



SpiraTest User Manual

Version 1.2

Inflectra Corporation

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1. Introduction

SpiraTest™ provides an integrated, holistic Quality Assurance (QA) management solution that manages requirements, tests and incidents in one environment, with complete traceability from inception to completion.

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?

This user manual outlines the features and functionality available in SpiraTest™, and demonstrates how to use the application for managing the QA processes on a typical project.

2. Functionality Overview

This section outlines the functionality provided by SpiraTest™ in the areas of requirements management, test management, incident tracking and project / user management.

2.1. Requirements Management

SpiraTest™ 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.

2.2. Test Management

SpiraTest™ 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.

2.3. Incident Tracking

SpiraTest™ 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’. SpiraTest™ 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.

2.4. Projects and Users

SpiraTest™ 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

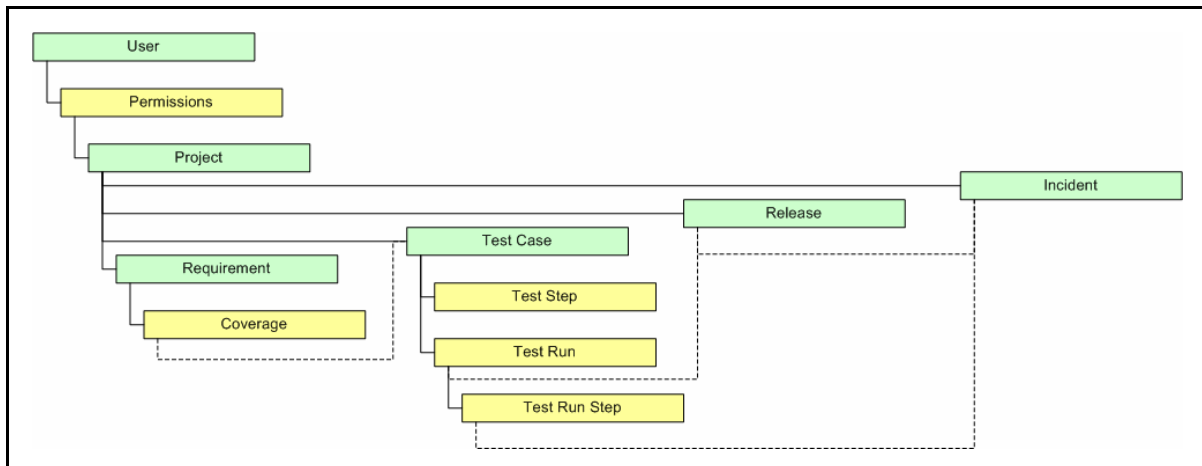
(requirements, tests and incidents) are associated with a particular project, and each user of the system can be given a specific role for the particular project. So, a power user of one software project, may be merely an observer of another. That way, a central set of users can be managed across the 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.

2.5. Release Management

SpiraTest™ 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. 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. 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.

2.6. 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 diagram illustrates the relationships between the different artifacts and entities:



With these overall concepts in mind, the rest of this help manual will outline the functionality in each of the SpiraTest™ 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 *SpiraTest™ Administration Guide*.

3. User/Project Management

This section outlines how you can log into SpiraTest™, 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 SpiraTest™ URL provided by your system administrator into your browser, you will see the following login screen:



Welcome to

spiraTest™

Version v1.1
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inflectra

Please enter your user name and password, then click the log in button.

User Name:

Password:

Remember Me

[Forgot your password?](#)

[Don't have an account?](#)

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 SpiraTest™ regardless of browser window closing or inactivity, select the “Remember Me” 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 SpiraTest™ 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 SpiraTest™ 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 log out. 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”:

The screenshot shows the SpiraTest interface for user Fred Bloggs. The page title is "My Page > Fred Bloggs" and the user's role is "Manager". The interface is divided into three main sections:

- My Projects:** A table with columns: Project Name, Web Site, and Creation Date. The first row is "Library Information System" (bolded, yellow background) with web site "www.libraryinformationssystem.org" and creation date "1-Dec-2005". Other rows include "Sample Application One" and "Sample Application Two".
- My Tests:** A table with columns: Name, Project, Status, and Last Executed. The first row is "Ability to create new book" (bolded, yellow background) with project "Library Information System", status "Passed", and last executed "1-Dec-2003". Other rows include "Ability to edit existing book".
- My Open Incidents:** A table with columns: Description, Project, Type, Priority, and Date Opened. It lists several incidents such as "Ability to associate multiple authors", "Test System Limitation", "Test Training Item", "Editing the date on a book is clunky", "Test Training Item", "Test Change Request", "Ability to import data from excel", "Test System Limitation", and "Sample Risk 3".

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Note that once you have successfully logged-in and chosen a project, SpiraTest™ 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. The page typically consists of the following elements:

3.2.1. My Projects

This section lists all the projects you have been given access to, together with the name, description, web-site 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 white 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 yellow 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.

3.2.2. My Tests

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 5.3) so that you can easily retest failed cases.

3.2.3 My Open Incidents

This section lists all the incidents 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 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”.

3.3. Global Navigation

Regardless of the page you are on, SpiraTest™ will always display the global navigation bar, consisting of five section tabs (My Page, Project Home, Requirements, Test Cases and Incidents) that correspond to the five main parts of the system, as well as three secondary links to “My Profile” and “Log Out” and “Help”. Each of the main sections is described separately in this manual; however, it is worth noting that the section you’re currently accessing will always be displayed in a darker color blue that matches the horizontal bar. 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:

The screenshot shows the SpiraTest™ Help Center interface. On the left is a Table of Contents with sections 1 through 8. The main content area is titled '4.1. Requirements List' and contains a table of requirements. The table has columns for Requirement Name, Importance, Status, Test Coverage, Author, and Last Updated. Below the table, there is a copyright notice and the Inflectra logo.

Requirement Name	Importance	Status	Test Coverage	Author	Last Updated	Req #
Functional System Requirements	In Progress	Not Covered	Not Covered	Fred Blagov	1-Dec-2003	00000
Online Library Management System	In Progress	Not Covered	Not Covered	Fred Blagov	1-Dec-2003	00002
Book Management	Completed	Not Covered	Not Covered	Fred Blagov	1-Dec-2003	00003
Ability to add new books to the system	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00004
Ability to update existing books in the system	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00005
Ability to delete existing books in the system	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00006
Ability to access the books with different authors	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00007
Ability to access the books with different subjects	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00008
Ability to access the books with different genres	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00009
Ability to search the books with different authors	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00010
Ability to search the books with different subjects	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00011
Ability to search the books with different genres	1 - Critical	Completed	Not Covered	Fred Blagov	1-Dec-2003	00012
Book Management	2 - High	In Progress	Not Covered	Joe P. Smith	1-Dec-2003	00013
Subject Management	3 - Medium	Planned	Not Covered	Joe P. Smith	1-Dec-2003	00014
Administration Functions	3 - Medium	Requested	Not Covered	Joe P. Smith	1-Dec-2003	00022

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:

The screenshot shows the SpiraTest interface for the 'Library Information System' project. The page is divided into several sections:

- Project Overview:** Provides a brief description of the system and its purpose.
- Requirements Summary:** A table showing the status of requirements across different priority levels (Critical, High, Medium, Low, None).
- Requirements Coverage:** A bar chart showing the number of requirements that have passed, failed, not run, or not been covered.
- Requirement Incident Count:** A table listing specific requirements and their associated open and total incident counts.
- Top Open Issues:** A table listing the most critical open issues, including their descriptions, priorities, and dates.
- Top Open Risks:** A table listing the most significant risks, including their descriptions, priorities, and dates.
- Incident Summary:** A table providing a detailed breakdown of incidents by status and priority.
- Test Execution Status:** A bar chart showing the results of test executions (Failed, Passed, Not Run) along with the total number of runs and the daily run count.

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. Each of the sections that make up the homepage is described 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 allow 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).

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 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 three statuses for the covered requirements, the fourth ("Not Covered") bar depicts the total number of requirements that have no tests covering them, putting the three 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" or "Not Run". The greatest risk lies with the "Not Covered" and "Not Run" status codes, since the severity/quantity of any bugs lurking within is not yet 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 "View Details" link at the top of the table simply brings up the project requirements list (see section 4.1).

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, displayed in an indented list. 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).

3.4.5. Top Open Issues

This section displays a breakdown of the *top five* 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).

3.4.6. Top Open Risks

This section displays a breakdown of the *top five* 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).

3.4.7. Incident Summary

This section consists of a summary table that displays the aggregate count of incidents in the system broken-down by importance (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).

By default this summary table displays the total count of all incidents – regardless of type, however by 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.

3.4.8. 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 or Not Run), 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 three 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 “View Details” link at the top of the table simply brings up the project test case list (see section 5.1).

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.

3.5. 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:

The screenshot shows the 'My Profile' page in the SpiraTest application. At the top, there is a navigation bar with the SpiraTest logo on the left and a welcome message 'Welcome, Fred Bloggs | My Profile | Log Out' on the right. Below the navigation bar are several tabs: 'My Page', 'Project Home', 'Requirements', 'Test Cases', and 'Incidents'. The main content area is titled 'My Profile' and contains a form for updating user information. The form includes the following fields and options:

- First Name:** Fred
- Middle Initial:** (empty)
- Last Name:** Bloggs
- User Name:** fredbloggs
- Change Password
- Current Password:** (empty)
- New Password:** (empty)
- Confirm Password:** (empty)

At the bottom of the form are two buttons: 'Update' and 'Cancel'. The footer of the page contains the copyright notice 'Copyright (C) 2006, Inflectra Corporation | SpiraTest v1.0' and the Inflectra logo.

You can change your user information including your first-name, last-name, middle-initial and user-name. The system will check to make sure that the user-name is not already in use, and warn you if this is the case. 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.

3.5.1. Change Password

In addition to being able to update your user information, you can optionally change your password at the same time. If you check the “Change Password” box, when the <Update> button is clicked, the system will expect you to have entered your old password and two instances of your new proposed password. If the old password matches the one stored in the system, and the two entries of the new password match, then the system will update your password, otherwise you will simply get a warning message indicating what needs to be corrected.

4. Requirements Management

This section outlines how the requirements management features of SpiraTest™ 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 “Requirements” tab on the global navigation bar, you will initially be taken to the requirements list screen illustrated below:

Requirement Name	Importance	Status	Test Coverage	Author	Last Updated	Req #	
Functional System Requirements		In Progress	Not Covered	Fred Bloggs	1-Dec-2003	000001	Edit
Online Library Management System		In Progress	Not Covered	Fred Bloggs	1-Dec-2003	000002	Edit
Book Management	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000003	Edit
Ability to add new books to the system	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000004	Edit
Ability to edit existing books in the system	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000005	Edit
Ability to delete existing books in the system	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000006	Edit
Ability to associate books with different subjects	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000007	Edit
Ability to associate books with different authors	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000008	Edit
Ability to associate books with different editions	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000009	Edit
Ability to completely erase all books stored in th...	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000010	Edit
Edition Management	1 - Critical	In Progress	Not Covered	Fred Bloggs	1-Dec-2003	000011	Edit
Author Management	2 - High	In Progress	Not Covered	Joe P Smith	1-Dec-2003	000013	Edit
Subject Management	3 - Medium	Planned	Not Covered	Joe P Smith	1-Dec-2003	000019	Edit
Administration Functions	3 - Medium	Requested	Not Covered	Joe P Smith	1-Dec-2003	000022	Edit

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”) and its completion status (from “Requested” to “Completed”) as well as a graphical indicator that represents its coverage status. For those requirements that have no test-cases covering them (i.e. validating that the requirement works as expected) the indicator consists of a yellow 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 have three green bars (50% passed) and three gray bars (50% not run). *Note: The number of bars has no relation to the number of tests.*

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/not-run breakdown 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®. 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-indent 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, 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. When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information.

