific information into the report.
- **Customize the Data/Layout** – if you want to customize how the data is displayed and formatted, you will need to edit the XSLT Template. You can learn more about XSLT at the W3Schools website (<http://www.w3schools.com/xsl>). However, the recommended approach is to first run the “Raw XML” format report from the main SpiraTeam reports center. An example XML report is partially shown below:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Report>
  <Title>
    Requirements Detailed Report
  </Title>
  <ProjectData>
    <Project>
      <ProjectId>1</ProjectId>
      <ProjectGroupId>2</ProjectGroupId>
      <Name>Library Information System</Name>
      <Description>Sample application that allows users to manage books, authors and lending
records for a typical branch library</Description>
      <Website>www.libraryinformationsystem.org</Website>
      <CreationDate>2005-11-30T19:00:00</CreationDate>
      <ActiveYn>Y</ActiveYn>
      <WorkingHours>8</WorkingHours>
      <WorkingDays>5</WorkingDays>
      <NonWorkingHours>0</NonWorkingHours>
      <TimeTrackIncidentsYn>Y</TimeTrackIncidentsYn>
      <TimeTrackTasksYn>Y</TimeTrackTasksYn>
      <EffortIncidentsYn>Y</EffortIncidentsYn>
      <EffortTasksYn>Y</EffortTasksYn>
      <TasksAutoCreateYn>Y</TasksAutoCreateYn>
      <ReqDefaultEffort>480</ReqDefaultEffort>
      <TaskDefaultEffort>360</TaskDefaultEffort>
      <ProjectGroupName>Internal Projects</ProjectGroupName>
    </Project>
  </ProjectData>
  <RequirementData>
    <Requirement>
      <RequirementId>1</RequirementId>
      <ProjectId>1</ProjectId>
      <ScopeLevelId>3</ScopeLevelId>
      <AuthorId>2</AuthorId>
      <Name>Functional System Requirements</Name>
      <CreationDate>2003-11-30T19:00:00</CreationDate>
      <LastUpdateDate>2003-11-30T19:00:00</LastUpdateDate>
      <IndentLevel>AAA</IndentLevel>
      <ExpandedYn>Y</ExpandedYn>
      <VisibleYn>Y</VisibleYn>
      <SummaryYn>Y</SummaryYn>
      <AttachmentsYn>N</AttachmentsYn>
      <CoverageCountTotal>21</CoverageCountTotal>
      <CoverageCountPassed>10</CoverageCountPassed>
      <CoverageCountFailed>3</CoverageCountFailed>
      <CoverageCountCaution>1</CoverageCountCaution>
      <CoverageCountBlocked>1</CoverageCountBlocked>
      <PlannedEffort>8700</PlannedEffort>
      <TaskEstimatedEffort>11400</TaskEstimatedEffort>
      <TaskActualEffort>7570</TaskActualEffort>
      <TaskProjectedEffort>3855</TaskProjectedEffort>
      <TaskRemainingEffort>11485</TaskRemainingEffort>
      <TaskCount>42</TaskCount>
      <TaskPercentOnTime>59</TaskPercentOnTime>
      <TaskPercentLateFinish>6</TaskPercentLateFinish>
      <TaskPercentNotStart>7</TaskPercentNotStart>
      <TaskPercentLateStart>28</TaskPercentLateStart>
      <ScopeLevelName>In Progress</ScopeLevelName>
      <AuthorName>Fred Bloggs</AuthorName>
      <HasDiscussionChanged>>false</HasDiscussionChanged>
      <IsDeleted>>false</IsDeleted>
    </Requirement>
  </RequirementData>
</Report>
```

```

<CustomProperties>
  <CustomProperty>
    <Alias>URL</Alias>
    <Name>Custom_01</Name>
    <Type>Text</Type>
  </CustomProperty>
  <CustomProperty>
    <Alias>Difficulty</Alias>
    <Name>Custom_02</Name>
    <Type>List</Type>
  </CustomProperty>
  <CustomProperty>
    <Alias>Requirement Type</Alias>
    <Name>Custom_03</Name>
    <Type>List</Type>
  </CustomProperty>
  <CustomProperty>
    <Alias>Notes</Alias>
    <Name>Custom_04</Name>
    <Type>Text</Type>
  </CustomProperty>
  <CustomProperty>
    <Alias>Review Date</Alias>
    <Name>Custom_05</Name>
    <Type>Date</Type>
  </CustomProperty>
  <CustomProperty>
    <Alias>Decimal</Alias>
    <Name>Custom_06</Name>
    <Type>Decimal</Type>
  </CustomProperty>
</CustomProperties>
<Discussions />
<TestCases />
<Tasks />
<Attachments />
<History>
  <HistoryChangeSetType>
    <ChangeTypeId>1</ChangeTypeId>
    <ChangeTypeName>Modified</ChangeTypeName>
  </HistoryChangeSetType>
  <HistoryChangeSetType>
    <ChangeTypeId>2</ChangeTypeId>
    <ChangeTypeName>Deleted</ChangeTypeName>
  </HistoryChangeSetType>
  <HistoryChangeSetType>
    <ChangeTypeId>3</ChangeTypeId>
    <ChangeTypeName>Added</ChangeTypeName>
  </HistoryChangeSetType>
  <HistoryChangeSetType>
    <ChangeTypeId>4</ChangeTypeId>
    <ChangeTypeName>Purged</ChangeTypeName>
  </HistoryChangeSetType>
  <HistoryChangeSetType>
    <ChangeTypeId>5</ChangeTypeId>
    <ChangeTypeName>Rollback</ChangeTypeName>
  </HistoryChangeSetType>
  <HistoryChangeSetType>
    <ChangeTypeId>6</ChangeTypeId>
    <ChangeTypeName>Undelete</ChangeTypeName>
  </HistoryChangeSetType>
  <HistoryChangeSetType>
    <ChangeTypeId>7</ChangeTypeId>
    <ChangeTypeName>Imported</ChangeTypeName>
  </HistoryChangeSetType>
  <HistoryChangeSetType>
    <ChangeTypeId>8</ChangeTypeId>
    <ChangeTypeName>Exported</ChangeTypeName>
  </HistoryChangeSetType>
</History>
<Requirements />
<Incidents />

```

```

    <SourceCodeRevisions />
  </Requirement>
</RequirementData>
</Report>

```

This XML data is then converted by the XSLT template into HTML format so that it can be included into the final generated report. An example fragment of the XSLT template looks like:

```

<?xml version="1.0" encoding="utf-8"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
xmlns:msxsl="urn:schemas-microsoft-com:xslt" exclude-result-prefixes="msxsl">
  <xsl:template match="/RequirementData">
    <xsl:for-each select="Requirement">
      <div>
        <xsl:attribute name="style">
          padding-left: <xsl:value-of select="string-length(IndentLevel)*2"/>px;
        </xsl:attribute>
        <xsl:if test="SummaryYn='Y'">
          <div class="Title2">
            RQ:<xsl:value-of select="RequirementId"/> - <xsl:value-of select="Name"/>
          </div>
          <div class="Description">
            <xsl:value-of select="Description" disable-output-escaping="yes"/>
          </div>
          <br />
        </xsl:if>
        <xsl:if test="SummaryYn='N'">
          <xsl:attribute name="style">
            padding-left: <xsl:value-of select="string-length(IndentLevel)*2"/>px;
          </xsl:attribute>
          <div class="Title3">
            RQ:<xsl:value-of select="RequirementId"/> - <xsl:value-of select="Name"/>
          </div>
          <p>
            <xsl:value-of select="Description" disable-output-escaping="yes"/>
          </p>
        </xsl:if>
      </div>
    </xsl:for-each>
  </xsl:template>

```

So using a combination of XSLT and the Raw XML report format, you can generate a customized view of the standard report section that will be included in the final report.

Sometimes, however you want to be able to create a completely custom report that includes customized data as well as a custom format. In which case you need to use a **custom report section** instead.

b) Custom Section

Back on the main report details page:

Formats:			
Format			
<input checked="" type="checkbox"/>		Adobe Acrobat	
<input checked="" type="checkbox"/>		HTML	
<input type="checkbox"/>		MS-Excel 2003+	
<input type="checkbox"/>		MS-Excel 2007+	
<input checked="" type="checkbox"/>		MS-Word 2003+	
<input checked="" type="checkbox"/>		MS-Word 2007+	
<input checked="" type="checkbox"/>		XML	

Standard Sections:			
Name	Active	Operations	
	Project Overview	<input checked="" type="checkbox"/>	> Customize Delete
	Requirements Details	<input checked="" type="checkbox"/>	> Customize Delete
> Add New Standard Section			

Custom Sections:			
Name	Active	Operations	
> Add New Custom Section			

If you click on “Add New Custom Section”, the following dialog box will be displayed:

Add/Edit Custom Section

Name:* List of Requirement Names and IDs

Description: This new custom section contains a table of the requirements name and IDs

Header: This new custom section contains a table of the requirements name and IDs

Footer: (C) Copyright MyCompany 2013

Active:*

Query:* --- Add New Query --- | [Preview Results](#) | [Create Default Template](#)

On this page you can enter / change the following fields:

- **Name** – Enter the name of the new custom report section that you will be adding to the report. This is not displayed in the final report
- **Description** – This is the description of the custom section, it is not displayed in the final report.
- **Header** – This is the header that will be displayed *before* the dynamic data retrieved as part of the report section. You can enter in formatted rich text in this field.
