



SpiraTeam<sup>®</sup> User Manual Version 3.0.0 Inflectra Corporation

Date: September 20th, 2010



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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 user manual outlines the features and functionality available in SpiraTeam®, and demonstrates how to use the application for managing the quality assurance and project management processes on a typical project.

# 1.1. Quality Assurance

Quality Assurance is a key component of the Software Development Life-Cycle (SDLC), which needs to be integrated into the planning and management of a program or project from its inception. Too often though, QA is implemented as *Quality Control* - whereby testing that the required functionality works as expected, is performed at the end, when it is most costly to make corrections and changes.

To manage QA across a project from day one, it is imperative that the original requirements are documented together with the use-cases that validate the desired functionality. These use-cases then form the basis of the test scripts that can be executed to validate that the functionality has been correctly built, and that the requirements have been satisfied. During the execution of these test scripts, failures may occur, which are recorded as *incidents* - either to be fixed or documented depending on the severity.

Typically, these activities require people to use at least three different types of software:

- Requirements Management
- Test Script Management
- Defect / Issue / Bug Tracking

However, this stove-piped approach has many limitations and drawbacks, most importantly the fact that there is no *traceability* between the different artifacts. How can the project manager know that all the requirements have been tested? Conversely, how can the developer know which test script was responsible for a recorded bug – needed to accurately reproduce the issue?

# 1.2. Project Management

As described in the Agile Manifesto, traditional waterfall software methodologies and lifecycles have failed to delivery projects on-time and onbudget. In addition, many systems built this way will fail to provide the expected business value as there is no ability to quickly refine the requirements as the project progresses.

Consequently software development has been transformed with these new ideas and concepts, with new methodologies such as Extreme Programming (XP), Scrum, DSDM and AUP becoming common. However the traditional tools of project management - requirements specifications, high level project plans, GANTT charts, white-board schedules and top-down task management - are too cumbersome and not well suited.

SpiraTeam® provides a complete Agile Project Management System in one package, that can manages your project's requirements, releases, iterations, tasks and issues in one environment, fully synchronized.

# 2. Functionality Overview

This section outlines the functionality provided by SpiraTeam® in the areas of requirements management, test case management, release planning, iteration planning, incident tracking, task management and project / user management.

# 2.1. Requirements Management

SpiraTeam® provides the ability to create, edit and delete project scope / requirements in a hierarchical organization that resembles a typical scope matrix. Each requirement is associated with a particular importance level (ranging from critical to low) and a status identifier that designates where the requirement is in the development lifecycle (requested, planned, in-progress and completed). In addition, each requirement is mapped to one or more test cases that can be used to validate that the functionality works as expected. This mapping is called the "Requirement Test Coverage", since the test cases "cover" the requirement so that if all the tests can be executed successfully, then the requirement is validated.

At the same time, from a development perspective, the team begins initial estimation of the lowest-level requirements in the requirements matrix to determine the complexity and associated resourcing. Once the high-level release schedule has been determined, the requirements can then be prioritized and scheduled against the appropriate release according to their business priority.

Once the release is underway, the requirements are further decomposed into their constituent low-level project tasks that can be assigned to the project team. The system will track the progress and revised estimates for the tasks and display them against the requirements so that risks to the schedule can be quickly determined.

# 2.2. Test Case Management

SpiraTeam® provides the ability to create, edit and delete project test cases that are stored in a hierarchical folder structure that resembles Windows Explorer ®. Each test case consists of a set of test steps that represent the individual actions a user must take to complete the test. These test steps also contain a description of the expected result and any sample data elements that the tester should use when performing the action. When a user executes a test case, the results are stored in a test run that contains the success/failure status of each test step as well as the actual observed result that the tester experienced.

In addition each test case is mapped to one or more requirements that the test is effectively validating, providing the test coverage for the requirement. During the execution of the test case, each failure can be optionally used to record a new incident, which can then be managed in the incident tracking module (see below). This provides complete traceability from a recorded incident to the underlying requirement that was not satisfied.

To streamline the assignment and tracking of multiple test cases, SpiraTeam® allows users to select groups of test cases and arrange them into *test sets*. Each test set can contain test cases from a variety of different folders and can be associated with a specific release of the system being tested.

## 2.2.1. Test Automation

As well as being able to store and manage manual test cases, SpiraTeam® can be used to manage the scheduling and execution of automated test scripts for a variety of third-party test automation engines. This allows you to centrally plan your automated testing and monitor the results of automated unit, functional and load testing remotely. For example, you could schedule a set of automated functional tests to run on five different machines (each with a different browser/OS combination) at 2:00 AM and have the results be ready for the next morning.

# 2.3. Release Planning

SpiraTeam® provides the ability to track different versions / releases of the application being tested. Each project in the system can be decomposed into an unlimited number of specific project releases, denoted by name and version number. Requirements and Test Cases developed during the design phase can then be assigned to these different releases. When a tester executes a series of test cases, they are able to choose the version of the project being tested and the resulting test run information is then associated with that release.

From a project planning perspective, the releases are the major milestones in the project, which are further sub-divided into iterations which are separate mini-projects with associated project scope and tasks. The project's requirements are scheduled at a high-level against the releases and the detailed tasks are scheduled against specific iteration within the release.

In addition, all incidents raised during the testing process are associated with this release, allowing the development team to easily determine which version of the project is affected. Finally as the incidents are resolved and verified during the testing phase, the appropriate release can be selected to indicate which release the incident was resolved and/or verified in.

# 2.4. Iteration Planning

As described in section 2.3, in addition to high-level project releases, SpiraTeam® can also track the individual iterations that comprise a release, giving the project manager the option to manage agile methodology projects within the SpiraTeam® environment. Unlike the release planning stage, where high-level requirements are estimated and scheduled, the iteration planning phase involves assigning each of the tasks in the project backlog against a specific iteration until the available effort in the iteration has been completely allocated.

When you first create iterations, you specify the start and end-dates together with the notional number of project resources assigned to the iteration and any non-working days. SpiraTeam® uses this information to calculate the planned effort available to the iteration, from which it will subtract the estimated task effort values to determine how much effort is available to schedule.

# 2.5. Incident Tracking

SpiraTeam® provides the ability to create, edit, assign, track, manage and close incidents that are raised during the testing of the software system under development. These incidents can be categorized into bugs, enhancements, issues, training items, limitations, change requests, and risks, and each type has its own specific workflow and business rules. Typically each incident is raised initially as a 'New' item of type 'Incident'. Following the review by the project manager and customer, they are changed to one of the other specific types, given a priority (critical, high, medium or low), and status changed to 'Open'. Once it is assigned to a developer for fixing, it is changed to status 'Assigned'.

The developer now works to correct the incident, after which time its status changes to 'Fixed' or 'Not Reproducible' depending on the actions taken (or not taken). Finally the project manager and customer verify that it has indeed been fixed, and the status is changed to 'Closed'. SpiraTeam® provides robust sorting and filtering of all the incidents in the system, as well as the ability to view the incidents associated with particular test cases and test runs, enabling drill-down from the requirements coverage display, right through to the open incidents that are affecting the requirement in question.

# 2.6. Task Management

As described above, in addition to storing the requirements for a project, SpiraTeam® includes the capability of drilling each lowest-level requirement down further into a series of work items called 'Tasks'. These tasks are the discrete activities that each member of the development team would need to carry

out for the requirement to be fulfilled. Each task can be assigned to an individual user as well as associated with a particular release or iteration. The system can then be used by the project manager to track the completion of the different tasks to determine if the project is on schedule.

# 2.7. Projects and Users

SpiraTeam® supports the management of an unlimited number of users and projects, which can be administered through the same web interface as the rest of the application. All artifacts (requirements, tests and incidents) are associated with a particular project, and each user of the system can be given a specific role for the particular project. So, a power user of one software project, may be merely an observer of another. That way, a central set of users can be managed across the enterprise, whilst devolving project-level administration to the manager of the project. In addition to these administration functions, each user profile and project has its own personalized dashboard view of all the pertinent and relevant information. This feature reduces the information overload associated with managing such a rich source of project information, and allows a single user or project snapshot to be viewable at all times for rapid decision-making.

# 2.8. Document Management

SpiraPlan® and SpiraTeam® include an integrated document management collaboration system that can be used to upload, manage and share documents between the different members of the project. This module includes support for uploading files and URLs, versioning of documents, the ability to organize into folders and categorize and search using meta-tags.

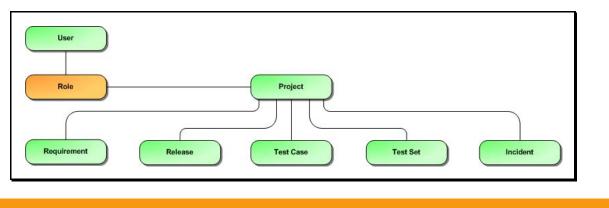
# 2.9. Source Code Tracking

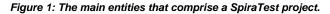
SpiraPlan® and SpiraTeam® provide the ability to browse your source code repository from within the main web application. This is an excellent way for managers and casual users of the project to browse the files and revisions of the software code without needing to install the version control software on their own workstations. In addition for all users, the ability to link source code revisions with SpiraTeam® artifacts provides traceability from requirements, incidents and tasks to the code changes that were made to implement the required feature or fix the identified defect. Should a defect resurface later, you can view the associated source code revisions to determine which changes were made and did they truly correct the defect.

# 2.10. Miscellaneous

# 2.10.1. Artifact Relationships

The sections above have outlined the different features and functions available in the system, and have described the various artifacts managed in the system (e.g. projects, users, requirements, tests, etc.). To aid in understanding how the information is related, the following diagrams illustrates the relationships between the different artifacts and entities:





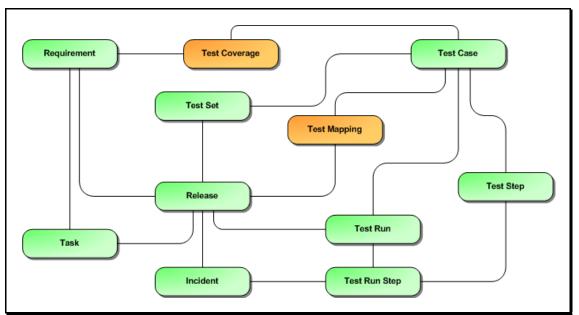


Figure 2: The relationships between the various SpiraTest entities

With these overall concepts in mind, the rest of this help manual will outline the functionality in each of the SpiraTeam® screens, and provide specific information on how to manage each of the artifacts illustrated above. Note that this manual does not explain the Administration-level functionality of the system; for that, please refer to the *SpiraTeam® Administration Guide*.

#### 2.10.2. Artifact Naming Conventions

On various screens in the system, you will see lists of artifacts (requirements, test cases, etc.) together with a unique identification number. In order to make it easier to recognize at a glance which type of artifact the identification number refers to, SpiraTeam® uses a system of two-letter prefixes which help identify the type of artifact being displayed. The current prefixes used by the system are:

Artifact	Prefix	Artifact	Prefix
Project	PR	Project Group	PG
User	US	Incident Type	IT
Requirement	RQ	Incident Priority	IP
Release	RL	Incident Severity	IV
Test Case	TC	Workflow	WK
Test Step	TS	Workflow Transition	WT
Test Run	TR	Custom Property Values	PV
Test Run Step	RS	Project Role	RX
Incident	IN	Task	TK
Incident Status	IS	Test Set	TX
Custom List	CL	Document	DC
Document Type	DT	Document Folder	DF
Automation Host	AH		

In addition, certain artifacts in the system are displayed with an icon that helps distinguish them from each other, and provides additional context on the state of the artifact:

**Artifact Description** lcon

- File	Summary Requirement
	Detailed Requirement
Ē	Test Folder
<u>-</u>	Test Case with Test Steps
<u>-</u>	Test Case without Test Steps
	Test Set
	Test Run
(P)	Test Step
Ċ	Linked Test Case
	Release
	Iteration / Build
	Task
×	Incident
<b>A</b>	Source Code Revision
&	Project Resource
	Test Automation Host
U	Artifact has an Attachment

# 3. User/Project Management

This section outlines how you can log into SpiraTeam®, view your personalized home-page that lists the key tasks that you need to focus on, and drill-down into each of your assigned projects in a single dashboard view. In addition to your personal homepage, each of your projects has its own dashboard that depicts the overall project health and status in a single comprehensive view.

# 3.1. Login Screen

Upon entering the SpiraTeam® URL provided by your system administrator into your browser, you will see the following login screen:



You need to enter your given *user-name* and *password* into the system in the appropriate boxes then click the <Log In> button to gain access to the application. Normally you only remain logged in to the application whilst in active use, and you will be asked to log-in again after either closing the browser or 20 minutes of inactivity. To prevent this, and stay logged-in to SpiraTeam® regardless of browser window closing or inactivity, select the "Keep me logged in" check-box before clicking the <Log In> button. Note that this setting is specific to each individual computer you are logging-in from, and that it will be reset when you explicitly log-out with the log-out link (described in more detail in section 3.3).

If for any reason you are unable to login with the provided username/password combination, and error message will be displayed. If you cannot remember the correct log-in information, click on the "Forgot user name / password" link and your password will be emailed to the email address currently on file.

If you don't have a SpiraTeam® account setup, clicking on the "Don't have an account?" link will take you to a form that you need to fill-in, which will be forwarded to the system administrator, who will actually create your account.

In addition, the system will prevent you logging on to the system with the same username *at the same time* on multiple computers. This is to avoid the system getting confused by a user trying to make contradictory actions at the same time. If for any reason you do try and log in to the system when you already have an active session in progress, you will see the following screen:



You have two choices: you can either click the "Log Out" link and try logging in as a different user, or if you want to log-off any other active sessions (e.g. you closed the browser and the session is still listed as active), simply click the "Sign Off The Other Locations" link, and you will be logged in to the application.

Since SpiraTeam® is licensed to organizations for a specific number of concurrent users – unless they have purchased an unlimited Enterprise license – only a fixed number of users may be active at the same time. So, for example if an organization has a five (5) concurrent user license and a sixth user tries to log-in, they will be presented with the following screen:



This means that one of the other users who is already logged-in, needs to click the "Log Out" button so that one of the concurrent licenses is freed for your use. If the user has logged out by closing the browser, the system may not have detected the logout. In this case, the other user needs to log back in, and then click the "Log Out" link.

# 3.2. My Page

Once you have successfully logged in, you will initially be taken to your personalized home page called "My Page":

Taaw	Welcome, Fre	d Bloggs   <u>My Pr</u>	ofile   Administr	ration   Log Out   Choose Project	•			Help
spiraTeam	My Page	Project Home	Planning	Tracking Reporting				
My Page								
Welcome Fred Bloggs to Your Dashboa	ard (Modify Layout/Setti	ngs   <u>Add Items</u> )						
My Projects				My Assigned Incidents				
Project Name	Group	Creation	Date	Name	Project	Туре	Priority	Date Open
Library Information System	Internal Projects	1-Dec-200	5	Ability to associate multiple authors	Library Information	Enhancement	1 - Critical	17-Nov-2003
Sample Application One	Internal Projects	1-Dec-200	5	Test System Limitation	Library Information	Limitation	1 - Critical	4-Dec-2003
Sample Application Two	External Projects	1-Dec-200	5	Test Training Item	Library Information	Training	1 - Critical	3-Dec-2003
				Editing the date on a book is clunky	Library Information	Bug	2 - High	4-Nov-2003
My Saved Searches				Test Training Item	Library Information	Training	2 - High	3-Dec-2003
Name	Project			Test Change Request	Library Information	Change Request	3 - Medium	7-Dec-2003
Critical Not-Covered Requirements		tion System	> Delete	Ability to import data from excel	Library Information	Enhancement	3 - Medium	25-Nov-2003
Failed Active Test Cases	Library Informa		> Delete	Test System Limitation	Library Information	Limitation	3 - Medium	4-Dec-2003
New Unassigned Incidents	Library Informa		> Delete	Sample Risk 3	Library Information	Risk	4 - Low	10-Dec-2003
All Reopened Incidents	Library Informa		> Delete					
High Priority Late Tasks	Library Informa	tion System	> Delete	My Detected Incidents				
Not Executed Test Sets	Library Informa	tion System	> Delete	Name	Project	Туре	Priority	Date Opene
				Cannot log into the application	Library Information	Incident		1-Nov-2003
My Assigned Requirements	۹			Clicking on link throws fatal error	Library Information	Incident		1-Nov-2003
Name	Project	Importance	Statue	Cannot install system on Windows M	E Library Information	Issue		1-Dec-2003
Ability to create different editions	Library Informatio	_	In Progress	Cannot install system on Oracle 9	Library Information	Bug	1 - Critical	2-Nov-2003
Ability to link authors to their contact			Requested	Ability to associate multiple authors	Library Information	Enhancement	1 - Critical	17-Nov-2003
Ability to edit existing authors in the		-	Planned	Cannot log into the application	Sample Application C	Incident	1 - Critical	10-Dec-2003
Ability to delete existing authors in the			In Progress	Test System Limitation	Library Information	Limitation	1 - Critical	4-Dec-2003
Ability to create new users in the sy		-	Requested	Sample Risk 1	Library Information	Risk	1 - Critical	10-Dec-2003
				Test Training Item	Library Information	Training	1 - Critical	3-Dec-2003
Ability to import from legacy system	<u>n x</u> Library Information	9 - LOW	Requested	Test Change Request	Library Information	Change Reques	t 2 - High	6-Dec-2003
				Support for IBM DB2	Library Information	Enhancement	2 - High	17-Nov-2003
My Assigned Test Cases				Test System Limitation	Library Information	Limitation	2 - High	4-Dec-2003
Name P	Project		Executed	Sample Risk 2	Library Information	Risk	2 - High	10-Dec-2003
	ibrary Information	Failed 4-Dec	c-2003	Test Training Item	Library Information	Training	2 - High	3-Dec-2003
> Execute	ibree defermation	Caution 4 Day	c-2003	Test Change Request	Library Information	Change Reques		7-Dec-2003
Ability to edit existing book L > Execute	ibrary Information	Caution 1-Dec	c-2003	Sample Risk 3	Library Information	Risk	4 - Low	10-Dec-2003
				Ser expectations from old client app		Training	4 - Low	3-Dec-2003
My Assigned Test Sets				Exporting data to excel	Library Information	Training	4 - Low	3-Dec-2003
	Project	Due Date	Status		,			
-	Project	- n/a -	Deferred	My Assigned Tasks				
Exploratory Testing (2)	Library Information	- 10 d -	Deletted	Name	Project	Progress	Priority	Due Date
	Library Information	10-Feb-2007	In Progress	Develop new edition entry scre	Library Information	i rogress	1 - Critical	12-Mar-20
> Execute				Create edition object insert m	Library Information		1 - Critical	12-Mar-20
				Write edition object insert qu	Library Information		1 - Critical	12-Mar-20
My Pending Test Runs				Refactor author screen to incl	Library Information		2 - High	12-Mar-20
Name Project	Last Update	Progre	\$\$	Create author object delete me	Library Information		2 - High	10-Mar-20
				Write author object delete que	Library Information		2 - High	10-Mar-20
				Develop edit subject details s	Library Information		3 - Medium	27-Oct-200

Note that once you have successfully logged-in and chosen a project, SpiraTeam® remembers this selection, and on subsequent log-ins will automatically select that project, and highlight it for you in the "My Projects" list (see 3.2.1 below).

Your homepage contains all the information relevant to you consolidated onto a single page for you to take immediate action. By default the page lists the information for all projects that you are a member of. However, you can choose to filter by the current project, to get a more focused list.

Initially the page is loaded in 'view mode' which means that the various 'widgets' on the page are displayed with minimum visual clutter (no toolbars or control icons) that makes it easy to scan the items on the page and see what work has been assigned. To switch the page to 'edit mode', click on "Modify Layout/Settings" hyperlink:

spiraTeam		Bloggs   My Profile			Choose Project	V			H
· <u> </u>	My Page F	Project Home	Planning	Tracking	Reporting				
ly Page									
/elcome Fred Bloggs to Yo	ur Dashboard (Return to Normal View	w   Add Items)							
<ul> <li>My Projects</li> </ul>			¢×	▼ My Assign	ned Incidents				
Project Name	Group	Creation Da	ate	Name		Project	Туре	Priority	Date Ope
Library Information System	Internal Projects	1-Dec-2005		Ability to a	ssociate multiple authors	Library Information	Enhancement	1 - Critical	17-Nov-20
Sample Application One	Internal Projects	1-Dec-2005		Test System	em Limitation	Library Information	Limitation	1 - Critical	4-Dec-200
Sample Application Two	External Projects	1-Dec-2005		Test Traini	ng Item	Library Information	Training	1 - Critical	3-Dec-200
				Editing the	date on a book is clunky	Library Information	Bug	2 - High	4-Nov-200
<ul> <li>My Saved Searches</li> </ul>			¢×	Test Traini	ng Item	Library Information	Training	2 - High	3-Dec-200
Name	Project			Test Chan	ge Request	Library Information	Change Request	3 - Medium	7-Dec-200
Critical Not-Covered Req Critical Not-Covered Req	uirements Library Informati	on System	> Delete	Ability to in	mport data from excel	Library Information	Enhancement	3 - Medium	25-Nov-20
Failed Active Test Cases	Library Informati	on System	> Delete	Test Syste	em Limitation	Library Information	Limitation	3 - Medium	4-Dec-200
New Unassigned Inciden	ts Library Informati	on System	> Delete	Sample Ri	<u>sk 3</u>	Library Information	Risk	4 - Low	10-Dec-20
All Reopened Incidents	Library Informati	on System	> Delete						
High Priority Late Tasks	Library Informati	on System	> Delete	<ul> <li>My Detect</li> </ul>	ted Incidents				*
Not Executed Test Sets	Library Informati	on System	> Delete	Name		Project	Туре	Priority	Date Ope
				Cannot log	into the application	Library Information	Incident		1-Nov-200
<ul> <li>My Assigned Requirem</li> </ul>	nents		¢ ×	Clicking or	link throws fatal error	Library Information	Incident		1-Nov-200
Name	Project	Importance	Status	Cannot ins	tall system on Windows MI	E Library Information	Issue		1-Dec-200
Ability to create different (	editions Library Information	1 - Critical	In Progress	Cannot ins	tall system on Oracle 9i	Library Information	Bug	1 - Critical	2-Nov-200
Ability to link authors to t	heir contact Library Information	1 2 - High	Requested	Ability to a	ssociate multiple authors	Library Information	Enhancement	1 - Critical	17-Nov-20
Ability to edit existing aut	thors in the Library Information	1 2 - High	Planned	Cannot log	into the application	Sample Application C	Incident	1 - Critical	10-Dec-20
Ability to delete existing a	authors in th Library Information	1 2 - High	In Progress	Test Syste	m Limitation	Library Information	Limitation	1 - Critical	4-Dec-200
Ability to create new user	rs in the syste Library Information	3 - Medium	Requested	Sample Ri	sk 1	Library Information	Risk	1 - Critical	10-Dec-20
Ability to import from legal	acy system x Library Information	1 4 - Low	Requested	Test Traini	na Item	Library Information	Training	1 - Critical	3-Dec-200
				Test Chan		Library Information	Change Reques	t 2 - High	6-Dec-200
<ul> <li>My Assigned Test Case</li> </ul>	es a construction of the c		¢ ×	Support for		Library Information	Enhancement	2 - High	17-Nov-20
Name	Project	Status Last Ex	kecuted	Test Syste		Library Information	Limitation	2 - High	4-Dec-200
Ability to create new boo	k Library Information	Failed 4-Dec-2	2003	Sample Ri		Library Information	Risk	2 - High	10-Dec-200
> Execute				Test Traini		Library Information	Training	2 - High	3-Dec-200
Ability to edit existing bo > Execute	bok Library Information	Caution 1-Dec-2	2003	Test Chan		Library Information	Change Reques		7-Dec-200
				Sample Ri		Library Information	Risk	4 - Low	10-Dec-200
<ul> <li>My Assigned Test Sets</li> </ul>			⇔ ×		ctations from old client app	Library Information	Training	4 - Low	3-Dec-200
Name	Project	Due Date S	tatus			Library Information	Training	4 - Low	3-Dec-200
Exploratory Testing (2) > Execute	Library Information	- n/a - D	eferred	Exporting of		ciorary mormation	ranng	4 - LOW	
Testing New Functionality	y (4) Library Information	10-Feb-2007 In	Progress	<ul> <li>My Assign</li> </ul>	ned Tasks	Dealerst	0	Delevite	1
> Execute				Name	ew edition entry scre	Project Library Information	Progress	Priority 1 - Critical	Due Dat
<ul> <li>My Pending Test Runs</li> </ul>			¢ ×					1 - Critical	12-Mar-
, ,		Dece			tion object insert m	Library Information			
Name Project	Last Update	Progress			on object insert qu	Library Information		1 - Critical	12-Mar-
				Refactor a	uthor screen to incl	Library Information		2 - High	10-Mar-

In this mode, each of the 'widgets' displayed on the page can be minimized by clicking on the arrow icon  $(\checkmark)$  in the top-left of the window, or closed by clicking-on the cross icon  $(\varkappa)$  in the top-right of the window. This allows you to customize your page to reflect the types of information that are relevant. If you have closed a widget that you subsequently decide you want to reopen, you can add them back to the page display by clicking the "Add Items" hyperlink at the top of the page. In addition, the various widgets have a "settings" icon ( $\bigstar$ ) that allows you to customize how that widget appears. The settings are specific to each widget and in general allow you to specify how many rows of data are displayed and what columns are displayed.

You can move and reposition the various widgets on the dashboard by clicking the mouse on the title bar of the widget you want to move and dragging it to the desired location. This change will be remembered when you next login to the system. Once you have the dashboard configured the way you like it, you can click "Return to Normal View" to switch back to 'view mode'.

When you load your 'My Page' for the first time it will consists of the following main elements:

- > My Projects
- > My Saved Searches
- My Assigned Requirements
- My Assigned Test Cases
- My Assigned Test Sets
- > My Pending Test Runs

- > My Assigned Incidents
- My Detected Incidents
- My Assigned Tasks

However these are not the only widgets available. If you click on the "Add/Remove" items hyperlink it will display the list of any additional widgets that are available:

Add/Remove Items	Close
Select the catalog you would like t	o browse.
<u>Closed Widgets (0)</u> Available Widgets (1)	
Available Widgets	
My Saved Reports	
Add to: Left Side 💌 Add	Close

You can add the additional widgets by selecting the appropriate checkbox, choosing the destination location (left side vs. right side) and then click the [Add] button. The additional widgets available in the My Page are:

> My Saved Reports

#### 3.2.1. My Projects

This section lists all the projects you have been given access to, together with the name, description, project group and date of creation. To view the description of the project, simply position the mouse pointer over the link, and a tooltip window will popup containing the description.

When you initially view the page, all of the projects will be shown as links, in normal type, with a gray background. When you click on a project to view, you will be taken to that project's home-page, and that project will be set as the current project. That project will now appear in your home-page in bold-type with a white background (see above screen-shot). To change the currently selected project, simply click on the link of another project name. You can always change your current project by clicking on the drop-down-list of projects displayed on the global navigation bar to the right of the "Log Out" link.

If you are a project group member, the name of the project group will also be displayed as a hyperlink. In which case, clicking on the project group hyperlink will take you to the Project Group dashboard (see section 3.5).

#### 3.2.2. My Saved Searches

This section lists any filters/searches you have saved from the various artifact list screens throughout the application. This allows you to store specific combinations of searches that you need to perform on a regular basis (e.g. display all newly logged incidents, display all requirements that are completed but have no test coverage).

The name of the saved search is displayed along with an icon that depicts which artifact it's for and the project it refers to. Clicking on the name of the saved search will take you to the appropriate screen in the project and set the search parameters accordingly. Clicking the "Delete" link next to the saved search will delete it.

#### 3.2.3. My Assigned Requirements

This section lists all the requirements you have been made owner of, across *all the different projects* you are a member of. This typically means that the project manager has assigned you to be responsible for either developing the supporting test cases or decomposing the requirement into its detailed work breakdown structure of project tasks. The requirement name is displayed, along with its status (requested, accepted, in-progress, etc.) and its importance.

#### 3.2.4. My Assigned Test Cases

This section lists all the test cases you have been made owner of, across *all the different projects* you are a member of. This typically means that the project manager has assigned you to be responsible for executing the assigned test scripts. To aid in this process, the script name is displayed, along with its last execution status (failed, passed or not-run) and date of last execution. This enables you to see how recently the tests have been run, and whether they need to be re-run.

If you click on the test-name hyperlink, you will be taken to the details page for this test-case (see section 5.2) and the project that the test-case belongs to will be made your current project. If you click on the ">Execute" link listed below it will actually launch the test-case in the test-case execution module (see section 5.4) so that you can easily retest failed cases.

#### 3.2.5. My Assigned Test Sets

This section lists all the test sets (groups of test cases) you have been made owner of, across *all the different projects* you are a member of. This typically means that the project manager has assigned you to be responsible for executing the test cases contained within the test set against a specified release of the system under test. To aid in this process, the test set name is displayed, along with its status, the project it belongs to, the number of remaining test cases to be executed, and the date by which all the tests need to have been run.

If you click on the test-set name hyperlink, you will be taken to the details page for this test-set (see section 5.6) and the project that the test-set belongs to will be made your current project. If you click on the ">Execute" link listed below it will actually launch the test-cases contained within the test-set in the test-case execution module (see section 5.4) so that you can easily carry out your assigned testing task.

## 3.2.6. My Pending Test Runs

This section lists any test runs that you started executing in the test case module but haven't yet completed. Once a test case or test set is executed, a pending test run entry is stored in the system so that you can continue execution at a later date. Any pending test run can be either deleted or resumed by clicking on the appropriate link.

#### 3.2.7. My Assigned Tasks

This section lists all the project tasks that you have been made the owner of across *all the different projects* you are a member of. This typically means that the manager of the project in question has assigned development tasks to you that need to be completed so that a release can be completed and/or a requirement can be fulfilled. The tasks are listed in ascending date order so that the items with the oldest due-dates are displayed first. In addition, each task is displayed with a progress indicator that graphically illustrates its completion against schedule. See section 8 – task management for details of the different progress indicators.

Clicking on the task name hyperlink will take you to the task details page. This page will describe the task in more detail, illustrate which requirement and release it is associated with, and also allow you to view the change log of actions that have been performed on it.

#### 3.2.8. My Assigned Incidents

This section lists all the open incidents you are the owner of, across *all the different projects* you are a member of. This typically means that the project manager has assigned you to be responsible for resolving the incident. In the case of a bug, this can mean actually fixing the problem, whereas for other incident types (e.g. training item) it may mean simply documenting a workaround. In either event, this section highlights the open incidents you need to manage, ranked by importance/priority and categorized by type, with the open date displayed to give you a sense of the age of the incident.

Clicking on the incident name hyperlink takes you to the incident details page (see section 6.2) that describes the incident in more detail, and allows you to add new information or change its status to indicate actions taken. In addition, if you position the mouse pointer over the name of the incident, a more detailed description is displayed as a "tooltip".

#### 3.2.9. My Detected Incidents

This section lists all the open incidents that you have detected, across *all the different projects* you are a member of. These incidents are not necessarily ones that you need to take an active role in resolving, but since you were the originator – either by executing a test case or just logging a standalone incident – you can watch them to make sure that they are resolved in a timely manner.

Clicking on the incident name hyperlink takes you to the incident details page (see section 6.2) that describes the incident in more detail, and allows you to add new information or change its status to indicate actions taken. In addition, if you position the mouse pointer over the name of the incident, a more detailed description is displayed as a "tooltip".

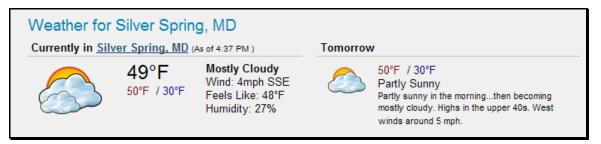
#### 3.2.10. My Saved Reports

This section lists any reports you have saved from the reports center. This allows you to store specific combinations of report elements, format, filters and sorts (see the section on Reporting for more details on how to configure a report) for reports that you need to run on a regular basis:

My Saved Reports		
Name	Project	
v1.0 Release List Report	Library Information System	> <u>Delete</u>

#### 3.2.11. My Weather

This "fun" widget is designed to allow users to make the SpiraTeam® homepage more useful so that the page becomes more central in their day-to-day operations and therefore they are more likely to keep track of the other items reflected on the page.



# 3.3. Global Navigation

Regardless of the page you are on, SpiraTeam® will always display the global navigation bar, consisting of six section tabs (My Page, Project Home, Planning, Testing, Tracking and Reports) that correspond to the main activities that take place in the system, as well as three secondary links to "My Profile" and "Log Out" and "Help". Under the various tabs are several secondary menu options that are displayed when you hover the mouse over the appropriate tab as illustrated below:

### > Project Home

- $\triangleright$  Project Home (described in Section 3.4)
- ▷ Project Group Home (described in Section 3.5)
- ▷ Documents (described in Section 10)

#### > Planning

- ▷ Requirements (described in Section 4)
- $\triangleright$  Releases (described in Section 7)
- ▷ Iterations (described in Section 7.3)

#### > Testing

- ▷ Test Cases (described in Section 5)
- $\triangleright$  Test Sets (described in Section 5.7)
- $\triangleright$  Test Runs (described in Section 5.5)
- $\triangleright$  Automation Hosts (described in Section 5.9)

## > Tracking

- ▷ Incidents (described in Section 6)
- $\triangleright$  Tasks (described in Section 8)
- ▷ Resources (described in Section 9)
- ▷ Source Code (described in Section 12)
- > **Reports** (described in section 11)

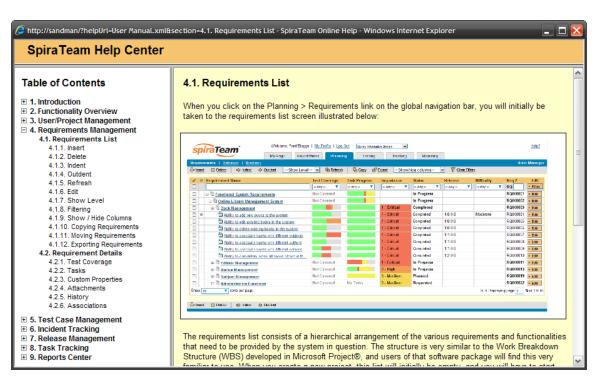
Note: The main tabs will take you to the appropriate artifact type (requirement, test case, incident, etc.) for the currently selected project. However if you haven't selected a project, then clicking on any of the tabs will simply take you back to "My Page" so that you can select a project.

#### 3.3.1. Log Out

Clicking on the "Log Out" link will immediately log you out of your current session and return you to the login page illustrated in section 3.1. If you had set the "Remember Me" option during your previous login, that setting will be reset; so if you want to avoid having to keep logging-in, you'll need to re-check that box during your next log-in.

#### 3.3.2. Help

Clicking on this link on any page will bring up the online version of this manual shown below:



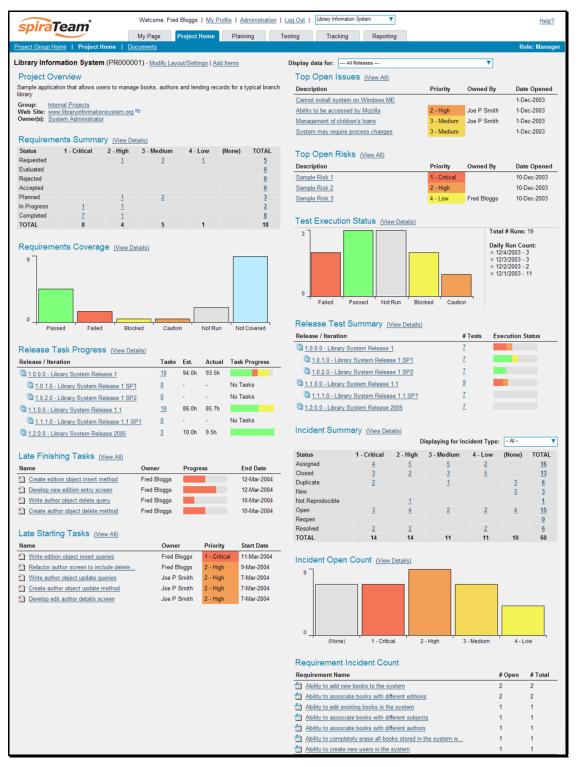
Clicking on any of the [+] expand links in the left hand table of contents will open up the detailed list of topics for each of the main areas of the system. In each area, clicking on one of the individual links will open the appropriate section in the help manual. By default, the reading-pane will open to the help item that is most closely related to the screen you happened to be on when you clicked the "Help" link.

## 3.3.3. Choose Project

Choosing a project from the list of your assigned projects in the drop-down-menu allows you to quickly and easily jump between projects regardless of the page you happen to be on. When you choose a project, you will be taken to the home page for that project (which is described in section 3.4 below).

# 3.4. Project Home

When you click on either the "Project Home" tab or the name of the project in the "My Page" project list, you will be taken to the homepage of the specific project in question:



This page summarizes all of the information regarding the project into a comprehensive, easily digestible form that provides a "one-stop-shop" for people interested in understanding the overall status of the

project at a glance. It contains summary-level information for all types of artifact (requirements, test cases, incidents, etc.) that you can use to drill-down into the appropriate section of the application. *In addition to viewing the project home page, you can choose to filter by a specific release, to get the homepage for just that release (and any child iterations).* 

In a similar manner to the 'My Page', the Project Home dashboard is initially loaded in 'view mode' which means that the various 'widgets' on the page are displayed with minimum visual clutter (no toolbars or control icons) that makes it easy to scan the items on the page and see the health of the status of the project at a glace. To switch the page to 'edit mode', you should click on "Modify Layout/Settings" hyperlink.

Once in 'edit mode', each of the 'widgets' displayed on the project homepage can be minimized by clicking on the arrow icon ( $\checkmark$ ) in the top-left of the window, or closed by clicking-on the cross icon ( $\thickapprox$ ) in the top-right of the window. In addition, the widgets allow you change their settings by clicking on the settings icon ( $\clubsuit$ ). This allows you to customize your view of the project to reflect the types of information that are relevant to you. If you have closed a widget that you subsequently decide you want to reopen, you can rectify by clicking the "Add Items" hyperlink at the top of the page, and locating the closed item from the list of 'Closed Widgets'.

When you load your 'Project Home' for the first time it will consists of the following main elements:

- Project Overview
- Requirements Summary
- > Requirements Coverage
- Release Task Progress
- Late Finishing Tasks
- Late Starting Tasks
- Top Open Issues
- Top Open Risks
- Test Execution Status
- Release Test Summary
- Incident Summary
- Incident Open Count
- Requirement Incident Count

However these are not the only widgets available. If you click on the "Add/Remove" items hyperlink it will display the list of any additional widgets that are available:

Add/Remove Items	Close
Select the catalog you would like to b	rowse.
<u>Closed Widgets (0)</u> Available Widgets (4)	
Available Widgets	
Requirements Regression Cov     Test Set Status     Incident Aging     Incident Test Coverage	verage
Add to: Left Side 💌 Add	Close

You can add the additional widgets by selecting the appropriate checkbox, choosing the destination location (left side vs. right side) and then click the [Add] button. The additional widgets available in the Project Home dashboard are:

- Requirements Regression Coverage
- Test Set Status
- Incident Aging
- Incident Test Coverage

Each of the different widgets listed is described in more detail below:

#### 3.4.1. Project Overview

This section displays the name of the project, together with a brief description, the web-site that points to any additional information about the project, and the names of the owners of the project.

#### 3.4.2. Requirements Summary

This section consists of a summary table that displays the aggregate count of requirements in the system broken-down by importance (on the x-axis) and status (on the y-axis). This allows the project manager to determine how many critical vs. low priority enhancements are waiting to be implemented, vs. actually being implemented. In addition, it makes a distinction between those requirements simply requested and those actually planned for implementation, so the project manager can see what the backlog is between the customer's demands, and the plan in place. Clicking on the "View Details" link at the top of the table simply brings up the project requirements list (see section 4.1), whereas clicking on the individual values in the cells will display the requirements list with the filter set to match the importance and status of the value.

#### 3.4.3. Requirements Coverage

This section consists of a bar graph that displays the aggregated count of requirements test coverage for the project. The Passed, Failed, Blocked, Caution and Not-Run bars indicate the total count of requirements that have tests covering them, allocated across the execution status of the covering tests. For example if a requirement is covered by *four tests*, two that have passed, one that has failed and one that has not yet been run, the counts would be passed = 0.5, failed = 0.25 and not-run 0.25. These fractional quantities are then summed across all the requirements to give the execution status breakdown of the covered requirements.

In addition to the five statuses for the covered requirements, the sixth ("Not Covered") bar depicts the total number of requirements that have no tests covering them, putting the five other bars into perspective. Typically a project is in good health if the "Not Covered" bar is zero, and the count of "Passed" requirements is greater than "Failed", "Caution" or "Not Run". The greatest risk lies with the "Blocked", "Not Covered" and "Not Run" status codes, since the severity/quantity of any bugs lurking within is not yet fully known.

If you position the mouse pointer over any of the four bars, the color of the bar changes slightly and the underlying raw data is displayed as a tooltip, together with the percentage equivalent. Clicking on the any of the bars in the chart will take you to the requirements list page (see section 4.1) with the corresponding filters set.

When you filter the project home by release/iteration, this widget will filter the requirements coverage graph to only include *requirements that are specifically mapped to the selected release/iteration*. This is useful when you want to determine the test coverage of new requirements that are being added to the specific release/iteration. If instead you want to determine the regression test coverage for a release, you should add the separate "Requirements Regression Coverage" widget to the page instead.

## 3.4.4. Requirement Incident Count

This section displays a count of the total number of incidents, and the number of open incidents mapped against requirements in the system, sorted by the requirements that have the most open incidents first. This section is useful for determining the parts of the application that have the most instability, as you can look at the requirements that have yielded the greatest number of incidents. Clicking on any of the requirements hyperlinks will take you to the detail page for the requirement in question (see section 4.2). You can configure in the settings whether to include requirements with no open incidents, and also how many rows of data to display.

## 3.4.5. Top Open Issues

This section displays a breakdown of the top issues logged against the project, in order of decreasing priority. Note that items not given a priority are listed at the top, since critical issues could be lurking in that list, and the project manager will want to immediately review these to assign priorities. Clicking on the issue item hyperlink will take you to the incident details page for the issue in question (see section 6.2). *You can configure in the settings whether to use Priority or Severity for the display, and also how many rows of data to display.* 

## 3.4.6. Top Open Risks

This section displays a breakdown of the top risks logged against the project, in order of decreasing priority. Note that items not given a priority are listed at the top, since critical risks could be lurking in that list, and the project manager will want to immediately review these to assign priorities. Clicking on the risk item hyperlink will take you to the incident details page for the risk in question (see section 6.2). You can configure in the settings whether to use Priority or Severity for the display, and also how many rows of data to display.

## 3.4.7. Release Test Summary

This widget allows you to quickly ascertain the test execution status of each of the active releases that make up the current project in one snapshot. Each release is displayed together with a graphical display that illustrates the execution status with different colored bars. In addition, if you hover the mouse over the graphical display it will display a tooltip that provides a more detailed description of the number of tests in each status.

Release Test Summary (View Details)		
Release / Iteration	# Tests	Execution Status
1.0.0.0 - Library System Release 1	<u>7</u>	
1.0.1.0 - Library System Release 1 SP1	<u>7</u>	
1.0.2.0 - Library System Release 1 SP2	<u>7</u>	
1.1.0.0 - Library System Release 1.1	<u>9</u>	
1.1.1.0 - Library System Release 1.1 SP1	<u>7</u>	
1.2.0.0 - Library System Release 2005	<u>7</u>	

Each release will display the aggregate status of any test cases directly assigned to itself, together with the test status of any child iterations that are contained within the Release. Clicking on one of the releases will drill you down one level further and display the test execution status for the parent release as well as each of the child iterations separately:

Release Test Summary (View Details)		
Release / Iteration	# Tests	Execution Status
1.1.0.0 - Library System Release 1.1	<u>9</u>	
1.1.0.0.0001 - Iteration 001	2	
1.1.0.0.0002 - Iteration 002	<u>3</u>	
🖺 <u>1.1.0.0.0003 - Iteration 003</u>	<u>4</u>	

## 3.4.8. Incident Summary

This section consists of a summary table that displays the aggregate count of incidents in the system broken-down by priority (on the x-axis) and status (on the y-axis). This allow the project manager to determine how many critical vs. low priority incidents are waiting to be addressed, and how many new items need to be categorized and assigned. Clicking on the "View Details" link at the top of the table simply brings up the incident list (see section 6.1), whereas clicking on the individual values in the cells will display the incident list with the filter set to match the priority and status of the value.

By default this summary table displays the total count of all incidents – regardless of type, however my changing the drop-down list to a specific incident type (e.g. bug, enhancement, issue, etc.), the project manager can filter the summary table to just items of that type. You can also configure in the settings whether to use Priority or Severity for the x-axis

## 3.4.9. Test Execution Status

This section consists of a bar graph that displays the aggregated count of test cases in each execution status for the project. Note that this graph does not consider past test-runs when calculating the totals in each status (Passed, Failed, Not Run, etc.), it simply looks at each test-case and uses the last-run status as the best health indicator. Thus if a test case that previously passed, has subsequently failed upon re-execution, it will be considered a failure only.

If you position the mouse pointer over any of the five bars, the color of the bar changes slightly and the underlying raw data is displayed as a tooltip, together with the percentage equivalent. Clicking on any of the bars will bring up the project test case list (see section 5.1) with the appropriate filter applied.

In addition to the bar-chart, there is a also a display of the total number of test runs recorded for the project, and a list of the *five most recent* days of recorded test-runs, together with the daily count.

#### 3.4.10. Release Task Progress

This widget allows you to quickly ascertain the task progress of each of the active releases that make up the current project in one snapshot. Each release is displayed together with a graphical display that illustrates the completion percentage and status with different colored bars. In addition, if you hover the mouse over the graphical display it will display a tooltip that provides a more detailed description of the number of tasks in each status.

Release Task Progress (View Details)				
Release / Iteration	Tasks	Est.	Proj.	Task Progress
1.0.0.0 - Library System Release 1	<u>18</u>	94.0h	95.8h	
1.0.1.0 - Library System Release 1 SP1	<u>4</u>	15.3h	15.3h	
1.0.2.0 - Library System Release 1 SP2	<u>0</u>	-	-	No Tasks
1.1.0.0 - Library System Release 1.1	<u>15</u>	71.0h	70.7h	
1.1.1.0 - Library System Release 1.1 SP1	<u>0</u>	0.9h	0.9h	No Tasks
1.2.0.0 - Library System Release 2005	<u>3</u>	10.0h	9.5h	

Each release will display the aggregate progress of any tasks directly assigned to itself, together with the task progress of any child iterations that are contained within the Release. Clicking on one of the releases will drill you down one level further and display the task progress for the parent release as well as each of the child iterations separately:

Release Task Progress (View Details)								
Release / Iteration	Tasks	Est.	Proj.	Task Progress				
1.0.0.0 - Library System Release 1	<u>18</u>	94.0h	95.8h					
🖺 <u>1.0.0.0.0001 - Iteration 001</u>	<u>6</u>	32.0h	32.0h					
1.0.0.0.0002 - Iteration 002	<u>6</u>	32.0h	32.0h					
🖺 <u>1.0.0.0.0003 - Iteration 003</u>	<u>6</u>	30.0h	31.8h					

#### 3.4.11. Late Finishing Tasks

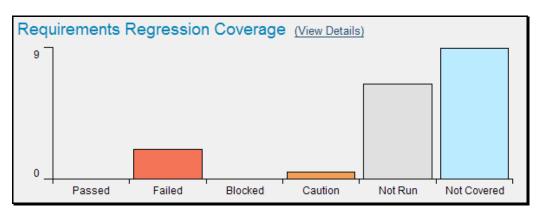
This section displays the list of any project tasks that have not yet been completed, but whose scheduled end date has already elapsed. A graphical progress bar is included with each task in the grid, so that you can easily see which tasks are nearest completion.

## 3.4.12. Late Starting Tasks

This section displays the list of any project tasks that have not yet started, but whose scheduled start date has already elapsed. Each task is listed along with its owner, priority and due-date so that you quickly ascertain how many days late it will be starting, how important it is to the project, and who needs to be contacted to get more information.

#### 3.4.13. Requirements Regression Coverage

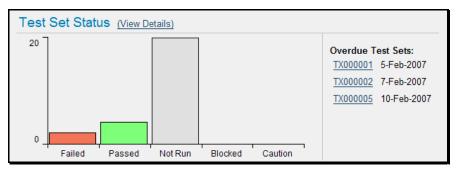
This section consists of a bar graph that displays the aggregated count of requirements test coverage for the project in a similar fashion to the 'Requirements Coverage' widget:



However, unlike the 'Requirements Coverage' widget, when you filter the project home by release/iteration, this widget will filter the requirements coverage graph to include all requirements (regardless of release/iteration), but only considering covering test cases that are associated with the selected release/iteration. This is useful when you want to determine the regression requirements test coverage of a specific release (i.e. does running all the tests relevant to this release cover <u>all the necessary</u> requirements, not just new requirements).

## 3.4.14. Test Set Status

This section consists of a bar graph that displays the aggregated count of test cases in each execution status for each test set in the project:



Therefore if you have the same test cases stored in multiple test sets, then this widget will display the total test case count for all combinations of test set. This is useful if you have the same test cases being executed in different environments – represented by different test sets – and you need to make sure that the tests passed successfully in all environments.

If you position the mouse pointer over any of the five bars, the color of the bar changes slightly and the underlying raw data is displayed as a tooltip, together with the percentage equivalent. Clicking on any of the bars brings up the project test set list (see section 5.6) page with the appropriate filter applied. In addition to the bar-chart, there is a also a display of the *five most overdue test sets in the project*.

## 3.4.15. Incident Aging

This section displays the number of days incidents have been left open in the system. The chart is organized as a histogram, with the count of incidents on the y-axis and different age intervals on the x-axis.

#### 3.4.16. Incident Test Coverage

This section displays a bar-graph that illustrates the execution status of any test cases that previously failed and resulted in the generation of an incident that has subsequently been resolved. This is very useful when a test case was executed in Release 1.0 and an incident was logged. That incident has now

been resolved in Release 1.1 (and is in a closed status) but we need to know that the test case that caused the failure has been successfully re-run. Any test cases listed as Blocked, Caution, Not-Run or Failed in this graph need to be executed to verify that all resolved bugs in the release have truly been fixed.