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 accordingly.

4.1.8. Filtering

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

The screenshot shows the SpiraTest web application interface. The user is logged in as Fred Bloggs. The main menu includes 'My Page', 'Project Home', 'Requirements', 'Test Cases', and 'Incidents'. The 'Requirements' section is active, showing a list of requirements for the 'Library Information System'. The table below shows the filtered results where all requirements have a status of 'Requested'.

Requirement Name	Importance	Status	Test Coverage	Author	Last Updated	Req #	Filter
Ability to link authors to their contact informati...	2 - High	Requested	Not Covered	Joe P Smith	1-Dec-2003	000017	Edit
Administration Functions	3 - Medium	Requested	Not Covered	Joe P Smith	1-Dec-2003	000022	Edit
Ability to completely backup the database	3 - Medium	Requested	Not Covered	Joe P Smith	1-Dec-2003	000023	Edit
Data Import Functionality	4 - Low	Requested	Not Covered	Joe P Smith	1-Dec-2003	000024	Edit
Ability to import from legacy system x	4 - Low	Requested	Not Covered	Joe P Smith	1-Dec-2003	000025	Edit
Ability to create new users in the system	3 - Medium	Requested	Not Covered	Joe P Smith	1-Dec-2003	000026	Edit
Ability to modify existing users in the system	3 - Medium	Requested	Not Covered	Joe P Smith	1-Dec-2003	000027	Edit

To filter the list by importance, status, test coverage or author 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> 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.

4.1.9. Copying and Moving

To copy or move a requirement or set of requirements, simply select the check-boxes of the requirements you want to copy or move and then click either <Copy> or <Move> as appropriate. Upon clicking the button, the rows you selected will be marked in bold with a light yellow background and the screen will prompt you to choose the destination for the copy/move:

The screenshot shows the SpiraTest web application interface with a 'Move Requirements' dialog box open. The dialog box prompts the user to choose a destination location and click 'Move Requirements'. The requirements list below shows that several rows are selected (highlighted in bold with a light yellow background).

Requirement Name	Importance	Status	Test Coverage	Author	Last Updated	Req #	Filter
Functional System Requirements		In Progress		Fred Bloggs	1-Dec-2003	000001	Edit
Online Library Management System		In Progress		Fred Bloggs	1-Dec-2003	000002	Edit
Book Management	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000003	Edit
Ability to add new books to the system	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000004	Edit
Ability to edit existing books in the system	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000005	Edit
Ability to delete existing books in the system	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000006	Edit
Ability to associate books with different subjects	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000007	Edit
Ability to associate books with different authors	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000008	Edit
Ability to associate books with different editions	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000009	Edit
Ability to completely erase all books stored in th...	1 - Critical	Completed	██████████	Fred Bloggs	1-Dec-2003	000010	Edit
Edition Management	1 - Critical	In Progress		Fred Bloggs	1-Dec-2003	000011	Edit
Author Management	2 - High	In Progress		Joe P Smith	1-Dec-2003	000013	Edit
Subject Management	3 - Medium	Planned		Joe P Smith	1-Dec-2003	000019	Edit
Administration Functions	3 - Medium	Requested		Joe P Smith	1-Dec-2003	000022	Edit

Choose the destination location for the copied/moved requirements by selecting the checkbox of the requirement you want to copy/move in front of and then clicking the “Copy Requirements” or “Move Requirements” link. If you want to copy/move the requirements to the *end of the list*, you just click the link *without* selecting a destination. To abort the copy or move, all you need to do is click the “Cancel” link and the operation will be aborted. Note that copied requirements will also include the test coverage information from the originals.

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:

The screenshot displays the SpiraTest web application interface. At the top, there is a navigation bar with the SpiraTest logo, user information (Welcome, Fred Bloggs), and various navigation tabs (My Page, Project Home, Requirements, Releases, Test Cases, Incidents, Reports). The main content area is titled "Requirement Details" and shows the details for a requirement: "Requirement: Ability to add new books to the system (000004)". The interface is split into two panes. The left pane contains a "Book Management" section with a list of requirements, including "Ability to add new books to the system" and several other related requirements. The right pane is titled "View Coverage" and shows the test coverage information for the selected requirement. It includes a list of "Available Test Cases" on the left and a "Test Coverage" list on the right. The "Test Coverage" list contains three items: "Ability to create new book", "Adding new book and author to library", and "Book management", all of which are highlighted in green. Between the two lists are buttons for "Add >", "Remove <", and "Remove All". At the bottom of the right pane are "Update" and "Cancel" buttons. The bottom of the page shows the Inflectra logo and copyright information.

This page is made up of two areas; the left pane displays the requirements list navigation and the right pane displays the details of the selected 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 right pane can be switched between three views: “View Coverage”, “View Attachments” and “View History”.

4.2.1. View Coverage

In this mode, the right pane contains the test coverage information for the requirement in question. 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 (denoted by their gray color). The right box (which will initially be empty) contains the list of test cases mapped to this requirement. The test cases in this box are color-coded according to their most recent execution status – red for failed, green for passed and gray for not-run. Double-clicking on items in this box will jump you to the test case details screen for this test case (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. Note that none of the changes are committed until you click the <Update> button at the bottom-right of the screen. If you want to discard the changes you

have made, simply click either the <Cancel> button or the “Back to Requirements List” link and you will be returned to the Requirements List page.

4.2.2. View Attachments

In this mode, the main pane displays the list of documents that have been “attached” to the requirement. The documents can be in any format, though SpiraTest™ will only display the icon for certain known types.

The screenshot shows the SpiraTest web application interface. At the top, there is a navigation bar with the SpiraTest logo and user information: "Welcome, Fred Bloggs | My Profile | Log Out | Library Information System". Below this is a secondary navigation bar with tabs: "My Page", "Project Home", "Requirements", "Releases", "Test Cases", "Incidents", and "Reports". The main content area is titled "Library Information System > Requirements > Requirement Details" and shows the requirement "Requirement: Ability to add new books to the system". There are two radio buttons: "View Coverage" (unselected) and "View Attachments" (selected). Below this is an "Attachment List" table with columns: "Document Name", "Size", "Uploaded By", "Upload Date", and "Delete". The table contains three rows of attachments. Below the table is an "Upload New Attachment" section with a "Filename:" field, a "Browse..." button, a "Description:" field, and an "Upload" button. The footer of the page includes "Copyright (C) 2006-2007, Inflectra Corporation | SpiraTest v1.1" and the Inflectra logo.

Document Name	Size	Uploaded By	Upload Date	Delete
Book Management Functional Spec.doc	10 KB	Fred Bloggs	2-May-2006	Delete
Graphical Design Mockups.psd	1,500 KB	Joe P Smith	1-May-2006	Delete
Book Management Screen Wireframe.ai	3,200 KB	Joe P Smith	2-Mar-2005	Delete

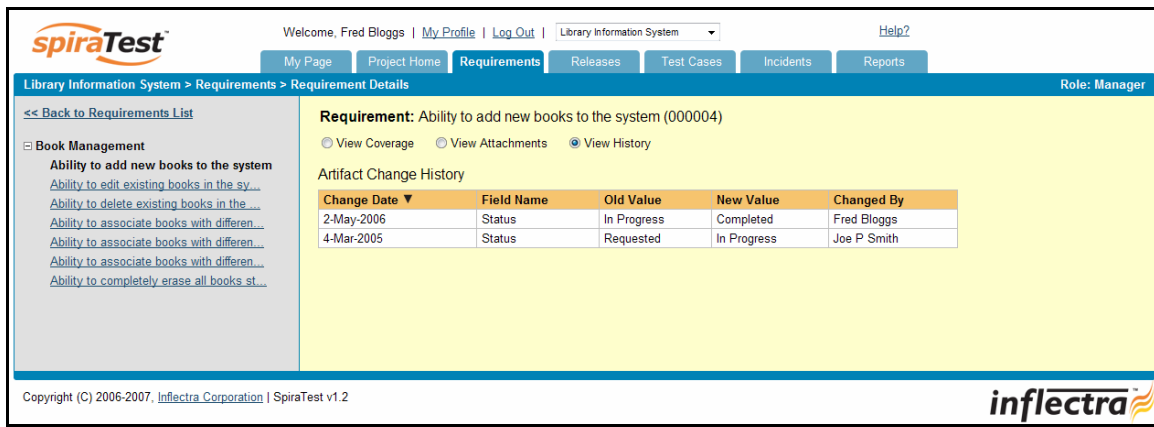
The attachment list includes the filename that was originally uploaded together with the file-size (in KB), name of the person who attached it and the date uploaded. In addition, if you position the pointer over the filename and hold it there for a few seconds, a detailed description is displayed as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

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.

4.2.3. View 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:



The screenshot shows the SpiraTest web interface. At the top, there is a navigation bar with the SpiraTest logo, user information (Welcome, Fred Bloggs), and a dropdown menu for 'Library Information System'. Below this is a secondary navigation bar with tabs for 'My Page', 'Project Home', 'Requirements', 'Releases', 'Test Cases', 'Incidents', and 'Reports'. The main content area is titled 'Library Information System > Requirements > Requirement Details' and shows the role 'Manager'. On the left, there is a sidebar with a 'Book Management' section containing several links. The main pane displays a requirement: 'Requirement: Ability to add new books to the system (000004)'. Below the requirement, there are three radio buttons: 'View Coverage', 'View Attachments', and 'View History' (which is selected). Underneath, the 'Artifact Change History' is shown in a table:

Change Date	Field Name	Old Value	New Value	Changed By
2-May-2006	Status	In Progress	Completed	Fred Bloggs
4-Mar-2005	Status	Requested	In Progress	Joe P Smith

At the bottom of the page, there is a copyright notice: 'Copyright (C) 2006-2007, Inflectra Corporation | SpiraTest v1.2' and the Inflectra logo.

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. Test Case Management

This section outlines how the use-case / test-case management features of SpiraTest™ 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 be 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

However when migrating existing projects into SpiraTest™, 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 “Test Cases” tab on the global navigation bar, you will initially be taken to the test case list screen illustrated below:

Test Name	Status	Owner	Execution Date	Author	Creation Date	Test #
Functional Tests	Failed	Fred Bloggs	1-Dec-2003	Fred Bloggs	1-Dec-2003	000001
Ability to create new book	Failed	Fred Bloggs	21-Mar-2007	Fred Bloggs	1-Dec-2003	000002
Ability to edit existing book	Passed	Fred Bloggs	1-Dec-2003	Fred Bloggs	1-Dec-2003	000003
Ability to create new author	Failed	Joe P Smith	1-Dec-2003	Fred Bloggs	1-Dec-2003	000004
Ability to edit existing author	Passed	Joe P Smith	1-Dec-2003	Fred Bloggs	1-Dec-2003	000005
Ability to reassign book to different author	Passed	Joe P Smith	1-Dec-2003	Fred Bloggs	1-Dec-2003	000006
Regression Tests	Passed	Joe P Smith	1-Dec-2003	Joe P Smith	1-Dec-2003	000007
Scenario Tests	Not Run	Joe P Smith		Joe P Smith	1-Dec-2003	000010
Exception Scenario Tests	Not Run	Joe P Smith		Joe P Smith	1-Dec-2003	000011
Person loses book and needs to report loss	Not Run	Joe P Smith		Joe P Smith	1-Dec-2003	000012
Adding new book and author to library	Not Run	Joe P Smith		Joe P Smith	1-Dec-2003	000013

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 <New Folder> and <New Test> buttons to start adding 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, creation date and test case number. In addition, if you position the mouse pointer over the name of the test case/folder, a more detailed description is displayed as a “tooltip”. 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 simply display an aggregate of the worst-case assessment of their children's status. Also, only test cases can be mapped against requirements for test-coverage, or have lists of associated test steps.