- **Footer** – This is the footer that will be displayed *after* the dynamic data retrieved as part of the report section. You can enter in formatted rich text in this field.
- **Active** – You should make sure this checkbox is checked if you want the custom section to appear in the final report.

Further down on the page you can actually enter the custom query and associated XSLT template:

Add/Edit Custom Section

Active:*

Query:* Requirements | [Preview Results](#) | [Create Default Template](#)
select value R from SpiraTestEntities R_Requirements as R where R.PROJECT_ID = \${ProjectId}

You need to enter the SQL command for retrieving the report data. You can use the special tokens `${ProjectId}` and `${ProjectGroupId}` to limit the query to a specific project or project group. WARNING: If you do not specify either of these parameters, the report will retrieve data for all projects in the system, regardless of the user's role or permissions.

Template:

You need to enter the XSLT Template for displaying the retrieved data as HTML. When you click the 'Create Default Template' option, the system will automatically generate a default XSLT template that you can edit.

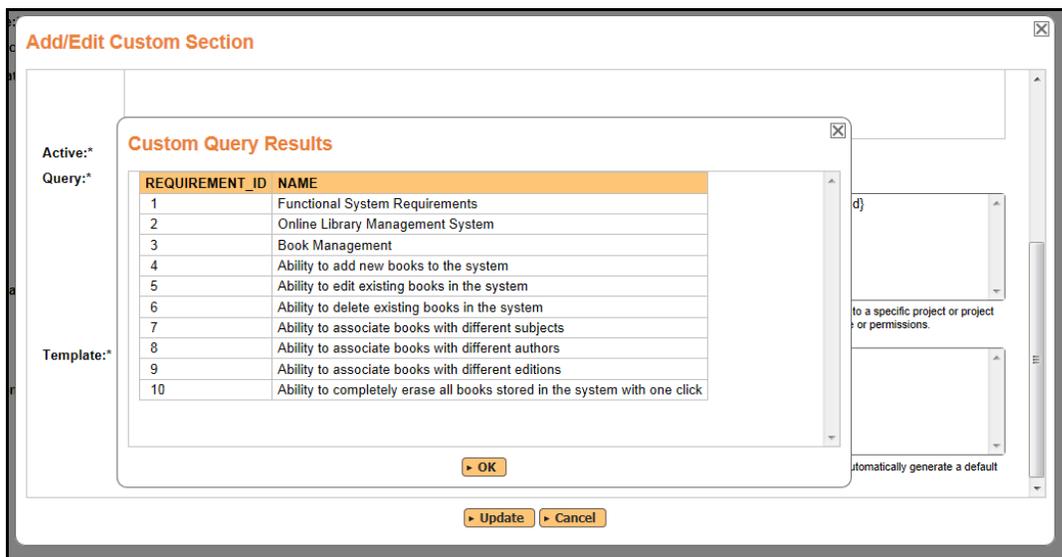
On this page you need to first choose the appropriate **reportable entity** from the dropdown list. In the example illustrated above, we have selected the “Requirements” reportable entity. This will automatically populate the following query in the **Query** editor:

```
select value R from SpiraTestEntities.R_Requirements as R where R.PROJECT_ID = ${ProjectId}
```

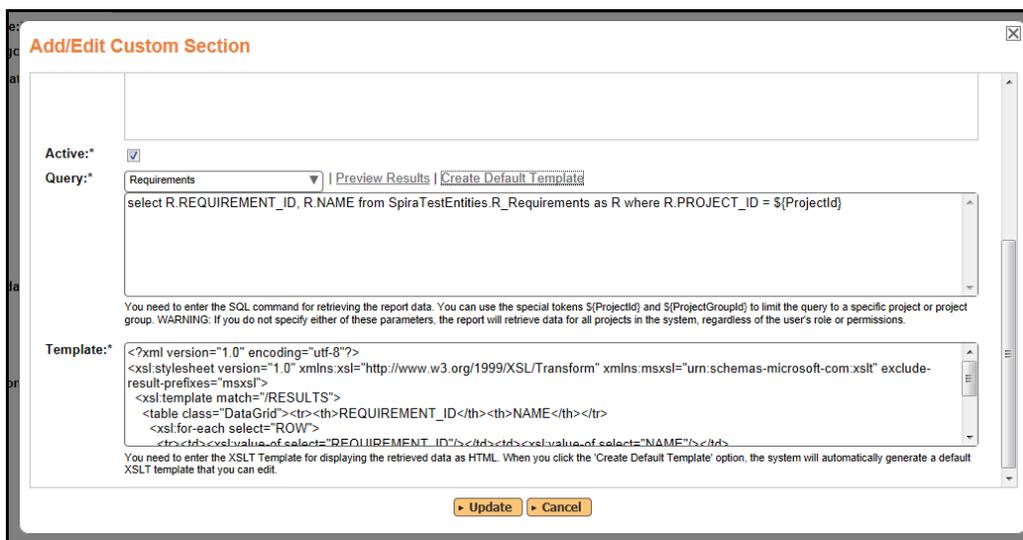
This query tells SpiraTeam to select all of the rows in the R_Requirements collection that are in the current project and include all of the columns in the final report. This generally will result in more columns than is desirable, so you should click on the “Preview Results” option to view a list of the various columns and the sample data. That will help you decide which columns are important for your report. You can then adjust the query to only include those columns:

```
select R.REQUIREMENT_ID, R.NAME from SpiraTestEntities.R_Requirements as R where R.PROJECT_ID = ${ProjectId}
```

In this modified query, we have replaced the keyword **value** with the specific column names. When you use the “Preview Results” option on this query, you will only see the two desired columns:



Once you have verified that the data being returned matches your requirements, click on the “Create Default Template” option and SpiraTeam will automatically generate a new XSLT template that displays just these columns in a nice table format:



with the information you entered. If you are unable to get the system to work with the license key information, please contact Inflectra® customer support at: support@inflectra.com.

3.8.5. LDAP Configuration

As described previously, you can configure SpiraTeam® to use an external LDAP server for importing new user profiles into the system, and for authenticating users – instead of having to store separate passwords inside SpiraTeam®. However you need to first configure the LDAP server settings. To do this, click on the “LDAP Configuration” link the Administration navigation:

LDAP Configuration

This page allows you to configure SpiraTeam to authenticate users against an LDAP directory server. This allows you to avoid having to store passwords in a user's SpiraTeam profile. You can have both types of user exist at the same time - SpiraTeam users that store their passwords inside SpiraTeam, and LDAP users that use their existing LDAP passwords.

Please view/edit your LDAP server's configuration details below:

LDAP Host*: Use Secure Sockets Layer (SSL)
Name (and optionally port) of the server running LDAP, (e.g. myserver, myserver:389 or myserver:636)

Base DN*:
Name of the root node in LDAP from which to search for users (e.g. CN=Users,DC=MyCompany,DC=Com)

Bind DN:
The distinguished name of the user to log into the directory server as (e.g. CN=Fred Bloggs,CN=Users,DC=MyCompany,DC=Com) or leave blank for anonymous

Bind Password:
The password of the user to log into the directory server as, or leave blank for anonymous

Attributes

Login*: <input type="text" value="uid"/> <small>The attribute in LDAP holding the login name (e.g. uid or sAMAccountName for ActiveDirectory)</small>	First Name: <input type="text" value="givenName"/> <small>The attribute in LDAP holding the user's first name (e.g. givenName)</small>
Last Name: <input type="text" value="sn"/> <small>The attribute in LDAP holding the user's last name (e.g. sn)</small>	Middle Initial: <input type="text" value="initials"/> <small>The attribute in LDAP holding the user's middle initials (e.g. initials)</small>
Email Address: <input type="text" value="mail"/> <small>The attribute in LDAP holding the user's email address (e.g. mail)</small>	

Sample User

You can optionally enter a sample user to authenticate. When you click [Update] SpiraTeam will try authenticating this user before it updates the LDAP configuration.

Sample User:
The distinguished name of a sample user you want to test authenticate (e.g. CN=Fred Bloggs,CN=Users,DC=MyCompany,DC=Com)

Sample Password:

You need to fill out the various configuration settings for your LDAP server, each of which is explained in more detail below:

- **LDAP Host**
This should contain the name of the LDAP server that you want SpiraTeam to connect to together with the port number if it's not the default of 389.
- **Use Secure Sockets Layer (SSL)**
You should select this check-box if your LDAP server requires use of the LDAPS secure protocol. Leave unchecked for unencrypted LDAP communication.
- **Base DN**
This should be the distinguished name of the object inside your LDAP server that contains the list of user accounts. This varies by the type of LDAP server, please consult your LDAP server documentation for more details.
- **Bind DN**
This should be the distinguished name of the user inside your LDAP server that will be used to authenticate against when importing users. If not provided, SpiraTeam® will try and authenticate with the LDAP server anonymously.
- **Bind Password**
This is the password of the user specified in the Bind DN field above.

➤ **Login Attribute**

When SpiraTeam® imports users from the LDAP server it needs to know the user attribute inside the LDAP server that it should use to generate the SpiraTeam® user-name. For most LDAP servers the appropriate attribute would be “uid”. However for Windows ActiveDirectory, the attribute “sAMAccountName” should be used instead.

➤ **First Name Attribute**

Providing this optional attribute will allow SpiraTeam® to automatically populate the first name field of the imported user instead of simply using the username as a placeholder.