# 3.5. Project Group Home

When you click on either the "Project Group Home" tab in the global navigation or the name of the project group in the "My Page" project list, you will be taken to the homepage of the specific project group in question:



This page summarizes all of the information regarding the project group into a comprehensive, easily digestible form that provides a "one-stop-shop" for people interested in understanding the overall status of the group as a whole as well as the relative performance of the different projects that make up the group. It contains summary-level metrics for all types of artifact (requirements, test cases, tasks, incidents, etc.) that you can use to drill-down into the appropriate project for more details.

In a similar manner to the 'My Page', the Project Group Home dashboard is initially loaded in 'view mode' which means that the various 'widgets' on the page are displayed with minimum visual clutter (no toolbars or control icons) that makes it easy to scan the items on the page and see the health of the status of the project at a glace. To switch the page to 'edit mode', you should click on "Modify Layout/Settings" hyperlink.

Once in 'edit mode', each of the 'widgets' displayed on the project group homepage can be minimized by clicking on the arrow icon ( $\checkmark$ ) in the top-left of the window, or closed by clicking-on the cross icon ( $\varkappa$ ) in the top-right of the window. In addition, the widgets allow you change their settings by clicking on the settings icon ( $\aleph$ ). This allows you to customize your view of the project group to reflect the types of information that are relevant to you. If you have closed a widget that you subsequently decide you want to

reopen, you can rectify by clicking the "Add Items" hyperlink at the top of the page, and locating the closed item from the list of 'Closed Widgets'.

When you load the 'Project Group Home' for the first time it will consists of the following main elements:

- Group Overview
- Requirements Coverage
- > Task Progress
- > Project List
- Test Execution Status
- Incident Aging

However these are not the only widgets available. If you click on the "Add/Remove" items hyperlink it will display the list of any additional widgets that are available:

Add/Remove Items	Close
Select the catalog you would like to	browse.
<u>Closed Widgets (0)</u> Available Widgets (2)	
Available Widgets	
Top Open Issues Top Open Risks	
Add to: Left Side 🔽 Add	Close

You can add the additional widgets by selecting the appropriate checkbox, choosing the destination location (left side vs. right side) and then click the [Add] button. The additional widgets available in the Project Group Home dashboard are:

- > Top Open Issues
- > Top Open Risks

Each of the different widgets listed is described in more detail below:

#### 3.5.1. Group Overview

This section displays the name of the project group, together with a brief description, the web-site that points to any additional information about the project group, and the names of the owners of the project group.

#### 3.5.2. Project List

This section lists all the active projects that make up the group, together with the name, description, project group and date of creation. To view the description of the project, simply position the mouse pointer over the link, and a tooltip window will popup containing the description.

#### 3.5.3. Requirements Coverage

This section consists of a bar graph that displays the aggregated count of requirements test coverage for the entire project group. The Passed, Failed, Blocked, Caution and Not-Run bars indicate the total count of requirements that have tests covering them, allocated across the execution status of the covering tests

Under the main bar graph is displayed a table containing each project in the group and a colored bar illustrating the specific requirements coverage distribution for that project. That way you can see both the aggregate coverage and also the relative coverage for the projects. You can configure in the widget settings whether you want to see the aggregate bar graph, and/or the project-specific requirements coverage.

## 3.5.4. Task Progress

This section consists of a bar graph that displays the aggregated count of tasks by progress category for the entire project group. The 'On Schedule', 'Late Finish', 'Late Start' and 'Not Started' bars indicate the total count of tasks that are in that category for all the projects in the group.

Under the main bar graph is displayed a table containing each project in the group and a colored bar illustrating the specific task progress for that project (using the same coloring convention as the main graph). That way you can see both the aggregate task progress and also the relative progress for each project. You can configure in the widget settings whether you want to see the aggregate bar graph, and/or the project-specific task progress.

#### 3.5.5. Test Execution Status

This section consists of a bar graph that displays the aggregated count of test cases by execution status for the entire project group. The Passed, Failed, Blocked, Caution and Not-Run bars indicate the total count of test cases that are in that category for all the projects in the group.

Under the main bar graph is displayed a table containing each project in the group and a colored bar illustrating the specific test case execution status for that project (using the same coloring convention as the main graph). That way you can see both the aggregate test status and also the relative status for each project. You can configure in the widget settings whether you want to see the aggregate bar graph, and/or the project-specific test status.

#### 3.5.6. Incident Aging

This section displays the number of days incidents have been left open in the system. The chart is organized as a histogram, with the count of incidents on the y-axis (for all projects in the group) and different age intervals on the x-axis.

Under the main bar graph is displayed a table containing each project in the group and a colored bar illustrating the distribution of <u>open incidents by priority</u> for that project. That way you can see both the aggregate aging for the group and also the relative priority of open incidents for each project. You can configure in the widget settings whether you want to see the aggregate aging histogram, and/or the project-specific incident count by priority.

## 3.5.7. Top Open Issues

This section displays a breakdown of the top issues logged against any of the projects in the group, in order of decreasing priority. Note that items not given a priority are listed at the top, since critical issues could be lurking in that list, and the project manager will want to immediately review these to assign priorities. Clicking on the issue item hyperlink will take you to the incident details page for the issue in

question (see section 6.2). You can configure in the settings whether to use Priority or Severity for the display, and also how many rows of data to display.

### 3.5.8. Top Open Risks

This section displays a breakdown of the top risks logged against any of the projects in the group, in order of decreasing priority. Note that items not given a priority are listed at the top, since critical risks could be lurking in that list, and the project manager will want to immediately review these to assign priorities. Clicking on the risk item hyperlink will take you to the incident details page for the risk in question (see section 6.2). You can configure in the settings whether to use Priority or Severity for the display, and also how many rows of data to display.

# 3.6. My Profile

When you click on either the "My Profile" link in the global navigation, you will be taken to the page in the system that allows you to view and edit your personal profile:

Please review the info Click [Update] to save	rmation listed below and make any changes if necessary.  Cancel Cancel Cancel
User ID/Name:	administrator [US:1]
First Name*:	System
Middle Initial:	
Last Name*:	Administrator
Change Password	Email Preferences LDAP Settings
To change your p	assword, you must enter your current password and the password you would like to change it to.
Current Passwor	rd:
New Password:	
Confirm Passwo	rd:

You can change your user information including your first-name, last-name, and middle-initial. Clicking the <Update> button will commit the changes, whereas clicking <Cancel> returns you back to either "Project Home" or "My Page" depending on whether you have a project currently selected or not.

#### 3.6.1. Change Password

In addition to being able to update your user information, you can optionally change your password at the same time. To change your password, on the Change Password tab fill in the three boxes with your current password, and your new password repeated for verification. Then when the <Update> button is clicked, the system will update your password, otherwise you will simply get a warning message indicating what needs to be corrected.

с	hange Password	Email Preferences	LDAP Settings	
	To change your p	assword, you must e	nter your current password and the password you would like to o	hange it to.
	Current Passwo	rd:		
	New Password:			
	Confirm Passwo	ord:		

Note: If your SpiraTest user profile is linked to an account stored in an external LDAP server, you may find the change password option is disabled. This is because the system uses the password held in the

external server. To change the password in this case, please contact your system administrator who will be able to help you change the password in your LDAP environment.

### 3.6.2. Email Preferences

Change Password	Email Preferen	ces LDAP Settings			
Email Address*:	: [	administrator@mycomp	any.com	]	
Enable Email N	otifications:	No 🔻			
		If disabled, you will not get any	notifications from SpiraTeam		

Here you can configure the email address that the application will send notifications to, and whether or not you want to receive email notifications.

If the Enable Notifications cannot be changed, it means that the system is either not configured to send out notifications, or the administrator has disabled user's ability to opt out of notifications being sent.

#### 3.6.3. LDAP Settings

Change Password	Email Preferences	LDAP Settings	
LDAP DN: No	t Linked		

This tab will show configured LDAP options for your account. At this time, no configurable options are on this tab, it is for reference only.

# 4. Requirements Management

This section outlines how the requirements management features of SpiraTeam® can be used to develop a requirements / scope matrix for a project, and how you can map any existing test-cases to the requirements. Typically when starting a project, developing the requirements list is the first activity after the Administrator has set up the project in the system.

# 4.1. Requirements List

When you click on the Planning > Requirements link on the global navigation bar, you will initially be taken to the requirements list screen illustrated below:

ś	piraTeam <sup>®</sup> Welcome, Fred Blo	ggs   <u>My Profile</u>   <u>Adm</u>	inistration   Log Ou	t   Library Information	n System 🔻	_			Help?
	My Page Pro	ject Home Plannin	ng Testing	Tracking	Reporting				
lequ	uirements   <u>Releases</u>   <u>Iterations</u>							Role	: Manag
<u>ا ا</u>	isert 🗱 Delete 🖒 Indent 💠 Outdent Show Leve	🔻 🇞 Refresh	Edit 🗗 Exp	ort - Show/hide co	lumns 🔻 🔻	Filter			
~	Requirement Name	Test Coverage	Task Progress	Importance	Status	Release	Difficulty	Req #	Edit
		Any 🔻	Any 🔻	Any 🔻	Any 🔻	- Any 🔻	- Any 🔻	RQ	<ul> <li>Filter</li> </ul>
	E Tunctional System Requirements	Not Covered			In Progress			RQ000001	► Edit
	Online Library Management System	Not Covered			In Progress			RQ000002	► Edit
	Book Management			1 - Critical	Completed			RQ000003	► Edit
	Ability to add new books to the system			1 - Critical	Completed	1.0.0.0001	Moderate	RQ000004	► Edit
	Ability to edit existing books in the system			1 - Critical	Completed	1.0.0.0001		RQ000005	► Edit
	Ability to delete existing books in the system			1 - Critical	Completed	1.0.0.0002		RQ000006	► Edit
	Ability to associate books with different subjects			1 - Critical	Completed	1.1.0.0.0001		RQ000007	► Edit
	Ability to associate books with different authors			1 - Critical	Completed	1.1.0.0.0001		RQ000008	► Edit
	Ability to associate books with different editions			1 - Critical	Completed	1.1.0.0.0002		RQ000009	► Edit
	Ability to completely erase all books stored in the	<u>1</u>		1 - Critical	Completed	1.2.0.0		RQ000010	► Edit
	New Requirement	Not Covered			In Progress	1.0.1.0.0001		RQ000075	► Edit
	Edition Management	Not Covered		1 - Critical	In Progress			RQ000011	► Edit
	Author Management	Not Covered		2 - High	In Progress			RQ000013	► Edit
	Bubject Management	Not Covered		3 - Medium	Planned			RQ000019	► Edit
	Administration Functions	Not Covered	No Tasks	3 - Medium	Requested			RQ000022	► Edit
Shov	w 15 🔻 rows per page						🛯 🖛 Displayin	g page 1	of 1

The requirements list consists of a hierarchical arrangement of the various requirements and functionalities that need to be provided by the system in question. The structure is very similar to the Work Breakdown Structure (WBS) developed in Microsoft Project®, and users of that software package will find this very familiar to use. When you create a new project, this list will initially be empty, and you will have to start using the <Insert> button to start adding requirements.

Requirements come in two main flavors: summary items shown in **bold-type**, and detail items shown in normal-type with a hyperlink. When you indent a requirement under an existing requirement, the parent is changed from a detail-item to a summary-item, and when you outdent a child item, its parent will return to a detail-item (assuming it has no other children). This behavior is important to understand, as only detail items are assigned a status themselves; the summary items simply display an aggregate of the worst-case assessment of their children's status. Also, only detail items can be mapped against test-cases for test-coverage (thus only they have hyperlinks), the summary items simply display an aggregate coverage status of their children.

Each requirement is displayed along with its importance/priority (ranked from "Critical" to "Low"), its completion status (from "Requested" to "Completed"), the version of the software that the requirement is planned for, and graphical indicators that represents its test coverage status and its task progress.

For those requirements that have no test-cases covering them (i.e. validating that the requirement works as expected) the indicator consists of a white solid bar, bearing the legend "Not Covered". For those requirements that have *at least one* test-case mapped against them, they will display block graph that illustrates the last execution status of each of the mapped test-cases. Thus if the requirement is covered by two test cases, one of which passed, and one of which wasn't run, the graph will display a green bar (50% passed) and an equal length gray bar (50% not run). To determine the exact requirements

coverage information, position the mouse pointer over the bar-chart, and the number of covering tests, along with the pass / fail / blocked / caution / not-run breakdown will be displayed as a "tooltip".

For those requirements that have at least one task associated with them, they will display a block graph that illustrates the relative numbers of task that are on-schedule (green), late-starting (yellow), latefinishing (red) or just not-started (grey). These values are weighted by the effort of the task, so that larger, more complex tasks will be change the graph more than the smaller tasks. To determine the exact task progress information, position the mouse pointer over the bar-chart and the number of associated tasks, along with the details of how many are in each status will be displayed as a "tooltip".

### 4.1.1. Insert

Clicking on the <Insert> button inserts a requirement *above* the currently selected requirement – i.e. the one whose check-box has been selected, at the same level in the hierarchy. If you want to insert a requirement below a summary item, you need to insert it first, then indent it with the <Indent> button. If you insert a requirement without first selected an existing requirement from the list, the new requirement will simply be inserted at the end of the list.

Once the new requirement has been inserted, the item is switched to "Edit" mode so that you can rename the default name and choose a priority, status and/or author.

#### 4.1.2. Delete

Clicking on the <Delete> button deletes all the requirements whose check-boxes have been selected. If any of the items are summary items, then: if the item is expanded and the children are visible, the children are simply made children of the item above it in the list, however if the item is not expanded and the children are hidden, then the children are all deleted. This behavior is similar to that found in project planning tools like Microsoft Project<sup>®</sup>. In addition, if all the children are deleted from a summary item, it changes back into a detail item.

#### 4.1.3. Indent

Clicking on the <Indent> button indents all the requirements whose check-boxes have been selected. If any of the items are made children of a requirement that had no previous children, it will be changed from a detail item into a summary item.

#### 4.1.4. Outdent

Clicking on the <Outdent> button de-indents all the requirements whose check-boxes have been selected. If any of the items were the only children of a summary requirement item, then that item will be changed back from a summary item to a detail item.

#### 4.1.5. Refresh

Clicking on the <Refresh> button simply reloads the requirements list. This is useful as other people may be modifying the list of requirements at the same time as you, and after stepping away from the computer for a short-time, you should click this button to make sure you are viewing the most current requirements list for the project.

### 4.1.6. Edit

Each requirement in the list has an <Edit> button display in its right-most column. When you click this button or just *double-click* on any of the cells in the row, you change the item from "View" mode to "Edit" mode. The various columns are made editable, and <Update> <Cancel> buttons are displayed in the last column:

spiraTeam <sup>*</sup> Welcome, Fred B	oject Home Plann	ing Testing	Tracking	Reporting			
quirements   Releases   Iterations							Role: Mana
Insert 🗱 Delete 🔶 Indent 💠 Outdent Show L	evel 💌 🦻 Refres	h 🖓 Edit 🚱	Export Show/hid	e columns 💌	Tilter		
/ 😻 Requirement Name	Test Coverage	Task Progress	Importance	Status	Release	Reg #	Edit
	Any 🔻	Any 🔻	Any 🔻	Any 🔻	Any 🔻	RQ	► Filter
B B Functional System Requirements	Not Covered			In Progress		RQ000001	► Edit
] 🗉 🕲 Online Library Management System	Not Covered			In Progress		RQ000002	► Edit
Book Management			1 - Critical	Completed		RQ000003	► Edit
Ability to add new books to the system			1 - Critical 🔻 🗐	Completed V	1.0.0.0 ▼ ■↓		Update     Cancel
Ability to edit existing books in the system			1 - Critical 🔻	Completed V	1.0.0.0 🔻		
Ability to delete existing books in the syste			1 - Critical 🔻	Completed <b>V</b>	1.0.0.0 🔻		
Ability to associate books with different subject	is <b>and and and and and and and and and and </b>		1 - Critical	Completed	1.1.0.0	RQ000007	► Edit
Ability to associate books with different authors			1 - Critical	Completed	1.1.0.0	RQ000008	► Edit
Ability to associate books with different edition			1 - Critical	Completed	1.1.0.0	RQ000009	► Edit
Ability to completely erase all books stored in t			1 - Critical	Completed	1.2.0.0	RQ000010	► Edit
Edition Management	Not Covered		1 - Critical	In Progress		RQ000011	► Edit
I Author Management	Not Covered		2 - High	In Progress		RQ000013	► Edit
Subject Management	Not Covered		3 - Medium	Planned		RQ000019	► Edit
Administration Functions	Not Covered	No Tasks	3 - Medium	Requested		RQ000022	► Edit

If you click <Edit> on more than one row, the <Update> and <Cancel> buttons are only displayed on the first row, and you can make changes to all the editable rows and then update the changes by clicking the one <Update> button. Also, if you want to make the same change to multiple rows (e.g. to change five requirements from "In Progress" status to "Completed"), you can click on the "fill" icon to the right of the editable item, which will propagate the new value to all editable items in the same column.

When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information. Alternatively, pressing the <ENTER> key will commit the changes and pressing the <ESCAPE> key will cancel the changes.

## 4.1.7. Show Level

Choosing an indent level from the 'Show Level' drop down box allows you to quickly and easily view the entire requirements list at a specific indent level. For example you may want to see all requirements drilled-down to the *third* level of detail. To do this you would simply choose 'Level 3' from the list, and the requirements will be expanded / collapsed accordingly.

## 4.1.8. Filtering

You can easily filter the list of requirements as illustrated in the screen-shot below:

Śr		My Profile   Log (	Out   Library Informati	ion System 💌					Help?	
5	My Page Project Home Planning Testing Tracking Reporting									
Requi	Requirements   <u>Releases</u>   <u>terations</u> Role: Manager									
🕂 Inse	ert 🗱 Delete 💠 Indent 💠 Outdent Show Level	💙 🖏 <u>Refresh</u>	Edit 🗗 🗄	xport Show/hi	de columns 🛛 🛩	Filter				
1	Requirement Name	Test Coverage	Task Progress	Importance	Status	Release	Difficulty	Reg #	Edit	
		Any 🔻	Any 🔻	Any 🔻	Requested V	Any 🔻	Any 🔻	RQ	► Filter	
	Functional System Requirements	Not Covered			In Progress			RQ000001	► Edit	
	Online Library Management System	Not Covered			In Progress			RQ000002	► Edit	
	🖻 🚇 Author Management	Not Covered		2 - High	In Progress			RQ000013	► Edit	
	Ability to link authors to their contact informati	Not Covered		2 - High	Requested	1.1.0.0		RQ000017	► Edit	
	Administration Functions	Not Covered	No Tasks	3 - Medium	Requested			RQ000022	► Edit	
	Ability to completely backup the database	Not Covered	No Tasks	3 - Medium	Requested			RQ000023	► Edit	
	Data Import Functionality	Not Covered	No Tasks	4 - Low	Requested			RQ000024	► Edit	
	Ability to import from legacy system x	Not Covered	No Tasks	4 - Low	Requested			RQ000025	► Edit	
	Ability to create new users in the system		No Tasks	3 - Medium	Requested			RQ000026	► Edit	
	Ability to modify existing users in the system	Not Covered	No Tasks	3 - Medium	Requested			RQ000027	► Edit	
Show	15 Trows per page						l≪l ≪ Displayi	ng page 1	In of 1 ► IN	
🕂 Inse	ert 🗱 Delete 🖒 Indent 💠 Outdent									

To filter the list by any of the displayed columns, you either choose an item from the appropriate dropdown list or enter a free-text phrase (depending on the type of field) then click <Filter> or press the <ENTER> key to apply the different filters. Note that the name field is searched using a "LIKE" comparison, so that searching for "database" would include any item with the word database in the name. The other freetext fields need to be exact matches (e.g. dates, requirement numbers). In the screen-shot above, we are filtering on Status = Requested.

In addition, if you have a set of filters that you plan on using on a regular basis, you can choose the option Filter > Save Filter to add the current filter to the list of saved filters that appear on your 'My Page'. The list of saved filters can also be retrieved by clicking Filter > Retrieve Filter:

	My Profile   Log (	Dut   Library Inform	ation Syste	im 🔻	]				Help?
My Page Project H	lome Plannin	g Testing	Т	racking	Reporting				
Requirements   Releases   Iterations								Role	: Manager
nsert 🗱 Delete 🗘 Indent 💠 Outdent Show Level '	Refresh	Edit 🛃 Expor	<u>t</u> Sh	ow/hide co	lumns 🔻 🔻	Tilter			
V 🖲 Requirement Name	Т			nce	Status	Apply Filter	ulty	Reg #	Edit
	Save Filter			•	Any 🔻	Clear Filter	y 🔻	RQ	► Filter
E E Functional System Requirements	N Please choose	a name for this filter:			In Progress	Retrieve Filte	r	RQ000001	► Edit
Online Library Management System	N				In Progress	B Save Filter	-	RQ000002	► Edit
Book Management				al	Completed			RQ000003	► Edit
Ability to add new books to the system		> <u>Save</u>   <u>C</u>	ancel	al	Completed	1.0.0.0	Moderate	RQ000004	► Edit
Ability to edit existing books in the system			1 - Critic	al	Completed	1.0.0.0		RQ000005	► Edit
Ability to delete existing books in the system			1 - Critic	al	Completed	1.0.0.0		RQ000006	► Edit
Ability to associate books with different subjects			1 - Critic	al	Completed	1.1.0.0		RQ000007	► Edit
Ability to associate books with different authors			1 - Critic	al	Completed	1.1.0.0		RQ000008	► Edit
Ability to associate books with different editions			1 - Critic	al	Completed	1.1.0.0		RQ000009	► Edit
Ability to completely erase all books stored in th			1 - Critic	al	Completed	1.2.0.0		RQ000010	► Edit
Edition Management	Not Covered		1 - Criti	cal	In Progress			RQ000011	► Edit
Author Management	Not Covered		2 - High		In Progress			RQ000013	► Edit
Bubject Management	Not Covered		3 - Med	ium	Planned			RQ000019	► Edit
Administration Functions	Not Covered	No Tasks	3 - Med	ium	Requested			RQ000022	► Edit
Show 15 V rows per page							阔 ৰ Displayin	g page 1	of 1 ► ►
· · · · · · · · · · · · · · · · · · ·									

# 4.1.9. Show / Hide Columns

This drop-down list allows you to change the fields that are displayed in the requirement list as columns for the current project. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. This is stored on a per-project basis, so you can have different display settings for each project that you are a member of. The fields can be any of the built-in fields or any of the custom properties set up by the project owner.

## 4.1.10. Copying Requirements

To copy a requirement or set of requirements, simply select the check-boxes of the requirements you want to copy and then select the Edit > Copy menu option. This will copy the current requirements selection to the clipboard. Then you should select the place where you want the requirements to be inserted and choose the Edit > Paste option.

The requirements will now be copied into the destination location you specified. The name of the copied requirements will be prefixed with "Copy of..." to distinguish them from the originals. Note that copied requirements will also include the test coverage information from the originals.

## 4.1.11. Moving Requirements

To move a requirement in the requirements hierarchy, there are two options:

1. Click on the icon the requirement you want to move and then drag the icon to the location you want it moved. The border between the destination requirements will change as the icon is dragged over it to illustrate where it will be inserted:

S	piraTeam My Page Project H	Home Plannin	g Testing	Tracking	Reporting				
equ	irements   <u>Releases</u>   <u>Iterations</u>			U.S.				Role: Proj	ject Owr
In:	sert 🗱 Delete 💠 Indent 💠 Outdent Show Level	V Refresh	🕒 Copy 🛛 🗗 E	kport Show/hid	e columns 💌	Clear Filters			
/	Requirement Name	Test Coverage	Task Progress	Importance	Status	Author	Release	Req #	Edit
		Any 🔻	Any 🔻	Any 🔻	Any 🔻	Any 🔻	Any 🔻	RQ	<ul> <li>Filter</li> </ul>
	Eunctional System Requirements	Not Covered			In Progress	Fred Bloggs		RQ000001	► Edit
	Online Library Management System	Not Covered			In Progress	Fred Bloggs		RQ000002	► Edit
	e 🖲 Book Management			1 - Critical	Completed	Fred Bloggs		RQ000003	► Edit
	Ability to add new books to the system			1 - Critical	Completed	Fred Bloggs	1.0.0.0	RQ000004	► Edit
	Ability to edit existing books in the system			1 - Critical	Completed	Fred Bloggs	1.0.0.0	RQ000005	► Edit
	Ability to delete existing books in the system			1 - Critical	Completed	Fred Bloggs	1.0.0.0	RQ000006	► Edit
	Ability to associate books with different subjects			1 - Critical	Completed	Fred Bloggs	1.1.0.0	RQ000007	► Edit
	Ability to associate books with different authors			1 - Critical	Completed	Fred Bloggs	1.1.0.0	RQ000008	► Edit
	Ability to associate books with different editions			1 - Critical	Completed	Fred Bloggs	1.1.0.0	RQ000009	► Edit
	Ability to edit existing books in the system			1 - Critical	Completed	Fred Bloggs	1.2.0.0	RQ000010	► Edit
	Edition Management	Not Covered		1 - Critical	In Progress	Fred Bloggs		RQ000011	► Edit
	Author Management	Not Covered		2 - High	In Progress	Joe P Smith		RQ000013	► Edit
		Not Covered		3 - Medium	Planned	Joe P Smith		RQ000019	► Edit
1	Administration Functions	Not Covered	No Tasks	3 - Medium	Requested	Joe P Smith		RQ000022	► Edit

Once you have the requirement positioned at the correct place that you want it inserted, just release the mouse button and the requirement list will be refreshed, with the requirement moved to the desired location.

 Alternatively you can simply select the check-boxes of the requirements you want to move and then select the Edit > Cut menu option. This will cut the current requirements selection to the clipboard. Then you should select the place where you want the requirements to be inserted and choose the Edit > Paste option. The requirements will now be moved into the destination location you specified.

## 4.1.12. Exporting Requirements

To export a requirement or set of requirements from the current project to another project in the system, all you need to do is select the check-boxes of the requirement(s) you want to export and then click the <Export> button. This will then bring up a list of possible destination projects:

spiraTeam	Welcome, Fred Bloggs	My Profile   Admi	nistration   Log Out	Ubrary Inf	omation	System 🔻				Help?
Spirarea	My Page Project Ho	ome Plannin	g Testing	Trac	king	Reporting				
Requirements   <u>Releases</u>   <u>Iterations</u>									Role	: Manager
🗜 Insert 🗱 Delete 🕹 Indent 💠 Ou	utdent Show Level 🔻	Refresh	Edit 🗗 Expo	t - Show/	hide col	umns 🔻	Filter			
✓ 🕘 Requirement Name	Т	Export Items			е	Status	Release	Difficulty	Req #	Edit
	· · · · · · · · · · · · · · · · · · ·				•	Any 🔻 🔻	Any 🔻 🔻	Any 🔻 🔻	RQ	<ul> <li>Filter</li> </ul>
🔲 🗉 🖲 Functional System Requirem	ients N	Please select th	e project you want to	export to:		In Progress			RQ000001	► Edit
🔲 🗉 🖲 Online Library Management	nt System N	Sample Application	One	•		In Progress			RQ000002	► Edit
Book Management						Completed			RQ000003	► Edit
Ability to add new books to	o the system		_			Completed	1.0.0.0001	Moderate	RQ000004	► Edit
Ability to edit existing book	ks in the system		> Export   0	Cancel		Completed	1.0.0.0001		RQ000005	► Edit
Ability to delete existing bo				1 - Critical		Completed	1.0.0.0002		RQ000006	► Edit
Ability to associate books				1 - Critical		Completed	1.1.0.0.0001		RQ000007	► Edit
Ability to associate books				1 - Critical		Completed	1.1.0.0.0001		RQ000008	► Edit
Ability to associate books	with different editions			1 - Critical		Completed	1.1.0.0.0002		RQ000009	► Edit
Ability to completely erase	all books stored in th			1 - Critical		Completed	1.2.0.0		RQ000010	► Edit
New Requirement		lot Covered				In Progress	1.0.1.0.0001		RQ000075	► Edit
E dition Management	N	lot Covered		1 - Critical		In Progress			RQ000011	► Edit
Author Management	N	lot Covered		2 - High		In Progress			RQ000013	► Edit
Bubject Management	N	lot Covered		3 - Mediun	n	Planned			RQ000019	► Edit
Administration Functions	N	lot Covered	No Tasks	3 - Mediun	n	Requested			RQ000022	► Edit
Show 15 🔻 rows per page								≪	g page 1	of 1 ► ►

Once you have chosen the destination project and clicked the <Export> button, the requirements will be exported from the current project to the destination project. Any file attachments will also be copied to the destination project along with the requirements.

#### 4.1.13. Right-Click Context Menu

SpiraTeam® provides a shortcut – called the *context menu* - for accessing some of the most commonly used functions, so that you don't need to move your mouse up to the toolbar each time. To access the context menu, right-click on any of the rows in the requirements list and the following menu will be displayed:

a a onnie chirary management system				3		
Book Management	- Insert Item		1 - Critical	Completed		
83	- Delete Item		1 - Critical	Completed	<u>1.0.0.0001</u>	Mo
Ability to edit existing	- Indent Item		1 - Critical	Completed	<u>1.0.0.0001</u>	
Ability to delete evictin	- Outdent Item		1 - Critical	Completed	1.0.0.0002	
Ability to associate bo			1 - Critical	Completed	1.1.0.0.0001	
P Ability to associate bo	- Copy Items		1 - Critical	Completed	1.1.0.0.0001	
Ability to associate bo	- Cut Items - Paste Items		1 - Critical	Completed	1.1.0.0.0002	
Ability to completely eras	se all books stored in th		1 - Critical	Completed	<u>1.2.0.0</u>	

You can now choose any of these options as an alternative to using the icons in the toolbar.

# 4.2. Requirement Details

When you click on a requirement item in the requirements list described in section 4.1, you are taken to the requirement details page illustrated below:

spiraTeam	Welcome, Fred Bloggs	My Profile   Administr	ation   Log Out   Library	Information System	V	Help?
Spirarcai	My Page Project	Home Planning	Testing T	racking Re	eporting	
Requirements > Requirement Details   R	eleases   Iterations					Role: Manager
< Back to Requirements List	💾 Save 🖓	Copy 🗞 Refresh	😫 Delete 🛛 🖨 Print	🖂 Email 🛛 省	Subscribe	
Book Management	Requirement	: Ability to add new bo	ooks to the system [R0	2:000004]		
Ability to add new books to the sy		Ability to add new books	to the system			
Ability to edit existing books in the s Ability to delete existing books in the		Font 🔻	Size 🔻 B / U	≡≡≡  ≘	目 律 律   T₂ �₂   — ∞ ■ ■ ◇ Ø	
Ability to associate books with different		The ability to add new bo	oks into the system, com	plete with ISBN, pu	blisher and other related information	
Ability to associate books with differ						
Ability to associate books with different of the second						
	Importance:	1 - Critical	•	Author*:	Fred Bloggs	T
	Status*:	Completed	•	Release:	1.0.0.00001 - Iteration 001	▼
	Created On:	12/1/2003 12:00:00 AM		Owner:	Joe P Smith	T
	Last Updated:	12/1/2003 12:00:00 AM		Planned Effort:	15.0 hours	
	Test Coverage	Tasks #	Comments	Custom Props *	Attachments * History *	Associations *

This page is made up of *three* areas; the left pane displays the requirements list navigation, the top of the right pane displays the details of the selected requirement, and the bottom of the right pane can display different information related to the requirement.

The navigation pane consists of a link that will take you back to the requirements list, as well as a list of the peer requirements to the one selected. This latter list is useful as a navigation shortcut; you can quickly view the coverage information of all the peer requirements by clicking on the navigation links without having to first return to the requirements list page.

The top part of the right pane allows you to view and/or edit the details of the particular requirement. You can edit the various fields (name, description, etc.) and once you are satisfied with them, simply click either the <Save>, <Save and Close> or <Save and New> button at the top of the page to commit the changes. In addition you can delete the current artifact by choosing <Delete>, make a copy of it by choosing <Copy>, discard any changes made by clicking <Refresh> or print it by clicking <Print>.

Using the <Email> button on the toolbar, you can send an email containing details of the requirement to an email address or another user on the system:

Email this artifact to:	X
Project User: Fred Bloggs  Select a user in the project to send to.	
C Email Addresses: A list of email addresses, separated by ;	
Message Subject:	]
Send   Cance	<u>.</u>

You can specify the subject line for the email, and either a list of email addresses, separated by semicolons, or an existing project user .The content of the email is specified in the System Administration – Notification Templates.

In addition, the bottom part of the right pane can be switched between six views: "Test Coverage", "Tasks", "Comments", "Custom Properties", "Attachments", "History" and "Associations", each of which will be described in more detail below.

## 4.2.1. Test Coverage

In this mode, the right pane contains the test coverage information for the requirement in question:

Test Coverage *	Tasks *	Custom P	stom Props * Attachments *		s *	History *	Associations *	
Available Test Cases: Test Coverage:								
✓ Name				1	Test #	Name		Status
📃 🖻 🖨 Function	nal Tests	<u>~</u>			TC000002	Ability to cre	ate new book	Failed
🗌 🗄 Ability	to create new book		Add >		TC000008	Book manag	ement	Passed
Ability	to edit existing book		Aug >		TC000013	Adding new I	book and author to	Not Run
🔲 🗄 Ability	to create new author	_	Remove <					
🔲 🗄 Ability	to edit existing autho.		Remove All					
🔲 🗄 Ability	r to reassign book to d							
🔲 🗉 Regression Tests								
📃 🗉 🖿 Scenari	o Tests							
	<b>T</b> .	×						
> Create Test Case	e From This Requirer	nent 🏝						
To add test cases to	ox indicates the test ca o this requirement, cho emove] and [Remove A	ose from the	e list above and cl	ick (Ad	d].			

The pane consists of two lists of test cases, the one on the left being the hierarchical list of the test cases belonging to the project arranged in test folders. The right box (which will initially be empty) contains the list of test cases mapped to this requirement. The test cases in this box include columns for their ID, name and execution status. Hovering the mouse over the names of the test cases in either box will display a "tooltip" consisting of the test case name, place in the folder structure and a detailed description. Clicking on the hyperlinks in right-hand box will jump you to the test case details screen for the test case in question (see section 5.2.9).

To change the coverage for this requirement, you use the buttons (Add, Remove, Remove All) positioned between the two list-boxes. The <Add> button will move the selected test cases from the list of available on the left to the list of mapped on the right. Similarly the <Remove> and <Remove All> buttons will remove either the selected or all the test cases from the right list-box and add them back to the left list-box.

Finally, as a shortcut you can click the "Create Test Case from This Requirement" link to create a new test case in the list of covered test cases that will be automatically linked to this requirement. This is

useful when you have created a new requirement and want to generate an initial covering test to be fleshed-out later.

## 4.2.2. Tasks

In this mode, the right pane displays the list of project tasks that need to be completed for the requirement to be satisfied:

Test (	Coverage *	Tasks <del>*</del>	Comments	Custom Props *	Attachments	s* H	istory *	Associations *		
> <u>New</u>	<u>/ Task</u>   <u>Remo</u>	ve   <u>Refresh</u>   <u>Apply</u>	Filter   <u>Clear Filters</u>	Show/hide columns V > Est. Effort			ort: 16.0h / Proj. Effort: 16.0h			
<ul> <li>Image: Image: Ima</li></ul>	Task Name	▲▼	Progress	Status ▲▼	Priority ▲▼	Owner ▲▼	Release	Task # ▲	Edit	
			Any 🔻	- Any 🔻	Any 🔻 🔻	Any	- Any	🔻 ТК	► Filter	
	Develop ne	ew book entry screen		Completed	1 - Critical	Fred Bloggs	1.0.0.000	01 TK000001	► Edit	
	Create boo	ok object insert metho	od	Completed	1 - Critical	Fred Bloggs	1.0.0.000	01 TK000002	► Edit	
	Write book	k object insert queries		Completed	1 - Critical	Fred Bloggs	1.0.0.000	01 TK000003	► Edit	
Show 1	15 🔻 rows pe	r page					H 🖛 Di	splaying page 1	S of 1 ► ►	

Each of the tasks is displayed together with its name, description (by hovering the mouse over the name), progress, priority, start-date, current owner, estimated effort, projected effort and numeric task identifier. Clicking on the task name will bring up the Task Details page which is described in more detail in section 8.2. This allows you to edit the details of an existing task.

You can perform the following actions on a task from this screen:

- New Task inserts a new task in the task list with a default set of values. The task will be associated with the current requirement.
- > Remove removes the task from this requirement without actually deleting the task
- Refresh updates the list of tasks from the server, useful if other people are adding tasks to this
  requirement at the same time.
- > Apply Filter Applies the entries in the filter boxes to the list of tasks
- Clear Filters Clears the current filter, so that all tasks associated with the current requirement are shown.
- Edit Clicking the [Edit] button to the right of the task allows you to edit the task inline directly on this screen. Only columns visible will be editable.
- > Show/Hide Columns Allows you to choose which Task columns are visible

The system has a series of shortcuts that simplify the editing of requirements and tasks:

- If you create a new task on the requirements page, the priority, release/iteration and owner are automatically copied from the parent requirement. You can change these suggested values before clicking [Update]
- When you assign a release/iteration to a requirement, its status automatically changes to "Planned"
- When at least one task assigned to the requirement changes from "Not Started" to "In Progress", the parent requirement automatically switches from "Planned" to "In Progress"
- When all the tasks under the requirement are completed, the parent requirement will switch to the "Completed" status.
- If you manually move a requirement that has no associated tasks from "Planned" to "In Progress", the system will automatically generate one task under the requirement and use the requirement's planned effort field to generate the task's estimated effort.

### 4.2.3. Comments

The Comments tab allows users to add and view discussions relating to the requirement:

Test Coverage	Tasks	Comments	Custom Props	Attachments	History	Associati	ions
To add a new commen	nt to this requirement, p	lease enter it below a	nd click the [Save] butt	ion:			
Font 🔻	Size 🔻	<b>B</b> <i>I</i> <u>U</u>  ≣	╡╪╪╪	T <sub>2</sub> 🗞   — ∞ 🖾 🗆	· ◇ Ø		
Existing Comm	nents						

Existing comments are displayed in order underneath the textbox in date order. To add a new comment, simply enter it into the textbox, and click the Save button.

#### 4.2.4. Custom Properties

In this mode, the main pane displays any custom properties that the project owner has defined for requirements. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*. Assuming that custom properties have been defined for your project, you will see a list of optional parameters that can be set on the requirement. These can be either freetext or drop-down-lists. In the example below, you can enter a URL, difficulty and/or Requirement Type.

Test Coverage *	Tasks *	Custom Props *	Attachments *	History *	Associations *	
The following are the cu	ustom properties of this	artifact:				
URL:	http://www.libraries	org		~	1	
		Ū		~		
Difficulty:	Moderate			▼		
Requirement Type:	None			V		

Once you are satisfied with the values for the custom properties, simply click the main [Save] or [Save and New] to commit the changes.

#### 4.2.5. Attachments

In this mode, the main pane displays the list of documents, screenshots or web-links (URLs) that have been "attached" to the requirement. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.

Те	est Coverage *	Tasks #	Custo	om Props *	Attach	nments *	History *	Associat	ions *	
> <u>A</u>	dd Attachment	<u>Remove</u>   <u>Refresh</u>   <u>/</u>	Apply Fil	lter   <u>Clear Filt</u>	ters					
$\checkmark$	Document Nan	ne 🔺 🔻	T	ype <b>▲</b> ▼		Size ▲▼	Edited By AV	Edited On ▲▼	Uploaded By ▲▼	Doc # ▲▼
			-	- Any 🛛 🔻	]		Any 🔻		Any 🔻	DC
	Book Manag	gement Functional Spe	C.GOC	unctional pecification		285 KB	Joe P Smith	30-May-2006	Fred Bloggs	DC000001
	Discrete Contract Design of Cont	esign Mockups.psd	S	creen Layout		1009 KB	Joe P Smith	1-May-2006	Joe P Smith	DC000013
	http://www.ir	nflectra.com	D	efault		0 KB	Fred Bloggs	1-May-2006	Fred Bloggs	DC000015
	Book Manag	ement Screen Wirefrar	<sub>me.ai</sub> S	creen Layout		392 KB	Fred Bloggs	1-Apr-2006	Joe P Smith	DC000011
Show	w 15 ▼ rows pe	er page				·		<b>H</b> 4	Displaying page 1	Sa of 1 ► ►

The attachment list includes the filename/URL that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as a tooltip:

Book Manageme	nt Functional Spec.doc	×
Filename:	Book Management Functional Spec.doc 🖻	
Document Type:	Functional Specification	
File Type:	Word 🕮	
Description:	This document outlines the functional specification for the book management part of the library management system.	
Version:	2.0	
Tags:	book management   functional specification   libraries	
Created By:	Fred Bloggs (5/2/2006 12:00:00 AM)	
Edited By:	Joe P Smith (5/30/2006 12:00:00 AM)	
Document ID:	DC000001	
	> <u>View Details</u>   <u>Cano</u>	<u>cel</u>

To actually view the document, simply click on the filename hyperlink and a new web browser window will open. Depending on the type of file, this window will either display the document / web-page or prompt you for a place to save it on your local computer. To remove an existing attachment from a requirement, simply click the <Remove> button and the attachment will be removed from the list. Using the standard filter/sort options you can also sort and filter the list of attachments to make it more manageable.

To attach a new document to the requirement, you need to first click the <Add Attachment> link to display the new attachment dialog box:

Add New Docume Type:*	● File ○ URL ○ Sc	creenshot	Add New Docume	○ File	O Screenshot	Add New Docum	O File O URL	<ul> <li>Screenshot</li> </ul>
Filename:*		Browse	URL:*			Screenshot:*		
Description:		4	Description:		^			
Document Type:*	Functional Specification		Document Type:*	Functional Specification	×			
Ocument Folder:*	Root Folder	T	Document Folder:*	Root Folder	•		> Paste image from c	lipboard
lags:			Tags:			Description:		<u>^</u>
		> Upload   Cancel			> Upload   Cance	1		~
						Document Type:*	Functional Specification	V
						Document Folder:	* Root Folder	V
						Tags:		
								> Upload   Cancel

There are three different types of item that can be attached to a requirement:

- To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.
- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard, click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename *before uploading* if you want it to be displayed with the correct icon in the attachment list.

#### 4.2.6. History

In this mode, the main pane displays the list of changes that have been performed on the requirement artifact since its creation. An example requirement change history is depicted below:

Tasks *	Custom Props * Atta	chments * Hist	ory *	Associations *	
	Field Name	Old Value	New Va	alue	Changed By
	Status	In Progress	Comple	ted	Fred Bloggs
	Status	Requested	In Progr	ess	Joe P Smith
		Status	Status In Progress	Status In Progress Complet	Status In Progress Completed

The change history displays the date that each change was made, together with the fields that were changed, the old and new values and the person who made the change. This allows a complete audit trail to be maintained of all changes in the system.

## 4.2.7. Associations

In this mode, the main pane displays a list of any incidents or other requirements that are associated with this requirement:

Test Coverage *	Tasks *	Custom P	Props #	Attac	:hments *		History *	Associations *					
> Add   Delete   Re	fresh   Apply Filter	Clear Filters	🛓 🗌 Includ	le Sourc	e Code Revisior	ns							
✓ Artifact Name	✓ Artifact Name ▲▼ Artifact Type ▲▼ Created On ▲▼ Created By ▲▼ Comment ▲▼ Artifact # ▲▼ Edit												
			Any	▼			Any 🔻			► Filter			
Cannot insta	all system on Oracle 9	i	Incident		14-Mar-2004		Fred Bloggs	This bug affects the requirement	IN00005	► Edit			
Ability to de	lete existing books in	the system	Requireme	nt	12-Mar-2004		Fred Bloggs	These two requirements are related	RQ000006	► Edit			
Cannot add	a new book to the sys	<u>tem</u>	Incident		4-Nov-2003		Joe P Smith	Test Run: Ability to create new book	IN000007				
Show 15 Trows p	er page	I						ৰ ৰ Displa	ying page 1	S of 1 ► ►			

The requirements in this list are ones that a user has decided are relevant to the current one and has created a direct link between them. In the case of incidents, the association can be either due to the creator of an incident directly linking the incident to the requirement, or it can be the result of a tester executing a test-run and creating an incident during the test run. In this latter case, the check-box to the left of the association will be unavailable as the link is not editable.

Each association is displayed with the type of artifact (requirement vs. incident), name of the artifact being linked-to, the name of the person who created the association, and a comment that describes why the association was made. In the case of an indirect association due to a test run, the comment will contain the name of the test run.

In addition, when using SpiraPlan or SpiraTeam, you can select the checkbox marked "Include Source Code Revisions" and the system will also scan the source code repository for any revisions that are linked to this artifact. Since that can take be slower than accessing SpiraTeam, it is provided as an option that you can enable and disable:

Test Coverage # Tasks	Custom Props *	Attachme	nts i	listory	Associations *		
> Add   Delete   Refresh   Apply Filter   Clea	ar Filters   🔽 Inclu	de Source Co	de Revisions				
✓ Artifact Name ▲▼	Artifac	t Type ▲▼ (	Created On ▲▼	Created By	Comment ▲▼	Artifact # ▲▼	Edit
	Any -	- 🔻		Any 🔻			► Filter
☐ ▲ <u>rev0012</u>	Revisio	n <sup>,</sup>	15-Jan-2010	Fred Bloggs	The artifact was changed in this version to fix th	-	
☐ ▲ <u>rev0003</u>	Revisio	n '	15-Jan-2010	Fred Bloggs	The artifact was changed in this version to fix th	-	
The book listing screen doesn't sort	Inciden	t '	15-Mar-2004	Fred Bloggs		IN000006	► Edit
Ability to associate books with differen	t subjects Require	ement ·	13-Mar-2004	Fred Bloggs		RQ000007	► Edit
Show 15 Trows per page					ৰ ৰ Displa	iying page 1	Si of 1 ► ►

You can perform the following actions on an association from this screen:

- Delete removes the selected association to the other artifact. This will only delete the association, not the linked artifact itself.
- Refresh updates the list of associations from the server, useful if other people are adding associations to this requirement at the same time.
- > Apply Filter Applies the entries in the filter boxes to the list of associations
- Clear Filters Clears the current filter, so that all associations for the current requirement are shown.
- Edit Clicking the [Edit] button to the right of the associations allows you to edit the comment field inline directly on this screen.

To create a new association, simply click the <Add> hyperlink which will display the "Add New Association" popup dialog box:

Lindatod: 19/1/9003 19-00-00	AM Planned Effort: Les	
Add New Association		×
Please choose the type of a	rtifact that you want to add an association to:	
	⊖ Test Step	
Please choose the artifact	that you want to add an association to:	
(a) Enter Artifact ID:		
(b) Choose from list:	✓ Name	
-	Editing the date on a book is clunky	<u>^</u>
	Doesn't let me add a new category	
	Quote handling issues throughout	
-	Permissions not updating when changed	~
Comment:		
-		~
		> Add   Cancel
		<u>, ounou</u>

Once you have selected the appropriate artifact type, you will then be able to choose the specific artifact you want to link to. In all cases, you can choose the item from a scrolling selection box, or you can either enter the ID of the artifact directly (if known). In either case you can also add a comment that explains the rationale for the association.

# 5. Test Case Management

This section outlines how the use-case / test-case management features of SpiraTest® and SpiraTeam® can be used to develop the business use-cases for the system, which specify how the different pieces of functionality are expected to work in practice. In addition, these use/test-cases form the basis of the business specification of the system when associated with the underlying requirements matrix. Typically when starting a new project:

- > The requirements matrix is entered first
- Then the list of use-cases is developed to outline the key scenarios that need to supported to implement the requirement
- Then the use-cases are fleshed out into full test-cases by adding the detailed test-steps with the expected result and suggested sample-data
- Finally the tests are grouped into test-sets so that they can be assigned to users in batches for execution and tracking.

However when migrating existing projects into SpiraTeam®, you may need to migrate the test-case list first, and then add the supporting requirements matrix afterwards.

## 5.1. Test Case List

When you click on the Testing > Test Cases link on the global navigation bar, you will initially be taken to the test case list screen illustrated below:

10	ni	Team	Welcome, Fred Bloggs   M	Profile   Log Out	Library Information System	n 💌				Help?
3			My Page Project Home	Planning	Testing	Tracking Rep	orting			
Test	Case	s   Test Sets							Ro	ole: Manager
4 In	sert	🗱 Delete 💠 Indent 💠 Ot	utdent Show Level 🗸	Refresh	Edit 🔅 Tools	Show/hide columns	- Y Filter			
Displ	laying	9 out of 11 test case(s) for this relea	ase			1	Display data for:	All Releases		~
~	0	Test Case Name		Execution Status	Owner	Last Executed	Author	Active	Test #	Edit
				Any 🔻	Any 🔻		Any 🔻	Any 🔻	TC	Filter
		🗆 🗁 Functional Tests (5)			Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000001	► Edit
	0	Ability to create new book		Failed		4-Dec-2003	Fred Bloggs	Yes	TC000002	► Edit
		Ability to edit existing book		Caution	Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000003	► Edit
	0	Ability to create new author		Failed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000004	► Edit
		Ability to edit existing autho	<u>r</u>	Blocked	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000005	► Edit
		Ability to reassign book to d	ifferent author	Passed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000006	► Edit
		Regression Tests (2)				1-Dec-2003	Joe P Smith	Yes	TC000007	► Edit
		🗆 🗁 Scenario Tests (2)			Joe P Smith		Joe P Smith	Yes	TC000010	► Edit
		Exception Scenario Tests	(1)		Joe P Smith		Joe P Smith	Yes	TC000011	► Edit
		Person loses book and ne	eds to report loss	Not Run			Joe P Smith	Yes	TC000012	► Edit
		Adding new book and author	r to library	Not Run			Joe P Smith	Yes	TC000013	► Edit
		🗆 🗁 Common Tests (2)				1-Dec-2003	Fred Bloggs	Yes	TC000015	► Edit
		Den Up Web Browser		Passed		1-Dec-2003	Fred Bloggs	Yes	TC000016	► Edit
		Login to Application		Not Run		1-Dec-2003	Fred Bloggs	Yes	TC000017	► Edit
Show	W 15	rows per page						i≪ ■ Disp	laying page 1	tof 1 ► ►
	_									

The test case list consists of a hierarchical arrangement of the various test folders and test cases that the system being developed needs to be able to demonstrate. The structure is very similar to the folder structure in Microsoft Windows® Explorer, and users will find this very familiar and intuitive to use. When you create a new project, this list will initially be empty, and you will have to use the <Insert> button to start adding test folders and test cases to the system.

