



---

Test Management Tools Series

# **ApTest™ Manager User Guide**



TEST MANAGEMENT TOOLS SERIES

# ApTest Manager User Guide

**Version 2.14**  
**March 2006**

---

Copyright © 2000-2006 - Applied Testing and Technology, Inc.

All rights reserved. This product and related documentation are protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or related documentation may be reproduced in any form by any means without prior written authorization of Applied Testing and Technology, Inc.

THIS PUBLICATION COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THE PUBLICATION. APPLIED TESTING AND TECHNOLOGY, INC. MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

ApTest is a trademark of Applied Testing and Technology, Inc. All other product and brand names used herein are service marks, trademarks, or registered trademarks of their respective companies or trademark owners. Applied Testing and Technology disclaims any responsibility for specifying which marks are owned by which companies or which organizations.

**Applied Testing and Technology, Inc.**

9298 Central Avenue • Suite 309  
Blaine, MN 55434 USA  
Phone 763-786-8157 • Fax 763-786-8180

[www.aptest.com](http://www.aptest.com)

## Significant Revisions

Revision	Date	
Version 2.14	March 2006	
<b>Split off from User's Guide</b>		

# Table of Contents

<b>PREFACE</b>	<b>VIII</b>
MANUAL ORGANIZATION	VIII
DOCUMENTATION SET	VIII
STYLISTIC CONVENTIONS	VIII
CUSTOMIZATION	IX
<b>1 INTRODUCTION</b>	<b>1-1</b>
1.1 FEATURES	1-2
1.1.1 <i>WWW Application</i>	1-2
1.1.2 <i>Automated Test Definition, Execution, and Reporting</i>	1-2
1.1.3 <i>Tracking Schedules</i>	1-3
1.1.4 <i>Problem Tracking Integration</i>	1-3
1.1.5 <i>Source Control Integration</i>	1-3
1.2 APTEST MANAGER USERS	1-3
1.3 CONCEPTS	1-4
1.3.1 <i>Customization</i>	1-5
1.4 TEST METHODOLOGY	1-6
1.5 OPERATION	1-7
<b>2 USING APTEST MANAGER</b>	<b>2-1</b>
2.1 BROWSER REQUIREMENTS	2-1
2.2 LICENSING	2-1
2.3 HELP	2-1
2.4 PRINTING	2-2
2.5 WARNINGS AND ERRORS	2-2
2.6 TABLE SORTING	2-2
2.7 TIMEZONES	2-2
2.8 EMAIL NOTIFICATIONS	2-3
2.9 FORM SUBMISSION	2-4
2.10 MAKING BACKUPS	2-4
2.11 LOGGING IN	2-4
2.11.1 <i>Managing an Account</i>	2-4
2.11.2 <i>Account Administration</i>	2-4
2.11.3 <i>Access Permissions</i>	2-5
2.11.4 <i>Passwords</i>	2-5
2.12 SELECTING A TEST SUITE	2-6
2.12.1 <i>Creating a New Test Suite</i>	2-6
2.13 SCREEN LAYOUT	2-6
2.14 NAVIGATION	2-7
2.15 PAGINATION	2-8
2.16 USAGE SCENARIOS	2-9
2.16.1 <i>Working with multi-step tests</i>	2-9

2.16.2	Testing different versions of a product .....	2-10
2.16.3	Testing a new release, reusing the test project from a previous release.....	2-10
2.16.4	Testing different drops .....	2-11
2.16.5	Fixing bugs and retesting fixes .....	2-12
2.16.6	Assigning priorities to tests within sessions.....	2-12
2.16.7	Digitally signing reports.....	2-13
2.17	QUICK TOUR .....	2-13
2.17.1	Edit Tests .....	2-13
2.17.2	Run Tests.....	2-15
2.17.3	View Reports .....	2-18
<b>3</b>	<b>DEFINING TESTS .....</b>	<b>3-1</b>
3.1	TEST CASE TREES.....	3-1
3.1.1	Collapsing and Expanding the Tree.....	3-1
3.1.2	Navigation .....	3-2
3.1.3	Naming Conventions.....	3-3
3.1.4	Trash Can .....	3-4
3.2	FOLDERS, TEST CASES, AND FILES .....	3-4
3.2.1	Test Suite Development Models .....	3-6
3.2.2	Generating Reports from the Edit Tests Screen.....	3-6
3.3	CREATE A NEW FOLDER .....	3-6
3.4	MANAGE A FOLDER.....	3-7
3.5	COPY A FOLDER .....	3-7
3.6	RENAME A FOLDER.....	3-7
3.7	DELETE A FOLDER .....	3-8
3.8	SEARCH TESTS .....	3-8
3.9	UPLOAD A FILE.....	3-9
3.10	IMPORT TESTS .....	3-9
3.10.1	How do I import values for table fields? .....	3-11
3.11	CREATE A NEW TEST CASE .....	3-11
3.12	EDIT A TEST CASE .....	3-11
3.12.1	Test Case Fields .....	3-12
3.12.2	Text Fields .....	3-12
3.12.3	Table Fields .....	3-15
3.12.4	Inserting File References.....	3-15
3.12.5	Inserting Images .....	3-16
3.12.6	Inserting Session Variable References .....	3-16
3.13	COPY A TEST CASE .....	3-17
3.14	RENAME A TEST CASE .....	3-17
3.15	DELETE A TEST CASE.....	3-18
3.16	COPY A FILE.....	3-18
3.17	RENAME A FILE .....	3-19
3.18	DELETE A FILE .....	3-19
<b>4</b>	<b>RUNNING TESTS .....</b>	<b>4-1</b>
4.1	TEST SESSIONS AND TEST SETS.....	4-1
4.1.1	Session Variables .....	4-2
4.1.2	Test Execution Models.....	4-2

4.2	TEST SESSIONS .....	4-3
4.2.1	Selecting Sessions .....	4-3
4.2.2	Sorting Sessions .....	4-5
4.2.3	Assigning Test Cases to Users .....	4-5
4.3	RUNNING A TEST SESSION.....	4-6
4.3.1	Running Test Cases One at a Time .....	4-7
4.3.2	Running Multiple Test Cases.....	4-7
4.3.3	Entering Notes.....	4-7
4.3.4	Creating Problem Reports.....	4-8
4.3.5	Recording Problem Reports.....	4-8
4.3.6	Uploading Files .....	4-8
4.4	USING THE SESSION SUMMARY .....	4-9
4.4.1	Running a Test Case.....	4-9
4.4.2	Editing the Note for a Test Case .....	4-9
4.4.3	Submitting a Bug Report.....	4-10
4.4.4	Viewing a Test Case .....	4-10
4.5	TEST SETS .....	4-10
4.6	DEFINE A NEW TEST SET .....	4-10
4.7	CREATE A TEST SESSION.....	4-12
4.8	MANAGE A TEST SET.....	4-14
4.8.1	Change Test Set Settings.....	4-14
4.8.2	Delete a Test Set .....	4-14
4.8.3	Copy a Test Set .....	4-15
4.8.4	Rearrange a Test Set.....	4-15
4.8.5	Assign a Test Set.....	4-16
4.8.6	Lock a Test Set .....	4-16
4.8.7	Unlock a Test Set.....	4-16
4.8.8	Refresh a Test Set.....	4-17
4.9	MANAGE A TEST SESSION.....	4-17
4.9.1	Change a Test Session's Name.....	4-17
4.9.2	Change a Test Session's Variables.....	4-18
4.9.3	Delete a Test Session.....	4-18
4.9.4	Clear a Test Session's Results.....	4-18
4.9.5	Copy a Test Session .....	4-18
4.9.6	Import Information into a Test Session.....	4-18
4.9.7	Rearrange a Test Session.....	4-19
4.9.8	Assign a Test Session.....	4-20
4.9.9	Lock a Test Session.....	4-21
4.9.10	Unlock a Test Session .....	4-21
4.9.11	Refresh a Test Session.....	4-21
<b>5</b>	<b>VIEWING REPORTS .....</b>	<b>5-1</b>
5.1	REQUESTING A REPORT .....	5-1
5.1.1	Available Reports.....	5-1
5.1.2	Selecting Sessions .....	5-2
5.1.3	Sorting Sessions.....	5-3
5.2	CUSTOMIZING REPORTS .....	5-3
5.2.1	Saving Settings .....	5-4

5.2.2	<i>Queries</i> .....	5-4
5.2.3	<i>Querying Problem Reports</i> .....	5-5
5.2.4	<i>Selector Summaries</i> .....	5-8
5.2.5	<i>Graphs</i> .....	5-8
5.2.6	<i>Export in CSV Format</i> .....	5-9
5.2.7	<i>Grouping by Fields</i> .....	5-9
5.3	SAVING, BOOKMARKING, AND E-MAILING REPORTS.....	5-9
5.4	TEMPLATED REPORTS.....	5-10
5.4.1	<i>Customizing Templated Reports</i> .....	5-11
5.4.2	<i>Links to Templated Reports</i> .....	5-12
5.5	REGRESSION REPORT.....	5-12
5.5.1	<i>Customizing the Regression Report</i> .....	5-12
5.6	PROGRESS REPORT.....	5-15
5.6.1	<i>Customizing the Progress Report</i> .....	5-15
5.7	USERS REPORT.....	5-17
5.7.1	<i>Customizing the Users Report</i> .....	5-18
5.8	COVERAGE REPORT.....	5-20
5.8.1	<i>Creating Coverage Test Sets</i> .....	5-20
5.8.2	<i>Customizing the Coverage Report</i> .....	5-21

## Table of Figures

Figure 1 - Example Project.....	1-5
Figure 2 - Test Suite access levels .....	2-5
Figure 3 - Select an Operation screen .....	2-8
Figure 4 - Example multi-step test .....	2-9
Figure 5 - Test Suite tree .....	2-14
Figure 6 - Sample Edit Test Case screen .....	2-15
Figure 7 - Run Tests screen.....	2-16
Figure 8 - Run Single Test Case screen .....	2-17
Figure 9 - Run Multiple Test Cases screen .....	2-18
Figure 10 - Report Selection screen .....	2-20
Figure 11 - Progress Report.....	2-21
Figure 12 - Test Case tree .....	3-3
Figure 13 - Sample Excel File for Import.....	3-10
Figure 14 - Run Tests screen.....	4-4
Figure 15 - Define Test Set screen .....	4-13
Figure 16 - Query Test Case Interface.....	5-7
Figure 17 - Selector Summary Tables .....	5-8
Figure 18 - Test Requirements Coverage Report .....	5-10
Figure 19 - Regression Report.....	5-14
Figure 20 - Progress Report – Result Details.....	5-17
Figure 21 - Users Report.....	5-19
Figure 22 - Users Report – Result Details .....	5-20
Figure 23 - Coverage Report .....	5-22

# Preface

## Manual Organization

This manual is divided into five chapters that present the purpose, operation, and usage of ApTest Manager.

### Chapter 1 – Introduction

An overview of the features and benefits of ApTest Manager.

### Chapter 2 – Using ApTest Manager

Managing testing with ApTest Manager.

### Chapter 3 – Defining Tests

Defining test requirements, specifications, and procedures with ApTest Manager.

### Chapter 4 – Running Tests

Executing ApTest Manager Test Sessions.

### Chapter 5 – Viewing Reports

Viewing ApTest Manager test reports.

## Documentation Set

See the *ApTest Manager Admin Guide* for additional information.

### Chapter 1 – Managing Test Suites

Configuring ApTest Manager Test Suites.

### Chapter 2 – Administration

ApTest Manager Administrative features.

### Chapter 3 – Advanced Topics

Additional ApTest Manager features and functions.

## Stylistic Conventions

*Italics* indicate important references, placeholders, and command line variables.


**Boldface** indicates emphasis. Boldfaced text is used to draw attention to active menu selections or hypertext links.

`Courier` type represents examples of computer-generated output, code samples, or a typed command line entry.

The paired hyphen and ‘greater than’ characters (->) denote separate elements of a mouse command sequence when moving through a series of menus.

Brackets [ ] are used to enclose optional items in a typed entry. Enter only the information within the brackets, and not the brackets themselves. Alternately, brackets are used to identify a bracketed menu item or a key on the keyboard (e.g., the Escape key is expressed as [Esc]).

Braces { } are used to enclose required items in a typed entry. Enter only the information within the braces, and not the braces themselves.

Representations of graphical user interface elements, such as the browser’s “back” button, are displayed graphically (i.e.  Back).

## Customization

ApTest Manager is template driven, allowing it to be customized to match existing test processes and procedures. Thus, an organization gains the benefits of improved management of its testing process without having to modify that process or adopt a new methodology.

In this Guide examples are based on templates derived from the IEEE 829 standard for test documentation. When working with a Test Suite that is based on different templates some screens may be different from those in this Guide.

Also, ApTest Manager can be configured to limit access to some features by users with different levels of access privileges. Thus some of the functionality shown in this Guide may not be available to all ApTest Manager users.

See the *ApTest Manager Admin Guide* for information on customizing ApTest Manager.

# 1 Introduction

**A**pTest Manager is a tool for managing manual Quality Assurance testing - defining test requirements and specifications, executing tests, and viewing and comparing test results. A single installation of ApTest Manager can support any number of tests for any number of products.

General-purpose, Web-based, and highly customizable, ApTest Manager provides well-structured facilities for configuring, managing, executing, and recording the results of a variety of testing projects.

These facilities offer a number of distinct advantages over other methods of managing testing:

- Web-based test definition, execution and reporting
- Consistent test procedures within and across test runs
- Centralized repository of tests and results
- Customizable to match existing processes and procedures
- Web-based access to test specifications, plans, and results
- Regression reports comparing new and previous results
- Status reports showing project state and comparing actual versus planned schedules
- User reports showing work performed by individual users
- Ability to export reports and import tests as CSV files
- Data may be reported in tables and graphs
- Reusable collections of tests
- Hierarchical Test Suite structure
- Consistent test organization
- Highly extensible: add support for configuring new tests without changes to source code

# 1.1 Features

## 1.1.1 WWW Application

ApTest Manager is completely Web-based. It is installed on a Web Server and accessed with standard Web browsers, through the Internet or an internal network. This architecture brings all the power of the Web to the management of software testing.

- Distributed access to a centralized repository of tests and results
- Tests and reports accessible to developers, testers, and management world-wide
- Security through existing policies and firewalls
- Support for an unlimited number of users
- Support for any desktop platform
- Familiar browser-based look and feel

## 1.1.2 Automated Test Definition, Execution, and Reporting

ApTest Manager automates the three most critical aspects of manual testing projects:

**Test Definition.** With ApTest Manager tests are defined on-line through a series of forms; entering the objectives, procedures, possible results, associated files, and other attributes and requirements of each test. Tests can be evolved based on design reviews and in response to the evolution of the product under test. Test information is immediately available to produce test requirement and specification documents, execute repeatable comprehensive test cycles, and document and compare the results of test runs.

**Test Execution.** ApTest Manager manages the process testers follow in executing test cycles. For each test the tester is presented with the required procedures and associated resources to perform the test, along with a choice of possible results and the ability to attach notes and comments. As each test is completed test results are entered into ApTest Manager. This ensures consistent procedures from one test run to another, whether the same or different personnel perform the testing. As well, a consistent set of results are produced and recorded which can be compared for regression analysis.

**Test Reporting.** As tests are defined and executed ApTest Manager records the tests and results in its database. This information can be used to produce a variety of reports. Reports can show overall project status, test coverage, user productivity, and the results of testing, both for individual test runs and in comparison to other test runs for different product configurations or test environments. Reports may be viewed and printed with a Web browser or exported as CSV or PDF files.

### 1.1.3 Tracking Schedules

ApTest Manager can track both the planned schedule for executing tests as well as the time actually spent. Reports can include whether testing is ahead of or behind schedule, the expected time needed to complete testing, and individual testers' performance.

### 1.1.4 Problem Tracking Integration

ApTest Manager can link to third party Problem Tracking systems to allow problem reports to be filed as product issues are encountered during a project. This provides a convenient method for connecting problem submission to the testing process.

A variety of information can be passed to the Problem Tracking system, allowing problem reporting creation forms to be filled in automatically. Both web-based and application-based Problem Tracking solutions can be supported.

Please see Creating Problem Reports and Recording Problem Reports (Sections 4.3.4 and 4.3.5) for details on using this feature and the *ApTest Manager Admin Guide* for details on configuring it.

### 1.1.5 Source Control Integration

ApTest Manager can utilize a third party Source Code Control system to track changes to the tests it manages. This feature can be configured during installation of the product and is documented in the installation instructions. It also allows a record to be maintained of the history of modifications made to the information stored in ApTest Manager's repository.

## 1.2 ApTest Manager Users

ApTest Manager can be used to manage manual testing organization-wide.

- Quality Assurance and Quality Control teams can automate their entire testing process.
- Engineering can automate their Unit testing process as well as sharing QA/QC tests.
- Management can monitor and examine the results of testing to assess product reliability.
- Test processes and results can be shared with vendors and customers.
- Team members, including new members as they come on board, have test requirements, specifications, procedures, and results available at their fingertips from their browsers.

## INTRODUCTION

As ApTest Manager integrates all these functions under a single Web interface, test information can easily be shared across a user community of any size and geography.

### 1.3 Concepts

The basic element managed by ApTest Manager is a *Test Suite*. An ApTest Manager Test Suite is a collection of tests - tens, hundreds, or thousands of tests - and the results of running those tests, once or many times. ApTest Manager can manage an unlimited number of Test Suites for an unlimited number of products. Tests may be structured into as many or as few Test Suites as desired and run repeatedly over different product versions and configurations.

A test contained in a Test Suite is a *Test Case*. The information associated with a Test Case is broken into Fields and can be customized separately for each Test Suite. The following Test Case Fields are standard Test Case definitions shipped with ApTest Manager.

FIELD	PURPOSE
ID	The name of the Test Case.
Creation Date	The creation date of the Test Case.
Assigned To	The tester(s) assigned to the Test Case.
Functional Test Area	The type of testing the Test Case performs.
Test Cycles	The test cycles the Test Case applies to.
Product Versions	The releases the Test Case applies to.
Priority	The priority level of the Test Case.
State	Where the Test Case stands in the testing process.
Planned Staff Time	The time it is expected to take to execute this Test Case (in minutes).
Requirements	The requirements verified by the Test Case.
Preconditions and Setup	Set-up procedures or other inputs required to execute the Test Case.
Test Procedure	The procedure to be followed to execute the Test Case.
Verification	Expected Test Case results.
Associated Files	Hyperlinks to additional information associated with the Test Case.

## INTRODUCTION

ApTest Manager allows for an unlimited number of Test Cases per Test Suite, encouraging granular tests. The level and scope of each Test Case is at the discretion of the test developer however and may be as simple or complex as desired.

Two additional concepts are involved in executing tests with ApTest Manager.

- A *Test Set* is a subset of the Test Cases in a Test Suite, for example the tests for a particular feature or the tests for characterizing performance. Once a Test Set is defined it can be reused repeatedly.
- Each time a Test Set is executed the results are recorded in a *Test Session*. Test Sessions can be summarized, viewed, and compared in reports and rerun in whole or in part to reverify tests.

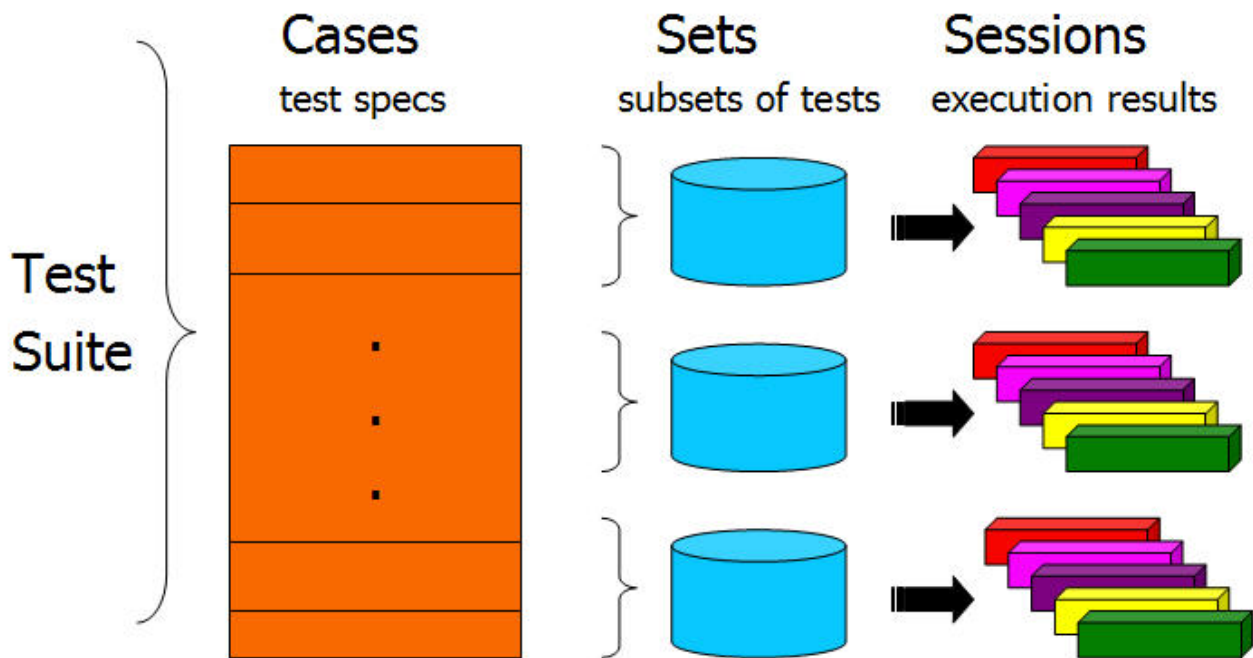


Figure 1 - Example Project

### 1.3.1 Customization

ApTest Manager is highly customizable. Customization can occur on a per Test Suite basis for both the information stored for the Suite and how it is presented.