➤ **Last Name Attribute**

Providing this optional attribute will allow SpiraTeam® to automatically populate the last name field of the imported user instead of simply using the username as a placeholder.

➤ **Middle Initial Attribute**

Providing this optional attribute will allow SpiraTeam® to automatically populate the middle initial field of the imported user instead of simply leaving it blank.

➤ **Email Address Attribute**

Providing this optional attribute will allow SpiraTeam® to automatically populate the email address field of the imported user instead of simply using the username@spiratestest.com as a placeholder.

➤ **Sample User**

You can optionally enter a sample user and password to test that the user is correctly authenticated against the server. You can update the LDAP configuration without setting this, but if you do provide a sample user/password, it will not save the configuration unless the authentication succeeds. If you choose to enter it, the user’s name should be the fully-distinguished name of the user (e.g. CN=Sample User, CN=Users, OU=Headquarters, DC=MyCompany, DC=Com).

3.8.6. Security Settings

The “Security Settings” administration page lets you specify the various security settings within SpiraTeam to match your organization’s policies and processes:

Security Settings
This page allows you to modify the SpiraTeam application security settings:

Allow User Registration*: Yes ▾
Set this to True if you want to allow users to be able to signup for an account themselves.

Maximum # Invalid Password Attempts*: 5
The number of times a user can enter an incorrect password before their account gets locked out

Minimum Required Password Length*: 6
The minimum length of a user's chosen password

Minimum Required Special Characters*: 0
The minimum number of non-alphanumeric characters required in a user's password

Password Attempt Time Window*: 10 minutes
The time after which a user's account gets automatically unlocked

Cancel Update

The following settings can be changed within the system, once you are satisfied, click the <Update> button to commit the changes:

- **Allow User Registration** – Set this to “Yes” if you want to allow users to self-register for SpiraTeam accounts (that you can subsequently approve). If you set this to “No”, a system administrator will

need to create all user accounts. Also set this to “No” if you plan on using LDAP-based authentication.

- **Maximum # Invalid Password Attempts** – Set this to the number of times a user can enter an incorrect password before their account is temporarily locked out. This is important in preventing ‘brute force’ password hacking attempts.
- **Minimum Required Password Length** – Set this to the minimum length of passwords in the system. Choosing a longer password will make it harder for an unauthorized user to crack a password and gain entry into the system.
- **Minimum Required Special Characters** - Set this to the minimum number of non-alphanumeric characters that will be required for passwords in the system. Choosing more required special characters will make it harder for an unauthorized user to crack a password and gain entry into the system.
- **Password Attempt Time Window** – Set this to the duration (in minutes) after which a user’s account will be automatically unlocked (due to repeated incorrect password attempts).

3.8.7. Event Log

The “System Event Log” administration page lets you view all of the errors, warning and other diagnostic messages that have been logged in the system:

System Event Log

The following system events have been logged in the system:

Event Time ▲▼	Type ▲▼	Category ▲▼	Message ▲▼	Event Code ▲▼	Operations
<input type="text"/>	-- Any --	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12/26/2012 10:51 PM	Error	Application	Cannot get IIS pickup directory.	0	View Item
12/26/2012 10:51 PM	Error	Application	Cannot get IIS pickup directory.	0	View Item
12/26/2012 10:51 PM	Warning	Application	User with username 'rsmith' does not exist in the system	0	View Item
12/26/2012 12:08 PM	Warning	Application	User 26 does not exist in the system	0	View Item
12/26/2012 12:08 PM	Error	Application	Cannot get IIS pickup directory.	0	View Item
12/26/2012 12:08 PM	Warning	Application	User with username 'testuser' does not exist in the system	0	View Item
12/26/2012 12:08 PM	Error	Application	Cannot get IIS pickup directory.	0	View Item
12/26/2012 12:08 PM	Warning	Application	User with username 'testuser' does not exist in the system	0	View Item
12/26/2012 12:08 PM	Error	Application	Cannot get IIS pickup directory.	0	View Item
12/26/2012 12:08 PM	Warning	Application	User with username 'testuser' does not exist in the system	0	View Item
12/26/2012 12:08 PM	Warning	Application	User 27 does not exist in the system	0	View Item
12/26/2012 12:08 PM	Error	Application	Cannot get IIS pickup directory.	0	View Item
12/26/2012 12:08 PM	Warning	Application	User with username 'demo20121226-120855437' does not exist in the system	0	View Item
12/26/2012 12:08 PM	Error	Application	Cannot get IIS pickup directory.	0	View Item
12/26/2012 12:08 PM	Warning	Application	User with username 'jones' does not exist in the system	0	View Item

of 3

Each event entry is displayed along with the date-time it occurred, the type of event (error, warning, information, success audit, failure audit), category (application, source code provider, data-synchronization) and the short name. To view the full message, click on the “View Item” hyperlink:

System Event Log

The following system events have

Event Time ▲▼	Type	Event Code ▲▼	Operations
12/26/2012 10:51 PM	Error	0	View Item
12/26/2012 10:51 PM	Error	0	View Item
12/26/2012 10:51 PM	Warning	0	View Item
12/26/2012 12:08 PM	Warning	0	View Item
12/26/2012 12:08 PM	Error	0	View Item
12/26/2012 12:08 PM	Warning	0	View Item
12/26/2012 12:08 PM	Error	0	View Item
12/26/2012 12:08 PM	Warning	0	View Item
12/26/2012 12:08 PM	Error	0	View Item
12/26/2012 12:08 PM	Warning	0	View Item
12/26/2012 12:08 PM	Warning	0	View Item
12/26/2012 12:08 PM	Application	0	View Item
12/26/2012 12:08 PM	Error	0	View Item
12/26/2012 12:08 PM	Application	0	View Item
12/26/2012 12:08 PM	Application	0	View Item
12/26/2012 12:08 PM	Error	0	View Item
12/26/2012 12:08 PM	Application	0	View Item
12/26/2012 12:08 PM	Warning	0	View Item

Event Details

Exception: **System.Net.Mail.SmtpException**

```

at System.Net.Mail.IisPickupDirectory.GetPickupDirectory()
at System.Net.Mail.SmtpClient.SendAsync(MailMessage message, Object userToken)
at Inflectra.SpiraTest.Common.MailClient.SendMessage(MailMessage message)

```

OK

Displaying page 1 of 3

Filter Clear Filter Clear Log

The popup dialog box will display the full error message log and stack trace in a moveable dialog box. This information should be provided to Inflectra customer support if you log a help desk ticket.

3.9. Integration

3.9.1. Data Synchronization

SpiraTeam® is capable of synchronizing its data with a variety of other systems, including but not limited to requirements management systems and standalone bug-tracking tools. The various integration plug-ins for SpiraTeam® and the steps for configuring the data-synchronization settings are described in the *SpiraTest Migration and Integration Guide*.

If you are synchronizing data between SpiraTeam® and one of these other systems, you can click on the 'Data Synchronization' administration page at any time and view a list of all the data-synchronizations taking place, together with the status and date/time of last synchronization:

Data Synchronization ([Refresh](#))

SpiraTeam is able to communicate with a variety of external systems and applications using its background data synchronization service and library of available plug-ins.

This page allows you to view, add and modify the list of plug-ins, make changes to their configuration, and verify the status of the most recent synchronization. In addition, you can force a particular plug-in to perform a complete data-synchronization by resetting its date of last sync:

Plug-In	Data Mapping	Last Sync Date	Status	Operations
BugzillaDataSync	> View Project Mappings	-	Not Run	> Force Re-Sync Edit Delete View Errors
FogBugzDataSync	> View Project Mappings	-	Not Run	> Force Re-Sync Edit Delete View Errors
JiraDataSync	> View Project Mappings	-	Not Run	> Force Re-Sync Edit Delete View Errors
MsTfsDataSync	> View Project Mappings	-	Not Run	> Force Re-Sync Edit Delete View Errors

[Add](#)

In the example above, we have four plug-ins active, with incidents being exported into JIRA, Bugzilla, FogBugz and Microsoft Team Foundation Server. The data of last sync and the status indicate if there are problems with the plug-in.

The 'Refresh' link allows you to refresh the status of the page to ensure that you are seeing the most up to date information. In certain circumstances you may want to reset the date of last sync and force a particular plug-in to examine all the records in the system to see if any were not synchronized - clicking on the 'Force Complete Re-Sync' will achieve this. The recommended procedure for forcing a re-sync is to temporarily stop the SpiraTeam Data-Sync background Windows service, click the button to reset the last-sync date, and then start the service. This will ensure that the resetting doesn't happen mid-sync.

3.9.2. Version Control Integration

SpiraTeam® is capable of integrating with a variety of Version Control (VC) / Software Configuration Management (SCM) tools such as Subversion, CVS and SourceSafe. This allows you to browse the source code repositories using the SpiraTeam web interface, and more importantly link revisions in these tools to artifacts in SpiraTeam. This provides the end-to-end traceability from code commits/check-ins to the tasks, incidents and requirements that necessitated the code change.

The information on using the various version control providers for SpiraTeam® and the steps for configuring the provider-specific settings are described in the *SpiraPlan/Team Version Control Integration Guide*.

To configure a version control provider, you need to click on the Administration > Integration > Version Control link in the Administration navigation to bring up the list of configured version control providers:

Version Control Integration

SpiraTeam is able to integrate with a variety of external version control systems using its flexible, open architecture and library of available version control providers.