The list consists of test folders shown with a folder icon and in **bold-type**, and test cases that are shown with a document icon and a hyperlink. You can nest test folders and test cases under an existing test folder, but you cannot nest anything under a test case. All of the items in the list have a name, together with the most recent execution status (passed, failed or not-run), and owner, author, execution date, active flag and test case number. Clicking on a test case's hyperlink will take you to the test case details page for the item in question (see section 5.2).

It is important to understand that only test cases are assigned a status themselves; the test folders instead display a test execution bar graph that illustrates the aggregate execution status of its child test-cases. Thus if the test folder contains two test cases, one of which passed, and one of which wasn't run, the graph will display 50% green and 50% gray.

To determine the exact aggregate test folder execution status information, position the mouse pointer over the bar-chart, and the number of tests in each of the execution statuses (passed, failed, not-run, blocked, caution) will be displayed as a "tooltip". Note that if you change the owner of a test folder, then all the child test cases will be assigned the same owner. This allows you to more easily associate entire folders to test cases to be executed by a specific user.

#### 5.1.1. Insert

Hovering over the <Insert> button brings up a secondary menu that allows you to choose whether to insert a test case or a test folder (if you just click Insert it defaults to inserting a test case). In either case, it will insert the new test folder / test case *above* the currently selected item – i.e. the one whose checkbox has been selected, at the same level in the hierarchy. If you want to insert a new test case below an existing test case, you need to select the item below it. If you insert a new test folder / test case without first selected an existing item from the list, the new test case will simply be inserted at the end of the list.

Once the new test folder / test case has been inserted, the item is switched to "Edit" mode so that you can rename the default name and choose an owner and/or author. Note that all new test cases are initially set with an execution status of "Not Run".

#### 5.1.2. Indent / Outdent

Clicking on the <Indent> button indents all the test folders / test cases whose check-boxes have been selected. You cannot indent a test case or folder if it is *below* a test case, as test cases are not allowed to have child items. Clicking on the <Outdent> button de-indents all the test folders / test cases whose check-boxes have been selected.

#### 5.1.3. Delete

Clicking on the <Delete> button deletes all the test cases and/or test folders whose check-boxes have been selected. If any of the items are test folders, then all the children are all deleted (whether test cases or folders). This behavior is similar to that in Microsoft Windows® Explorer.

#### 5.1.4. Execute

Clicking on the <Execute> button executes all the test cases selected, together with all the test cases contained with any selected test folders. The test execution functionality of SpiraTeam® is explained in more detail in section 5.3.

#### 5.1.5. Refresh

Clicking on the <Refresh> button simply reloads the test case list. This is useful as other people may be modifying the list of test cases at the same time as you, or executing specific test cases, and after stepping away from the computer for a short-time, you should click this button to make sure you are viewing the most current test case list for the project.

### 5.1.6. Edit

Each test case in the list has an <Edit> button display in its right-most column. When you click this button or just *double-click* on any of the cells in the row, you change the item from "View" mode to "Edit" mode. The various columns are made editable, and <Update> <Cancel> buttons are displayed in the last column:

sp	piraTeam Welcome, Fred Bloggs	s   <u>My Profile</u>   <u>Lo</u>		on System 💌	Describer			
	My Page Project	t Home Plann	ing Testing	Tracking	Reporting			Deles Margare
	Cases   Test Sets		n l Engen Mar					Role: Manage
lnse		🖌 🧐 Refres	sh 🛛 🔁 Edit 🇱 T	ools Show/hid	de columns 💌 🎽	Filter		
Display	aying 9 out of 11 test case(s) for this release				Display data	for: All Relea	ises	~
	Itest Case Name	Execution Status	Owner	Last Executed	Author	Active	Test #	Edit
		Any 🔻	Any 🔻		Any 🔻	Any 🔻	TC	<ul> <li>Filter</li> </ul>
	E Eunctional Tests (5)		Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000001	► Edit
	Ability to create new book	ailed	None 🔻 🗐	4-Dec-2003	Fred Bloggs 🔻 🗐	Yes ▼ ≡↓		Update     Cancel
	Ability to edit existing book	Caution	Fred Bloggs 🔻	1-Dec-2003	Fred Bloggs 🔻	Yes 🔻		
	Ability to create new author	Failed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000004	► Edit
	Ability to edit existing author	Blocked	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000005	► Edit
	Ability to reassign book to different author	Passed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000006	► Edit
	Regression Tests (2)			1-Dec-2003	Joe P Smith	Yes	TC000007	► Edit
	E E Scenario Tests (2)		Joe P Smith		Joe P Smith	Yes	TC000010	► Edit
	Exception Scenario Tests (1)		Joe P Smith		Joe P Smith	Yes	TC000011	► Edit
	Person loses book and needs to report loss	Not Run			Joe P Smith	Yes	TC000012	► Edit
	Adding new book and author to library	Not Run			Joe P Smith	Yes	TC000013	► Edit
	🖻 🗁 Common Tests (2)			1-Dec-2003	Fred Bloggs	Yes	TC000015	► Edit
	Open Up Web Browser	Passed		1-Dec-2003	Fred Bloggs	Yes	TC000016	► Edit
	Login to Application	Not Run		1-Dec-2003	Fred Bloggs	Yes	TC000017	► Edit

If you click <Edit> on more than one row, the <Update> and <Cancel> buttons are only displayed on the first row, and you can make changes to all the editable rows and then update the changes by clicking the one <Update> button. Also, if you want to make the same change to multiple rows (e.g. to change the owner of five test cases from "Fred Bloggs" to "Joe Smith"), you can click on the "fill" icon to the right of the editable item, which will propagate the new value to all editable items in the same column.

When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information. Alternatively, pressing the <ENTER> key will commit the changes and pressing the <ESCAPE> key will cancel the changes.

## 5.1.7. Show Level

Choosing an indent level from the 'Show Level' drop down box allows you to quickly and easily view the entire test case list at a specific indent level. For example you may want to see all test cases drilled-down to the *third* level of detail. To do this you would simply choose 'Level 3' from the list, and the test cases will be expanded accordingly

## 5.1.8. Show / Hide Columns

This drop-down list allows you to change the fields that are displayed in the test case list as columns for the current project. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. This is stored on a per-project basis, so you can have different display settings for each project that you are a member of. The fields can be any of the built-in fields or any of the custom properties set up by the project owner.

## 5.1.9. Filtering

You can easily filter the list of test cases as illustrated in the screen-shot below:

t Case	es   Test Sets	My Page Project Hor	ne Planning	Testing	Tracking Re	eporting		F	Role: Mana
Insert	S Delete		<ul> <li>Refresh</li> </ul>	🖳 Edit 🔅 Tools	Show/hide column	ns 💌 🍸 <u>Filter</u>			
playing	g 7 out of 7 test case(s) for this	release				Display data for:	All Releases		
1 8	Test Case Name		Execution Status	Owner	Last Executed	Author	Active	Test #	Edit
]			Any 🔻	(None) 🔻		Any 🔻	Any 🔻	TC	Filter
1	E Punctional Tests (5)			Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000001	► Edit
0	Ability to create new I	book	Failed		4-Dec-2003	Fred Bloggs	Yes	TC000002	► Edit
	🖃 🗁 Regression Tests (2)				1-Dec-2003	Joe P Smith	Yes	TC000007	► Edit
	Book management		Passed		1-Dec-2003	Joe P Smith	Yes	TC000008	► Edit
	Author management		Passed		1-Dec-2003	Joe P Smith	Yes	TC000009	► Edit
1	🗆 🗁 Scenario Tests (2)			Joe P Smith		Joe P Smith	Yes	TC000010	► Edit
	Exception Scenario	Tests (1)		Joe P Smith		Joe P Smith	Yes	TC000011	► Edit
	Person loses book a	and needs to report loss	Not Run			Joe P Smith	Yes	TC000012	► Edit
	Adding new book and	author to library	Not Run			Joe P Smith	Yes	TC000013	► Edit
1	🖃 🗁 Common Tests (2)				1-Dec-2003	Fred Bloggs	Yes	TC000015	► Edit
1	Dpen Up Web Browse	<u>er</u>	Passed		1-Dec-2003	Fred Bloggs	Yes	TC000016	► Edit
1	Login to Application		Not Run		1-Dec-2003	Fred Bloggs	Yes	TC000017	► Edit

To filter the list by any of the displayed columns, you either choose an item from the appropriate dropdown list or enter a free-text phrase (depending on the type of field) then click <Filter> or press the <ENTER> key to apply the different filters. Note that the name field is searched using a "LIKE" comparison, so that searching for "database" would include any item with the word database in the name. The other freetext fields need to be exact matches (e.g. dates, test case numbers). In the screen-shot above, we are filtering on Owner = (None).

In addition, if you have a set of filters that you plan on using on a regular basis, you can choose the option Filter > Save Filter to add the current filter to the list of saved filters that appear on your 'My Page'. The list of saved filters can also be retrieved by clicking Filter > Retrieve Filter:

spi	aTeam	Welcome,	Fred Bloggs   My	Profile   Log Out	Library Information Sys	tem 🔻				Help?
-	$\sim$	My Page	Project Home	Planning	Testing	Tracking Re	porting			
Fest Case	s   <u>Test Sets</u>									Role: Manag
Insert	Delete		Show Level 🔻	🗞 Refresh 🛛 🖓 🗄	idit 🇱 <u>Tools</u> S	how/hide columns	T Filter			
Displaying	4 out of 11 test case(s) for t	his release				1	Display Y Apply Filt	er 5		
V 0	Test Case Name			Save Filter		ast Executed	Author 🗱 Clear Filt	er	Test #	Edit
			F	Please choose a name	e for this filter:		- Any -	- V	TC	► Filter
	🖻 🗁 Functional Tests (5)		r			-Dec-2003	Fred B		TC000001	► Edit
	Ability to reassign b	oook to different autho	<u>r</u>			-Dec-2003	Fred Bl	<u>=</u>	TC000006	► Edit
	E Pagression Tests (2)	)			> Save   Cancel	-Dec-2003	Joe P Smith	Yes	TC000007	► Edit
	Book management		1	Passed		1-Dec-2003	Joe P Smith	Yes	TC000008	► Edit
	Author management	t	F	Passed		1-Dec-2003	Joe P Smith	Yes	TC000009	► Edit
	🖻 🗁 Common Tests (2)		1			1-Dec-2003	Fred Bloggs	Yes	TC000015	► Edit
	Open Up Web Brow	<u>/ser</u>	F	Passed		1-Dec-2003	Fred Bloggs	Yes	TC000016	► Edit
Show 15	rows per page							14 4	Displaying page 1	S of 1 ► 1
Insert	😂 Delete 🛛 💠 Indent	Outdent	Execute							

#### 5.1.10. Copying Test Cases

To copy one or more test cases, simply select the check-boxes of the test cases you want to copy and then select the Edit > Copy menu option. This will copy the current test case selection to the clipboard. Then you should select the place where you want the test cases to be inserted and choose the Edit > Paste option.

The test cases will now be copied into the destination location you specified. The name of the copied test cases will be prefixed with "Copy of..." to distinguish them from the originals.

## 5.1.11. Moving Test Cases

To move test cases in the hierarchy, there are two options:

Click on the icon the test case/folder you want to move and then drag the icon to the location you
want it moved. The background of the destination location will change as the icon is dragged over
it to illustrate where it will be inserted:

Ś	, ii	Welcome, System Adm	inistrator   <u>My Profil</u>	e   Administration	og Out   Library Inf	ormation System			Help?
-		My Page Project H	Home Planning	Testing	Tracking	Reporting			
Test C	ase	es   Test Sets						Role: P	roject Owner
r Inse	ert	Show Level Show Level	✓ Pa Refresh	🔅 Tools 🗼 Exec	ute Show/hide d	columns 💌 🍸	Clear Filters		
Displa	ying	9 out of 13 test case(s) for this release				Display data for:	All Releases		~
1	8	Test Case Name	Execution Status	Owner	Last Executed	Author	Active	Test #	Edit
			Any 🔻	Any 🔻		Any 🔻	Any 🔻	тс	<ul> <li>Filter</li> </ul>
		Eunctional Tests (5)		Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000001	► Edit
	0	Ability to create new book	Passed	Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000002	► Edit
		Ability to edit existing author	Caution	Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000003	► Edit
	ø	Ability to create new author	Failed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000004	► Edit
		Ability to edit existing author	Blocked	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000005	► Edit
		Ability to reassign book to different author	Passed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000006	► Edit
		Egression Tests (2)			1-Dec-2003	Joe P Smith	Yes	TC000007	► Edit
		Book management	Passed		1-Dec-2003	Joe P Smith	Yes	TC000008	► Edit
		Author management	Passed		1-Dec-2003	Joe P Smith	Yes	TC000009	► Edit
		<u>Scenario Tests</u> (2)		Joe P Smith		Joe P Smith	Yes	TC000010	► Edit
		E Common Tests (2)			1-Dec-2003	Fred Bloggs	Yes	TC000015	► Edit
		Dpen Up Web Browser	Not Run		1-Dec-2003	Fred Bloggs	Yes	TC000016	► Edit
		Login to Application	Passed		1-Dec-2003	Fred Bloggs	Yes	TC000017	► Edit
Show	15	▼ rows per page					⊯ ⊲ Dis	playing page 1	Sof 1 ► M
r Inse	ert	🗱 Delete 🔄 🖒 Indent 📣 Outdent 📄 Execute							
	_								

Once you have the test case/folder positioned at the correct place that you want it inserted, just release the mouse button and the test case list will be refreshed, with the item moved to the desired location.

 Alternatively you can simply select the check-boxes of the test cases you want to move and then select the Edit > Cut menu option. This will cut the current test case selection to the clipboard. Then you should select the place where you want the test cases to be inserted and choose the Edit > Paste option. The test cases will now be moved into the destination location you specified.

## 5.1.12. Exporting Test Cases

To export a test case or set of test cases from the current project to another project in the system, all you need to do is select the check-boxes of the test case(s) you want to export and then click Tools > Export Tests. This will then bring up a list of possible destination projects:

SpiraTest Welcome, Fred Bloggs   My Page Project H	ome Planning	Testing	Tracking	Reporting			
st Cases   <u>Test Sets</u>						R	ole: Manaç
Insert 🗱 Delete 🔿 Indent 💠 Outdent Show Level	<ul> <li>Refresh</li> </ul>	🗱 Tools 🗼 Execu	te - Show/	'hide columns 👻 🍸	Clear Filters		
splaying 7 out of 7 test case(s) for this release				Display data for:	1.0.1.0 - Library \$	System Release	e 1 SP1
🗸 🕘 Test Case Name	Export Items		xecuted	i Author	Active	Test #	Edit
	Plassa salact the	project you want to expo	003 🛅	Any 🔻	Any 🔻	TC	► Filter
E E Functional Tests (5)			2003	Fred Bloggs	Yes	TC000001	► Edit
Ability to create new book	Select Project	···	2003	Fred Bloggs	Yes	TC000002	► Edit
Ability to edit existing book	1	> Export   Cance	2003	Fred Bloggs	Yes	TC000003	► Edit
Ability to create new author	NOT KUN	Jue - Smith	-Dec-2003	Fred Bloggs	Yes	TC000004	► Edit
Ability to edit existing author	Blocked	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000005	► Edit
Ability to reassign book to different author	Passed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000006	► Edit
🛛 🖻 🗁 Regression Tests (2)			-Dec-2003	Joe P Smith	Yes	TC000007	► Edit
Book management	Passed		1-Dec-2003	Joe P Smith	Yes	TC000008	► Edit
Author management	Not Run		1-Dec-2003	Joe P Smith	Yes	TC000009	► Edit
🗉 🖻 Common Tests (0)			I-Dec-2003	Fred Bloggs	Yes	TC000015	► Edit

Once you have chosen the destination project and clicked the <Export> button, the test cases will be exported from the current project to the destination project. Any file attachments will also be copied to the destination project along with the test cases.

#### 5.1.13. Adding Test Cases to a Release or Test Set

To quickly add a series of test cases to either a Release or Test Set, all you need to do is select the check-boxes of the appropriate test cases and then click Tools > Add to Release / Test Set. This will then bring up a dialog box displaying either a list of available releases, or a list of available test sets (depending on which option was chosen):

Welcome, Fred Bloggs   My Page Project H		n 👻	Reporting			Help?
Test Cases   Test Sets	<b>,</b>	5	,		Re	ole: Manager
Insert      Source Delete           Insert          Show Level	▼ Refresh III Tools ▷ Execute	Show/hide	columns 🔻 🍸	Clear Filters		
Displaying 7 out of 7 test case(s) for this release			Display data for:	1.0.1.0 - Library S	ystem Release	1 SP1 🔹
✓ 🕘 Test Case Name	Add To Test Set	Executed	Author	Active	Test #	Edit
	Please select the test set you want to add to	2003 🔳	Any 🔻	Any 🔻	TC	<ul> <li>Filter</li> </ul>
E E Functional Tests (5)		c-2003	Fred Bloggs	Yes	TC000001	► Edit
Ability to create new book	Select TestSet 👻	-2003	Fred Bloggs	Yes	TC000002	► Edit
Ability to edit existing book	Select TestSet Testing Cycle for Release 1.0	-2003	Fred Bloggs	Yes	TC000003	► Edit
Ability to create new author	Testing Cycle for Release 1.1	Dec-2003	Fred Bloggs	Yes	TC000004	► Edit
Ability to edit existing author	B Regression Testing for Windows XP Regression Testing for Windows Vista	Dec-2003	Fred Bloggs	Yes	TC000005	► Edit
Ability to reassign book to different author	P Testing New Functionality	Dec-2003	Fred Bloggs	Yes	TC000006	► Edit
E P Regression Tests (2)	Exploratory Testing	Dec-2003	Joe P Smith	Yes	TC000007	► Edit
Book management	Passed 1-	Dec-2003	Joe P Smith	Yes	TC000008	► Edit
Author management	Not Run 1-	Dec-2003	Joe P Smith	Yes	TC000009	► Edit
E Common Tests (0)	1.	Dec-2003	Fred Bloggs	Yes	TC000015	► Edit
<u>Insert</u> S Delete			•	-		

Once you have chosen the destination release / test set, clicking <Add> will add the selected test cases to the destination release / test set.

#### 5.1.14. Viewing the Test Status for a Release

By default, when you view the list of test case cases, it will display an aggregate status for all releases of the project. I.e. the test list will include all the test cases in the system (regardless of which release they apply to) and the execution status will reflect the most recent test run – regardless of which release it was for.

To change the test case list to just display test cases and execution status for a particular release, simply change the release selected in the drop-down list located below the toolbar (on the right-hand side) from "Any" to a specific release:

Sn	) ir	Welcome, Fred Bloggs   !	Ny Profile   Administ	tration   Log Out	erary Information System	V			Help?
- p		My Page Project Hor	ne Planning	Testing	Tracking Rep	porting			
Test Ca	ases	s   <u>Test Sets</u>							Role: Manager
♣ Inse	<u>ert</u>	🗱 Delete 🔿 Indent 💠 Outdent Show Level 🔻	🗞 <u>Refresh</u> 🛛 📮	Edit III Tools	Show/hide columns	Filter			
Display	/ing	7 out of 7 test case(s) for this release				Display data for:	1.0.1.0 - Library System P	Release 1 SP1	
~	8	Test Case Name	Execution Status	Owner	Last Executed	Author	Active	Test #	Edit
			- Any 🔻	Any 🔻		- Any 🔻	Any 🔻	TC	Filter
		E Punctional Tests (5)		Fred Bloggs		Fred Bloggs	Yes	TC000001	► Edit
	0	Ability to create new book	Passed	Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000002	► Edit
		Ability to edit existing book	Not Run	Fred Bloggs		Fred Bloggs	Yes	TC000003	► Edit
	0	Ability to create new author	Not Run	Joe P Smith		Fred Bloggs	Yes	TC000004	► Edit
		Ability to edit existing author	Blocked	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000005	► Edit
		Ability to reassign book to different author	Passed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000006	► Edit
		E Pregression Tests (2)				Joe P Smith	Yes	TC000007	► Edit
		Book management	Passed		1-Dec-2003	Joe P Smith	Yes	TC000008	► Edit
		Author management	Not Run			Joe P Smith	Yes	TC000009	► Edit
Show	15	▼ rows per page		-			i⊲ ⊲ Dis	playing page	5 of 1 ⊫ ⊨
🕂 Inse	ert	🗱 Delete 🔿 Indent 💠 Outdent ▷ Execute							

As illustrated in the example above, when the drop-down list is changed to select a specific release, the list of test cases is filtered to just those mapped to the release in question. In addition, the execution status for the test releases will only reflect test runs for that specific release (and any child iterations if applicable). As can be seen in our example, many test cases that have been run for other releases now show the "Not Run" status since they've not been run for this specific release.

As a shortcut, when you select a specific release for viewing, subsequent execution of any of the test cases via the Tools > Execute menu option will default the test run to the selected release.

#### 5.1.15. Right-Click Context Menu

SpiraTeam® provides a shortcut – called the *context menu* - for accessing some of the most commonly used functions, so that you don't need to move your mouse up to the toolbar each time. To access the context menu, right-click on any of the rows in the test case list and the following menu will be displayed:

Ability to create new book	- Insert Test Case	Passed	Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000002
Ability to edit existing book	- Insert Folder	Caution	Fred Bloggs	1-Dec-2003	Fred Bloggs	Yes	TC000003
Ability to create new author	- Delete Item	Failed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000004
Ability to edit existing author	- Indent Item	Blocked	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000005
Ability to reassign book to differen	- Outdent Item	Passed	Joe P Smith	1-Dec-2003	Fred Bloggs	Yes	TC000006
E      Regression Tests (2)	- Copy Items			1-Dec-2003	Joe P Smith	Yes	TC000007
🖃 🗁 <u>Scenario Tests</u> (2)	- Cut Items		Joe P Smith		Joe P Smith	Yes	TC000010
🗆 🖻 Exception Scenario Tests (1)	- Paste Items		Joe P Smith		Joe P Smith	Yes	TC000011

You can now choose any of these options as an alternative to using the icons in the toolbar.

## 5.2. Test Case Details

When you click on a test case item in the test case list described in section 5.1, you are taken to the test case details page illustrated below:

spiraTeam	Welcome, Fre	d Bloggs   <u>My Profile</u>   <u>A</u>	dministration   Log O	ut   Library Information S	ystem 🔻			Help?
spirarcai	My Page	Project Home Plan	ning Testing	Tracking	Reporting			
Test Cases > Test Case Details   Test	Sets   Test Runs	Automation Hosts						Role: Manager
<< Back to Test List	🖁 <u>Save</u> 🖓 C	opy 🧐 <u>Refresh</u> 🗱 🕻	Delete Execute	🖨 <u>Print</u> 🛛 Er	nail 1 Subscribe			
Eunctional Tests	Test Case: Abi	ity to create new book	TC:000002]					
Ability to create new book	Name*:	Ability to create new boo	k				]	
Ability to edit existing book Ability to create new author	Description					_		
Ability to edit existing autho	Description:	Font V			∃健健 ™3/34	ee 🔽 🗖 🗘 🕅		
Ability to reassign book to di		Tests that the user can o	reate a new book in th	e system				
	Author*:	Fred Bloggs	V	Estimated Time:	0 hours 10	minutes		
	Owner:	Fred Bloggs	V	Creation Date:	12/1/2003 12:00:00 A	M		
	Priority:	1 - Critical	V	Execution Status:	Passed			
	Active*:	Yes 🔻		Execution Date:	12/1/2003 12:00:00 A	M		
	Test Steps *	Req Coverage * Aut	omation Commer	ts Custom Props	Test Runs #	Releases *	Attachments *	History *

This page is made up of three areas; the left pane is the navigation window, the upper part of the right pane contains the test case detailed information itself, and the bottom part of the right pane contains related information about the test case.

The navigation pane consists of a link that will take you back to the test case list, as well as a list of the peer test case to the one selected. This latter list is useful as a navigation shortcut; you can quickly view the detailed information of all the peer test cases by clicking on the navigation links without having to first return to the test cases list page.

The top part of the right pane allows you to view and/or edit the details of the particular test case. You can edit the various fields (name, description, etc.) and once you are satisfied with them, simply click either the <Save> or <Save and New> button at the top of the page to commit the changes. In addition you can delete the current artifact by choosing <Delete>, discard any changes made by clicking <Refresh> or print it by clicking <Print>.

Using the <Email> button on the toolbar, you can send an email containing details of the test case to an email address or another user on the system:

Email this artifact	to:	X
Project User:	Fred Bloggs   Select a user in the project to send to.	
C Email Addresses:	A list of email addresses, separated by ;	
Message Subject:	Leave blank for default.	
		Send   Cancel

You can specify the subject line for the email, and either a list of email addresses, separated by semicolons, or an existing project user .The content of the email is specified in the System Administration – Notification Templates.

The lower part of the right pane can be switched between six different views by clicking the appropriate tab. Initially the pane will be in "Test Steps" mode, but it can be switched to "Requirements Coverage", "Automation", "Comments", "Custom Properties", "Test Runs", "Releases", "Attachments" and "History" modes if so desired. Each of the views is described separately below. In addition there is a shortcut link "Execute This Test" that allows you to execute this test (see section 5.3) without having to return to the Test Case list.

#### 5.2.1. Test Steps

This view displays the name of the test case together with all the defined test steps that a tester would need to perform to verify that the functionality works as expected. The list of test steps displays the position number, the description, the expected result, some suggested sample data and the most recent execution status of the individual test step:

Т	est	Steps *	Req Coverage *	Custom Props *	Test Runs *	Releases *	Attachments *	History *		
> <u>Ir</u>	> Insert Step   Insert Link   Delete   Copy   Refresh   Show/hide columns V Edit Parameters									
	U	Step #	Test Step Descripti	on	Expected Re	sult	Sample Data	a Statu	is Step Id	Edit
		🕲 Step 1	Call Login to Applica	ation' (TC17) 🗄				N/A	TS000001	► Edit
		🖺 <u>Step 2</u>	User clicks link to cr	eate book	User taken to	first screen in wizard		Pass	ed TS000002	► Edit
	User enters books name and author, then User taken to next screen in wizard Macbeth, William Shakespeare TS000003 + Edit									► Edit
		🖺 <u>Step 4</u>	User chooses book's from list	s genre and sub-genre	User sees scr information	een displaying all ent	ered Play, Tragedy	/ Pass	ed TS000004	► Edit
		🖺 <u>Step 5</u>	User clicks submit b	utton	Confirmation s	creen is displayed		Pass	ed TS000005	► Edit
Sho	Show 15 🔻 rows per page 1 S of 1 🕨									
To ch	o change the order of the test steps, please click on the test step/link icon and drag it to the appropriate place in the list.									

Note: Test steps that are marked with a hyperlink and test case icon (e.g. "Call Login to Application" in the screen shot above) are in fact *linked test cases*. Linked test cases are a useful way of reusing existing test steps from other test cases. For example if you want to have a set of steps be in more than one test case (e.g. a login step) then you would create a separate test case just containing these steps, then have all the other test cases just link to it. This avoids the need to have duplicate test steps throughout the project.

In addition, if you click on the step number hyperlink (e.g. Step 2) you will be taken to the test step details page which allows you to perform additional editing of a specific test step as well as attach documents, associate pre-existing incidents and view the change history.

#### 5.2.1.1. Insert Step

Clicking on the <Insert Step> button inserts a new test step *before* the currently selected (by means of the check-box) test step. Clicking the <Insert Step> button without selecting a test step will insert a new step at the end of the list. When a new step is inserted, the fields are displayed in "Edit" mode, so the description, expected result and sample data fields are editable, allowing you to enter the appropriate data:

Test	Steps *	Req Coverage *	Custom Props *	Test Runs *	Releases #	* Attachments *	Histo	ory *		
> <u>Inse</u>	rt Step   Ins	<u>ert Link   Delete   C</u>	opy   <u>Refresh</u>	Show/hide columns	Show/hide columns					
	Step #	Test Step Descript	ion	Expected Result		Sample Data		Status	Step Id	Edit
	🕲 Step 1	Call Login to Application	ation' (TC17) 皆					N/A	TS000001	► Edit
	1 Step 2	User clicks link to c	reate book	User taken to first scre	en in wizard			Passed	TS000002	► Edit
0	🖺 <u>Step 3</u>	User enters books n then clicks Next	ame and author,	User taken to next scre	een in wizard	Macbeth, William Shakes	beare	Passed	TS000003	► Edit
	🖺 <u>Step 4</u>	User chooses book's genre from list	s genre and sub-	User sees screen displ entered information	laying all	Play, Tragedy		Passed	TS000004	► Edit
	🖺 <u>Step 5</u>	User clicks submit t	outton	Confirmation screen is	displayed			Passed	TS000005	► Edit
	E Step 6	B I U T <sub>3</sub> (cee [ (New Test Step)	<b>□ ↔ [2</b> ] ■	B I U T₂ œ ₪ : (Expected Result)	<> 2 	₿ / ௶ ℡  ₩ ↔		Not Run		<ul> <li>Insert</li> <li>Update</li> <li>Cancel</li> </ul>
Show	15 <b>T</b> rows	per page					M	< Display	ing page 1	S of 1 ► ►

Once you have entered the necessary information, you can click either <Insert> or <Update> to commit the changes. If you choose <Insert>, another new row will be inserted which is useful if you intend on entering lots of rows at once, whereas clicking <Update> will simply commit the current row only.

### 5.2.1.2. Insert Link

Clicking on the <Insert Link> button brings up the following dialog box that allows you to choose the test case to be inserted:

		17/1/2001
	Linked Test Case use the test case to add as a link in the test step list:	×
CIIO	se the test case to add as a mix in the test step hat.	
~	Test Case	
0	🗉 🛅 Functional Tests	
0	🗉 💼 Regression Tests	
0	🗉 🛅 Scenario Tests	
0	🖃 🛱 Common Tests	
0	Open Up Web Browser	
0	Eugin to Application	
Ple url:	ease fill out the parameters for this linked test case:	>
	> <u>Add</u>   <u>Ca</u>	incel

You need to then select the name of the test case you want to insert as a link. If the test case has declared parameters (see the section on Parameters below for more details) you will be given a list of parameters that needed to be filled out.

You need to fill out the values of the parameters for the linked test case and then click the <Add> button to complete the operation. The system will then insert the test case as a link just before the currently selected test step. If no existing test step was selected, the link will be added at the end of the test step list.

## 5.2.1.3. Delete

Clicking on the <Delete> button deletes the currently selected test steps, and reorders the test step position numbers to close any gaps in numbering.

## 5.2.1.4. Copy

Clicking on the <Copy> button makes a copy of the current test step or linked test case and inserts the copied version directly above the original one.

## 5.2.1.5. Refresh

Clicking on the <Refresh> button simply reloads the list of test steps. This is useful if other people are making changes to the test list and you want to make sure that you have the most current version.

## 5.2.1.6. Show / Hide Columns

By default the test step list screen will display the Description, Expected Result and Sample Data fields. However the Expected Result and Sample Data fields are optional and can be hidden if necessary to make more space. If you have configured custom properties for test steps, you can use the Show/Hide features to display one or more of your custom properties instead. These fields will then be editable in this grid-view.

## 5.2.1.7. Editing Test Steps

To modify an existing Test Step you simply need to click on the <Edit> button to the right of the step, or just *double-click* on the cells in the row. That will switch the selected row into Edit mode. The various columns are turned into editable text-boxes, and <Update> <Cancel> buttons are displayed in the last column:

Т	est	Steps *	Req Coverage *	Custom Props *	Test Runs *	Releases #	e Attachments	; * Histo	гу ж		
> 1	nse	rt Step   Ins	ert Link   Delete   C	opy   <u>Refresh</u>	Show/hide columns	▼ <u>I</u>	Edit Parameters				
	U	Step #	Test Step Descript	ion	Expected Result		Sample Data		Status	Step Id	Edit
		🕲 Step 1	Call Login to Applic	ation' (TC17) 🚰					N/A	TS000001	► Edit
		🖺 <u>Step 2</u>	B Z ∐ T <sub>2</sub> (ce) ] User clicks link to c book		B Z U T₂ Gee ⊠ User taken to first scr in wizard		B Z U T <sub>2</sub> (88		Passed		► Update ► Cancel
	U	1 Step 3	User enters books r then clicks Next	name and author,	User taken to next scr	een in wizard	Macbeth, William	Shakespeare	Passed	TS000003	► Edit
		1 Step 4	User chooses book' genre from list	s genre and sub-	User sees screen disp entered information	olaying all	Play, Tragedy		Passed	TS000004	► Edit
		🛍 <u>Step 5</u>	User clicks submit I	button	Confirmation screen is	displayed			Passed	TS000005	► Edit
Sho	W 1	5 <b>v</b> rows	per page					H	■ Displayi	ng page 1	S of 1 ► ►

If you click <Edit> on more than one row, the <Update> and <Cancel> buttons are only displayed on the first row, and you can make changes to all the editable rows and then update the changes by clicking the one <Update> button. Also, if you want to make the same change to multiple rows, you can click on the "fill" icon to the right of the editable item, which will propagate the new value to all editable items in the same column. When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information.

#### 5.2.1.7. Editing Test Steps

To modify an existing Test Link you simply need to click on the <Edit> button to the right of the step, or just click on the cells in the row. That will open up the special dialog box used for editing the parameter values associated with a specific linked test case:

	Edit Linked T	est Case Parameters		×
	Please fill ou	t the parameters for this linked test case:	^	
	login:	librarian		
-	password:	password1		
-	<		>	
¢		> <u>Upda</u>	te   <u>Cancel</u>	

This allows you to edit the parameters being passed from the current test step to the linked test case without having to recreate the test link from scratch. To commit the change click <Update> to close the dialog box, or click <Cancel> to revert back to the original information.

#### 5.2.1.9. Moving Test Steps

To move test steps in the list, click on the icon the test step/link you want to move and then drag the icon to the location you want it moved. The border of the destination location will change as the icon is dragged over it to illustrate where it will be inserted.

#### 5.2.1.10. Parameters

Test cases can have parameters associated with them. This enables one test case to be called several times by another test case (as a link) and have different parameters passed in each case, making the operation different. E.g. you could have a generic "login to application" test case that others call as an initial step, which could be provided with different login information depending on the calling test case.

To view / change the parameters associated with the current test case, click on the <Parameters> icon in the toolbar and the list of current parameters will be displayed:

		arameters eters have been defined	for this test case:		٤	×
Name		Default Value	Operations		^	
\${login	}		Copy To Clipboard   Delete			
\${pass	word}		Copy To Clipboard   Delete			
<				>	~	
Add a n	ew paramete	er to this test case:				
Name	e:*					
Defau	lt Value:					
E			► Add	► Cancel		
ι						

The list of existing parameters is displayed in a grid, followed by the option to add a new parameter and default value (used when the test case is run directly rather than being called by another test case). You can delete an existing parameter and also copy the parameter token to your computer's clipboard. The latter option is useful so that you can insert the parameter token (in the format *\${parameter name}*) in the test step description, expected result or sample data fields and have it converted into the parameter value during test execution.

## 5.2.2. Requirements Coverage

This view displays the name of the test case together with the requirements coverage information for the test case in question:

Test Steps * R	eq Coverage *	Custom Prop	s *	Test Runs	*	Release	s *	Attachments *	His	tory *	
Available Requirem	ents:				Requ	uirements Co	overage	:			
✓ Name					<ul> <li>Image: A second s</li></ul>	Test #	Name			Status	
🔲 🗉 🗐 Functiona	I System Require	ments 📃 🖄				RQ000004	🛍 Abil	ity to add new books	s to th	Completed	1
🔲 🗉 🗐 Online L	ibrary Manageme	nt Syst		Add >							
Book I	Vanagement	=		Add >							
🗌 📸 Abilit	ty to add new boo	ks to th		Remove <							
🗌 🛗 Abilit	ty to edit existing	books	R	temove All							
🔲 🗋 Abilit	ty to delete existi	ng boo									
🔲 📋 Abilit	ty to associate bo	ooks wit									
C Δhilit	tv to seencists hr	oke wit									
> Create Requireme	nt From This Te	st Case 🖶									
The requirements cove To add requirements to You can use the [Rem	o this test case, o	choose from t	he list	above and clic	k [Ad	ld].			-		

The pane consists of two lists of requirements, the one on the left being the complete hierarchical list of requirements in the project. The right box (which will initially be empty) contains the list of requirements mapped to this test case. The requirements in this box include columns for their ID, name and status. Hovering the mouse over the names of the requirements in either box will display a "tooltip" consisting of the requirement name, place in the hierarchical structure and a detailed description. Clicking on the hyperlinks in right-hand box will jump you to the requirement details screen for the requirement in question (see section 4.2).

To change the coverage for this test case, you use the buttons (Add, Remove, Remove All) positioned between the two list-boxes. The <Add> button will move the selected requirements from the list of available on the left to the list of mapped on the right. Similarly the <Remove> and <Remove All> buttons will remove either the selected or all the requirements from the right list-box and add them back to the left list-box.

Finally, as a shortcut you can click the "Create Requirement from This Test Case" link to create a new requirement in the list of covered requirements that will be automatically linked to this test case. This is useful when you have created a new test case and want to generate an initial placeholder requirement to be fleshed-out later.

## 5.2.3. Automation

The Automation tab displays any automated test scripts associated with the current test case. SpiraTeam® can either be used to physically store the test script as an attachment in the system (as long as the test script is stored in a plain Unicode text format) or simply store the location of the test script if stored on an external network drive or local folder:

Test Steps * Req C	overage * Automation *	Comments	Custom Props *	Test Runs *	Releases *	Attachments *	History
This section defines the au	tomated test script associa	ed with this test case	9:				
Automation Engine:*	SmarteScript	•					
Script Type:*	Attached O Linked						
Filename:*	Web 01 SmarteATM Log	n.ses					
Document Type:*	Functional Specification	▼					
Document Folder:*	Test Results	•					
Version:	v 1.0						
Test Script:*	Sample Script Sync(60." <u>Smarte</u> ATM : L Info(" <u>Smarte</u> ATM : Login' If( <u>ReturnVar</u> == "RESTOR Click(" <u>Smarte</u> ATM : Lo 5Shell( <u>EXE</u> ." <u>IEXPLORE</u> 5Shell( <u>EXE</u> ." <u>IEXPLORE</u> End If	"Maximize". <u>Window</u> E") gin"."Maximize". <u>Lclic</u> EXE http://demo.sm	<u>k);</u> artesoft.com");				

The automation screen includes the following fields that you should populate when using SpiraTeam® to store an automated test script:

- Automation Engine this should be the name of the test automation engine that the test script should be executed with. This list is populated by a system administrator using the administration section of the application (as described in the SpiraTeam Administration Guide)
- Script Type This should be set to either "attached" or "linked". If you choose to attach the test script, the large text box at the bottom will be enabled, allowing you enter/edit the test script directly in SpiraTeam. If you choose linked, the test script is stored externally and SpiraTeam just stores a reference to it.
- Filename If you are attaching the test script to the test case then this field just needs to contain the filename of the test script (no folders or path needed), whereas if you are choosing to link the test script, you need to follow the exact format that will be expected by the test automation engine. For details, please refer to the specific test automation engine in the SpiraTest/Team Automated Test Integration Guide.
- Document Type (SpiraTeam only) This should be set to the document type that you want the test script associated with.
- Document Folder (SpiraTeam only) This should be set to the document folder that you want the test script to be stored in.
- > Version This should contain the version number of the test script.
- Test Script If you are attaching a test script, this should contain the actual program code for executing the test script. The language and syntax will be dependent on the test automation engine being used. If you are linking the test script, this section will be disabled.

### 5.2.4. Comments

The Comments tab allows users to add and view discussions related to the Test Case:

Test Steps *	Req Coverage	Automation	Comments	Custom Props *	Test Runs *	Releases *	A
To add a new comm		nt, please enter it bel	•	-	_		_
Font	- Size	▼ B <i>I</i> <u>U</u>	│ <b>ॾ</b> ॾ   <b>⋸</b> Е	傳導 喝魯 -	@ 🛛 🗆 🗘 🛛		
Existing Com	iments						

Existing comments are displayed by date underneath the text box. To add a comment to the Test Case, enter your text into the textbox, then click the Save button to save.

#### 5.2.5. Custom Properties

In this mode, the main pane displays any custom properties that the project owner has defined for test cases. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*. Assuming that custom properties have been defined for your project, you will see a list of optional parameters that can be set on the test case. These can be either freetext or drop-down-lists. In the example below, you can enter a URL and/or Test Type.

Test Steps *	Req Coverage *	Custom Props *	Test Runs *	Releases *	Attachments *	History *
The following are	the custom properties o	f this artifact:				
URL:	http://www.libraryrefere	nces.org			•	
				N	e e	
Test Type:	Functional Test			•	]	

Once you are satisfied with the values for the custom properties, simply click [Save] or [Save and New] to commit the changes.

#### 5.2.6. Test Runs

This view displays the name of the test case together with a list of the previous execution runs that the test case has been put through. Each test run is listed together with the date of execution, the name of the test case, the name of the test set (if applicable), the name of the tester, the release/version of the system that the test was executed against, the overall execution status for the test case in that run and a link to the actual test run details (see section 5.6). In addition, you can choose to display any of the custom properties associated with the test run.

> Re	fresh   Apply Filter   Clear Filte	rs   - Show/hide colu	mns 🔻							
1	and the second	Execution Date	1745 195 1940 I	Release ▲▼	Status ▲▼	Est. Dur. ▲▼	Act. Dur. ▲▼	Web Browser ▲▼	Operating System ▲▼	Run # A
			Any 🔻	Any 🔻	- Any - 🔻			- Any - 🔻	- Any - 🔻	TR
	Ability to create new book	4-Dec-2003		1.1.0.0.0003	Failed	0.0h	1.2h			TR000018
	Ability to create new book	3-Dec-2003		1.1.0.0.0002	Passed	0.0h	1.2h			TR000015
	Ability to create new book	2-Dec-2003		1.1.0.0.0001	Passed	0.0h	1.2h			TR000013
	Ability to create new book	1-Dec-2003	Testing Cycle for Release 1.1	1.0.1.0	Passed	0.2h	1.5h	Mozilla / Firefox	Windows 2000	TR000002
	Ability to create new book	1-Dec-2003		1.0.0.0	Failed	0.2h	1.2h	Opera	Windows 2003	TR000012
	Ability to create new book	1-Dec-2003	Testing Cycle for Release 1.0	<u>1.0.0.0</u>	Failed	0.2h	1.3h	Internet Explorer	Windows XP	TR000001

The "customize columns" drop-down list allows you to change the fields that are displayed in the test run list as columns. To show a column that is not already displayed, simply select that column from the list of

"Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. The displayed columns can be any standard field or custom property.

You can also filter the results by choosing items from the filter options displayed in the sub-header row of each field and clicking the "Apply Filter" link. In addition, you can quickly sort the list by clicking on one of the directional arrow icons displayed in the header row of the appropriate field.

## 5.2.7. Release Mapping

This view displays the name of the test case together with the release mapping information for the test case in question:

Test Steps * Req Coverage *	Custom Props *	Test Runs #	i.	Release	:S ₩	Attachments *	Hist	tory *	
Available Releases:		I	Map	oed Release	s:				_
✓ Name			$\checkmark$	Test #	Name			Status	
🗆 🗉 🖻 1.0.0.0 - Library System	Relea			RL000001	<u> 1.0.</u>	0.0 - Library Systen	n Relea	Active	
🗌 🗉 🖻 1.0.1.0 - Library Syste	m Relea	Add >		RL000002	<u>1.0.</u>	1.0 - Library Systen	n Relea	Active	
🔲 🗉 🗐 1.0.2.0 - Library Syste	m Relea	Auu		RL000003	1.0.	2.0 - Library Systen	n Relea	Active	-
1.0.0.0001 - Iteration	001	Remove <		RL000004	<u> 1.1</u>	0.0 - Library Systen	n Relea	Active	
1.0.0.0002 - Iteration	002 R	emove All		RL000017	💾 <u>1.1</u> .	0.0.0001 - Iteration	001	Active	
1.0.0.0003 - Iteration				RL000018	💾 <u>1.1.</u>	0.0.0002 - Iteration	002	Active	
🔲 🗉 🗐 1.1.0.0 - Library System	Relea			RL000019	💾 <u>1.1.</u>	0.0.0003 - Iteration	003	Active	
🔲 📲 1.2.0.0 - Library System	Relea								
The selection of the se	h								
The release coverage box indicates t To associate releases with this test					case.				
You can use the [Remove] and [Ren					overed b	y the test case.			

The pane consists of two lists of releases/iterations, the one on the left being the complete hierarchical list of releases and iterations in the project. The right box (which will initially be empty) contains the list of releases/iterations mapped to this test case. The releases in this box include columns for their ID, name and active status. Hovering the mouse over the names of the releases/iterations in either box will display a "tooltip" consisting of the release/iteration name, place in the hierarchical structure and a detailed description. Clicking on the hyperlinks in right-hand box will jump you to the details screen for the release/iteration in question (see section 7.2).

To change the release mapping for this test case, you use the buttons (Add, Remove, Remove All) positioned between the two list-boxes. The <Add> button will move the selected releases from the list of available on the left to the list of mapped on the right. Similarly the <Remove> and <Remove All> buttons will remove either the selected or all the releases from the right list-box and add them back to the left list-box.

## 5.2.8. Attachments

In this mode, the main pane displays the list of documents that have been "attached" to the test case. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.

Т	est Steps *	Req Coverage #	Custom Prop	s * Test Runs	* F	Releases *	Attach	ments *	History *	
> <u>A</u>	Add Attachment   Remove   Refresh   Apply Filter   Clear Filters									
~	Document N	ame ▲▼		Type ▲▼	Size ▲▼	Edited By AV	/ E	Edited On ▲▼	Uploaded By 🔺 🔻	Doc # ▲▼
				Any 🔻		Any	• [		Any 🔻	DC
	Sequence	Diagram for Book M	<u>gt.pdf</u>	UML Diagram	35 KB	Joe P Smith	1	10-May-2006	Fred Bloggs	DC000007
Show	V 15 V rows	per page							ৰ Displaying page	1 S of 1 ► M

The attachment list includes the filename that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as a tooltip.

To actually view the document, simply click on the filename hyperlink and a new web browser window will open. Depending on the type of file, this window will either display the document or prompt you for a place to save it on your local computer. To delete an existing attachment from a test case, simply click the <Delete> button and the attachment will be removed from the list.

To attach a new document to the requirement, you need to first click the <Add Attachment> link to display the new attachment dialog box:

Add New Docume	ent	Add New Docum	nent	X	Add New Docume	ent	D
Type:* Filename:* Description:	File     URL     Screenshot     Browse	Type:* URL:* Description:	○ File	Screenshot	Type:* Screenshot:*	O File O URL ⊙ So	creenshot
Document Type:* Document Folder:* Tags:	Functional Specification  Functional Specification  Folder  Folder Folder  Fo	Document Type:" Document Folder Tags:		V V	Description:	> Paste image from clipboar	d
	> Uptoad I Cance	4		> Upload   Cancel	Document Type:* Document Folder:* Tags:	Functional Specification Root Folder	V V > Upload I Cancel

There are three different types of item that can be attached to a test case:

- To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.
- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard, click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename *before uploading* if you want it to be displayed with the correct icon in the attachment list.

#### 5.2.9. History

In this mode, the main pane displays the list of changes that have been performed on the test case artifact since its creation. An example test case change history is depicted below:

Test Steps *	Req Coverage	* Custom Props	* Test Runs *	Releases *	Attachments *	History *
Change Date 🔻		Field Name	Old Value	Ne	w Value	Changed By
5/2/2006 12:00:00 /	MA	Name	Need to create new boo	k Ab	ility to create new book	Fred Bloggs
3/4/2005 12:00:00 AM		Owner		Fre	ed Bloggs	Joe P Smith

The change history displays the date that each change was made, together with the fields that were changed, the old and new values and the person who made the change. This allows a complete audit trail to be maintained of all changes in the system.

## 5.3. Test Step Details

When you click on one of the hyperlinks next to a test step in the test step list (see above), you will be taken to the test step details screen illustrated below:

spiraTeam	Welcome, Fred Bloggs   <u>My Profile</u>   <u>Administration</u>   <u>Log Out</u>   Library Information System 🔻	Help?
spirarcain	My Page Project Home Planning Testing Tracking Reporting	
Test Cases > Test Step Details   Test	t Sets   Test Runs	Role: Manager
<< Back to Test Step List	Save + Save and New 🔅 Delete	
Ability to create new book	Test Step 3 [TS:000003] - Test Case #: <u>TC000002</u>	
🐚 Step 1 (TS000001)	Description:* -Font ▼ -Size ▼ B / U F F F H H H F F V -∞ D • ◇ Ø	
Step 2 (TS000002)	User enters books name and author, then clicks Next	
😢 Step 3 (TS000003)		
Step 4 (TS000004)		
Step 5 (TS000005)	Expected Result:Font	
1 Step 6 (TS000026)	User taken to next screen in wizard	
	Sample Data: Font Size B / U	
	Macbeth, William Shakespeare	
	Incident Associations * Custom Properties * Attachments * History *	

This page is made up of three areas; the left pane is the navigation window, the upper part of the right pane contains the test step detailed information itself, and the bottom part of the right pane contains related information about the test step.

The navigation pane consists of a link that will take you back to the test step list, as well as a list of the peer test steps to the one selected. This latter list is useful as a navigation shortcut; you can quickly view the detailed information of all the peer test steps by clicking on the navigation links without having to first return to the test step list page.

The top part of the right pane allows you to view and/or edit the details of the particular test step. You can edit the various fields (description, expected result and sample data) and once you are satisfied with them, simply click the <Save> button just below the fields to commit the changes. If you want to add a new test step to the test case, you should click <Save and New> instead.

The lower part of the right pane can be switched between four different views by clicking the appropriate tab. Initially the pane will be in "Incident Associations" mode, but it can be switched to "Custom Properties", "Attachments" and "History" modes if so desired. Each of the views is described separately below.

## 5.3.1. Incident Associations

In this mode, the main pane displays a list of any incidents that are associated with this test step. They can either be linked indirectly due to being logged during a test run, or directly linked after the fact:

Incident Associations *	Custom Properties #	e Attachm	nents #	History *			
> Add   Delete   Refresh   Apply Filter   Clear Filters   V Include Source Code Revisions							
✓ Artifact Name ▲	▼	Artifact Type ▲▼	Created On ▲▼	Created By ▲▼	Comment ▲▼	Artifact # ▲▼	Edit
		Any 🔻		Any 🔻			► Filter
Cannot add a n	ew book to the system	Incident	4-Nov-2003	Joe P Smith	Test Run: Ability to create new book	IN000007	
Show 15 Trows per p	page				ৰ ৰ Displa	ying page 1	a of 1 ► ►

Each incident is displayed with its name, the name of the person who executed the test run or made the direct association, and a comment that describes why the association was made. In the case of a test run, the comment will simply contain the name of the test run.