ApTest Manager Test Cases can have any number of custom Fields from just a few to dozens, and Fields can be formatted in a variety of ways: as text fields, menus, tables, dates, etc.

## INTRODUCTION

Which Test Case Fields are shown in ApTest Manager reports can be customized along with how these reports are laid out.

Fields used when a Test Case is executed can also be customized. These are useful for gathering data at run time, such as submitted Problem Reports for the execution of the Test Case.

Attributes associated with Test Sessions can be customized as well. These attributes are known as *Session Variables* and are used to capture the test environment a Session is run in, e.g. OS, browser, hardware, and network. Test Sessions can have any number of Variables from just a few to dozens and Variables can be formatted in a variety of ways: as text, menus, etc.

Possible test results can also be customized.

ApTest Manager includes a catalog of Test Suite configurations, known as Profiles, which offer predefined Test Case and Test Session definitions. An organization can extend this catalog with additional Profiles to match its testing process. A Test Suite is initially defined using a Profile; it can then be customized further if desired.

This flexibility allows ApTest Manager to be adapted to fit easily an organization's QA process, and for different test plans and procedures to be used for different products, all under the ApTest Manager umbrella.

See the *ApTest Manager Admin Guide* for information on customizing ApTest Manager.

## 1.4 Test Methodology

ApTest Manager is test methodology neutral. It does not impose a particular process for testing but rather aims to provide a flexible framework within which different processes can be managed.

- Test Requirements and Specifications can be developed either before test procedures or in parallel.
- A Test Suite can be fully defined before it is executed or testing can start small and expand to include more tests later.
- What comprises a Test Case can be fully customized.
- Roles within the test team can be assigned to any number of user accounts.
- Reports can be customized to present appropriate information for roles within the team and the organization.
- Customizing Test Case Fields allow you to configure a software development life cycle process into ApTest Manager: e.g. a Waterfall process would be configured by defining a state field with different state values that can be given to Test Cases as their definition moves through the process.

### 1.5 Operation

ApTest Manager is operated from a Web browser. The ApTest Manager User Interface offers a familiar Web site look and feel: a series of screens navigated by clicking on links between them. This makes learning to use ApTest Manager easy – a user that has surfed the Web will be comfortable with ApTest Manager immediately.

ApTest Manager offers more sophisticated functionality by far than your average Web site. For one thing, ApTest Manager keeps track of what is being worked on between screens. What Test Suite is being worked on, the user name, and alike only need to be entered once during an ApTest Manager session. ApTest Manager also stores information permanently for each user, for instance the reports a user likes to see.

Most importantly, ApTest Manager creates and stores a repository of information about tests and the results of running them. ApTest Manager provides screens to enter, modify, query, examine, and compare information from this repository. Files associated with tests can also be uploaded into this repository: for example screen shots showing expected results or generic test procedures. Links in tests can be established to these additional files as well as to WWW pages, other programs, etc.

ApTest Manager also shares test information between users across an organization. For example, a test developer might use ApTest Manager to define a set of tests that a test engineer uses ApTest Manager to run in order that a QA manager can ask ApTest Manager to compare the results to tests run previously on a different product version.

All in all ApTest Manager provides a comfortable Web-based interface to a rich set of features for managing information about testing across an entire organization.

## 2 Using ApTest Manager

**A**pTest Manager offers a simple yet elegant Web-based user interface, comfortable to anyone who uses a Web browser to surf the Internet. Simply point a browser toward ApTest Manager to get started managing testing.

### 2.1 Browser Requirements

Any browser that supports HTML 4.0 (or higher) or XHTML 1.0 (or higher), Frames, and Javascript 1.1 can be used with the ApTest Manager: Internet Explorer, Netscape, Firefox, Safari, etc. A browser must have cookies enabled in order to use ApTest Manager.

For Excel 2002 and above, if using Internet Explorer right clicking on a screen and selecting Export to Microsoft Excel will allow the screen to be exported, in whole or in part, to an Excel Spreadsheet.


### 2.2 Licensing

An ApTest Manager license allows a specific number of seats. Each seat allows one user to be logged in to ApTest Manager at any given time.

If more users want to work with ApTest Manager than the number of licensed seats, ApTest Manager will indicate that the number of logged in users would be greater than the license allows. If users log out of ApTest Manager or are idle for a while their seat will become available for others to use.

Additional seats may be added to a license at any time.

### 2.3 Help

ApTest Manager provides on-line Help on a per-screen basis. Help is displayed on the right side of most screens. The Help display may be turned off and on by clicking the  icon. New users may

wish to have Help displayed all the time. Experienced users may choose to keep Help off to conserve screen real-estate, only turning it on for reference.

Per-screen Help contains a link to a more complete on-line product overview.

## 2.4 Printing

The content of an ApTest Manager screen may be printed directly from a Web-browser using *Files -> Print* or *[Ctrl] [P]*. This generally also allows setup of items such as the page header and footer. Please consult a system administrator or the browser's help menu if difficulties with printing are encountered.

## 2.5 Warnings and Errors

ApTest Manager Error messages look like:



You must specify a Test Case name.

ApTest Manager Warning messages look like:



This test session is locked!

## 2.6 Table Sorting

Many of the tables in ApTest Manager can be sorted based on the contents of different columns by clicking on the name of the column. Clicking the name a second time will reverse the sort order. Sortable tables display an up (↑) or down (↓) arrow next to the name of the column on which the table is currently sorted.

## 2.7 Timezones

The timezone matters when looking at a time stamp, i.e. a date and time value. Timestamps are shown for date/time values in Test Case Fields and when displaying the last time Test Sessions were modified.

A timezone may be specified separately for individual users, allowing timestamps to be displayed to each user in their local time.

In the screens for user and system administration (see the *ApTest Manager Admin Guide* for details.) a default timezone for all users may be specified with a simple two field menu from which a region and a city therein are selected. This is set by default to the timezone of the server or, in the case of a Windows server, to UTC as it is not possible to automatically determine what timezone a Windows server is in.

## 2.8 Email Notifications

ApTest Manager can automatically send emails to users, triggered by a variety of events, show below. Email notifications can be enabled on a per Test Suite basis for individual users for each event. See the *ApTest Manager Admin Guide* for details.

Name	Trigger Events
Test Case changed	Test Case created, copied, deleted, or modified, or Test Cases imported
Suite configuration changed	Test Case Fields, result codes, run data, or Session Variable definitions changed
Suite template file changed	Editing, execution, or reporting templates modified
Set changed	Set created, copied, deleted, modified, or refreshed
Session changed	Session created, copied, deleted, modified, or refreshed
Session completed	All tests in a session executed
Tests reassigned	Any test assignments changed
Tests assigned to/from user	Tests assigned to, or away from, this user
Global notifications – Administrators Only	
User changed	User account created, deleted, or modified
Update Available	A newer version of ApTest Manager is available to support customers
System configuration changed	Any change to the system configuration
Suite changed	Test Suite created, copied, deleted, or renamed

## 2.9 Form Submission

Many ApTest Manager screens contain forms that are submitted by clicking associated buttons. These buttons are inoperative and appear 'grayed out' while a screen is loading and while it has been submitted. This prevents problems that can occur if forms are submitted before loading is complete or are submitted more than once.

## 2.10 Making Backups

ApTest Manager files can be backed up using standard OS or third-party backup tools. See the *ApTest Manager Admin Guide* for details.

## 2.11 Logging In

The ApTest Manager Login screen requires a User name and Password for an existing ApTest Manager account.

Each user needs to have an account created for them. Depending on the configuration of an ApTest Manager installation a link may be provided on the Login screen to the Create Account screen. If this feature is not enabled an ApTest Manager Administrator can create new user accounts. See the *ApTest Manager Admin Guide* for details.

### 2.11.1 Managing an Account

Once a user logs into ApTest Manager its screens show the current Username. Clicking on this Username brings up the Edit Account Information screen which allows modification of the information entered when the account was created, deleting the account, and logging out from ApTest Manager. Some of these features may be restricted depending on access level and system configuration.

### 2.11.2 Account Administration

Users that have been granted administrative privileges can restrict the access that other user accounts have to specific Test Suites as well as administer system wide configuration. Administrative functions are described in the *ApTest Manager Admin Guide*.

### 2.11.3 Access Permissions

Each ApTest Manager user has a separate level of access to each ApTest Manager Test Suite.

An Administrator may configure specific access levels for a user to different Test Suites. Depending on what their access level is for a Test Suite a user will be able to access different ApTest Manager features for working with that Test Suite.

Eight different access levels are supported for each Test Suite:

Features	Access Levels							
	None	View Reports	View Tests and Reports	Run Assigned	Run Any Test	Execute	Execute and Edit	Suite Manager
Select this Test Suite		✓	✓	✓	✓	✓	✓	✓
Generate reports		✓	✓	✓	✓	✓	✓	✓
View Test Cases			✓	✓	✓	✓	✓	✓
Run tests assigned to this user				✓	✓	✓	✓	✓
Run any tests, regardless of assignment					✓	✓	✓	✓
Create and manage Test Sets and Test Sessions						✓	✓	✓
Edit and manage Test Cases							✓	✓
Modify configuration of this Test Suite								✓

Copyright © 2000-2006 Applied Testing and Technology, Inc. All rights reserved.

Done

Figure 2 - Test Suite access levels

See the *ApTest Manager Admin Guide* for details.

### 2.11.4 Passwords

ApTest Manager can store passwords in encrypted form or in clear text. This is selected at installation time.

## 2.12 Selecting a Test Suite

The first time a user logs into ApTest Manager the user is asked to select a Test Suite to work with. As discussed in Chapter 1, a Test Suite is the basic element managed with ApTest Manager, consisting of Test Cases and the results of executing them. Users work with one Test Suite at a time. The Test Suite being worked with may be selected at any time.

Test Suites are listed in alphabetical order in the list of Suites to select from.

How many Test Suites a user has to choose from depends on how an organization is using ApTest Manager and may be one, many or anything in between. It also depends on what Test Suites the user has permission to access. Test Suites a user has no access to will not be visible to that user.

For each Test Suite a user can access ApTest Manager shows the name and description the Suite. The user clicks on a Test Suite name to work with that Suite and can then define tests, execute tests, and view test reports for the Suite, depending on the user's access level for the Suite.

### 2.12.1 Creating a New Test Suite

When a new suite is needed is a function of an organization's testing process and the number of products for which testing is managed with ApTest Manager.

From the Test Suite selection screen click **Create a New Test Suite** to reach the Create Test Suite screen and enter a name and a brief description for the new Suite.

Select a Profile to define how the new Test Suite is to be configured.

ApTest Manager includes a catalog of Profiles to choose from. This catalog includes:

- a 'Standard' Profile applicable to most testing projects
- a 'Tiny' Profile applicable to smaller projects
- a 'Standard with table' Profile that defines the test procedure as a table of test and verification steps

The catalog may also contain additional Profiles specific to an organization's test process. ApTest-provided Profiles are based on the IEEE 829 standard for test documentation.

A Test Suite's configuration can be modified after it is created to customize it further. See the *ApTest Manager Admin Guide* for details.

## 2.13 Screen Layout

Figure 1 shows the Select an Operation screen that is displayed after a Test Suite is selected or created. From this screen choose one of the three main ApTest Manager operations:

- Edit to create, modify, and search the tests that make up the current Test Suite. This is discussed in detail in Chapter 3.
- Run to execute the current Test Suite. This is discussed in detail in Chapter 4.
- Report to generate reports of the status and results of testing projects. This is discussed in detail in Chapter 5.


A different Test Suite to work with may also be selected, as discussed above, and the current Test Suite can be managed. See the *ApTest Manager Admin Guide* for details on Suite management.

The layout of the Select Operation screen is common to the screens in ApTest Manager:

- Logo – Clicking the ApTest Manager logo brings up ApTest’s home page on the WWW.
- Screen Title – Each ApTest Manager screen has a title describing it.
- Menu Bar – The menu bar provides icons to select among the Edit, Run, and Reports functions, select a new Test Suite, manage and configure the current Test Suite, and display ApTest Manager on-line Help. Icons for features a user does not have permission to access contain a red x and are not clickable.
- Suite Bar – The suite bar shows the user’s name, the current Test Suite, and the user’s level of access for the Test Suite. Clicking on the Username allows management of the user’s account, if the user has permission to do so or, for an Administrator, of all the user accounts.
- Content Area – The content of the screen is placed here.
- Copyright– Clicking this link displays the version of ApTest Manager and further legal information.

## 2.14 Navigation

When an operation from the Menu or Suite Bars is selected the current screen is replaced with a new screen or a new child window may be opened, depending upon the specific nature of the operation.

Child windows may be closed without saving changes by clicking the close button  in the upper right corner of the child window or from screen-specific navigational buttons provided.

Note that on screens with forms the form controls are ‘grayed out’ until the page has completed loading. If there is an extremely large page, or the connection to the server is over a slow link, this may take some time.

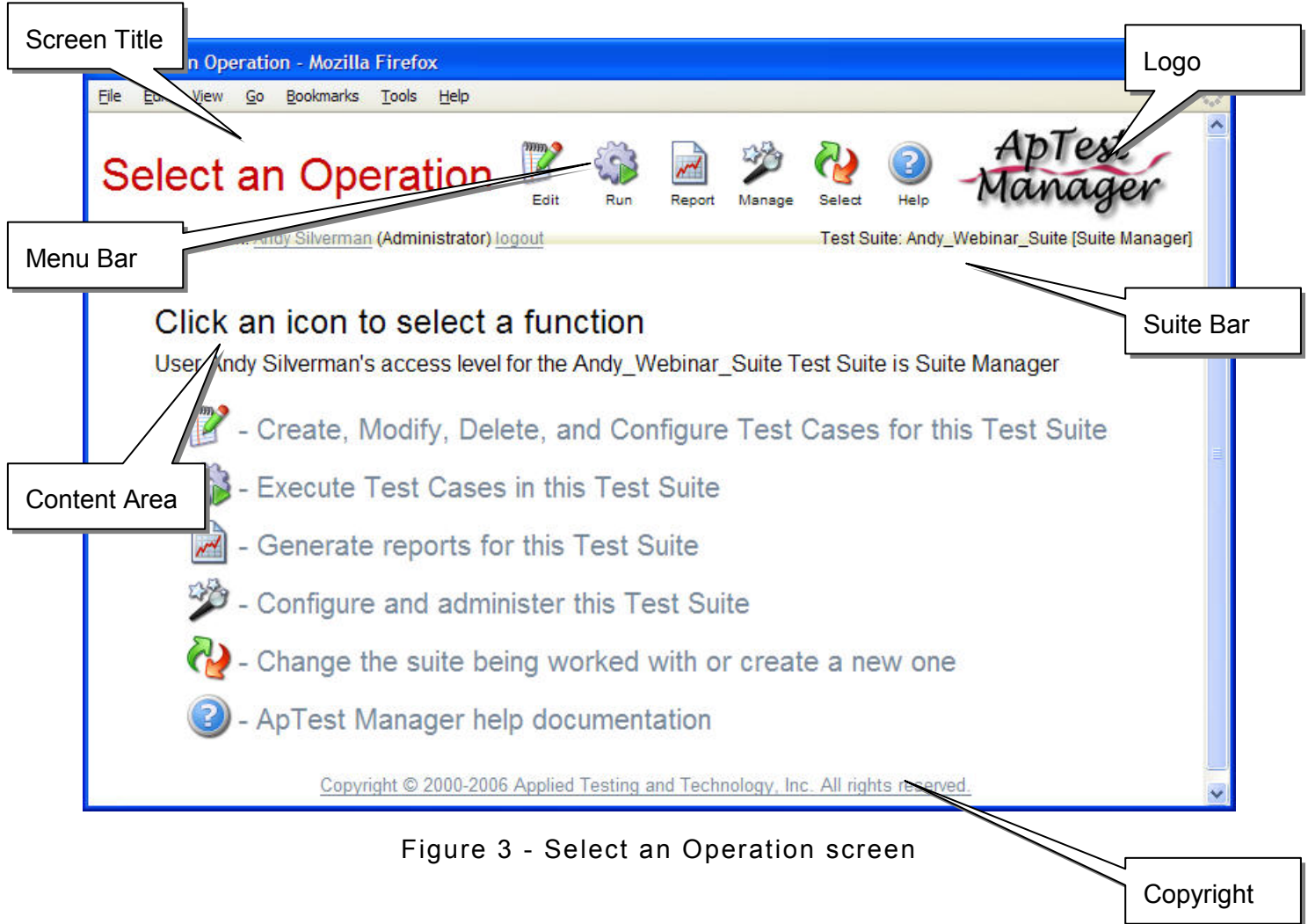


Figure 3 - Select an Operation screen

## 2.15 Pagination

Many screens in ApTest Manager that would be very long can be broken into multiple pages.

The Rows per Page for reports configuration setting controls how many items can be on a screen before it is paginated. If a user has the necessary access the user can change this value by clicking on the Username on the Suite Bar.

If a screen is paginated it contains controls that allow the user to move among the pages of the paginated screen: to go to specific pages or the next/previous page.

Pagination applies to most ApTest Manager reports as well as to the screen for running multiple tests at once. Paginated reports include a link to a printable version, containing the entire unpaginated report.

## 2.16 Usage Scenarios

Examples of how ApTest Manager can be used to solve different sorts of problems.

### 2.16.1 Working with multi-step tests

ApTest Manager tests may contain a Test Procedure Field, with the steps a tester follows to execute it, and a Verification Field, with what the tester needs to verify after the Test Procedure is completed to determine if the test passed. This is how the Standard Test Suite profile is configured.

The Standard with table Test Suite profile provides a Test Suite that is configured with a table of Test Procedure and Verification steps. This lets the test author specify the tester should check for an expected result at different points within the Test Procedure. The tester can then set the overall result of the Test Case based on the results of different steps when the Test Case is executed.

An unlimited number of steps may be defined for each Test Case. Each step is automatically numbered when the Test Case is displayed.

**View Test Case**

User: Andy Silverman Test Suite: table [Suite Manager]

[Close Window](#) [Edit Test Case](#)

ID: New\_test\_suite\_creation

Test Process	
#	Test Procedure
1.	Click the Select icon.
2.	Click Create Test Suite.
3.	Select the Standard with table profile and click Create Test Suite.

Verification Procedure	
The Welcome to ApTest Manager screen is displayed.	
1. The Create Test Suite screen is displayed 2. A list of Profiles is provided 3. The Standard with Table profile is included in the list	
A new Test Suite is created with a table of test Procedure and Verification Procedures.	

<b>Requirements:</b>		<b>Preconditions and Setup:</b>										
Features Tested: Reporting	Test Cycles: Unit	Associated Files: None										
Product Versions: 1.0	Priority: High	<table border="1"> <thead> <tr> <th colspan="3">Change History</th> </tr> <tr> <th>Last Modification Date</th> <th>Last Modified By</th> <th>Change Details</th> </tr> </thead> <tbody> <tr> <td>Mar 24, 2006 06:06 PST</td> <td>Andy Silverman</td> <td>added steps</td> </tr> </tbody> </table>		Change History			Last Modification Date	Last Modified By	Change Details	Mar 24, 2006 06:06 PST	Andy Silverman	added steps
Change History												
Last Modification Date	Last Modified By	Change Details										
Mar 24, 2006 06:06 PST	Andy Silverman	added steps										
Assigned Test Developer:	Planned Staff Time: 2m State: Requirements Definition											

Copyright © 2000-2006 Applied Testing and Technology, Inc. All rights reserved.

Figure 4 - Example multi-step test

### 2.16.2 Testing different versions of a product

Using ApTest Manager to test product releases as they are developed?