This page allows you to view, add and modify the list of version control providers, make changes to their configuration and also specify any project-specific configuration values:

Provider	Description	Project Settings	Active	Operations
TestVersionControlProvider	This provides the dummy version control provider used in testing	> Project Settings	Yes	> Edit Delete

[▶ Add](#)

By default the only provider listed will be the TestVersionControlProvider which is used for demonstration purposes only, and can be deleted from a production system by clicking on the “Delete” link to the right of it.

To add a new version control provider, click the “Add” button to enter the Plug-in details page. The fields required are as follows:

Edit Provider | New Provider

[<< Back to Version Control Home](#)

Please enter/edit the following information for the provider. The exact information that needs to be entered is specific to each provider, and you should refer to the documentation for the provider when entering/changing it.

Name*:

Description:

Active

Default Settings

The following settings are used for any projects that do not define their own settings:

Connection Info*:

Login*:

Password*:

- **Name:** The name of the version control provider that you’re adding. This needs to match the name of the Plug-in DLL file that you’re using (see the *SpiraPlan/Team Version Control Integration Guide* for more details on your specific tool)
 - **Description:** The description is for your use only, and does not affect operation of the plug-in.
 - **Active:** If checked, the plug-in is active and able to be used for any project.
 - **Connection Info:** This field holds the root of the repository for any project accessing the plug-in, unless overridden in the Project Settings. Use the syntax that is described for your tool in the *SpiraPlan/Team Version Control Integration Guide*)
 - **Login / Password:** The user id and the password of the user to use while accessing and retrieving information from the version control system.
 - **Other Fields:** The other fields (Domain, Custom1 – Custom5) are provider-specific and will be described in the appropriate section of the *SpiraPlan/Team Version Control Integration Guide*.
- When finished, click the “Insert” button and you will be taken back to the Version Control integration list page, with new provider listed as an available plug-in:

Version Control Integration

SpiraTeam is able to integrate with a variety of external version control systems using its flexible, open architecture and library of available version control providers.

This page allows you to view, add and modify the list of version control providers, make changes to their configuration and also specify any project-specific configuration values:

Provider	Description	Project Settings	Active	Operations
SubversionProvider	Accesses our Subversion Repository on server quagmire	> Project Settings	Yes	> Edit Delete
TestVersionControlProvider	This provides the dummy version control provider used in testing	> Project Settings	Yes	> Edit Delete

[Add](#)

To edit the settings for an existing version control provider, just click on the “Edit” link next to the name of the provider and you will be able to edit the same settings that were shown above when you first created it.

Now, you may want to change some of the settings on a per-project basis. For example you may have different repositories that you want to link to each project. You still enter the base settings for the provider as illustrated above, but then you can override specific settings for each project.

To do this, click on the “>Project Settings” hyperlink next to the provider in question:

SubversionProvider Project Settings | Library Information System [\(Change Project\)](#)

[<< Back to Version Control Home](#)

Please edit the following project-specific settings for the 'SubversionProvider' version control provider. If you leave any fields blank, then the value will be taken from the provider's default settings. To stop using this provider on the project, just set the Active flag to No below:

Project Name: Library Information System

Active for Project:

[Update](#)

The first thing you need to do (regardless of whether you'll be overriding any of the settings) is to make the provider active for the current project. To do this, change the drop-down list to “Yes” and click [Update]:

SubversionProvider Project Settings | Library Information System [\(Change Project\)](#)

Project settings successfully updated.

[<< Back to Version Control Home](#)

Please edit the following project-specific settings for the 'SubversionProvider' version control provider. If you leave any fields blank, then the value will be taken from the provider's default settings. To stop using this provider on the project, just set the Active flag to No below:

Project Name: Library Information System

Active for Project:

Connection Info:

Login:

Password:

Domain:

Custom 01:

Custom 02:

Custom 03:

Custom 04:

Custom 05:

Now you can decide whether you want to override any of the default settings for this project. Any field left blank will automatically get its settings from the default values entered earlier. In the example above, we have specified a project-specific repository path, login and password. Once you have correctly configured the project, click [Update] to commit the changes.

You are now ready to use SpiraTeam® in conjunction with the version control tool you selected. For details on how to use the Source Code integration features of SpiraTeam, please refer to the *SpiraTeam® User Manual*.

3.9.3. Test Automation

SpiraTeam® can be used to manage the development, scheduling and execution of automated unit, functional and load tests written using a variety of test automation engines (e.g. HP QuickTest Pro, SmarteScript, TestComplete, etc.). This section allows you to configure the different engines that are available in your environment so that the testers know which tools they can use to schedule tests with.

The information on using the various test automation engines for SpiraTeam® and the steps for configuring the engine-specific settings are described in the *SpiraTest/Team Automated Testing Integration Guide*.

To configure a test automation engine, you need to click on the Administration > Integration > Test Automation link in the Administration navigation to bring up the list of configured test automation engines:

Test Automation Engines

SpiraTeam is able to integrate with a variety of external test automation systems using its flexible, open architecture and library of available test automation engines.

This page allows you to view, add and modify the list of test automation engines and make changes to their configuration:

Engine Name	Token	Description	Active	Operations
Quick Test Pro	QTP	Engine that integrates with HP/Mercury Quick Test Pro	Yes	> Edit Delete
Selenium	Selenium	Engine that integrates with the open-source Selenium RemoteControl (RC)	Yes	> Edit Delete
SmarteScript	SeS	Engine that integrates with SmarteSoft SmarteScript	Yes	> Edit Delete
TestComplete	TestComplete	Engine that integrates with AutomatedQA TestComplete	Yes	> Edit Delete

To add a new test automation engine, click the “Add” button to enter the Automation Engine details page. The fields required are as follows:

Edit Engine | New Engine

[<< Back to Test Automation Engine Home](#)

Please enter/edit the following information for the test automation engine. Required fields are indicated in **bold**:

Name*:

Description:

Token*:

Active

- **Name:** The name of the test automation engine that you’re adding. This can be set to any name of your choice that would make sense to your users.
 - **Description:** The description is used for any comments or additional information that you need to use to describe the automation engine.
 - **Active:** If checked, the automation engine is active and able to be used in any project.
 - **Token:** This needs to match the name of the Automation Engine DLL file that you’re using (see the *SpiraTest/Team Automated Testing Integration Guide* for more details on your specific tool) for the specific automation engine.
- When finished, click the “Insert” button and you will be taken back to the test automation engine list page, with new automation engine listed.

Test Automation Engines

SpiraTeam is able to integrate with a variety of external test automation systems using its flexible, open architecture and library of available test automation engines.

This page allows you to view, add and modify the list of test automation engines and make changes to their configuration:

Engine Name	Token	Description	Active	Operations
Quick Test Pro	QTP	Engine that integrates with HP/Mercury Quick Test Pro	Yes	> Edit Delete
Selenium	Selenium	Engine that integrates with the open-source Selenium RemoteControl (RC)	Yes	> Edit Delete
SmarteScript	SeS	Engine that integrates with SmarteSoft SmarteScript	Yes	> Edit Delete
TestComplete	TestComplete	Engine that integrates with AutomatedQA TestComplete	Yes	> Edit Delete

To edit the settings for an existing test automation engine, just click on the “Edit” link next to the name of the engine and you will be able to edit the same settings that were shown above when you first created it.

Edit Engine | Quick Test Pro
[<< Back to Test Automation Engine Home](#)

Please enter/edit the following information for the test automation engine. Required fields are indicated in **bold**:

Name*:

Description:

Token*:

Active

Once you have made the appropriate changes, click the [Update] button to commit them.

You are now ready to use SpiraTest® / SpiraTeam® in conjunction with the test automation engine you added. For details on how to use the test automation features of SpiraTeam, please refer to the *SpiraTeam® User Manual*.

3.9.4. Add-Ons and Downloads

In addition to the web interface that is typically used to interact with SpiraTeam®, there are a variety of downloadable tools and extensions that allow SpiraTeam® to be used in conjunction with other applications, and also to enable the migration of data from other systems into SpiraTeam®.

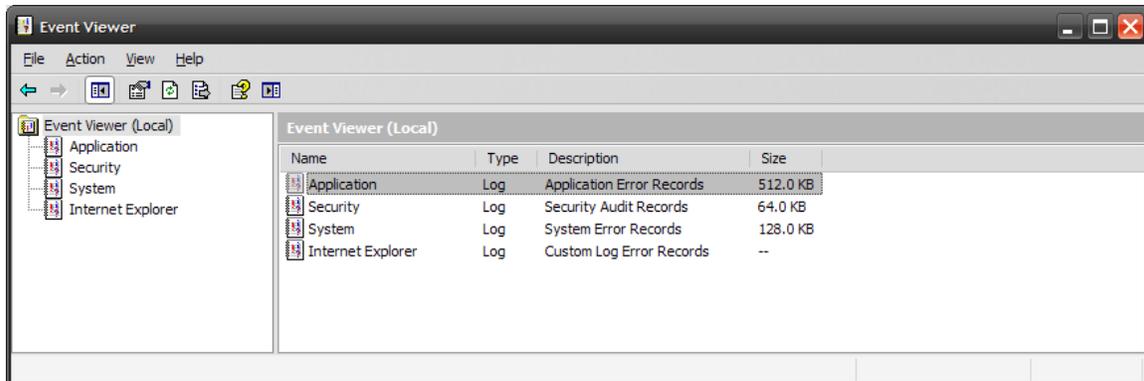
To view the list of available add-ons and downloads, simply click the “Add-Ons and Downloads” link in the Administration navigation sidebar and you will be taken to the page on the Inflectra® website that lists the various add-ins for the system, together with links to the appropriate documentation.