5.1.1. New Test

Clicking on the <New Test> button inserts a test case *above* the currently selected test case – i.e. the one whose check-box 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 test folder below it. If you insert a new 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 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. New Folder

Clicking on the <New Folder> button inserts a test folder *above* the currently selected test folder – i.e. the one whose check-box has been selected, at the same level in the hierarchy. The new folder is automatically populated with a single default test case. If you want to insert a new test folder below an existing test folder, you need to select the test folder below it. If you insert a new test folder without first selected an existing item from the list, the new test folder will simply be inserted at the end of the list of test folders, but *before* any of the test cases. Note that in a test folder, all of the child test folders are always displayed *before* any of the actual test cases.

Once the new test folder 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.

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. Note that you cannot delete all the test cases in a test folder; at least one test case needs to be left in the folder, the system will warn you if you try to do this.

5.1.3. 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 SpiraTest™ is explained in more detail in section 5.3.

5.1.4. 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.

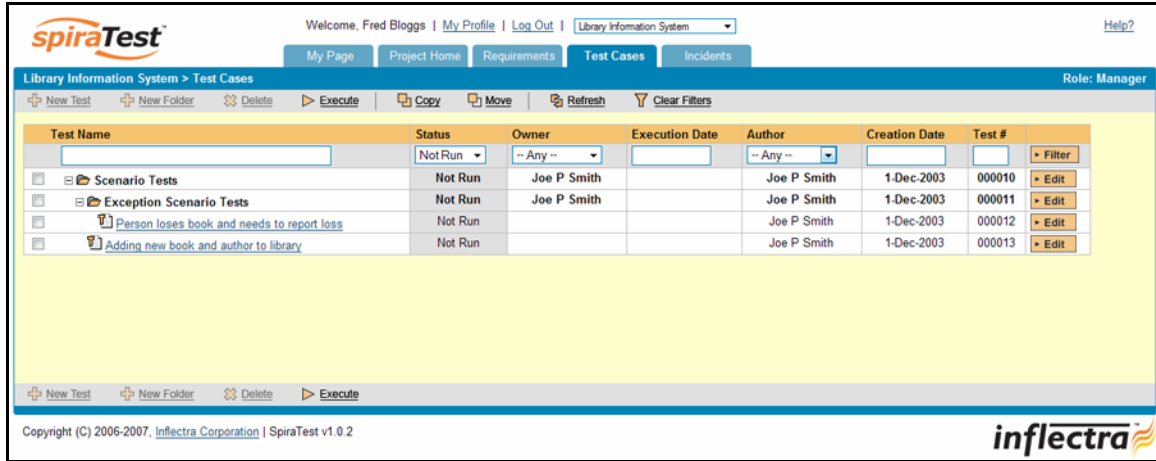
5.1.5. Edit

Each test case/folder in the list has an <Edit> button display in its right-most column. When you click this button, 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. When you have

made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information.

5.1.6. Filtering

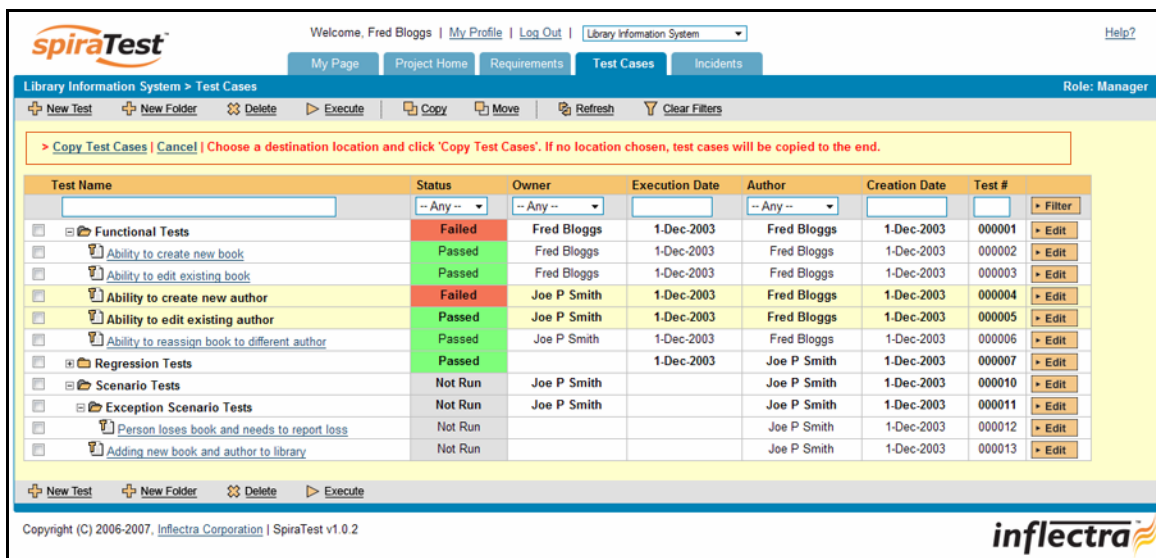
You can easily filter the list of test cases as illustrated in the screen-shot below:



To filter the list by execution status, owner name or author 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> 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 Execution Status = Not Run.

5.1.7. Copying and Moving

To copy or move a test case or test folder, simply select the check-boxes of the test cases/folders you want to copy or move and then click either <Copy> or <Move> as appropriate. Upon clicking the button, the rows you selected will be marked in bold with a light yellow background and the screen will prompt you to choose the destination for the copy/move:



Choose the destination location for the copied/moved test cases/folders by selecting the checkbox of the test case/folder you want to copy/move in front of and then clicking the “Copy Test Cases” or “Move Test Cases” link. If you want to copy/move the test cases/folders to the *end of the list*, you just click the link *without* selecting a destination. To abort the copy or move, all you need to do is click the “Cancel” link and the operation will be aborted. Note that copied test cases/folders will also include the requirements coverage and test step information from the originals.

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:

The screenshot shows the SpiraTest interface for a test case. The top navigation bar includes 'Welcome, Fred Bloggs | My Profile | Log Out | Library Information System | Help?'. Below this is a secondary navigation bar with 'My Page', 'Project Home', 'Requirements', 'Releases', 'Test Cases', 'Incidents', and 'Reports'. The main content area is titled 'Library Information System > Test Cases > Test Case Details' and shows the test case 'Ability to create new book (000002)'. A table of test steps is displayed with columns for Step #, Test Step Description, Expected Result, Sample Data, and Status. The first five steps are marked as 'Passed'.

Step #	Test Step Description	Expected Result	Sample Data	Status
000001	User logs in to application	User taken to main menu screen		Passed
000002	User clicks link to create book	User taken to first screen in wizard		Passed
000003	User enters books name and author, then clicks Next	User taken to next screen in wizard	Macbeth, William Shakespeare	Passed
000004	User chooses book's genre and sub-genre from list	User sees screen displaying all entered information	Play, Tragedy	Passed
000005	User clicks submit button	Confirmation screen is displayed		Passed
				New
				New
				New
				New
				New
				New

This page is made up of two areas; the left pane is the navigation window and the right pane contains the test case detailed information itself. 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 main (right) pane can be switched between five different views by clicking the appropriate radio button. Initially the pane will be in “View Test Steps” mode, but it can be switched to “View Test Runs”, “View Coverage”, “View Attachment” and “View 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. View 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.

5.2.2. 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. All test steps are displayed in “Edit” mode, so the description, expected result and sample data fields are editable, allowing you to enter the appropriate data (see section 5.2.7). In addition to the existing test steps, the system always displays five blank test steps so that it is easy and quick to enter large numbers of test steps. Upon entering up to five test steps and clicking the <Update> button, five new blank rows will be added at the bottom of the list.

5.2.3. 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.

5.2.4. Move Up

Clicking on the <Move Up> button simply reorders the test step list so that the currently selected test step is one position higher up the list. Note: Attempting to move a test step above the top of the list will give a warning message.

5.2.5. Move Down

Clicking on the <Move Down> button simply reorders the test step list so that the currently selected test step is one position lower down the list. Note: Attempting to move a test step below the bottom of the list of existing test steps will give a warning message.

5.2.6. 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.

5.2.7. Update

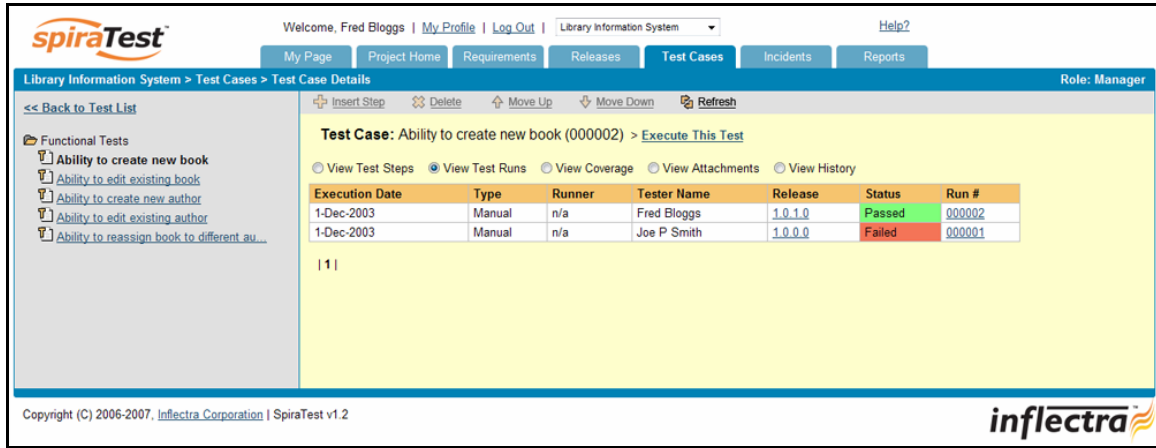
Each test step in the list is always in an editable mode. When you click this button, you commit any changes made to the test step list. These changes consist of modifying an existing test step or entering a new test step in one of the five blank rows. The delete/insert/move-up/move-down operations on the other hand are committed immediately, and *do not* need to have the <Update> button clicked for them to take effect.

5.2.8. Cancel

If during the entry of new test steps or the modification of existing test steps, you want to revert back to the original information, click <Cancel> and your changes will be discarded.

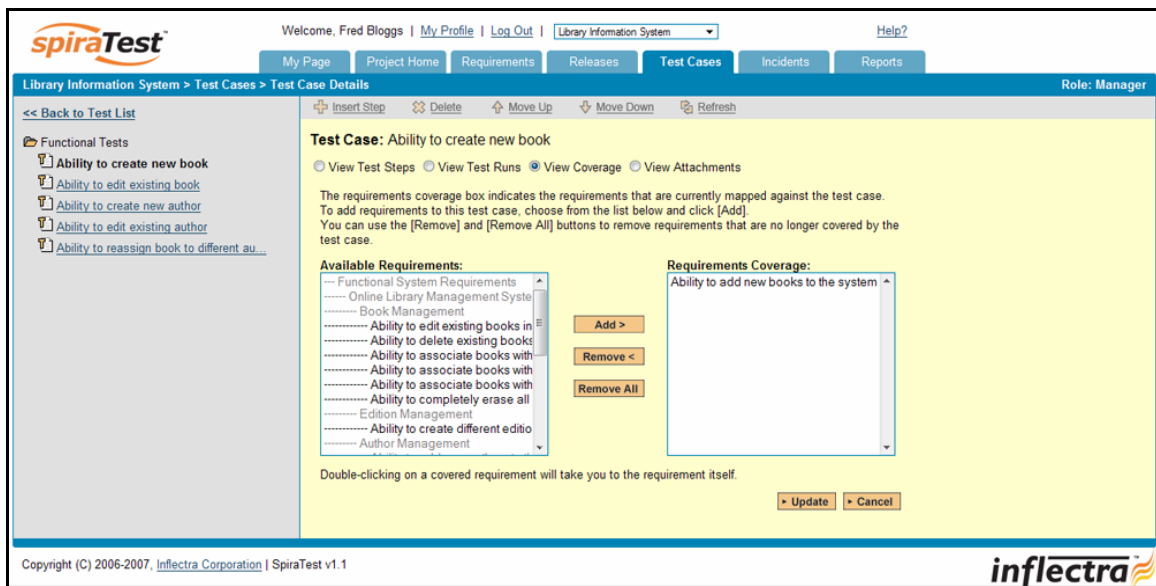
5.2.9. View Test Runs

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 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 5.4).