A Test Suite for this sort of project will normally include:

- A Product Versions Test Case Field – a multi-select menu containing the numbers of the product versions, e.g. 5.0, 6.0, 7.0.
- Test Cases, each with values selected from the Product Versions Field for one or more versions, indicating the version(s) of the product the Test Case applies to. New versions may have new tests added for them (for new features or enhanced test coverage). These tests will often then apply to subsequent versions as well.
- Test Sets that select the Test Cases for a version of the product. This selection can be combined with other characteristic based selections, e.g. a Test Set for smoke tests for Version 5.0 or a Set for high priority installation tests for Version 6.0.

It is common to include the version number in the Set name along with the Set's purpose, e.g. V5.0 Smoke Tests.

- Test Sessions for these Test Sets to contain results from running the tests in the Set on different test platforms.

Test Sessions have numbers that uniquely identify them, so their names do not need to be unique. Session names often note important information about the test environment indicated by their Session Variables. E.g. you can have two different Sessions named Windows XP IE7, one for the V6.0 Smoke Tests Set and one for the V6.1 Smoke Tests Set.

This is how the ApTest Manager sample Test Suite is configured.

### 2.16.3 Testing a new release, reusing the test project from a previous release

There are few simple steps that can be performed to quickly extend the configuration above to test a new version. This procedure provides a project configuration for testing a new release that offers maximal reuse of materials from testing the previous release. The Test Cases and results from previous releases are retained so they can be compared to the results for the new release.

This is something that would need to be done just once when a new version is put into testing:

1. Add to the Product Versions Test Case Field an entry for the new version. If versions 1.0 and 2.0 were previously tested and version 3.0 is being added for example, extend the list of values for this Field from "1.0, 2.0" to "1.0, 2.0, 3.0".
2. If there are new tests for the new release add them to the Test Suite, selecting the new release (e.g. 3.0) as one of the Product Versions they apply to.

Existing tests will generally also apply to the new release. So, the new version needs to be added to the Product Versions these tests apply to. Use the Search/Replace feature to do this. For example, if the values selected in the Product Versions Field for existing Test Cases contains version 2.0, to make them also apply to Version 3.0: search that Field for “2.0” and replace it with “3.0, 2.0”.

3. From the Manage Test Set screen for a Test Set for a previous version, click **Copy test set**. Select the "Copy and clear test sessions" option for the copy operation. This will retain the Test Set/Sessions for the previous version of the product while creating new ones for the new version.
4. From the Manage Test Set screen for the Test Set just created, click **Change the test set name/options**. Select the new version as the value for the Product Versions Field in the Test Case Characteristics section. This will enable the new Test Set to include the all the Test Cases for the new release.

You can also change the name of the new Set from this screen, e.g. from V2.0 Smoke Tests to V3.0 Smoke Tests.

Test Sessions have numbers and when they are copied the new copies are given new numbers. So, you can have 10 Sessions for a Set and when you copy the Set and its Sessions you will automatically get 10 new Sessions that are identified by new numbers. Session names do not need to be unique so the copies will have the same names as the originals.

Sessions generally do not have the product version in their name, so they can be copied from version to version without the name needing to be changed.

5. From the Manage Test Set screen for the Test Set just created, click **Refresh the test set contents** to update the tests in the Set to match the new Test Case Characteristics. Select the option for refreshing Sessions in this Set.

Repeat steps 3-5 for any other existing Test Sets to be used in testing the new release. New Test Sets or Test Sessions to be used in testing the new release can be created as well.

#### 2.16.4 Testing different drops

ApTest Manager can be used to handle new drops in a variety of ways: ranging from restarting the test cycle with each new drop to continuing from where the testing of the last drop left off.

- A new drop can be handled just like a new release, by following the procedure above and creating new Test Sets and Test Sessions for it. This would allow different tests to be applied to each drop.
- Different Test Sessions can be used for a drop, with a Test Session Variable employed to indicate the drop a Test Session applies to. This approach requires less project administration. The results of testing different drops can be compared for regression analysis.

- The same Test Sessions can be used for testing as new drops are made available. A Run Data Field can be used to have the tester specify which drop was tested for each Test Case in each Session. Tests from previous drops can be rerun all or in part (see the following section for details). This entails minimal project administration when new drops are received, but requires testers to enter more information during test execution.

### 2.16.5 Fixing bugs and retesting fixes

A QA group is testing a new release and a development team is tasked with fixing the PRs the testers file. What is a good way to coordinate the activities of the two groups to ensure fixes get verified when new drops are delivered to QA?

In this model testers use ApTest Manager to enter each PR into the bug tracking system. Development then goes through the bug list and fixes the reported problems.

A link to the ApTest Manager run page is included (automatically) in the information ApTest Manager submits when a bug is created.

When a bug is fixed the developer clicks this link to bring up the ApTest Manager run page for the Test Case that detected the problem. The developer can a) rerun the test to verify the fix and b) change the test result to "Needs QA retest" (and optionally add a comment about the fix). As ApTest Manager keeps a running history of every time a test is run this would record the new result along with the developer who made the fix and their comment, which is a nice info for QA to have.

When QA gets a new drop with fixes they tell ApTest Manager to rerun just the tests with the "Needs QA retest" result so they can verify the fixes and change the results of those tests that now pass to 'pass' (additional testing of the drop can be performed as desired)

As the tester filing a PR puts a link to the bug tracking system into ApTest Manager when they file it (in the Problem report Links Field), the QA person verifying the fix can also invoke the bug tracking system to resolve the bug there as well.

Having an ApTest Manager result code for "Needs QA retest" (ApTest Manager allows customizing result codes) allows product developers to flag the Test Cases that need to be rerun against an impending drop to verify bugs have been fixed. This enables information to be passed back and forth between QA and development, mediated by ApTest Manager.

The ApTest Manager sample Test Suite has most of this already set up - all that would need to be done is add the "Needs QA retest" result code to the configuration.

### 2.16.6 Assigning priorities to tests within sessions

In some testing processes Test Case priority varies by test environment and so needs to be assigned on a per Test Session basis. To do this the Assign Session screen is used to set the priority values for different tests.

A Run Data field is configured to hold the priority of each test in a Session. This would be a single-select menu field marked settable, so it can be set with Assign Session, and read only, so the priority for each test is displayed to the user but cannot be edited. This field would be added to the template for Test Case execution when it is defined.

The standard capabilities of Assign Session can then be used to select groups of tests and assign them different priority values.

### 2.16.7 Digitally signing reports

A digitally signed ApTest Manager report can be created by printing it to a PDF file with Adobe® Acrobat®. Acrobat 4.0 and later includes digital signature functionality, which is provided by an Adobe-supplied signature framework and signing method plug-ins from Adobe and third-party vendors. Digital signature functionality for Acrobat meets the standards for digital signatures as defined in the Code of Federal Regulations 21 (called "CFR 21"), Part 11. Y. See <http://www.adobe.com/support/techdocs/323231.html>.

## 2.17 Quick Tour

Once a user has logged in and selected a Test Suite the user works with ApTest Manager to Edit Tests, Run Tests, View Reports, and Configure Test Suites. These functions are described in detail in the following Chapters of this Guide. The remainder of this Chapter provides an overview of the most commonly used ApTest Manager features.

### 2.17.1 Edit Tests

ApTest Manager organizes and displays tests in a tree composed of Folders that contain one or more Test Cases. A Test Case tree is displayed and manipulated with a user interface employing two side-by-side frames. This interface is similar to the familiar "Explorer" view native to the Windows platform. A sample screen showing a Test Case tree in the left frame and the contents of a Folder in the right is shown in Figure 5.

Test Case trees are populated and managed by selecting one of the icons in the right-hand frame for the current Folder or one of the Test Cases within that Folder. Test Cases are broken into a number of Fields, which can be customized separately for each Test Suite, presented as a form on a Web browser.

**Edit Tests**

Administer System: [Andy Silverman \(Administrator\) logout](#) Test Suite: Andy\_Webinar\_Suite [Suite Manager]

Test Requirements [Go] [Customize]

Session variables [Configure table] [Search test IDs]

Andy\_Webinar\_Suite

- ATM\_Administration
- Edit Tests**
- Help
- import
- Log-in
- Look\_and\_Feel
- Manage\_Suite
- mark\_import
- reports
- Run\_Tests
- Select\_Suite
- Test\_Files

Tests for the Edit Tests subsystem.

Edit\_Tests

	ID	Assigned Test Developer	Product Versions	Requirements
	<a href="#">clone_test_case</a>	Norm Liu	2.10, 2.04	A user can clone an existing test case
	<a href="#">delete_test_case</a>	Norm Liu	2.10, 2.04	A user can delete a test case.
	<a href="#">edit_test_case</a>	Norm Liu	2.10, 2.04	A user can edit an existing test case.
	<a href="#">new_folder_creation</a>	Norm Liu	2.10, 2.04	A new folder can be created via the "new folder" link.
	<a href="#">new_test_case</a>	Norm Liu	2.10, 2.04	A new test case can be created via the "new test case" link.
	<a href="#">rename_test_case</a>	Norm Liu	2.10, 2.04	A user can rename an existing test case
	<a href="#">sync_suite_db</a>	Norm Liu	2.10, 2.04	Sync suite DB works as expected.
	<a href="#">upload_file</a>	Norm Liu	2.10, 2.04	Uploading a file places that file into that current directory.

Figure 5 - Test Suite tree

**Edit Test Case**

User: Andy Silverman Test Suite: 5PR\_ApTest [Suite Manager]

Help with Fields **ApTest Manager**

Edit test case rename\_test\_case by modifying the following fields, then click "Save changes".

ID: Edit\_Tests/rename\_test\_case Creation Date: Feb 11, 2003 Author: Norm Liu

**Requirements (wysiwyg):**  
A user can rename an existing test case

**Preconditions and Setup (wysiwyg):**

**Test Procedure (wysiwyg):**  
1. Successfully log into ATM.  
2. If no suite is present, create one.  
3. Create a test case.  
4. Select the "Rename" link.  
5. Change test case name.  
6. Press "Change name" button.

**Verification Procedure (wysiwyg):**  
Test case is renamed.

**Features Tested:** Reporting, Installer, Help\_Screens, Admin

**Test Cycles:** Unit, Integration, System, Compatibility

**Product Versions:** 2.10, 2.05, 2.04, 2.03

**Priority:** High

**Planned Staff Time:** 2

**State:** Ready

Associated Files		
Controls	Link to File	File Description (formatted)
	/atm2/datasheet.html	ApTest Manager Data Sheet
	/images/ATMscreens/WF6.jpg	Screen shot

Copyright © 2000-2004 Applied Testing and Technology, Inc. All rights reserved.

Figure 6 - Sample Edit Test Case screen

### 2.17.2 Run Tests

Test execution with ApTest Manager revolves around Test Sets and Test Sessions. A Test Set is a subset of the Test Cases in a Test Suite. A Test Session contains the results of running the tests in a Test Set in a specific test environment. An example Run Tests screen showing the Test Sessions assigned to a user is shown in Figure 7.

**Run Tests**

Administer System: [Andy Silverman \(Administrator\)](#) [logout](#) Test Suite: [Andy\\_Webinar\\_Suite \(Suite Manager\)](#)

Administer Sets and Sessions | Filter Session Table | Show all Sessions | Compact Session Variables | Configure Session Table

To perform operations on multiple sessions, click their checkboxes and choose an operation: **Lock Sessions**

	#	Name	Test Set	Assigned To	Last Mod Date	Last Mod By	Tests	Not Run	Progress	Test Environment			
										browser	network	os	platform
<input type="checkbox"/>	<a href="#">00102</a>	MacOS X NS 7	V2.1_Smoke	Sue Lake	Nov 23, 2005 12:41 PST	Sue Lake	44	6	86%	NS7	100baseT	Mac OS X	G3
<input type="checkbox"/>	<a href="#">00094</a>	MacOS 9 IE 5	V2.1_Smoke	Sue Lake	Nov 23, 2005 12:41 PST	Sue Lake	44	0	100%	IE5	100baseT	Mac OS 9	G3
<input type="checkbox"/>	<a href="#">0062</a>	MacOS 9 NS 4.79	V2.1_Integrate	Sue Lake	Nov 14, 2005 09:54 PST	Joe Rice	159	0	100%	NS4	100baseT	Mac OS 9	G3
<input type="checkbox"/>	<a href="#">0053</a>	MacOS 9 IE 5	V2.1_Integrate	Sue Lake	Nov 11, 2005 09:54 PST	Sue Lake	159	0	100%	IE5	100baseT	Mac OS 9	G3
<input type="checkbox"/>	<a href="#">0053</a>	MacOS X NS 7	V2.1_Integrate	Sue Lake	Nov 07, 2005 09:54 PST	Joe Rice	159	25	84%	NS7	100baseT	Mac OS X	G3

Optionally, you can use the following lists to filter the sessions presented in the table.

Test Sets	Assigned To	Properties	Last Mod By
<a href="#">All Test Sets</a> <a href="#">V2.03_Integrate</a> <a href="#">V2.04_Integrate</a> <a href="#">V2.1_Integrate</a> <a href="#">V2.1_Smoke</a>	<a href="#">All Users</a> <a href="#">Al Lines</a> <a href="#">Alan Reeson</a> <a href="#">Albert Aronchik</a> <a href="#">Alex Barnes</a>	Date: <a href="#">All</a> Lock: <a href="#">Unlocked</a> Run?: <a href="#">All</a>	<a href="#">All Users</a> <a href="#">Al Lines</a> <a href="#">Alan Reeson</a> <a href="#">Albert Aronchik</a> <a href="#">Alex Barnes</a>

Test Environment			
What operating system? (os)	<a href="#">--Don't care--</a> <a href="#">Windows 95</a> <a href="#">Windows 98</a> <a href="#">Windows ME</a> <a href="#">Windows 2000</a> <a href="#">Windows NT</a>	What browser? (browser)	<a href="#">--Don't care--</a> <a href="#">IE4</a> <a href="#">IE5</a> <a href="#">IE6</a> <a href="#">NS4</a> <a href="#">NS7</a>
What hardware? (platform)	<a href="#">--Don't care--</a> <a href="#">PI</a> <a href="#">PII</a> <a href="#">PIII</a> <a href="#">P4</a> <a href="#">Sparc</a>	What network connection? (network)	<a href="#">--Don't care--</a> <a href="#">Dial-up</a> <a href="#">10baseT</a> <a href="#">100baseT</a>

Copyright © 2000-2006 Applied Testing and Technology, Inc. All rights reserved.

Figure 7 - Run Tests screen

When a user selects a Test Session to be run the Test Cases in that Session are presented so the tests can be performed and results provided to ApTest Manager. Test Cases may be presented one at a time or multiple tests may be presented at once. Sample screens for running Test Cases are shown in Figure 8 and Figure 9.

Run Test Case 1 of 159 - Netscape

Run Test Case 1 of 159

ApTest Manager

User: Andy Silverman

Test Suite: ApTest\_Manager [Suite Manager]

Execute the testing process defined below and answer the questions at the end.

If you discover a problem with the implementation you can [Submit a Bug Report](#).

ID: ATM\_Administration/Change\_existing\_accounts/edit\_feature

Requirements:

To edit an existing users features.

Associated Files

#	Link to File	File Description
1.	/atm2/datasheet.html	ApTest Manager Data Sheet
2.	/images/ATMscreens/WF6.jpg	Screen shot

Preconditions and Setup:

Test Procedure:

1. Successfully log into ATM with admin rights.
2. Select the user name from the menu bar; tool tips states "Manage User Accounts".
3. Select the "Make Changes to an existing account" link.
4. Change the feature access control permissions. #. Select the "Update Account" button.

Verification Procedure:

The features were updated.

What was the result of this test?

☒ pass - The test passed  
☐ fail - The test failed  
☐ unresolved - Result could not be determined  
☐ unsupported - Feature not supported  
☐ untested - The feature was not tested  
☐ uninitiated - Test case was not started

Enter any notes about this test's result in the area below:

How long did it take for you to run this test case (in minutes)?

5

Problem Report IDs:

Problem Report Links (formatted):

Previous results for this test:

Run by liu on Apr 18, 2003 23:03: Result: pass

\* mandatory

Send Result

Skip Test

Cancel

Upload File

Figure 8 - Run Single Test Case screen

Run Multiple Tests in Session 0063 - Netscape

ApTest Manager

User: Andy Silverman Test Suite: ApTest\_Manager [Suite Manager]

Finish Save Changes Cancel

Process	Verification	Results	Problem Reports
<b>ID: ATM_Administration/ Change_existing_accounts/ edit_feature</b>			
<b>Test Procedure:</b> 1. Successfully log into ATM with admin rights. 2. Select the user name from the menu bar; tool tips states "Manage User Accounts". 3. Select the "Make Changes to an existing account" link. 4. Change the feature access control permissions. #. Select the "Update Account" button.	<b>Verification Procedure:</b> The features were updated.	<b>Current result:</b> pass <b>Result?</b> <input type="text"/> <input type="button" value="Submit a Bug Report"/> <b>Test run time (in minutes)?</b> 5 <b>Notes:</b> <input type="text"/> <input type="button" value="Upload File"/>	<b>Problem Report IDs:</b> <input type="text"/> <b>Problem Report Links (formatted):</b> <input type="text"/>
<b>ID: ATM_Administration/ Change_existing_accounts/ edit_feature_cancel</b>			
<b>Test Procedure:</b> 1. Successfully log into ATM with admin rights. 2. Select the user name from the menu bar; tool tips states "Manage User Accounts". 3. Select the "Make Changes to an existing account" link. 4. Change the feature access control permissions. 5. Select the "Cancel" button.	<b>Verification Procedure:</b> The features were NOT updated.	<b>Current result:</b> pass <b>Result?</b> <input type="text"/> <input type="button" value="Submit a Bug Report"/> <b>Test run time (in minutes)?</b> 2 <b>Notes:</b> <input type="text"/> <input type="button" value="Upload File"/>	<b>Problem Report IDs:</b> <input type="text"/> <b>Problem Report Links (formatted):</b> <input type="text"/>
<b>ID: ATM_Administration/ Change_existing_accounts/ edit_feature_reset</b>			
<b>Test Procedure:</b> 1. Successfully log into ATM with admin rights. 2. Select the user name from the menu bar; tool tips states "Manage User Accounts". 3. Select the "Make Changes to an existing account" link.	<b>Verification Procedure:</b> The features were reset to initial editing state.	<b>Current result:</b> pass <b>Result?</b> <input type="text"/> <input type="button" value="Submit a Bug Report"/> <b>Test run time (in minutes)?</b> 5 <b>Notes:</b> <input type="text"/> <input type="button" value="Upload File"/>	<b>Problem Report IDs:</b> <input type="text"/> <b>Problem Report Links (formatted):</b> <input type="text"/>

Figure 9 - Run Multiple Test Cases screen

### 2.17.3 View Reports

ApTest Manager provides instantaneous access to reports on testing projects. Both information about Test Cases and the results of executing tests can be retrieved and viewed.

Reports are generated for one or more Test Sessions, using the Select Report screen shown in Figure 10. A variety of Session displays can be created, for example the Sessions run by a particular user during a given time period.

There are a number of reports available:

- Progress Report – Shows the current status of testing for all or part of a project, including planned versus actual schedule. A portion of a Progress Report is shown in Figure 11.

- Regression Report – Compares the results of different Test Sessions.
- Users Report – Shows the work performed by individual users for a project.
- Coverage Report – Shows how well testing is covering the tests defined.
- Templated Reports – An unlimited number of report templates may be defined for reports that cover a single Session. These templates specify the Fields that are shown and how they are presented (e.g. as a spreadsheet, a series of tables, etc.). If a user has a suitable level of access to a Suite the user can modify, add, or delete the available templates by clicking the Manage icon.

In addition to being displayed as HTML many reports can also be exported in CSV format for further processing with applications such as Excel (after which they may also be imported back into ApTest Manager). Use the Customize Report screen to request a CSV report.

Reports can be produced for entire Sessions or, by queries based on the values of Test Case Fields, for groups of tests; for a specific feature, type of testing, test priority, etc.