4. Appendices

4.1. Appendix A – Troubleshooting

If you receive the dreaded “IIS 500 Internal Error” or the “Server Application Not Available” webpage when you try and access SpiraTeam® for the first time, there can be a myriad of causes. However a good first place to look for the cause is inside the Windows Event Viewer, which stores all errors raised in the system.

To open the Event Viewer, click Start > Settings > Control Panel > Administrative Tools > Event Viewer. This will open up the event viewer:



Click on the Application and System folders in turn and look for errors raised by “MSSQLSERVER”, “SpiraTest”, “SpiraTest DataSync Service”, “DCOM”, “ASPNET” or “IIS”. Click on the error message, and copy the text of the message into a text editor (e.g. Notepad).

Before contacting Inflectra® customer support with the specific error message, here are a couple of common causes for the above errors together with the appropriate resolutions:

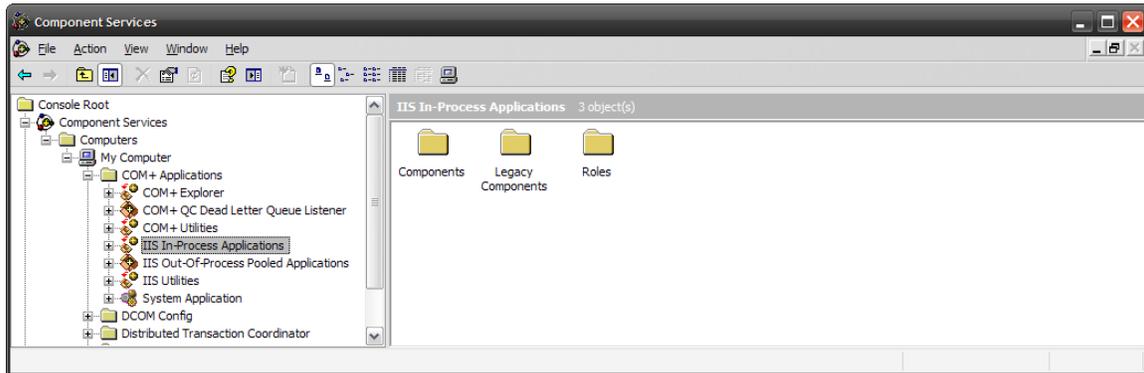
- **The ASP.NET process account has been disabled**
Go to Start > Control Panel > Administrative Tools > Computer Management and launch the Windows computer management console. Expand Local Users and Groups > Users and then double-click on the 'ASPNET' account. Make sure that the ASPNET user is not disabled. If you are using Windows 2003 or 2008 Server the ASPNET user is set per-application pool and typically is set to the built-in NETWORKSERVICE account, so this won't apply.
- **The ASP.NET process account does not have sufficient permissions**
Right-click on the C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319 folder (and any other versions of .NET that are listed) and make sure that the ASPNET, NETWORKSERVICE and LOCALSERVICE accounts are all listed with Full Control. If that doesn't fit the issue and you are using Windows 2003 or 2008 Server, open up the IIS manager and right-click on the Application Pool that SpiraTeam® is running under and make sure that the identity listed has Full Control permissions on the same folders.
- **The Windows Event Log is full**
Open up the Application and System event logs, right-click on the log name and choose Properties. Make sure that both are set to “overwrite events as needed”. If they are not set to overwrite as needed, change the setting then manually clear both logs.

If the resolutions above were not able to resolve the issue, please send an email to support@inflectra.com and include the error message from both the web page and the Windows Event Logs.

4.1.1. Missing MSDTC Issue

There is one common error that has been found with installations where Microsoft SQL Server was installed *after* IIS was installed. This typically affects only Windows XP Professional, but could occur in other situations. What happens is that the SQL Server installation inadvertently removes the *Microsoft Distributed Transaction Coordinator* (MSDTC) service from the system during the installation.

To determine if this is indeed the cause of the observed error, you need to click on Start > Settings > Control Panel > Administrative Tools > Component Services:

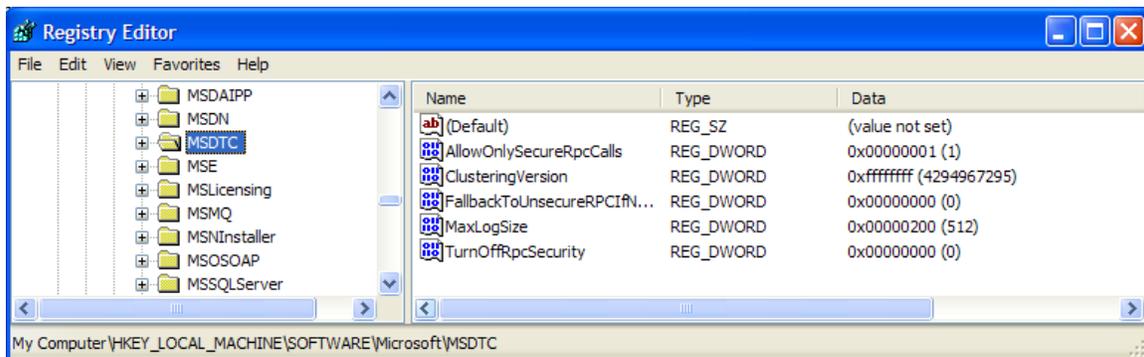


Once the window has opened, expand the folders marked “Component Services”, “Computers”, “My Computer” and “COM+ Applications” in turn. If the window opens correctly and displays the information illustrated above, then your IIS 500 error is being caused by something else.

However if you receive an error message that indicates an inability to connect with the “Distributed Transaction Coordinator”, then you have to fix the MSDTC service to enable IIS and ASP.NET to operate properly.

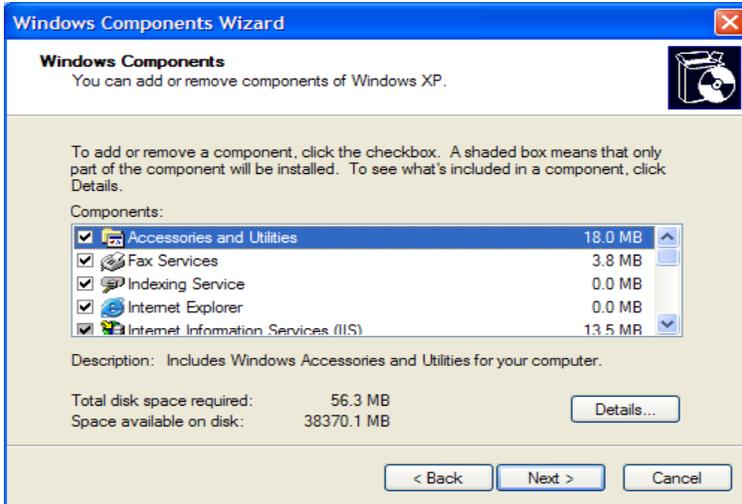
To fix the issue, you need to make changes to the Windows System Registry (hereafter referred to as “the registry”). This is a process that should **not** be attempted by novice users, since any incorrect changes can completely wreck the Windows installation, requiring a complete reinstallation of the operating system.

To open the registry, click Start > Run, and type “Regedit.exe” into the dialog box, and the registry will open:



Expand the folders marked “My Computer”, “HKEY_LOCAL_MACHINE”, “SOFTWARE” and “Microsoft” in turn and navigate to the folder marked “MSDTC”. Click the <Delete> button on your keyboard, and click <OK> on the confirmation box. Now close the registry editor.

Now you need to click on Start > Settings > Control Panel > Add or Remove Programs and click on the tab marked “Add/Remove Windows Components”:



Don't change any of the selected components, but instead simply click the <Next> button. The Windows installer will detect that the MSDTC is missing (due to the registry change you made) and will now reinstall it correctly. Once this has finished, reboot the system and you should now be able to access ASP and ASP.NET applications from within IIS.