5.2.10. View Coverage

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

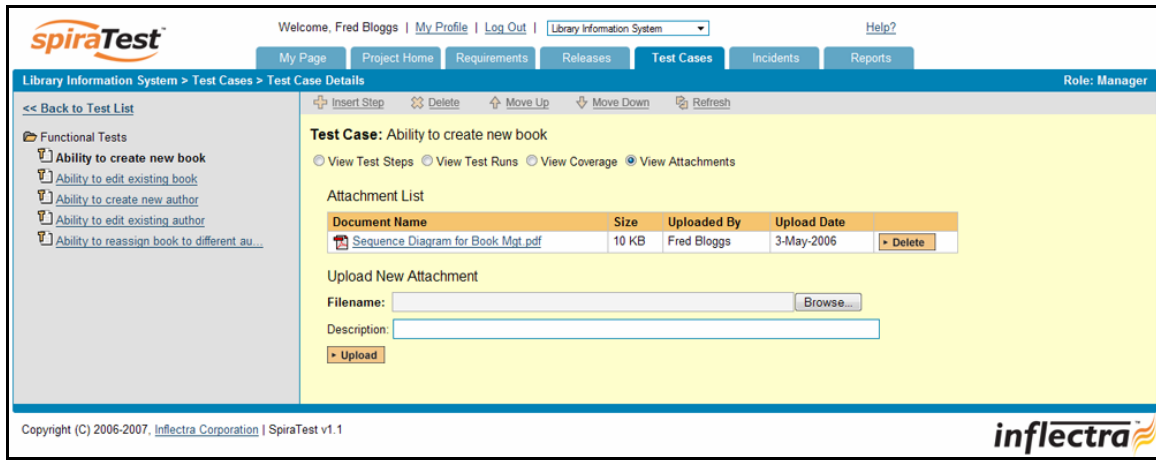


The main (right) pane consists of two lists of requirements, the one on the left being the hierarchical list of the requirements belonging to the project (the summary items are denoted by their gray color). The right box contains the list of requirements mapped to this test case. Double-clicking on items in this box will jump you to the requirements details screen for this requirement (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. Note that none of the changes are committed until you click the <Update> button at the bottom-right of the screen. If you want to discard the changes you have made, simply click either the <Cancel> button or the "Back to Test List" link and you will be returned to the Test Case List page.

5.2.11. View 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 SpiraTest™ 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 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 test case, you need to 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 test case.

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.

5.2.12. View 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:

Library Information System > Test Cases > Test Case Details

Test Case: Ability to create new book (000002) > [Execute This Test](#)

View Test Steps | View Test Runs | View Coverage | View Attachments | **View History**

Artifact Change History

Change Date	Field Name	Old Value	New Value	Changed By
2-May-2006	Name	Need to create new book	Ability to create new book	Fred Bloggs
4-Mar-2005	Owner		Fred Bloggs	Joe P Smith

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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. Execute Test Case(s)

When you select test cases on the test case list page and click the <Execute> button, or click the “Execute” link on the test cases listed under My Tests on your personalized home page, you are launching the test execution module with the selected test cases. 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).

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

Library Information System > Test Cases > Test Case Execution

Current Test Case: Ability to create new book

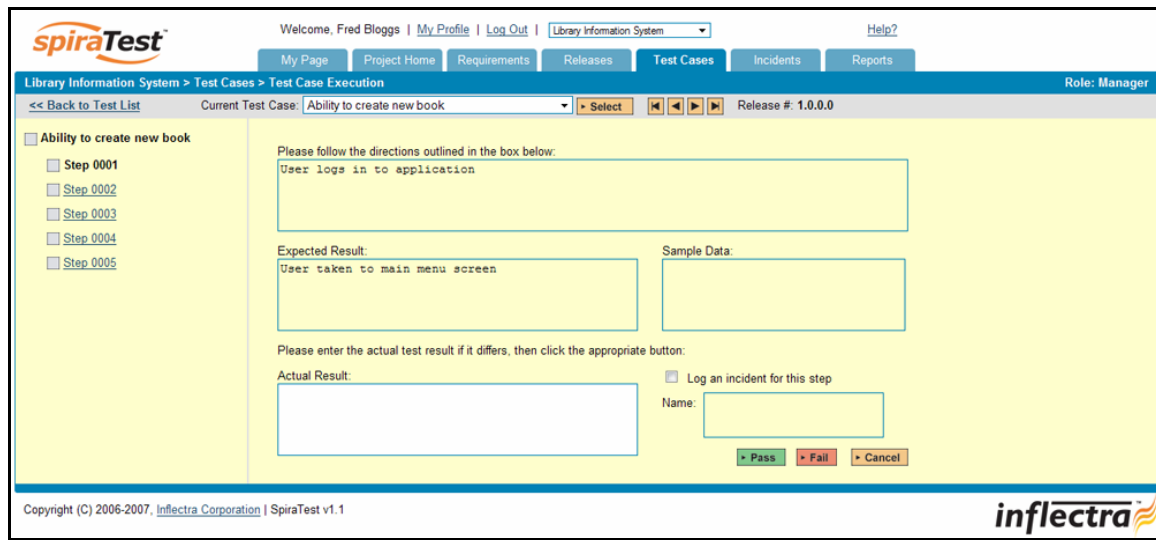
Please Choose the Release To Execute Against:
Library System Release 1

Submit

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Before actually executing the test scripts, you need to select the release of the system that you will be testing against. This ensures that the resulting test runs and incidents are associated with the correct release of the system. If you have not configured any releases for the project, then this step will be skipped and the test runs/incidents will not be associated with any particular release.

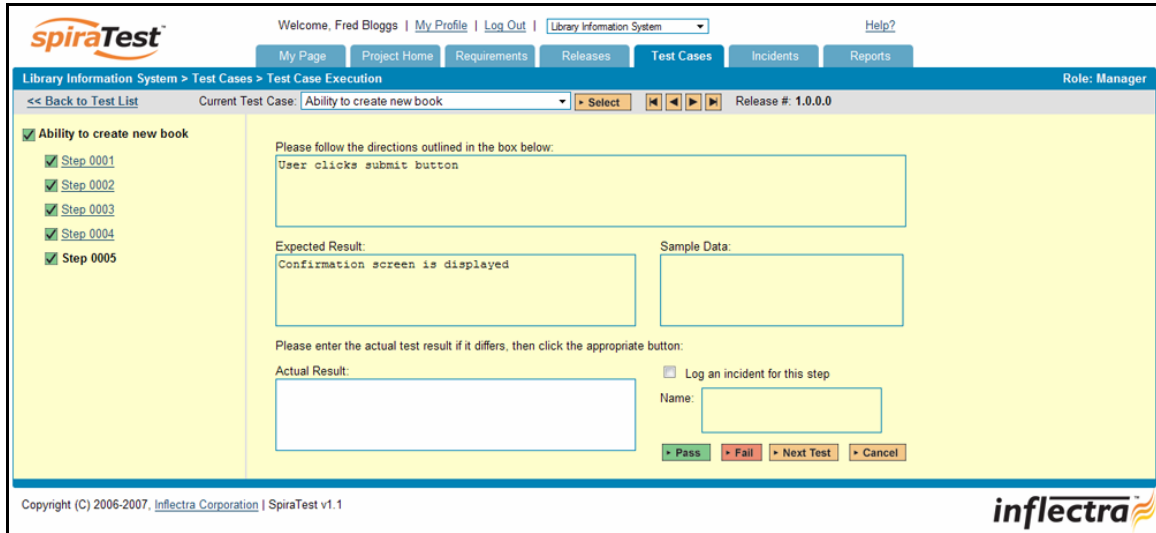
Once you have chosen the appropriate release name from the drop-down list, click the <Submit> button to begin executing test steps:



The screen is divided up into three main elements:

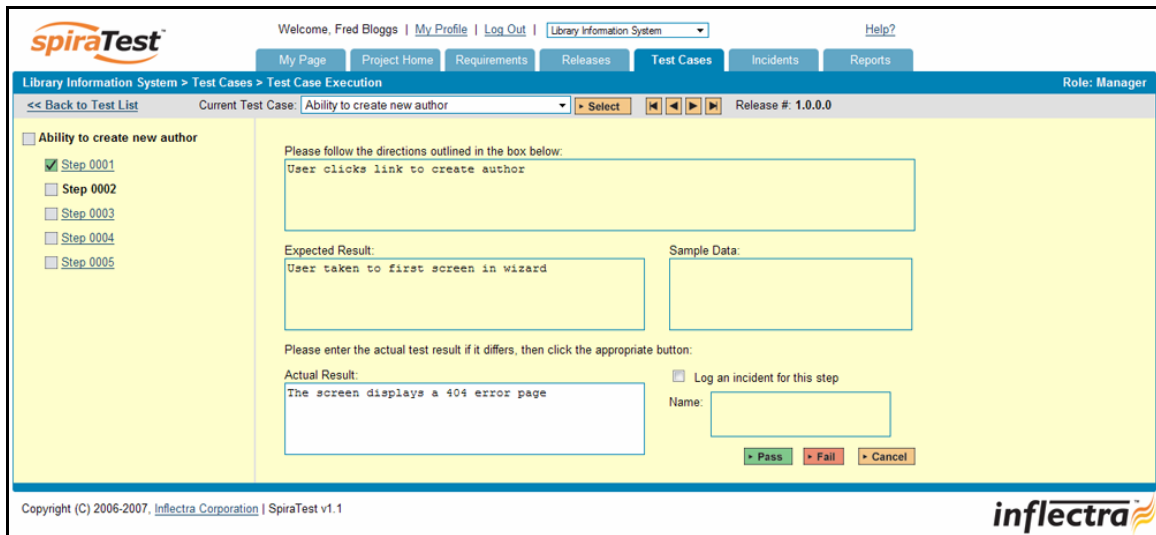
- The top navigation bar (with a gray background) contains a link back to the test case list together with the navigation that allows you to move between the different *test cases* being executed. You can either directly select the test case from the drop-down list and click <Select> or use the movement buttons (that look like the buttons on a music player); from left to right they: move to first, move to previous, move to next and move to last test case. Regardless of the method chosen, when the test case is changed, the list of test-steps available in the left hand pane is refreshed.
- The left-hand navigation pane contains the list of test steps for the currently executing test case. You can click on the test step link to move between the test steps in the current test case. In addition, each test step has a colored square next to the name that indicates its status (green = “Passed”, red = “Failed”, gray = “Not Run”) in the current test run. The overall test case also has an execution status. If any of the steps are marked as “Failed”, then the overall test case “Failed”, 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 current test step for the current test case. As the tester you would 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.