You can perform the following actions on an incident association from this screen:

- Delete removes the selected incident association. This will only delete the association, not the incident itself.
- Refresh updates the list of associated incidents from the server, useful if other people are linking incidents to this test step at the same time.
- > Apply Filter Applies the entries in the filter boxes to the list of associations
- Clear Filters Clears the current filter, so that all associations for the current test step are shown.
- Edit Clicking the [Edit] button to the right of the associations allows you to edit the comment field inline directly on this screen.

To create a new association between this test step and an existing incident, simply click the <Add> hyperlink which will display the "Add New Association" popup dialog box:

Add N	lew Association		X				
Please	Please choose the type of artifact that you want to add an association to:						
<li>Incident of the second sec</li>	dent O Requirement						
Plea	se choose the artifact	that you want to add an association to:					
(a)	Enter Artifact ID:	IN	Ī				
c (b)	Choose from list:	✓ Name					
c		Editing the date on a book is clunky					
		Doesn't let me add a new category					
		Quote handling issues throughout					
		Permissions not updating when changed					
٨	Comment:						
		<u>v</u>					
		> Add   Can	cel				
¢ .							

You need to choose the specific incident you want to link to, either by choosing the item from a scrolling selection box, or entering the ID of the incident directly (if known). In either case you can also add a comment that explains the rationale for the association.

Finally, to delete an existing incident association (except for those due to test runs) select the check-box next to its name and click the <Delete> hyperlink. This will only delete the association, not the linked incident itself.

#### 5.3.2. Custom Properties

In this mode, the main pane displays any custom properties that the project owner has defined for test steps. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*. Assuming that custom properties have been defined for your project, you will see a list of optional parameters that can be set on the test step. These can be either freetext or drop-down-lists.

Incident Associations	* Custom Pro	operties *	Attachments *	History *			
The following are the custom properties of this artifact:							
Additional Data:	Some Data			~			
Step Type:	Step Type 1			V			

Once you are satisfied with the values for the custom properties, simply click [Save] or [Save and New] to commit the changes.

#### 5.3.3. Attachments

In this mode, the lower section of the screen displays the list of documents that have been "attached" to the test step. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.

	Incident Associations * Cust	om Properties *	Attachments	*	History *			
>	Add Attachment   <u>Remove</u>   <u>Re</u>	fresh   Apply Filte	<u>r   Clear Filters</u>					
~	Document Name	Ту	pe ▲▼	Size ▲▼	Edited By ▲▼	Edited On ▲▼	Uploaded By 🔺 🔻	Doc # ▲▼
		/	Any 🔻		Any 🔻		Any 🔻	DC
	Expected Result Screens	hot.png Sc	reen Shot	314 KB	Fred Bloggs	1-May-2006	Fred Bloggs	DC000014
Sh	ow 15 🔻 rows per page						le displaying page 1	Sof 1 ► ►

The attachment list includes the filename that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as a tooltip.

To actually view the document, simply click on the filename hyperlink and a new web browser window will open. Depending on the type of file, this window will either display the document or prompt you for a place to save it on your local computer. To remove an existing attachment from a test step, simply click the <Remove> button and the attachment will be removed from the list.

To attach a new document to the requirement, you need to first click the <Add Attachment> link to display the new attachment dialog box:

Add New Docume	ent	X	Add New Docum	ent		X	Add New Docume	ent	X
Type:* Filename:* Description:	File     URL     Scrr	Browse	Type:* URL:* Description:	○ File	O Screenshot		Type:* Screenshot:*	⊖File ⊖URL ⊚	Screenshot
Document Type:* Document Folder:* Tags:	Functional Specification	V V	Document Type:* Document Folder:* Tags:	Functional Specification	<b>V</b>		Description:	> Paste image from clipb	oard 🗠
	د	- <u>Upload I Cancel</u>			> Upload   Cance		Document Type:* Document Folder:* Tags:	Functional Specification Root Folder	V V V V Jpload I Cancel

There are three different types of item that can be attached to a test step:

To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.

- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard, click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename before uploading if you want it to be displayed with the correct icon in the attachment list.

## 5.3.4. History

In this mode, the main pane displays the list of changes that have been performed on the test step artifact since its creation. An example test step change history is depicted below:

Incident Associations *	Custom Properties *	Attachments *	History *		
Change Date 🔻	Field Name	Old Value	New Valu	e	Changed By
5/2/2006 12:00:00 AM	Expected Result	User taken to first screen	User taken	to next screen in wizard	Fred Bloggs
3/4/2005 12:00:00 AM	Expected Result		User taken	to first screen	Joe P Smith

The change history displays the date that each change was made, together with the fields that were changed, the old and new values and the person who made the change. This allows a complete audit trail to be maintained of all changes in the system.

## 5.4. Execute Test Case(s)

This section describes how a tester can follow the steps defined for a series of test cases and record what actually happened in the process. In addition, recorded failures of test cases can be used to automatically generate new incidents that will be added to the incident tracking module (see section 6).

You start test case execution in SpiraTeam by either selecting test cases or test sets on their respective page(s) and clicking the <Execute> button, or by clicking the "Execute" link on the test cases / test sets listed on your personalized home page under "My Test Cases" or "My Test Sets". If you execute a test set then the values of the selected release and custom list properties for the test run are automatically populated from the test set, whereas if you directly execute a test case itself, those values can be chosen by the tester.

Regardless of the route taken to launch the test execution module, the first screen that will be displayed will look like the following:

spiraTeam	Welcome, Fred Bloggs   M	Profile   Administration	Log Out   Ubrary Inform	ation System 🔻	Help?
spirarcall	My Page Project Hom	e Planning	Testing Tracking	g Reporting	
Test Cases > Test Case Execution   Test	Sets   Test Runs   Automa	tion Hosts			Role: Manager
<< Back To Tests	Pass ✓ Pass All 🐓	Blocked O Caution	I Fail X Pause	Release #: 1.2.0.0	
🗄 🔄 Testing New Functionality (TX5)	Test Execution Wize	ırd			
	Please Choose the Release	e To Execute Against:			
	Release*:	1.2.0.0 - Library System Rele	ase 2005		<b>v</b>
	Now enter the following pr	operties for this test run:			
	Notes:				
	Web Browser:	- None -			
	Operating System:	- None			
	(Note: Any custom prop	erties that are read-only h	ave already been populate	I from the Test Set.)	
				Cancel     Nex	t

Before actually executing the test scripts, you need to select the release of the system that you will be testing against and any test run custom properties that have been defined by the project owner. This ensures that the resulting test runs and incidents are associated with the correct release of the system, and that the test runs are mapped to the appropriate custom properties (e.g. operating system, platform, browser, etc.).

If you have not configured any releases for the project, then the release drop-down list will be disabled and the test runs/incidents will not be associated with any particular release. If the test run was launched from a test set, the release and any list custom properties will be pre-populated from the test set itself and will not be changeable on this screen (unless they weren't set by the test set).

Once you have chosen the appropriate release name and/or custom properties, click the <Next> button to begin executing test steps:

	spiraTeam	Welcome, Fred Bloggs   <u>My Profile</u>   <u>Administration</u>   <u>Log Out</u>   Ubrary Information System <b>V</b> My Page Project Home Planning <b>Testing</b> Tracking Reporting	Help?
Ability to create new author (TC000004)         Image: Step 1. (TC16)         Image: Step 2. (TC17)	Test Cases > Test Case Execution   Test S		Role: Manager
Image: Control in the system         Image: Control in the system <td< th=""><th>&lt; Back To Tests</th><th>Pass V Pass All V Blocked G Caution ! Fail X + Pause Release #: 1.2.0.0</th><th></th></td<>	< Back To Tests	Pass V Pass All V Blocked G Caution ! Fail X + Pause Release #: 1.2.0.0	
Person loses book and (TC12)       Expected Result:       Sample Data:         Image: Step 2 - (TC17)       The browser loads the login web page       http://www.libraryinformationsystem.com/beta         Image: Step 2 - (TC12)       Image: Step 2 - (TC12)       Actual Result - Please enter the actual test result if it differs, then click the appropriate button:         Image: Step 5 - (TC12)       Person - Image: Step 7 - Step 7 - Image: Ste	Ability to create new (TC4)         ① Step 1 - (TC16)         ① Step 2 - (TC17)         ① Step 3 - (TC4)         ① Step 5 - (TC4)         ③ Step 6 - (TC4)	Tests that the user can create a new author record in the system Step 1 - Please follow the directions outlined in the box below:	
Image: Step 5 - ITC12       Actual Result. Please enter the actual test result if it differs, then click the appropriate button:         Image: Step 5 - ITC12       Fort - ▼       B / U       B / U       B = 0       Image: Step 5 - ITC12	Person loses book and (TC12)     Y Step 1 - (TC16)     Step 2 - (TC17)     Step 3 - (TC12)		
Logged Incidents Attachments	Step 5 - (TC12)	-Fort-▼ -Sze-▼ B I I I 臣 律 律 「 3 0 」 — ∞ □ □ ◇ Ø	

The screen is divided up into four main elements:

The left-hand navigation pane contains the list of test cases and test steps for the currently executing test case. You can click on the various links to move between the test cases and/or test steps. In addition, each test case and test step has a colored square next to the name that indicates its status (green = "Passed", yellow = "Blocked", orange = "Caution", red = "Failed", gray = "Not Run") in the current test run. If any of the steps are marked as "Failed", "Blocked", or

"Caution" then the overall test case is marked with that status; if *all* the test steps passed, then the overall test case is marked as "Passed"; any other case results in the test case being marked as "Not Run".

- The main pane displays the details of the test case together with the current test step. As the tester you would read the name and description of the test case, then read the description of the test step, carry out the instructions on the system you are testing, and then compare the results with those listed as expected. As described below, depending on how the actual system responds, you will use the buttons on the page to record what actually happened.
- Below the main pane there are two optional sections. The first one allows you to log an incident in the system associated with the test step. For failures this will typically be used to log a bug relating to the failure. However even if you pass a step you can still log an incident, which may be useful for logging non-critical cosmetic items that are not serious enough for a failure to be recorded. This tab also displays any pre-existing incidents that were associated with the test step being viewed.
- The second tab displays a list of attachments that are related to the current test case and/or test step. This list initially contains any documents that have been attached to either the test case in general or the test step in particular. However as you perform the testing, you can attach additional documents to this list that are relevant to the test results (e.g. screenshots of an error page); these attached documents will be associated with both the test run itself and any incidents that are created.

If the expected results are indeed observed, then you simply need to click the <Pass> button to mark the test step as passed, and advance to the next test step, or if all the steps have passed, you can click <Pass All> to pass all the steps at once. This is illustrated in the screen shot below:

spiraTeam	Welcome, Fred Bloggs   My Profile   Administration   Log Out   Ubray Information System	Help?
Spiralea	My Page Project Home Planning Testing Tracking Reporting	
Test Cases > Test Case Execution   Test	Sets   Test Runs   Automation Hosts	Role: Manager
<< Back To Tests	Pass ✓     Pass All ✓     Blocked ⊗     Caution !     Fail X     • Pause     Release #: 1.2.0.0	
□ ♣ Testing New Functionality (TX5) □ ✔ ♠ Ability to create new (TC4) ✔ ♥ Step 1 - (TC16)	Person loses book and needs to report loss (TC000012)	
✓ <sup>(1)</sup> Step 2 - (TC17) ✓ <sup>(2)</sup> Step 3 - (TC4)	Step 1 - Please follow the directions outlined in the box below:	
<ul> <li>✓ Step 5 - (TC4)</li> <li>✓ <sup>(1)</sup> Step 5 - (TC4)</li> <li>✓ <sup>(1)</sup> Step 5 - (TC4)</li> <li>✓ <sup>(1)</sup> Step 6 - (TC4)</li> </ul>	User opens up browser and enters application URL: http://www.libraryinformationsystem.com/beta	
🗆 🗌 🎦 Ability to reassign bo (TC6)		
Person loses book and (TC12)		
<sup>(1)</sup> Step 1 - (TC16) <sup>(1)</sup> Step 2 - (TC17) <sup>(1)</sup> Step 3 - (TC12)	The browser loads the login web page http://www.libraryinformationsystem.com/beta	
Step 4 - (TC12)	Actual Result - Please enter the actual test result if it differs, then click the appropriate button:	
Step 5 - (TC12)     Adding new book and au (TC1)	-Font	
and au (IC)		
	Logged Incidents Attachments	

This will change the icon in the left-hand navigation bar into a green square with a check mark in it. Once all the test steps have passed, you will now have the option of moving to the next test step by clicking the <Next Test> button; if it is the last test case being executed, the <Finish> button will be displayed instead.

If the actual results differ from those expected, you need to enter a description of the result observed and click the <Fail>, <Blocked> or <Caution> button; this is illustrated in the screen-shot below:

spiraTeam	Welcome, Fred Bloggs   My Profile   Administration   Log Out   Library Information System	Help?
Spiralea	My Page Project Home Planning Testing Tracking Reporting	
Test Cases > Test Case Execution   Test S	Sets   Test Runs   Automation Hosts	Role: Manager
<< Back To Tests	Pass ✓ Pass All ✓ Blocked Ø Caution ! Fail X > Pause > Finish Release #: 1.2.0.0	
🗆 攝 Testing New Functionality (TX5)	Person loses book and needs to report loss (TC000012)	
🗆 🗹 🎦 Ability to create new (TC4)		
Step 1 - (TC16)		
✓ <sup>(1)</sup> Step 2 - (TC17)	Step 1 - Please follow the directions outlined in the box below:	
✓ <sup>1</sup> Step 3 - (TC4) ✓ <sup>1</sup> Step 4 - (TC4)	User opens up browser and enters application URL: http://www.librarvinformationsystem.com/beta	
Step 5 - (TC4)		
Step 6 - (TC4)		
🗆 🗔 🎦 Ability to reassign bo (TC6)		
🗆 🗙 🎦 Person loses book and (TC12)	Expected Result: Sample Data:	
🔀 🖺 Step 1 - (TC16)	The browser loads the login web page http://www.libraryinformationsystem.com/beta	
Step 2 - (TC17)		
Step 3 - (TC12) Step 4 - (TC12)		
Step 5 - (TC12)	Actual Result - Please enter the actual test result if it differs, then click the appropriate button:	
B Adding new book and au (TC1	-Fort▼ -Sze▼ B Z U ■ 書 書   汪 汪 律 律   T₂ O₂   -∞ 国 □ ◇ Ø	
	The screen displays a 404 error message page	
	Logged Incidents Attachments	

Unlike the <Pass> button, if you don't enter a description of the actual result, the system will display an error message and re-prompt you again for input. In the case of a failure, both the individual test step and the overall test case will be marked with a red square containing a cross. Similarly, in the case of a blocked test case, they will be marked with a yellow square, and in the case of a caution, they will be marked with a vellow square, and in the case of a caution, they will be marked with an orange square. You will now have the option of moving to the next test step by clicking the <Next Test> button; if it is the last test case being executed, the <Finish> button will be displayed instead.

In addition to logging the failure, you can optionally choose to have the failure automatically result in the creation of a new incident. This is achieved by clicking on the Incident tab and entering a name, type, priority, severity (and any custom properties) for the new incident *before* clicking the <Fail/Caution/Blocked> button:

Actual Resu	ult - Please		it differs, then click the appropriate button:			
Font	▼	Size 🔻	Ⅰ 単 重要≡ 毎日健健 ℡&	— 😄 🛄 🔿 Ӣ		
The screen	displays a 4	04 error message page				
Loggad	Incidents	Attachments				
Loggeu	incluents	Attachments				
Please enter	the following	information to log an incide	t with this test step:			
Name:*	0 11					
Name.	Cannot log	in to the web page correct				
Type:*	Bug		Priority: 1 - Critical	▼		
Owner:	- None -		Severity: 2 - High	V		
Also enter the following custom properties for this new incident:						
Also enter the	e tollowing c	ustom properties for this ne	incident:			
Notes:						
Operating	System:	Windows Vista		V		

The other information needed for the new incident is automatically populated from the test step details. The newly created incident will also be linked to the test step, allowing traceability from within the incidents module. The functionality for managing incidents is described in more detail in section 6. If you need to attach documents to the test run (e.g. screenshots of the error message), you just need to select the Attachments tab and then choose the option to upload the necessary documents, attach the appropriate URLs, or paste in the appropriate screen capture.

Note that the entire test run is saved once you first start execution, so you can always step away from your computer and then resume testing at a later date by locating the test run on your 'My Page' under 'My Pending Test Runs' and choosing to resume testing.

## 5.5. Test Run List

When you click on the Testing > Test Runs global navigation link, you will initially be taken to the test run list screen illustrated below:

Ś		me, Fred Bloggs   My	Profile   Administration   Log	Out   Library Infor	mation System	7			Help?
30	My Pag	ge Project Home	Planning Testi	ng Tracki	ing Report	ing			
Test C	ases   Test Sets   Test Runs							R	ole: Manager
la Refr	esh 🗱 Delete Show/hide columns	Filter							
Display	ring 1 - 15 out of 19 test run(s) for this project								
1	Test Run Name ▲▼	Execution Date AV	Test Set ▲▼	Release ▲▼	Status ▲▼	Est. Dur. ▲▼	Act. Dur. ▲▼	Web Browser AV	Run # ▲▼
			Any 🔻	Any 🔻	Any 🔻			Any 🔻	TR
	Ability to create new book	4-Dec-2003		1.1.0.0.0003	Failed	0.0h	1.2h		TR000018
	Ability to edit existing book	4-Dec-2003		1.1.0.0.0003	Failed	0.1h	1.2h		TR000019
	Ability to create new author	4-Dec-2003		1.1.0.0.0003	Caution	0.2h	1.2h		TR000020
	Ability to create new book	3-Dec-2003		1.1.0.0.0002	Passed	0.0h	1.2h		TR000015
	Ability to edit existing book	3-Dec-2003		1.1.0.0.0002	Blocked	0.1h	1.2h		TR000016
	Ability to create new author	3-Dec-2003		1.1.0.0.0002	Caution	0.2h	1.2h		TR000017
	Ability to create new book	2-Dec-2003		<u>1.1.0.0.0001</u>	Passed	0.0h	1.2h		TR000013
	Ability to edit existing book	2-Dec-2003		<u>1.1.0.0.0001</u>	Passed	0.1h	1.2h		TR000014
	Ability to edit existing author	1-Dec-2003		<u>1.0.1.0</u>	Blocked	0.1h	1.6h		TR000011
	Ability to edit existing book	1-Dec-2003		1.0.0.0	Caution	0.1h	0.8h		TR000010
	Ability to create new book	1-Dec-2003	Testing Cycle for Release 1.1	1.0.1.0	Passed	0.2h	1.5h	Mozilla / Firefox	TR000002
	Ability to edit existing book	1-Dec-2003	Testing Cycle for Release 1.0	1.0.0.0	Passed	0.1h	1.5h		TR000003
	Ability to create new author	1-Dec-2003	Testing Cycle for Release 1.0	1.0.0.0	Failed	0.1h	1.5h		TR000004
	Ability to edit existing author	1-Dec-2003		1.0.2.0	Passed	0.1h	1.5h		TR000005
	Ability to reassign book to different author	1-Dec-2003	Testing Cycle for Release 1.1	1.0.1.0	Passed	0.1h	1.5h		TR000006
Show	15 V rows per page						14	I Displaying page	S of 2 ► ►

The test run list screen displays all the individual test executions performed in the current project, in a filterable, sortable grid. The grid displays the test run number together with fields such as execution status, name, assigned tester, execution date, test set, specified release, etc. The choice of columns displayed is configurable per-user, per-project, giving extensive flexibility when it comes to viewing and searching test runs.

In addition, you can view a more detailed description of the test run by positioning the mouse pointer over the test run name hyperlink and waiting for the popup "tooltip" to appear. If you click on the test run hyperlink, you will be taken to the test run details page described in the next section. Clicking on any of the pagination links at the bottom of the page will advance you to the next set of test runs in the list according to the applied filter and sort-order. There is also a drop-down-list at the bottom of the page which allows you to specify how many rows should be displayed in each page, helping accommodate different user preferences.

### 5.5.1. Sorting and Filtering

You can easily filter and sort the list of test runs as illustrated in the screen-shot below:

6	ni	raTeam	Welcome, Sys	tem Administrator	My Profile   Adm	ninistration   Log	Out   Library Inform	ation System	1			Help?
5,			My Page	Project Home	Planning	Testing	Tracking	Reporting				
Test (	Cas	es   Test Sets   Test Runs									Role: Proj	ect Owner
🖗 Re	fres	h 🗱 Delete Show/hide of	columns 🔻 🔻	Filter								
Displa	ayin	g 1 - 5 out of 5 test run(s) for this	project									
~	Û	Test Run Name ▲▼	Execution Date	Test Set ▲▼	Type ▲▼	Tester ▲▼	Release <b>∆</b> ▼	Status ▲▼	Est. Dur. ▲▼	Act. Dur. ▲▼	Run # ▲▼	Edit
				Any 🔻	Any 🔻	Any 🔻	Any 🔻	Failed 🔻			TR	► Filter
		Ability to create new book	1-Dec-2003		Automated	Fred Bloggs	1.0.0.0	Failed	0.2h	1.2h	TR000012	► Edit
		Ability to create new author	1-Dec-2003	Testing Cycle for Release 1.0	Manual	Joe P Smith	<u>1.0.0.0</u>	Failed	0.1h	1.5h	TR000004	► Edit
	0	Ability to create new book	1-Dec-2003	Testing Cycle for Release 1.0	Manual	Joe P Smith	<u>1.0.0.0</u>	Failed	0.2h	1.3h	TR000001	► Edit
		Ability to edit existing book	4-Dec-2003		Automated	Fred Bloggs	1.1.0.0.0003	Failed	0.1h	1.2h	TR000019	► Edit
		Ability to create new book	4-Dec-2003		Automated	Fred Bloggs	1.1.0.0.0003	Failed	0.0h	1.2h	TR000018	► Edit
Show	N 15	s 🔻 rows per page								🗏 🗏 Displayin	g page 1	S of 1 ► ►
🕏 Re	fres	h 🗱 Delete										
ę <u>10</u>												

To filter the list by any of the visible fields, you simply choose an item from the appropriate drop-down list, and for the other fields, you enter a free-text phrase then click <Filter> or press the <ENTER> key to apply the different filters. Note that the name field is searched using a "LIKE" comparison, so that searching for "database" would include any item with the word database in the name.

To change the column that is sorted, or to change the direction of the current sort, simply click on the up/down arrow icon in the appropriate column. The currently sorted column is indicated by the larger, white arrow with the back-border. In the screen-shot above, we have filtered on test runs that have failed, sorted in order of increasing release version number.

Clicking on Filter > Clear Filter removes any set filters and expands the test run list to display all test runs for the current project, and clicking on Filter > Save Filter allows you to save the filter to your 'My Page' for use in the future. The list of saved filters can also be retrieved by clicking Filter > Retrieve Filter.

## 5.6. Test Run Details

When you click on any of the individual test runs in the test run list, you are taken to the Test Run details page (not to be confused with the Test Case details page!) shown below:

spiraTeam	Welcome,	iystem 🔻	Help?			
spirarean	My Page	Project Home F	Planning Testing	Tracking	Reporting	
Test Cases   Test Sets   Test	t Runs > Test Run Detai	s   Automation Hosts				Role: Manager
< Back to Test Run List	🖹 Save 🗱 Delete	🖗 Refresh 🛛 🖨 Prin	t			
28-Sep-2010 (TR000052)	Test Run: Ability to	create new book [TR:0	00001]			
28-Sep-2010 (TR000050)	Tests that the user can	create a new book in the s	vstem			1
4-Dec-2003 (TR000020)			Jotom			
4-Dec-2003 (TR000019)						
4-Dec-2003 (TR000018)	Release #:	1.0.0.0 - Library System Release	1 🔻 🔿	Est. Duration:	0 hours 10 minutes	
3-Dec-2003 (TR000017)	Tester Name:	Joe P Smith		Actual Duration:	1 have 15 minutes	
3-Dec-2003 (TR000016)	rester name.	JOE F Smith	•	Actual Duration.	1 hours 15 minutes	
3-Dec-2003 (TR000015)	Test Set:	Testing Cycle for Release	<u>1.0</u> 🖣	Execution Date:	12/1/2003 10:45:20 AM	
2-Dec-2003 (TR000014)	Test Case #:	TC000002 🎝		Execution Status:	Failed	
2-Dec-2003 (TR000013)				Test Due Tuest		
1-Dec-2003 (TR000012)	Automation Host:			Test Run Type:	Manual	
1-Dec-2003 (TR000011)						
1-Dec-2003 (TR000010)	Test Run Steps 🍍	Automation	Custom Properties *	Attachments *		

This page consists of three panes:

- > The left hand navigation pane displays a list of the last fifteen (15) runs
- The main pane displays the details of the test run itself (name, description, release, test set, estimated and actual duration, tester name, test run type, automation host, etc.)

The tab-control displays the list of test run steps (populated if a manual run executed by a user), the automated test results (populated by an test automation engine such as NUnit, JUnit, QuickTest Pro, etc.), any custom properties set for the run, and a list of any documents/URLs/screenshots that were attached to the test results.

## 5.6.1. Editing a Test Run

When reviewing the test run, you may find that you need to change the results of the test run (e.g. the user selected the wrong release or custom property value). Many of the fields are editable at a later date, and to make changes, just modify the appropriate fields and click [Save].

#### 5.6.2. Deleting the Test Run

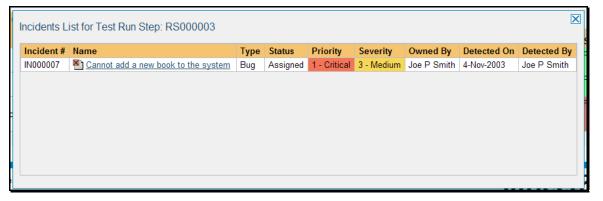
If you need to delete a test run that was erroneously captured, all you need to do is click on the link to access the invalid test run and then click the <Delete> button to remove it from the system. This will then force the system to update the status of the test case itself from the other logged test runs.

## 5.6.3. Test Run Steps

In the case of a manual test run, this tab displays all the steps of the test case as they appeared during the test run in question. This means that if the test steps were changed after running the test, the list here will reflect the original information.

Test Run	Steps *	Automation	Custom Properties *	Attachments *			
Run Step #	Test Step	Description	Expected Result	Sample Data	Test Case/Step	Actual Result	Status
RS000001	User logs i	n to application	User taken to main menu screen		TC000017 / TS000019		Passed
RS000002	User clicks	link to create book	User taken to first screen in wizard		TC000002 / TS000002		Passed
RS000003		s books name and n clicks Next	User taken to next screen in wizard	Macbeth, William Shakespeare	TC000002 / TS000003	An error page is displayed - "No such object or with block variable at line 473" >View Incidents	Failed

Each test run step is displayed along with the description, expected result, suggested sample data, a link back to the current version of the test step in question, the actual result and the execution status for this step *in this particular test run*. Where an actual result was recorded, you will have an additional hyperlink "View Incidents" displayed. This allows you to view any incidents that are associated with this particular test run step:



Clicking on the link will open up a popup dialog box that displays a list of all the incidents associated with the selected test run step. Each of the incidents listed will reflect the most up-to-date information regarding that incident, including its type, status, priority, name, assigned owner, detection date and who first detected it. Clicking on the incident number hyperlink will take you to the details page for that incident, which is described in section 6.2.

#### 5.6.4. Automation

In the case of an automated test run, this tab will display the details of the test run as reported from the test runner application. These details will vary depending on the type of automated tool being used, but typically they include the name of the automated test runner, the number of assertions raised, the name of the corresponding test case in the tool, the status of the test run and a detailed error message, and stack-trace in the case of a failure. An example test run as reported from the NUnit automated test runner is illustrated below:

Test Run Step	ps Automation *	Custom Properties *	Attachments		
Runner Name:	NUnit	Assert Co	ount: 1		
Message:	Expected 1 but 2 was found	Test Nan	ne: _01_TestCreate	Book	
Details:	trace for more information about Exception Details: System.Null Source Error: Line 215: Response.Write (" <op &amp; vbCrLf) Line 216:Else</op 	ption occurred during the e the error and where it origi ReferenceException: Objec tion selected value=""" & M	nated in the code. It variable or With block v: AonthCheck(MonthCount)	b request. Please review the stack riable not set. & """>" & MonthCount & "" MonthCount & "" & vbCrLf)	

Details on how to use SpiraTeam® in conjunction with an automated testing tool are provided in the *SpiraTeam® Automated Testing Integration Guide,* which can be downloaded from the Inflectra<sup>®</sup> website.

#### 5.6.5. Custom Properties

In this mode, the tab displays any custom properties that the project owner has defined for test runs. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*. Assuming that custom properties have been defined for your project, you will see a list of optional parameters that have been set during the test run:

Test Run Steps	Automation *	Custom Properties *	Attachments	
The following are the cust	om properties of this artifac	et:		
Notes:				
Web Browser:	Opera			▼
Operating System:	Windows 2003			▼

For test runs, custom properties are most commonly used to capture and record the system configuration that the test was performed on – for example the operating system, hardware platform, and web-browser.

#### 5.6.6. Attachments

In this mode, the lower section of the screen displays the list of documents that have been "attached" to the test run. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.

Test Run Steps * Stack Trace		Custom Properties *	Atta	chments *			
> Add Attachment   Ren	nove   <u>Refresh</u>   <u>Apply</u>	Filter   Clear Filters					
✓ Document Name	<b>↓</b> ▼	Type ▲▼	Size ▲▼	Edited By ▲▼	Edited On ▲▼	Uploaded By ▲▼	Doc # ▲▼
		Any 🔻		Any 🔻		Any 🔻	DC
Error Logging-in	Screen-shot.gif	Screen Shot	48 KB	Fred Bloggs	24-Apr-2006	Fred Bloggs	DC000003
Show 15 🔻 rows per pag						l≪ ≪ Displaying page 1	\$a of 1 ▶ ♦

The attachment list includes the filename that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as a tooltip.

To actually view the document, simply click on the filename hyperlink and a new web browser window will open. Depending on the type of file, this window will either display the document or prompt you for a place to save it on your local computer. To remove an existing attachment from a test run, simply click the <Remove> button and the attachment will be removed from the list.

To attach a new document or web link to the test run, you need to click on the "Add Attachment" hyperlink to open the "Add Attachment" dialog box. There are three different types of item that can be attached to a test run:

- To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.
- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard, click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename before uploading if you want it to be displayed with the correct icon in the attachment list.

## 5.7. Test Set List

As well as being able to organize test cases into folders, you can also create separate groupings of test cases called test sets which can then be assigned to testers as a package. To view the list of test sets for a project, click on Testing > Test Sets in the global navigation:

cni	Team	Welcome, Fred Bloggs	My Profile   Admin	istration   Log Out	Library Information System	n 🔻			Help?
spii		My Page Project H	Home Planning	Testing	Tracking	Reporting			
Test Cases	s   Test Sets   <u>Test Runs</u>	Automation Hosts						l.	Role: Manager
lnsert	🗱 Delete 🔹 🔶 Indent	Outdent Show Level Y	Refresh	Edit Execute	Show/hide columns	- V Filte	<u>r</u>		
✓ @	Test Set Name		Execution Status	Planned Date	Last Executed	Owner	Status	Test Set #	Edit
			Any 🔻			- Any 🔻	- Any 🔻	TX	► Filter
	E Punctional Test Sets			5-Feb-2007			In Progress	TX000008	► Edit
	Testing Cycle for Relea	ase 1.0 (7)		5-Feb-2007	1-Dec-2003	Joe P Smith	In Progress	TX000001	► Edit
	Testing Cycle for Relea	ase 1.1 (9)		7-Feb-2007	1-Dec-2003	Joe P Smith	Not Started	TX000002	► Edit
	a Testing New Functiona	ality (4)		10-Feb-2007	28-Sep-2010	Fred Bloggs	In Progress	TX000005	► Edit
	Exploratory Testing (2)	)				Fred Bloggs	Deferred	TX000006	► Edit
	E 🖻 Regression Test Sets						Completed	TX000009	► Edit
	Regression Testing for	Windows XP (4)				Fred Bloggs	Completed	TX000003	► Edit
	Regression Testing for	Windows Vista (4)					Completed	TX000004	► Edit
Show 15	<ul> <li>rows per page</li> </ul>						ia ⊲ D	isplaying page 1	S of 1 ► ►

The test set list consists of hierarchical list of all the test sets in the current project organized into folders. When you create a new project, this list will initially be empty, and you will have to use the <Insert> button to start adding test sets to the system.

Each test set is listed along with the number of test cases contained (in parenthesis), the aggregate execution status of the contained test cases (using a graphical bar-chart), the date that the test set has been scheduled to be executed (planned date), the date that it was last executed, the person currently assigned to execute the test set, the status and the test set id. Clicking on a test set's hyperlink will take you to the test set details page for the item in question.

## 5.7.1. Insert

Clicking on the <Insert> button inserts a new test set *before* the currently selected (by means of the check-box) test set. Clicking the <Insert> button without selecting a test set will insert a new test set at the end of the list.

## 5.7.2. Indent / Outdent

Clicking on the <Indent> button indents all the test folders / test sets whose check-boxes have been selected. You cannot indent a test set or folder if it is *below* a test set, as test sets are not allowed to have child items. Clicking on the <Outdent> button de-indents all the test folders / test sets whose check-boxes have been selected.

## 5.7.3. Delete

Clicking on the <Delete> button deletes the currently selected test sets. It will delete the association between the test set and its contained test cases, but it will not delete the test cases themselves.

## 5.7.4. Execute

Clicking on the <Execute> button executes all the test sets selected. The test execution functionality of SpiraTeam® is explained in more detail in section 5.3.

### 5.7.5. Refresh

Clicking on the <Refresh> button simply reloads the list of test sets. This is useful if other people are making changes to the test set list and you want to make sure that you have the most current version.

## 5.7.6. Edit

Each test set in the list has an <Edit> button display in its right-most column. When you click this button or just *double-click* on any of the cells in the row, you change the item from "View" mode to "Edit" mode. The various columns are made editable, and <Update> <Cancel> buttons are displayed in the last column:

spiraTeam	Welcome, Fred Bloggs	s   My Profile   Lo	g Out   Library Informa	tion System 💌				Help?
spirarean	My Page Project	Home Plann	ing Testing	Tracking	Reporting			
Test Cases   Test Sets								Role: Manager
<u>Insert</u> S <u>Delete</u> → <u>Indent</u>	Outdent Show Level	💌 🗞 Refre	sh 🛛 🎦 Edit 🕞	Execute Show	/hide columns 💌	Tilter		
✓ 🐵 Test Set Name	E	xecution Status	Planned Date	Last Executed	Owner	Status	Test Set #	Edit
	-	- Any 🔻			Any 🔻	Any 🔻	TX	► Filter
E E Functional Test Sets			5-Feb-2007			In Progress	TX000008	► Edit
Testing Cycle for Release	1.0		2/5/2007	1-Dec-2003	Joe P Smith 🔻 🗐	In Progress 🔻 🗐		Update     Cancel
Testing Cycle for Release	1.1		2/7/2007	1-Dec-2003	Joe P Smith	Not Started		
Testing New Functionality (	(4)		10-Feb-2007	1-Dec-2003	Fred Bloggs	In Progress	TX000005	► Edit
Exploratory Testing (2)				22-Jan-2009	Fred Bloggs	Deferred	TX000006	► Edit
Regression Test Sets						Completed	TX000009	► Edit
Regression Testing for Win	dows XP (2)			1-Dec-2003		Completed	TX000003	► Edit
Regression Testing for Win	dows Vista (2)			1-Dec-2003		Completed	TX000004	► Edit
Show 15 Trows per page							≪	ig page 1 S of 1 ► ₩
⊕ Insert  Structure Delete	Outdent Execute							

If you click <Edit> on more than one row, the <Update> and <Cancel> buttons are only displayed on the first row, and you can make changes to all the editable rows and then update the changes by clicking the one <Update> button. Also, if you want to make the same change to multiple rows (e.g. to change the owner of five test sets from "Fred Bloggs" to "Joe Smith"), you can click on the "fill" icon to the right of the editable item, which will propagate the new value to all editable items in the same column.

When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information. Alternatively, pressing the <ENTER> key will commit the changes and pressing the <ESCAPE> key will cancel the changes.

## 5.7.7. Show Level

Choosing an indent level from the 'Show Level' drop down box allows you to quickly and easily view the entire test set list at a specific indent level. For example you may want to see all test set drilled-down to the *third* level of detail. To do this you would simply choose 'Level 3' from the list, and the test sets will be expanded accordingly

## 5.7.8. Show / Hide Columns

This drop-down list allows you to change the fields that are displayed in the test set list as columns for the current project. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. This is stored on a per-project basis, so you can have different display settings for each project that you are a member of. The fields can be any of the built-in fields or any of the custom properties set up by the project owner.

## 5.7.9. Filtering

You can easily filter the list of test sets as illustrated in the screen-shot below:

Spi	raTeam	My Page	My Page Project Home Planning Testing Tracking Reporting							
est Case	es   Test Sets									Role: Manag
Insert	🗱 Delete 🗼 Indent	Outdent	Show Level 💌	Refr	resh 🖓 Edit 👂	Execute - Show/hi	de columns 💌	Tilter		
✓ 8	Test Set Name		Execution 5	status	Planned Date	Last Executed	Owner	Status	Test Set #	Edit
			> 0% Failed	•			Any 🔻	Any 🔻	TX	► Filter
	E C Functional Test Sets	5			5-Feb-2007			In Progress	TX000008	► Edit
	Testing Cycle for Re	elease 1.0 (7)			5-Feb-2007	1-Dec-2003	Joe P Smith	In Progress	TX000001	► Edit
	Testing New Function	onality (4)			10-Feb-2007	1-Dec-2003	Fred Bloggs	In Progress	TX000005	► Edit

To filter the list by any of the displayed columns, you either choose an item from the appropriate dropdown list or enter a free-text phrase (depending on the type of field) then click <Filter> or press the <ENTER> key to apply the different filters. Note that the name field is searched using a "LIKE" comparison, so that searching for "database" would include any item with the word database in the name. The other freetext fields need to be exact matches (e.g. dates, test set numbers). In the screen-shot above, we are filtering on test sets that contain at least one failed test case.

In addition, if you have a set of filters that you plan on using on a regular basis, you can choose the option Filter > Save Filter to add the current filter to the list of saved filters that appear on your 'My Page'. The list of saved filters can also be retrieved by clicking Filter > Retrieve Filter.

## 5.7.10. Copying Test Sets

To copy one or more test sets, simply select the check-boxes of the test sets you want to copy and then select the Edit > Copy menu option. This will copy the current test set selection to the clipboard. Then you should select the place where you want the test sets to be inserted and choose the Edit > Paste option.

The test sets will now be copied into the destination location you specified. The name of the copied test sets will be prefixed with "Copy of..." to distinguish them from the originals.

#### 5.7.11. Moving Test Sets

To move test sets in the hierarchy, there are two options:

1. Click on the icon the test set/folder you want to move and then drag the icon to the location you want it moved. The background of the destination location will change as the icon is dragged over it to illustrate where it will be inserted.

Once you have the test set/folder positioned at the correct place that you want it inserted, just release the mouse button and the test set list will be refreshed, with the item moved to the desired location.

 Alternatively you can simply select the check-boxes of the test sets you want to move and then select the Edit > Cut menu option. This will cut the current test set selection to the clipboard. Then you should select the place where you want the test sets to be inserted and choose the Edit > Paste option. The test sets will now be moved into the destination location you specified.

#### 5.7.12. Right-Click Context Menu

SpiraTeam® provides a shortcut – called the *context menu* - for accessing some of the most commonly used functions, so that you don't need to move your mouse up to the toolbar each time. To access the context menu, right-click on any of the rows in the test set list and the following menu will be displayed:

Testing Cycle for Release 1.0 (7)	- Insert Test Set	5-Feb-2007	1-Dec-2003	Joe P Smith	In Progress
Testing Cycle for Release 1.1 (9)	- Insert Folder	7-Feb-2007	1-Dec-2003	Joe P Smith	Not Started
Testing New Functionality (4)	- Delete Item	10-Feb-2007	28-Sep-2010	Fred Bloggs	In Progress
Exploratory Testing (2)	- Indent Item			Fred Bloggs	Deferred
E 🖻 Regression Test Sets	- Outdent Item				Completed
Regression Testing for Windows XP (4)	- Copy Items			Fred Bloggs	Completed
Regression Testing for Windows Vista (4)	- Cut Items				Completed
▼ rows per page	- Paste Items				

You can now choose any of these options as an alternative to using the icons in the toolbar.

## 5.8. Test Set Details

When you click on a test set item in the test set list described in the previous section, you are taken to the test set details page illustrated below:

spiraTeam	Welcome, Fre	d Bloggs   My Profil	e   Administration	Log Out   Libra	ary Information Syster	n 🔻		Help?
spirarcail	My Page	Project Home	Planning	Testing	Tracking	Reporting		
Test Cases   Test Sets > Test Set Det	ails   <u>Test Runs</u>	Automation Hosts						Role: Manager
< Back to Test Set List	🖺 Save 🛛 🖓 Co	py 🗟 <u>Refresh</u>	🗱 Delete 🛛 🕨	Execute 🛛 🛱 Prir	nt 🛛 Email	1 Subscribe		
E Functional Test Sets	Test Set: Testing	g Cycle for Releas	se 1.0 [TX:00000	1]				
Testing Cycle for Release 1.0	Name*:	Testing Cycle for R	elease 1.0					
Testing Cycle for Release 1.1 Testing New Functionality	Description:	- Font -	▼ Size ▼	BIU		= (=   T <sub>2</sub> d2   - @ 🔤 🗖	02	
Exploratory Testing		This tests the functi	onality introduced in	release 1.0 of the	library system			
	Owner:	Joe P Smith	•		Creator*:	Fred Bloggs	T	
	Release:	1.0.0.0 - Library System	Release 1	▼	Type*:	Manual	V	
	Automation Host:	None	▼		Created On:	1/2/2007 12:00:00 AM		
	Status*:	In Progress			Last Executed:	-		
	Planned Date:	2/5/2007 🛅 12	00:00 AM		Last Updated:	9/24/2010 12:16:01 PM		
	Test Cases 🐐	Test Runs 🛎	Comments	Custom Props *	Attachme	nts History		

This page is made up of three areas; the left pane is the navigation window, the upper part of the right pane contains the test set detailed information itself, and the bottom part of the right pane contains related information about the test set.

The navigation pane consists of a link that will take you back to the test set list, as well as a list of the peer test sets to the one selected. This latter list is useful as a navigation shortcut; you can quickly view the detailed information of all the peer test sets by clicking on the navigation links without having to first return to the test sets list page.

The top part of the right pane allows you to view and/or edit the details of the particular test set. You can edit the various fields (name, description, etc.) and once you are satisfied with them, simply click either the <Save> or <Save and New> button at the top of the page to commit the changes. In addition you can delete the current artifact by choosing <Delete>, discard any changes made by clicking <Refresh> or print it by clicking <Print>.

Test Sets can be specified as being either for "Manual" or "Automated" test runs. If you choose Manual, then the test set can be executed by a tester from their "My Page." However if you choose "Automated", the test set will be executed by the automation host you specified. In this case, the *planned date and time* will be used by the automated test engine to know when to execute the automated test scripts. For manual test sets, only the date component is used.

The lower part of the right pane can be switched between different views by clicking the appropriate tab. Initially the pane will be in "Test Cases" mode, but it can be switched to "Test Runs", "Comments",

"Custom Properties", "Attachments" and "History" modes if so desired. Each of the views is described separately below. In addition there is a shortcut link "Execute This Test Set" that allows you to execute all the tests in the set against the release specified in the test set.

## 5.8.1. Test Cases

In this mode, the main pane displays the list of test cases contained within the test set. You can add, remove, reposition and remove test cases from the list. The execution status displayed next to each test case is the most recent execution status of the test case *when run in the context of the current test set*.

Test Cases *	Test Runs *	Comments		Custom Props	s # Attac	hments		History			
> Add Tests   Rei	move Tests   <u>Refresh</u>	Edit Param	eters   E	xecuteTests	2				Est. Duration: 0.7h	/ Actual Durati	on: 4.3h
🗌 🖲 Test Case Name Owner Priority Est. Duration Act. Duration Last Executed Execution State								Execution Status	Test Case #	Edit	
🔲 🖉 🗄 Ability	to create new book			1 - Critical	0.2h	1.3h		1-Dec-2003	Failed	TC000002	► Edit
Ability	to edit existing book			1 - Critical	0.1h	1.5h		1-Dec-2003	Passed	TC000003	► Edit
□ 0 Ability to create new author 1 - Critical 0.1h 1.5h 1-Dec-2003 Failed TC000004 Fedit											
Ability	to edit existing author			2 - High	0.1h				Not Run	TC000005	► Edit
Ability	to reassign book to di	fferent author		2 - High	0.1h				Not Run	TC000006	► Edit
🔲 🗄 Book r	management			2 - High	0.1h				Not Run	TC000008	► Edit
Author management 2 - High 0.1h Not Run TC000009											
Show 15 Trows	Show 15 🔻 rows per page 1 🗣 of 1 🕨 🕅										
To change the order	o change the order of the test cases, please click on the test case icon and drag it to the appropriate place in the list.										

To move the test cases, you simply need to click the test case icon and drag it to the appropriate position in the list. Whilst you are dragging the icon, the border in the list will change color to indicate where it will be moved to.

To modify an existing Test Case you simply need to click on the <Edit> button in the right-most column, or just *double-click* on the cells in the row. That will switch the selected row into Edit mode. The owner field can then be set at the test case level. This is useful in situations where you want the different test cases in the set to be executed by different testers (e.g. in integrated, scenario tests)

Test	t Cases *	Test Runs *	Comments	Cu	stom Props	*	Attachments	Н	story			
> <u>Add</u>	l Tests   <u>Re</u> r	nove Tests   <u>Refresh</u>	Edit Parame	ters   Exec	uteTests					Est. Duration: 0	.7h / Actual [	Duration: 4.3h
U (	Test Case	Name	C	Owner		Priority	Est. Duration	Act. Duration	Last Executed	Execution Status	Test Case #	Edit
U U	Ability 1	to create new book				1 - Critical	0.2h	1.3h	1-Dec-2003	Failed	TC000002	► Edit
	Ability t	o edit existing book	E	- None	▼≣	1 - Critical	0.1h	1.5h	1-Dec-2003	Passed	TC000003	<ul><li>Update</li><li>Cancel</li></ul>
o o	Ability 1	to create new author				1 - Critical	0.1h	1.5h	1-Dec-2003	Failed	TC000004	► Edit
	Ability 1	to edit existing author				2 - High	0.1h			Not Run	TC000005	► Edit
	Ability	to reassign book to dif	ferent author			2 - High	0.1h			Not Run	TC000006	► Edit
	Book m	nanagement				2 - High	0.1h			Not Run	TC000008	► Edit
	Author	management				2 - High	0.1h			Not Run	TC000009	► Edit
Show	Show 15 🔻 rows per page 🛛 🗣 of 1 🕨 🖂											

To add a new test case to the Test Set, you need to click on the "Add Test Cases" hyperlink to display the popup dialog box:

_	Add Test Case to the Test Set Choose the test case(s) to add to the current test set:	
	✓ Test Case	
١	🔲 🖻 🛱 Functional Tests	
	Ability to create new book	1
	Ability to edit existing book	
	Ability to create new author	1
	Ability to edit existing author	1
	Ability to reassign book to different author	1
		1
R	> <u>Add</u>   <u>Cancel</u>	

You can then select the checkboxes of the individual test cases or whole folders of test cases that you want to add to the test set. Once you have selected the desired items, click the <Add> button to actually add them to the test set.

Test cases in SpiraTeam can have parameters defined which are available to specify the text that should be used to replace certain tokens in the test case. In addition these parameters may be used by certain test automation engines. In addition to being able to specify the parameter values when linking the test cases as test steps of a parent test case, you can also specify the parameter values from the Test Set.

To view/edit the parameter values being set by the test case, you should either select the checkbox of a test set and click "Edit Parameters" at the top of the section, or right-click on the test case and choose "Edit Parameters":

	U	Test Case Name		Owner	Priority	Est. Duration	Act. Duration	Last Executed	Execution	Status	Test Case #
	U	Ability to create new book			1 - Critical	0.2h	1.3h	1-Dec-2003	Failed		TC000002
$\checkmark$		Ability to edit existing book	Incot	Test Ca	1 Critical	0.1h	1.5h	1-Dec-2003	Passed		TC000003
	U	Ability to create new author		ve Test	ical	0.1h	1.5h	1-Dec-2003	Failed		TC000004
		Ability to edit existing author	- Edit F	a				1	×	1	TC000005
		Ability to reassign book to differer		– Edi	t Test Cas	e Parameters	3				TC000006
		Book management	- Exect	_	ease fill ou	the naramete	rs for this test o	ase entry:	~		TC000008
		Author management			owserName:			aco ona ji			TC000009
Show	N :	15 🔻 rows per page				safari				splayi	ng page 1 🔹
To al	_		liels en th		gin:	fred1			=	-	
TO CH	an	ge the order of the test cases, please c	ICK ON U	le pa	issword:	unknown				_	
tion   S	pira	aTeam v3.0 (Beta)		ur	l:	www.testing	g.com		~	:	flagt
				<					>	I	nflect
								> Update	Cancel		

You can then specify the values of the parameters that the test set will pass to the test case. Once you have entered / modified the values, click [Update] to commit the changes.

## 5.8.2. Test Runs

This view displays the list of all the test runs executed against the test set. Each test run is listed together with the date of execution, the name of the test case, the name of the tester, the release/version of the system that the test was executed against, the overall execution status for the test case in that run and a link to the actual test run details (see section 5.6). In addition, you can choose to display any of the custom properties associated with the test run.

lest	Cases * Test Runs *	Custom Props *	Attachments	History						
> <u>Ref</u>	resh   Apply Filter   Clear Filter	s   - Show/hide column	16 🔻							
/ 0	Test Run Name ▲▼	Execution Date AV	Test Set ▲▼	Release ▲▼	Status AV	Est. Dur. ▲▼	Act. Dur. AV	Web Browser AV	Operating System ▲▼	Run # A
			Testing Cycle f 🔻	Any 🔻	- Any - 🔻	1		- Any - 🔻	- Any - 🔻	TR
	Ability to create new author	1-Dec-2003	Testing Cycle for Release 1.0	1.0.0.0	Failed	0.1h	1.5h			TR000004
	Ability to edit existing book	1-Dec-2003	Testing Cycle for Release 1.0	<u>1.0.0.0</u>	Passed	0.1h	1.5h			TR000003
•	Ability to create new book	1-Dec-2003	Testing Cycle for Release 1.0	<u>1.0.0.0</u>	Failed	0.2h	1.3h	Internet Explorer	Windows XP	TR000001

The "customize columns" drop-down list allows you to change the fields that are displayed in the test run list as columns. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. The displayed columns can be any standard field or custom property.