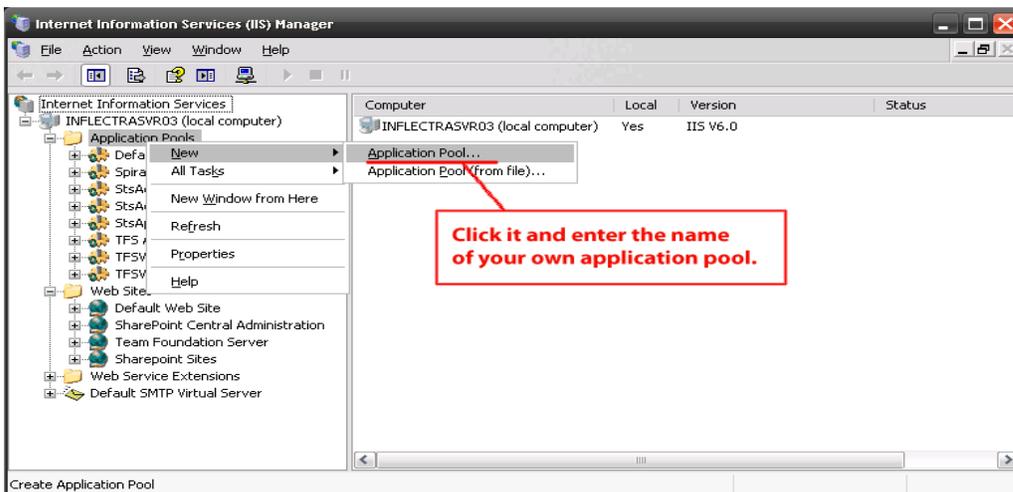
4.1.2. Application Session Pooling Issues (Windows 2003)

This issue can affect Windows Server 2003 using IIS 6.0. Since the 6.0 release of IIS, there is the ability to separate the web-server into different "Application Pools". Sometimes, web hosting companies will host multiple websites in the same application pool (which we do not recommend). When resources are maxed out for an application pool IIS 6 starts to recycle these sites causing application variables to be lost for those recycled sites. *By default, SpiraTeam installs on these operating systems in its own application pool.*

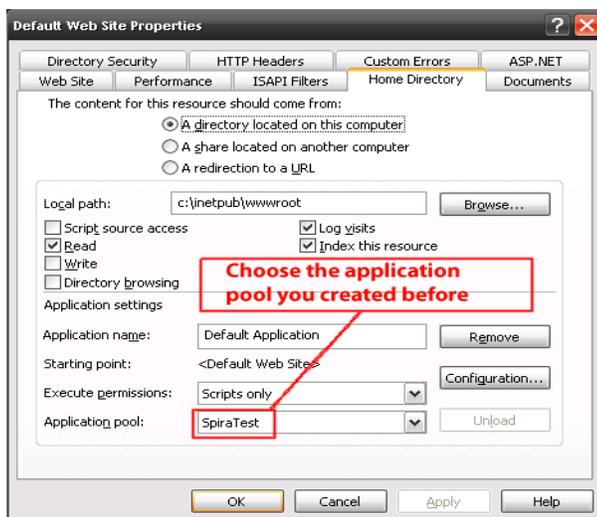
If you are experiencing application/session loss symptoms then we recommend asking your web hosting company to verify that your instance of SpiraTeam is running in its own application pool with all recycling options disabled and the recycle worker process set to recycle only once during the day at a set time.

To make these changes yourself, you need to follow these steps:

- 1) Add new application pool for "SpiraTeam" if one does not already exist:



- 2) Next, choose your own application pool in the SpiraTeam web site properties:



Click <OK> and you should now find that the issues with sessions disappearing has been corrected.

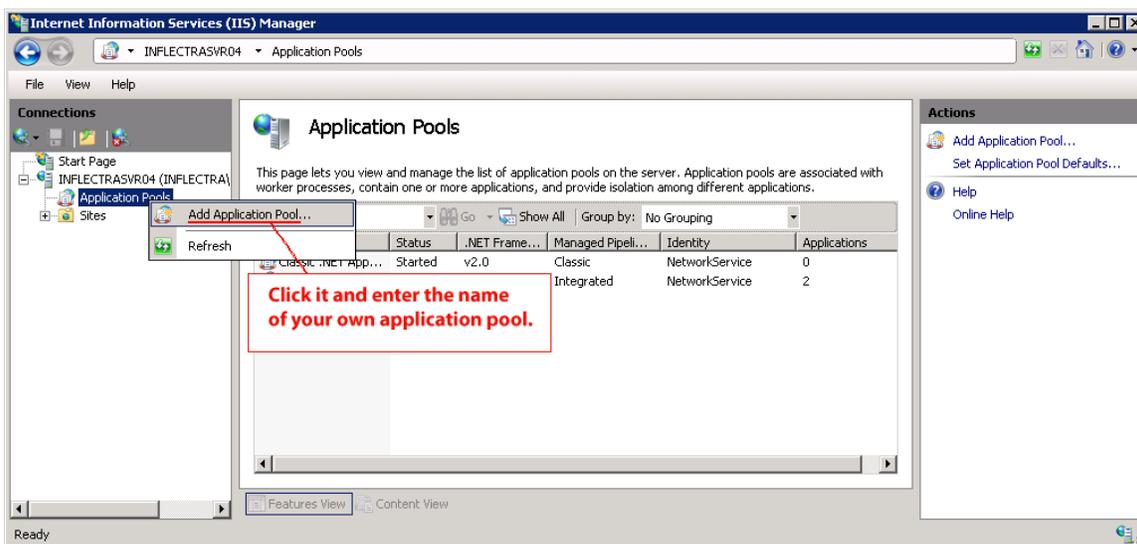
4.1.3. Application Session Pooling Issues (Windows Vista, 7 or 2008)

This issue can affect Windows Vista, 7 or Server 2008 using IIS 7.0. Since the 6.0 release of IIS, there is the ability to separate the web-server into different “Application Pools”. Sometimes, web hosting companies will host multiple websites in the same application pool (which we do not recommend). When resources are maxed out for an application pool IIS 7 starts to recycle these sites causing application variables to be lost for those recycled sites. *By default, SpiraTeam installs on these operating systems in its own application pool.*

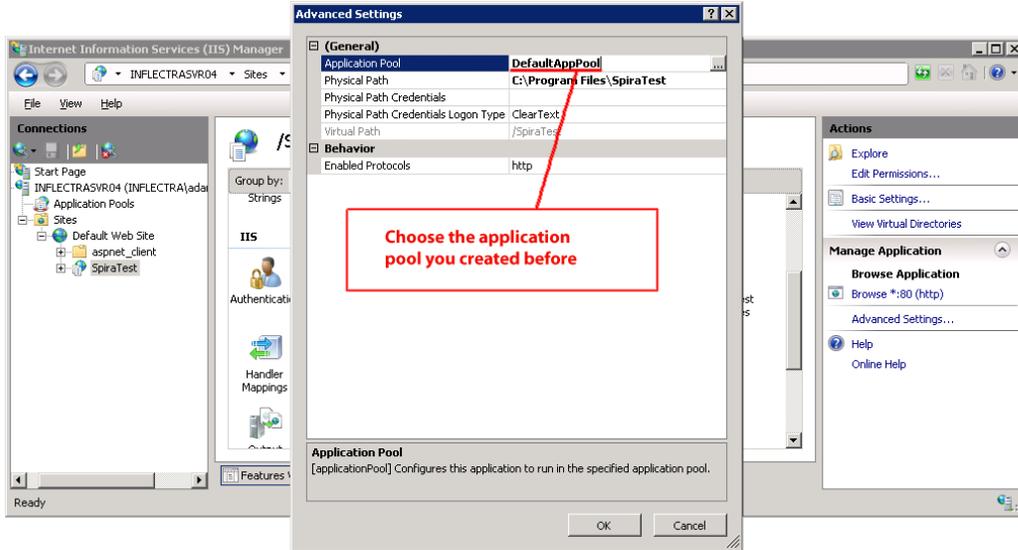
If you are experiencing application/session loss symptoms then we recommend asking your web hosting company to verify that your instance of SpiraTeam is running in its own application pool with all recycling options disabled and the recycle worker process set to recycle only once during the day at a set time.

To make these changes yourself, you need to follow these steps:

Add new application pool for “SpiraTeam” (if one does not already exist) and make sure it is set to use the .NET Framework v4.0 and the “Integrated Pipeline”:



Next, choose your own application pool in the SpiraTeam web site properties:



4.2. Appendix B – Using with SSL

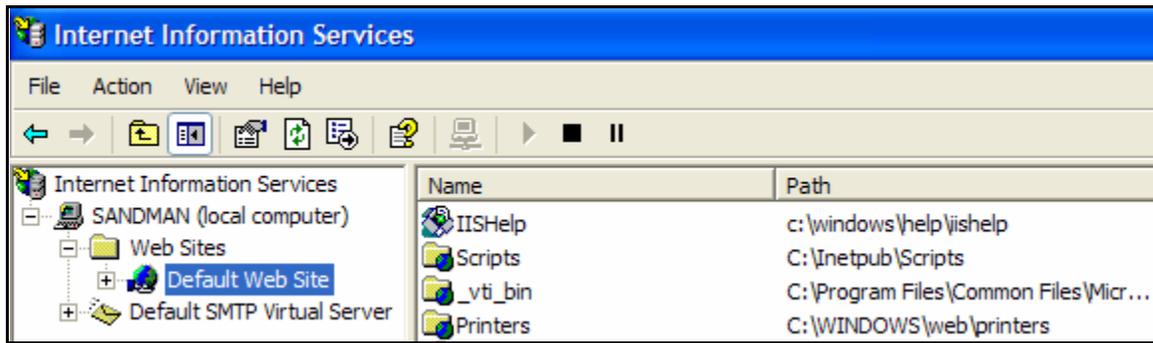
This section outlines how you can install a Secure Sockets Layer (SSL) certificate onto IIS to allow users to access SpiraTeam® via an encrypted protocol, so that usernames, passwords and sensitive project data cannot be “sniffed” across the network. This is especially important if your web-server is being accessed across the Internet.