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. This is illustrated in the screen shot below:



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> button; this is illustrated in the screen-shot below:



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. 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 result in a new incident be automatically created. This is achieved by selecting the "Log an Incident for this step" checkbox and entering a name for the new incident. 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.

Note that the entire test run is not actually saved until the <Finish> button is clicked, so you can use the move forward/backward buttons to revisit previous test cases and/or test steps and make changes before saving the test run. As a consequence however, you should make sure you complete the test run (or at least the test-cases you have time for) and save it, before leaving the computer for a period of time; this will ensure work is not lost due to the timeout of your session.

5.4. Test Run Details

As described in section 5.2.8, when you view the details of a test case, one of the views possible is to list all the test runs for that test case:

When you click on any of the individual test runs in the list, you are taken to the Test Run details page (not to be confused with the Test Case details page!). This page consists of two panes: the left hand navigation pane displays a list of the last fifteen (15) runs, and the main pane lists the details of the test run itself. The layout of this main pane will look different depending on whether the test run was a manual “user-driven” test run or an automated test run (using an external automated tool such as NUnit, JUnit, etc.).

5.4.1. Manual Test Run

In the case of a manual test run, the main pane 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.

Each test step is displayed along with the description, expected result, suggested sample data, actual result and the execution status for this step *in this particular test run*. Where the test-step was listed as a “Failure” you will have an additional hyperlink “View Incidents” displayed. This allows you to view any incidents that are associated with this particular test step failure:

The screenshot shows the SpiraTest web application interface. At the top, there is a navigation bar with links for 'My Page', 'Project Home', 'Requirements', 'Releases', 'Test Cases', 'Incidents', and 'Reports'. The main content area is titled 'Library Information System > Test Cases > Test Run Details' and shows details for a test run: 'Test Run: Ability to create new book (000001)'. Below this, there is a table of test steps:

Step	Test Step Description	Expected Result	Sample Data	Actual Result	Status
000001	User logs in to application	User taken to main menu screen			Passed
000002	User clicks link to create book	User taken to first screen in wizard			Passed
000003	User enters books name and author, then clicks Next	User taken to next screen in wizard		An error page is displayed - "No such object or with block variable at line 473"	Failed

Below the table, there is an 'Incidents List for Step: 000003 (Test Run Step #: 000003)'. It contains one incident:

Incident #	Type	Status	Priority	Name	Owned By	Detected On	Detected By
000007	Bug	Assigned	1 - Critical	Cannot add a new book to the system	Joe P Smith	4-Nov-2003	Joe P Smith

Clicking on the link will change the background color of the test case to gray and display a list of all the associated test steps in a grid below the test step list. 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.

5.4.2. Automated Test Run

In the case of an automated test run, the main pane 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:

The screenshot shows the SpiraTest web application interface for an automated test run. The main content area is titled 'Library Information System > Test Cases > Test Run Details' and shows details for a test run: 'Test Run: Ability to edit existing author (000046)'. Below this, there is a summary of the test run:

Test Case #: 000005 Execution Date: 17-May-2007 Release #: 1.0.0.0

Runner Name: NUnit Execution Status: Failed

Assert Count: 1 Start Date: 17-May-2007 20:42:03

Tester Name: Fred Bloggs End Date: 17-May-2007 20:42:03

Message: Expected: 1 But was: 0

Test Name: Inflectra.SpiraTest.AddOns.SpiraTestNUnitAddIn.SampleTestSuite.SampleTestFixture_01.SampleFailure_01.SampleFailure

Failure Details:

```

at NUnit.Framework.Assert.That(Object actual, IConstraint constraint, String message, Object[] args)
at NUnit.Framework.Assert.AreEqual(Int32 expected, Int32 actual, String message, Object[] args)
at NUnit.Framework.Assert.AreEqual(Int32 expected, Int32 actual)
at Inflectra.SpiraTest.AddOns.SpiraTestNUnitAddIn.SampleTestSuite.SampleTestFixture_01.SampleFailure_01.SampleFailure()

```

Details on how to use SpiraTest™ in conjunction with an automated testing tool are provided in the *SpiraTest Automated Testing Integration Guide*, which can be downloaded from the Inflectra website.

6. Incident Tracking

This section outlines how the incident/defect tracking features of SpiraTest™ can be used to manage key project artifacts during the software development lifecycle. Although the primary purpose of the incident tracker is to manage the defects raised during the execution of test cases in the test management module, it 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 “Incidents” tab on the global navigation bar, you will initially be taken to the incidents list screen illustrated below:

Del	Incident #	Type	Status	Priority	Name	Owned By	Detected On	Detected By	
		-- Any --	-- Any --	-- Any --		-- Any --		-- Any --	> Filter
<input type="checkbox"/>	59	Risk	Open	1 - Critical	Sample Risk 1		10-Dec-2003	Fred Bloggs	> Edit
<input type="checkbox"/>	60	Risk	Open	2 - High	Sample Risk 2		10-Dec-2003	Fred Bloggs	> Edit
<input type="checkbox"/>	61	Risk	Assigned	4 - Low	Sample Risk 3	Fred Bloggs	10-Dec-2003	Fred Bloggs	> Edit
<input type="checkbox"/>	57	Change Request	Duplicate	3 - Medium	Test Change Request		9-Dec-2003	Joe P Smith	> Edit
<input type="checkbox"/>	55	Change Request	Closed	1 - Critical	Test Change Request	Joe P Smith	8-Dec-2003	Fred Bloggs	> Edit
<input type="checkbox"/>	56	Change Request	Closed	2 - High	Test Change Request	Joe P Smith	8-Dec-2003	Fred Bloggs	> Edit
<input type="checkbox"/>	52	Change Request	Open	2 - High	Test Change Request		7-Dec-2003	Joe P Smith	> Edit
<input type="checkbox"/>	53	Change Request	Assigned	3 - Medium	Test Change Request	Fred Bloggs	7-Dec-2003	Joe P Smith	> Edit
<input type="checkbox"/>	54	Change Request	Assigned	4 - Low	Test Change Request	Joe P Smith	7-Dec-2003	Fred Bloggs	> Edit
<input type="checkbox"/>	51	Change Request	Open	2 - High	Test Change Request		6-Dec-2003	Fred Bloggs	> Edit

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 the incident type (bug, issue, risk, etc.), status (new, open, etc.), priority, name, assigned owner, detection date and original detector. 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 ten incidents in the list according to the applied filter and sort-order.

6.1.1. Sorting and Filtering

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

Del	Incident #	Type	Status	Priority	Name	Owned By	Detected On	Detected By	
<input type="checkbox"/>	4	Bug	Open		Database not backing up correctly		2-Nov-2003	Joe P Smith	Edit
<input type="checkbox"/>	17	Bug	Duplicate		Cannot add a new book to the system	Fred Bloggs	15-Nov-2003	Fred Bloggs	Edit
<input type="checkbox"/>	5	Bug	Open	1 - Critical	Cannot install system on Oracle 9i		2-Nov-2003	Fred Bloggs	Edit
<input type="checkbox"/>	7	Bug	Assigned	1 - Critical	Cannot add a new book to the system	Joe P Smith	4-Nov-2003	Joe P Smith	Edit
<input type="checkbox"/>	11	Bug	Fixed	1 - Critical	Validation on the edit book page	Joe P Smith	15-Nov-2003	Fred Bloggs	Edit
<input type="checkbox"/>	15	Bug	Closed	1 - Critical	Session handling	Joe P Smith	15-Nov-2003	Joe P Smith	Edit
<input type="checkbox"/>	12	Bug	Fixed	2 - High	Quote handling issues throughout	Fred Bloggs	15-Nov-2003	Fred Bloggs	Edit
<input type="checkbox"/>	8	Bug	Assigned	2 - High	Editing the date on a book is clumsy	Fred Bloggs	4-Nov-2003	Joe P Smith	Edit
<input type="checkbox"/>	16	Bug	Not Reproducible	2 - High	The homepage hangs whilst loading	Fred Bloggs	15-Nov-2003	Joe P Smith	Edit
<input type="checkbox"/>	6	Bug	Open	3 - Medium	The book listing screen doesn't sort		2-Nov-2003	Joe P Smith	Edit

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> 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. In the screen-shot above, we are filtering on type=bug and sorting by decreasing priority.

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 some of the fields are disabled (type, status, owner) since all incidents are initially created as type=incident and status=new.

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. Clear Filters

Clicking on the <Clear Filters> button removes any set filters and expands the incident list to display all incidents for the current project.

6.1.5. 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.

6.1.6. Edit

Each incident in the list has an <Edit> button display in its right-most column. When you click this button, 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. When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information.

This is useful for making simple changes to an incident – it avoids having to first go to the incident details page. To change fields not displayed in the incident list, you will however, need to click on the incident name to view the Incident Details page (see section 6.2).

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:

The screenshot shows the SpiraTest web application interface. At the top, there is a navigation bar with the SpiraTest logo, user information (Welcome, Fred Bloggs | My Profile | Log Out), and a dropdown menu for the Library Information System. Below the navigation bar, there are several tabs: My Page, Project Home, Requirements, Releases, Test Cases, Incidents (selected), and Reports. The main content area has a yellow background and contains the following fields:

- Name: Cannot add a new book to the system
- Type: Bug
- Status: Assigned
- Test Run Step #: 000003
- Priority: 1 - Critical
- Closed On: (m/d/yyyy)
- Detected By: Joe P Smith
- Detected On: 4-Nov-2003
- Detected In Release: Library System Release 1
- Owned By: Joe P Smith
- Last Modified: 1-Dec-2003

Below these fields are three radio buttons: View Description (selected), View Attachments, and View History. There are two text areas: Description (containing the text "When I click on the button to add a book, enter the new information and click submit, I get a subscript out of range error") and Resolution. At the bottom right of the main pane are Update and Cancel buttons.

This page is made up of two areas; the top navigation bar (with the gray background) that allows you move between incidents, and the main pane (yellow background) that contains the details of the incident in question.

The navigation bar allows you to move within the list of incidents that were displayed in the incident list page, without having to go back to that page. So, if the incident list page contained a list of all bugs sorted by priority, the buttons on this navigation would allow you to cycle between the different bugs, in order of priority. If you want to view incidents that are outside this filtered list, or want to change the way they are sorted, you need to click the “Back to Incident List” hyperlink and change the filter/sort on the incident list page.

You can either enter a specific incident number in the text-box and click the <Find> button, or simply click one of the four movement buttons (move first, move previous, move next and move last) to cycle to a different incident in the list.

In addition, the lower section of the incident details page can be switched between three different views: “View Description”, “View Attachments”, and “View History”. These are described separately below.

6.2.1. Editing an Existing Incident

If you are editing an existing incident, the following fields will be editable for you to change:

- Name
- Status (New, Open, Assigned, Fixed, Closed, Duplicate, Cannot Reproduce)
- Incident Type (Bugs, Enhancements, Issues, Training Items, Limitations, Change Requests, and Risks)
- Detected By User
- Assigned Owner
- Detected In Release
- Priority (Critical, High, Medium, Low)
- Closed Date
- Description
- Resolution
- Attachment List

Note that the mandatory fields are listed in **bold type** with asterisks. Once you've made the changes to the appropriate incident fields, you can either click <Update> to commit the changes or <Cancel> to discard the changes and return back to the incident list.

6.2.2. Inserting a New Incident

If you are inserting a new incident, only the following fields will be editable for you to fill-in:

- Name
- Detected By User
- Detected In Release
- Priority (Critical, High, Medium, Low)
- Closed Date
- Description
- Resolution
- Attachment List

The reason for the limited number of editable fields is that all incidents are created as type=Incident and status=New, so that they have to be formally reviewed, assigned a type, priority, owner and status by the project manager. Note that the mandatory fields are listed in **bold type** with asterisks.