You can also filter the results by choosing items from the filter options displayed in the sub-header row of each field and clicking the "Apply Filter" link. In addition, you can quickly sort the list by clicking on one of the directional arrow icons displayed in the header row of the appropriate field.

## 5.8.3. Comments

The Comments tab allows users to add and view discussions relating to the test set:

Test Cases *	Test Runs *	Comments	Custom Props *	Attachments	History	
To add a new comm	ent to this requiremer	nt, please enter it be	low and click the [Sa	ve] button:		
Font	Size	▼ B <i>I</i> <u>U</u>	[ ≣≣≣   <u> </u> ≣	健健 14-04	ee 🔟 🔜 🔷 💆	
Existing Com	ments					

Existing comments are displayed in order underneath the textbox in date order. To add a new comment, simply enter it into the textbox, and click the Save button.

## 5.8.4. Custom Properties

In this mode, the main pane displays any custom properties that the project owner has defined for test sets. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*.

Test Cases *	Test Runs *	Comments	Custom Props *	Attachments	History	
The following are the	custom properties of	this artifact:				
Notes:						
Operating System	i: Windows 7				▼	

Assuming that custom properties have been defined for your project, you will see a list of optional parameters that can be set on the test set. These can be either freetext or drop-down-lists. If you want any of the custom list properties to prepopulate the corresponding value of the test run (e.g. you want all test runs to be marked with Operating System = Windows XP) make sure that both the test set and the test run are configured to use the same custom list.

#### 5.8.5. Attachments

In this mode, the main pane displays the list of documents that have been "attached" to the test set. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.



The attachment list includes the filename that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as a tooltip.

To actually view the document, simply click on the filename hyperlink and a new web browser window will open. Depending on the type of file, this window will either display the document or prompt you for a place to save it on your local computer. To remove an existing attachment from a test set, simply click the <Remove> button and the attachment will be removed from the list.

To attach a new document or web link to the test set, you need to click on the "Add Attachment" hyperlink to open the "Add Attachment" dialog box.

Add New Docume	nt	Add New Docume	ent		×	Add New Docume	ent	X
Type:* Filename:* Description:	File     URL     Screenshot     Browse	Type:* URL:* Description:	O File	Screenshot		Type:* Screenshot:*	O File O URL 0	Screenshot
Document Type:* Document Folder:* Tags:	Root Folder	Document Type:" Document Folder:" Tags:	Functional Specification Root Folder	v V Vpload I Ca	- - - ncel	Description:	> Paste image from clip	sboard
						Document Type:* Document Folder:* Tags:	Functional Specification Root Folder	▼ ▼ > Upload I Cancel

There are three different types of item that can be attached to a test set:

- To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.
- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard, click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename before uploading if you want it to be displayed with the correct icon in the attachment list.

#### 5.8.6. History

In this mode, the main pane displays the list of changes that have been performed on the test set artifact since its creation. The change history displays the date that each change was made, together with the fields that were changed, the old and new values and the person who made the change. This allows a complete audit trail to be maintained of all changes in the system.

## 5.9. Automation Host List

This section outlines how to use the Automation Host Management features of SpiraTeam® to manage the different host systems that will be running automated tests in your environment. Typically when scheduling automated tests you will want to execute the same tests on multiple computers running different environments.

SpiraTeam allows you to build a master list of automation hosts in each project, which can be used to schedule test sets containing automated test cases against. Please refer to the Test Set section of this manual for more information on managing and scheduling test sets.

When you click on the Testing > Automation Hosts global navigation link, you will initially be taken to the automation host list screen illustrated below:

spiraTeam	Welcome, Fred Bloggs   My Profi	le   Administration	Log Out   Ubrary Information	System 🔻		Help?								
spirarcail	My Page Project Home	Planning	Testing Tracking	Reporting										
Test Cases   Test Sets   Test Runs	Automation Hosts					Role: Manager								
🕂 New Host 🗱 Delete 🛛 🖗 Refresh	- Show/hide columns 🔻 💙	Filter												
Displaying 1 - 4 out of 4 automation hosts(s) for	r this project													
✓	Token ▲▼	Active ▲▼	Last Modified ▲▼	Host # <b>∆</b> ▼	Web Browser ▲▼	Operating System ▲▼								
		- Any - 🔻		AH	- Any 🔻	- Any 🔻								
Windows XP Host	WinXP	Yes	1-May-2009	AH000001	Internet Explorer	Windows XP								
Windows Vista Host #1	WinVista1	Yes	2-May-2009	AH000002	Internet Explorer	Windows Vista								
Windows Vista Host #2	WinVista2	Yes	3-May-2009	AH000003	Mozilla / Firefox	Windows Vista								
Windows 7 Host	Win7	Yes	4-May-2009	AH000004	Internet Explorer	Windows 7								
Show 15 Trows per page	'				н	Show 15 ▼ rows per page 1 \$ of 1 > >								

The automation host list screen displays all the automation hosts entered for the current project, in a filterable, sortable grid. The grid displays the automation host ID together with fields such as name, description, last modified, token, and any custom properties. The choice of columns displayed is configurable per-user, per-project, giving extensive flexibility when it comes to viewing and searching automation hosts.

In addition, you can view a more detailed description of the automation host by positioning the mouse pointer over the host name hyperlink and waiting for the popup "tooltip" to appear. If you click on the host name hyperlink, you will be taken to the automation host details page described in section 5.9.2. Clicking on any of the pagination links at the bottom of the page will advance you to the next set of hosts in the list according to the applied filter and sort-order. There is also a drop-down-list at the bottom of the page which allows you to specify how many rows should be displayed in each page, helping accommodate different user preferences.

One special column that is unique to automation hosts is the "Token" field. This needs to contain a short textual identifier that uniquely identifies each automation host in the project. This will be used by each host computer to identify itself to SpiraTeam.

### 5.9.1. Sorting and Filtering

You can easily filter and sort the list of automation hosts as illustrated in the screen-shot below:

Ś	oiraTeam	Welcome, Fred E	Welcome, Fred Bloggs   My Profile   Administration   Log Out   Ubray Information System V									
-		My Page F	Project Home Plan	nning Te	esting Tracking	Reporting						
Test C	ases   Test Sets   Test Runs	Automation Hosts						Role: Manage				
Nev	v Host 🗱 Delete 🛛 😵 Refresh	- Show/hide column	s 🔻 🍸 <u>Filt</u>	er								
Display	ving 1 - 3 out of 3 automation hosts(	s) for this project										
~	e Host Name ▲▼	Token ▲▼	A	ctive ▲▼	Last Modified AV	Host # <b>∆</b> ▼	Web Browser ▲▼	Operating System ▲▼				
				- Any 🔻		AH	Internet Explore	- Any 🔻				
	Kindows XP Host	WinXP	Y	es	1-May-2009	AH000001	Internet Explorer	Windows XP				
	Kindows Vista Host #1	WinVista1	Y	es	2-May-2009	AH000002	Internet Explorer	Windows Vista				
	Windows 7 Host	Win7	Y	es	4-May-2009	AH000004	Internet Explorer	Windows 7				
Show	15 Trows per page							Displaying page 1 S of 1 ► ►				

To filter the list by one of the displayed fields, you simply choose an item from the appropriate drop-down list or enter a free-text phrase then click <Filter> or press the <ENTER> key to apply the different filters. Note that the name field is searched using a "LIKE" comparison, so that searching for "database" would include any item with the word database in the name. The other freetext fields need to be exact matches (e.g. dates, incident numbers).

To change the column that is sorted, or to change the direction of the current sort, simply click on the up/down arrow icon in the appropriate column. The currently sorted column is indicated by the larger, white arrow with the back-border.

Clicking on Filter > Clear Filter removes any set filters and expands the host list to display all automation hosts in the current project, and clicking on Filter > Save Filter allows you to save the filter to your 'My Page' for use in the future. The list of saved filters can also be retrieved by clicking Filter > Retrieve Filter.

## 5.9.2. New Host

Clicking on the <New Host> button adds a new automation host to the list with a default name and token.

## 5.9.3. Delete

Clicking on the <Delete> button deletes the automation hosts whose check-boxes have been selected in the host list.

### 5.9.4. Refresh

Clicking on the <Refresh> button simply reloads the list of automation hosts; this is useful when new hosts are being added by other users, and you want to make sure you have the most up-to-date list displayed.

### 5.9.5. Show / Hide Columns

This drop-down list allows you to change the fields that are displayed in the host list as columns for the current project. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. This is stored on a per-project basis, so you can have different display settings for each project that you are a member of. The fields can be any of the built-in fields or any of the custom properties set up by the project owner.

## 5.9.6. Edit

Each automation host in the list has an <Edit> button display in its right-most column. When you click this button or just *double-click* on any of the cells in the row, you change the item from "View" mode to "Edit" mode. The various columns are made editable, and <Update> <Cancel> buttons are displayed in the last column

If you click <Edit> on more than one row, the <Update> and <Cancel> buttons are only displayed on the first row, and you can make changes to all the editable rows and then update the changes by clicking the one <Update> button. Also, if you want to make the same change to multiple rows (e.g. to change five

automation hosts from Active = No to Active = Yes), you can click on the "fill" icon to the right of the editable item, which will propagate the new value to all editable items in the same column.

When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information. Alternatively, pressing the <ENTER> key will commit the changes and pressing the <ESCAPE> key will cancel the changes.

## 5.10. Automation Host Details

When you click on an automation host entry in the host list, you are taken to the automation host details page illustrated below:

spiraTeam	Wel	come, Fred Bloggs   <u>My Profile</u>	e   <u>Administration</u>   <u>Log Ou</u>	t   Library Information Syste	em 🔻
	My	Page Project Home	Planning Testing	Tracking	Reporting
Test Cases   Test Sets   Test Sets	est Runs   Automa	tion Hosts > Automation Host	Details		
<< Back to Host List	🖺 Save 🛛 🗟 Re	fresh 🗱 Delete			
Strate Windows XP Host Windows Vista Host #1	Host Name: W	indows XP Host [AH:0000	01]		
Windows Vista Host #1	Name:*	Vindows XP Host			
Windows 7 Host	Description:	Font Size	▼ B I U ≣≣	■ (1111日) (日日) (日日) (日日) (日日) (日日) (日日) (	: — co 🖪 🔲 🗘 💆
	1	Vindows XP with IE7, Firefox 2,	Chrome and Safari 3		
	Token*:	VinXP		Active*:	Yes 🔻
				Last Updated:	5/1/2009 12:00:00 AM
	Test Runs	Custom Properties *	Attachments	History	

This page is made up of three areas; the left pane is the navigation window, the upper part of the right pane contains the automation host detailed information itself, and the bottom part of the right pane displays different information associated with the automation host.

The navigation pane consists of a link that will take you back to the host list, as well as a list of the other automation hosts in the project that match the currently selected sort and filter option. If the number of hosts exceeds fifteen, only the first fifteen entries will be shown.

The top part of the right pane allows you to view and/or edit the details of the particular automation host. You can edit the various fields (name, description, token, etc.) and once you are satisfied with them, simply click either the <Save> or <Save and New> button at the top of the page to commit the changes. In addition you can delete the current artifact by choosing <Delete>, or discard any changes made by clicking <Refresh>.

### 5.10.1. Test Runs

This view displays the list of all the test runs executed against the automation host. Each test run is listed together with the date of execution, the name of the test case, the name of the tester, the release/version of the system that the test was executed against, the name of the test set (if applicable), the overall execution status for the test case in that run and a link to the actual test run details (see section 5.6). In addition, you can choose to display any of the custom properties associated with the test run.

	Τe	est Runs *	Custom Prope	erties *	Attach	ments		History						
> [	Refre	esh   <u>Apply Filte</u>	r   <u>Clear Filter</u>	s   Sho	w/hide column	s	•							
~	Ű	Test Run Name	▲▼	Execution	Date ▲▼	Test Set ▲	7	Type ▲▼		Release ▲▼	Status ▲▼	Est. Dur. ▲▼	Act. Dur. ▲▼	Web Brows
						Any	▼	Any	▼	Any 🔻 🔻	Any 🔻 🔻			Any
		Ability to crea	ate new author	4-Dec-2003	3			Automated		1.1.0.0.0003	Caution	0.2h	1.2h	
		Ability to edit	existing book	4-Dec-2003	3			Automated		1.1.0.0.0003	Failed	0.1h	1.2h	
		Ability to create	ate new book	4-Dec-2003	3			Automated		1.1.0.0.0003	Failed	0.0h	1.2h	

The "customize columns" drop-down list allows you to change the fields that are displayed in the test run list as columns. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. The displayed columns can be any standard field or custom property.

You can also filter the results by choosing items from the filter options displayed in the sub-header row of each field and clicking the "Apply Filter" link. In addition, you can quickly sort the list by clicking on one of the directional arrow icons displayed in the header row of the appropriate field.

## 5.10.2. Custom Properties

In this mode, the main pane displays any custom properties that the project owner has defined for automation hosts. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*. Assuming that custom properties have been defined for your project, you will see a list of optional parameters that can be set on the host. These can be either freetext or drop-down-lists.

Test Runs *	Custom Properties *	Attachments	History	
The following are the cust	om properties of this artifa	ct:		
Web Browser:	Internet Explorer			▼
Operating System:	Windows 7			▼

Once you are satisfied with the values for the custom properties, simply click [Save] or [Save and New] to commit the changes.

## 5.10.3. Attachments

In this mode, the main pane displays the list of documents, screenshots or web-links (URLs) that have been "attached" to the automation host. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.

To attach a new document to the automation host, you need to first click the <Add Attachment> link to display the new attachment dialog box. There are three different types of item that can be attached to an automation host:

- To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.
- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard,

click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename *before uploading* if you want it to be displayed with the correct icon in the attachment list.

## 5.10.4. History

In this mode, the main pane displays the list of changes that have been performed on the automation host artifact since its creation. The change history displays the date that each change was made, together with the fields that were changed, the old and new values and the person who made the change. This allows a complete audit trail to be maintained of all changes in the system.

# 6. Incident Tracking

This section outlines how the incident/defect tracking features of SpiraTeam® can be used to manage key project artifacts during the software development lifecycle. In addition to managing the defects raised during the execution of test cases in the test management module, the Incident Tracker is also a powerful risk/issue/bug tracking system in its own right. When coupled with the project dashboard (see section 3.4) it is a powerful tool for representing all the key risks and issues associated with a project in a single, graphical format.

Unlike a standalone bug/issue tracking tool however, you can trace the incidents/defects back to the test case and the underlying requirement that generated them, giving the project manager unprecedented power in analyzing the "in-process" quality of a system during its lifecycle. This power is clearly illustrated in the "Requirement Incident Count" pane in the Project Home dashboard (see section 3.4.4).

## 6.1. Incident List

When you click on the Tracking > Incidents global navigation link, you will initially be taken to the incidents list screen illustrated below:

ŚĽ	oiraTeam	Welcome, Fred Blog	gs   <u>My Profile</u>   <u>L</u>	Log Out   Library	Information System					Help?
-		My Page Proje	ct Home Plar	nning Te:	sting Trac	king Repo	rting			
Incide	nts   <u>Tasks</u>								Role	e: Manager
+ Nev	w Incident 🗱 Delete 🛛 🗞 Refresh	🔁 Copy 🛛 Exp	ort Show/hide	e columns 🖌 🖌	Filter					
Display	ying 16 - 30 out of 60 incident(s) for this p	roject								
1	Incident Name ▲▼	Type ▲▼	Status ▲▼	Priority <b>▲▼</b>	Detected By ▲▼	Owned By ▲▼	Closed On ▲▼	Operating System ▲▼	Inc. # ▲▼	Edit
		Any 🔻	Any 🔻	Any 🔻	Any 🔻	Any 🔻		Any 🔻	IN	► Filter
	Ability to generate customized rep	orts Enhancement	Resolved	1 - Critical	Joe P Smith	Joe P Smith			IN000025	► Edit
	Ability to associate multiple author	Enhancement	Duplicate	1 - Critical	Fred Bloggs				IN000029	► Edit
	Section 508 compliance	Issue	Closed	1 - Critical	Fred Bloggs	Joe P Smith	3-Dec-2003		IN000035	► Edit
	Test Training Item	Training	Assigned	1 - Critical	Fred Bloggs	Fred Bloggs			IN000040	► Edit
	Test System Limitation	Limitation	Open	1 - Critical	Fred Bloggs				IN000045	► Edit
	Test System Limitation	Limitation	Assigned	1 - Critical	Joe P Smith	Fred Bloggs			IN000046	► Edit
	Test System Limitation	Limitation	Duplicate	1 - Critical	Joe P Smith	Fred Bloggs			IN000050	► Edit
	Test Change Request	Change Request	Closed	1 - Critical	Fred Bloggs	Joe P Smith	10-Dec-2003		IN000055	► Edit
	Sample Risk 1	Risk	Open	1 - Critical	Fred Bloggs				IN000059	► Edit
	Configurable meta-data columns	Enhancement	Resolved	2 - High	Joe P Smith	Joe P Smith			IN000026	► Edit
	Integration of security with NTLM/F	Enhancement	Assigned	2 - High	Joe P Smith	Joe P Smith			IN000022	► Edit
	Support for IBM DB2	Enhancement	Open	2 - High	Fred Bloggs				IN000019	► Edit
	The homepage hangs whilst loading	g Bug	Not Reproducible	2 - High	Joe P Smith	Fred Bloggs			IN000016	► Edit
	Quote handling issues throughout	Bug	Resolved	2 - High	Fred Bloggs	Fred Bloggs			IN000012	► Edit
	Editing the date on a book is clunk	Evg Bug	Assigned	2 - High	Joe P Smith	Fred Bloggs			IN000008	► Edit
Show	15 Trows per page							🛯 🚽 Displayin	g page 2	\$a of 4 ► 🛤

The incident list screen displays all the incidents entered for the current project, in a filterable, sortable grid. The grid displays the incident number together with fields such as incident type (bug, issue, risk, etc.), status (new, open, etc.), priority, name, assigned owner, detection date, detector, closed date, etc. The choice of columns displayed is configurable per-user, per-project, giving extensive flexibility when it comes to viewing and searching incidents.

In addition, you can view a more detailed description of the incident (along with a resolution if any) by positioning the mouse pointer over the incident name hyperlink and waiting for the popup "tooltip" to appear. If you click on the incident name hyperlink, you will be taken to the incident details page described in section 6.2. Clicking on any of the pagination links at the bottom of the page will advance you to the next set of incidents in the list according to the applied filter and sort-order. There is also a drop-down-list at the bottom of the page which allows you to specify how many rows should be displayed in each page, helping accommodate different user preferences.

## 6.1.1. Sorting and Filtering

You can easily filter and sort the list of incidents as illustrated in the screen-shot below:

6	ni	raTeam	come, Fred Bloggs	I My Profile   Lo	g Out   Library Inf	ormation System	*				Help?
9		My F	Page Project	Home Plann	ning Test	ing Tracki	ng Report	ing			
Incid	lent	I <u>Tasks</u>								Role	e: Manager
-{∱ №	ew Ir	ncident 🗱 Delete 🦻 Refresh 🛛 📮	<u>Copy</u> 🛃 Expo	t Show/hide	columns 💌	Tilter					
Displ	ayin	g 1 - 14 out of 14 incident(s) for this project									
~	8	Incident Name 🔺 🔻	Type ▲▼	Status ▲▼	Priority <b>△</b> ▼	Detected By ▲▼	Owned By ▲▼	Closed On ▲▼	Operating System ▲▼	Inc. # ▲▼	Edit
			Bug 🔻	- Any 🔻	Any 🔻	Any 🔻	Any 🔻		Any 🔻	IN	► Filter
	1	Cannot add a new book to the system	Bug	Duplicate		Fred Bloggs	Fred Bloggs			IN000017	► Edit
	1	Database not backing up correctly	Bug	Open		Joe P Smith				IN000004	► Edit
	1	Cannot install system on Oracle 9i	Bug	Open	1 - Critical	Fred Bloggs				IN000005	► Edit
	0	Cannot add a new book to the system	Bug	Assigned	1 - Critical	Joe P Smith	Joe P Smith		Windows XP	IN000007	► Edit
	1	Validation on the edit book page	Bug	Resolved	1 - Critical	Fred Bloggs	Joe P Smith			IN000011	► Edit
	1	Session handling	Bug	Closed	1 - Critical	Joe P Smith	Joe P Smith	21-Nov-2003		IN000015	► Edit
	1	The homepage hangs whilst loading	Bug	Not Reproducible	2 - High	Joe P Smith	Fred Bloggs			IN000016	► Edit
		Duote handling issues throughout	Bug	Resolved	2 - High	Fred Bloggs	Fred Bloggs			IN000012	► Edit
	0	Editing the date on a book is clunky	Bug	Assigned	2 - High	Joe P Smith	Fred Bloggs			IN000008	► Edit
		The book listing screen doesn't sort	Bug	Open	3 - Medium	Joe P Smith			Windows 2003	IN000006	► Edit
		Editing the date on an author is clunky	Bug	Assigned	3 - Medium	Joe P Smith	Joe P Smith			IN000009	► Edit
		The tables get cutoff on low-res modes	Bug	Closed	3 - Medium	Joe P Smith	Joe P Smith	20-Nov-2003		IN000013	► Edit
		Permissions not updating when changed	Bug	Closed	4 - Low	Joe P Smith	Fred Bloggs	21-Nov-2003		IN000014	► Edit
	1	Doesn't let me add a new category	Bug	Resolved	4 - Low	Fred Bloggs	Fred Bloggs			IN000010	► Edit
Show	W 15	rows per page							l≪ ⊲ Displayin	g page 1	S of 1 ► ►

To filter the list by incident type, status, priority, owner or detector name, you simply choose an item from the appropriate drop-down list, and for the other fields, you enter a free-text phrase then click <Filter> or press the <ENTER> key to apply the different filters. Note that the name field is searched using a "LIKE" comparison, so that searching for "database" would include any item with the word database in the name. The other freetext fields need to be exact matches (e.g. dates, incident numbers). There are also several aggregate filters that are used to filter on multiple values at once (e.g. filtering status on (All Open) will return any incident that is in one of the open statuses – new, open, assigned, reopen).

To change the column that is sorted, or to change the direction of the current sort, simply click on the up/down arrow icon in the appropriate column. The currently sorted column is indicated by the larger, white arrow with the back-border. In the screen-shot above, we are filtering on type=bug and sorting by decreasing priority.

Clicking on Filter > Clear Filter removes any set filters and expands the incident list to display all incidents for the current project, and clicking on Filter > Save Filter allows you to save the filter to your 'My Page' for use in the future. The list of saved filters can also be retrieved by clicking Filter > Retrieve Filter.

### 6.1.2. New Incident

Clicking on the <New Incident> button takes you to the new incident screen. This is essentially the same screen as the incident details screen shown in section 6.2 except that the <Update> button is replaced by an <Insert> button, and depending on how the workflow has been configured for your project, certain fields may be disabled. For more details on setting and up configuring workflow for your project, please refer to the *SpiraTest Administration Guide*.

### 6.1.3. Delete

Clicking on the <Delete> button deletes the incidents whose check-boxes have been selected in the incident list.

### 6.1.4. Refresh

Clicking on the <Refresh> button simply reloads the list of incidents; this is useful when new incidents are being added by other users, and you want to make sure you have the most up-to-date list displayed.

### 6.1.5. Show / Hide Columns

This drop-down list allows you to change the fields that are displayed in the incident list as columns for the current project. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. This is stored on a per-project basis, so you can have different display settings for each project that you are a member of. The fields can be any of the built-in fields or any of the custom properties set up by the project owner.

## 6.1.6. Edit

Each incident in the list has an <Edit> button display in its right-most column. When you click this button or just *double-click* on any of the cells in the row, you change the item from "View" mode to "Edit" mode. The various columns are made editable, and <Update> <Cancel> buttons are displayed in the last column:

<b>C</b>	viral	<i>leam</i>		Welcome, S	System Admin	istrator	My Profile	Admini	stration   Lo	og Out	Library Informa	tion Syste	m 💌			Help?
Sp	n a i	Calli		My Page	Project Ho	ome	Planning	1	Testing	Trac	cking	Reportin	g			
Incide	nts   <u>Ta</u>	isks													Role: P	roject Owne
🕂 New	v Incident	🗱 Delete	lefresh Refresh	Copy	Export Export	Sho	w/hide colur	nns 👔	Filte	<u>er</u>						
Display	/ing 1 - 14	out of 14 incide	ent(s) for this pro	oject												
V 0	Inciden	nt Name 🔺 🔻			Type ▲▼		Status A V	·	Priority Δ	7	Detected B	/▲▼	Detected On ▲▼	Owned By ▲▼	Inc. # 🔺	/ Edit
					Bug	•	Any	•	Any	•	Any	•		Any 🔻	IN	Filter
	🐴 Can	not add a new l	book to the syst	em	Bug		Duplicate				Fred Bloggs		15-Nov-2003	Fred Bloggs	IN000017	► Edit
	E Data	abase not back	ing up correctly		Bug		Open				Joe P Smith		2-Nov-2003		IN000004	► Edit
	🕙 Can	not install system	em on Oracle 9i		Bug	▼≡↓	Open	▼ =↓	1 - Critical	▼ =1	Fred Bloggs	▼≡↓	2-Nov-2003	None 🔻		Update     Cancel
	Can	inot add a new	book to the sys	tem	Bug	•	Assigned	•	1 - Critical	•	Joe P Smith	•	4-Nov-2003	Joe P Smith 🔻		- cancer
	🕙 Valio	dation on the e	dit book page		Bug		Resolved		1 - Critical		Fred Bloggs		15-Nov-2003	Joe P Smith	IN000011	► Edit
		sion handling			Bug		Closed		1 - Critical		Joe P Smith		15-Nov-2003	Joe P Smith	IN000015	► Edit
			gs whilst loading	1	Bug		Not Reprod	ucible	2 - High		Joe P Smith		15-Nov-2003	Fred Bloggs	IN000016	► Edit
	🐴 Quo	te handling iss	ues throughout		Bug		Resolved		2 - High		Fred Bloggs		15-Nov-2003	Fred Bloggs	IN000012	► Edit
	Editi	ing the date on	a book is clunk	Y	Bug		Assigned		2 - High		Joe P Smith		4-Nov-2003	Fred Bloggs	IN000008	► Edit
	🛚 💾 The	book listing sc	reen doesn't sort		Bug		Open		3 - Medium		Joe P Smith		2-Nov-2003		IN000006	► Edit
			an author is clu		Bug		Assigned		3 - Medium		Joe P Smith		4-Nov-2003	Joe P Smith	IN000009	► Edit
			ff on low-res mo		Bug		Closed		3 - Medium		Joe P Smith		15-Nov-2003	Joe P Smith	IN000013	► Edit
	Perr Perr	missions not up	dating when cha	anged	Bug		Closed		4 - Low		Joe P Smith		15-Nov-2003	Fred Bloggs	IN000014	► Edit
	E Doe	sn't let me add	a new category		Bug		Resolved		4 - Low		Fred Bloggs		4-Nov-2003	Fred Bloggs	IN000010	► Edit
Show	15 🔻 ro	ws per page												i≪ A Disp	laying page 1	of 1 ► ►

If you click <Edit> on more than one row, the <Update> and <Cancel> buttons are only displayed on the first row, and you can make changes to all the editable rows and then update the changes by clicking the one <Update> button. Also, if you want to make the same change to multiple rows (e.g. to change five incidents from "Resolved" status to "Closed"), you can click on the "fill" icon to the right of the editable item, which will propagate the new value to all editable items in the same column.

When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information. Alternatively, pressing the <ENTER> key will commit the changes and pressing the <ESCAPE> key will cancel the changes.

Note that in the case of incidents, you need to have Project Owner permissions for the project to make bulk changes using the <Edit> button as such changes can override the workflow business rules established.

## 6.1.7. Copying Incidents

To copy an incident or set of incidents, simply select the check-boxes of the incidents you want to copy and then click <Copy>. This will make a copy of the current incident with its name prefixed 'Copy of ....' to distinguish itself from the original. Any file attachments will also be copied along with the incident itself.

### 6.1.8. Exporting Incidents

To export an incident or set of incidents from the current project to another project in the system, all you need to do is select the check-boxes of the incident(s) you want to export and then click the <Export> button. This will then bring up a list of possible destination projects:

ś	Di	raTeam	Welcome,	System Adminis	strator   <u>My Profile</u>   <u>Adr</u>	ninistration   Log Out	<u>t</u> I	Library Information S	System 💌			Help?
-	-		My Page	Project Hor	ne Planning	Testing T	rac	king Rep	orting			
Incid	ent	s   <u>Tasks</u>									Role: Pro	oject Owner
+ №	ew li	ncident 🗱 Delete 🛛 🗞 Refresh	Copy	Export Export	Show/hide columns	✓ <u> Filter</u>						
Displ	ayin	g 1 - 14 out of 14 incident(s) for this p	project				_					
~	8	Incident Name		Type ▲▼	Export Items			tected By ▲▼	Detected On ▲▼	Owned By ▲▼	Inc. # ▲▼	Edit
				Bug				Any 🔻		Any 🔻	IN	► Filter
		Cannot add a new book to the s	vstem	Bug	Please select the project	t you want to export t	0:	d Bloggs	15-Nov-2003	Fred Bloggs	IN000017	► Edit
		Database not backing up correct		Bug	Sample Application O	ne 🗸		P Smith	2-Nov-2003		IN000004	► Edit
4		Cannot install system on Oracle		Bug		> Export   Cancel		d Bloggs	2-Nov-2003		IN000005	► Edit
	0	Cannot add a new book to the s		Bug	Assigned	I - Chucai	JUe	P Smith	4-Nov-2003	Joe P Smith	IN000007	► Edit
		Validation on the edit book page		Bug	Resolved	1 - Critical	Fre	d Bloggs	15-Nov-2003	Joe P Smith	IN000011	► Edit
		Session handling		Bug	Closed	1 - Critical	Joe	e P Smith	15-Nov-2003	Joe P Smith	IN000015	► Edit
		The homepage hangs whilst load	ding	Bug	Not Reproducible	2 - High	Joe	e P Smith	15-Nov-2003	Fred Bloggs	IN000016	► Edit
		Duote handling issues throughout		Bug	Resolved	2 - High	Fre	d Bloggs	15-Nov-2003	Fred Bloggs	IN000012	► Edit
	0	Editing the date on a book is clu		Bug	Assigned	2 - High	Joe	e P Smith	4-Nov-2003	Fred Bloggs	IN000008	► Edit
	Ø	The book listing screen doesn't a		Bug	Open	3 - Medium	Joe	e P Smith	2-Nov-2003		IN000006	► Edit
		Editing the date on an author is		Bug	Assigned	3 - Medium	Joe	e P Smith	4-Nov-2003	Joe P Smith	IN000009	► Edit
		The tables get cutoff on low-res		Bug	Closed	3 - Medium	Joe	P Smith	15-Nov-2003	Joe P Smith	IN000013	► Edit
		Permissions not updating when		Bug	Closed	4 - Low	Joe	e P Smith	15-Nov-2003	Fred Bloggs	IN000014	► Edit
		Doesn't let me add a new catego		Bug	Resolved	4 - Low	Fre	d Bloggs	4-Nov-2003	Fred Bloggs	IN000010	► Edit
Sho	N 1	5 🔻 rows per page								i⊲ ⊲ Display	ing page 1	S of 1 ► ►
												1
	ew li	ncident 🗱 Delete 🛛 🗞 Refresh										
-												

Once you have chosen the destination project and clicked the <Export> button, the incidents will be exported from the current project to the destination project. Any file attachments will also be copied to the destination project along with the incidents.

### 6.1.9. Emailing the Incident

Using the <Email> button on the toolbar, you can send an email containing details of the incident to an email address or another user on the system:

Email this artifact	:0:	×
Project User:	Fred Bloggs   Select a user in the project to send to.	
© Email Addresses:	A list of email addresses, separated by ;	
Message Subject:	Leave blank for default.	
		Send   Cancel

You can specify the subject line for the email, and either a list of email addresses, separated by semicolons, or an existing project user .The content of the email is specified in the System Administration – Notification Templates.

## 6.2. Incident Details

When you click on an incident item in the incident list, or click the <New Incident> button (as described in section 6.1), you are taken to the incident details page illustrated below:

<i>spira</i> Team	Welcome	e, Fred Bloggs   My Profi	le   Administration	Log Out   Library Informat	tion System 🔻		Help?
spirarealli	My Page	Project Home	Planning	Testing Tracking	g Reporting		
Incidents > Incident Details	Tasks   Resources	Source Code					Role: Manager
< Back to Incident List	🖺 Save 🛛 🖓 Copy	la Refresh 🛛 😂 Del	ete IN 7	► Find 🖨 Pri	int 🛛 Email 🛯 🕅 Subscribe		
Workflow Operations	Incident Name:	Cannot add a new bo	ook to the system	[IN:00007]			
> Resolve Incident	Name:*	Cannot add a new book	to the system				
> Unable to Reproduce > Duplicate Incident	Status:*	> Assigned		Detected By:*	Joe P Smith	•	
×10	Type:*	Bug	•	Detected In Release:	1.0.0.0 - Library System Release 1	▼	
Cannot add a new book to Editing the date on a boo	Priority:*	1 - Critical	•	Resolved In Release:	1.0.1.0 - Library System Release 1 SP1	▼	
Editing the date on an au	Severity:	3 - Medium	•	Verified In Release:	1.0.2.0 - Library System Release 1 SP2	▼ 🔿	
Ability to associate mult	Owned By:*	Fred Bloggs	•	Detected On:	11/4/2003 12:00:00 AM		
Integration of security w				Last Modified:	9/28/2010 10:43:03 PM		
Ability to import data fr	Description:*						
Ability to be accessed by Management of children's	Font	▼ Size ▼	B <i>I</i> <u>U</u>  ≣	[書書  [目目傳傳  ]]	s 🕭   — 📾 🖬 🗖 🖒 🖉		
Test Training Item	When I click on th	e button to add a book, er	ter the new informati	on and click submit, I get a	a subscript out of range error		
Test Training Item							
E Test System Limitation							
Test System Limitation							
Test System Limitation							
Test Change Request	Comments	Schedule =	Custom Props *	Attachments .	History # Association		
Test Change Request	comments	Schedule =	cuatom Props *	Autochnietits =	Association		_

This page is made up of three areas; the left pane is the navigation window where you can quickly jump to other incidents as well as execute workflow transitions (see below), the upper part of the right pane contains the incident detailed information itself, and the bottom part of the right pane displays different information associated with the incident.

The left-hand navigation pane consists of a link that will take you back to the incident list, as well as a list of the other related incidents that match the currently selected sort and filter option on the incident list page. If the number of incidents exceeds fifteen, only the first fifteen entries will be shown. Above this navigation list is a highlighted box that displays the list of any workflow transitions that the current user can execute on the incident. This is described in more detail below.

In addition to the left hand navigation, you can enter a specific incident number in the text-box in the toolbar and click the <Find> button. In the same toolbar, there is also a shortcut for creating a new incident without having to first return to the incident list page. In addition, the lower section of the incident details page can be switched been four different views: "Comments", "Schedule", "Custom Properties", "Attachments", "History", and "Associations". These are described later.

## 6.2.1. Editing an Existing Incident

If you are editing an existing incident, the fields that are available and the fields that are required will depend on your stage in the incident workflow. For example an open incident might not require a "Resolved Version" whereas a resolved incident could well do. The types of change allowed and the email notifications that are sent will depend on how your project administrator has setup the system for you. Administrators should refer to the *SpiraTeam Administration Guide* for details on configuring the incident workflows to meet their needs.

Depending on the user's role and whether they are listed as the owner or detector of the incident or not, displayed in the left hand side of the page, above the navigation list is a set of allowed workflow operations:

Workflow Operations		
> <u>Resolve Incident</u> > Unable to Reproduce	Status:*	> Assigned
> Duplicate Incident		

These workflow transitions allow the user to move the incident from one status to another. For example when the incident is in the Assigned status, you will be given the options to:

- > Resolve the Incident changes status to "Resolved"
- > Unable to Reproduce changes the status to "Not Reproducible"
- > Duplicate Incident changes the status to "Duplicate"

After changing the status of the incident by clicking on the workflow link, you can then fill in the additional fields that are now enabled and/or required. Once you've made the changes to the appropriate incident fields, you can either click <Save>, <Save and Close>, or <Save and New> to commit the changes or <Refresh> to discard the changes and reload the incident from the database. In addition you can print the current incident by clicking <Print>, which will display a printable version of the page in a separate window.

## 6.2.2. Inserting a New Incident

If you are creating a new incident, the fields that are available and the fields that are required will depend on how your project has been for configured. For example, some projects may require that all incidents be started with Status=New and Type=Incident, others may allow you to specify the incident type. The types of change allowed will depend on how your project administrator has setup the system for you. Administrators should refer to the *SpiraTeam Administration Guide* for details on configuring the incident workflows to meet their needs.

Once you've filled out the appropriate incident fields, you can either click <Save>, <Save and Close> or <Save and New> to commit the new item or click on the "Back to Incident List" to discard the insertion and return back to the incident list.

### 6.2.3. Comments

In this mode, the lower section of the screen displays a threaded list of resolutions that have been logged against this incident:

Com	nments *	Schedule *	Custom Props *	Attachments	History	Associations	
To add a	a new comm	ent to this requirem	•	elow and click the [S	-		
Font	•	Size 🔻	B / ∐  ≣≣	Ĕ <b>═│</b> ┊═┇═ <b>ᡬ</b> ╪┎╪│	₲ 🖕 🖉 💭	<>⊉	
*							
E Ex	kisting Comn	nents					
Β	Joe P Smith	(21-Nov-2003)					
	Exception	code retested and erro	r no longer occurs				
Ξ	Fred Bloggs	(20-Nov-2003)					
	There was	an erroneous exceptio	n throw in the module	- removed			

You can expand or collapse the list of existing resolutions by clicking the appropriate expand or collapse icon. To add a new resolution to an incident, all you need to do is enter the new resolution / comment in the text box above the list and then click <Save>. Your resolution will now be added to the existing items in the list.

## 6.2.4. Schedule

In this mode, the main pane displays the general schedule and completion status of the specific incident. You can enter/edit the start-date, closed-date (i.e. the due-date), estimate, actual and remaining effort. From these values, the system will display the calculated percent completion, progress indicator and projected final effort.

Comments	Schedule *	Custom Props *	Attachments *	History *	Associations *
Start Date:*	11/6/2003		Closed On		
Progress:*		(0%)	Estimated	Effort:*	0.3 hours
Projected Effort:	0.3 hours		Actual Effo	ort:	hours
			Remaining	Effort:	0.3 hours

### 6.2.5. Custom Properties

In this mode, the main pane displays any custom properties that the project owner has defined for incidents. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*. Assuming that custom properties have been defined for your project, you will see a list of optional parameters that can be set on the incident. These can be either freetext or drop-down-lists. In the example below, you can enter Notes, and/or the Operating System that the incident was observed on.

Resolution	Schedule *	Custom Props *	Attachments *	History *	Associations *
The following are the cu	ustom properties of thi	s artifact:			
Notes:	May be an array bo	ounds issue		~	
Operating System:	Windows XP			V	

Once you are satisfied with the values for the custom properties, simply click [Save], [Save and New] or [Save and Close] to commit the changes.

## 6.2.6. Attachments

In this mode, the lower section of the screen displays the list of documents, screenshots or web links (URLs) that have been "attached" to the incident. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.

	Resolution	Resolution Schedule * Custom Props *		Attachments	s *	History *	A	Associations *		_	
> <u>Ad</u>	Id Attachment	<u>Remove</u>   <u>Refresh</u>	<u> Apply Filter   Clear Fi</u>	<u>lters</u>							
~	Document Na	me ▲▼	Type ▲▼	Size ▲▼	Edite	dBy▲▼	Edited O	n ▲▼	Uploaded By	▲▼	Doc # ▲▼
			Any 🔻		Any				Any	•	DC
	Error Stack	trace.doc	Stack Trace	24 KB	Fred E	Bloggs	1-May-20	06	Fred Bloggs		DC000004
	🖉 Web Page	capture.htm	Screen Shot	88 KB	Fred E	Bloggs	25-Apr-20	06	Fred Bloggs		DC000006
Show	15 🔻 rows pe	r page							🝽 ৰ Displa	aying page	1 🗳 of 1 ► 🕨

The attachment list includes the filename that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as a tooltip.

To actually view the document, simply click on the filename hyperlink and a new web browser window will open. Depending on the type of file, this window will either display the document or prompt you for a place to save it on your local computer. To remove an existing attachment from an incident, simply click the <Remove> button and the attachment will be removed from the list.

To attach a new document or web link to the incident, you need to click on the "Add Attachment" hyperlink to open the "Add Attachment" dialog box. There are three different types of item that can be attached to an incident:

- To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.
- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard, click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename *before uploading* if you want it to be displayed with the correct icon in the attachment list.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename before uploading if you want it to be displayed with the correct icon in the attachment list.

## 6.2.7. History

In this mode, the main pane displays the list of changes that have been performed on the incident artifact since its creation. An example incident change history is depicted below:

Comments	Schedule *	Custom Props *	Attachments *	History *	Associations *	
Change Date 🔻		Field Name		Old Value	New Value	Changed By
9/28/2010 10:43:03 PN	1	Est. Effort		20	18	Fred Bloggs
9/28/2010 10:43:03 PN	1	Projected Effo	t	20	18	Fred Bloggs
9/28/2010 10:43:03 PN	1	Remaining Effe	ort	15	18	Fred Bloggs
9/28/2010 10:43:03 PM	1	% Complete		25	0	Fred Bloggs
9/28/2010 10:43:03 PN	1	Owned By		Joe P Smith	Fred Bloggs	Fred Bloggs
5/2/2006 12:00:00 AM		Status		Open	Assigned	Fred Bloggs
3/5/2005 12:00:00 AM		Status		New	Open	Fred Bloggs
3/4/2005 12:00:00 AM		Туре		Incident	Bug	Joe P Smith

The change history displays the date that each change was made, together with the fields that were changed, the old and new values and the person who made the change. This allows a complete audit trail to be maintained of all changes in the system.

## 6.2.8. Associations

In this mode, the main pane displays a list of any requirements, test runs, test steps or other incidents that are associated with this incident:

Add   Delete   Refresh   Apply Filter   Clear Filters	Include Source C	ode Revisions				
✓ Artifact Name ▲▼	Artifact Type ▲▼	Created On ▲▼	Created By ▲▼	Comment ▲▼	Artifact # ▲▼	Edit
	Any 🔻		Any 🔻			► Filter
Ability to associate books with different editions	Requirement	19-Mar-2004	Joe P Smith		RQ000009	► Edit
Ability to create new book (Step 2)	Test Step	19-Mar-2004	Fred Bloggs	This incident is related to the test step	TS000002	► Edit
The book listing screen doesn't sort	Incident	17-Mar-2004	Joe P Smith		IN000006	► Edit
Ability to create new book	Test Run	1-Dec-2003	Joe P Smith	Test Run: Ability to create new book	TR000001	
Ability to add new books to the system	Requirement	1-Dec-2003	Fred Bloggs	Test Run: Ability to create new book	RQ000004	
how 15 <b>v</b> rows per page				🖬 ৰ Displa	ying page 1	s of 1 ►

The incidents in this list are ones that a user has decided are relevant to the current one and has created a direct link between them. In the case of requirements and test cases, the association can be either due to the creator of an incident directly linking the incident to the requirement or test step, or it can be the result of a tester executing a test-run and creating an incident during the test run. In this latter case, the check-box to the left of the association will be unavailable as the link is not editable.

Each association is displayed with the type of artifact (requirement, test step, test run, incident), the name of the artifact being linked-to, the name of the person who created the association, and a comment that describes why the association was made. In the case of an indirect association due to a test run, the comment will contain the name of the test run.

In addition, when using SpiraPlan or SpiraTeam, you can select the checkbox marked "Include Source Code Revisions" and the system will also scan the source code repository for any revisions that are linked to this artifact. Since that can take be slower than accessing SpiraTeam, it is provided as an option that you can enable and disable:

1	Artifact Name 🔺 🔻	Artifact Type ▲▼	Created On ▲▼	Created By ▲▼	Comment AV	Artifact # ▲▼	Edit
		Any 🔻		Any 🔻			► Filte
	A rev0005	Revision	16-Jan-2010	Fred Bloggs	The artifact was changed in this version to fix th	-	
	a rev0003	Revision	16-Jan-2010	Fred Bloggs	The artifact was changed in this version to fix th	-	
	Ability to associate books with different editions	Requirement	19-Mar-2004	Joe P Smith		RQ000009	► Edit
	Ability to create new book (Step 2)	Test Step	19-Mar-2004	Fred Bloggs	This incident is related to the test step	TS000002	► Edit
	The book listing screen doesn't sort	Incident	17-Mar-2004	Joe P Smith		IN000006	► Edit
	Ability to create new book	Test Run	1-Dec-2003	Joe P Smith	Test Run: Ability to create new book	TR000001	
	Ability to add new books to the system	Requirement	1-Dec-2003	Fred Bloggs	Test Run: Ability to create new book	RQ000004	
how	15 Trows per page				a a Dienla	ying page 1	of 1 ⊳

You can perform the following actions on an association from this screen:

- Delete removes the selected association to the other artifact. This will only delete the association, not the linked artifact itself.
- Refresh updates the list of associations from the server, useful if other people are adding associations to this incident at the same time.
- > Apply Filter Applies the entries in the filter boxes to the list of associations

- > Clear Filters Clears the current filter, so that all associations for the current incident are shown.
- Edit Clicking the [Edit] button to the right of the associations allows you to edit the comment field inline directly on this screen.

To create a new association, simply click the <Add> hyperlink which will display the "Add New Association" popup dialog box:

Add New Association				X
Please choose the type of a	artifact that you want to add	an asse	ociation to:	
OIncident ORequiremen	t 💿 Test Step			
Please choose the artifac	t that you want to add an as	sociatio	on to:	
(a) Enter Artifact ID:	TS			
(b) Choose from list:	✓ Test Case		✓ Test Step	
_	😑 🖻 Functional Tests	^	🗌 🐿 Step 1	<u>^</u>
_	O 🗄 Ability to		💌 🚇 Step 2	=
	create new book		🔲 🛍 Step 3	
	Ability to edit	~	🔲 🖺 Step 4	~
p Comment:	a comment			<
				> Add   Cancel
Opirarcant vz.o. r (Deta)				

Once you have selected the appropriate artifact type, you will then be able to choose the specific artifact you want to link to. In all cases, you can choose the item from a scrolling selection box, or you can either enter the ID of the artifact directly (if known). In either case you can also add a comment that explains the rationale for the association. If you're adding an association to a test step, then there are actually *two* selection boxes, one to choose the overall test case and the other to choose the specific test step.

### 6.2.9. Creating a Requirement from an Incident

Sometimes you may have a situation where an enhancement has been logged in the incident tracker and now that it has been approved, it needs to be converted into a formal requirement so that test cases and tasks can be generated from it. To aid this process, there is a shortcut link on the Associations tab that allows you to create a new requirement from the current incident and have it be automatically added to the requirements list. When that is performed an association is automatically added that links this new requirement to the original incident.

# 7. Release Management

This section outlines how to use the Release Management features of SpiraTeam® to manage different versions of the system being tested in a particular project. This is an optional feature of the system, and you can manage the testing for a project successfully without tracking individual releases. Typically when you develop a system, it is important to ensure that features introduced in successive versions do not impair existing functionality - this is known as *regression testing*.

In such situations, you will want to be able to execute the same set of test scripts against multiple versions of the system and be able to track failures by version. A feature that works correctly in version 1.0 may fail in version 1.1, and the maintenance team may be testing the existing lifecycle of v1.0 in parallel with the development team testing v1.1. Therefore by developing a master set of releases/versions in the Release Management module, you can have the different testing teams correctly assign their testing actions to the appropriate version.

There are two types of release artifact in SpiraTeam® - major project releases that are displayed with the blue release icon and represent major versions of the system, and release Iterations (aka builds) that are displayed with a yellow icon and represent intermediate builds/iterations of the system. *Note: Iterations can be contained within a Release, but not the other way round.* 

The main differences between releases and iterations are as follows:

- Releases are independent versions of the system being tested and as such, you can map a requirement directly to a release, indicating the release of the system that the requirement will be fulfilled in.
- When you report on a release (e.g. on the project home or in one of the reports) any child iterations are automatically taken into account, and test runs and incidents that are related to the child iterations will get included in the release reports. Child releases on the other hand are not aggregated up into the parent release.

## 7.1. Release List

When you click on the Planning > Releases global navigation link, you will initially be taken to the release list screen illustrated below:

sn	iraTeam	Welcome, Syste	em Administrator	My Profile   Administr	ation   Log Out	Library Information	System 💌	]			Help?
Sp		Ay Page F	Project Home	Planning Te:	sting Tra	cking Re	porting				
Require	ments   Releases   Iterations									Role: Proj	ect Owne
🕂 Inser	t 🗱 Delete 💠 Indent 💠 Outd	ent Show	Level 💌 🤹	Refresh 🔁 Edit	Export -	Show/hide colum	ns 👻 🍾	Filter			
✓ 0	Release Name	Version #	Test Status	Task Progress	Start Date	End Date	Plan Effort	Task Effort	Iteration?	Release Id	Edit
			Any 🔻	Any 🔻					Any 🔻	RL	► Filter
	🗉 🖫 Library System Release 1	1.0.0.0			1-Mar-2004	12-Mar-2004	216.0h	94.0h	No	RL000001	► Edit
	🖃 🗐 Library System Release 1 SP1	1.0.1.0		No Tasks	13-Mar-2004	30-Mar-2004	176.0h		No	RL000002	► Edit
	Lteration 001	1.0.1.0.0001	No Tests	No Tasks	13-Mar-2004	20-Mar-2004	80.0h		Yes	RL000011	► Edit
	Lteration 002	1.0.1.0.0002	No Tests	No Tasks	21-Mar-2004	24-Mar-2004	48.0h		Yes	RL000012	► Edit
	Lteration 003	1.0.1.0.0003	No Tests	No Tasks	25-Mar-2004	30-Mar-2004	64.0h		Yes	RL000013	► Edit
	🖃 🛅 Library System Release 1 SP2	1.0.2.0		No Tasks	1-Apr-2004	30-Apr-2004	352.0h		No	RL000003	► Edit
	Lteration 001	1.0.2.0.0001	No Tests	No Tasks	1-Apr-2004	10-Apr-2004	112.0h		Yes	RL000014	► Edit
	Lteration 002	1.0.2.0.0002	No Tests	No Tasks	11-Apr-2004	20-Apr-2004	112.0h		Yes	RL000015	► Edit
	Lteration 003	1.0.2.0.0003	No Tests	No Tasks	21-Apr-2004	30-Apr-2004	128.0h		Yes	RL000016	► Edit
	Lteration 001	1.0.0.0001	No Tests		1-Mar-2004	4-Mar-2004	96.0h	32.0h	Yes	RL000008	► Edit
	Lteration 002	1.0.0.00002	No Tests		5-Mar-2004	8-Mar-2004	24.0h	32.0h	Yes	RL000009	► Edit
	Lteration 003	1.0.0.00003	No Tests		9-Mar-2004	12-Mar-2004	72.0h	30.0h	Yes	RL000010	► Edit
	🗉 🖺 Library System Release 1.1	1.1.0.0			15-Oct-2004	27-Oct-2004	168.0h	86.0h	No	RL000004	► Edit
	Library System Release 1.1 SP1	1.1.1.0		No Tasks	1-Nov-2004	30-Nov-2004	336.0h		No	RL000005	► Edit
	Library System Release 1.1 SP2	1.1.2.0	No Tests	No Tasks	1-Dec-2004	31-Dec-2004	320.0h		No	RL000007	► Edit
Show	15 🔻 rows per page								i≪ ⊲ Displayir	ng page 1	G of 2 ► ►
linser	t 🗱 Delete 🐟 Indent 💠 Outd	ent									

The release list will contain all the releases and iterations associated with current project. When you create a new project, this list will initially be empty, and you will have to use the <Insert> button to start adding releases and iterations to the project. The hierarchical organization of releases in the list is configurable, so you can organize the various releases in the way that makes most sense for a particular project. Typically you have the major releases as the top-level items, with sub-releases, builds and iterations as the lower-level items.