Select Report - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

Select Report

Edit Run Report Manage Select Help On

ApTest Manager

Administer System: [Andy Silverman \(Administrator\)](#) [logout](#)

Test Suite: [Andy\\_Webinar\\_Suite \[Suite Manager\]](#)

Filter Session Table Show all Sessions Compact Session Variables Configure Session Table

Report Type: Progress Report

Generate Report Customize Report Save Settings Show Other's Reports

<input checked="" type="checkbox"/>	Test Set	#	Name	Assigned To	Last Mod Date	Last Mod By	Tests	Not Run	Test Environment			
									browser	network	os	platform
<input checked="" type="checkbox"/>	V2.1_Smoke	<a href="#">[00102]</a>	MacOS X NS 7	Sue Lake	Nov 23, 2005 12:41 PST	Sue Lake	44	6	NS7	100baseT	Mac OS X	G3
<input checked="" type="checkbox"/>	V2.1_Smoke	<a href="#">[00098]</a>	WinNT NS 4.79	Joe Rice	Nov 23, 2005 12:41 PST	Sue Lake	44	0	NS4	100baseT	Windows NT	PIII
<input checked="" type="checkbox"/>	V2.1_Smoke	<a href="#">[00096]</a>	WinMe IE 5.5	Norm Liu	Nov 23, 2005 12:41 PST	Sue Lake	44	0	IE5	100baseT	Windows ME	PIII
<input checked="" type="checkbox"/>	V2.1_Smoke	<a href="#">[00095]</a>	WinXP IE 6	Joe Rice	Nov 23, 2005 12:41 PST	Sue Lake	44	0	IE6	100baseT	Windows XP	PIII
<input checked="" type="checkbox"/>	V2.1_Smoke	<a href="#">[00094]</a>	MacOS 9 IE 5	Sue Lake	Nov 23, 2005 12:41 PST	Sue Lake	44	0	IE5	100baseT	Mac OS 9	G3
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0062]</a>	MacOS 9 NS 4.79	Sue Lake	Nov 14, 2005 09:54 PST	Joe Rice	159	0	NS4	100baseT	Mac OS 9	G3
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0052]</a>	MacOS X IE 5.2	Joe Rice	Nov 13, 2005 09:54 PST	Sue Lake	159	0	IE5	100baseT	Mac OS X	G3
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0054]</a>	WinXP IE 6	Joe Rice	Nov 12, 2005 09:54 PST	Joe Rice	159	0	IE6	100baseT	Windows XP	PIII
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0055]</a>	WinMe IE 5.5	Norm Liu	Nov 12, 2005 09:54 PST	Norm Liu	159	0	IE5	100baseT	Windows ME	PIII
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0057]</a>	Win2k IE 6	Joe Rice, Norm Liu	Nov 11, 2005 09:54 PST	Norm Liu	159	0	IE6	100baseT	Windows 2000	PIII
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0053]</a>	MacOS 9 IE 5	Sue Lake	Nov 11, 2005 09:54 PST	Sue Lake	159	0	IE5	100baseT	Mac OS 9	G3
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0061]</a>	Win2k NS 7	Norm Liu	Nov 10, 2005 09:54 PST	Norm Liu	159	0	NS7	100baseT	Windows 2000	PIII
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0063]</a>	MacOS X NS 7	Sue Lake	Nov 07, 2005 09:54 PST	Joe Rice	159	25	NS7	100baseT	Mac OS X	G3
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0058]</a>	WinNT NS 4.79	Joe Rice	Nov 06, 2005 09:54 PST	Joe Rice	159	0	NS4	100baseT	Windows NT	PIII
<input checked="" type="checkbox"/>	V2.1_Integrate	<a href="#">[0060]</a>	WinXP NS 7	Norm Liu	Nov 06, 2005 09:54 PST	Sue Lake	159	0	NS7	100baseT	Windows XP	P4

Optionally, you can use the following lists to filter the sessions presented in the table.

Test Sets

All Test Sets

V2.03\_Integrate

V2.04\_Integrate

V2.1\_Integrate

V2.1\_Smoke

Assigned To

All Users

Al Lines

Alan Reeson

Albert Aronchik

Alex Barnes

Properties

Date: All

Lock: Unlocked

Run?: All

Last Mod By

All Users

Al Lines

Alan Reeson

Albert Aronchik

Alex Barnes

Test Environment

What operating system? (os)

--Don't care--

Windows 95

Windows 98

Windows ME

Windows 2000

Windows NT

What browser? (browser)

--Don't care--

IE4

IE5

IE6

NS4

NS7

What hardware? (platform)

--Don't care--

PI

PIII

P4

Sparc

What network connection? (network)

--Don't care--

Dial-up

10baseT

100baseT

Apply List Settings

Copyright © 2000-2006 Applied Testing and Technology, Inc. All rights reserved.

Figure 10 - Report Selection screen

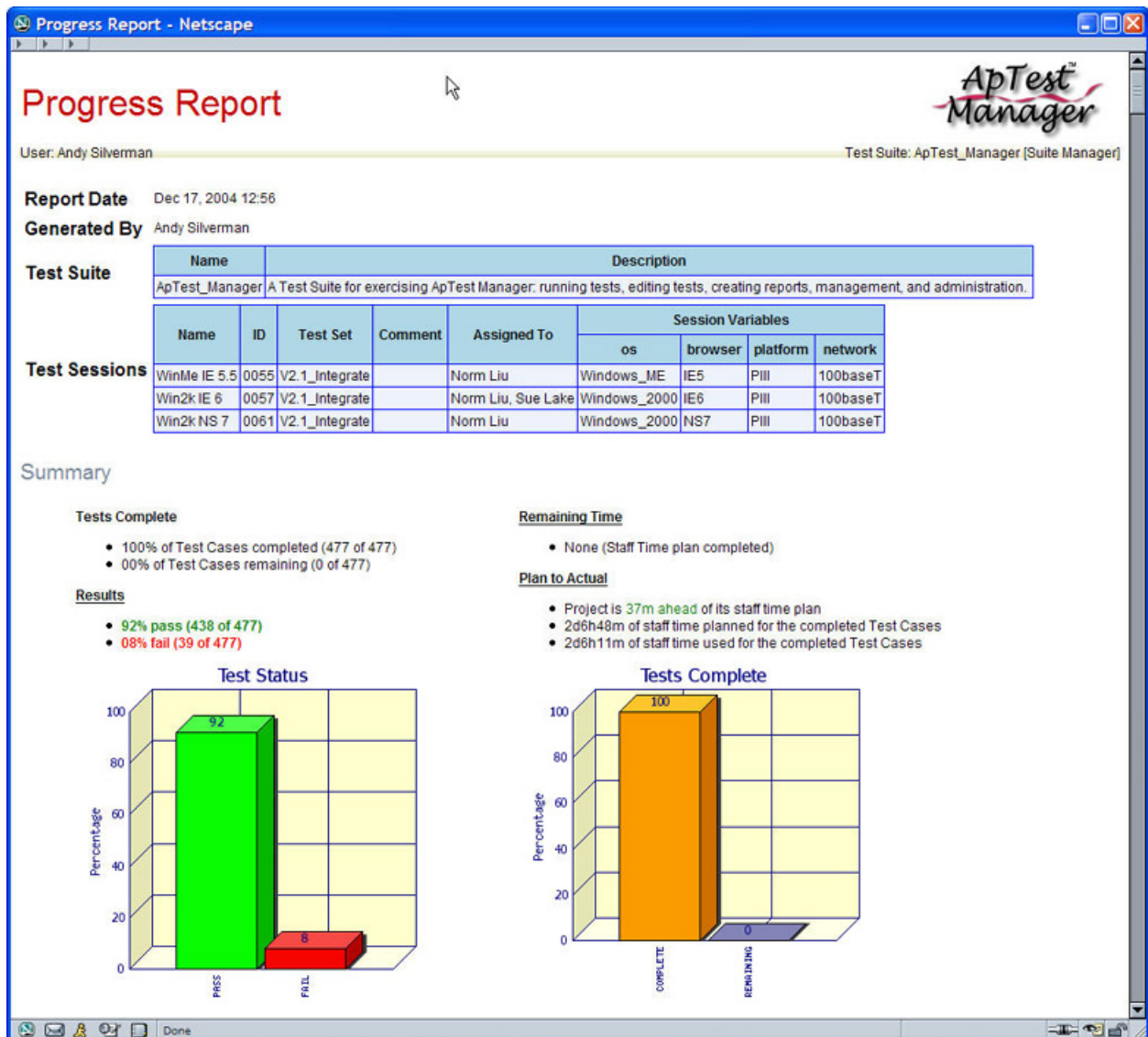


Figure 11 - Progress Report

## 3 Defining Tests

**T**he previous chapters introduced the core features and basic operation of ApTest Manager. This chapter describes the details of using ApTest Manager to define, configure, and evolve the requirements, characteristics, and procedures of tests.

Click the Edit icon on the ApTest Manager Menu Bar to get to this area of ApTest Manager. Depending on a user's access level for a Test Suite the user may only be able to view but not modify tests (and the icon will be labeled View), or may not have access to this area of ApTest Manager at all.

### 3.1 Test Case Trees

ApTest Manager organizes and displays tests in a tree composed of Folders that contain Test Cases and files. A tree is specific to a Test Suite – each Test Suite has its own tree that contains the Test Cases and files for that Suite. The tree displayed is that of the current Test Suite. Click on the Select icon to change the Test Suite and work with the Test Cases from a different Suite.

Any number of Test Cases, files, and Folders can be placed at any level of the tree. Keeping the Test Case tree from being too deep or wide is desirable for readability and ease of use. It is also beneficial to keep Folder and Test Case names reasonably short, yet adequately descriptive. Additional Folders and Test Cases may be added, or Folder descriptions changed whenever desired.

This mechanism is very flexible and may be used to structure Tests Suites in a wide variety of ways. A completely flat test structure can be employed in which all Test Cases in the Test Suite are placed in a single Folder. At the opposite extreme small groups of related Test Cases may be placed in separate Folders, which themselves may be grouped within other Folders based on characteristics such as the type of testing performed or the functional area tested. How to structure a Test Case tree is at the discretion of the process an organization wishes to use.

#### 3.1.1 Collapsing and Expanding the Tree

The level of detail in which the tree is shown can be collapsed and expanded.

Notice the '+' to the immediate left of some of the Folders in the Test Suite. These are Folders which have further levels of Folders defined within them. Clicking a '+' causes the display of these sub-Folders. The '+' associated with a Folder is changed to '-' when the Folder contents are displayed. Clicking the '-' collapses that portion of the tree. This feature is especially beneficial when navigating through large multi-layer Test Case trees.

### 3.1.2 Navigation


A Test Case tree is displayed and manipulated with a user interface employing two side-by-side frames. This interface is similar to the "Explorer" view native to the Windows platform.

Use the browser scroll bar, if shown, to scroll a frame upward or downward.

The left-hand frame shows the Folders that comprise the tree and allows individual Folders to be selected. The right-hand frame shows the Test Cases and files contained in the currently selected Folder, along with any sub-folders.

The name of the Test Suite appears as the top link of the tree in the left-hand frame. A button above the name allows searching the Test Cases in the tree based on their ID. Any matching Test Cases are displayed in a table in the right hand frame, independent of the folder they are in. The right-hand frame is traditionally blank until a Folder selection or a Test Case search is performed.

The left hand frame also allows generating reports for the Test Cases in the tree, configuring the table of tests in the right hand frame, and viewing the Session Variables defined for the Test Suite.

The  icon precedes the name of the Folder currently displayed in the right-hand frame. This is followed by a series of icons for working with Folders. Below the Folder name is a table of the Test Cases in the Folder followed by any files in the Folder and any sub-Folders it contains. The Test Case table can be sorted by different columns by clicking on a column name. Clicking the name again reverses the sort order. Please note that sorting this table has no permanent effect on the order of Test Cases within a Folder or within Test Sets or Test Sessions.

Each row in the Test Case table contains information for an individual Test Case. Icons are provided for renaming/moving the Test Case, deleting it, copying it, and editing it. The user must have an appropriate level of access in order for these icons to be shown. The name of the Test Case is shown and will display the Test Case when clicked.

The columns displayed in the Test Case table can be configured by clicking **Configure table** in the left hand frame. The Configure Test Case Table screen provides check boxes for each Test Case Field defined for this Test Suite (other than Fields in table or Change History Fields). If a box is checked the value of that Field is shown for each Test Case in the table. It is advisable for readability to just display a few Fields in this table.

A sample screen displaying Folders for a Test Suite in the left frame and the contents of a Folder in the right is shown in Figure 12.

## DEFINING TESTS

In this example the Folder “Edit Tests” has been selected from the left-hand frame, causing the right-hand frame to display the Test Cases contained in that Folder.



The screenshot shows the ApTest Manager web application interface. The left-hand frame displays a tree view of the test suite structure, with 'Edit Tests' selected. The right-hand frame displays a table of test cases for the 'Edit Tests' subsystem.

Test Requirements:

Session variables | Configure table | Search test IDs

Andy\_Webinar\_Suite

- ATM\_Administration
- Edit Tests**
- Help
- import
- Log-in
- Look\_and\_Feel
- Manage\_Suite
- mark\_import
- reports
- Run\_Tests
- Select\_Suite
- Test\_Files

Tests for the Edit Tests subsystem.

Edit\_Tests

	ID	Assigned Test Developer	Product Versions	Requirements
	clone_test_case	Norm Liu	2.10, 2.04	A user can clone an existing test case
	delete_test_case	Norm Liu	2.10, 2.04	A user can delete a test case.
	edit_test_case	Norm Liu	2.10, 2.04	A user can edit an existing test case.
	new_folder_creation	Norm Liu	2.10, 2.04	A new folder can be created via the "new folder" link.
	new_test_case	Norm Liu	2.10, 2.04	A new test case can be created via the "new test case" link.
	rename_test_case	Norm Liu	2.10, 2.04	A user can rename an existing test case
	sync_suite_db	Norm Liu	2.10, 2.04	Sync suite DB works as expected.
	upload_file	Norm Liu	2.10, 2.04	Uploading a file places that file into that current directory.

Figure 12 - Test Case tree

### 3.1.3 Naming Conventions

Folders and Test Cases can be named according to an organization's policy of choice.

Consideration should be given to naming conventions that avoid making Test Suites difficult to navigate. Very long names can be cumbersome for instance as the left frame will become cluttered. Lengthy Folder names are generally not necessary, as the user-defined description for the current Folder is displayed at the top of the right-hand frame.

## DEFINING TESTS

ApTest Manager automatically sorts the displayed Folders and Test Cases alphabetically. Therefore consideration should be given to conventions that will cause Folders and Test Cases to be listed in the order desired. For example, beginning Folder and Test Case names with a numerical or alphabetical designation, such as "1-" or "A\_".

ApTest Manager limits Test Case names to the characters available in the "POSIX Portable Filename Character Set". This means Test Case IDs must be composed of A-Z, a-z, 0-9, periods("."), underscores("\_"), and hyphens("-"). ApTest Manager transforms space characters into "\_" and removes other characters outside of this set. This is to ensure that Test Case IDs are representable in the file system on the server, and that they are portable to other servers should they need to be migrated later.

Camel case (e.g. TestCaseName) works well with ApTest Manager, and may be combined with underscores or hyphens (e.g., 1\_TestCaseName).

By default Test Case names are limited to 50 characters.

### 3.1.4 Trash Can

When Test Cases are deleted they are not removed from the Test Case tree, but rather are moved automatically into a special Trash Folder where they can be continue to be referenced by existing Test Sets and Sessions. If a Test Set is Refreshed any deleted Test Cases it contains may be removed. Deleted tests will also not match any selection criteria when creating new Test Sets.

If it is not empty the Trash Folder is shown just below the name of the Test Suite in the tree. The contents of the Trash Folder can be viewed, it can be emptied, and Test Cases can be returned to other folders in the tree from the Trash by moving/renaming them.

If the Trash Folder is emptied its contents are moved to a Folder that is time stamped to indicate when the trash was taken out, under an invisible Folder named .Deleted\_Files. Thus, while removed from the Test Case tree these tests can continue to be referenced from existing Test Sets and Sessions).









## 3.2 Folders, Test Cases, and Files

Test Case trees are populated and managed by selecting one of the icons in the right-hand frame for the current Folder or one of the Test Cases or files within that Folder. The Test Suite itself is the top level of the tree; Folders and Test Cases are added are beneath it.





Click one of the icons to the right of the current Folder in the right-hand frame to manage the current Folder or add new Folders and Test Cases to it.

- Click  to create a Folder within the current Folder.




## DEFINING TESTS

- Click  to create a new Test Case within the current Folder.
- Click  to rename the current Folder, possibly also moving it elsewhere in the Test Case tree.
- Click  to delete the current Folder.
- Click  to copy the current Folder elsewhere in the Test Suite tree.
- Click  to revise the description of the current Folder.
- Click  to search for strings within Test Case Fields and replace them with other strings.
- Click  to copy a local file into the current Folder.
- Click  to import tests under the current Folder.

Click the **Test Case name** to view a Test Case. Click one of the icons to the left of a Test Case name in the right-hand frame to edit, rename, copy, or delete a Test Case.

- Click  to change the name of a Test Case, possibly also moving it elsewhere in the Test Case tree.
- Click  to delete a Test Case.
- Click  to copy a Test Case within the Test Case tree.
- Click  to modify a Test Case.

Click the **File name** to view a file. Click one of the icons to the left of a file name in the right-hand frame to rename, copy, or delete a file.

- Click  to change the name of a file, possibly also moving it elsewhere in the Test Case tree.
- Click  to delete a file.
- Click  to copy a file within the current Test Suite.

Files must be edited with the tool that created them; they cannot be edited with ApTest Manager.

### 3.2.1 Test Suite Development Models


ApTest Manager allows Test Case information to be defined when a Test Case is created and be revised later. This allows a great deal of flexibility in the model used for test development, accommodating the traditional “Waterfall model” and alternatives as different as Extreme Programming. For example:

- The Folders and Test Cases for a Test Suite can be created and populated with just the requirements for each Test Case. A Test Requirements report can then be produced which can be reviewed and iterated on before further definition of the tests.
- The Test Suite can be populated with Folders and Test Cases along with the requirements and descriptions of each Test Case. A Test Specification report can then be produced which can be reviewed and iterated on before defining the procedures to be used to implement the tests.
- The Test Suite can be populated with Folders and Test Cases along with the requirements, specifications, and procedures for these tests. This creates a complete Test Suite that can be further reviewed and iterated for both test coverage and test methodology.

### 3.2.2 Generating Reports from the Edit Tests Screen

For convenience, Templated reports can be generated from the Edit Tests screen. These are some of the same reports that can be generated for Test Sessions, but here they apply to the entire Test Suite. The list of templates includes those that do not contain any execution information (and which can thus be applied directly to the Test Case tree). Please see Section 5.4 for details about these reports.

## 3.3 Create a New Folder

To create a Folder within the current Folder click the  icon. The New Folder window is displayed.


Enter a unique Folder name into the field `Folder Name`. Since folders in the Test Suite tree are displayed in alphabetical order it is advisable to establish an appropriate naming convention so Folders will be shown in the order desired. ApTest Manager limits Folder names to the characters available in the “POSIX Portable Filename Character Set”. Basically, this means Folder names must be composed of A-Z, a-z, 0-9, periods (“.”), underscores (“\_”), and hyphens (“-”). ApTest Manager transforms space characters into “\_” and removes other characters outside of this set. This is to ensure that Folders are representable in the file system on the server, and that they are portable to other servers should they need to be migrated later.

Continue by entering an appropriate description of the Folder into the field `Folder Description`.

When satisfied that the name and description are accurate, click **Make Folder** beneath the description field. .


If a duplicate Folder Name is encountered, an error message is displayed above the Folder name asking for a different name. Type over the previous entry with an appropriate alternative.

### 3.4 Manage a Folder

To revise the description of the current Folder click the  icon. The Manage Folder window is displayed.

Once changes have been entered, click **Make Changes** below the Folder description field.

### 3.5 Copy a Folder

To copy the current Folder elsewhere in the Test Suite tree click the  icon. The Copy Folder window is displayed.


Pick a Folder into which the current Folder is to be copied. The `New folder` field is a pull-down list of all the folders in the current Test Suite. Select one of the folders from this list.

Enter a name for the newly created copy into the `New name` field.

Click **Copy Folder** to copy the Folder.

If a duplicate Folder Name is entered an error message is displayed. Type over the previous `New name` entry with an alternative that is unique.

### 3.6 Rename a Folder

To rename the current Folder, possibly also moving it elsewhere in the Test Suite tree, click the  icon. The Rename Folder window is displayed.

The `New Folder` field is a drop-down list of all the folders in the current Test Suite. Pick a folder into which the current one will be moved. If the location where the current folder already resides is selected, it is renamed but not moved.


Enter a new name for the current Folder into the `New name` field.

Click **Rename Folder** to rename the Folder.

If a duplicate Folder Name is entered an error message is displayed. Type over the previous entry with an alternative that is unique.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen. This feature is disabled if source control is enabled during installation and a command is not defined for the renameDir configuration option.

### 3.7 Delete a Folder

To delete the current Folder and its contents click the  icon. A new window is displayed asking for confirmation of deletion of the Folder.

Click **Delete Folder** to remove the Folder. The Folder and its contents are moved to the Trash Can as a result of this action.