Once you've filled out the appropriate incident fields, you can either click <Insert> to commit the new item or <Cancel> to discard the insertion and return back to the incident list.

6.2.3. View Description

In this mode, the lower section of the screen displays the detailed description of the incident together with any recorded resolution. The latter text-box is optional and can be used to enter guidance to the development team, suggestions for resolving the bug/issue, etc.

6.2.4. View Attachments

In this mode, the lower section of the screen displays the list of documents that have been “attached” to the incident. The documents can be in any format, though SpiraTest™ will only display the icon for certain known types.

The screenshot shows the SpiraTest web application interface. At the top, there is a navigation bar with the SpiraTest logo, user information (Welcome, Fred Bloggs), and navigation links (My Profile, Log Out, Library Information System). Below this is a secondary navigation bar with tabs for My Page, Project Home, Requirements, Releases, Test Cases, Incidents, and Reports. The main content area is titled 'Library Information System > Incidents > Incident Details' and shows details for Incident # 7. The incident details include fields for Name, Type (Bug), Status (Assigned), Test Run Step # (000003), Priority (1 - Critical), Closed On, Detected By (Joe P Smith), Detected On (4-Nov-2003), Detected In Release (Library System Release 1), Owned By (Joe P Smith), and Last Modified (1-Dec-2003). Below these details are radio buttons for 'View Description' and 'View Attachments', with 'View Attachments' selected. A table lists the attachments:

Document Name	Size	Uploaded By	Upload Date	
Error Stacktrace.doc	1,500 KB	Fred Bloggs	1-May-2006	Delete
Web Page capture.htm	120 KB	Fred Bloggs	25-Apr-2006	Delete

Below the table is a section for 'Upload New Attachment' with fields for 'Filename' and 'Description', and 'Update' and 'Cancel' buttons. The footer of the application shows 'Copyright (C) 2006-2007, Inflectra Corporation | SpiraTest v1.1' and the Inflectra logo.

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 an incident, simply click the <Delete> button and the attachment will be removed from the list. To attach a new document to the incident, you need to click the Browse button and select the file from your local computer, optionally enter a detailed description then click the <Update> button. The document will be copied from your computer and attached to the incident.

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.

6.2.5. View 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:

The screenshot displays the SpiraTest web application interface. At the top, there is a navigation menu with options like 'My Page', 'Project Home', 'Requirements', 'Releases', 'Test Cases', 'Incidents', and 'Reports'. The 'Incidents' tab is selected. Below the navigation, there is a search bar for 'Incident #' with the value '7' and a 'Find' button. The main content area shows the 'Incident Details' for incident #7. The incident name is 'Cannot add a new book to the system'. The incident type is 'Bug', status is 'Assigned', and priority is '1 - Critical'. The incident was detected on '4-Nov-2003' by 'Joe P Smith'. The 'Artifact Change History' table is visible, showing the following changes:

Change Date	Field Name	Old Value	New Value	Changed By
2-May-2006	Status	Open	Assigned	Fred Bloggs
5-Mar-2005	Status	New	Open	Fred Bloggs
4-Mar-2005	Type	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.

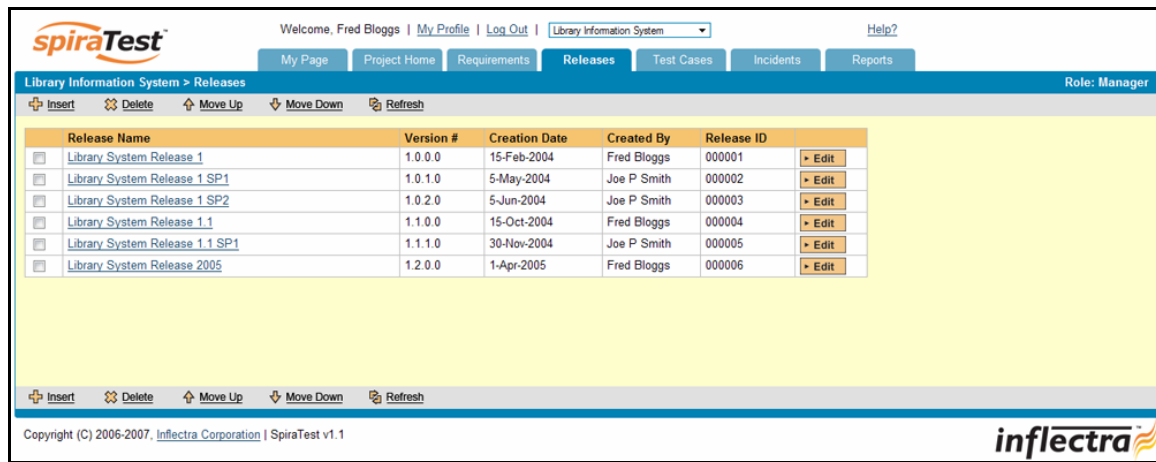
7. Release Management

This section outlines how to use the Release Management features of SpiraTest™ 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.

7.1. Release List

When you click on the “Releases” tab on the global navigation bar, you will initially be taken to the release list screen illustrated below:



Release Name	Version #	Creation Date	Created By	Release ID
<input type="checkbox"/> Library System Release 1	1.0.0.0	15-Feb-2004	Fred Bloggs	000001
<input type="checkbox"/> Library System Release 1 SP1	1.0.1.0	5-May-2004	Joe P Smith	000002
<input type="checkbox"/> Library System Release 1 SP2	1.0.2.0	5-Jun-2004	Joe P Smith	000003
<input type="checkbox"/> Library System Release 1.1	1.1.0.0	15-Oct-2004	Fred Bloggs	000004
<input type="checkbox"/> Library System Release 1.1 SP1	1.1.1.0	30-Nov-2004	Joe P Smith	000005
<input type="checkbox"/> Library System Release 2005	1.2.0.0	1-Apr-2005	Fred Bloggs	000006

The release list will contain all the releases 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 to the project. The order 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.

All of the releases in the list have a release-name, together with the assigned version number for that release, the date that the release was first created, the name of the creator of the release and the release number. 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. Insert

Clicking on the <Insert> button inserts a new release *above* the currently selected release – i.e. the one whose check-box has been selected. If you want to insert a new release below an existing release, you need to select the one below it. If you insert a new release without first selecting an existing item from the list, the new release will simply be added to 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, version number and creator.

7.1.2. Delete

Clicking on the <Delete> button deletes all the releases whose check-boxes have been selected. Any test runs or incidents that were associated with this release are **not** themselves deleted, but the relationship between them is lost.

7.1.3. 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.

7.1.4. Edit

Each release in the list has an <Edit> button display in its right-most column. When you click this button, 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. When you have made your updates, you can either click <Update> to commit the changes, or <Cancel> to revert back to the original information.

7.1.5. Move Up

Clicking on the <Move Up> button simply reorders the release list so that the currently selected release is one position higher up the list. Note: Attempting to move a release above the top of the list will give a warning message.

7.1.6. Move Down

Clicking on the <Move Down> button simply reorders the release list so that the currently selected release is one position lower down the list. Note: Attempting to move a release below the bottom of the list of existing releases will give a warning message.

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:

The screenshot shows the SpiraTest web application interface. At the top, there is a navigation bar with the SpiraTest logo and user information: "Welcome, Fred Bloggs | My Profile | Log Out | Library Information System | Help?". Below this is a secondary navigation bar with tabs: "My Page", "Project Home", "Requirements", "Releases", "Test Cases", "Incidents", and "Reports". The main content area is titled "Library Information System > Releases > Release Details" and shows the role "Manager".

The release details for "Library System Release 1 (000001)" are displayed, including the "Version Number: 1.0.0.0". There are three radio buttons for "View Test Runs" (selected), "View Attachments", and "View History". Below this is a table titled "Test Runs Executed Against This Release":

Execution Date	Tester Name	Test Run Name	Type	Runner	Status	Run #
1-Dec-2003	Joe P Smith	Ability to create new author	Manual	n/a	Failed	000004
1-Dec-2003	Fred Bloggs	Ability to edit existing book	Manual	n/a	Passed	000003
1-Dec-2003	Joe P Smith	Ability to create new book	Manual	n/a	Failed	000001

At the bottom of the page, there is a copyright notice: "Copyright (C) 2006-2007, Inflectra Corporation | SpiraTest v1.2" and the Inflectra logo.

This page is made up of two areas; the left pane is the navigation window and the right pane contains the release detailed information itself. 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.

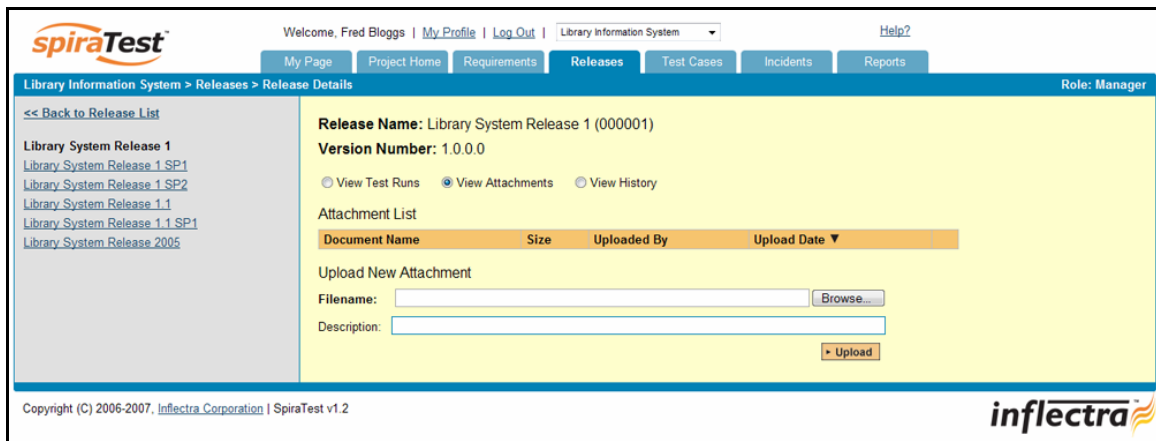
The main (right) pane always displays the name of the release, its identification number and its assigned version string. Below this standard information, there are three possible views that can be selected: “View Test Runs”, “View Attachments”, and “View History”. Each of the different views is described separately below.

7.2.1. View Test Runs

This is the default view for the release details page. It lists the different test case execution runs that are associated with this release, starting with the most recent. Each test run is listed together with the date of execution, the name of the test case, the name of the tester, the overall execution status for the test run and a link to the actual test run details (see section 5.4)

7.2.2. View 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 SpiraTest™ 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 delete an existing attachment from a release, simply click the <Delete> button and the attachment will be removed from the list. To attach a new document to the release, you need to 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 release.

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.