This section assumes that you already have a Certificate Authority (CA) available to generate an SSL certificate for you. This can either be a third-party provider (e.g. Verisign) or a tool used to generate “self certificates” that can be used internally to your organization (e.g. the IIS Certificate Server that ships with Windows Server 2003 or 2008). For more information on the differences between these two options, please read the following documents:

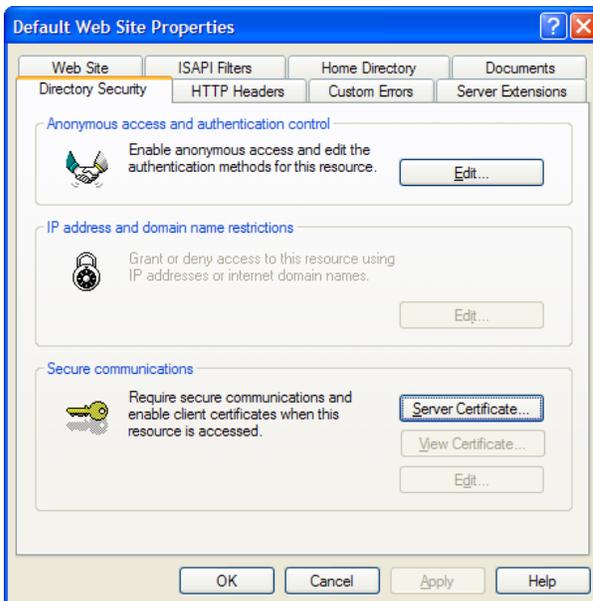
<http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/8d3bb71a-0a7f-443f-8084-908d0dab9caa.msp?mfr=true> (installing self or third-party certificate on Windows Server 2003)

<http://www.somacn.com/p42.php> (installing self-certificate on Windows XP)

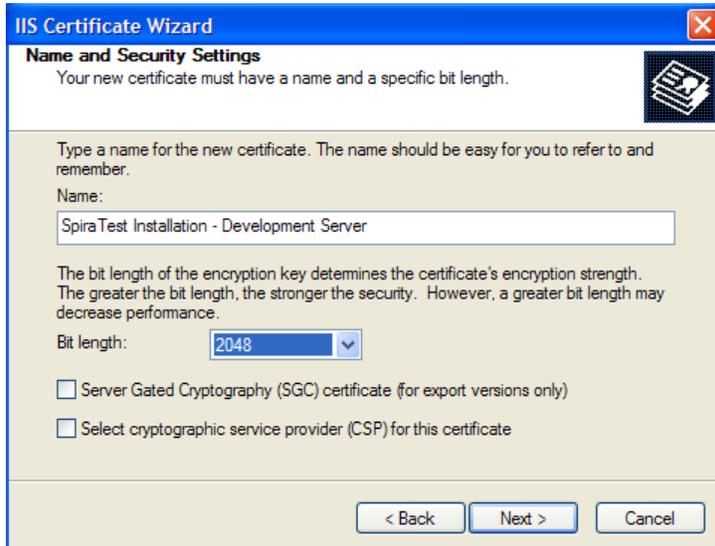
Once you have decided how you will generate the certificate, you next need to generate the request for the certificate from your web server. First, click Start > Settings > Control Panel > Administrative Tools > Internet Information Services to bring up the IIS management console:



Now, right-click on the “Default Web Site” and choose “Properties”, then click the “Directory Security” tab:



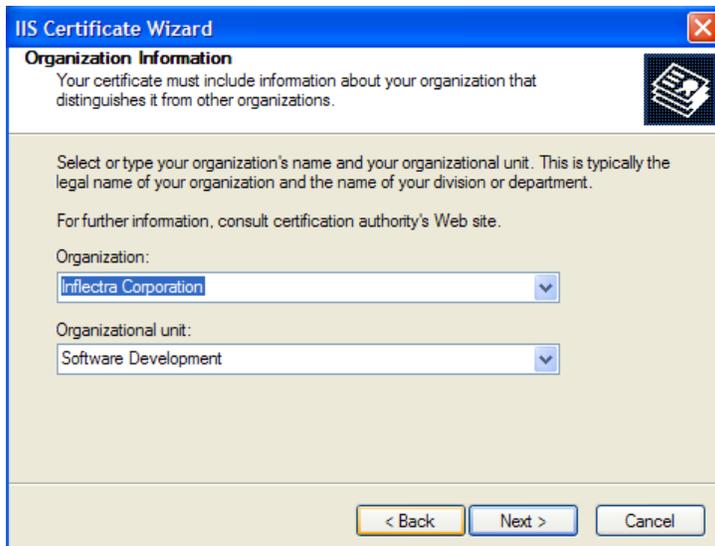
Now, click the button marked “Server Certificate”, click <Next> and choose the option marked “Create a new certificate”, and click <Next>. You can then choose to either prepare the certificate request and sent it later, or to send the certificate request immediately to an online CA. If you are using a third-party CA and are connected to the Internet choose the second option, otherwise choose the first option.



The screenshot shows the 'IIS Certificate Wizard' dialog box, titled 'Name and Security Settings'. The main text reads: 'Your new certificate must have a name and a specific bit length.' Below this, there is a text box for 'Name' containing 'SpiraTest Installation - Development Server'. A note explains that the bit length of the encryption key determines the certificate's encryption strength. The 'Bit length' is set to '2048' in a dropdown menu. There are two unchecked checkboxes: 'Server Gated Cryptography (SGC) certificate (for export versions only)' and 'Select cryptographic service provider (CSP) for this certificate'. At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

Enter the name for the certificate, typically this will contain the name of the organization, purpose of the certificate and any other pertinent information that will help you distinguish it.

You should choose a bit-length of at least 2048 bits, and leave the other options unchecked unless you are using the server outside of the United States, in which case you will need to choose the “Server Gated Cryptography (SGA)” option. Click the <Next> button when you are finished.

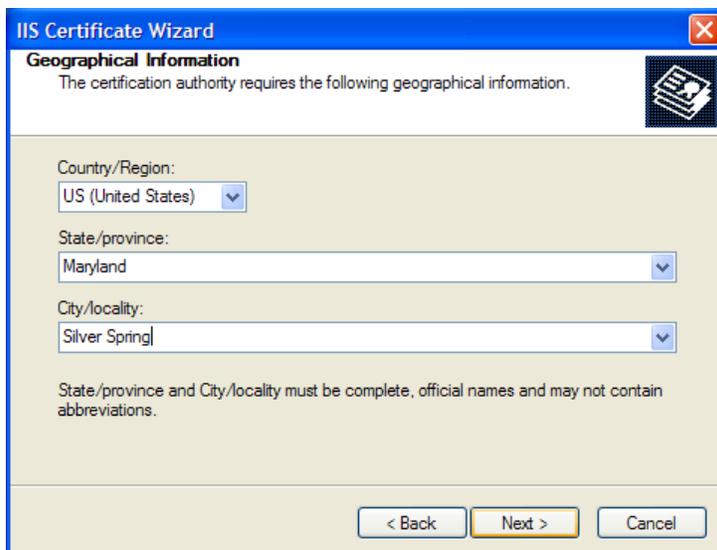


The screenshot shows the 'IIS Certificate Wizard' dialog box, titled 'Organization Information'. The main text reads: 'Your certificate must include information about your organization that distinguishes it from other organizations.' Below this, there is a text box for 'Organization' containing 'Inflectra Corporation' and a dropdown menu for 'Organizational unit' containing 'Software Development'. A note explains that this is typically the legal name of your organization and the name of your division or department. At the bottom are buttons for '< Back', 'Next >', and 'Cancel'.

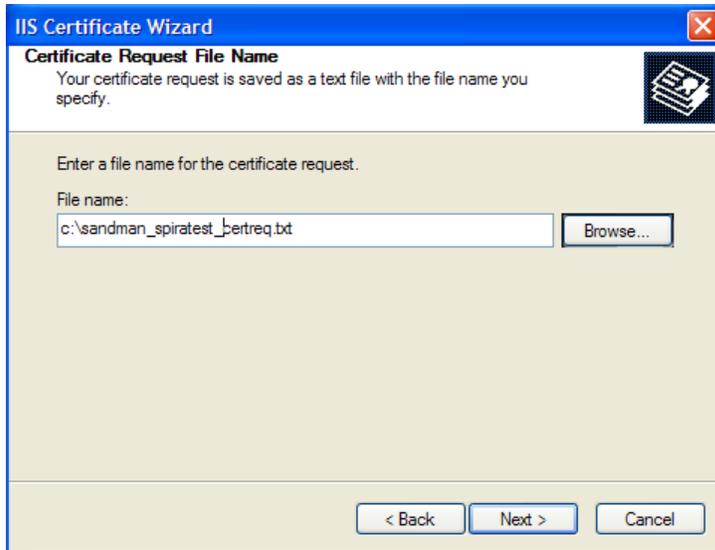
Now enter the organization and organizational unit name that best describes who is requesting the certificate. Click <Next> when you are finished.



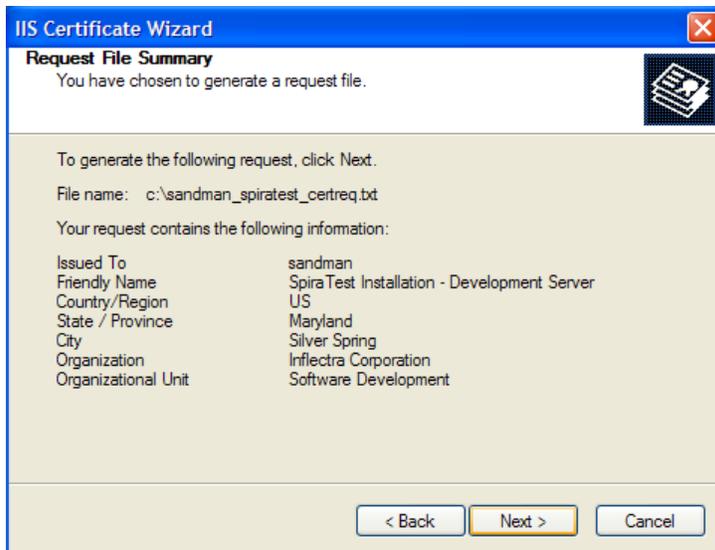
Next enter the “common name” for the web site that will be using the certificate. For a website that will be accessed across the Internet, this should be the fully qualified domain name (e.g. www.mysite.com), whereas for a website that is limited to a local intranet, the computer name will suffice (e.g. myhost). Click <Next> when you are finished.