Click **Cancel** to return without deleting the Folder.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen. This feature is disabled if source control is enabled during installation and a command is not defined for the removeDir configuration option.

### 3.8 Search Tests

To search for strings within Test Cases click the  icon. The Search Tests screen allows searching Test Cases for data in Test Case Fields and optionally replacing matching data.

By default Test Cases in the current Folder and any sub-Folders are searched. Deselect **and sub-folders** to only search Test Cases in the current Folder. Search Tests may also be used to search the Test Cases resulting from a **Search test case IDs** operation.

One or more Test Case Fields to be searched, a pattern to search for, and if **Search and replace** is clicked a string to replace matches in the Test Cases may be specified. Click **change** to modify the list of Fields to be searched. All Fields are included on this list except for Fields of type ID, table (though Fields in the table may be searchable), user, muser, cdate, mdate, date, and modification history table (though Fields in the table may be searchable).

By default the search pattern is a simple string but if **Perl regular expression** is selected a regular expression may be used. Click **Help with Regular Expressions** on this screen's Help panel for details. For example:

- To match all Test Cases with any content in a Field, including none, use an RE of `^.*$`
- To match all Test Cases with some content in a Field, use an RE of `^.+ $`
- To match all Test Cases with no content in a field, use an RE of `^$`

Click **Search** or **Search and replace** to perform a search or search and replace operation.

Note that Search and Replace replacements are permanent and can NOT be undone. If **confirm replacements** is selected the names of the Test Cases in which matches were found are displayed with the matched strings highlighted before replacements are made. Examine these tests to verify the selections to be changed and then click **Confirm replacements** to make the changes. Otherwise, modify the search string and perform a new search and replace operation.

After a search or search and replace operation the names of the Test Cases in which matches were found are displayed. Clicking a Test Case name displays the Test Case. For a search operation the matches are highlighted. For a search and replace operation the replacements made are highlighted.

When changing values for a menu Field the replacement value must be a valid menu item (as defined in the Test Case Field configuration for the Suite) for the Field or an error is reported. For example, for Test Cases which contain values of 1.0 and 2.0 for product versions, to add 3.0 to these selections first add 3.0 to the Test Case Field configuration for the versions field. Then, search for "2.0" and replace it with "2.0,3.0", omitting the quotation marks, in this Field.

The replace feature may be restricted to users with administrative privilege through the Manage System Configuration screen.

### 3.9 Upload a File

To copy a local file into the current Folder click the  icon. The Upload File window is displayed.

Enter the name of the file to upload. Click **Browse** to select a file by looking through the available files.

Click **Upload file** to copy the file to the current Folder.

### 3.10 Import Tests

To import tests into the current Folder click the  icon.

Test Cases can be imported into ApTest Manager from a file in Comma Separated Value format. CSV files can be created with spreadsheets such as Microsoft Excel and databases such as Microsoft Access. Programs that transform test information from another program or file format into a CSV file may also be employed. The Import Tests screen provides extensive documentation of the instructions and requirements for importing tests.

A CSV file must have one record per Test Case to be imported. A record is usually one line, though it may spread across several lines in some cases. There can be as many Test Cases in the file as desired.

For each Test Case the file specifies the information to be imported as fields separated by commas. The same fields must be specified for each test in the file. The first line of the file provides labels for each of the fields.

## DEFINING TESTS

For example:

ID,objective,atm\_owner,priority,testcycle,filename,filedesc

clone\_test\_case,A user can clone an existing test case,liu,High,"Integration, System","~/Test\_Files.dir/datasheet.html, ~/Test\_Files.dir/WF6.jpg","Data Sheet, Screen shot"

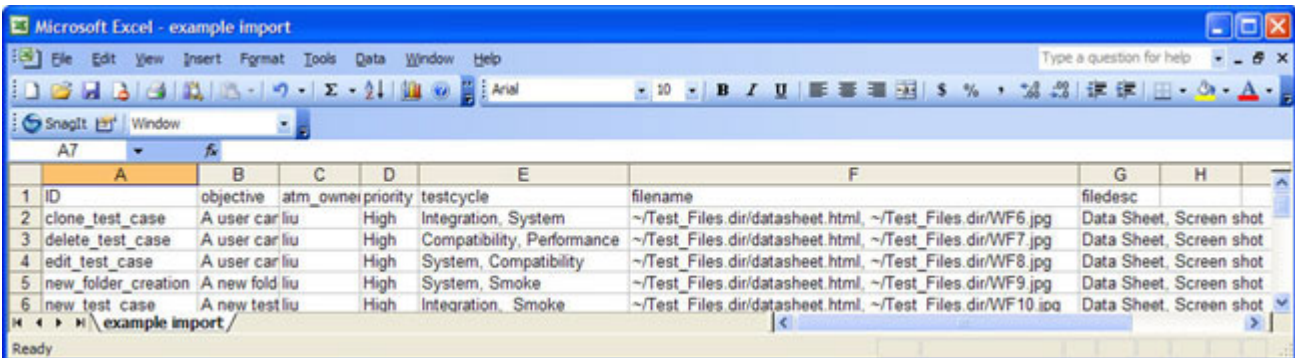
delete\_test\_case,A user can delete a test case.,liu,High,"Compatibility, Performance","~/Test\_Files.dir/datasheet.html, ~/Test\_Files.dir/WF7.jpg","Data Sheet, Screen shot"

edit\_test\_case,A user can edit an existing test case.,liu,High,"System, Compatibility","~/Test\_Files.dir/datasheet.html, ~/Test\_Files.dir/WF8.jpg","Data Sheet, Screen shot"

new\_folder\_creation,A new folder can be created.,liu,High,"System, Smoke","~/Test\_Files.dir/datasheet.html, ~/Test\_Files.dir/WF9.jpg","Data Sheet, Screen shot"

new\_test\_case,"A new test case can be created via the ""new test case"" link.",liu,High,"Integration, Smoke","~/Test\_Files.dir/datasheet.html, ~/Test\_Files.dir/WF10.jpg","Data Sheet, Screen shot"

Each of these records corresponds to a spreadsheet row and each field to a spreadsheet column. So, to produce the example above create a spreadsheet that looks like the following and save it as a CSV file.



	A	B	C	D	E	F	G	H
1	ID	objective	atm_owner	priority	testcycle	filename	filedesc	
2	clone_test_case	A user can clone an existing test case	liu	High	Integration, System	~/Test_Files.dir/datasheet.html, ~/Test_Files.dir/WF6.jpg	Data Sheet, Screen shot	
3	delete_test_case	A user can delete a test case	liu	High	Compatibility, Performance	~/Test_Files.dir/datasheet.html, ~/Test_Files.dir/WF7.jpg	Data Sheet, Screen shot	
4	edit_test_case	A user can edit an existing test case	liu	High	System, Compatibility	~/Test_Files.dir/datasheet.html, ~/Test_Files.dir/WF8.jpg	Data Sheet, Screen shot	
5	new_folder_creation	A new folder can be created	liu	High	System, Smoke	~/Test_Files.dir/datasheet.html, ~/Test_Files.dir/WF9.jpg	Data Sheet, Screen shot	
6	new_test_case	A new test case can be created via the "new test case" link	liu	High	Integration, Smoke	~/Test_Files.dir/datasheet.html, ~/Test_Files.dir/WF10.jpg	Data Sheet, Screen shot	

Figure 13 - Sample Excel File for Import

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen.

### 3.10.1 How do I import values for table fields?

In order to import data into a table Field:

- Import into the Fields in the table, not the table itself.
- Use a single field in the CSV file for each Field in the table. In that field specify the values for each row in the table separated by ", " (comma space). For example: "file1, file2, file3" to import values for 3 rows of a Field in a table.
- To embed commas within the field use %2c to represent the embedded commas.

See the filename and filedesc columns in the sample above.

## 3.11 Create a New Test Case


To create a new Test Case within the current Folder click the  icon. The Create Test Case window is displayed.

Enter a unique Test Case name into the field `Test Case Name` and click **Create Test Case** to create the Test Case. By default Test Case names are limited to 50 characters in length.

If a duplicate Test Case Name is entered an error message that the name has been defined previously is displayed. Change the name to an appropriate alternative.

Completing this screen will bring up the Edit Test Case screen, described below, to begin entering the information for the newly created Test Case.

## 3.12 Edit a Test Case

To edit a Test Case click the  icon for the Test Case. The Edit Test Case screen shown in Figure 6 is displayed.

The Test Case Fields and their values are displayed so the values can be modified.

This screen is based on a template – the information that is displayed may have been configured specially for an installation. The exact fields that are displayed are determined by the Test Suite's configuration – the Profile selected when it was created and any additional customization performed later. Figure 6 shows an example set of Test Case Fields.

Click **Save Changes** to save the information when finished making edits.

### **3.12.1 Test Case Fields**

Fields in a Test Case can be:

- Single selection menus to pick a value from a list of values.
- Multi-Selection menus to pick one or more values from a list of values. This type of field allows choosing multiple values from among those displayed. The keystrokes required to do this vary from browser to browser; consult the browser's documentation for details. Often the Shift and Control keys can be used to select different values and ranges of values.
- Text Fields to enter text information.
- Tables composed of several other Fields.
- Special Fields such as the Test ID, Creation Date, Author, Modification Date, and Modifying User which are filled in by ApTest Manager.
- Time tracking Fields to enter the time it is expected to take to execute this test, in minutes. Time Tracking is an optional item that may be configured for each Test Suite.
- File Fields to enter file names and have them turned into links.
- Date Fields to select a date from a calendar.
- User list Fields to pick users from a list of available users (i.e. to specify the user(s) assigned to write the Test Case).

### **3.12.2 Text Fields**

ApTest Manager offers four styles of textarea Fields. A textarea Field's style is shown in parentheses after the name the Field in the Edit Test Case screen.

These styles format the information in different ways when the Field is viewed, executed, or shown in a report.

The primary differences between styles have to do with how data is entered: as if using a word processor, a typewriter, or as HTML source code.

Non-HTML styles allow text to be entered much like working on a typewriter or a word processor. Entering HTML allows control of text formatting with HTML commands. However some common text formatting, such as hitting Enter to create a blank line, will not work with HTML.

After editing a Test Case it can be viewed (by clicking its name on the Edit Tests screen) to ensure the information entered is formatted as desired.

## DEFINING TESTS

Supported textarea Field styles and the way their contents are formatted follows. Some additional deprecated styles are supported for backward compatibility with earlier versions, but are not shown here.

### code

Special characters are automatically transformed into HTML so they will display correctly in a browser (e.g. '<' is transformed into "&lt;"). Otherwise, the text entered is displayed as is.

Text is displayed in a monospace font. This style is used primarily for entering source code or (human readable) data into a Field.

### formatted

This style allows typing text much as with a typewriter. Plus, numbered lists can be automatically created.

- Newlines can be used to end lines and paragraphs.
- Spaces or tabs can be used at the start of a line to indent text.
- Special characters are automatically transformed into HTML so they will display correctly in a browser (e.g. '<' is transformed into "&lt;").
- Lines within the Field that begin with "#. " (the pound sign followed by a period and a space) will automatically be numbered when the Test Case is viewed or executed. This is a convenient mechanism for making a Test Case easy to understand and maintain. Lines beginning with "nnn, " (a number followed by a period and a space) will be included in the numbered list, with the specified number.




### HTML




















Contents are expected to include HTML. Special characters need to be specified in HTML and all formatting specified with HTML directives. For example, newlines will not have any effect, the HTML <br> or <P> directives need to be used instead or lines will run together when the Field is displayed.


Knowledge of HTML is required in order to use this style of Field. Please refer to <http://www.w3c.org/TR/html4/> for assistance with HTML.

### wysiwyg

A What You See Is What You Get (WYSIWYG) editor provides a Word Processor style interface for formatting information. Paragraph formats, font styles, and sizes may be specified for selected text. Various other formatting functions are also offered.

	Sets the foreground color.
	Sets the background color.
	Bold text style.

	Italic text style.
	Underline text style.
	Strikethrough text style.
	Makes the selection a subscript.
	Makes the selection a superscript.
	Align left.
	Align center.
	Align right.
	Align full.
	Inserts a new horizontal ruler
	Unordered list/bullet list.
	Ordered list/numbered list
	Outdent/decrease indentation.
	Indent/increase indentation.
	Undo the last operation.
	Redo the last operation.
	Cleanup code/Removes unwanted formatting. This function is useful when copying contents from for example an Office product.
	Insert a new link. Select text to be used as the label for the link before selecting this function.
	Unlinks the current selection/removes all selected links.

	Inserts a special character.
HTML	Opens HTML source code editor.

### 3.12.3 Table Fields

A table Field is composed of one or more rows consisting of one or more other Test Case Fields. In each Test Case a table may have a different number of rows and rows may be added or deleted on the fly. Fields in a table may be of any type.

Each table row also contains controls for that row:



moves the row up one row



moves the row down one row



deletes the row (if there is only one row it cannot be deleted)



creates a duplicate of the row



inserts a new row above



inserts a new row below

### 3.12.4 Inserting File References

File references can be included in Test Case Fields. These may be references to files uploaded into the Test Case repository or other files or programs on the server or on other servers on the WWW.

- In html style textarea Fields include the HTML markup for a file reference (e.g. `<a href='http://www.aptest.com/file' target='_blank'>Click to access file</a>`) to create a link to a file. Files may be located on the same server as ApTest Manager or any other system with a WWW server.
- In wysiwyg style textarea Fields create a link to a file by entering a URL to be associated with a previously entered text string using the insert/edit link feature of the wysiwyg editor.
- In formatted style textarea Fields, file references are automatically turned into links. For example entering `http://www.aptest.com/file` inserts a link to that file into the Field. Files may be located on the same server as ApTest Manager or any other system with a WWW server.

## DEFINING TESTS

- In Fields of type file insert a series of file names separated by commas. These are turned into links:
  - Simple file names (e.g. file.doc) are made into a link to the file relative to the folder of the current Test Case.
  - File names starting with ~/ (e.g. ~/file.doc) are made into a link to the file relative to the root directory of the current Test Suite.
  - File names starting with a / (e.g. /file.doc) are made into a link to the file relative to the document root directory of the WWW server.
  - Full URLs (e.g. http://www.aptest.com) are turned into links to the URL.

In each case, links are clickable when a test is run, so the user running the test can view associated files for additional information. Note that if Folders are included in the file name they must have the suffix .dir added to them, e.g. ~/TestFiles.dir/file.doc.

Links may be inserted to any type of object the browser knows how to display: web pages, images, documents, spreadsheets, etc. This allows information such as requirements specifications, screen shots, test data, etc. to be associated with tests.

### 3.12.5 Inserting Images

Images can be included directly inline into Test Cases by entering an HTML IMG directive referencing an image on the server or on other servers on the WWW. This causes the image to be displayed as part of the Test Case. For example:

```

```

- In html style textarea Fields enter the IMG directive.
- In wysiwyg style textarea Fields click the HTML icon and insert the IMG directive into the Field's HTML.

The reference to the image must be either a fully qualified URL (e.g. src="http://foo.com/images/image.jpg") or a server root relative reference to an image on the local system (e.g. src="/images/image.jpg").

### 3.12.6 Inserting Session Variable References

## DEFINING TESTS

A Session Variable reference can be inserted into a Test Case Field when editing the Test Case. When the Test Case is executed or included in a report for a Test Session the Variable is expanded into its value for that Session.

Session Variables are not expanded in reports for a Test Suite (from the Edit Test screen) or when viewing or editing a Test Case. A Session Variable reference has the form `<% variable_name %>`. Variable names are case insensitive.

There are some predefined Session Variables that can also be referenced:

VARIABLE	VALUE
ATM_FULLNAME	the current user's full name
ATM_SESSDESC	the Session description
ATM_SESSNAME	the Session name
ATM_SESSNUM	the Session number
ATM_SETNAME	the Set name
ATM_USERNAME	the current user's account name

In a textarea Field of style wysiwyg insert a Session Variable by selecting it from the editor's "Session Variables" pull down menu.

### 3.13 Copy a Test Case

To copy a Test Case click the  icon for the Test Case. The Copy Test Case window is displayed.

The `Copy to Folder` field is a drop-down list of all the folders in the Test Suite. Pick a folder into which the copy will be created. Enter a new name for the Test Case into the `Copy to Name` field. Click **Copy Test Case** to create the copy.


This feature creates a new Test Case with the same data as an existing Test Case. It is useful when creating several similar Test Cases.

If a duplicate Test Case name is entered an error message that the name has been defined previously is displayed. Change the name to an appropriate alternative.

This feature may be restricted to users with administrative privilege.

### 3.14 Rename a Test Case

## DEFINING TESTS


To rename, and optionally move, a Test Case click the  icon for the Test Case. The Rename Test Case window is displayed.

The `New Folder` field is a drop-down list of all the folders in the Test Suite. Pick a folder into which the Test Case will be moved. If the Folder where the Test Case resides is selected, it is renamed but not moved. Enter a new name for the Test Case into the `New name` field. Click **Rename Test Case** to rename the Test Case.

If a duplicate Test Case name is entered an error message that the name has been defined previously is displayed. Change the name to a unique alternative.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen. This feature is disabled if source control is enabled during installation and a command is not defined for the `renameFile` configuration option.

### 3.15 Delete a Test Case

To delete a Test Case click the  icon for the Test Case. A window is displayed asking for confirmation of the deletion of the Test Case.

Click **Delete Test Case** to remove the Test Case from the current Folder. The Test Case is moved to the Trash Can as a result of this action.

Click **Cancel** to return without deleting the Test Case.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen. This feature is disabled if source control is enabled during installation and a command is not defined for the `removeFile` configuration option

### 3.16 Copy a File

To copy a file click the  icon for the file. The Copy File window is displayed.


The `Copy to Folder` field is a drop-down list of all the folders in the Test Suite. Pick a folder into which the copy will be created. Enter a new name for the file into the `Copy to Name` field. Click **Copy File** to create the copy.

This feature creates a new file with the same data as an existing file.

If a duplicate name file is entered an error message that the name has been defined previously is displayed. Change the name to an appropriate alternative.

This feature may be restricted to users with administrative privilege.

## 3.17 Rename a File


To rename, and optionally move, a file click the  icon for the file. The Rename File window is displayed.

The `New Folder` field is a drop-down list of all the folders in the Test Suite. Pick a folder into which the file will be moved. If the location where the file already resides is selected, it is renamed but not moved. Enter a new name for the file into the `New name` field. Click **Rename File** to rename the file.

If a duplicate file name is entered an error message that the name has been defined previously is displayed. Change the name to a unique alternative.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen. This feature is disabled if source control is enabled during installation and a command is not defined for the `renameFile` configuration option.

## 3.18 Delete a File

To delete a file click the  icon for the file. A window is displayed asking for confirmation of the deletion of the file.

Click **Delete File** to remove the file from the current Folder. The file is moved to the Trash Can as a result of this action.

Click **Cancel** to return without deleting the file.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen. This feature is disabled if source control is enabled during installation and a command is not defined for the `removeFile` configuration option.

## 4 Running Tests

**T**he previous chapter described defining Test Cases with ApTest Manager. This chapter describes using ApTest Manager for test execution. Click the Run icon on the ApTest Manager Menu Bar to get to this area of ApTest Manager.

Depending on a user's access level for a Test Suite the user may only be able to run Test Sessions but not modify Test Sets or Sessions, or may not have access to this area of ApTest Manager at all.

### 4.1 Test Sessions and Test Sets

Test execution in ApTest Manager revolves around Test Sets and Test Sessions.

A Test Set is a subset of the Test Cases in a Test Suite, selected by on a query based on characteristics of the tests. Any number of Test Sets can be created.

A Test Set may encompass an entire Test Case tree or a portion of the tests in the tree to address specific test objectives. For example a Test Set can be limited to tests from a specific folder, for a specific feature, for a type of test cycle, for a specific product version, etc.

A Test Set can be run as many times as desired in different test environments by creating Test Sessions for it.

A Test Session captures the results from running the tests in a Test Set. Sessions are the element on which most ApTest Manager reports are generated. Reports can be generated for projects comprised of lots of Test Sessions and results from different Sessions can be compared.

To execute tests:

- Create a Test Set; this identifies a set of Test Cases to be run (see Section 4.6).
- Create a Test Session; this is where test results will be stored (see Section 4.7).
- Execute the Test Session; this presents the Test Cases to the user so they can be performed and information entered into the Session about the results of execution (see Section 4.3).

### 4.1.1 Session Variables

Test Sessions have *Session Variable* values associated with them. Session Variables are used to specify characteristics of the test environment for a run of a set of tests. Examples of Session Variables are the OS, hardware, and software on which the Test Session is run. Session Variables may be configured to be menus or text fields.

Each Test Suite can have its own custom Session Variables and sets of values for Variable menus. Default Variable values may be defined for each Test Set and are inherited by its Test Sessions.