7.2.3. 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:

spiraTest

Welcome, Fred Bloggs | [My Profile](#) | [Log Out](#) | Library Information System | [Help?](#)

[My Page](#) [Project Home](#) [Requirements](#) **Releases** [Test Cases](#) [Incidents](#) [Reports](#)

Library Information System > Releases > Release Details Role: Manager

[<< Back to Release List](#)

Library System Release 1
[Library System Release 1.SP1](#)
[Library System Release 1.SP2](#)
[Library System Release 1.1](#)
[Library System Release 1.1.SP1](#)
[Library System Release 2005](#)

Release Name: Library System Release 1 (000001)
Version Number: 1.0.0.0

View Test Runs View Attachments View History

Artifact Change History

Change Date	Field Name	Old Value	New Value	Changed By
10-Jun-2007	Version #	1.0.0.0.0.0.0.0.0	1.0.0.0	Fred Bloggs
10-Jun-2007	Version #	1.0.0.0	1.0.0.0.0.0.0.0.0	Fred Bloggs
2-May-2006	Name	Library System v1.0.0	Library System Release 1	Fred Bloggs
4-Mar-2005	Version Number	1.0.0	1.0.0.0	Joe P Smith

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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. Reports Center

This section describes the reporting features of SpiraTest™, 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:

The screenshot shows the SpiraTest Reports Center home page. The navigation bar includes 'My Page', 'Project Home', 'Requirements', 'Releases', 'Test Cases', 'Incidents', and 'Reports' (selected). The main content area is divided into three columns:

- Requirements Reports:**
 - > [Requirements Coverage Report](#)
- Test Case Reports:**
 - > [Printable Test Scripts](#)
 - > [Test Case Execution Report](#)
- Incident Reports:**
 - > [Incident Status Report](#)
 - > [Discovery Rate Chart](#)
 - > [Cumulative Count Chart](#)
 - > [Open Count By Priority Chart](#)
 - > [Aging By Priority Chart](#)
 - > [Turnaround Time By Priority Chart](#)

The footer contains the text: Copyright (C) 2006-2007, Inflectra Corporation | SpiraTest v1.2 and the Inflectra logo.

This page simply lists each of the reports available in the system, categorized by the artifact they primarily relate to (requirements, test cases, and incidents). Clicking on any of the report hyperlinks will take you to the report in question. Each of the reports is briefly described below:

8.1. Requirements Reports

8.1.1. Requirements Coverage 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, attached documents, and the change history:

The screenshot shows the SpiraTest Requirements Coverage Report page. The navigation bar includes 'Reports' selected. The main content area displays the following information:

Req 5 - Ability to edit existing books in the system

Priority: 1 - Critical Status: Completed
 Author: Fred Bloggs Creation Date: 12/1/2003 12:00:00 AM
 Coverage: 2 Covering, 0 Failed, 2 Passed Last Modified: 12/1/2003 12:00:00 AM

Requirement Test Coverage:

Test #	Name	Status	Last Execution Date
2	Ability to create new book	Passed	12/1/2003 12:00:00 AM
13	Adding new book and author to library	Not Run	
8	Book management	Passed	12/1/2003 12:00:00 AM

Attachment List:

Filename	Description	Author	Date Uploaded
Book Management Functional Spec.doc	This document outlines the functional specification for the book management part of the library management system.	Fred Bloggs	5/2/2006 12:00:00 AM
Graphical Design Mockups.psd		Joe P Smith	5/1/2006 12:00:00 AM
Book Management Screen Wireframe.ai		Joe P Smith	3/2/2005 12:00:00 AM

8.2. Test Case Reports

8.2.1. 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.

The screenshot shows the SpiraTest interface for a 'Printable Test Scripts' report. The page title is 'Printable Test Scripts' and the user is identified as 'Fred Bloggs' with the role of 'Manager'. The report is for 'Test 3 - Ability to edit existing book'. It contains a table with 5 steps, an attachment list, and a section for 'Test 4 - Ability to create new author' which is partially visible.

Step	Description	Expected Result	Sample Data	Date
1	User logs in to application	User taken to main menu screen		
2	User clicks link to create book	User taken to first screen in wizard		
3	User enters books name and author, then clicks Next	User taken to next screen in wizard	Macbeth, William Shakespeare	
4	User chooses book's genre and sub-genre from list	User sees screen displaying all entered information	Play, Tragedy	
5	User clicks submit button	Confirmation screen is displayed		

Attachment List:

Filename	Description	Author	Date Uploaded
Sequence Diagram for Book Mgt.pdf	Sequence diagram in UML format that provides additional detail surrounding the book management use-case / test case	Fred Bloggs	5/3/2006 12:00:00 AM

Test 4 - Ability to create new author

Step	Description	Expected Result	Sample Data	Date
------	-------------	-----------------	-------------	------

Attachment List:

Filename	Description	Author	Date Uploaded
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8.2.2. Test Case Execution Report

This printable report displays all of the test cases defined for the current project in the order they appear in the test case list. For each individual test case, the name, execution status, author, owner and execution date are displayed, along with tables containing the list of individual test runs, attached documents, the change history, and finally any associated open incidents:

The screenshot shows the SpiraTest interface for a 'Test Case Execution Report'. The page title is 'Test Case Execution Report' and the user is identified as 'Fred Bloggs' with the role of 'Manager'. The report is for 'Test 3 - Ability to edit existing book'. It displays the test status (Passed), author (Fred Bloggs), owner (Fred Bloggs), creation date (12/1/2003 12:00:00 AM), and last execution date (12/1/2003 12:00:00 AM). It also includes a table of test runs, an attachment list, and a section for 'Test 4 - Ability to create new author' which is partially visible.

Status: Passed
Author: Fred Bloggs
Owner: Fred Bloggs
Creation Date: 12/1/2003 12:00:00 AM
Last Execution: 12/1/2003 12:00:00 AM

Test Runs:

Run #	Tester	Release	Version	Status	Execution Date
2	Fred Bloggs	Library System Release 1 SP1	1.0.1.0	Passed	12/1/2003 11:30:55 AM
1	Joe P. Smith	Library System Release 1	1.0.0.0	Failed	12/1/2003 10:45:20 AM

Attachment List:

Filename	Description	Author	Date Uploaded
Sequence Diagram for Book Mgt.pdf	Sequence diagram in UML format that provides additional detail surrounding the book management use-case / test case	Fred Bloggs	5/3/2006 12:00:00 AM

Test 4 - Ability to create new author

Status: Failed
Author: Fred Bloggs
Owner: Joe P. Smith
Creation Date: 12/1/2003 12:00:00 AM
Last Execution: 12/1/2003 12:00:00 AM

8.3. Incident Reports

8.3.1. Incident Status 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 and the change history:

The screenshot shows the 'Incident Status Report' page in the spiraTest application. The page header includes the user name 'Fred Bloggs', navigation links, and the current project 'Library Information System'. The report title is 'Incident Status Report'. It displays two incidents:

Incident 1 - Cannot log into the application

Type:	Incident	Priority:	
Status:	New	Opened On:	11/1/2003 12:00:00 AM
Opened By:	Fred Bloggs	Last Modified:	12/1/2003 12:00:00 AM
Assigned To:		Closed On:	

Description / Resolution:
When trying to log into the application with a valid username and password, the system throws a fatal exception

Attachment List:

Filename	Description	Author	Date Uploaded
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Incident 2 - Not able to add new author

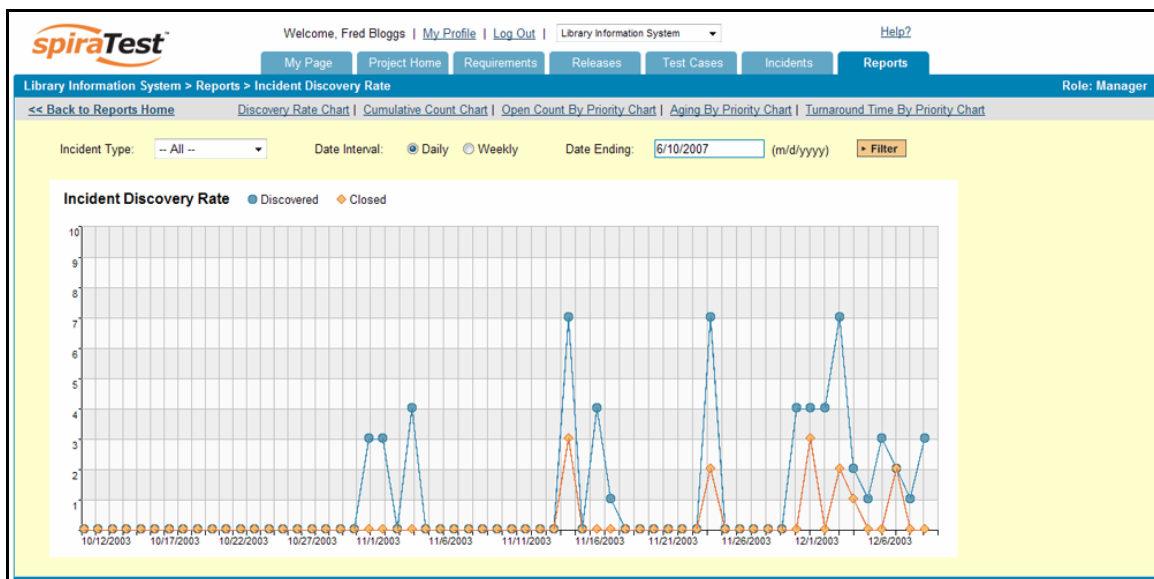
Type:	Incident	Priority:	
Status:	New	Opened On:	11/1/2003 12:00:00 AM
Opened By:	Joe P Smith	Last Modified:	12/1/2003 12:00:00 AM
Assigned To:		Closed On:	

Description / Resolution:
When I try and click on the button to add a new author the system simply displays the main screen and does nothing

8.3.2. Incident Discovery Rate Chart

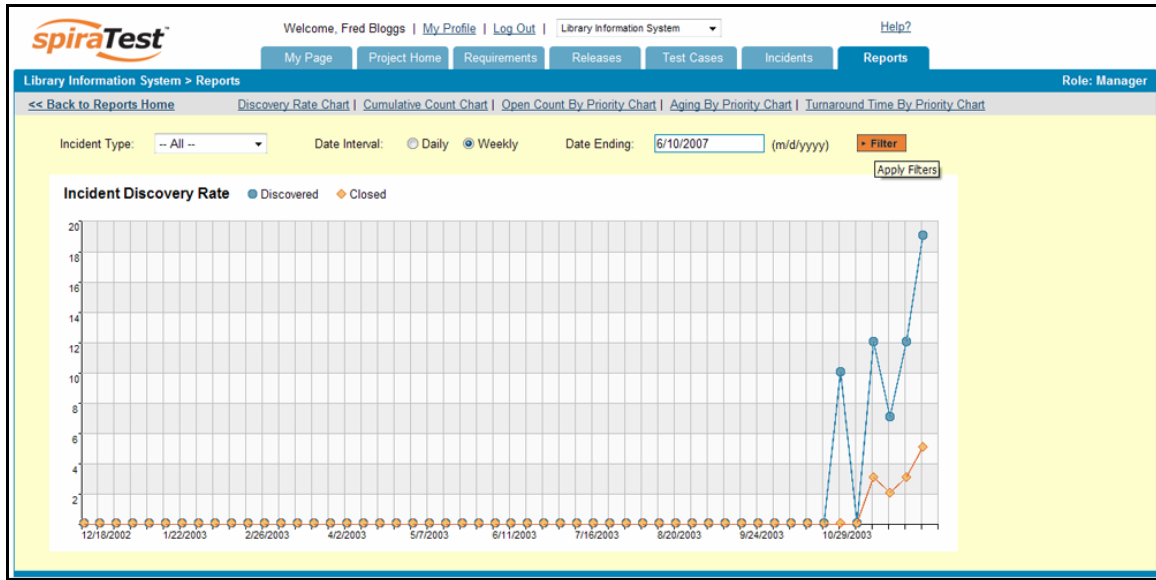
The incident discovery rate chart displays the total number of incidents created and closed over a particular date-range. The report can either be displayed for 60 days of data daily or for 12 months of data weekly, ending on a specified date.