Next enter the country / region, state / province and city / locality that best describe where the web-server will operate or where the organizational entity resides. Once you are finished, click <Next>.



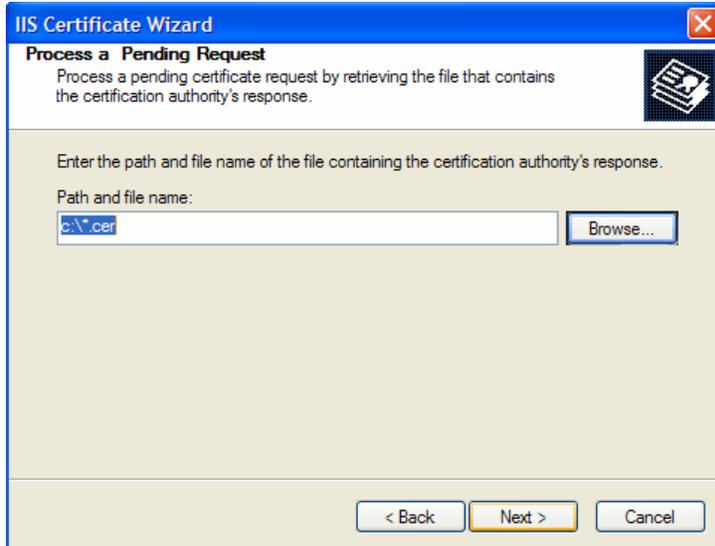
Next, enter the filename that you want to use for the *certificate request file*. This is the file that you will send to the Certificate Authority (CA) to request an SSL certificate. This filename should be memorable and describe what the certificate is for. The file extension should be `.txt`. Click <Next> once you have finished entering the filename.



Finally, you will get a confirmation screen that verifies the information you have entered. If you want to make changes, click the <Back> button, otherwise click <Next> to actually generate the certificate. Once finished, you will now have the certificate request file that you can send to the Certificate Authority (CA) to process your request.

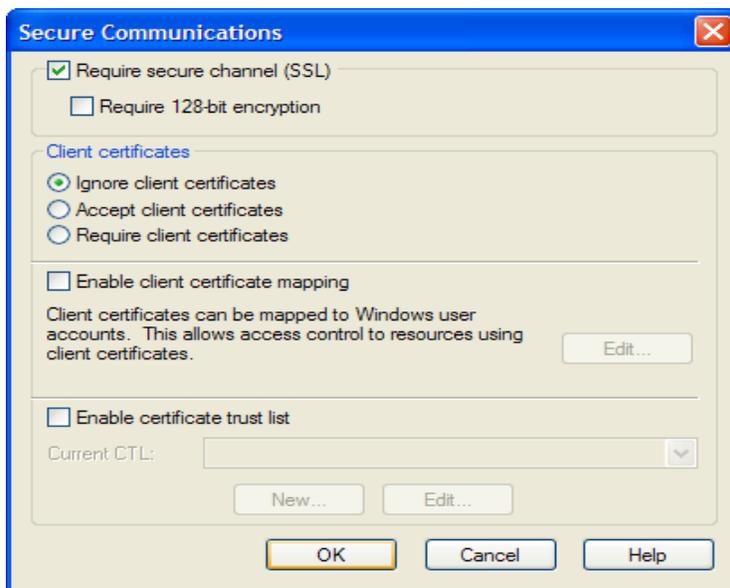
Once the CA has processed your request, they will send back the actual SSL certificate that you can install onto your web-server. The next steps will describe how to install the certificate once you receive it back from the CA.

Once you have received the SSL certificate back from the CA, save the file onto your hard-disk with the file-extension .cer. Now open up the IIS management console (as described above), right-click on the “Default Web Site” icon and choose “Properties”. Now select the “Directory Security” tab, and click the button marked <Server Certificate> under the heading “Secure Communications”. When the dialog box appears, choose the second option – to process an existing request. This will bring up the following dialog box:



Now, browse to the place on your hard disk where you saved the SSL certificate (with extension .cer) and select the file you saved. Click <Next> to load the certificate. Once the certificate has been loaded, all that remains is to tell IIS to require a secure HTTPS connection, so that users don't attempt to access the website over the unencrypted HTTP protocol.

From the IIS properties dialog box, click the button marked <Edit> under the “Secure Communications” heading:

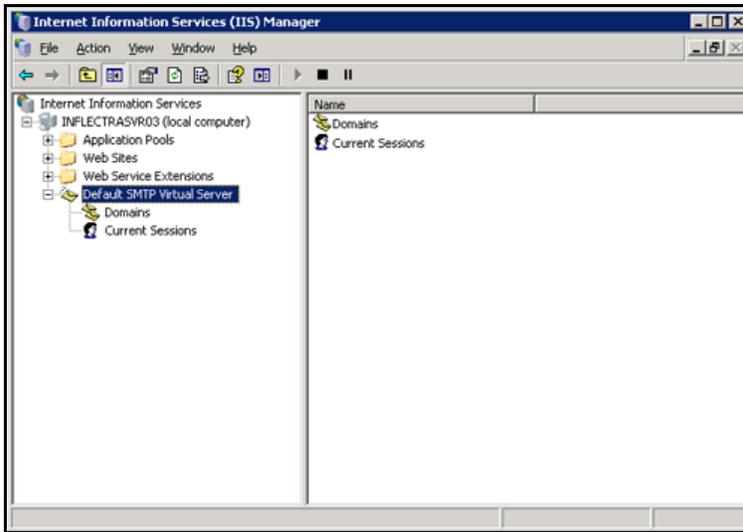


Check the box marked “Require secure channel (SSL)”, and click the <OK> button. You have now successfully configured IIS for secure HTTPS data transmission.

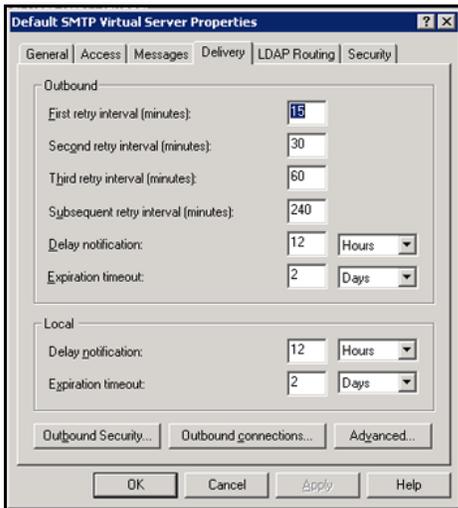
4.3. Appendix C – Sending Email through IIS

This section outlines the steps that you need to take to configure your IIS web server to send email notifications from SpiraTeam®. Since email configurations can vary greatly between environments, please check with your local IT personnel for the correct settings that should be used. This section assumes that you have an SMTP mail-server available on your network that is capable of relaying the email from the IIS server.

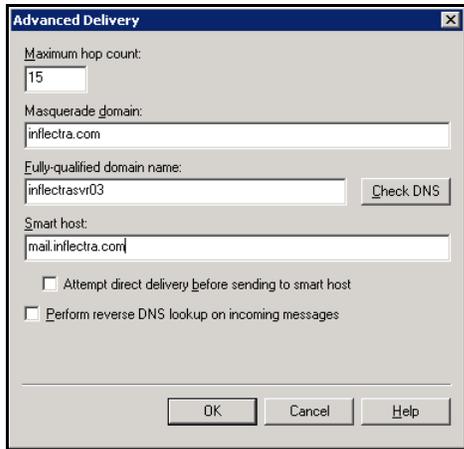
First open up the Internet Information Services (IIS) Manager on your server and expand the Default SMTP Virtual Server node:



Right-click on the “Default SMTP Virtual Server” node and click on “Properties”. Then select the “Delivery” tab on the dialog box that pops-up:



Now, click on the <Advanced> button to bring-up the advanced delivery configuration screen:



In this dialog box, you should enter the following information:

- **Masquerade domain:**
This is the domain name that you want emails from SpiraTeam® to look like their being sent from. This is typically the domain name of your organization (e.g. mycompany.com)
- **Fully-qualified domain name:**
This is the fully qualified domain name of the IIS server that SpiraTeam® is installed on (e.g. iisserver.mycompany.com).
- **Smart host:**
This is the fully qualified domain name of the SMTP mail-server that will actually be used in delivering the emails. (e.g. mail.mycompany.com). You will need to get the name of this from your IT personnel.

Once you have updated the settings, click the various <OK> buttons and you should now see emails being delivered from SpiraTeam®. Note: the email address that is used as the 'from address' for all emails generated by SpiraTeam® is the email address stored in the Administrator user's profile. You should edit that user's account and make sure their email address is a valid email address in your environment.

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The section of the manual that describes modifying the Windows System Registry (“Registry”) should only be attempted by experienced Windows administrators who are familiar with its organization and contents. Inflectra[®] cannot be held liable for any losses due to damage to the system registry made by inexperienced personnel.

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