Session Variables can be used in defining reports, as described in Chapter 5, for instance to request a report on all the Sessions run on a particular OS or a particular hardware platform.

### 4.1.2 Test Execution Models

Over time, an organization will build up a repertoire of Test Sets for each Test Suite and when testing a new product release or configuration will use these standard Sets. This provides the organization with consistency in the tests run for different tasks: functional testing, unit testing, smoke testing, acceptance testing, etc. When a new release enters testing existing Sets can be updated to include new Test Cases added for that release.

Test Sessions on the other hand will often be created anew, for each time a Set of tests is run in a different test environment.

A Test Session may be worked on for some time; rerunning its Test Cases, all or in part. It may be desirable to use a new Test Session each time a new product version or configuration is tested. This allows the results and notes of each test campaign to be saved in different Sessions. Thus the results of previous test runs can be reviewed at any time and ApTest Manager can produce regression reports comparing the results of different Test Sessions for different releases.

The Test Set/Test Session paradigm is a powerful mechanism as a Set can have multiple Sessions and thus be used to group the results of running a collection of Test Cases in multiple test environments, and manipulate them as a unit.




Test Sets and the Test Sessions for them can be copied. This is useful for example to clone a group of Test Sessions from testing a previous product release as a starting point to test the next release, without the need to define all the Test Sessions and their test environments again. By copying the existing Test Sessions the project layout used in earlier projects is made available for the testing of a new release. The contents of a Test Set or Test Session can then be refreshed to add any new Test Cases created since the previous round of testing. See the *ApTest Manager Admin Guide* for details.

Report Generation (described in Chapter 5) allows reports to be requested for the Test Sessions associated with a Test Set, facilitating seeing the results of testing across various platforms.

## 4.2 Test Sessions

The Run Tests screen provides a table of Test Sessions.

Click a Test Session number to view information about the Session. Click one of the icons to the left of a Test Session number to work with the Session.

-  to run the Test Session (see Section 4.3).
-  to access the Test Session Summary (see Section 4.4).
-  to manage the Test Session (see Section 4.9).

To manage multiple Test Sessions click the check boxes for the Test Sessions, select an operation (delete, refresh, lock, unlock, clear results, or set session variables), and click **Go**.

Click a Test Session name to see information about it.

What columns of information are contained in this table is configurable. Fewer columns will make the table narrower which can improve performance.

An example Run Tests screen is shown in Figure 14.

### 4.2.1 Selecting Sessions

The table of Sessions on the Run Tests screen is itself a report that can provide valuable management information, for example all the Sessions assigned to a particular user that are not yet complete.

For each Session the table can show:

- The associated Test Set
- The name of the Session, number, and locked status of the Session
- The total number of tests and the number of unexecuted tests in the Session
- The date it was last executed
- The user that last executed it
- The users that have Test Cases assigned
- The Session description
- The values of its Session Variables

## RUNNING TESTS

**Run Tests**

Administer System: [Andy Silverman \(Administrator\)](#) [logout](#) Test Suite: [Andy\\_Webinar\\_Suite](#) [Suite Manager]

Administer Sets and Sessions | Filter Session Table | Show all Sessions | Compact Session Variables | Configure Session Table

To perform operations on multiple sessions, click their checkboxes and choose an operation: Lock Sessions Go

	#	Name	Test Set	Assigned To	Last Mod Date	Last Mod By	Tests	Not Run	Progress	Test Environment			
										browser	network	os	platform
<input type="checkbox"/>	[00102]	MacOS X NS 7	V2.1_Smoke	Sue Lake	Nov 23, 2005 12:41 PST	Sue Lake	44	6	86%	NS7	100baseT	Mac OS X	G3
<input type="checkbox"/>	[00094]	MacOS 9 IE 5	V2.1_Smoke	Sue Lake	Nov 23, 2005 12:41 PST	Sue Lake	44	0	100%	IE5	100baseT	Mac OS 9	G3
<input type="checkbox"/>	[0062]	MacOS 9 NS 4.79	V2.1_Integrate	Sue Lake	Nov 14, 2005 09:54 PST	Joe Rice	159	0	100%	NS4	100baseT	Mac OS 9	G3
<input type="checkbox"/>	[0053]	MacOS 9 IE 5	V2.1_Integrate	Sue Lake	Nov 11, 2005 09:54 PST	Sue Lake	159	0	100%	IE5	100baseT	Mac OS 9	G3
<input type="checkbox"/>	[0063]	MacOS X NS 7	V2.1_Integrate	Sue Lake	Nov 07, 2005 09:54 PST	Joe Rice	159	25	84%	NS7	100baseT	Mac OS X	G3

Optionally, you can use the following lists to filter the sessions presented in the table.

Test Sets	Assigned To	Properties	Last Mod By
<ul style="list-style-type: none"> <li>All Test Sets</li> <li>V2.03_Integrate</li> <li>V2.04_Integrate</li> <li>V2.1_Integrate</li> <li>V2.1_Smoke</li> </ul>	<ul style="list-style-type: none"> <li>All Users</li> <li>Al Lines</li> <li>Alan Reeson</li> <li>Albert Aronchik</li> <li>Alex Barnes</li> </ul>	Date: <span>All</span> Lock: <span>Unlocked</span> Run?: <span>All</span>	<ul style="list-style-type: none"> <li>All Users</li> <li>Al Lines</li> <li>Alan Reeson</li> <li>Albert Aronchik</li> <li>Alex Barnes</li> </ul>

Test Environment			
What operating system? (os)	<ul style="list-style-type: none"> <li>--Don't care--</li> <li>Windows 95</li> <li>Windows 98</li> <li>Windows ME</li> <li>Windows 2000</li> <li>Windows NT</li> </ul>	What browser? (browser)	<ul style="list-style-type: none"> <li>--Don't care--</li> <li>IE4</li> <li>IE5</li> <li>IE6</li> <li>NS4</li> <li>NS7</li> </ul>
What hardware? (platform)	<ul style="list-style-type: none"> <li>--Don't care--</li> <li>P1</li> <li>P11</li> <li>P111</li> <li>P4</li> <li>Sparc</li> </ul>	What network connection? (network)	<ul style="list-style-type: none"> <li>--Don't care--</li> <li>Dial-up</li> <li>10baseT</li> <li>100baseT</li> </ul>

Apply List Settings Save Settings

Copyright © 2000-2006 Applied Testing and Technology, Inc. All rights reserved.

Figure 14 - Run Tests screen

Session Selection fields located at the bottom of the screen control what Sessions are shown in the table:

- Test Sets – specify the Test Sets for which Test Sessions are shown.
- Dates – specify a time period during which the Test Sessions shown were executed.

## RUNNING TESTS

- Users – specify the ApTest Manager users who ran the Test Sessions shown.
- Locked – specify only locked or unlocked Test Sessions.
- Run- specify only completed, never run, or partially complete Test Sessions.
- Assigned users – specify only Test Sessions with Test Cases assigned to specific users are shown.
- Session Variables– a selection field is provided for each Session Variable that is marked as selectable. These fields present menus of values or fill in fields for text searches that specify which Test Sessions are shown based on their Variable values. Strings for text searches are case insensitive.

Click **Filter Session Table** to get to these fields.

The Test Sets, Users, and Session Variable fields for Session selection allow choosing multiple values from among those displayed. The keystrokes required to do this vary from browser to browser; consult the browser's documentation for details. Often the Shift and Control keys can be used to select specific values or ranges of values.

After changing Session selection fields click **Apply Selections**; the table of Sessions will be changed appropriately. Clicking **Show all Sessions** causes the table to show all a Suite's Test Sessions. Clicking **Compact Session Variables** limits how much information is displayed for a Session Variable to the first 32 characters of the first Variable value. A Variable whose value is not fully displayed will have a blue triangle appended to the information that is displayed. Placing the mouse over this blue triangle shows the entire value as a tool tip.

Values of the Session Selection fields, Report Type field, and the Session table's sort-by column can be saved by clicking **Save Settings**. These values will be applied when the Run Test screen is visited in the future, until different values are saved.

### 4.2.2 Sorting Sessions

The way the table of Sessions is sorted can be changed by clicking on one of the titles of the columns in the table. The table is resorted based on the title clicked. Clicking that title again reverses the sort order. An up (↑) or down (↓) arrow is displayed next to the header for the column on which the table is currently sorted. The Description and Session Variable columns are not used for sorting.

### 4.2.3 Assigning Test Cases to Users


Individual Test Cases within a Test Session may be assigned to one or more users. Assignments may also be defined for a Test Set; these become the default assignments for subsequently created Test Sessions for that Set.

## RUNNING TESTS

Test Case assignment tells testers the Test Cases in Test Sessions they are responsible for executing and allows managers to track what tasks each tester has accomplished and has remaining to complete.

- Through the Run Tests screen a user can elect to run only those Test Cases assigned to them in a Test Session. For some Test Suite access levels these may be the only tests the user can run in the Session.
- The Select Report screen can be configured so just those Sessions with Test Cases assigned to specific users are shown.
- In the User's Report the number of assigned Test Cases for each user is shown by Test Session broken down by those that have been run and those that remain to be run.
- Templated reports for Test Sessions can be configured so only those Test Cases assigned to specific users are included in the report.
- Which users have Test Cases assigned is shown for each Test Session on ApTest Manager reports, the Run Test screen, the View Test Session information screen, and the Select Report screen.

### 4.3 Running a Test Session

Click the **Run Session** icon  to the left of a Session in the table on the Run Tests screen to execute that Session. This involves presenting each of the tests in the Session so that it can be performed and a result and associated information entered.

Several options for how execution is to be performed are presented:

- One at a time or Many at a time: whether each Test Case should be presented on its own screen or a screen with multiple Test Cases should be shown.
- Test Cases are to be executed, based on their previous results in the Session. Test Cases with results of untested have not been run yet. Thus specifying untested will cause the Test Cases in the Test Session that have not been run to be presented. Specifying other results will rerun Test Cases that have been previously run with those results. This is useful for testing new drops for example.
- If just those Test Cases assigned to the current user are to be executed, rather than all the Test Cases.

For each Test Case shown, perform the test and then provide a result for its execution. Notes about executing the test as well as information for any Run Data Fields, such as Problem Reports that are created, may also be entered. Files, such as logs or screen shots may also be uploaded and associated with the execution of the Test Case in the Test Session. The order in which the Test Cases are presented is determined by how they have been arranged for the Test Session.

### 4.3.1 Running Test Cases One at a Time

When Test Cases are run one at a time they are each presented on a separate screen, shown in Figure 8. This screen is based on a template – the information that is displayed may have been configured specially for an installation, including the fields to enter information into.

Once a Test Case is performed and its result entered click **Send Result** to record the result and advance to the next Test Case in the Session. Click **Reset run info** to clear the contents of execution related fields. To not enter a result, click **Skip Test**. The result will retain its previous setting and no entry in the Test Case's notes will be made.

There is a link at the bottom of the page that enables editing the current Test Case if an error is noticed in the Test Case. This feature is available only to users with sufficient access.

### 4.3.2 Running Multiple Test Cases

When Test Cases are run many at a time several tests are presented on a common screen, shown in Figure 9, and results can be entered for one or many at once. The number of Test Cases presented per screen is determined by the user's pagination level setting. With the necessary permission this value can be changed by clicking on the Username on the Suite Bar. This screen is based on a template – the information that is displayed may have been configured specially for an installation, including the fields to enter information into.

The Run Multiple screen will usually be configured to show less information about each Test Case than is provided when they are run one at a time. It may thus be desirable to run Test Cases One at a time initially and Many at a time when rerunning them. One at a time and Many at a time execution may be mixed at will however.

Once the Test Cases on a screen have been performed and their results entered, click **Save Changes** to record the results and advance to the next screen of Test Cases in the Session. Move around within the screens using the Go to page/Next/Previous controls. When done with running tests, click **Finish**. Click **Reset run info** to clear the contents of execution related fields for a test.

### 4.3.3 Entering Notes

A field in which notes about what was encountered in performing a test is usually configured to be displayed for each test.

File references entered into the notes field are automatically turned into links. For example entering <http://www.aptest.com/file> will cause a link to that file to be inserted into the notes field.

ApTest Manager keeps track of each time the notes or result of a Test Case is changed and displays a history of this information in many of its reports and on the Run Test Case and Run Multiple Tests screens.

### 4.3.4 Creating Problem Reports

ApTest Manager can be configured to interface with a Problem Tracking system. If an installation has been configured to do this there will be a link labeled “Submit a Bug Report” for each Test Case run. Clicking this link invokes the Problem Tracking system and Problem Reports can be submitted, often with information prepopulated automatically by ApTest Manager.

### 4.3.5 Recording Problem Reports

The example configurations shipped while ApTest Manager include two Run Data Fields: IDs for Problem Report and Problem Report links.

The Problem Report ID Field is a text Field in which references to problem reports can be entered. These are generally names or numbers that reference PRs in the Problem Tracking system.

The Problem Report links Field is intended to contain links to PRs in the Problem Tracking system. If the Problem Tracking system is WWW based the link to a Problem Report can be copied from the browser and pasted into this Field. When this Field is shown in reports ApTest Manager will turn the pasted links into clickable links that will invoke the Problem Tracking system. This allows user to invoke the Problem Tracking system to view and modify PRs and to check their status. As many links as desired may be entered into this Field, separated by spaces.

The Status and Results reports as shipped with ApTest Manager include Problem Report information.

### 4.3.6 Uploading Files


Click **Upload File** to upload a file and associate it with a Test Case’s execution in the Test Session. For example a screen shot to illustrate a problem.

Enter the name of a local file to upload or click **Browse** to select the file by looking through the available files. Click **Upload file** to copy the file to the server.

Uploaded files are stored separately for each Test Case in the Test Session. Thus, files with the same name can be uploaded for different Test Cases.

A reference to the uploaded file is added to the notes Field for the Test Case, and a description of the file can be added by the user. The file reference is of the form atmResultFile:filename which will be expanded by ApTest Manager to a link to the uploaded file when the notes Field is displayed in reports. Clicking that link displays the file.

## 4.4 Using the Session Summary

Click the **Session Summary** icon  to the left of a Session in the table in the Run Tests screen to view the results of the Session with the Session Summary screen. The Session Summary also allows, for Sessions which are not locked, modification of the results of Test Cases by running them individually or updating their execution notes. This screen provides a "cherry picker" style interface for running a Session and a quick summary of the status of execution, as a supplement to the other two execution modes.

For each Test Case in the Test Session the Session Summary provides:

- the current result for the Test Case
- a log of each time the Test Case was run in this Session showing
  - the user that ran the test
  - the date and time it was run
  - the Test Case result
  - any comments that the user entered
- the ability to run the Test Case, modify its execution notes, and submit a bug report

### 4.4.1 Running a Test Case

Click **Run this test** next to a Test Case in the Test Session Summary to run (or re-run) the Test Case using the Run one at a time screen.

Click **Run from here** next to a Test Case in the Test Session Summary to run (or re-run) the Test Case and any subsequent Test Cases with results that match the results specified last time Test Cases were run using the Run one at a time screen.

### 4.4.2 Editing the Note for a Test Case

Click **Edit Note** for a Test Case in the Test Session Summary to add to the information in the notes for this Test Case for this Session. This will present the last note entered and allow creating a new note by modifying or replacing this text.

See **Uploading Files** in the preceding section for a description of the Upload File button on the Edit Note screen.

#### 4.4.3 Submitting a Bug Report

Click **Submit Bug** for a Test Case in the Test Session Summary to create a bug report in the Problem Tracking system for this Test Case for this Session.

#### 4.4.4 Viewing a Test Case



Click the name of a Test Case in the Test Session Summary to view the information for the Test Case without rerunning it.

### 4.5 Test Sets

Test Sets are administered from the Test Sets screen (reached from the Run Tests screen by clicking **Administer Sets and Sessions**).

Click **Define a new test set** to create a Test Set. The Define Test Set screen is displayed (Figure 15).

The Test Sets screen displays a table of all the Test Sets in the Suite that includes the number of Test Cases in each Set and the number of Sessions that have been created to run it. Display of locked Test Sets may be suppressed by clicking **Hide Locked Sets**.

- Click a Test Set name to see information about it.
- Click the **Manage Set** icon  for a Set in the table to make changes such as revising the Test Set's Test Case selection criteria. The Manage Test Set screen is displayed (see Section 4.8).
- Click the **Create Test Session** icon  to create a new Test Session to execute the Test Cases in a Test Set (See Section 4.7).
- To manage multiple Test Sets click the check boxes for the Test Sets, select an operation: delete, refresh, lock, unlock, or show details, and click **Go**.

### 4.6 Define a New Test Set

From the Test Set screen, click **Define a new test set**. Enter the name of the Test Set in the field provided and a brief description in the appropriate field.

The Test Cases contained in a Test Set are determined when it is created. New Test Cases that are created after the Test Set will not be included in it automatically. However the Test Set can be

## RUNNING TESTS

refreshed so that it contains new Test Cases meeting its selection criteria, as described in Refresh a Test Set (see Section 4.8.8).

The Test Cases in a Test Set are determined by specifying values for Test Case Fields. The Test Case Fields displayed on this screen are called Selectors. Selector Fields are identified as part of Test Case Field configuration (by setting the selectable flag for a Field) and the Fields displayed on this screen will thus vary from one Test Suite to another. A similar User Interface is used to specify the Test Cases to be covered by reports (see Section 5.2.2).

If no selector values are specified for a Field, that Field matches all Test Cases.

If no selector values are specified for any Fields, the Test Set contains all the Test Cases in the Test Suite.

The values specified for a selector and their significance depend on the type of Field:

- For a text Field specify a text string. The string must appear in the Field for a Test Case in order for it to be included in the Test Set. Strings may be case sensitive or case insensitive. Normal strings or Regular Expressions may be used.
  - To match any Test Cases where the Field has a value, use the Regular Expression “^.\$” (without the quotation marks).
  - To match any Test Cases where the Field is empty (has no value), use the Regular Expression “^\$” (without the quotation marks).
  - To match any Test Case where the Field contains one of several different strings, use the Regular Expression “string1|string2” (without the quotation marks).
- For a menu Field specify one or more values. A Test Case must have at least one of these values in the Field in order for it to be included in the Test Set. The special value – Empty – matches Test Cases with no value for the Field.
- For date, Creation Date, and Modification date Fields, specify a starting and ending date. A Test Case must have a value for the Field that falls between these dates in order for it to be included in the Test Set.
- For Fields that are lists of users specify one or more users. A Test Case must have one of these users in the Field in order for it to be included in the Test Set. For an Author Field pick one of more users who must have been the author of the Test Case. For a Modifying User Field pick one or more users who must have been the last user to modify a Test Case. The special value – Empty – will match Test Cases with no value for the Field.
- For the ID Field select one or more Folders from a list and/or specify a search string.

The ID Field search string will match any Test Case where the string appears in the selected Folder names or in the test name making up the ID of the Test Case.

To match on just Test Case names, and not Folder names, check the ID search string’s Regular Expression box and use the search string myString[^\]\*\$ (with the string to match replacing myString).

## R U N N I N G   T E S T S

If Folders are selected and a search string is specified the search string will only be applied to Test Cases within those Folders.

Normally selecting a Folder in the ID Field Folder list does NOT automatically select any child Folders (i.e. all the Folders in a hierarchy need to be selected individually). However the depth of the tree that is shown may be configured to a specific limit. Folders below the depth limit are selected if their parent Folder is selected.


A Test Case must have an ID that matches one of the selected Folders and/or the specified search string in order for it to be included in the Test Set.

Default values for the Session Variables for Test Sessions created for this Test Set may be defined. These values will be inherited as the default values for Variables for newly created Test Sessions. They may then be changed as desired.

Click **Create Test Set** to create the Test Set and return to the Test Set screen. Click **Cancel** to return to the Test Set screen without creating the Test Set.

Test Sets can also be created from within a Coverage Report (see Section 5.8.1) for collections of Test Cases based on how many times they were covered by a group of Test Sessions. For example, a Set of the tests which have never been covered, or only those tests which have already been covered.

### 4.7 Create a Test Session

Click the **Create New Session** icon  to the left of a Test Set in the Test Sets table on the Test Sets screen to display the Create Test Session screen. This screen allows a new Test Session to be created for the Test Set.

Enter a Test Session name in the field provided. Two or more Sessions may share the same name, since a unique numeric identifier is automatically assigned to each Session.

Optionally a description of the Test Session may be entered.

Select the values for the Session Variables for this Session, specifying the test environment in which its tests are run. These values will be associated with the Test Session and included in reports for it.

Click **Create Test Session** to create the new Test Session.

The Test Cases run by a Test Session are initially set to those in its Test Set. New Test Cases that are subsequently added to the Test Set will not be automatically added to existing Test Sessions. However an existing Test Session can be refreshed to match the current content of its Test Set (see Section 4.9.11).