The screen-shot below illustrates the discovery 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:



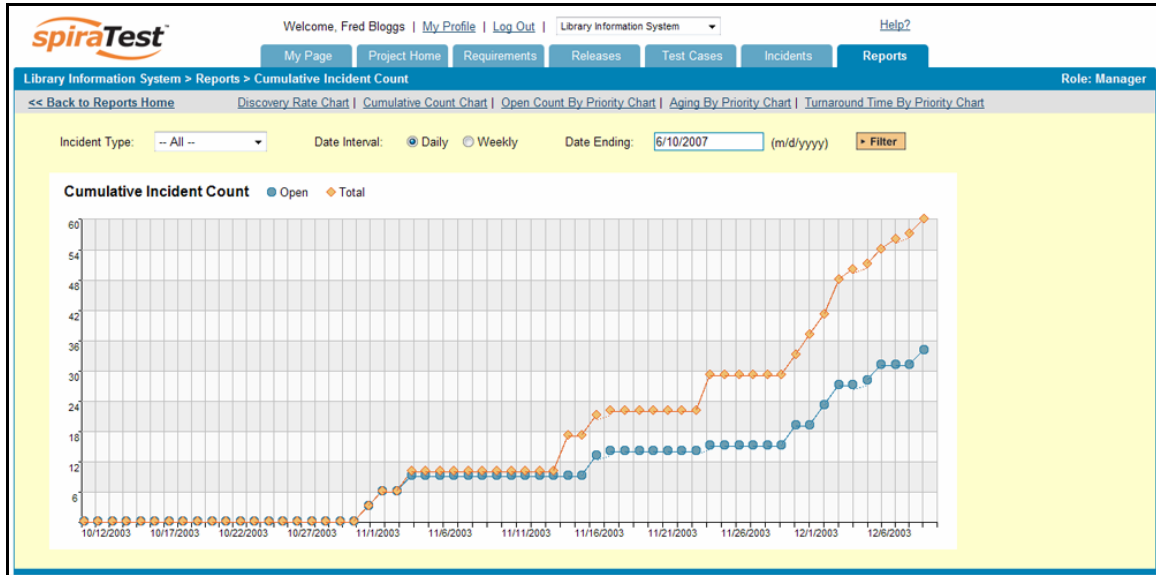
In this version of the report, the y-axis represents the number of incidents (either created or closed in a 7-day period), and the x-axis represents a specific week in the time-span. Each data-point can be viewed by positioning the mouse pointer over the point, and a “tooltip” will pop-up listing the actual data value. Again you can filter this report by the type of incident and also specify the ending date of the date-range.

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.

8.3.3. Cumulative Incident Count Chart

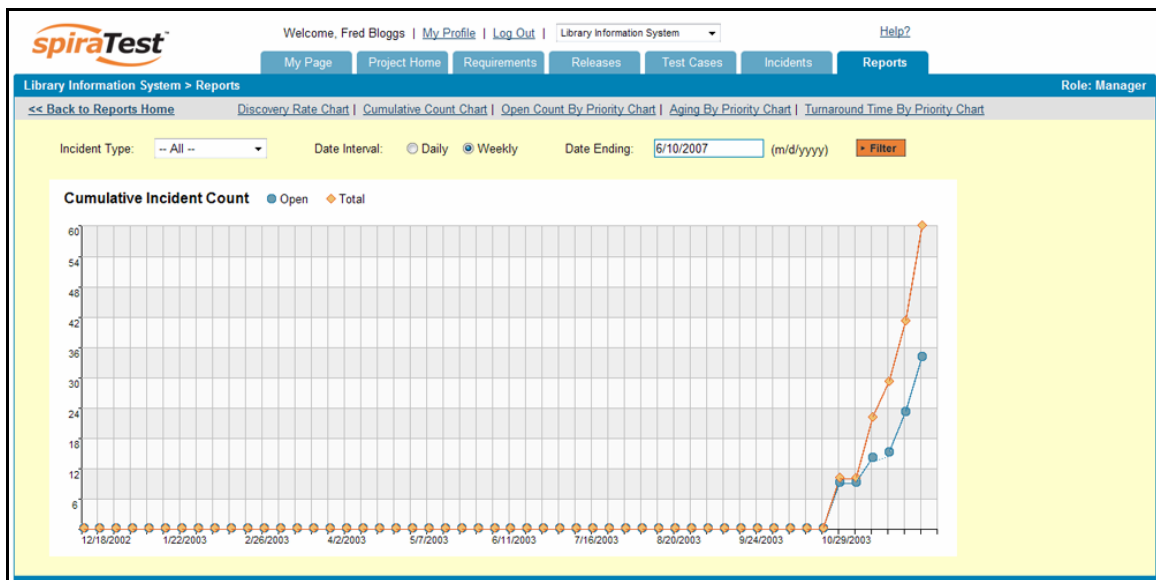
The cumulative incident count chart displays the cumulative total number of incidents logged in the system for the current project over a particular date-range. The report can either be displayed for a 60 day interval on a daily basis or for a 12 month interval of a weekly basis. The report displays 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:

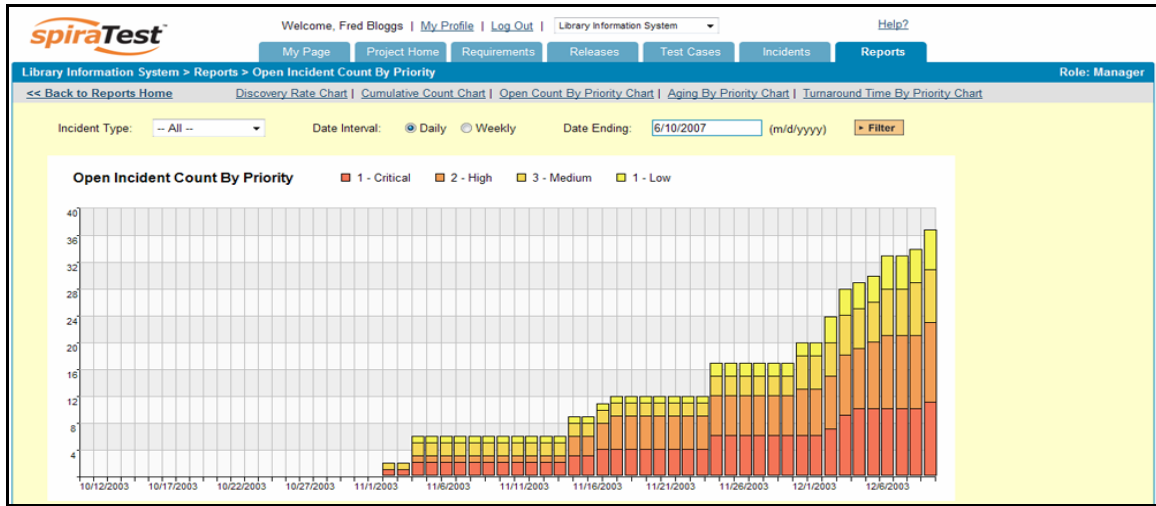


In this version of the report, the y-axis represents the number of incidents logged in a 7-day period, and the x-axis represents a specific week in the time-span. Each data-point can be viewed by positioning the mouse pointer over the point, and a “tooltip” will pop-up listing the actual data value. Again, you can also filter the type of incident being reported, as well as change the end date for the date interval.

Clicking the “Back to Project Home” hyperlink will take you back to the Project Home dashboard.

8.3.4. Open Incident Count

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:

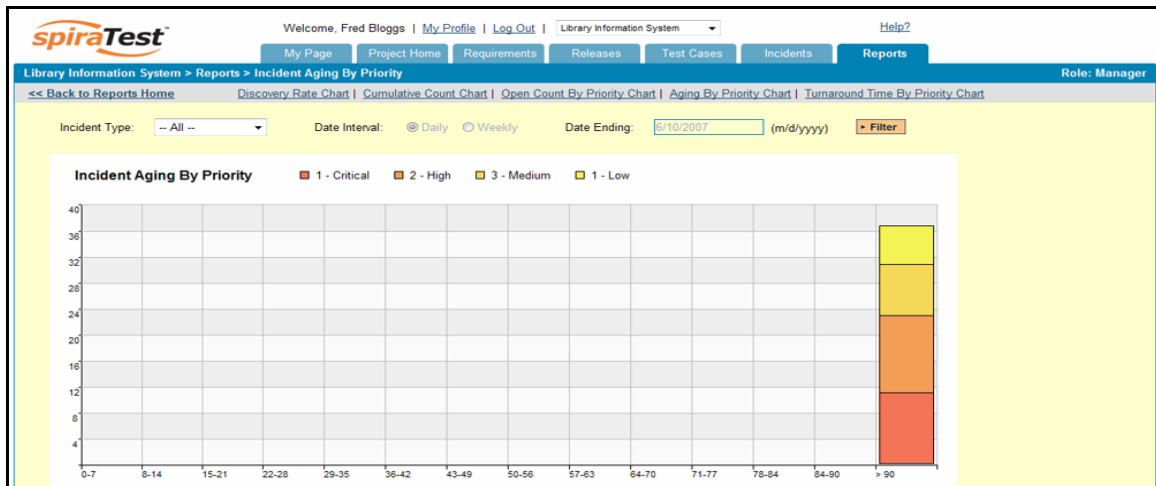


In this version of the report, the y-axis represents the number of incidents, and the x-axis represents a specific day in the time-span. The exact count of each bar in the stacked histogram can be viewed by positioning the mouse pointer over the bar, and a "tooltip" will pop-up listing the actual data value. You can also filter the type of incident being reported, as well as change the end date for the date interval.

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).

8.3.5. Incident Aging

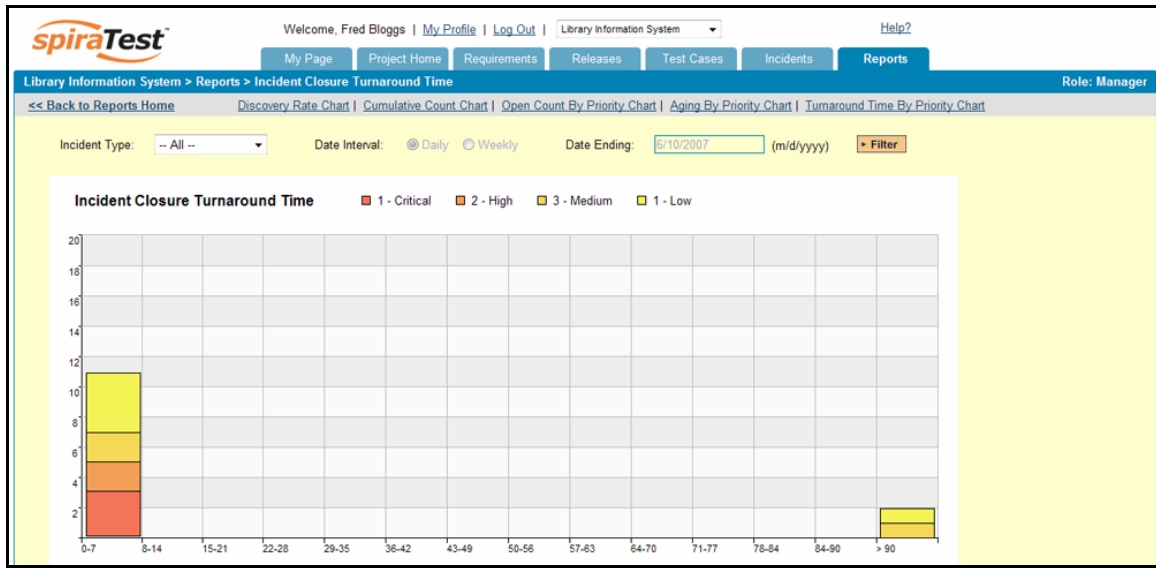
The incident aging chart displays the number of days incidents have been left open in the system. The chart is organized as a stacked histogram, with the count of incidents on the y-axis and different age intervals on the x-axis. Each bar-chart color represents a different incident priority, giving a 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.

8.3.6. Incident Turnaround Time

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.



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.

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