All of the releases in the list have a release-name, together with the assigned version number for that release, the start-date and end-date for the release, the number of estimated project personnel working on that release, the planned effort for the release, the total effort currently scheduled (as tasks), the available effort for new tasking, the release id, and a set of custom properties defined by the project owner.

For those releases that have test cases mapped against them, the execution status of the various test cases associated with the release is displayed in aggregate for each item as a graphical bar diagram. If you position the mouse over the execution status indicator you will see the detailed execution information displayed as a tooltip.

For those releases that have at least one requirement task associated with them, they will display a block graph that illustrates the relative numbers of task that are on-schedule (green), late-starting (yellow), late-finishing (red) or just not-started (grey). These values are weighted by the effort of the task, so that larger, more complex tasks will be change the graph more than the smaller tasks. To determine the exact task progress information, position the mouse pointer over the bar-chart and the number of associated tasks, along with the details of how many are in each status will be displayed as a "tooltip".

Clicking on a release's hyperlink will take you to the release details page for the item in question (see section 7.2).

## 7.1.1. Filtering

You can easily filter the list of releases as illustrated in the screen-shot below:

Ś	jiraTeam	Welcome, Sys	stem Administrator   <u>N</u>	ly Profile   Administra	ation   Log Out	Library Information	System 💌				Help?
Sp		My Page	Project Home P	lanning Tes	ting Tra	cking Re	porting				
Require	ements   Releases   Iterations									Role: Proj	ect Owner
🕂 Inse	rt 🗱 Delete 💠 Indent 💠 Out	lent Sho	w Level 💌 🔹 🖻	tefresh 🗗 Edit	🚰 Export 🛛 - S	Show/hide colum	ns 💌 🍸	Filter			
1 8	Release Name	Version #	Test Status	Task Progress	Start Date	End Date	Plan Effort	Task Effort	Iteration?	Release Id	Edit
			Any 🔻	Any 🔻					No 🔻	RL	Filter
	E CLibrary System Release 1	1.0.0.0			1-Mar-2004	12-Mar-2004	216.0h	94.0h	No	RL000001	► Edit
	🗉 🛅 Library System Release 1 SP	1.0.1.0		No Tasks	13-Mar-2004	30-Mar-2004	176.0h		No	RL000002	► Edit
	🖃 🛅 Library System Release 1 SP	1.0.2.0		No Tasks	1-Apr-2004	30-Apr-2004	352.0h		No	RL000003	► Edit
	🖻 🛅 Library System Release 1.1	1.1.0.0			15-Oct-2004	27-Oct-2004	168.0h	86.0h	No	RL000004	► Edit
	Library System Release 1.1 SP	1.1.1.0		No Tasks	1-Nov-2004	30-Nov-2004	336.0h		No	RL000005	► Edit
	Library System Release 1.1 SP	1.1.2.0	No Tests	No Tasks	1-Dec-2004	31-Dec-2004	320.0h		No	RL000007	► Edit
	Library System Release 2005	1.2.0.0			1-Apr-2005	2-Apr-2005	16.0h	10.0h	No	RL000006	► Edit
Show	15 V rows per page								🛯 🖛 Displayir	ng page 1	Siof1 ⊫ ⊨
🕂 Inse	<u>ent</u> 😂 <u>Delete</u> 🖒 <u>Indent</u> 💠 <u>Outr</u>	lent									

To filter the list by any of the displayed columns, you either choose an item from the appropriate dropdown list or enter a free-text phrase (depending on the type of field) then click <Filter> or press the <ENTER> key to apply the different filters. Note that the name field is searched using a "LIKE" comparison, so that searching for "database" would include any item with the word database in the name. The other freetext fields need to be exact matches (e.g. dates, release numbers). In the screen-shot above, we are filtering on Iteration = No. Clicking on <Clear Filters> clears all the set filters and displays all the releases for the project. In addition, if you have a set of filters that you plan on using on a regular basis, you can choose the option Filter > Save Filter to add the current filter to the list of saved filters that appear on your 'My Page'. The list of saved filters can also be retrieved by clicking Filter > Retrieve Filter:

sp	iraTeam													Help?
-		My Page	Project Hom	e Pla	anning	Testing	Т	racking Re	porting					
Require	<u>nents</u>   Releases   <u>Iterations</u>												Role	e: Manage
🕂 Inser	Sindent Indent	ient Show	Level 🔻	Refres	sh 🔁 Ed	it 🗗 Export	Sł	iow/hide columns	•	<b>T</b> Filter	[	_		
✓ 8	Release Name	Version #	Test Sta					End Date	Plan Effe		ply Filter	Iteration?	Release Id	Edit
			Any	Save Fi	lter						ar Filter	No 🔻	RL	► Filter
	E Library System Release 1	1.0.0.0		Please ch	oose a name	for this filter:		12-Mar-2004	216.0h		trieve Filter	No	RL000001	► Edit
	🖃 🛅 Library System Release 1 SP	1.0.1.0		All non-ite	eration release	29		30-Mar-2004	176.0h	💾 Sar	ve Filter	No	RL000002	► Edit
	🖻 🛅 Library System Release 1 SP2	2 1.0.2.0			- autom relie do		_	30-Apr-2004	352.0h			No	RL000003	► Edit
	🗉 🛅 Library System Release 1.1	1.1.0.0				> <u>Save</u>   <u>Ca</u>	ncel	27-Oct-2004	168.0h		86.0h	No	RL000004	► Edit
	Library System Release 1.1 SP	<u>1</u> 1.1.1.0			No Tasks	1-Nov-2	004	30-Nov-2004	336.0h			No	RL000005	► Edit
	Library System Release 1.1 SP	2 1.1.2.0	No Tests		No Tasks	1-Dec-2	2004	31-Dec-2004	320.0h			No	RL000007	► Edit
	Library System Release 2005	1.2.0.0				1-Apr-2	005	2-Apr-2005	16.0h		10.0h	No	RL000006	► Edit
Show	5 🔻 rows per page											i≪ ⊲ Displayir	ng page 1	s of 1 ► ►

## 7.1.2. Insert

Hovering over the <Insert> button brings up a secondary menu that allows you to choose whether to insert a release or iteration (if you just click Insert it defaults to inserting a release). In either case, it will insert the new release / iteration *above* the currently selected item – i.e. the one whose check-box has been selected, at the same level in the hierarchy. If you want to insert a release/iteration below a summary item, you need to insert it first, then indent it with the <Indent> button. If you insert a release without first selecting an existing release from the list, the new release will simply be inserted at the end of the list.

Once the new release has been inserted, the item is switched to "Edit" mode so that you can change the default name, active flag, version number and creator.

### 7.1.3. Delete

Clicking on the <Delete> button deletes all the releases whose check-boxes have been selected. If any of the items are summary items, then if the item is expanded and the children are visible, the children are simply made children of the item above it in the list, however if the item is not expanded and the children are hidden, then the children are all deleted. This behavior is similar to that found in project planning tools like Microsoft Project®.

In addition, if all the children are deleted from a summary item, it changes back into a detail item. Any test runs or incidents that were associated with a deleted release are *not* themselves deleted, but the relationship between them is lost.

### 7.1.4. Indent

Clicking on the <Indent> button indents all the releases whose check-boxes have been selected. If any of the items are made children of a release that had no previous children, it will be changed from a detail item into a summary item. Note: you cannot indent a release or iteration if it is *below* an iteration, as iterations are not allowed to have child items

### 7.1.5. Outdent

Clicking on the <Outdent> button de-indents all the releases whose check-boxes have been selected. If any of the items were the only children of a summary release item, then that item will be changed back from a summary item to a detail item.

## 7.1.6. Refresh

Clicking on the <Refresh> button simply reloads the release list. This is useful as other people may be modifying the list of releases at the same time as you, and after stepping away from the computer for a short-time, you should click this button to make sure you are viewing the most current release list for the project.

## 7.1.7. Edit

Each release/iteration in the list has an <Edit> button display in its right-most column. When you click this button or click on any of the cells in the row, you change the item from "View" mode to "Edit" mode. The various columns are made editable, and <Update> <Cancel> buttons are displayed in the last column:

SD		Bloggs   My Profile	Log Out   Library	Information System	~				Help?
Requirer	My Page	Project Home P	Planning Te	sting Track	ing Reportir	ng			Role: Manage
∱ <u>Inser</u> t	t 🗱 Delete 🖒 Indent 💠 Outdent Shor	v Level 💌 🗞 🖻	Refresh 🛛 🖓 Copy	Export Si	how/hide columns	✓ Y Clear F	ilters		
✓ 0	Release Name	Version #	Test Status	Task Progress	Start Date	End Date	Plan Effort	Release Id	Edit
			Any 🔻	Any 🔻				RL	► Filter
	🖻 🛅 Library System Release 1	1.0.0.0			1-Mar-2004	12-Mar-2004	216.0h	RL000001	► Edit
	Library System Release 1 SP1	1.0.1.0		No Tasks	3/13/2004 🔳 🗐	3/30/2004 🔳 🗐	176.0h		Update     Cancel
	Library System Release 1 SP2	1.0.2.0		No Tasks	4/1/2004	4/30/2004 📰	352.0h		
	Tteration 001	1.0.0.0.0001	No Tests		1-Mar-2004	4-Mar-2004	96.0h	RL000008	► Edit
	Iteration 002	1.0.0.00002	No Tests		5-Mar-2004	8-Mar-2004	24.0h	RL000009	► Edit
	El Iteration 003	1.0.0.0003	No Tests		9-Mar-2004	12-Mar-2004	72.0h	RL000010	► Edit
	🗉 🚇 Library System Release 1.1	1.1.0.0			15-Oct-2004	27-Oct-2004	168.0h	RL000004	► Edit
	Library System Release 1.1 SP1	1.1.1.0		No Tasks	1-Nov-2004	30-Nov-2004	336.0h	RL000005	► Edit
	Library System Release 1.1 SP2	1.1.2.0	No Tests	No Tasks	1-Dec-2004	31-Dec-2004	320.0h	RL000007	► Edit
	Lteration 001	1.1.0.0.0001			15-Oct-2004	18-Oct-2004	24.0h	RL000017	► Edit
	teration 002	1.1.0.0.0002			19-Oct-2004	23-Oct-2004	72.0h	RL000018	► Edit
	Lteration 003	1.1.0.0.0003			24-Oct-2004	27-Oct-2004	72.0h	RL000019	► Edit
	Library System Release 2005	1.2.0.0			1-Apr-2005	2-Apr-2005	16.0h	RL000006	► Edit
Show 1	15 Tows per page						🖂 🗏 Disp	playing page 1	ta of 1 ►
h Inser	t 🗱 Delete 💠 Indent 💠 Outdent								

If you click <Edit> on more than one row, the <Update> and <Cancel> buttons are only displayed on the first row, and you can make changes to all the editable rows and then update the changes by clicking the one <Update> button. Also, if you want to make the same change to multiple rows (e.g. to change five releases from "active" to "inactive"), you can click on the "fill" icon to the right of the editable item, which will propagate the new value to all editable items in the same column.

When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information. Alternatively, pressing the <ENTER> key will commit the changes and pressing the <ESCAPE> key will cancel the changes.

## 7.1.8. Show Level

Choosing an indent level from the 'Show Level' drop down box allows you to quickly and easily view the entire release list at a specific indent level. For example you may want to see all releases drilled-down to the *third* level of detail. To do this you would simply choose 'Level 3' from the list, and the releases will be expanded / collapsed accordingly.

## 7.1.9. Show / Hide Columns

This drop-down list allows you to change the fields that are displayed in the release list as columns for the current project. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. This is stored on a per-project basis, so you can have different display settings for each project that you are a member of. The fields can be any of the built-in fields or any of the custom properties set up by the project owner.

## 7.1.10. Copying Releases/Iterations

To copy a release/iteration or set of releases/iterations, simply select the check-boxes of the release/iteration you want to copy and then select the Edit > Copy menu option. This will copy the current release/iteration selection to the clipboard. Then you should select the place where you want the releases/iterations to be inserted and choose the Edit > Paste option.

The releases/iterations will now be copied into the destination location you specified. The name of the copied releases/iterations will be prefixed with "Copy of..." to distinguish them from the originals. Note that copied releases/iterations will also include the test mapping information from the originals.

### 7.1.11. Moving Releases/Iterations

To move a release/iteration in the hierarchy, there are two options:

1. Click on the icon the release/iteration you want to move and then drag the icon to the location you want it moved. The border between the destination releases/iterations will change as the icon is dragged over it to illustrate where it will be inserted:

spi	raieam		nistrator   <u>My Profile</u>			Information System	<b>M</b>			Help?
	My Page	Project H	ome Planning	Testing	Tracking	Reporting				
Requirem									Role: P	roject Owner
P Insert	Delete	Show Level	Refresh	🔁 Copy 🛛 🗗 Exp	ort Show/hide	columns 💌	Clear Filte	rs		
<ul> <li>✓</li> <li>Ø</li> </ul>	Release Name	Version #	Test Status	Task Progress	Start Date	End Date	Plan Effort	Task Effort	Release Id	Edit
			Any 🔻	Any 🔻					RL	<ul> <li>Filter</li> </ul>
	Library System Release 1	1.0.0.0			1-Mar-2004	12-Mar-2004	216.0h	94.0h	RL000001	► Edit
	🗉 🛅 Library System Release 1 SP1	1.0.1.0		No Tasks	13-Mar-2004	30-Mar-2004	176.0h		RL000002	► Edit
	E      Library System Release 1 SP2	1.0.2.0		No Tasks	1-Apr-2004	30-Apr-2004	352.0h		RL000003	► Edit
	teration 001	1.0.0.00001	No Tests		1-Mar-2004	4-Mar-2004	96.0h	32.0h	RL000008	► Edit
	Lteration 002	1.0.0.0002	No Tests		5-Mar-2004	8-Mar-2004	24.0h	32.0h	RL000009	► Edit
	Lteration 003	1.0.0.00003	No Tests		9-Mar-2004	12-Mar-2004	72.0h	30.0h	RL000010	► Edit
	Company System Release 1.1	1.1.0.0			15-Oct-2004	27-Oct-2004	168.0h	86.0h	RL000004	► Edit
	Library System Release 1 SP2 Library System Release 1.1 SP1	1.1.1.0		No Tasks	1-Nov-2004	30-Nov-2004	336.0h		RL000005	► Edit
	Library System Release 1.1 SP2	1.1.2.0	No Tests	No Tasks	1-Dec-2004	31-Dec-2004	320.0h		RL000007	► Edit
	teration 001	1.1.0.00001			15-Oct-2004	18-Oct-2004	24.0h	29.0h	RL000017	► Edit
	Lteration 002	1.1.0.00002			19-Oct-2004	23-Oct-2004	72.0h	27.0h	RL000018	► Edit
	Lteration 003	1.1.0.00003			24-Oct-2004	27-Oct-2004	72.0h	30.0h	RL000019	► Edit
	Library System Release 2005	1.2.0.0			1-Apr-2005	2-Apr-2005	16.0h	10.0h	RL000006	► Edit
Show 15	; vows per page							i⊲ ⊲ Disp	playing page 1	S of 1 ► ►
🕂 Insert	🗱 Delete 🕹 Indent 💠 Outdent									

Once you have the release/iteration positioned at the correct place that you want it inserted, just release the mouse button and the release list will be refreshed, with the release/iteration moved to the desired location.

 Alternatively you can simply select the check-boxes of the release/iteration you want to move and then select the Edit > Cut menu option. This will cut the current release/iteration selection to the clipboard. Then you should select the place where you want the release/iteration to be inserted and choose the Edit > Paste option. The release/iteration will now be moved into the destination location you specified.

### 7.1.12. Exporting Releases/Iterations

To export releases/iterations from the current project to another project in the system, all you need to do is select the check-boxes of the releases/iterations you want to export and then click the <Export> button. This will then bring up a list of possible destination projects:

	My F	Page Project H	ome Planning	Testing Tr	acking Rep	porting			
quiren	nents   Releases							Rol	e: Mana
Insert	🗱 Delete 🗼 Indent 🧇 Outdent	Show Level	🔹 🦻 <u>Refresh</u> 🛛 🖓 Co	py 🗗 Export 🛛	- Show/hide colum	ns 🔻 🍸 🤆	lear Filters		
1 8	Release Name	Test Status			Creator	Active	Iteration?	Release Id	Edit
		Any 🔻	Export Items		Any 🔻	Any 🔻	Any 🔻	RL	<ul> <li>Filte</li> </ul>
1	🖃 🛅 Library System Release 1		Please select the project yo	u want to export to:	Fred Bloggs	Yes	No	RL000001	► Edit
	🖻 🛅 Library System Release 1 SP1		Select Project	-	Joe P Smith	Yes	No	RL000002	► Edit
1	Lteration 001	No Tests	Select Ploject	•	Joe P Smith	Yes	Yes	RL000011	► Edit
1	Lteration 002	No Tests	> <u>E</u>	xport   Cancel	Joe P Smith	Yes	Yes	RL000012	► Edit
3	Lteration 003	No Tests	1.0.1.0.0003	5-May-2004	Joe P Smith	Yes	Yes	RL000013	► Edit
1	🖻 🛅 Library System Release 1 SP2		1.0.2.0	5-Jun-2004	Joe P Smith	Yes	No	RL000003	► Edit
1	teration 001	No Tests	1.0.2.0.0001	5-Jun-2004	Joe P Smith	Yes	Yes	RL000014	► Edit
1	Lteration 002	No Tests	1.0.2.0.0002	5-Jun-2004	Joe P Smith	Yes	Yes	RL000015	Edit
1	Lteration 003	No Tests	1.0.2.0.0003	5-Jun-2004	Joe P Smith	Yes	Yes	RL000016	► Edit
1	Lteration 001	No Tests	1.0.0.0001	15-Feb-2004	Fred Bloggs	Yes	Yes	RL000008	► Edit
1	teration 002	No Tests	1.0.0.0002	15-Feb-2004	Fred Bloggs	Yes	Yes	RL000009	► Edit
1	Lteration 003	No Tests	1.0.0.0003	15-Feb-2004	Fred Bloggs	Yes	Yes	RL000010	► Edit
]	Elibrary System Release 1.1		1.1.0.0	15-Oct-2004	Fred Bloggs	Yes	No	RL000004	► Edit
1	Library System Release 2005		1.2.0.0	1-Apr-2005	Fred Bloggs	Yes	No	RL000006	► Edit

Once you have chosen the destination project and clicked the <Export> button, the releases/iterations will be exported from the current project to the destination project. Any file attachments will also be copied to the destination project along with the release/iteration.

## 7.1.13. Right-Click Context Menu

SpiraTeam® provides a shortcut – called the *context menu* - for accessing some of the most commonly used functions, so that you don't need to move your mouse up to the toolbar each time. To access the context menu, right-click on any of the rows in the release list and the following menu will be displayed:

El Iteration 001	1.0.1.0.0001 No	Tests		13-Mar-2004	20-Mar-2004	80.0h	
Lteration 002	- Insert Release	Tests		21-Mar-2004	24-Mar-2004	48.0h	15.0h
Lteration 003	- Insert Iteration	Tests	No Tasks	25-Mar-2004	30-Mar-2004	64.0h	
🗉 🗐 Library System Release 1	- Delete Item		No Tasks	1-Apr-2004	30-Apr-2004	352.0h	
E Iteration 001	- Indent Item	Tests	No Tasks	1-Apr-2004	10-Apr-2004	112.0h	
E Iteration 002	- Outdent Item	Tests	No Tasks	11-Apr-2004	20-Apr-2004	112.0h	
Lteration 003	- Copy Items	Tests	No Tasks	21-Apr-2004	30-Apr-2004	128.0h	
Lteration 001	- Cut Items	Tests		1-Mar-2004	4-Mar-2004	96.0h	32.0h
Lteration 002	- Paste Items	Tests		5-Mar-2004	8-Mar-2004	24.0h	32.0h

You can now choose any of these options as an alternative to using the icons in the toolbar

## 7.2. Release Details

When you click on release item in the release list described in section 7.1, you are taken to the release details page illustrated below:

	Welcome, Fre	d Bloggs   My Profile   Administration   Log Out	Library Information System
spiraTeam	My Page	Project Home Planning Testing	Tracking Reporting
Requirements   Releases > Release	Details   Iterations		
< Back to Release List	🖺 Save 🛛 🖓 Copy	🗞 Refresh 🛛 🗱 Delete 🏻 🖨 Print	
Library System Release 1	Release Name:	Library System Release 1 [RL:000001]	
Library System Release 1 SP1	Name*:	Library System Release 1	
Library System Release 1 SP2 Library 001	Description:	Font V Size V B Z U	
Leration 001		This is the initial release of the Library Management	
Lteration 003			
Library System Release 1.1			
Library System Release 2005	Version Number*:		Created By*: Fred Bloggs
		1.0.0.0	
	Start/End Date:*	3/1/2004 🔳 - 3/12/2004 🔳	Created On: 15-Feb-2004
	# Resources:*	3	Active*: Yes
	Non-Working:*	3 person days	Iteration*: No
	Planned Effort:	216.0h	Available Effort: 120.3h
	Incidents *	Reqs & Tasks # Test Cases # Commer	nts Custom Props * Test Runs * Attachments History *

This page is made up of three areas; the left pane is the navigation window, the upper part of the right pane contains the release detailed information itself, and the bottom part of the right pane displays different information associated with the release.

The navigation pane consists of a link that will take you back to the release list, as well as a list of the other releases in the current project. This latter list is useful as a navigation shortcut; you can quickly view the test run information of all the other releases by clicking on the navigation links without having to first return to the release list page.

The top part of the right pane allows you to view and/or edit the details of the particular release. You can edit the various fields (name, description, etc.) and once you are satisfied with them, simply click either the <Save> or <Save and New> button at the top of the page to commit the changes. In addition you can delete the current artifact by choosing <Delete>, discard any changes made by clicking <Refresh> or print it by clicking <Print>.

When you make changes to the release/iteration's start-date, end-date, number of project personnel resources, or number of non-working *person* days, the system will automatically calculate how many hours of effort (planned effort) are available in the release/iteration for assigning tasks. As you begin assigning tasks – either through the Tasks tab or the Iteration Planning screen – the total estimated effort of the tasks is subtracted from this planned effort to give the "available effort".

The lower part of the right pane can be in one of eight possible modes that can be selected: "Incidents", "Reqs & Tasks", "Test Cases", "Comments", "Custom Properties", "Test Runs", "Attachments", and "History". Each of the different views is described separately below.

## 7.2.1. Incidents

This is the default view for the release details page. It displays the incidents associated with the selected release. The incident list can be one of three modes:

- Detected in this Release this will display a list of all the incidents that were detected during the testing of the selected release. This is useful in determining if there are open incidents associated with a release that need to be dealt with.
- Resolved in this Release This will display a list of all the incidents that have been reportedly resolved in this release. This is useful for double-checking that all the resolved incidents for a release have indeed been fixed.
- Verified in this Release This will display a list of the incidents that have been verified as being fixed in this release. This is useful for generating release notes for a specific release indicating what changes and enhancements have been made in the release.

Regardless of the mode, each incident is listed together with the type, status, priority, name, owner, detector, detection date and a link to the actual incident details (see section 6.2):

Incidents *	Tasks *	Test Cases * Cust	om Props *	Test Runs *	Attachments	History *			
Display List of Inc	cidents: Detected in Thi	s Release 🔻 >	Refresh   Apply F	ilter   <u>Clear Filters</u>	Show/hide co	ilumns 🔻			
🗸 🕘 Incident N	ame ▲▼	Type ▲▼	Status ▲▼	Priority ▲▼	Detected By ▲▼	Detected On ▲▼	Owned By ▲▼	Inc. # <b>▲</b> ▼	Edit
		Any 🔻	Any 🔻	Any 🔻	Any 🔻		Any 🔻	IN	► Filter
🔲 🖉 🏝 Cannot	log into the application	Incident	New		Fred Bloggs	1-Nov-2003		IN000001	► Edit
Not abl	e to add new author	Incident	New		Joe P Smith	1-Nov-2003		IN000002	► Edit
🔲 🔍 🎦 Cannot	add a new book to the sy	<sub>/stem</sub> Bug	Assigned	1 - Critical	Joe P Smith	4-Nov-2003	Fred Bloggs	IN000007	► Edit
Show 15 V rows	per page						🝽 ┥ Displaying	page 1	S of 1 ► ►

To change between the three modes outlined above, simply select the desired mode from the drop-down list contained within the header of the incident list table.

You can perform the following actions:

- Refresh updates the list of incidents from the server, useful if other people are adding incidents to this release at the same time.
- > Apply Filter Applies the entries in the filter boxes to the list of incidents
- Clear Filters Clears the current filter, so that all incidents associated with the current release are shown.
- Edit Clicking the [Edit] button to the right of the incident allows you to edit the incident inline directly on this screen. This functionality is limited to project owners.
- > Show/Hide Columns Allows you to choose which incident columns are visible

### 7.2.2. Reqs & Tasks

In this mode, the lower part of the right pane displays the list of requirements and their associated child tasks that need to be completed for the release/iteration to be completed:

In	cidents	s *	Reqs & Tasks *	Test Cases *	Comments		Custom Prop	s *	Test Runs *	Attach	iments	History *	
> <u>Ins</u>	ert T	ask   Del	ete Task   Refresh	Apply Filter   Clear	Filters   -	- Shov	v Level 🔻	> Es	st. Effort: 94.0h / A	ct. Effort: 61	I.0h / Proj. E	Effort: 95.8h	
V 0	Re	quireme	ent/Task Name		Importance	•	Progress		Owner	Est. Effort	Act. Effort	Proj. Effort	Edit
					Any	▼	Any	•	Any 🔻				► Filter
	) + i	🖹 <u>Abilit</u>	y to add new book	s to the system	1 - Critical				Joe P Smith	16.0h	15.5h	16.0h	► Edit
	Ξ	🗋 <u>Abilit</u>	y to edit existing b	ooks in the system	1 - Critical				Joe P Smith	16.0h	16.8h	16.0h	► Edit
	÷	<u>Abilit ݣ</u>	y to delete existing	books in the syster	n 1 - Critical				Fred Bloggs	16.0h	15.2h	16.0h	► Edit
	0	🗋 <u>Abilit</u>	y to create differen	t editions	1 - Critical				Fred Bloggs	16.0h	10.3h	17.8h	► Edit
		Deve Deve	elop new edition entr	y screen	1 - Critical				Fred Bloggs	8.0h	7.0h	9.0h	► Edit
		Crea	ate edition object ins	ert method	1 - Critical				Fred Bloggs	5.0h	3.3h	5.8h	► Edit
		🖄 <u>Writ</u>	e edition object inse	rt queries	1 - Critical				Fred Bloggs	3.0h		3.0h	► Edit
	) ± 1	🗋 <u>Abilit</u>	y to edit existing a	uthors in the system	2 - High				Fred Bloggs	16.0h		16.0h	► Edit
	) ± 1	🖹 <u>Abilit</u>	y to edit existing a	uthors in the system	2 - High				Fred Bloggs	16.0h		16.0h	► Edit
Show	15	<b>v</b> rows p	oer page							H	I ৰ Displayin	g page 1	Si of 1 ► ►

Each of the requirements and associated tasks is displayed together with its name, description (by hovering the mouse over the name), priority, progress indicator, current owner, estimated effort, actual effort, projected effort and numeric task identifier. Clicking on the task name will bring up the Task Details page which is described in more detail in section 8.2. This allows you to edit the details of an existing task.

You can perform the following actions on a task from this screen:

- New Task inserts a new task in the task list under the specified requirement, with a default set of values. The task will be associated with the specified requirement and current release/iteration.
- > **Delete Task** deletes the task from the project.
- Refresh updates the list of requirements and tasks from the server, useful if other people are adding requirements and/or tasks to this release/iteration at the same time.
- Apply Filter Applies the entries in the filter boxes to the list of requirements and all their associated tasks (*it does not filter the tasks themselves*).
- Clear Filters Clears the current filter, so that all requirements associated with the current release/iteration are shown.
- Edit Clicking the [Edit] button to the right of the requirement or task allows you to edit the item inline directly on this screen. Only columns visible will be editable.
- > Show Level Allows you to quickly expand/collapse all the requirements in the list.

## 7.2.3. Test Case Mapping

This mode displays the test case mapping information for the release in question:

Incidents *	Tasks *	Test Cases	* Custom Pro	ps *	Test Rur	ns *	Attachments	Hist	ory *
Available Test C	ases:			Test	Coverage:				
✓ Name				1	Test #	Name			Status
📃 🗆 🖨 Functi	onal Tests	<u>^</u>			TC000004	🖹 Abi	lity to create new au	thor	N/A
🗌 🗄 Abili	ty to create new bool	<	Add >		TC000002	🗄 Abi	lity to create new bo	ok	N/A
🗆 🗄 Abili	ty to edit existing bo	ok	Auu >		TC000005	🗄 Abi	lity to edit existing a	utho	N/A
🗆 🗄 Abili	ty to create new auth	or 🔤	Remove <		TC000003	🗄 Abi	lity to edit existing b	ook	N/A
🗆 🗄 Abili	ty to edit existing aut	ho	Remove All		TC000006	🔁 Abi	lity to reassign book	to di	N/A
🗆 🗄 Abili	ty to reassign book t	o di			TC000009	Aut 🗠	hor management		N/A
🔲 🗉 🖻 Regres	ssion Tests				TC000008	Boo	ok management		N/A
📃 🗉 🖻 Scena	rio Tests	~							
	·	×.							
Create Test Set F	rom This Release								
To add test cases	box indicates the tes to this release, choo Remove] and [Remov	se from the lis	t above and click [/	\dd].			9.		

The pane consists of two lists of test cases, the one on the left being the hierarchical list of the test cases belonging to the project arranged in test folders. The right box (which will initially be empty) contains the list of test cases mapped to this release/iteration. The test cases in this box include columns for their ID and name. Hovering the mouse over the names of the test cases in either box will display a "tooltip" consisting of the test case name, place in the folder structure and a detailed description. Clicking on the hyperlinks in right-hand box will jump you to the test case details screen for the test case in question (see section 5.2.9).

To change the test case mapping for this release, you use the buttons (Add, Remove, Remove All) positioned between the two list-boxes. The <Add> button will move the selected test cases from the list of available on the left to the list of mapped on the right. Similarly the <Remove> and <Remove All> buttons will remove either the selected or all the test cases from the right list-box and add them back to the left list-box.

Finally, as a shortcut you can click the "Create Test Set from This Release" link to create a new test set from this release, that will include all of the test sets associated with this release. This is useful in regression testing when you have created a new release and want to be able to quickly assign a tester to ensure that all the functionality in the release works as expected.

## 7.2.4. Comments

The Comments tab shows the current discussion thread made on this release:

Incidents *	Reqs & Tasks	Test Cases *	Comments	Custom Props *	Test Runs	Attachments
To add a new comm	ent to this requiremer	nt, please enter it bel	ow and click the [Sav	e] button:		
Font	- Size	▼ B <i>I</i> <u>U</u>	│ <b>⋤⋥</b>   <b>⋸ !</b> Ξ	律律 13-36 -	@ 🔄 🗔 <> 🗖	
Existing Com	iments					

All existing comments are listed in order by entered date. To create a new comment, enter the text into the text box, and then click the Save button.

## 7.2.5. Custom Properties

In this mode, the main pane displays any custom properties that the project owner has defined for releases. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*. Assuming that custom properties have been defined for your project, you will see a list of optional parameters that can be set on the release. These can be either freetext or drop-down-lists. In the example below, you can enter Notes and/or the Operating System that the release is intended for.

Incidents *	Tasks *	Test Cases *	Custom Props *	Test Runs *	Attachments	History *	
The following are the	custom properties o	f this artifact:					
Notes:	This is the first	version of the system			~		
	This is the lifst	version of the system	1				
					~		
Operating System	I: Windows Vista				▼		

Once you are satisfied with the values for the custom properties, simply click [Save] or [Save and New] to commit the changes.

### 7.2.6. Test Runs

This view displays the list of all the test runs executed against the release. Each test run is listed together with the date of execution, the name of the test case, the name of the tester, the release/version of the system that the test was executed against, the name of the test set (if applicable), the overall execution status for the test case in that run and a link to the actual test run details (see section 5.6). In addition, you can choose to display any of the custom properties associated with the test run.

> <u>Re</u>	fresh   Apply Filter   Clear Filter	s   - Show/hide column	ns – 🔻 🔻							
1	9 Test Run Name ▲▼	Execution Date AV	Test Set ▲▼	Release ▲▼	Status ▲▼	Est. Dur. ▲▼	Act. Dur. ▲▼	Web Browser ▲▼	Operating System ▲▼	Run # A
			Any 🔻	1.0.0.0 - Librar 🔻	- Any 🔻			- Any - 🔻	- Any - 🔻	TR
	Ability to edit existing book	1-Dec-2003		1.0.0.0	Caution	0.1h	0.8h			TR000010
	Ability to create new author	1-Dec-2003	Testing Cycle for Release 1.0	<u>1.0.0.0</u>	Failed	0.1h	1.5h			TR000004
	Ability to edit existing book	1-Dec-2003	Testing Cycle for Release 1.0	<u>1.0.0.0</u>	Passed	0.1h	1.5h			TR000003
	Ability to create new book	1-Dec-2003		1.0.0.0	Failed	0.2h	1.2h	Opera	Windows 2003	TR000012
	Ability to create new book	1-Dec-2003	Testing Cycle for Release 1.0	1.0.0.0	Failed	0.2h	1.3h	Internet Explorer	Windows XP	TR000001

The "customize columns" drop-down list allows you to change the fields that are displayed in the test run list as columns. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. The displayed columns can be any standard field or custom property.

You can also filter the results by choosing items from the filter options displayed in the sub-header row of each field and clicking the "Apply Filter" link. In addition, you can quickly sort the list by clicking on one of the directional arrow icons displayed in the header row of the appropriate field.

## 7.2.7. Attachments

In this mode, the lower section of the screen displays the list of documents that have been "attached" to the release. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.

Incidents *	Tasks *	Test Cases *	Custom Props *	Test	Runs *	Attachm	ents	History *		
> Add Attachmen	t   <u>Remove</u>   <u>Refres</u>	<u>h   Apply Filter   Cle</u>	ear Filters							
✓ Document Na	ame ▲▼	Туре и	٤ ٧٧	Size ▲▼	Edited By A	▲▼	Edited On A	▲▼ Uploade	ed By ▲▼	Doc # ▲▼
		Any -	- 🔻		Any	•		🔲 Any	•	DC
🔲 🙋 www.myco	ompany.com/Related	Information Function	onal Specification 0	) KB	System Adr	ministrator	16-Jan-2010	System	Administrator	DC000017
Show 15 Trows	per page							ৰ 🗖 Displa	ying page 1	S of 1 ► ►

The attachment list includes the filename that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as a tooltip.

To actually view the document, simply click on the filename hyperlink and a new web browser window will open. Depending on the type of file, this window will either display the document or prompt you for a place to save it on your local computer. To remove an existing attachment from a release/iteration, simply click the <Remove> button and the attachment will be removed from the list.

To attach a new document or web link to the release/iteration, you need to click on the "Add Attachment" hyperlink to open the "Add Attachment" dialog box. There are three different types of item that can be attached to a release or iteration:

- To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.
- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard, click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename before uploading if you want it to be displayed with the correct icon in the attachment list.

## 7.2.8. View History

In this mode, the main pane displays the list of changes that have been performed on the release artifact since its creation. An example release change history is depicted below:

Incidents *	Reqs & Tasks #	Test Cases *	Comments	Custom Props *	Test Runs *	Attachments	History *	
Change Date 🔻	Fi	ield Name	Old Value		New Value		Changed By	
5/2/2006 12:00:00 AM	N	ame	Library System	v1.0.0	Library System Rele	ease 1	Fred Bloggs	
3/4/2005 12:00:00 AM	V	ersion Number	1.0.0		1.0.0.0		Joe P Smith	

The change history displays the date that each change was made, together with the fields that were changed, the old and new values and the person who made the change. This allows a complete audit trail to be maintained of all changes in the system.

## 7.3. Iteration Planning

As well as being able to assign requirements, tasks and incidents to releases and iterations individually through the Release/Iteration details page (see above), you can also do this on the Iteration Planning screen. When you are first planning the iteration, and need to batch assign requirements, tasks and incidents from the backlog of unscheduled items to the iterations, it is usually more convenient to use the Iteration Planning screen. To access this screen, go to Planning > Iterations, choose the current release and the following screen will be displayed:

	(3/1/2004 - 3/12/2004) -	<u>rearean</u>							216.0h 95.8h	120.3h
	001 (3/1/2004 - 3/4/2004)			002 (3/5/2004 - 3/				1.0.0.0003 (3/9/	2004 - 3/12/2004)	
Available 96.0h	Utilized 32.0h	Remaining 64.0h	Availa 24.0		Jtilized 32.0h	R	emaining -8.0h	Available 72.0h	Utilized 31.8h	Remaining 40.3h
齝 Ability to add	d new books to the syster	<u>n</u> 16.0h	🗆 齝 Abil	ity to delete existi	ing books in the	system	16.0h	Ability to crea	te different editions	17.8
🛗 Ability to edi	it existing books in the sy	stem 16.0h	🗆 📸 Abil	ity to edit existing	authors in the s	ystem	16.0h	🗌 📸 Ability to dele	te existing authors in the sys	tem 13.9
Develop new	book entry screen	8.0h	🗌 🏠 Refa	ictor book screen	to include delete	e buttor	8.0h	C 2 Refactor auth	or screen to include delete bu	tton 6.0
Create book	object insert method	5.0h	🗌 🏠 Crea	ate book object de	elete method		5.0h	Create author	object delete method	4.8
🛯 🏠 Write book o	object insert queries	3.0h	🗆 🏠 Writ	e book object del	ete query		3.0h	Write author	bject delete query	3.1
🛯 🏠 Develop edit	book details screen	8.0h	🗆 🏠 Dew	elop edit author de	etails screen		8.0h	Develop new	edition entry screen	9.0
Create book	object update method	5.0h	🗆 🏠 Crea	ate author object u	update method		5.0h	Create edition	object insert method	5.8
1 Write book o	object update queries	3.0h	🗆 🏠 Writ	e author object up	pdate queries		3.0h	Write edition	object insert queries	3.0
Reqs & Tasks	Incidents									
Insert Task   Dele	ete Task   Refresh	- Show Level 🔻	Apply Filter	Clear Filters						
Requirement	nt/Task Name		mportance	Progress	Owner		Est. Effort	Act. Effort	Proj. Effort	Ed
			- Any 🔻 🔻	Any 🔻 🔻	Any	•				► Filt
	to edit existing subject	s in the system 3	- Medium		Joe P Smit	h i	3.0h		15.0h	► Ed
	to earl existing subject			No Tasks	Joe P Smit	h				► Ed
⊞ 🖄 Ability	to completely backup t	ne database	- Medium							
I ⊞ 🛍 Ability	to completely backup t	ne database	- Medium - Low	No Tasks	Fred Blogg	IS				► Ed
]		system x 4		No Tasks No Tasks	Fred Blogg Fred Blogg	-				► Ed

This screen is divided into two sections:

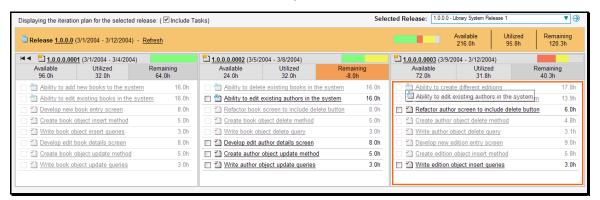
- The top part of the screen displays the iterations contained within the current release (up-to three per page) together with the list of requirements, tasks and incidents currently assigned to the iteration. Also any of these item directly associated with the release itself are displayed in the first panel.
- The bottom part of the screen displays the list of accepted, unplanned (not started) requirements and tasks and unplanned, open incidents that need to be scheduled for a specific iteration. This is essentially the backlog of requirements and their associated tasks, together with any outstanding incidents that need to be scheduled. The requirements and tasks are shown in one tab and the incidents are shown in the other

To navigate around the release, you use the small black arrow buttons located at the top of the iteration panels. These allow you to quickly move to the previous/next iteration in the currently selected release.

To change the release itself, you use the drop-down-list at the top-right of the page to change to a different release.

## 7.3.1. Scheduling Requirements / Tasks / Incidents to Iterations

To assign a new requirement, task, or incident to the iteration schedule, you either position the mouse pointer over a single item's icon, dragging it to the desired iteration or you select several checkboxes in the requirements / tasks / incident list and then drag all the selected items in one go. Once the requirement / task / incident(s) have been added to the iteration, the utilized effort for the iteration will increase, and the available effort will decrease by the same amount.



If you schedule a requirement for a specific iteration, all the child tasks that have not yet been started, will follow the parent requirement in being associated with the iteration.

Note: The system will allow you to assign more tasks/incidents to an iteration than is possible to complete, however this will result in a negative value for 'available effort'. If this happens, the "Available Effort" value will be displayed in red, and you need to rebalance the items, extend the iteration length or add project personnel resources to the iteration.

## 7.3.2. Rescheduling Requirements / Tasks / Incidents

To move planned items from one iteration to another, you either position the mouse pointer over a single item's icon, dragging it to the desired new iteration or you select several checkboxes in the existing iteration and then drag all the selected items to the destination iteration in one go. To remove a requirement / task / incident from an iteration, you should just drag and drop it from the iteration panel back to the requirement / task / incident task list at the bottom of the page. This will return the item to the list of unplanned items at the bottom of the page.

If you reschedule a requirement to a new iteration, all the child tasks that have not yet been started, will follow the parent requirement in being associated with the new iteration. The tasks that have already started, will remain associated to the old iteration.

Note: Once a task has changed status from 'not-started' to any of the other statuses, its checkbox will be disabled and you will need to return it to the 'not started' status before attempting to reassign it. This is a safety feature that prevents you from accidentally rescheduling a task that is currently being worked on.

### 7.3.3. Task Assignment Rules

When you move a task from one iteration to another or assign a new task to the iteration, the system makes the following changes to the task automatically:

> The release/iteration that the task is assigned-to is updated

The start-date and end-date of the task is changed to match that of the iteration if the dates lie outside the bounds of the iteration. This means that the task may change from being on-schedule to late-starting depending on whether the iteration is already in progress

## 7.3.4. Editing the Requirement / Task / Incident List

As well as being able to schedule the requirements, incidents and tasks with the various iterations in the upper portion of the screen, the incident and requirement / task lists displayed on the bottom half of the screen include the same editing functions found in the Requirements, Task, and Incident List pages.

# 8. Task Tracking

## 8.1. Task List

When you click on the Tracking > Tasks global navigation link, you will initially be taken to the tasks list screen illustrated below:

spi	iraTeam	Welcome, System Admi		Administration   Lo	g Out   Library Inform	Reporting			Help?
Incidents	Tasks	My Page Project P	Planning	Testing	Паскіпд	Reporting		Role: P	oject Own
P New 1		Copy 🐼 Export	Show/hide columns	- V Filter					oje et onn
Displavin	g 16 - 30 out of 43 task(s) for this								
V a		project	Progress	Status ▲▼	Priority ▲▼	Owner ▲▼	Release <b>∆</b> ▼	Task # ▲▼	Edit
			Any 🔻	Any 🔻	Any 🔻	Any 🔻	Any 🔻	тк	► Filter
	Write author object update of	ueries		Not Started	2 - High	Joe P Smith	1.0.0.0002	TK000026	► Edit
	Refactor author screen to inc			Not Started	2 - High	Fred Bloggs	1.0.0.0003	TK000027	► Edit
	Write edition object insert qu	Jeries		Not Started	1 - Critical	Fred Bloggs	1.0.0.0003	TK000023	► Edit
	Create edition object insert r			In Progress	1 - Critical	Fred Bloggs	1.0.0.0003	TK000022	► Edit
	Develop new edition entry so	reen		In Progress	1 - Critical	Fred Bloggs	1.0.0.0003	TK000021	► Edit
	Create author object delete			In Progress	2 - High	Fred Bloggs	1.0.0.0003	TK000028	► Edit
	Write author object delete qu			In Progress	2 - High	Fred Bloggs	1.0.0.0003	TK000029	► Edit
	Modify book insert/update qu			Completed	1 - Critical	Joe P Smith	1.1.0.0.0001	TK000015	► Edit
	Refactor book details screen	to include author dro		Completed	1 - Critical	Joe P Smith	1.1.0.0.0001	TK000014	► Edit
	Create book-subject mappin			Completed	1 - Critical	Joe P Smith	1.1.0.0.0001	TK000013	► Edit
	Create book-subject mappin			Completed	1 - Critical	Fred Bloggs	1.1.0.0.0001	TK000012	► Edit
	Create book-subject mappin			Completed	1 - Critical	Fred Bloggs	1.1.0.0.0001	TK000011	► Edit
	Develop book-subject assoc			Completed	1 - Critical	Fred Bloggs	1.1.0.0.0001	TK000010	► Edit
	Modify book insert/update qu			Completed	1 - Critical	Fred Bloggs	1.1.0.0.0002	TK000017	► Edit
	Refactor book details screen	to include edition dr		Completed	1 - Critical	Fred Bloggs	1.1.0.0.0002	TK000016	► Edit
show 1	5 🔻 rows per page						M	playing page 2	I of 3 ► 1

The task list screen displays all the tasks entered for the current project, in a filterable, sortable grid. The grid displays the task number together with fields such as priority, name, assigned owner, start date, end date, scheduled release, etc. The choice of columns displayed is configurable per-user, per-project, giving extensive flexibility when it comes to viewing and searching tasks.

In addition, you can view a more detailed description of the task by positioning the mouse pointer over the task name hyperlink and waiting for the popup "tooltip" to appear. If you click on the task name hyperlink, you will be taken to the task details page described in section 8.2. Clicking on any of the pagination links at the bottom of the page will advance you to the next set of tasks in the list according to the applied filter and sort-order. There is also a drop-down-list at the bottom of the page which allows you to specify how many rows should be displayed in each page, helping accommodate different user preferences.

One special column that is unique to tasks is the 'progress indicator'. This illustrates graphically both the percentage completion of the task and also if the task is either starting late or finishing late. The following table illustrates the different type of status that can be conveyed by the indicator:

Indicator Display	Progress Description				
	Task has not yet started, but the scheduled start date is still in the future.				
	Task has not yet started, and the start date has elapsed. This is considered a 'Late Starting Task'				
	Task has started, and is approximately 25% complete. The scheduled end date is still in the future.				
	Task has started, and is approximately 25% complete. However the scheduled end date has elapsed already. This is a considered a 'Late Finishing Task'.				

	Task has been 100% completed.
--	-------------------------------

Essentially, the gray section of the bar indicates the % of the task yet to be completed, and the green/red section of the bar indicates the % of the task that has already been completed. If the bar changes from green to red it means that the end date has been reached and the task is not yet complete, and if the background changes from gray to yellow it means that the task has not yet started, but the scheduled start date has passed.

## 8.1.1. Sorting and Filtering

You can easily filter and sort the list of tasks as illustrated in the screen-shot below:

spiraTeam	Welcome, System Administrato		stration   Log Out   Library	Reporting	×		Help?
ncidents   Tasks	My Page Project Home	Planning	racking	Reporting		Role	: Project Own
New Task 🗱 Delete 🛛 🗟 Refresh	Copy & Export - Show	/hide columns 💌	Filter				
Displaying 1 - 4 out of 4 task(s) for this project							
✓ 🐵 Task Name ▲▼	Progress	Status ▲▼	Priority <b>▲</b> ▼	Owner ▲▼	Release ▲▼	Task # ▲▼	Edit
	Running Late	' Any 🔻	Any 🔻	Any 🔻	Any 🔻	ТК	Filter
Create edition object insert me	thod	In Progress	1 - Critical	Fred Bloggs	1.0.0.0003	TK000022	► Edit
Develop new edition entry scree	en	In Progress	1 - Critical	Fred Bloggs	1.0.0.0003	TK000021	► Edit
Write author object delete quer		In Progress	2 - High	Fred Bloggs	1.0.0.0003	TK000029	► Edit
Create author object delete me		In Progress	2 - High	Fred Bloggs	1.0.0.0003	TK000028	► Edit
Show 15 🔻 rows per page					M	<ul> <li>Displaying page</li> </ul>	1 \$ of 1 ►
New Task 🗱 Delete 🛛 🕏 Refresh							

To filter the list by progress, status, priority, owner or release, you simply choose an item from the appropriate drop-down list, and for the other fields, you enter a free-text phrase then click <Filter> or press the <ENTER> key to apply the different filters. Note that the name field is searched using a "LIKE" comparison, so that searching for "database" would include any item with the word database in the name. The other freetext fields need to be exact matches (e.g. dates, task numbers).

To change the column that is sorted, or to change the direction of the current sort, simply click on the up/down arrow icon in the appropriate column. The currently sorted column is indicated by the larger, white arrow with the back-border. In the screen-shot above, we have filtered on tasks that are finishing late, sorted in order of decreasing priority.