When a Test Session is created it inherits its Test Case ordering and assignments from its Test Set. The execution order and assignments for tests in a Test Session can be changed after it is created.

## RUNNING TESTS

Define Test Set - Mozilla Firefox
File Edit View Go Bookmarks Tools Help

Define Test Set
Edit Run Report Manage Select Help On
ApTest Manager

Administer System: Andy Silverman (Administrator) logout
Test Suite: Andy\_Webinar\_Suite [Suite Manager]

Back to Run Tests → Test Sets

Through this screen you can select a subset of the Test Cases in a Test Suite, collecting them into a Test Set.

What is the name for this Test Set?

How should this Test Set be described?

Format -- Font family -- Font size --
B I U ABC x, x'

### Test Case Selectors

You may specify values for the following fields in a Test Case to determine what Test Cases will be included in the Test Set. You may specify one or more values for menus, enter literal strings for text fields, and specify date ranges for date fields.

The selections you make are applied using the following simple rule. In order for a Test Case to be included in the Test Set, it must match one or more of the selections you make within a field (logical OR within a field), and must have at least one match in each of the fields for which you make a selection (logical AND between fields). Fields for which you do not specify a value will match every Test Case. Thus, specifying no values will match all Test Cases.

Description	Selections	Description	Selections
ID	<input type="text"/> <input type="checkbox"/> Case Sensitive? <input type="checkbox"/> Regular Expression?	Test Cycles	<input type="text"/> <input type="checkbox"/> Case Sensitive? <input type="checkbox"/> Regular Expression?
Product Versions	<input type="text"/> <input type="checkbox"/> Case Sensitive? <input type="checkbox"/> Regular Expression?	Priority	<input type="text"/> <input type="checkbox"/> Case Sensitive? <input type="checkbox"/> Regular Expression?
Features Tested	<input type="text"/> <input type="checkbox"/> Case Sensitive? <input type="checkbox"/> Regular Expression?	Requirements	<input type="text"/> <input type="checkbox"/> Case Sensitive? <input type="checkbox"/> Regular Expression?
		Test Procedure	<input type="text"/> <input type="checkbox"/> Case Sensitive? <input type="checkbox"/> Regular Expression?

### Test Session Variables

You may also define default values for the following Test Session Variables. These defaults will be inherited by Test Sessions created for this Test Set. They may then be modified for each Session.

Test Environment			
What operating system? (os)	Windows XP	What browser? (browser)	IE6
What hardware? (platform)	P4	What network connection? (network)	100baseT

Create test set Cancel

Copyright © 2000-2006 Applied Testing and Technology, Inc. All rights reserved.

Figure 15 - Define Test Set screen

## 4.8 Manage a Test Set

From the Manage Test Set screen, a user can:

- **Change the Test Set name/options.** Make changes to the current Test Set name, its description, its selectors, and its Session Variable defaults.
- **Delete the Test Set.** Remove the Test Set and the associated Test Sessions.
- **Copy the Test Set.** Create a copy of the Test Set with a new name. The copy can then be edited to have different option selections from those of the original.
- **Change the order of the Test Set.** Specify the default arrangement of Test Cases for subsequently created Test Sessions for the Test Set.
- **Lock or unlock the Test Set.** A locked Test Set cannot have its option settings altered and cannot be deleted unless it is first unlocked. The unlock option is only available for Test Sets that are locked.
- **Refresh the Test Set.** Reapply the Test Set's selectors Field values to the current Test Cases in the Test Suite.
- **Assign the Test Set.** Specify the default Test Case assignments for subsequently created Test Sessions for the Test Set.

### 4.8.1 Change Test Set Settings

Click the **Change the Test Set name/options** link from the Manage Test Set screen to display the Change Test Set Settings screen. Enter a new Test Set name and description, change the selector Field values, or change the Test Session Variable defaults, and click **Change settings** to make the changes.

### 4.8.2 Delete a Test Set

Click the **Delete the Test Set** link from the Manage Test Set screen to remove the current Test Set and all its associated Test Sessions. A confirmation window is displayed. Please exercise caution to not delete a Test Set that may be important. ApTest Manager allows individual Test Sets to be locked to avoid accidental deletion of Test.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen.

### 4.8.3 Copy a Test Set

Click the **Copy the Test Set** link from the Manage Test Set screen to copy the Test Set. Provide a name for the new Test Set.

Several options are provided for copying the Test Set that control what Test Session information is copied.

Click **Copy** to create the copied Test Set.

### 4.8.4 Rearrange a Test Set

Test Cases in a Test Set are initially ordered alphabetically. Click the **Arrange the tests in the set** link from the Manage Test Set screen to reorder Test Cases, delete Test Cases, and sort Test Cases in different ways.

Any Test Sessions created subsequently for this Set will inherit this new arrangement. It will not be applied automatically to existing Test Sessions.

The Arrange Test Set screen presents a list of all the Test Cases in the Test Set and allows their ordering to be changed. Move, sort, and delete Test Cases as many times as necessary until the desired order is achieved. Click **Try Changes** to apply a set of changes. Click **Finished** when done to commit all the changes made, or they will be lost.

Clicking the Delete check box next to a Test Case will remove it from the Test Set. However a deleted Test Case can be restored to the Test Set later if desired.

To move one or more Test Cases:

- Click the check boxes for the Test Cases to be moved
- At the top of the screen, select which Test Case number to move them before or after
- Click **Try Changes**

To sort Test Cases follow these steps, specifying the criteria by which they are to be sorted at the top of the screen. Test Cases can be moved and sorted at the same time.

For each Test Case this screen shows the values of each of the selector Fields that is a menu or author Field. Clicking on selector value for a Test Case which is not currently selected will select all the Test Cases with that selector value. Clicking a selector value for a Test Case which is currently selected will deselect all the Test Cases with that selector value. Select or deselect Test Cases individually by clicking their select checkboxes, or select/deselect all Test Cases by clicking the top select checkbox.

Don't forget, click **Finished** when done making changes or they will be lost.

### 4.8.5 Assign a Test Set

Click the **Assign the Test Set** link from the Manage Test Set screen to assign the Test Cases in the Test Set to users and assign values to Run Data Fields. Test Sessions created subsequently for this Set will inherit these assignments. They will not be applied automatically to existing Test Sessions.

A single user or multiple users may be assigned for each Test Case and either single or multiple values for a Run Data Field may be set depending on the Field type.

For each Test Case this screen shows the values of the current assignees, those Run Data Fields with the settable flag set, as well as each Test Case selector Field of type menu. Clicking a value for a Test Case which is not currently selected will select all the Test Cases with that value. Clicking a value for a Test Case which is currently selected will deselect all the Test Cases with that value. Select or deselect Test Cases individually by clicking their select checkboxes, or select/deselect all Test Cases by clicking the top select checkbox.

Select a value or values in one of the menus of values and click **Set Assignments** to set those values in the selected tests. If no values are selected, or –Clear values – is selected for a single select menu Field, the Field is cleared. Set Assignments as many times as needed to assign different tests in a set to different users and assign different Run Data Field values.

Click **Finish** when done to commit all the changes made, or they will be lost.

### 4.8.6 Lock a Test Set

Click the **Lock the Test Set** link from the Manage Test Set screen to lock the current Test Set so that it may not have its settings changed or be deleted. When a Test Set is locked the only choices that appear in the Manage Test Set screen for it are those to copy the Set and, if the user has a sufficient level of access, to unlock it.

### 4.8.7 Unlock a Test Set

If a Test Set is locked a link is provided to unlock it. Click the **Unlock the Test Set** link from the Manage Test Set screen to unlock the current Test Set so that it may again have its settings changed and be deleted.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen.

#### 4.8.8 Refresh a Test Set

Click the **Refresh the Test Set contents** link from the Manage Test Set screen to reevaluate the selector Field values for the Test Set against the current tree of Test Cases for the Test Suite. Any additional Test Cases that match the selectors will be added to the Set and any Test Cases that have been deleted will be removed. New Test Cases will be added at the beginning of the Test Set. Thus it may be desirable to rearrange the Test Set after refreshing it.

This operation is useful after copying a Test Set to update it to include new Test Cases. Optionally all the current Test Sessions for this Test Set may be refreshed as well.

### 4.9 Manage a Test Session

From the Manage Test Session screen, a user can:

- Click **Change the test session name/description** to rename the Session.
- Click **Change the test session variables** to modify the Session's Variable values.
- Click **Delete the test session** to delete the Session.
- Click **Clear the test session results** to clear the Test Session's results. Note that clearing the results removes *all* information captured during previous runs of this Session.
- Click **Copy the test session** to copy the Test Session configuration.
- Click **Import results into the session** to bring data into the Test Session from a CSV file.
- Click **Arrange the tests in the session** to rearrange the Test Cases in the Test Session.
- Click **Assign the tests in the session** to assign each Test Case in the Test Session to one or more users and assign values to settable Run Data Fields.
- Click **Lock (or Unlock) the test session** to lock (or unlock) the Session. Once a Session has been locked, only the Copy and Unlock options are available.
- Click **Refresh the test session contents** to update the Test Cases in the Test Session from its Test Set.

#### 4.9.1 Change a Test Session's Name

Click the **Change the test session name/description** link from the Manage Test Session screen to display the Change Test Session Name/Description screen. Enter a new Session name or description in the fields provided and click **Update** to make the changes.

### 4.9.2 Change a Test Session's Variables

Click the **Change the test session variables** link from the Manage Test Session screen to display the Change Test Session Variables screen. Enter new Variable values using the fields provided and click **Change Variables** to make the change.

### 4.9.3 Delete a Test Session

Click the **Delete the test session** link from the Manage Test Session screen to remove the current Test Session. A confirmation window is displayed. Please exercise caution so as not to delete a Test Session that may be important. ApTest Manager allows individual Sessions to be locked to avoid accidental deletion.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen.

### 4.9.4 Clear a Test Session's Results

Click the **Clear the test session results** link from the Manage Test Session screen to clear all execution data from the current Test Session. A confirmation window is displayed. Please exercise caution to not to clear important information. ApTest Manager allows individual Sessions to be locked to avoid accidental clearing of information.

### 4.9.5 Copy a Test Session

Click the **Copy the test session** link from the Manage Test Session screen to copy the Test Session. The Test Session's results may optionally be copied to the new Session. A different name may be specified for the new Test Session. Some may find it unnecessary to rename the Test Session and will elect to retain the original name, since a unique identifier is automatically assigned to distinguish the copy from the original Session.

### 4.9.6 Import Information into a Test Session

Click the **Import results into the session** link from the Manage Test Session screen to import information into the Test Session from a local Comma Separated Values (CSV) file. Results, execution times, and execution notes for any or all of the Test Cases in the Session may be specified in this file. The CSV file must contain at least the following fields:

ID	the name of a Test Case that is in the Session.
----	---

## R U N N I N G   T E S T S

RESULT	the result of executing the test. This must be one of the results defined for the Suite.
NOTES	Notes about the execution of the test.

It can also contain the following fields:

STAFFTIME	The amount of time it took to run the Test Case (only useful if the Test Suite's Test Case Fields includes a <code>plannedtimestaff</code> Field). Time values must be specified in units of minutes. Integer (e.g. 2) or real (e.g. 2.5) values are supported.
CLOCKTIME	The amount of time it took to run the Test Case (only useful if the Test Suite's Test Case Fields includes a <code>plannedtimeclock</code> Field). Time values must be specified in units of minutes. Integer (e.g. 2) or real (e.g. 2.5) values are supported.

In addition, it can contain any fields in the Suite's Run Data definition, for example:

ATM_PRID	The problem report ID for the test
ATM_PRLINK	A link to the problem report in a bug-tracking system

Any fields that do not match the Run Data definition, or one of the special fields listed above, are ignored. The first line of the file must be the field names.

An example CSV file might look like:

```
ID,RESULT,NOTES,ATM_PRID
mytestcase,pass,"some notes about this test case",42
myothertestcase,fail,"another test case with notes",43
```

This option may be used to import the results of running automated tests into ApTest Manager. To import results from an external program, the script `ATM_ROOT/bin/importResults` may be used. See the script's internal documentation for details.

### 4.9.7 Rearrange a Test Session

The order of Test Cases within a Test Session is copied from its Test Set when the Session is created but may be modified later. Click the **Arrange the tests in the session** link from the Manage Test Session screen to reorder Test Cases, delete Test Cases, and sort Test Cases in different ways.

The Arrange Test Session screen presents a list of all the Test Cases in the Test Session and allows their ordering to be changed. Test Cases can be moved, sorted, and deleted as many times as

## R U N N I N G   T E S T S

needed until the desired order is achieved. Click **Try Changes** to apply a set of changes to the current order. Click **Finished** when done to save changes, otherwise they will be lost.

Clicking the Delete check box next to a Test Case will remove it from the Test Session.

To move one or more Test Cases,

- Click the check boxes for the Test Cases to be moved
- At the top of the screen, select the Test Case number to move them before or after
- Click **Try Changes**

To sort Test Cases follow these steps and at the top of the screen specify the criteria by which they are to be sorted. Test Cases can be moved and sorted at the same time.

For each Test Case this screen shows the values of each of the Test Case selector Fields that is a menu or author Field. Clicking on a value for a Test Case which is not currently selected will select all the Test Cases with that value. Clicking a value for a Test Case which is currently selected will deselect all the Test Cases with that value. Select or deselect Test Cases individually by clicking their select checkboxes, or select/deselect all Test Cases by clicking the top select checkbox.

Don't forget, click **Finished** when done making changes, or they will be lost.

### 4.9.8 Assign a Test Session

The assignments for a Test Session are copied from its Test Set when the Session is created but may be modified later. Click the **Assign the test session** link from the Manage Test Session screen to alter the assignments of Test Cases in the Session to users and values to Run Data Fields. A single user or multiple users may be assigned for each Test Case and either single or multiple values for a Run Data Field may be set depending on the Field type.

For each Test Case this screen shows the values of the current assignees, those Run Data Fields with the settable flag set, as well as Test Case selector Fields of type menu. Clicking on a value for a Test Case which is not currently selected will select all the Test Cases with that value. Clicking a value for a Test Case which is currently selected will deselect all the Test Cases with that value. Select or deselect Test Cases individually by clicking their select checkboxes, or select/deselect all Test Cases by clicking the top select checkbox.

Select a value or values in one of the menus of values and click **Set Assignments** to set those values in the selected tests. If no values are selected, or –Clear values – is selected for a single select menu Field, the Field is cleared. **Set Assignments** as many times as needed to assign different tests in a Session to different users and set different Run Data values.

When all changes are made click **Finished**. Don't forget, as changes will not actually be applied to the Test Session until **Finished** is clicked.

## R U N N I N G   T E S T S

An example application of assigning Run Data Field values is setting the priority of Test Cases on a per Session basis. Define a Run Data menu Field for test priority, marking it as settable and readonly, and include it in the Test Case Execution templates. Then use this screen to assign a priority value to each Test Case. The user running the Session will see the assigned priority value for each Test Case executed. This value may be assigned differently from one Test Session to another for the same Test Case.

### 4.9.9 Lock a Test Session

Click the **Lock the test session** link from the Manage Test Session screen to lock the current Test Session so that it may not be run, deleted, or changed. When a Test Session is locked, the only choices that appear in the Manage Test Session screen for it are those to copy the Session and, if the user has a sufficient level of access, to unlock it. On the Run Tests screen the Run icon for a locked Session is replaced with a lock icon.

### 4.9.10 Unlock a Test Session

If a Test Session is locked, click the **Unlock the test session** link from the Manage Test Session screen to it so it may again be run, deleted, and changed.

This feature may be restricted to users with administrative privilege through the Manage System Configuration screen.

### 4.9.11 Refresh a Test Session

Click the **Refresh the test session contents** link from the Manage Test Session screen to update the Test Cases contained in the Test Session to match those of its Test Set.

This can be useful if the Test Set has been changed since the Test Session was created.

The order of the Test Cases in the Test Session will not be changed and Test Cases deleted from the Test Session will remain deleted. New Test Cases added to the Test Session are added at the beginning of the Test Session. Thus it may be desirable to rearrange the Test Session after refreshing it.

## 5 Viewing Reports

**A**pTest Manager provides real-time access to reports on test campaigns. Information about test definitions, the results of running tests, testing progress, etc. can be retrieved and viewed with a browser from any location.

### 5.1 Requesting a Report

The Select Reports screen shown in Figure 10 is used to generate a report. Select Reports provides a table of Test Sessions that may be reported on and a list of the reports available. To request a report:

1. Select the report to be generated from the Report Type list.
2. Click the checkbox to the left of a Test Session in the table of Sessions to report on that Session. For a Regression Report click the boxes for two or more Sessions. For a Progress, Coverage, or User Report, click the boxes for one or more Sessions.
3. Click **Generate Report**.

#### 5.1.1 Available Reports

A variety of reports are available to choose from.

- Progress Report – Shows the status of testing for all or part of a testing project
- Users Report – Shows work performed by specific users for a project
- Coverage Report – Shows how much test coverage has been achieved.
- Regression Report – Compares the results of multiple executions of a set of tests
- Templated Reports - Any number of report templates may be defined for reports that cover a single Session. These templates specify the Fields that are shown in the report and how they are presented (e.g. as a spreadsheet, a series of tables, etc.). Each report

template has a unique name, such as the Test Specification report, Test Requirements report, Test Results report, etc. Templated reports are included in the Report Type list.

- Saved Settings – Each report has options available to customize its behavior: how results are sorted, which Test Cases to include, etc. An unlimited number of saved report settings can be defined and named. Saved report settings are included in the Report Type list. Selecting a saved setting from the list thus allows that report configuration to be generated with just a click.

### 5.1.2 Selecting Sessions

The table of Sessions on the Select Reports screen is itself a report that can provide valuable management information, for example all the Sessions run by a particular user during the last month.

For each Session the table can show:

- The associated Test Set
- The name of the Session, number, and locked status of the Session
- The total number of tests and the number of unexecuted tests in the Session
- The date it was last executed
- The user that last executed it
- The users that have Test Cases assigned
- The Session description
- The values of its Session Variables

Session Selection fields located at the bottom of the screen control what Sessions are shown in the table:

- Test Sets –specify the Test Sets for which Test Sessions are shown.
- Dates –specify a time period during which the Test Sessions shown were executed.
- Users –specify the ApTest Manager users who ran the Test Sessions shown.
- Locked –specify only locked or unlocked Test Sessions.
- Run- specify only completed, never run, or partially complete Test Sessions.
- Assigned users –specify only Test Sessions with Test Cases assigned to specific users are shown.

- Session Variables— a selection field is provided for each Session Variable that is marked as selectable. These fields present menus of values or fill in fields for text searches that specify which Test Sessions are shown based on their Variable values. Strings for text searches are case insensitive.

Click **Filter Session Table** to get to these fields.

The Test Sets, Users, and Session Variable fields for Session selection allow choosing multiple values from among those displayed. The keystrokes required to do this vary from browser to browser; consult the browser's documentation for details. Often the Shift and Control keys can be used to select specific values or ranges of values.

After changing Session selection fields click **Apply Selections**; the table of Sessions will be changed appropriately. Clicking **Show all Sessions** causes the table to show all a Suite's Test Sessions. Clicking **Compact Session Variables** limits how much information is displayed for a Session Variable to the first 32 characters of the first Variable value. A Variable whose value is not fully displayed will have a blue triangle appended to the information that is displayed. Placing the mouse over this blue triangle shows the entire value as a tool tip.

Values of the Session Selection fields, Report Type field, and the Session table's sort-by column can be saved by clicking **Save Settings**. These values will be applied when the Run Test screen is visited in the future, until different values are saved.

### 5.1.3 Sorting Sessions

The way the table of Sessions is sorted can be changed by clicking on one of the titles of the columns in the table. The table is resorted based on the title clicked. Clicking that title again reverses the sort order. An up (↑) or down (↓) arrow is displayed next to the header for the column on which the table is currently sorted. The Description and Session Variable columns are not used for sorting.

## 5.2 Customizing Reports

Each report offers a number of options for customizing it. Customization options can limit the tests the report applies to, suppress portions of the report, request the report be output in CSV format, etc.

Click **Generate** from the Select Reports screen to generate the selected Report Type. Click **Customize Report** to modify the settings for the report and either generate a report using them or save them (after picking a name for them). An unlimited number of saved settings may be created: private settings available just to the user that saved them and public settings available to all users of the Suite.

### 5.2.1 Saving Settings

When a Test Suite is created the Report Types available from the Select Report screen are defined by the Profile selected for it. As customized settings are saved for these reports their names are added to the Report Types list under the names of the reports they customize. For example, if two sets of custom settings for the Progress Report are saved, the list of report types would include the Progress Report and the two sets of Progress Report settings. Thus saved customized reports can be generated easily – the same way base reports are.