Clicking on Filter > Clear Filter removes any set filters and expands the task list to display all tasks for the current project, and clicking on Filter > Save Filter allows you to save the filter to your 'My Page' for use in the future. The list of saved filters can also be retrieved by clicking Filter > Retrieve Filter.

### 8.1.2. New Task

Clicking on the <New Task> button creates a new task in the grid with an initial set of information. You can click on the name of the task to edit its information.

### 8.1.3. Delete

Clicking on the <Delete> button deletes the tasks whose check-boxes have been selected in the task list.

## 8.1.4. Refresh

Clicking on the <Refresh> button simply reloads the list of tasks; this is useful when new tasks are being added by other users, and you want to make sure you have the most up-to-date list displayed.

#### 8.1.5. Show / Hide Columns

This drop-down list allows you to change the fields that are displayed in the task list as columns for the current project. To show a column that is not already displayed, simply select that column from the list of "Show..." column names and to hide an existing column, simply select that column from the list of "Hide..." column names. This is stored on a per-project basis, so you can have different display settings for each project that you are a member of. The fields can be any of the built-in fields or any of the custom properties set up by the project owner.

#### 8.1.6. Edit

Each task in the list has an <Edit> button display in its right-most column. When you click this button or just click on any of the cells in the row, you change the item from "View" mode to "Edit" mode. The various columns are made editable, and <Update> <Cancel> buttons are displayed in the last column:

spiraTeam	Welcome, Sys	tem Administrator	My Profile   Administra	ation   Log Out   Lib	ary Information System	M		Help?
	My Page	Project Home	Planning Tes	ting Tracking	Reporting			
Incidents   Tasks								Role: Project Owner
🕂 New Task 🗱 Delete 🔯 Refresh	🖳 Copy 🛛 🛃	Export Show/hid	le columns 💌 🎽	T Filter				
Displaying 1 - 4 out of 4 task(s) for this project	t							
✓ 🔮 Task Name ▲▼		Progress	Status ▲▼	Priority <b>∆</b> ▼	Owner ▲▼	Release ▲▼	Task # ▲▼	Edit
		Running Late 🔻	Any 🔻	Any 🔻	Any 🔻	Any 🔻	ТК	► Filter
Create edition object insert methods	od		In Progress	1 - Critical	Fred Bloggs	1.0.0.0.0003	TK000022	► Edit
Develop new edition entry scree	en 💷		In Progress 🔻 🗐	1 - Critical 🔻 🖽	Fred Bloggs 🔻 🗐	1.0.0.0003 🔻 🗐		Update     Cancel
Write author object delete quer	/		In Progress 🔻	2 - High 🔻	Fred Bloggs V	1.0.0.0003 🔻		
Create author object delete meth	od		In Progress	2 - High	Fred Bloggs	1.0.0.0.0003	TK000028	► Edit
Show 15 V rows per page							≪ ⊲ Displayi	ng page 1 Sof 1 ⊫ ⊨

If you click <Edit> on more than one row, the <Update> and <Cancel> buttons are only displayed on the first row, and you can make changes to all the editable rows and then update the changes by clicking the one <Update> button. Also, if you want to make the same change to multiple rows (e.g. to change five tasks from "Not Started" status to "In Progress"), you can click on the "fill" icon to the right of the editable item, which will propagate the new value to all editable items in the same column.

When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information. Alternatively, pressing the <ENTER> key will commit the changes and pressing the <ESCAPE> key will cancel the changes.

#### 8.1.7. Copying Tasks

To copy a task or set of tasks, simply select the check-boxes of the tasks you want to copy and then click <Copy>. This will make a copy of the current task with its name prefixed 'Copy of ....' to distinguish itself from the original. Any file attachments will also be copied along with the task itself.

#### 8.1.8. Exporting Tasks

To export a task or set of tasks from the current project to another project in the system, all you need to do is select the check-boxes of the task(s) you want to export and then click the <Export> button. This will then bring up a list of possible destination projects:

spiraTeam	Welcome, System Admini	strator   My Profile   Administration   Log Out	Library Information System	M.		Help
spirarean	My Page Project Ho	me Planning Testing Track	king Reporting			
idents   Tasks					Role:	Project Ow
New Task 🗱 Delete 🗟 Refresh		Show/hide columns 🔽 🍸 Filter				
splaying 1 - 4 out of 4 task(s) for this projec	ct	[]				
✓ 🔹 Task Name ▲▼	Progress	Export Items	Owner ▲▼	Release ▲▼	Task # ▲▼	Edit
	Running La	Discourse in the second s	Any 🔻	Any 🔻	ТК	► Filter
Create edition object insert m	nethod	Please select the project you want to export to:	Fred Bloggs	1.0.0.0003	TK000022	► Edit
Develop new edition entry scr		Sample Application One	Fred Bloggs	1.0.0.0003	TK000021	► Edit
Write author object delete que		> Export   Cancel	Fred Bloggs	1.0.0.0003	TK000029	► Edit
	nethod	III Flogless 2 - 11gu	Fred Bloggs	1.0.0.00003	TK000028	► Edit

Once you have chosen the destination project and clicked the <Export> button, the tasks will be exported from the current project to the destination project. Any file attachments will also be copied to the destination project along with the tasks.

## 8.2. Task Details

When you click on a task item in the lists displayed on either the main task list page or on the requirement / release details pages, you are taken to the task details page illustrated below:

spiraTeam	Welco	me, Fred Blog	gs   <u>My F</u>	rofile   Adminis	tration   Lo	g Out   Lib	rary Information	n System	V			Help?
spirarcain	My Pa	ge Proje	ct Home	Planning	Tes	ting	Tracking	F	Reporting			
Incidents   Tasks > Task Details   Resou	urces	Source Code										Role: Manager
<< Back to Task List		E Save	🔁 Copy	Refresh Refresh	🗱 Delete	🗟 Prir	nt 🛛 🖂 🗄	Email 9	Subscribe			
Lteration 002 웹 Ability to associate books with differen			ne: Refa	ctor book det	ails screer	to include	edition dr	rop-dow	/n [TK:000016]			
Refactor book details screen to incl	lude	Name:*		Refactor book	details scre	en to include	edition drop	p∙down				
Modify book insert/update queries to in	<u>IC</u>	Descriptio	n:	Font	•	Size 🔻	виц	≡≡:	■  細胞健健	T <sub>2</sub> 🕭   — 📾 🖬 🗖 🗘		
		Priority:		1 - Critical	V				Owner:	Fred Bloggs	•	
		Requireme	ent:	Ability to associate	books with diff	erent editions	•	$\Theta$	Last Updated:	12/1/2003 12:00:00 AM		
		Release /	Iteration:	1.1.0.0.0002 - Itera	tion 002		•	$\Theta$	Creator*:	Fred Bloggs	•	
				(10/19/2004 - 10/23	/2004)					(12/1/2003 12:00:00 AM)		
		Sched	ule *	Comm	ents	Custom P	Properties		Attachments	History	Revision	Associations
		Status:*		Completed	1	·	Estimate	ed Effort:	3.0	hours		
		Progress:			(100%	)	Actual E	ffort:	2.8	hours		
		Projected 8	ffort:	3.0 hours			Remaini	ng Effort:	0.0	hours		
		Start Date:		10/19/2004			End Date	e:	10/20/200	4 🔟		

This page is made up of three areas; the left pane is the navigation window, the upper part of the right pane contains the task detailed information itself, and the bottom part of the right pane displays different information associated with the task.

The navigation pane consists of a link that will take you back to the task list, as well as a list of the other related tasks, nested under their parent requirement, which is itself nested under the release/iteration that it is scheduled for:

- Release / Iteration
  - ▷ Requirement # 1
    - Task # 1.1
    - > Task # 1.2

The top part of the right pane allows you to view and/or edit the details of the particular task. You can edit the various fields (name, description, etc.) and once you are satisfied with them, simply click either the <Save> or <Save and New> button at the top of the page to commit the changes. In addition you can

delete the current artifact by choosing <Delete>, discard any changes made by clicking <Refresh> or print it by clicking <Print>.

Using the <Email> button on the toolbar, you can send an email containing details of the task to an email address or another user on the system:

Email this artifact	0:		×
Project User:	Fred Bloggs		
	Select a user in the project to send to.		
Email Addresses:			
	A list of email addresses, separated by ;		·
Message Subject:			
	Leave blank for default.		'
		Send   Cancel	I

You can specify the subject line for the email, and either a list of email addresses, separated by semicolons, or an existing project user .The content of the email is specified in the System Administration – Notification Templates.

The lower part of the right pane can be in one of five possible modes that can be selected: "Schedule", "Custom Properties", "Attachments", "History" and "Revision Associations". Each of the different views is described separately below.

#### 8.2.1. Schedule

In this mode, the main pane displays the general schedule and completion status of the specific task. You can enter/edit the start-date, end-date (i.e. the due-date), estimated, actual and remaining effort. From this the system will calculate the progress, percentage complete and projected final effort.

Schedule *	Comments	Custom Properties	Attachments	History	Revision Associations
Status:*	Completed 🔻	Estimate	d Effort: 3.0	hours	
Progress:	(100%)	Actual Ef	fort: 2.8	hours	
Projected Effort:	3.0 hours	Remainin	g Effort: 0.0	hours	
Start Date:	10/19/2004	End Date	10/20/	2004 🔳	

The different effort values mean the following:

- **Estimated Effort** This is the original estimate for how long the task would take to complete.
- Actual Effort This is the current amount of effort that has been expended in completing the task. This does not indicate the completion progress
- Remaining Effort This is the estimate for how it will take from the current state to complete the task. The % complete is calculated from this value in conjunction with the estimated effort:

% Complete = 100% - (Remaining Effort / Estimated Effort)

Projected Effort – This is value that the system is projecting it will take to complete the task. This is calculated from the Actual Effort and Remaining Effort:

Projected Effort = (Actual Effort + Remaining Effort)

If the actual effort is not specified, the projected effort will be the same as the estimated effort.

Note that if this task is currently assigned to a release or iteration, the start-date and end-date of the task must lie within the date-range of the parent release/iteration. If your task looks like it will not be completed in the available timeframe, you will need to contact the project manager to get them to either extend the date-range of the task, or consider moving the task to the next iteration.

#### 8.2.2. Comments

The comments tab will display the comments associated with the task:

Schedule *	Comments	Custom Properties	Attachments	History	Revision Associat
To add a new comment to	this requirement, please	enter it below and click the	e [Save] button:		
Font 🔻	Size 🔻	BIU∣≣≣≣∣	∃目健健 ℡&	co 🔟 🗔 <> 🔟	
Existing Comment	S				

All existing comments are displayed in date entered underneath the textbox. To enter a new comment, enter the text into the textbox, and then click the Save button.

#### 8.2.3. Custom Properties

In this mode, the main pane displays any custom properties that the project owner has defined for tasks. To learn more about how to setup and configure custom properties for a project, please refer to the *SpiraTest Administration Guide*. Assuming that custom properties have been defined for your project, you will see a list of optional parameters that can be set on the task. These can be either freetext or drop-down-lists. In the example below, you can enter Notes and/or the project track that the task is associated with.

Schedule #	Custom Properties *	Attachments	History	Revision Associations *	
The following are th	e custom properties of this artifa	act:			
Notes:			~		
Track: Non			▼		

Once you are satisfied with the values for the custom properties, simply click [Save] or [Save and New] to commit the changes.

#### 8.2.4. Attachments

In this mode, the lower section of the screen displays the list of documents that have been "attached" to the task. The documents can be in any format, though SpiraTeam® will only display the icon for certain known types.

	Schedule *	Custom Properties *	Attachments *	History	Revision Asso	ciations *	
> <u>A</u>	dd Attachment   Re	emove   <u>Refresh</u>   <u>Apply</u>	<u>/ Filter   Clear Filters</u>				
~	Document Name	▲▼ Type ▲▼	Size ▲▼	Edited By ▲▼	Edited On ▲▼	Uploaded By ▲▼	Doc # ▲▼
		Any 🔻		Any 🔻		Any 🔻	DC
	🙆 main.rb	Functional Spec	ification 3 KB	System Administrator	16-Jan-2010	System Administrator	DC000018
Show	w 15 🔻 rows per p	age				ৰ ৰ Displaying page 1	S of 1 ► ►

The attachment list includes the filename that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as a tooltip.

To actually view the document, simply click on the filename hyperlink and a new web browser window will open. Depending on the type of file, this window will either display the document or prompt you for a place to save it on your local computer. To remove an existing attachment from a task, simply click the <Remove> button and the attachment will be removed from the list.

To attach a new document or web link to the task, you need to click on the "Add Attachment" hyperlink to open the "Add Attachment" dialog box. There are three different types of item that can be attached to a task:

- To upload a file, choose "File" as the type and then click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Upload> button. The document will be copied from your computer and attached to the artifact.
- To attach a web-link (URL) to the artifact, you need to choose "URL" as the type and then enter the fully qualified URL (e.g. <u>http://mywebsite.com?Document=1</u>), an optional description and then click the <Upload> button to attach the web-link.
- To attached a screenshot to the artifact, you need to choose "Screenshot" as the type and then copy the image to your computer's clipboard (e.g. on Windows computers, the PRINT SCREEN button captures the current page and adds to the clipboard). Once the image is in the clipboard, click on the "Paste image from clipboard" hyperlink and the item will appear in the preview window. You can then fill in the other fields and click <Upload> to attach the image.

Note: If you are using a non-Windows® computer (e.g. Macintosh®) that doesn't put file extensions on filenames (e.g. .xls for an Excel sheet) automatically, then you will need to manually add the file extension to the filename before uploading if you want it to be displayed with the correct icon in the attachment list.

#### 8.2.5. View History

In this mode, the main pane displays the list of changes that have been performed on the task artifact since its creation. An example task change history is depicted below:

Schedule *	Comments	Custom Properties	Attachments	History <b>*</b>	Revision Associations
Change Date 🔻	Fiel	d Name	Old Value	New Value	Changed By
9/28/2010 11:29:50 PM	Star	t Date	10/19/2004	10/24/2004	Fred Bloggs
9/28/2010 11:29:50 PM	End	Date	10/20/2004	10/25/2004	Fred Bloggs
9/28/2010 11:29:50 PM	Rele	ase Id	1.1.0.0.0002	1.1.0.0.0003	Fred Bloggs
9/28/2010 11:29:31 PM	Tasł	Priority	1 - Critical	2 - High	Fred Bloggs
9/28/2010 11:29:31 PM	Actu	al Effort	170	168	Fred Bloggs
9/28/2010 11:29:31 PM	Proj	ected Effort	180	168	Fred Bloggs

The change history displays the date that each change was made, together with the fields that were changed, the old and new values and the person who made the change. This allows a complete audit trail to be maintained of all changes in the system.

#### 8.2.6. Revision Associations

In this mode, the main pane displays a list of any source code revisions that are associated with this task:

	Schedule *	Custom Properties *	Attachme	ents		History	Revision Associations *		
A <	dd   Delete   <mark>Refresl</mark>	n   <u>Apply Filter</u>   <u>Clea</u>	ur Filters   🔽 Inclu	ide Source C	ode Re	visions			
$\checkmark$	Artifact Name	Artifact Type ▲▼	Created On ▲▼	Created By	/▲▼	Comment AV		Artifact # ▲▼	Edit
		Any 🔻		Any	▼				► Filter
	A rev0012	Revision	16-Jan-2010	Fred Bloggs		The artifact was of fix th	hanged in this version to	-	
Show	w 15 ▼ rows per pa	ge					🛏 ┥ Displ	aying page 1	S of 1 ► ►

This feature allows you to display the list of any changes in the source code repository that were the result of implementing the functionality described in the task. Clicking on the revision name takes you to the revision details page which is described in more detail in the "Source Code" section of this guide.

You can perform the following actions:

- Refresh updates the list of revisions from the server, useful if other people are adding revisions connected to this task at the same time.
- > Apply Filter Applies the entries in the filter boxes to the list of revisions.
- > Clear Filters Clears the current filter, so that all revisions for the current task are shown.

# 9. Resource Tracking

This section outlines how you can use the Resource Tracking features of SpiraPlan® and SpiraTeam® to view the total workload for each of the project personnel resources assigned to a specific project. This allows you to verify that the work is evenly distributed amongst the project members and that no individual resource is overloaded.

When you click on the Tracking > Resources link on the global navigation bar, you will initially be taken to the project resources list screen illustrated below:

6	piraTeam	Welcome, Fred	Bloggs   My Profile   Administra	ation   Log Out   Ubrary Informatio	n System 🔻		Help?
5		My Page	Project Home Planning	Testing Tracking	Reporting		
Incide	nts   Tasks   Resources   S	Source Code					Role: Manager
<b>B</b>	Refresh Trilter						
Displa	aying the resource usage for the cur	rent project or selected	release:		Display data for: 1.0.0.0	) - Library System Release 1	▼
~	Resource Name <b>∆</b> ▼	Project Role ▲▼	Available Effort	Task Effort ▲▼	Incident Effort AV	Total Effort ▲▼	User # ▲▼
		Any 🔻					US
	A Fred Bloggs	Manager	80.0h	54.0h	0.0h	54.0h	US000002
	& Joe Smith	Observer	80.0h	40.0h	0.0h	40.0h	US000003
Show	15 Trows per page		•		5 	l≪ ⊲ Displaying page [1	s of 1 ⊨ ⊨

This screen lists all the personnel (project resources) that belong to the current project together with the total value of the projected effort of all the work assigned to them and the available effort based on the length of the current release/iteration. The effort is shown for tasks and incidents as well as a total of the two together. You can display the workload for the project as a whole, for a specific release (including all child iterations) or for a specific iteration.

If any project resources have been assigned more work that they have time to complete during the length of the release/iteration, the background color of the effort value will be colored in red, indicating that you need to offload some of the work to other project resources.

Clicking on a resource name will take you to the Resource Details page.

## 9.1 Resource Details

The resource details page will show you what a resource has been assigned, and time values for the items. A small table on the left will show current configured values for the project for # of hours per workday, # of days per week, and how many non-work hours per month there are.

<b>Resource Details</b>	:			
Name:	System Administrate	or	Current Proj	ect Planning Setting
E-Mail:	administrator@myco	mpany.com	Hours / Day:	
Department:			Days / Week	:
Project Role:	Project Owner		Non-Work Ho	urs / Month:
Reqs & Tasks	Incidents *	Test Cases #	Test Sets	
✓ 🧶 Requireme	nt/Task Name Impo	ortance Progre	ss Owner	Est. Effort
	- An	y 🔻 Any	Any	▼
Show 15 Trows pe	er page			

Tabs along the bottom will show assigned requirements and tasks, incidents, test cases and test sets. The views for each item are a subset of available columns, to show progress and completion information for all items listed. Clicking on an artifact's name will take you to the artifact details page:

### 9.1.1. Reqs & Tasks

This tab displays the list of requirements and child tasks that are assigned to the current resource:

F	Reqs	a& Tasks <b>≭</b>	Incidents *	Test Cases *	Test Sets *							
~	U	Requiremen	t/Task Name		Importance	Progress		Owner	Est. Effort	Act. Effort	Proj. Effort	Edit
					Any	Any	•	Any 🔻 🔻				► Filter
		⊕ 🛍 <u>Ability</u>	to delete existing boo	ks in the system	1 - Critical			Fred Bloggs	16.0h	15.2h	16.0h	► Edit
		⊞ 🛍 Ability	to completely erase a	II books stored in th	1 - Critical			Fred Bloggs	10.0h	9.5h	9.5h	► Edit
		🗆 🛍 Ability	to create different edi	tions	1 - Critical			Fred Bloggs	16.0h	10.3h	17.8h	► Edit
		Develo	op new edition entry scre	een	1 - Critical			Fred Bloggs	8.0h	7.0h	9.0h	► Edit
		Create	e edition object insert m	ethod	1 - Critical			Fred Bloggs	5.0h	3.3h	5.8h	► Edit
		🖄 Write	edition object insert que	ries	1 - Critical			Fred Bloggs	3.0h		3.0h	► Edit

#### 9.1.2. Incidents

This tab displays the list of incidents that are assigned to the current resource:

	Reqs & Tasks *	Incidents *	Test Case	s *	Te	st Sets *					
ID /	Name			Date Ope	ened	Status	Priority	Severity	% Complete	Est. Effort (hrs)	Projected Effort (hrs)
×	Cannot add a nev	v book to the system	[IN:000007]	4-Nov-200	)3	Assigned	1 - Critical	3 - Medium	0%	0.3	0.3
	Ability to associa	te multiple authors	[IN:000021]	17-Nov-20	003	Assigned	1 - Critical	1 - Critical	25%	0.3	0.4
×	Test System Lim	itation	[IN:000046]	4-Dec-200	03	Assigned	1 - Critical		75%	0.7	0.8
×	Test Training Item	1	[IN:000040]	3-Dec-200	03	Assigned	1 - Critical	2 - High	25%	0.5	0.5
×	Editing the date of	n a book is clunky	[IN:000008]	4-Nov-200	)3	Assigned	2 - High	4 - Low	50%	0.4	0.4
×	Test Training Item	1	[IN:000041]	3-Dec-200	03	Assigned	2 - High		50%	0.7	0.7
×	Test Change Req	uest	[IN:000053]	7-Dec-200	03	Assigned	3 - Medium		25%	0.5	0.5
×	Ability to import d	lata from excel	[IN:000023]	25-Nov-20	003	Assigned	3 - Medium	2 - High	75%	0.5	0.5
×	Test System Lim	itation	[IN:000048]	4-Dec-200	03	Assigned	3 - Medium	3 - Medium	90%	1.3	1.5
×	Sample Risk 3		[IN:000061]	10-Dec-20	003	Assigned	4 - Low	4 - Low	90%	0.7	0.9

#### 9.1.3. Test Cases

This tab displays the list of test cases that are assigned to the current resource:

R	leqs & Tasks *	Incidents *	Test Cases *	Test Sets *			
ID / I	Name			Last Executed	Last Execution Status	Priority	Estimated Duration
	Ability to create	new book	[TC:000002]	1-Dec-2003	Passed	1 - Critical	0.2h
<u>-</u>	Ability to edit ex	isting book	[TC:000003]	1-Dec-2003	Caution	1 - Critical	0.1h

#### 9.1.4. Test Sets

This tab displays the list of test sets that are assigned to the current resource:

	Reqs & Tasks *	Incidents *	Test Cases	* Т	est Sets *				
ID /	/ Name			Status	Planned Date	Execution Status	Last Executed	Est. Duration	Act. Duration
	Testing New Fund	ctionality	[TX:000005]	In Progress	10-Feb-2007		28-Sep-2010	0.3h	0.8h
	Exploratory Testi	ng	[TX:000006]	Deferred				0.0h	0.0h
	Regression Testi	ng for Windows XP	[TX:000003]	Completed				0.3h	0.0h

## **10. Document Management**

This section outlines the document management features of SpiraPlan® and SpiraTeam® that can be used to upload, manage and share documents between the different members of the project. This module includes support for uploading files and URLs, versioning of documents, the ability to organize into folders and categorize and search using meta-tags.

In addition the document management features are fully integrated into the rest of the system, so that documents attached to other artifacts (e.g. requirements, test cases, etc.) are automatically connected to the project documentation repository.

## 10.1. Document List

When you click on the Project Home > Documents link on the global navigation bar, you will initially be taken to the project documents list screen illustrated below:

spiraTeam	Welcome, Fred Bloggs   My Profile   Log Out	Library Information System	•		Help?
	My Page Project Home Planning	Testing Tra	cking Reporting		
Project Home   Documents				R	ole: Manage
Document Folders   Refresh	✓ Document Name ▲▼	Type ▲▼ Size	▲▼ Edited By ▲▼	Edited On ▲▼ Uploaded By ▲	Doc # 🔺
🗆 🗁 Root Folder		Any 🔻	Any 🔻	🔲 Any 🔻	DC
E Design Documents	Sequence Diagram for Book Mgt.pdf	UML Diagram 35	Joe P Smith	10-May-2006 Fred Bloggs	DC000007
Misc Documents	Graphical Design Mockups.psd	Screen Layout 1009	Joe P Smith	1-May-2006 Joe P Smith	DC000013
🗉 💼 Screen Captures	Use Case Diagram.vsd	UML Diagram 43	Fred Bloggs	23-Apr-2006 Fred Bloggs	DC000012
🗉 🧰 Specifications	Author Management Screen Wireframe.v	sd Screen Layout 533	Fred Bloggs	2-Apr-2006 Joe P Smith	DC00008
🖲 🖿 Test Results	Book Management Screen Wireframe.ai	Screen Layout 392	Fred Bloggs	1-Apr-2006 Joe P Smith	DC000011
Operations	Show 15 Trows per page			I ≪ Displaying page 1	of 1 ⊫ ⊧
Add Document     Delete Document     Aefresh Documents     Apply Current Filter     Clear All Filters     Export Documents					

This screen consists of three main sections:

- The top left-hand pane displays a hierarchical list of the various folders that have been setup for the current project. Clicking on the [+] expand icon will expand the child folders and clicking on the name of the folder will display the list of documents in the folder in the main pane to the right.
- The main right-hand pane displays a list of all the documents contained within the currently selected folder. This list can be filtered and sorted, and you can choose how many rows of documents to display on the page at one time.
- The bottom left-hand pane contains all the "Operations" that can be performed on the document list. You can use the various icons to add documents to the current folder, delete existing documents from the project, refresh the list of documents, export documents to another project and options to apply the selected filter.

#### 10.1.1. Add New Document

To add a new document to the project, you just need to click on the <Add Document> icon in the Operations list, and the 'Add New Document' dialog box will be displayed:

spiraTeam	Welcome, Fred Bloggs   M	V Profile   Log Out   Library	Information System				Help?
spirarcain	My Page Project Hom	e Planning Testi	ng Tracking	Reporting			
Project Home   Documents						Ro	le: Manager
Document Folders   Refresh	✓ Document Name ▲▼	Туре 🔺	▼ Size ▲▼	Edited By AV	Edited On ▲▼	Uploaded By ▲▼	Doc # ▲▼
Proof Folder     Posign Documents     Design Documents     Differen Captures     Differen Captures     Differenciations     Differenciations     Differenciations	Image: Sequence Diagram       I	Add New Document Type:*   File Filename:* Description:	O URL	ith ith gs gs gs	10-May-2006           1-May-2006           23-Apr-2006           2-Apr-2006           1-Apr-2006	Any     Fred Bloggs     Joe P Smith     Fred Bloggs     Joe P Smith     Joe P Smith	DC DC000007 DC000013 DC000012 DC000008 DC000011
Operations              Add Document)          Solution             Befresh Documents              Apply Current Filter          Solution             Clear All Filters             Export Documents	Show 15 V rows per page	Document Type:* Functional Tags:	ipecification > <u>Upload</u>   (	Cancel	H -4	Displaying page 1	Sof1⊫⊨

From here, you need to either browse to the file being uploaded or enter in its URL, and then enter the description (optional), choose the type of document from the list provided and supply any meta-tags that you want to search on (separated by commas). Then click <Upload> to complete the operation or <Cancel> to abort.

#### 10.1.2. View Document Information

When you hover the mouse pointer over any of the documents displayed in the document list, an information panel will be displayed that contains the name, description, version, document type and meta-tags of the document:

spiraTeam	Welcome, Fred Blog	gs   <u>My Profile</u>   <u>Lo</u> g	Out   Library Informa	tion System				Help?
spirarean	My Page Proje	ct Home Planni	ng Testing	Tracking Rep	orting			
Project Home   Documents							Ro	le: Manager
Document Folders   Refresh	✓ Document Nam	e ▲▼	Type ▲▼	Size ▲▼	Edited By	▼ Edited On ▲▼	Uploaded By ▲▼	Doc # ▲▼
Root Folder      Design Documents      Misc Documents      Screen Captures      Specifications      Test Results	Image: Sequence Di       Image: S	Filename: Document Type:	ram for Book Mgt.p Sequence Diagram f UML Diagram Acrobat		Any Loe P Smith P Smith d Bloggs d Bloggs d Bloggs		Fred Bloggs Joe P Smith Fred Bloggs Joe P Smith Joe P Smith	DC DC000007 DC000013 DC000012 DC000008 DC000011
Operations       Image: Constraint of the second secon	Show 15 V rows pe		Sequence diagram in L	12:00:00 AM)		<ul> <li></li> </ul>	Displaying page 1	<b>S</b> of 1 ► M

You can click on the document URL to actually open the document itself in a new window, click on the meta-tag links to find related documents that contain the same meta-tag, or click on "View Details" to see more information regarding the document, including an ability to edit its meta-information and see the different versions of the document.

## 10.2. Document Details

When you click on an item in the document list described above, you are taken to the document details page illustrated below:

	come, Fred Bloggs   My F	Profile   Log Out	Library Information St	ystēm 🔻			Help?
Му Р	Page Project Home	Planning	Testing	Tracking	Reporting		
Project Home   Documents > Document Details							Role: Manager
<< Back to Document List	🖺 Save 🗱 Delete	Refresh					
Design Documents Sequence Diagram for Book Mgt.pdf	Document: Sequer	nce Diagram for Boo	ok Mgt.pdf (DC	000007)			
Graphical Design Mockups.psd	Filename:*	Sequence Diagram fo	or Book Mgt.pdf				
(B) Use Case Diagram.vsd (B) Author Management Screen Wireframe.vsd	Description:	Font 💌				谭谭 13-34 -∞国■◇図	
Book Management Screen Wireframe.ai		Sequence diagram in case	UML format that p	rovides addition:	al detail surrour	nding the book managament use-case / test	
	Document Folder:*	Design Documents		▼ Cr	eated By:*	Fred Bloggs	,
	Document Type:*	UML Diagram		▼ Ec	lited By:*	Joe P Smith	
	Tags:	sequence diagram, b	ook management	t Cr	eated On:	5/3/2006 12:00:00 AM	
	File Type (Size):	Acrobat 🛃 (35 KB)		La	st Edited:	5/10/2006 12:00:00 AM	
				Cu	urrent Version:	1.2	
	Versions *	Associations =					

This page is made up of three areas; the left pane is for navigation, the upper part of the main pane contains the details of the document, and the bottom part of the right pane contains the list of document versions and the list of artifacts that the document is associated with.

The navigation pane consists of a link that will take you back to the project document list, as well as a list of other documents in the current folder. This latter list is useful as a navigation shortcut; you can quickly view the detailed information of all the peer documents by clicking on the navigation links without having to first return to the main document list page.

The top part of the main pane allows you to view and/or edit the details of the particular document. You can edit the various fields (name, description, etc.) and once you are satisfied with them, simply click the <Save> button at the top of the page to commit the changes. In addition you can delete the current document by choosing <Delete>, or discard any changes made by clicking <Refresh>.

The lower part of the main pane can be switched between two different views by clicking the appropriate tab. Initially the pane will be in "Versions" mode, but it can be switched to "Association" as well. The functionality in each of these two views is described below:

#### 10.2.1. Edit Document Versions

This view displays the list of different versions that exist for the current document. When you initially create a new document there will be only a single version (e.g. v1.0), however as revisions are made to the document, rather than having to create a whole new document, you can just upload the new revision as a new version (e.g. v1.1) and it will be added to the list of versions.

Each version in the list is displayed with its name, a description of what changed in the version, the version number assigned to the revision, the file-size, who uploaded the new version and a link to actually open the new version:

Ve	rsions *	Associations *					
Active	Version	Version Comme	nts	Size	Uploaded By	Uploaded On 🔻	Operations
~	Nersion 1.		n in UML format that provides additional the book managament use-case / test	35 KB	Fred Bloggs	10-May-2006	
	Image: Nersion 1.1 <sup>™</sup> Sequence diagram in UML format that provides a detail surrounding the book managament use-case			30 KB	Fred Bloggs	5-May-2006	> <u>Make Active</u>   <u>Delete</u>
	Version 1.		n in UML format that provides additional the book managament use-case / test	28 KB	Joe P Smith	3-May-2006	> <u>Make Active</u>   <u>Delete</u>
Upload Filena	I New Versio		rowse				
Descri	ption: - For	nt 💽 - Siz	<mark>···· B/U</mark> │इइ३│注⊟┇	∰ <b>T</b> a∙	ै;   — ∞ 🖪 [	■ <> /2	
Versio	on:*		ke this the active version				
						► Upload	

On this page, you have the option to delete an existing version, make a different version the active one (the one that users see when they view the document list and click on the link) and upload a new revision. If you upload a new version, you need to provide a description of the changes made, a new version number and whether the new version should be made the active one. *Note: If the original document was a file (instead of a URL) then all revisions will need to be files, similarly if the original document was a URL, all revisions will need to be URLs.* 

#### 10.2.2. Edit Document Associations

This view displays a list of the artifacts in the current project that are associated with the current document. If you originally uploaded the document as an attachment to a requirement, test case, etc. then an initial association will be already listed, otherwise it will be empty.

Versions *	Associations *				
Date	Artifact Name	Created By	Artifact Type	Artifact #	Operations
1-Dec-2003	Ability to create new book2	Fred Bloggs	Test Case	TC000002	> <u>Delete</u>
Add New Associa Please choose the ar	ation rtifact that you want to add an association to:				
Artifact Type:*	Requirement <b>V</b>				
Artifact ID:*					
	► Add				

From this screen you can either delete an existing artifact association or add a new association from the current document to an pre-existing artifact in the system. To add the association, you just need to select the type of artifact being associated (requirement, test case, incident, etc.) and the numeric ID of the artifact.

For example to add an association to Requirement RQ00005 you would choose Artifact Type = Requirement and Artifact ID = 5.

## **11. Reports Center**

This section describes the reporting features of SpiraTeam®, including an overview of each of the report types that are available. When you click on the "Reports" tab on the global navigation bar, you will initially be taken to the reports home page illustrated below:

spiraTeam	Welcome, Fred Blogg	Administrati	on   Log Out   Ubrary Information	n System 🔻 🔻		Help?
Spirarcai	My Page Project	t Home Planning	Testing Tracking	Reporting		
Reporting						Role: Manager
Saved Reports > <u>v1.0 Release List Report</u> (Caleta)	Requirement Reports <ul> <li>Requirements Summary</li> <li>Requirements Detailed</li> <li>Requirements Plan</li> <li>Requirements Traceability</li> </ul>	Test Case Reports > Test Case Summary > Test Case Detailed > Test Set Summary > Test Set Detailed > Printable Test Scripts > Test Run Summary > Test Run Detailed	Incident Reports Incident Summary Incident Detailed	Task Reports <u>Task Summary</u> <u>Task Detailed</u>	Release Reports Release Summary Release Detailed Release Plan	
	Requirements Graphs > Requirements Summary > Requirements Coverage	Test Case Graphs > Test Case Summary > Test Run Summary > Test Run Progress Rate	Incident Graphs > Incident Summary > Incident Progress Rate > Incident Cumulative Count > Incident Open Count > Incident Aging > Incident Turnaround Time	Task Graphs <ul> <li>Task Summary</li> <li>Task Velocity</li> <li>Task Burnup</li> <li>Task Burndown</li> </ul>		

This page consists of two main areas:

- The left hand pane displays a list of any reports that have either been saved by the currently logged in user, or those reports created by other members of the project, that have been marked (by that user) as 'shareable'.
- The right-hand main pane displays a list of the reports and graphs available in the system, categorized by the artifact they primarily relate to (requirements, test cases, incidents and releases). Clicking on any of the report hyperlinks will take you to the configuration page for the report in question.

The configuration page for each report differs slightly, but the general format is illustrated below:

	Welcome Fred Bl	orge I My Profile I 4	dministration   Log Ou	It   Ubrary Informatio	n System 🔻	Help?
spiraTeam						<u>nepr</u>
		oject Home Plan	ning Testing	Tracking	Reporting	<b></b>
Reporting > Requirements Detailed	гкероп					Role: Manager
<< Back to Reports Home	Requirements Deta	iled Report				
<ul> <li><u>Requirements Summary</u></li> <li><u>Requirements Detailed</u></li> </ul>	Please choose from the v You can filter the results of	arious options below to displayed by various pa	specify how you would rameters as well as ch	like this report to a bose which element	ppear. s of the report are displayed.	
> Requirements Plan	Report Format					
> Requirements Traceability	Format:	) HTML 🔊				
		O MS-Word 2003	i+ 🗟			
		🔿 XML 🖻				
	Report Elements					
	Requirements Details:	Artifact Chang	History			
		Associated Ta	sks			
		Linked Inciden	s			
		Linked Require	ments			
		List of Attache	d Documents			
		Test Case Cov	erage			
	Requirements Details	- Standard Field Filte	rs			
	Author:	Al		•		
	Importance:	Al		•		
	Owner:	- AI		•		
	Status:	Al		V		
	Created On:		1			
	Last Modified:					
	Requirement #:		<u></u>			
	Task Progress:	Al		•		
	Test Coverage:	- Al		<b>V</b>		
	Requirement Name:					
	Actual Effort:					
	Plan Effort:					
	Task Effort:					
	Release:	All			<b>T</b>	
	Requirements Details		tors			
	URL:	custom roperty r	1013			
	Difficulty:	- Al		V		
	-					
	Requirement Type:	- Al -		V		
	If would like to save this re	eport for future use, ple	ase give it a name belo	w before clicking the	e [Create Report] button:	
	Report Name:					
		I would like	to share this report wi	th other members o	f the project	
				Create Report	Cancel	

You can configure the reports in the following ways:

- Report Format This allows you to specify the display format of the report. Depending on the specific report, they can be displayed as a web-page (HTML), downloaded as a Microsoft Word document, downloaded as a Microsoft Excel spreadsheet or downloaded as a Microsoft Project file. In addition there is a raw-XML format that allows you to export the underlying report data into any external reporting system that supports XML import.
- Report Elements This allows you to determine which types of information to include in the report. This varies by report type, but includes the dependent items related to the artifact being reported on (attachments, test steps, coverage, history, etc.)
- Standard Field Filters This allows you to constrain the range of data being reported on, based on the various fields associated with the artifact in question. These filters are typically selections from multi-valued-dropdown lists and date-ranges.
- Custom Property Filters This allows you to constrain the range of data being reported on, based on the custom fields associated with the artifact by your project administrator. These filters can be either freetext or drop-down lists.

- Sort Options This option is only available for the non hierarchical-data reports (i.e. for test runs, incidents and tasks only) and allows you to specify the sort order of the results returned in the report. For the hierarchical-data based reports the sort order is always the order of the hierarchy.
- Report Name If you would like to save the report configuration so that you can quickly re-run it at a later date, you just need to enter a name for the report and indicate (by selecting the checkbox or not) whether you want this report to be private or shared by all members of the project.

Once you have selected the format, elements and filters, clicking the <Create Report> button launches the report in a new window. Each of the reports is now briefly described below:

## 11.1. Requirements Reports

#### 11.1.1. Requirements Summary Report

This report displays all of the requirements defined for the current project in the order they appear in the requirements list. The requirement's details and coverage status are displayed in a summary list form:

Prin	t Report												
	quirements S eport displays all of th	-			roject in t	he order	they appear in t	he requirements	list. The require	ment's details an	id coverage status are dis	played in a s	summary list form.
	ject 1: Librar	-		•	d lending	records	for a typical brar	nch library					
Req	#Name	Description	Priority	Status	Author	Owner	Creation Date	Test Coverage	Task Progress	Last Modified R	Release # Planned Effor	t Task Effort	Actual Effort URL
1	Functional System Requirements			In Progress	Fred Bloggs		01-Dec-2003	0 Covering, 0 Failed, 0 Passed,	42 Tasks; 60% On Schedule, 6% Running Late, 4% Starting Late, 29% Not Started	01-Dec-2003	145 hours 0 mins	190 hours 0 mins	188 hours 40 mins
2	Online Library Management System			In Progress	Fred Bloggs		01-Dec-2003	0 Covering, 0 Failed, 0 Passed, 0 Blocked, 0 Caution	42 Tasks; 60% On Schedule, 6% Running Late, 4% Starting Late, 29% Not Started	01-Dec-2003	145 hours 0 mins	190 hours 0 mins	188 hours 40 mins

#### 11.1.2. Requirements Detailed Report

This printable report displays all of the requirements defined for the current project in the order they appear in the requirements list. For each individual requirement, the name, priority, author, status and coverage status are displayed, along with tables containing the list of covering test cases, linked incidents/requirements, associated tasks, attached documents, and the change history:

Req #4 - Abil	lity to add new books to the system								
The ability to add	d new books into the system, complete with ISBN, publisher a	and other r	elated information						
Priority:	1 - Critical			Status:	Co	mpleted			
Author:	Fred Bloggs			Creation Date:	01-	Dec-2003			
Coverage:	3 Covering, 1 Failed, 1 Passed 0 Blocked 0 Cautio	ion		Last Modified:	01-	Dec-2003			
Owner:	Joe P Smith			Planned Effort:	15	hours 0 mins			
Release #:	1.0.0.0			Task Est. Effort:	16	hours 0 mins			
				Task Actual Effor	rt: 15	hours 30 mins			
URL:	http://www.libraries.org								
Difficulty:	Moderate								
Requirement	Type:								
Test Coverage:	1								
Test #	Name		S	itatus	Est. Durati	on	Last Exe	ecution Date	
TC2	Ability to create new book		F	Failed	0 hours 10	mins	04-Dec-	2003	
TC8	Book management		F	Passed	0 hours 4 i	nins	01-Dec-	2003	
TC13	Adding new book and author to library		1	Not Run -					
Linked Require									
Linkea Require	ments								
Name		Ci	reated By	Comment				Date	Req Id
Ability to delet	te existing books in the system	F	red Bloggs	These two requ	uirements ar	e related		12-Mar-2004	RQ6
Associated Inci	dents								
Name		Created E	By Co	omment				Date	Inc Id
Cannot install	system on Oracle 9i	gs T	his bug affects the r	equirement	nent 1		14-Mar-2004	IN5	
Cannot add a	new book to the system	Joe P Sm	ith T	est Run: Ability to c	reate new bo	ook		04-Nov-2003	IN7
	•			,					
Associated Tas	ks:								

#### 11.1.3. Requirements Plan

This report displays a complete work breakdown structure of the project from a requirements perspective, including all requirements and tasks organized by schedule:

#### **Requirements Plan Report**

This report displays a complete work breakdown structure of the project, including all requirements and tasks organized by schedule

#### Project 1: Library Information System

Sample application that allows users to manage books, authors and lending records for a typical branch library

ID #	Name	Туре	Status	Priority	Owner	Start Date	End Date	Release #	% Complete	Plan Effort	Est. Effort	Actual Effort
1	Functional System Requirements	Requirement	In Progress							145 hours 0 mins	190 hours 0 mins	188 hours 40 mins
2	Online Library Management System	Requirement	ln Progress							145 hours 0 mins	190 hours 0 mins	188 hours 40 mins
3	Book Management	Requirement	Completed	1 - Critical						90 hours 0 mins	96 hours 0 mins	95 hours 0 mins
4	Ability to add new books to the system	Requirement	Completed	1 - Critical	Joe P Smith			1.0.0.0		15 hours 0 mins	16 hours 0 mins	15 hours 30 mins
1	Develop new book entry screen	Task	Completed	1 - Critical	Fred Bloggs	01-Mar-2004	02-Mar-2004	1.0.0.00001	100 %		8 hours 0 mins	7 hours 20 min
2	Create book object insert method	Task	Completed	1 - Critical	Fred Bloggs	01-Mar-2004	02-Mar-2004	1.0.0.00001	100 %		5 hours 0 mins	5 hours 20 min
3	Write book object insert queries	Task	Completed	1 - Critical	Fred Bloggs	01-Mar-2004	02-Mar-2004	1.0.0.00001	100 %		3 hours 0 mins	2 hours 50 min
5	Ability to edit existing books in the system	Requirement	Completed	1 - Critical	Joe P Smith			1.0.0.0		15 hours 0 mins	16 hours 0 mins	16 hours 50 mins
4	Develop edit book details screen	Task	Completed	1 - Critical	Fred Bloggs	03-Mar-2004	04-Mar-2004	1.0.0.00001	100 %		8 hours 0 mins	7 hours 20 min
5	Create book object update method	Task	Completed	1 - Critical	Joe P Smith	03-Mar-2004	04-Mar-2004	1.0.0.00001	100 %		5 hours 0 mins	6 hours 0 mins
6	Write book object update queries	Task	Completed	1 - Critical	Joe P Smith	03-Mar-2004	04-Mar-2004	1.0.0.00001	100 %		3 hours 0 mins	3 hours 30 min
6	Ability to delete existing books in the system	Requirement	Completed	1 - Critical	Fred Bloggs			1.0.0.0		14 hours 0 mins	16 hours 0 mins	15 hours 10 mins

#### 11.1.4. Requirements Traceability Matrix

This report displays a matrix of the requirements in the system with their list of covering test cases and associated, mapped requirements:

rojec	et 1: Library Information System					
ample ap	oplication that allows users to manage books, authors and lending records for a typical bi	ranch library				
		· ·				
equire	ments Forward Traceability					
	on displays a list of all the requirements with the associated test cases/requirements.					
Reg #	Name	Importance	Status	Release #	Test Traceability	Requirements Traceability
RQ1	Functional System Requirements		In Progress		,	
RQ2	Online Library Management System		In Progress			
RQ3	Book Management	1 - Critical	Completed			
RQ4	Ability to add new books to the system	1 - Critical	Completed	1.0.0.0	TC2, TC8, TC13	RQ6
RQ5	Ability to edit existing books in the system	1 - Critical	Completed	1.0.0.0	TC3, TC8	RQ7
RQ6	Ability to delete existing books in the system	1 - Critical	Completed	1.0.0.0	TC8, TC12	RQ4
RQ7	Ability to associate books with different subjects	1 - Critical	Completed	1.1.0.0	TC4, TC8	RQ5
RQ8	Ability to associate books with different authors	1 - Critical	Completed	1.1.0.0	TC6, TC13	
RQ9	Ability to associate books with different editions	1 - Critical	Completed	1.1.0.0	TC4, TC8, TC12	
RQ10	Ability to completely erase all books stored in the system with one click	1 - Critical	Completed	1.2.0.0	TC4, TC8, TC12	
RQ11	Edition Management	1 - Critical	In Progress			
RQ12	Ability to create different editions	1 - Critical	In Progress	1.0.0.0		

#### 11.1.5. Requirements Summary Graph

The requirements summary graph shows how many requirements are currently in a project. The number of requirements is displayed according to the criteria that you specify. You can specify the type of data displayed along the x-axis, and the requirement information which is used to group the data. When you first open the graph you will be asked to pick the field that you would like to display on the x-axis and the field that you would like to group the data by. Once you have chosen the appropriate fields and clicked the <Select> button the graph will be displayed:



In this version of the report, the x-axis represents the requirements' status, and the individual bars are grouped by requirement importance. Each data-value can be viewed by positioning the mouse pointer over the bar, and a "tooltip" will pop-up listing the actual data value.

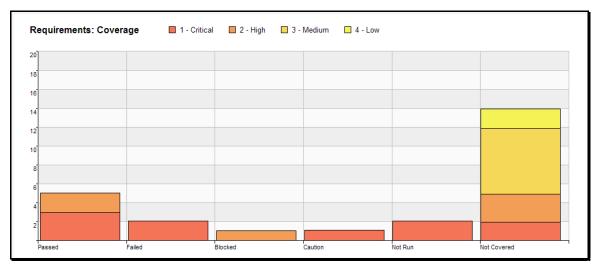
Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph:

> Hide Data Grid				
Status		In	iportance	
	1 - Critical	2 - High	3 - Medium	4 - Low
Completed	8	1	0	0
In Progress	2	2	0	0
Planned	0	2	3	0
Requested	0	1	4	2

This feature is available on all the various graphs in the system.

#### 11.1.6. Requirements Coverage Graph

The requirements coverage graph shows how many requirements are currently in a project, according to their test coverage status.



The x-axis of the report represents the various test execution statuses that a requirement can have as its coverage status (plus the Not-Covered status), and the individual bars are grouped by the requirements importance. Each data-value can be viewed by positioning the mouse pointer over the bar, and a "tooltip" will pop-up listing the actual data value. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

## 11.2. Test Case Reports

#### 11.2.1. Test Case Summary Report

This report displays all of the test cases defined for the current project in the order they appear in the test case list. The test case's details and execution status are displayed in a summary grid form with the test steps optionally displayed:

lest i	#Name	Description	Priority	Test Step	Test Step Description	Test Step Expected Result	Test Step Sample Data	Status	Author	Owner	Est. Duration	Created On	Last Modifie
1	Functional Tests							N/A	Fred Bloggs	Fred Bloggs		01-Dec- 2003	13-Oct-200 15:07:47
2	Ability to create new book	Tests that the user can create a new book in the system	1 - Critical					Failed	Fred Bloggs	Fred Bloggs	10	01-Dec- 2003	13-Oct-200 15:07:47
				1	Call Login to Application			Not Run					
				2	User clicks link to create book	User taken to first screen in wizard		Not Run					
				3	User enters books name and author, then clicks Next	User taken to next screen in wizard	Macbeth, William Shakespeare	Not Run					
				4	User chooses book's genre and sub-genre from list	User sees screen displaying all entered information	Play, Tragedy	Not Run					
				5	User clicks submit button	Confirmation screen is displayed		Not Run					

#### 11.2.2. Test Case Detailed Report

This report displays all of the test cases defined for the current project in the order they appear in the test case list. The test case's details and execution status are displayed, along with sub-tables containing the list of test steps, test runs, attached documents, the change history, and a list of any associated open incidents:

Status:		Failed		P	riority:	1 - Critical				
Author:		Fred Bloggs		C	reation Date:	01-Dec-2003				
Owner:		Fred Bloggs		La	ast Execution:	04-Dec-2003				
URL:		http://www.libraryreferences.org								
Test Ty	pe:	Functional Test								
Step	Description			Expected Result			Sample Da	ita		Last Status
1	Call Login to App	lication								Not Run
2	User clicks link to	o create book		User taken to first screen	in wizard					Not Run
3	User enters book	s name and author, then clicks Next		User taken to next screen	in wizard		Macbeth, V	Villiam Shake	espeare	Not Run
4	User chooses bo	ok's genre and sub-genre from list		User sees screen display	ing all entered informati	on	Play, Trage	dy		Not Run
5	User clicks subm	iit button		Confirmation screen is dis	played					Not Run
Run #	Tester	Test Set	Release		Version	Status	Est. Duration	Actual Du	iration E	xecution Date
TR18	Fred Bloggs		Iteration	003	1,1,0,0,0003	Failed	2 mins	70 mins		04-Dec-2003
TR15	Joe P Smith		Iteration	002	1.1.0.0.0002	Passed	2 mins	70 mins		03-Dec-2003
TR13	Fred Bloggs		Iteration	001	1.1.0.0.0001	Passed	2 mins	70 mins	(	02-Dec-2003
TR12	Fred Bloggs		Library S	ystem Release 1	1.0.0.0	Failed	10 mins	70 mins	(	01-Dec-2003
TR2	Fred Bloggs	Testing Cycle for Release 1.1	Library S	ystem Release 1 SP1	1.0.1.0	Passed	10 mins	90 mins		01-Dec-2003
TR1	Joe P Smith	Testing Cycle for Release 1.0	Library S	ystem Release 1	1.0.0.0	Failed	10 mins	75 mins	(	01-Dec-2003
equirer	nents Coverage:									
Req #	Nam	e				Statu	IS		Priority	
RQ4	AL 10	ty to add new books to the system				Com	pleted		1 - Critical	

#### 11.2.3. Test Set Summary Report

This report displays all of the test sets defined for the current project in the order they appear in the test set list. The test set's details and execution status are displayed in a summary list form:

-	t 1: Librar	-		-		ng record	ds for a typic	al branch library								
est Set	t#Name	Description	Status	Release	Creator	Owner	Created O	n Planned Date	Last Modified	Last Executed	# Passed	# Failed	# Caution	# Blocked	# Not Run	Note
TX8	Functional Test Sets		In Progress		Fred Bloggs		02-Jan- 2007	05-Feb-2007	13-Oct-2009		0	0	0	0	0	
TX1	Testing Cycle for Release 1.0	This tests the functionality introduced in release 1.0 of the library system	In Progress	1.0.0.0	Fred Bloggs	Joe P Smith	02-Jan- 2007	05-Feb-2007	13-Oct-2009	01-Dec-2003	1	2	0	0	4	
TX2	Testing Cycle for Release 1.1	This tests the functionality introduced in release 2.0 of the library system	Not Started	1.1.0.0	Fred Bloggs	Joe P Smith	03-Jan- 2007	07-Feb-2007	13-Oct-2009	01-Dec-2003	3	0	0	0	6	

#### 11.2.4. Test Set Detailed Report

This report displays all of the test sets defined for the current project in the order they appear in the test set list. The test set's details and execution status are displayed, along with sub-tables containing the list of test cases, test runs, attached documents, and the change history:

wner:	lee D	Smith		Creator:	Fred Bloggs			
elease:	1.0.0			Creation Dat				
Status:	In Pro	•		Last Executi				
status: Planned [		gress b-2007		Last Updated				
Notes:	Jate. 05-re	5-2007		Last opuater	1. 13-001-2005			
Operating	Suetom							
operating	System.							
Test Cas	es:							
Test #	Name			Priority	Est. Duration	Status	Last Exe	ecution Date
TC2	Ability to create r	ew book		1 - Critical	10 mins	Failed	01-Dec-	2003
TC3	Ability to edit exis	sting book		1 - Critical	5 mins	Passed	01-Dec-	2003
TC4	Ability to create r	ew author		1 - Critical	8 mins	Failed	01-Dec-	2003
TC5	Ability to edit exis	sting author		2 - High	5 mins	Not Run		
TC6	Ability to reassign	book to different author		2 - High	8 mins	Not Run		
TC8	Book manageme	nt		2 - High	4 mins	Not Run		
TC9	Author managem	ent		2 - High	4 mins	Not Run		
Test Run	s:							
Run #	Tester	Release	Version	Status	Est. Duration	Actual Duration	n	Execution Date
TR4	Joe P Smith	Library System Release 1	1.0.0.0	Failed	8 mins	90 mins		01-Dec-2003
TR3	Fred Bloggs Library System Release 1 1			Passed	5 mins	90 mins		01-Dec-2003
TR1	Joe P Smith	Library System Release 1	1.0.0.0	Failed	10 mins	75 mins		01-Dec-2003

#### 11.2.5. Printable Test Scripts

This printable report is useful when you want to be able to conduct the testing activities offline on paper, or when testers need paper copies of the test script in addition to using the online test execution wizard.

In either case, this report simply displays all of the test cases defined for the current project in the order they appear in the test case list together with their detailed test steps and a list of any attached documents.

	t #2 - Ability to create n that the user can create a new book						
	Steps:						
Ste	p Description		Expected Result	Sample Data	Status	Actual Result	
1	User opens up browser and enters http://www.libraryinformationsystem		The browser loads the login web page	http://www.libraryinformationsystem.com/beta	Passed Failed Blocked Caution		
2	User logs in to application		User taken to main menu screen	Login=librarian, Password=password1	Passed Failed Blocked Caution		
2	User clicks link to create book		User taken to first screen in wizard		Passed Failed Blocked Caution		
3	User enters books name and auth	or, then clicks Next	User taken to next screen in wizard	Macbeth, William Shakespeare	Passed Failed Blocked Caution		
4	User chooses book's genre and su	ub-genre from list	User sees screen displaying all entered information	Play, Tragedy	Passed Failed Blocked Caution		
5	User clicks submit button		Confirmation screen is displayed		Passed Failed Blocked Caution		
ile /	Attachments:						
File	name	Description				Author	Date Uploa
	quence Diagram for Book Mgt.pdf		JML format that provides additional	detail surrounding the book managament use-ca	ise / test case	Fred Bloggs	03-May-200

#### 11.2.6. Test Run Summary Report

This report displays all of the test runs defined for the current project. The test run's details and execution status are displayed in a summary grid form:

	un Summ displays all of the			urrent proje	ect in date on	der (most	recent first). 1	'he test run's deta	ils and exe	cution state	us are dis	played in a	summary li	st form.		
	t 1: Librar		-		nd lending re	cords for	a typical bran	ch library								
Test Rur	#Name	Test Case	# Release	Test Set	Туре	Tester	Est. Duration	Actual Duration	Start Date	End Date	Status	Runner	Message	Notes	Web Browser	Operating Sys
TR10	Ability to edit existing book	тсз	1.0.0.0		Manual	Fred Bloggs	0 hours 5 mins	0 hours 50 mins	01-Dec- 2003	01-Dec- 2003	Caution					
TR12	Ability to create new book	TC2	1.0.0.0		Automated	Fred Bloggs	0 hours 10 mins	1 hours 10 mins	01-Dec- 2003	01-Dec- 2003	Failed	NUnit	Expected 1 but 2 was found		Opera	Windows 2003
TR13	Ability to create new book	TC2	1.1.0.0.0001		Automated	Fred Bloggs	0 hours 2 mins	1 hours 10 mins	02-Dec- 2003	02-Dec- 2003	Passed	JUnit	Expected 1 but 2 was found			
TR14	Ability to edit existing book	тсз	1.1.0.0.0001		Automated	Fred Bloggs	0 hours 5 mins	1 hours 10 mins	02-Dec- 2003	02-Dec- 2003	Passed	JUnit	Expected 1 but 2 was found			

#### 11.2.7. Test Run Detailed Report

This report displays all of the test runs defined for the current project in date order (most recent first). The test run's details and execution status are displayed, along with sub-tables containing the list of test run steps, and a list of any associated open incidents:

			Ability to cre		ok							
Test	s tha	t the user car	n create a new book	< in the system								
Tes	t Ca	se #:	TC2									
Rel	ease	e #:	1.0.0.0				Status:	Failed				
Tes	ter:		Joe P Smith				Execution Date:	01-Dec-2003				
Тур	e:		Manual				Test Set:	Testing Cycle for Release 1.	0			
Est	Du	ation:	0 hours 10 mi	ns			Actual Duration:	1 hours 15 mins				
Not												
We	b Br	owser:	Internet Explo	rer								
Ор	erati	ng System:	Windows XP									
St	ep D	escription			Expected Result		Sample Data	ActualResult				Status
1	L	lser logs in to	application		User taken to main menu se	creen						Passed
2	ι	lser clicks lin	k to create book		User taken to first screen in wizard	1						Passed
3		lser enters bo lext	ooks name and auth	nor, then clicks	User taken to next screen in wizard	n	Macbeth, William Shakespeare	An error page is displayed - "No 473"	such object	or with block v	ariable at line	Failed
Ass	oci	ated Incide	ents:									
Inc	#	Туре	Status	Priority	Severity	Name	•		Owned By		Detected On	
7		Bug	Assigned	1 - Critical	3 - Medium	Canno	ot add a new book to the system		Joe P Smi	th	04-Nov-2003	
File	Aπ	achments:										
Fil	ena	me		Description						Author	Date Uploa	aded
E	ror L	ogging-in Scr	een-shot.gif	Captured scree	en-shot of the error that was r	aised w	hen attempting to log in to the lib	orary application		Fred Bloggs	24-Apr-200	6

#### 11.2.8. Test Case Summary Graph

The test case summary graph shows how many test cases are currently in a project. The number of test cases is displayed according to the criteria that you specify. You can specify the type of data displayed along the x-axis, and the test case information which is used to group the data. When you first open the graph you will be asked to pick the field that you would like to display on the x-axis and the field that you would like to group the data by. Once you have chosen the appropriate fields and clicked the <Select> button the graph will be displayed:

Axis:	Execution Status V	Grouped-By:	Priority V	Select		
Test	t Cases: Summary	🗖 1 - Critical	🗖 2 - High 📘 3 - Med	lium		
10						
9						
8						
7						
6						
5						
4						
3						
2						
1						
Blo	cked	Caution	Failed	N/A	Not Run	Passed

In this version of the report, the x-axis represents the test case execution status, and the individual bars are grouped by test case priority. Each data-value can be viewed by positioning the mouse pointer over the bar, and a "tooltip" will pop-up listing the actual data value. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

#### 11.2.9. Test Run Summary Graph

The test run summary graph shows how many test runs are currently in a project. The number of test runs is displayed according to the criteria that you specify. You can specify the type of data displayed along the x-axis, and the test run information which is used to group the data. When you first open the graph you will be asked to pick the field that you would like to display on the x-axis and the field that you would

like to group the data by. Once you have chosen the appropriate fields and clicked the <Select> button the graph will be displayed:



In this version of the report, the x-axis represents the test run execution status, and the individual bars are grouped by test run type. Each data-value can be viewed by positioning the mouse pointer over the bar, and a "tooltip" will pop-up listing the actual data value. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

#### 11.2.10. Test Run Progress Rate Graph

The test run progress rate graph shows how many tests have been executed during a period of time, and what execution status was recorded. The report can either be displayed for 60 days of data daily or for 12 months of data weekly, ending on a specified date.

The screen-shot below illustrates the progress rate report loaded with the past 60 days of test run data depicted on a daily basis:



In this version of the report, the y-axis represents the number of test runs executed in each 24 hour period, and the x-axis represents a specific day in the time-span. Each data-bar can be viewed by

positioning the mouse pointer over the point, and a "tooltip" will pop-up listing the actual data value. You can filter the report by the release that the test run was executed against, and also change the ending date of the date range. By clicking on the weekly radio button, you can display the past 12 months of test run data organized on a weekly basis. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

## 11.3. Incident Reports

#### 11.3.1. Incident Summary Report

This report displays all of the incidents tracked for the current project. The incident's details are displayed in a summary list form:

Inc	#Name	Description	Resolution	Turne	Status	Delevite	Councilto	Data ata d Bu (	Original Dec	Data ata d Ora	Loot Modified	Class d On	Data ata d Dala ara	Decelved Delea
1	Cannot log into the application	Description When trying to log into the application with a valid username and password, the system throws a fatal exception	Resolution	Type Incident	New	Priority	Seventy	Fred Bloggs		01-Nov- 2003	Last Modified		Detected Release	1.0.1.0
2	Not able to add new author	When I try and click on the button to add a new author the system simply displays the main screen and does nothing		Incident	New			Joe P Smith		01-Nov- 2003	01-Dec-2003		1.0.0.0	1.0.1.0
3	Clicking on link throws fatal error	When I click on the logout link, instead of logging out, I get an ASP session not valid error		Incident	New			Fred Bloggs		01-Nov- 2003	01-Dec-2003	**	1.0.1.0	1.0.2.0

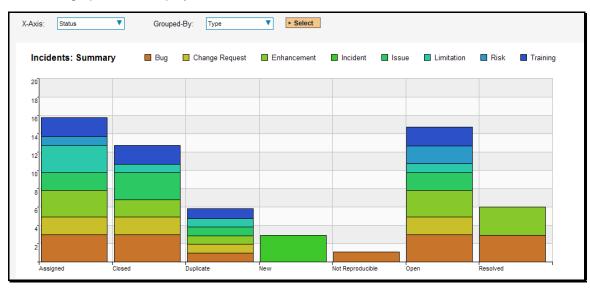
#### 11.3.2. Incident Detailed Report

This printable report displays all of the incidents tracked for the current project sorted by incident number. For each individual incident, the name, type, priority, status, opener, owner and close date are displayed, along with tables containing the detailed description and resolutions as well as a tabular list of attached documents, linked requirements/incidents and the change history:

Project 1: Libra	ary Informat	tion System					
Sample application that a	allows users to mana	age books, authors and lending records for a ty	ypical branch library				
Inc #1 - Cannot							
When trying to log into the	he application with a	valid username and password, the system three	ows a fatal exception				
Туре:	Incident		Priori	ity:			
Status:	New		Sever	rity:			
Opened By:	Fred Bloggs		Open	ed On:	01-Nov-2003		
Assigned To:			Last	Modified:	01-Dec-2003		
Detected In Release:	1.0.0.0		Close	d On:	-		
Resolved In Release:	1.0.1.0		Verifi	ied In Release:	1.0.1.0		
Notes:							
Operating System:							
Associations:							
Artifact Type	Name		Created By	Comment		Date	Artifact Id
Test Run	Sample Test		Fred Bloggs	Test Run: Sa	mple Test	01-Nov-2006	TR 9
Incident	The book listing so	creen doesn't sort	Joe P Smith	This incident	and bug are related	16-Mar-2004	IN 6
Requirement	Ability to create ne	ew users in the system	Joe P Smith	Test Run: Sa	mple Test	01-Dec-2003	RQ 26
File Attachments:							
Filename		Description				Author	Date Uploaded
Bug Stack Trace.txt						Joe P Smith	04-May-2006
Error Logging-in Scree	an-shot.gif	Captured screen-shot of the error that was rai	ised when attempting to	log in to the librar	y application	Fred Bloggs	24-Apr-2006

#### 11.3.3. Incident Summary Graph

The incident summary graph shows how many incidents are currently in a project. The number of incidents is displayed according to the criteria that you specify. You can specify the type of data displayed along the x-axis, and the incident information which is used to group the data. When you first open the graph you will be asked to pick the field that you would like to display on the x-axis and the field that you would like to group the data by. Once you have chosen the appropriate fields and clicked the <Select> button the graph will be displayed:

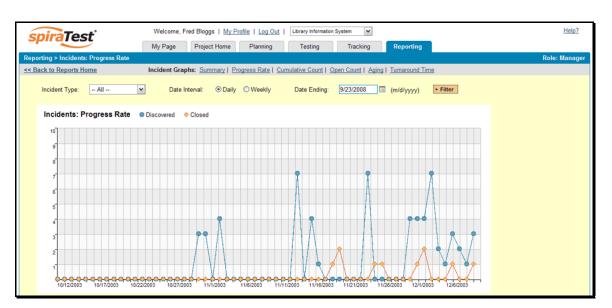


In this version of the report, the x-axis represents the incidents' status, and the individual bars are grouped by the type of incident. Each data-value can be viewed by positioning the mouse pointer over the bar, and a "tooltip" will pop-up listing the actual data value. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

#### 11.3.4. Incident Progress Rate Graph

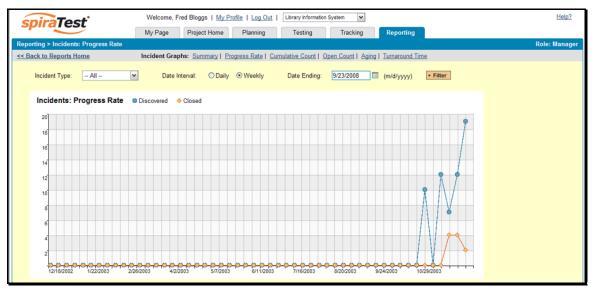
The incident progress rate chart displays the total number of incidents created and closed over a particular date-range. The report can either be displayed for 60 days of data daily or for 12 months of data weekly, ending on a specified date.

The screen-shot below illustrates the progress rate report loaded with the past 60 days of incident discovery/closure data depicted on a daily basis:



In this version of the report, the y-axis represents the number of incidents (either created or closed in a 24 hour period), and the x-axis represents a specific day in the time-span. Each data-point can be viewed by positioning the mouse pointer over the point, and a "tooltip" will pop-up listing the actual data value. You can filter the report by the type of incident, and also change the ending date of the date range (e.g. displaying only the bugs for the date range).

Similarly, by clicking on the weekly radio button, you can display the past 12 months of incident discovery data organized on a weekly basis:



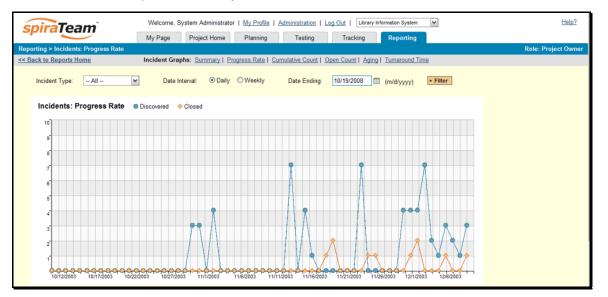
In this version of the report, the y-axis represents the number of incidents (either created or closed in a 7day period), and the x-axis represents a specific week in the time-span. Each data-point can be viewed by positioning the mouse pointer over the point, and a "tooltip" will pop-up listing the actual data value. Again you can filter this report by the type of incident and also specify the ending date of the date-range. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

Clicking the "Back to Project Home" hyperlink will take you back to the Project Home dashboard. In addition, the toolbar displays a list of shortcuts to other incident reports that can be displayed.

#### 11.3.5. Cumulative Incident Count Graph

The cumulative incident count chart displays the cumulative total number of incidents logged in the system for the current project over a particular date-range. The report can either be displayed for a 60 day interval on a daily basis or for a 12 month interval of a weekly basis. The report displays two data series, one illustrating the total count of all incidents, the other the total count of all *open incidents* (i.e. with status not set to fixed or closed).

The screen-shot below illustrates the cumulative count report loaded with the past 60 days of cumulative incident count data depicted on a daily basis:



In this version of the report, the y-axis represents the number of incidents, and the x-axis represents a specific day in the time-span. Each data-point can be viewed by positioning the mouse pointer over the point, and a "tooltip" will pop-up listing the actual data value. You can also filter the type of incident being reported, as well as change the end date for the date interval.

Similarly, by clicking on the weekly radio button, you can display the past 12 months of cumulative incident count data organized on a weekly basis:

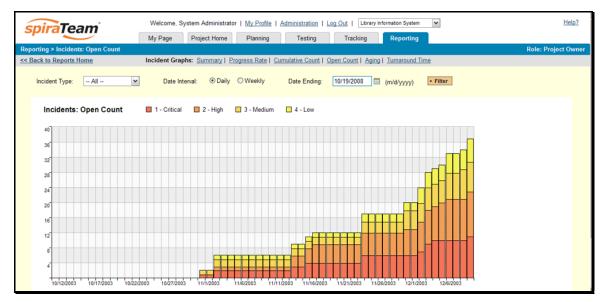


In this version of the report, the y-axis represents the number of incidents logged in a 7-day period, and the x-axis represents a specific week in the time-span. Each data-point can be viewed by positioning the mouse pointer over the point, and a "tooltip" will pop-up listing the actual data value. Again, you can also filter the type of incident being reported, as well as change the end date for the date interval. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

Clicking the "Back to Project Home" hyperlink will take you back to the Project Home dashboard.

#### 11.3.6. Open Incident Count Graph

The open incident count chart displays the total number of open incidents in the system for the current project over a particular date-range categorized by incident priority. The report can either be displayed for a 60 day interval on a daily basis or for a 12 month interval of a weekly basis. The screen-shot below illustrates the discovery report loaded with the past 60 days of cumulative incident count data depicted on a daily basis:

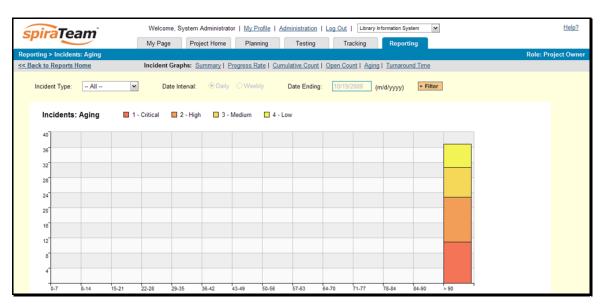


In this version of the report, the y-axis represents the number of incidents, and the x-axis represents a specific day in the time-span. The exact count of each bar in the stacked histogram can be viewed by positioning the mouse pointer over the bar, and a "tooltip" will pop-up listing the actual data value. You can also filter the type of incident being reported, as well as change the end date for the date interval. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

Similarly, by clicking on the weekly radio button, you can display the past 12 months of open incident counts organized on a weekly basis (categorized by priority).

#### 11.3.7. Incident Aging Graph

The incident aging chart displays the number of days incidents have been left open in the system. The chart is organized as a stacked histogram, with the count of incidents on the y-axis and different age intervals on the x-axis. Each bar-chart color represents a different incident priority, giving a project manager a snapshot view of the age of open project incidents by priority.



This report can be filtered by the type of incident, so for example you can see the aging of just bugs, or just issues for the project in question. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

#### 11.3.8. Incident Turnaround Time Graph

The incident turnaround time chart displays the number of days incidents have taken to be closed (from the time they were first raised) in the system. The chart is organized as a stacked histogram, with the count of incidents on the y-axis and different turnaround time intervals on the x-axis. Each bar-chart color represents a different incident priority, giving a project manager a snapshot view of the turnaround time of project incidents by priority.

spira	Team		Welco My Pag		m Administra roject Home		Profile   Adn	ninistration Testing		Library	nformation Sy Report	_		He
Reporting > I	ncidents: Turnaro	und Time												Role: Project O
<< Back to Re	ports Home		Inciden	t Graphs:	Summary	Progress R	tate   Cumu	lative Count	Open Co	ount   Aging	1 <u>Turnarou</u>	und Time		
Incident	Type: All	~	] D	ate Interval	: <ul> <li>Daily</li> </ul>	⊖ Wee	kly (	Date Ending	r: 10/19	/2008 (	m/d/yyyy)	► Filter	]	
Incid	lents: Turnaro	und Time	e E	1 - Critic	al 🔲 2 -	High 🗧	3 - Mediun	n 🗖 4 -	Low					
20														
18														
16														
14														
12														
10														
8														
6														
4														
<i></i>														
0-7	8-14	15-21	22-28	29-35	36-42	43-49	50-56	57-63	64-70	71-77	78-84	84-90	> 90	

This report can be filtered by the type of incident, so for example you can see the turnaround time of just bugs, or just issues for the project in question. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

## 11.4. Task Reports

### 11.4.1. Task Summary Report

This report displays all of the tasks tracked for the current project. The task's details are displayed in a summary list form:

Task #	Name	Description	Status	Priority	Owned By	Created On	Last Modified	Release #	Requirement #	Start Date	End Date	% Complete	Est. Effort	Actual Effor
23	Write edition object insert queries		Not Started	1 - Critical	Fred Bloggs	01-Dec- 2003	01-Dec-2003	1.0.0.0.0003	RQ12	11-Mar- 2004	12-Mar- 2004	0%	3 hours 0 mins	-
24	Develop edit author details screen		Not Started	2 - High	Joe P Smith	01-Dec- 2003	01-Dec-2003	1.0.0.0002	RQ15	07-Mar- 2004	08-Mar- 2004	0%	8 hours 0 mins	•
25	Create author object update method		Not Started	2 - High	Joe P Smith	01-Dec- 2003	01-Dec-2003	1.0.0.0.0002	RQ15	07-Mar- 2004	08-Mar- 2004	0%	5 hours 0 mins	
26	Write author object update queries		Not Started	2 - High	Joe P Smith	01-Dec- 2003	01-Dec-2003	1.0.0.0002	RQ15	07-Mar- 2004	08-Mar- 2004	0%	3 hours 0 mins	-
27	Refactor author screen to include delete button		Not Started	2 - High	Fred Bloggs	01-Dec- 2003	01-Dec-2003	1.0.0.0.0003	RQ16	09-Mar- 2004	10-Mar- 2004	0%	6 hours 0 mins	

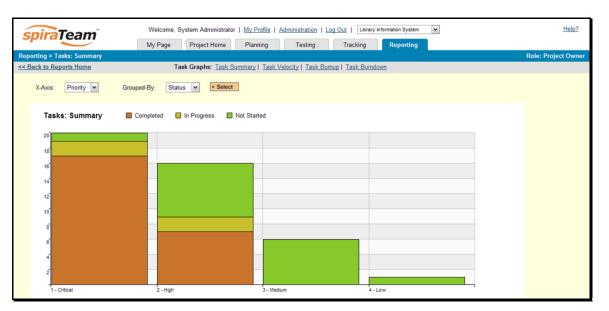
#### 11.4.2. Task Detailed Report

This report displays all of the tasks tracked for the current project. The task's details are displayed, along with a tabular list of attached documents and the change history:

Task Detailed This report displays all	•	k's details are displayed, along with a tabular list of attac	hed documents and the change histor
Project 1: Lib	rary Information System		
Sample application that	allows users to manage books, authors and lendir	ng records for a typical branch library	
Task #23 - Writ	e edition object insert queries		
Task #23 - Writ Requirement ID:	e edition object insert queries RQ 12	Status:	Not Started
	, ,	Status: Priority:	Not Started 1 - Critical
Requirement ID: Release #:	RQ 12		
Requirement ID:	RQ 12 1.0.0.0003	Priority:	1 - Critical
Requirement ID: Release #: Assigned To:	RQ 12 1.0.0.0003 Fred Bloggs	Priority: Created On:	1 - Critical 01-Dec-2003

#### 11.4.3. Task Summary Chart

The task summary graph shows how many tasks are currently in a project. The number of tasks is displayed according to the criteria that you specify. You can specify the type of data displayed along the x-axis, and the task information which is used to group the data. When you first open the graph you will be asked to pick the field that you would like to display on the x-axis and the field that you would like to group the data by. Once you have chosen the appropriate fields and clicked the <Select> button the graph will be displayed:



In this version of the report, the x-axis represents the tasks' priority, and the individual bars are grouped by the status of task. Each data-value can be viewed by positioning the mouse pointer over the bar, and a "tooltip" will pop-up listing the actual data value. Clicking on the "Display Data Grid" link will display the underlying data that is being used to generate the graph.

#### 11.4.4. Task Velocity Chart

The Task Velocity graph shows the total estimated and actual effort delivered in each project release and/or iteration:

spiraTeam	Welcome, System Administrator   <u>My Profile</u>   <u>Administration</u>   <u>Log Out</u>   Library Information Syst	em Help?
	My Page Project Home Planning Testing Tracking Reporting	g
Reporting > Tasks: Velocity		Role: Project Owner
<< Back to Reports Home	Task Graphs: Task Summary   Task Velocity   Task Burnup   Task Burndown	
Display data for: 1.1.0.0.0003 - Ite	ration 003	
Tasks: Velocity   Expected	/elocity 🔷 Actual Velocity	
30		
27		
24	•	
21		
18		
15		
12		
9		
6		
3		
10/25/2004	10/26/2004 10/27/2004	
<u>&gt; Display Data Grid</u>		

The y-axis of the graph displays the total estimated and actual effort delivered, and the x-axis can be configured to display three different levels of granularity:

- All Releases This shows the total estimated and actual effort for each of the releases in the project
- Specific Release This shows the total estimated and actual effort for each of the iterations in the selected release

 Specific Iteration – This shows the total estimated actual effort for each working day in the daterange covered by the selected iteration.

#### 11.4.5. Task Burnup Chart

The Task Burnup graph shows the cumulative increase in work for each release/iteration in the project with the percentage of tasks that are on-schedule, late starting and late finishing indicated:

spiraTeam	Welcome, System Administrator   <u>My Profile</u> My Page Project Home Planning	Administration         Log Out         Library Information System           Testing         Tracking         Reporting	Help2
Reporting > Tasks: Burnup			Role: Project Owner
<< Back to Reports Home	Task Graphs: Task Summary   Tas	k Velocity   Task Burnup   Task Burndown	
Display data for: 1.0.0.0 - Library S	ystem Release 1		
Tasks: Burnup	On Schedule 🗧 Late Finishing 📘 Late Starting 📃 Not	Started	
100			
90			
80			
70			
60			_
50			
40			
30			
20			
10			
1.0.0.0001	1.0.0.0002	1.0.0.0003	

The y-axis of the graph displays the cumulative increase in work for the project, broken down by progress (on-schedule, late-finishing, later-starting or not-started), and the x-axis can be configured to display three different levels of granularity:

- > All Releases This shows the increase in work for each of the releases in the project
- Specific Release This shows the increase in work for each of the iterations in the selected release
- Specific Iteration This shows the increase in work for each working day in the date-range covered by the selected iteration.

#### 11.4.6. Task Burndown Chart

The Task Burndown graph shows the remaining work that needs to be done for each release/iteration in the project:

spiraTeam		trator   My Profile   Administration		Help?
	My Page Project Hom	e Planning Testing	Tracking Reporting	
Reporting > Tasks: Burndown				Role: Project Owner
<< Back to Reports Home	Task Graphs: Ta	sk Summary   Task Velocity   Task E	lumup   Task Burndown	
Display data for: 1.0.0.0 - Library S	System Release 1			
Tasks: Burndown	Remaining Effort			
100				
90				
80	-			
70				
60				
50				
40				
30				
20				
10				
1.0.0.0	1.0.0.0001	1.0.0.0002	1.0.0.0003	

The y-axis of the graph displays the total remaining work that needs to be done, and the x-axis can be configured to display three different levels of granularity:

- All Releases This shows the total remaining work that needs to be done for each of the releases in the project
- Specific Release This shows the total remaining work that needs to be done for each of the iterations in the selected release
- Specific Iteration This shows the total remaining work that needs to be done for each working day in the date-range covered by the selected iteration.

#### 11.5. Release Reports

#### 11.5.1. Release Summary Report

This report displays all of the releases and iterations defined for the current project in the order they appear in the release/iteration hierarchy. The release's details are displayed in a summary list form:

		mmary Rep all of the releases		defined fo	or the current pr	oject in th	e order	they appea	r in the rel	ease/itera	ation hierar	chy. The re	ease's deta	ails are dis	played in a sum	mary list form.
		<b>ibrary Infor</b> that allows users t				ecords for	a typic	al branch li	brary							
				Genera	al						Tes	ting Inform	nation			
Rel #	Name	Version Number	Description	Creator	Creation Date	Iteration	Active	Start Date	End Date	# Failed	# Passed	# Blocked	# Caution	# Not Run	Task Progress	Planned Effo
1	Library System Release 1	1.0.0.0	This is the initial release of the Library Management System	Fred Bloggs	15-Feb-2004	N	Y	01-Mar- 2004	12-Mar- 2004	2	0	0	1	4	18 Tasks; 50% On Schedule, 12% Running Late, 9% Starting Late, 26% Not Started	216 hours 0 mins
2	Library System Release 1 SP1	1.0.1.0	This service pack fixes identified bugs and a small security vulnerability	Joe P Smith	05-May-2004	N	Y	13-Mar- 2004	30-Mar- 2004	0	3	1	0	3	0 Tasks; 0% On Schedule, 0% Running Late, 0% Starting Late, 0% Not Started	176 hours 0 mins

#### 11.5.2. Release Detailed Report

This report displays all of the releases and iterations defined for the current project in the order they appear in the release/iteration hierarchy. The release's details are displayed, along with sub-tables containing the list of requirements added, mapped test cases, test runs executed, incidents resolved, attached documents, scheduled tasks and the change history:

ersion #:	1.1.0.0	Active:	Y		
Creator:	Fred Bloggs	Creation Date:	15-Oct-2004		
Start Date:	15-Oct-2004	Planned Effort:	168 hours 0 mins		
End Date:	27-Oct-2004	Available Effort:	82 hours 0 mins		
# Resources:	: 3	Task Est, Effort:	86 hours 0 mins		
Non-Working	g Days: 6	Actual Effort:	85 hours 40 mins		
Notes:					
Operating Sy	ystem:				
equireme	nts Added:				
Req #	Name		S	Status	Priority
RQ1	Functional System Requirements		1	In Progress	
RQ1 RQ2	Functional System Requirements Online Library Management System			In Progress In Progress	
			1		1 - Critical
RQ2	Online Library Management System		1	In Progress	1 - Critical 1 - Critical
RQ2 RQ3	Online Library Management System Book Management			In Progress Completed	
RQ2 RQ3 RQ7	Online Library Management System Book Management Ability to associate books with different subjects			In Progress Completed Completed	1 - Critical
RQ2 RQ3 RQ7 RQ8	Online Library Management System Book Management Ability to associate books with different subjects Ability to associate books with different authors			In Progress Completed Completed Completed	1 - Critical 1 - Critical
RQ2 RQ3 RQ7 RQ8 RQ9	Online Library Management System           Book Management           Ability to associate books with different subjects           Ability to associate books with different authors           Ability to associate books with different editions			In Progress Completed Completed Completed Completed	1 - Critical 1 - Critical 1 - Critical
RQ2 RQ3 RQ7 RQ8 RQ9 RQ13	Online Library Management System           Book Management           Ability to associate books with different subjects           Ability to associate books with different authors           Ability to associate books with different editions           Author Management			In Progress Completed Completed Completed Completed In Progress	1 - Critical 1 - Critical 1 - Critical 2 - High
RQ2 RQ3 RQ7 RQ8 RQ9 RQ13 RQ17	Online Library Management System           Book Management           Ability to associate books with different subjects           Ability to associate books with different authors           Ability to associate books with different editions           Author Management           Ability to link authors to their contact information			In Progress Completed Completed Completed Completed In Progress	1 - Critical 1 - Critical 1 - Critical 2 - High
RQ2 RQ3 RQ7 RQ8 RQ9 RQ13	Online Library Management System           Book Management           Ability to associate books with different subjects           Ability to associate books with different authors           Ability to associate books with different editions           Author Management           Ability to link authors to their contact information			In Progress Completed Completed Completed Completed In Progress	1 - Critical 1 - Critical 1 - Critical 2 - High
RQ2 RQ3 RQ7 RQ8 RQ9 RQ13 RQ17 Apped Test	Online Library Management System           Book Management           Ability to associate books with different subjects           Ability to associate books with different authors           Ability to associate books with different editions           Author Management           Ability to link authors to their contact information			In Progress Completed Completed Completed Completed In Progress	1 - Critical 1 - Critical 1 - Critical 2 - High 2 - High
RQ2 RQ3 RQ7 RQ8 RQ9 RQ13 RQ17 Apped Test	Online Library Management System           Book Management           Ability to associate books with different subjects           Ability to associate books with different authors           Ability to associate books with different editions           Author Management           Ability to link authors to their contact information			In Progress Completed Completed Completed Completed In Progress Requested	1 - Critical 1 - Critical 1 - Critical 2 - High 2 - High
RQ2 RQ3 RQ7 RQ8 RQ9 RQ13 RQ17 Mapped Tex Test #	Online Library Management System           Book Management           Ability to associate books with different subjects           Ability to associate books with different authors           Ability to associate books with different editions           Author Management           Ability to link authors to their contact information           st Cases:           Name		i i i i i i i i i i i i i i i i i i i	In Progress Completed Completed Completed Completed In Progress Requested Last Execution	1 - Critical 1 - Critical 1 - Critical 2 - High 2 - High

## 11.5.3. Release Plan Report

This report displays a complete work breakdown structure of the project from a release perspective, including all releases, iterations, requirements, tasks and incidents organized by schedule:

D #	Name	Туре	Status	Priority	Owner	Start Date	End Date	% Complete	Plan Effort	Est. Effort	Actual Effort
RL1	1.0.0.0 - Library System Release 1	Release				01-Mar- 2004	12-Mar- 2004		216 hours 0 mins	94 hours 0 mins	93 hours 30 mins
RQ4	Ability to add new books to the system	Requirement	Completed	1 - Critical	Joe P Smith				15 hours 0 mins	16 hours 0 mins	15 hours 30 min
RQ5	Ability to edit existing books in the system	Requirement	Completed	1 - Critical	Joe P Smith				15 hours 0 mins	16 hours 0 mins	16 hours 50 min
RQ6	Ability to delete existing books in the system	Requirement	Completed	1 - Critical	Fred Bloggs				14 hours 0 mins	16 hours 0 mins	15 hours 10 min
RQ12	2 Ability to create different editions	Requirement	In Progress	1 - Critical	Fred Bloggs				-	16 hours 0 mins	16 hours 0 mins
RQ15	5 Ability to edit existing authors in the system	Requirement	Planned	2 - High	Fred Bloggs				15 hours 0 mins	16 hours 0 mins	16 hours 0 mins
RQ16	6 Ability to delete existing authors in the system	Requirement	In Progress	2 - High	Fred Bloggs				10 hours 0 mins	14 hours 0 mins	14 hours 0 mins
RL2	2 1.0.1.0 - Library System Release 1 SP1	Release				13-Mar- 2004	30-Mar- 2004		176 hours 0 mins	-	-
IN1	Cannot log into the application	Incident	New			-	-	0 %		-	-
IN2	Not able to add new author	Incident	New			-	-	0 %		-	-
IN7	Cannot add a new book to the system	Bug	Assigned	1 - Critical	Joe P Smith	06-Nov-2003	-	25 %		0 hours 20 mins	-
RL11	1 1.0.1.0.0001 - Iteration 001	Iteration				13-Mar- 2004	20-Mar- 2004		80 hours 0 mins	-	-
RL12	1.0.1.0.0002 - Iteration 002	Iteration				21-Mar- 2004	24-Mar- 2004		48 hours 0 mins		-
RL13	13 1.0.1.0.0003 - Iteration 003	Iteration				25-Mar- 2004	30-Mar- 2004		64 hours 0 mins	-	-
RI 3	1.0.2.0 - Library System Release 1 SP2	Release				01-Apr-	30-Apr-		352 hours 0		

## 12. Source Code

This section outlines the source code integration features of SpiraPlan® and SpiraTeam® that can be used to browse the source code repository associated with a particular project and link artifacts in SpiraTeam to revisions / commits made in the source code repository. This functionality allows project members to quickly view files in the repository through a convenient web interface and also to see the end-to-end traceability from requirements, tasks and incidents to the code changes that addressed the requirement, fulfilled the task or resolved the incident

The software can be integrated with a variety of different version control / Software Configuration Management (SCM) systems by means of different plug-ins. This section will outline the general features irrespective of the type of version control provider being used. For details on using a specific provider (e.g. Subversion) please refer to the separate *SpiraPlan/Team Version Control Integration Guide*. This section also assumes that an administrator has already configured the project to be integrated with the version control provider. The steps for using the administrative interface are described in the separate *SpiraTeam Administration Guide*.

## 12.1. Source Code File List

When you click on the Tracking > Source Code link on the global navigation bar, you will initially be taken to the source code repository file list screen illustrated below:

spiraTeam	Welcome, System Administrator   <u>My Profile</u>   <u>Administration</u>   <u>Log Out</u>   Library Information System 🔻						
spirareall	My Page Project	Home Planning Testing	Tracking	Reporting			
Incidents   Tasks   Resources   So	ource Code					Role: Project Owne	
Repository Browser   Refresh	Bus	iness Design > <u>Refresh</u>   <u>Apply Filter</u>   <u>Clea</u>	r Filters				
test://MyRepository	~	File Name <b>∆</b> ▼	Size ▲▼	Author ▲▼	Latest Revision ▲▼	Last Edited AV	
E Business Design							
🖲 🧰 Technical Design		Document Filename1.doc	100 KB	Fred Bloggs	rev0001	17-Jan-2010	
🗉 🗀 Development		Document Filename10.pptx	105 KB	Fred Bloggs	rev0005	17-Jan-2010	
🗉 🧰 Test		Document Filename11.htm	75 KB	Fred Bloggs	rev0006	17-Jan-2010	
Documentation     Documentation     Training		Document Filename2.xls	150 KB	Fred Bloggs	rev0002	17-Jan-2010	
		Document Filename21.cs	100 KB	Fred Bloggs	rev0001	17-Jan-2010	
		Document Filename22.vb	150 KB	Fred Bloggs	rev0002	17-Jan-2010	
Other Operations		Document Filename23.cpp	180 KB	Fred Bloggs	rev0001	17-Jan-2010	
> View Revision Log		Document Filename24.java	100 KB	Fred Bloggs	rev0004	17-Jan-2010	
		Document Filename25.pl	125 KB	Fred Bloggs	rev0001	17-Jan-2010	
		Document Filename26.php	20 KB	Fred Bloggs	rev0002	17-Jan-2010	
		Document Filename27.exe	1005 KB	Fred Bloggs	rev0001	17-Jan-2010	
		Document Filename28.rb	87 KB	Fred Bloggs	rev0003	17-Jan-2010	
		Document Filename29.aspx	100 KB	Fred Bloggs	rev0001	17-Jan-2010	
		Document Filename3.docx	180 KB	Fred Bloggs	rev0001	17-Jan-2010	
		Document Filename30.asp	105 KB	Fred Bloggs	rev0005	17-Jan-2010	
	Show	15 Trows per page			i⊲ ⊲ D	isplaying page 1 S of 2 ► ►	

This screen consists of three main sections:

- The top left-hand pane displays a hierarchical list of the various folders that exist in the source code repository. Clicking on the [+] expand icon will expand the child folders and clicking on the name of the folder will display the list of files in the folder in the main pane to the right.
- The main right-hand pane displays a list of all the files contained within the currently selected folder. This list can be filtered and sorted, and you can choose how many rows of documents to display on the page at one time.
- The bottom left-hand pane contains the option to view the overall revision log for the project, clicking on that will display the revision log page (see section 12.3 for details).

## 12.2. Source Code File Details

When you click on a file in the source code file list described above, you are taken to the file details page illustrated below:

spiraTeam	Welcome,	System Administ	rator   <u>My Prof</u>	file   Administration   Log Out   Library	y Information Syste	m 🔻		Help?
spirarcain	My Page	Project Home	e Plannin	g Testing Tracking	Reportin	g		
Incidents   Tasks   Resources   Source	Code > File	e Details						Role: Project Owner
<< Back to File List	Se	urce Code Fil	e: Documont	Filename1.doc				
Files Document Filename1.doc	File	e Path:	test://S	erver/Root/Files/Filename1.ext ®				
Document Filename10.pptx		e Type (Size):		100 KB)	Last Edite		1/18/2010 9:51:21 AM	
Document Filename11.htm	Au	thor:	Fred Bl	oggs	Latest Re	vision:	A rev0001	
Document Filename2.xls		Revisions *						
Document Filename21.cs	> R	efresh   Apply Fi	lter   Clear Filt	ers				
Document Filename22.vb	~	Revision ▲▼	Author ▲▼	Summary AV		Commit Date	∇ Content Δ ▲▼	Properties ∆ ▲▼
Document Filename23.cpp							Any 🔻	Any 🔻
Document Filename24.java		A rev0012	Fred Bloggs	The artifact was changed in this version	to fix th	18-Jan-2010	Yes	No
Document Filename25.pl		A rev0009	Fred Bloggs	The artifact was changed in this version	to fix th	18-Jan-2010	Yes	Yes
Document Filename26.php		A rev0010	Fred Bloggs	The artifact was changed in this version	to fix th	18-Jan-2010	Yes	Yes
Document Filename27.exe		A rev0015	Fred Bloggs	The artifact was changed in this version	to fix th	18-Jan-2010	Yes	No
Document Filename28.rb		A rev0016	Fred Bloggs	The artifact was changed in this version	n to fix th	18-Jan-2010	Yes	No
Document Filename29.aspx		A rev0013	Fred Bloggs	The artifact was changed in this version	n to fix th	18-Jan-2010	No	Yes
Document Filename3.docx		A rev0014	Fred Bloggs	The artifact was changed in this version	n to fix th	18-Jan-2010	No	Yes
Document Filename30.asp		A rev0003	Fred Bloggs	The artifact was changed in this version		18-Jan-2010	No	No
		A rev0004	Fred Bloggs	The artifact was changed in this version	n to fix th	18-Jan-2010	Yes	No
		A rev0001	Fred Bloggs	The artifact was changed in this version	to fix th	18-Jan-2010	Yes	Yes
		A rev0007	Fred Bloggs	The artifact was changed in this version	n to fix th	18-Jan-2010	Yes	Yes

This page is made up of three areas; the left pane is for navigation, the upper part of the main pane contains the details of the file, and the bottom part of the right pane contains the list of file revisions stored in the version control system.

The navigation pane consists of a link that will take you back to the source code file list, as well as a list of other files in the current folder. This latter list is useful as a navigation shortcut; you can quickly view the detailed information of all the peer files by clicking on the navigation links without having to first return to the main file list page.

The top part of the main pane allows you to view the details of the particular file in the version control system. Clicking on the "File Path" hyperlink will actually open the file in a separate window, and depending on the type of file, it may display in the page or prompt you to download it to your local computer. The "Latest Revision" hyperlink allows you to view details of the latest revision (see section 12.4 below).

The lower part of the main pane displays the list of different revisions that exist for the current file. Each revision in the list is displayed with its name, a description of what changed in the revision, the name of the person who committed the revision, and whether the revision was a change of the actual content, or just a change of the properties of the content. Clicking on the hyperlink for the revision name will take you to the Revision Details page for that revision (see section 12.4 below).

## 12.3. Source Code Revision List

If you click on the "View Revision Log" hyperlink on the main Source Code page, it will take you to the Revision List page that displays all the revisions made to the project in a sortable, filterable list:

sp	iraTeam	۲ 	My Page Project Home Planning Test	ing Tracki	Desertion		
	to I Taska I Day		Code > Revisions	ing Tracki	ing Reporting		Role: Project Ow
iden:			Code > Revisions				Role: Project Ow
Bac	k to Source Code Re	pository					
Ref	resh   Apply Filter	Clear Filters					
<ul> <li>Image: A second s</li></ul>	Revision ▲▼	Author ▲▼	Summary A V		Commit Date ▲▼	Content ∆ ▲▼	Properties ∆ ▲▼
						Any 🔻	Any 🔻
	A rev0011	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	No
	A rev0012	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	No
	A rev0009	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	Yes
	A rev0010	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	Yes
	A rev0015	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	No
	A rev0016	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	No
	A rev0013	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	No	Yes
	A rev0014	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	No	Yes
	A rev0003	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	No	No
	A rev0004	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	No
	A rev0001	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	Yes
	A rev0002	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	No
	A rev0007	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	Yes
	A rev0008	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	Yes	Yes
]	rev0005	Fred Bloggs	The artifact was changed in this version to fix th		18-Jan-2010	No	No

Each revision in the list is displayed with its name, a description of what changed in the revision, the name of the person who committed the revision, and whether the revision was a change of the actual content, or just a change of the properties of the content. Clicking on the hyperlink for the revision name will take you to the Revision Details page for that revision (see section 12.4 below).

## 12.4. Source Code Revision Details

When you click on a revision hyperlink in either the project revision log or the file revisions tab described above, you are taken to the revision details page illustrated below:

spiraTeam	Welcome, System	Administrator   My Profile	Administration   Log Out   Lib	rary Information System		Help?				
spirarean	My Page Pro	pject Home Planning	Testing Trackin	g Reporting						
Incidents   Tasks   Resources   Source Code > Revision Details Role: Project Owner										
<< Back to Revision List	Source Code Rev	vision: rev0012								
Document Filename1.doc A rev0012	Notes:	The artifact was chan	ged in this version to fix the issue	with the data access component		<u>^</u>				
A rev0009										
A rev0010						<u>×</u>				
A rev0015	Updated By:	Fred Bloggs	(	Content Changed:	Yes					
(A) rev0016	Update Date:	1/18/2010 10:12:02 A	M F	Properties Changed:	No					
A rev0013										
A rev0014	Files *	Associations *								

This page is made up of three areas; the left pane is for navigation, the upper part of the main pane contains the details of the revision, and the bottom part of the right pane contains the list of files that were changed in this revision and the list of artifacts that the revision is associated with.

The navigation pane consists of a link that will take you back to the source code revision list, as well as a list of other revisions associated with the current file. This latter list is useful as a navigation shortcut; you can quickly view the detailed information of all the peer revisions by clicking on the navigation links without having to first return to the main revision list page.

The top part of the main pane allows you to view the details of this revision in the version control system, including the description of what was changed, the date that the change was made, and the name of the person who made the change.

The lower part of the main pane can be switched between two different views by clicking the appropriate tab. Initially the pane will be in "Files" mode, but it can be switched to "Associations" as well. The functionality in each of these two views is described below:

#### 12.4.1. Revision Files

This view displays the list of files that were changed in the current revision:

	Files * Associations *									
> <u>Re</u>	> Refresh   Apply Filter   Clear Filters									
<ul> <li>Image: A second s</li></ul>	File Name <b>∆</b> ▼	Size ▲▼	Author ▲▼	Latest Revision AV	Action ▲▼	Last Edited ▲▼				
	Document Filename1.doc	100 KB	Fred Bloggs	rev0001	Added	18-Jan-2010				
	Document Filename10.pptx	105 KB	Fred Bloggs	rev0005	Deleted	18-Jan-2010				
	Document Filename11.htm	75 KB	Fred Bloggs	rev0006	Replaced	18-Jan-2010				
	Document Filename2.xls	150 KB	Fred Bloggs	rev0002	Added	18-Jan-2010				
	Document Filename21.cs	100 KB	Fred Bloggs	rev0001	Undefined	18-Jan-2010				

Each file in the list is displayed with its name, the file-size, who made changes to the file, what action was performed on the file (added, deleted, replaced, updated, etc.) and the most revision that exists for that file. Clicking on the filename will take you to the appropriate file details page (see section 12.2), and clicking on the revision hyperlink will take you the appropriate revision.

#### 12.4.2. Revision Associations

This view displays a list of the SpiraTeam artifacts in the current project that are associated with the current revision. This allows you to see which requirements, incidents or tasks were affected by this specific change to the source code:

Files *	Associations *				
Date	Artifact Name	Created By	Comment	Artifact Type	Artifact #
18-Jan-2010	Ability to edit existing books in the system	Fred Bloggs	This requirement was implemented in this revision	Requirement	RQ000005
18-Jan-2010	Develop new book entry screen	n/a	This task was completed in this revision	Task	TK000001

Clicking on the hyperlink for the artifact will take you to the appropriate artifact page inside the project (assuming your user has permissions to access that information). Note that these associations cannot be modified in SpiraTeam as they are creating directly inside the version control system. If you want to change/add associations, please refer to the appropriate section of the *SpiraPlan/Team Version Control Integration Guide*.

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