To modify a saved report setting, select it by name from the Report Type menu and click **Customize Report**. The saved settings are displayed and can be renamed, deleted, or modified.

If the settings of a base report (e.g. the Users Report or a Template report) are modified and saved without specifying a new name for these settings they are saved as private customized settings with the same name as the base report.

Settings for a base report cannot be deleted or renamed.

Settings may be private or public, and available to other users of the Test Suite. Users with Suite Manager access and ApTest Manager Administrators have access to all the private saved settings for users of a Test Suite by clicking **Show Other's Reports**.

### 5.2.2 Queries

For many reports, customization includes the ability to specify the Test Cases to be included in the report based on Field values. Test Case Fields or Run Data Fields, where applicable, may be queried.

An example of the interface for these queries is shown in Figure 16. The interface allows values to be specified that must appear in Test Case Fields in order for a Test Case to be included in the report. This powerful mechanism allows viewing reports on Test Cases based on a wide variety of criteria. A similar User Interface is used to specify the Test Cases in Test Sets (see Section 4.6).

If no values are specified for a Field, that Field will match all Test Cases. If no values are specified for any Fields, the report contains all the Test Cases in the Test Sessions on which it is reporting.

The values that can be specified for a Field and their significance depend on what type of Field it is:

- For a text Field specify a text string which must appear in the Field in order for a Test Case to be included in the report. Strings may be case insensitive or case sensitive. Normal strings or Regular Expressions may be used.
  - To match any Test Cases where the Field has a value, use the Regular Expression “^.+” (without the quotation marks).

- To match any Test Cases where the Field is empty (has no value), use the Regular Expression “^\$” (without the quotation marks).
- To match any Test Case where the Field contains one of several different strings, use the Regular Expression “string1|string2” (without the quotation marks).
- For a menu Field specify one or more values. A Test Case must have at least one of these values in the Field in order for it to be included in report. The special value – Empty – will match Test Cases with no value for the Field.
- For date Fields, Creation Date, and Modification date Fields, specify a starting and ending date. A Test Case must have a value for the Field that falls between these times in order for it to be included in the report.
- For Fields that are lists of users specify one or more users. A Test Case must have one of these users in the Field in order for it to be included in the report. For an Author Field pick one of more users who must have been the author of the Test Case. For a Modifying User Field pick one or more users who must have been the last user to modify a Test Case. The special value – Empty – will match Test Cases with no value for the Field.
- For the ID Field select one or more Folders from a list and/or specify a search string.

The ID Field search string will match any Test Case where the string appears in the selected Folder names or in the test name making up the ID of the Test Case.

To match on just Test Case names, and not Folder names, in the ID check the search string's Regular Expression box and use the search string myString[^\r]\*\$ (with the string to match replacing myString).

If Folders are selected and a search string is specified the search string will only be applied within those Folders.

Normally selecting a folder in the ID Field folder list does NOT automatically select any child folders (i.e. all the folders in a hierarchy need to be selected individually). However the depth of the tree that is shown may be configured to a specific limit. Folders below the depth limit are selected if their parent folder is selected.

### 5.2.3 Querying Problem Reports

One application of the query interface is to locate all the tests that had problem reports filed for them (i.e. for which Problem Report IDs were entered when they were run). This is done by entering the Regular Expression “^.+” (without the quotation marks) as the matching criterion for the Problem Report IDs Run Data Field. This will match any non-empty value, and thus select only those Test Cases for which a PR number was entered into the Field.

## **VIEWING REPORTS**

In a Test Results report this will display Test Case information including the PR IDs and the links to the problem reporting system for them. In a Progress Report the PR IDs are displayed. Click the link to the specific test result (a gray triangle in the Test Case Details table) to display the complete Test Case, including the PR links.

## VIEWING REPORTS

**Customize Progress Report 5 - Mozilla Firefox Beta 2**

File Edit View Go Bookmarks Tools Help

You may specify values for the following fields in a Test Case to determine what Test Cases will be included in this report. You may specify one or more values for menus, enter literal strings for text fields, and specify date ranges for date fields.

The selections you make are applied using the following simple rule. In order for a Test Case to be included in the report, it must match one or more of the selections you make within a field (logical OR within a field), and must have at least one match in each of the fields for which you make a selection (logical AND between fields). Fields for which you do not specify a value will match every Test Case. Thus, specifying no values will match all Test Cases.

Description	Selections	Description	Selections
ID	--Don't care-- / /ATM_Administration /Edit_Tests /Help /Log-in /Look_and_Feel /Manage_Suite /reports /Run_Tests /Select_Suite	Test Cycles	--Don't care-- Unit Integration System
Creation Date	Start: Don't Care End: Don't Care	Product Versions	--Don't care-- 2.10 2.05 2.04
Author	--Don't care-- Al Lines Alan Reeson Albert Aronchik Alex Barnes Ali Calisal Amir Malayeri Anders Larsen Andrew Rowe Andy Silverman Antonio Almeida Arnab Ghosh Ashok Kumar75 Ben Kariuki Ben Sandoval Bonnie Chan Brad Zehr Brian Rodgers Brijesh Jadav Bruce Gray	Requirements	<input type="text"/> Case Sensitive? <input type="checkbox"/> Regular Expression? <input type="checkbox"/>
Features Tested	--Don't care-- Reporting Installer Help_Screens	Preconditions and Setup	<input type="text"/> Case Sensitive? <input type="checkbox"/> Regular Expression? <input type="checkbox"/>
		Verification Procedure	<input type="text"/> Case Sensitive? <input type="checkbox"/> Regular Expression? <input type="checkbox"/>
		Test Procedure	<input type="text"/> Case Sensitive? <input type="checkbox"/> Regular Expression? <input type="checkbox"/>
		Planned Staff Time	--Don't care-- 2 5
		Link to File	<input type="text"/> Case Sensitive? <input type="checkbox"/> Regular Expression? <input type="checkbox"/>
		File Description	<input type="text"/> Case Sensitive? <input type="checkbox"/> Regular Expression? <input type="checkbox"/>
		Priority	--Don't care-- High Medium
		State	--Don't care-- 13 3

Figure 16 - Query Test Case Interface

## VIEWING REPORTS

### 5.2.4 Selector Summaries

For many reports optional tables can be included that summarize the Test Case results in the report based on the values of selector Fields. Sample tables are shown in Figure 17.

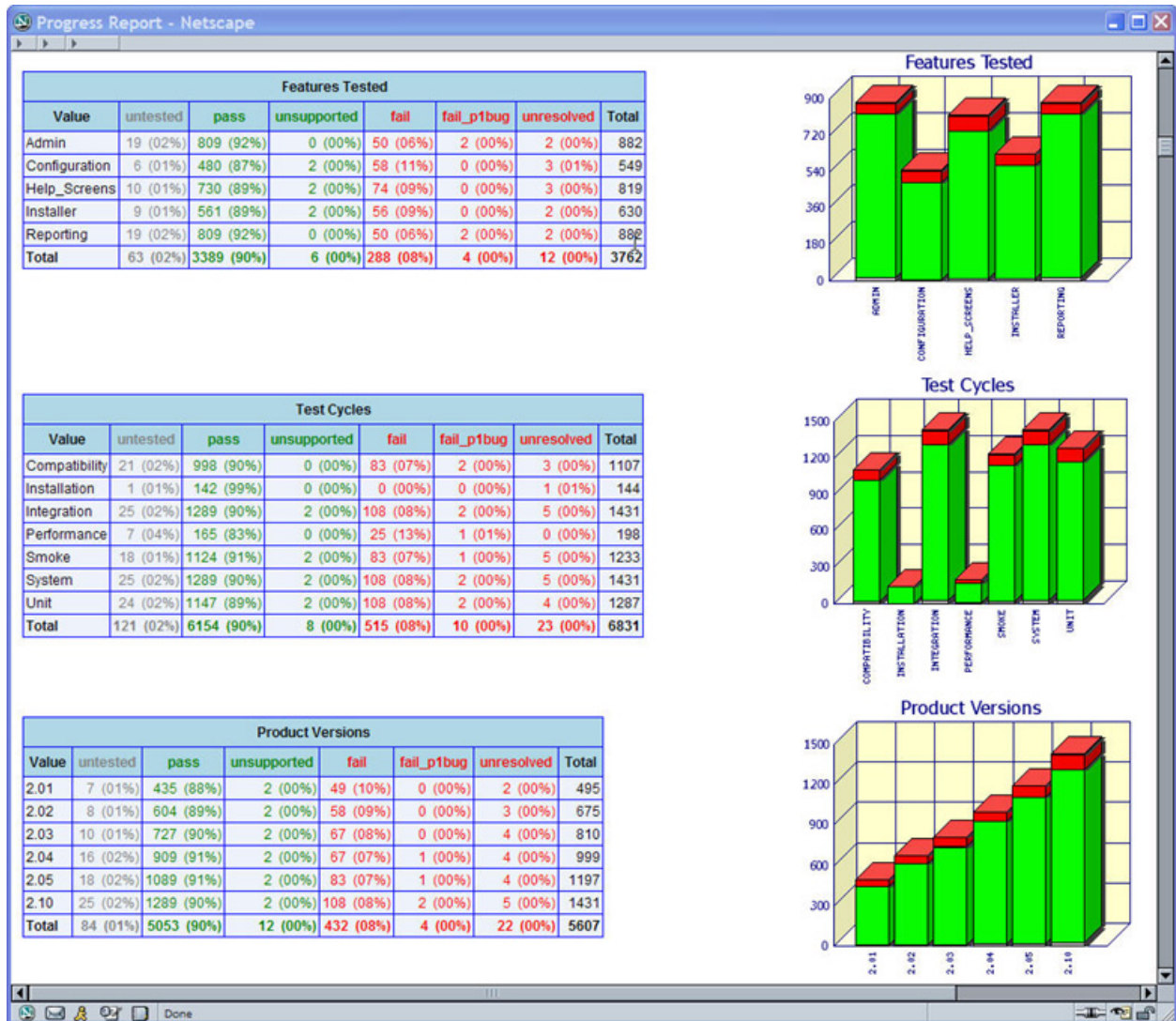


Figure 17 - Selector Summary Tables

### 5.2.5 Graphs

For many reports graphs may optionally be included.

### 5.2.6 Export in CSV Format

The Customize Report screen for Templated reports and the Regression report provide an option for the report to be produced as a Comma Separated Values (CSV) file. This will allow the report to be opened with applications such as the Excel spreadsheet for further processing. If the browser has an appropriate helper application configured for this format it should automatically open a CSV report.

To export Test Cases use a Templated report configured to contain those Fields to be exported.

### 5.2.7 Grouping by Fields

For many reports a Field can be specified to group Test Cases based on the values of the Field. An example of this feature is creating a Requirements Coverage Report that shows all the Test Cases that implement each value of a Requirements Field. An example Requirements Coverage Report is shown in Figure 18. When the grouping by Field setting is selected a table of contents is not displayed.

## 5.3 Saving, Bookmarking, and E-mailing Reports

There are two alternative ways an ApTest Manager report may be saved or emailed:

- Using a reference to the report: a bookmark or a link. Do this to see the current data each time the reference is viewed. For example; to get an updated status report for a project.
- Saving the report itself to a file. Do this to see the same data each time the report is viewed. For example, to get a daily status report for a project.

One way to save a report is printing it in PDF format. PDF creation software (such as PrimoPDF, a free PDF creator) must be available to print to. Printing colors may require setting up the browser. In Internet Explorer there is an option to print background colors in the Advanced tab of the Internet Options box. In Firefox this can be setup under Page Setup.

A report can also be saved as a web page. For example:

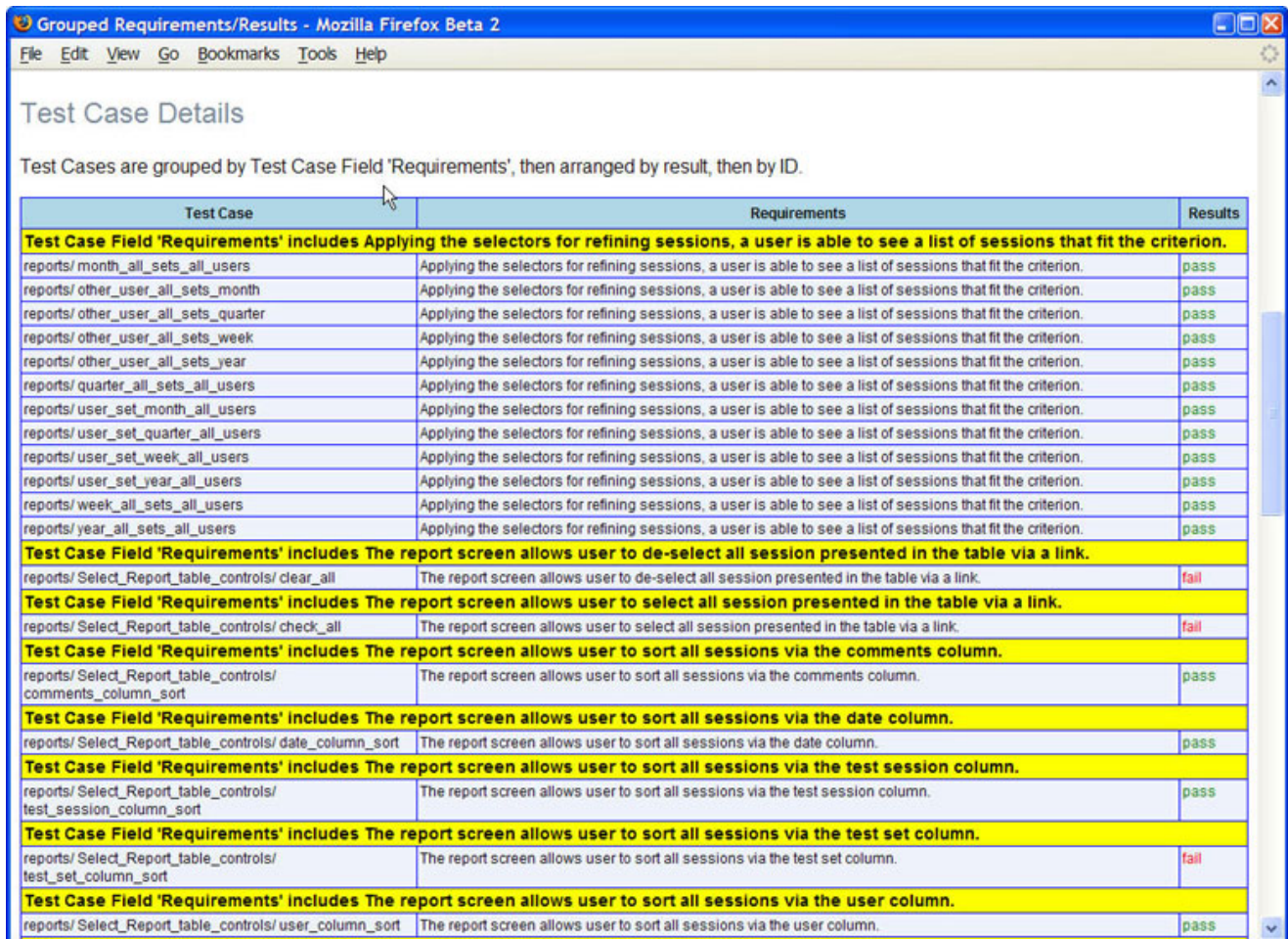
- With Internet Explorer select **Save As** from the File menu.
- With Firefox select **Save Page As** from the File Menu.

Both Internet Explorer and Firefox allow files to be saved as type `WebPage, complete`. This creates a static HTML file and a directory of associated images that can be recalled at any time by using a browser to open the file. These saved reports can also be emailed. When moving the saved report, remember to move the directory of images along with the HTML file.

## VIEWING REPORTS

Internet Explorer also allows files to be saved as type `Web Archive`, which includes the HTML and images in a single file. This file can be opened with Internet Explorer, but is not compatible with other browsers such as Firefox.

When a bookmark or link is accessed the report is retrieved anew from ApTest Manager. This requires logging in to ApTest Manager (which consumes a license seat). Unless links to ApTest Manager in the report are clicked viewing a saved report does not require logging in to ApTest Manager.



Test Case	Requirements	Results
<b>Test Case Field 'Requirements' includes Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.</b>		
reports/ month_all_sets_all_users	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ other_user_all_sets_month	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ other_user_all_sets_quarter	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ other_user_all_sets_week	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ other_user_all_sets_year	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ quarter_all_sets_all_users	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ user_set_month_all_users	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ user_set_quarter_all_users	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ user_set_week_all_users	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ user_set_year_all_users	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ week_all_sets_all_users	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
reports/ year_all_sets_all_users	Applying the selectors for refining sessions, a user is able to see a list of sessions that fit the criterion.	pass
<b>Test Case Field 'Requirements' includes The report screen allows user to de-select all session presented in the table via a link.</b>		
reports/ Select_Report_table_controls/ clear_all	The report screen allows user to de-select all session presented in the table via a link.	fail
<b>Test Case Field 'Requirements' includes The report screen allows user to select all session presented in the table via a link.</b>		
reports/ Select_Report_table_controls/ check_all	The report screen allows user to select all session presented in the table via a link.	fail
<b>Test Case Field 'Requirements' includes The report screen allows user to sort all sessions via the comments column.</b>		
reports/ Select_Report_table_controls/ comments_column_sort	The report screen allows user to sort all sessions via the comments column.	pass
<b>Test Case Field 'Requirements' includes The report screen allows user to sort all sessions via the date column.</b>		
reports/ Select_Report_table_controls/ date_column_sort	The report screen allows user to sort all sessions via the date column.	pass
<b>Test Case Field 'Requirements' includes The report screen allows user to sort all sessions via the test session column.</b>		
reports/ Select_Report_table_controls/ test_session_column_sort	The report screen allows user to sort all sessions via the test session column.	pass
<b>Test Case Field 'Requirements' includes The report screen allows user to sort all sessions via the test set column.</b>		
reports/ Select_Report_table_controls/ test_set_column_sort	The report screen allows user to sort all sessions via the test set column.	fail
<b>Test Case Field 'Requirements' includes The report screen allows user to sort all sessions via the user column.</b>		
reports/ Select_Report_table_controls/ user_column_sort	The report screen allows user to sort all sessions via the user column.	pass

Figure 18 - Test Requirements Coverage Report

## 5.4 Templated Reports

Templated Reports may apply to a single Test Session, in which case they may contain Test Session result information as well as Test Case Fields. Templated reports that do not include Test Session

related information may also apply to the Test Suite as a whole. These Templated reports will appear on the Edit Tests screen as well as on the Select Report screen.

Templated reports can be configured to display different Test Case Fields, for purposes such as a Test Requirements report or a Test Specification report, and information can be formatted in different ways, as a spreadsheet or a series of tables for example.

Several Templated reports are likely defined by the Profile used when a Test Suite was created. With a suitable level of access to a Suite, new templates can be created and existing templates can be modified, copied or deleted by clicking the Manage icon. See the *ApTest Manager Admin Guide* for details. The examples in this chapter show some of the standard definitions shipped with ApTest Manager.

These reports contain may be paginated, and thus be broken up into several screens. Otherwise a table of contents is first given which has hyperlinks to the information by Test Case. Click a link to move downward to the Test Case, or use the browser's scroll bar to navigate downward through the report.

### 5.4.1 Customizing Templated Reports

Using the Customize Report screen a Templated report can be customized in various ways, such as:

- The Test Cases in the Test Session to be included in the report. Values for any combination of Fields can be entered to query Test Cases for inclusion in the report.  
  
For example, to see a report on just those tests where Problem Reports were filed, enter “^.+” (without the quotation marks) into the Problem Report IDs string and click the Regular Expression checkbox (this will match any non empty Field value).
- If graphs are to be included.
- Whether an HTML or CSV (Comma Separated Values) format should be generated. If a CSV report is selected the browser should invoke an application such as Excel to view and further process the report information.
- If a Table of Contents should be generated. The Table of Contents provides links to the details of the tests in the report. If it is not selected just the test details are provided. The Table of Contents is not produced when a report is paginated (it is produced when a print version is requested).
- Whether tables and graphs summarizing the number of tests by selector values should be generated. Summaries may be generated for selector Fields of type Menu, ID, and Author.
- How the tests are sorted. Up to four different sort criteria and the order in which they are applied may be specified. If no sort order is specified the default order depends on where the report is generated. The order of Test Cases in the Test Case tree is used if the report is

generated from the Edit Tests screen. If the report is generated from the Select Reports page the order of tests in the selected Test Session is used.

### 5.4.2 Links to Templated Reports

Other reports link to Templated reports, via mechanisms such as gray triangles. In determining the template to use in these cases ApTest Manager will first look for a template named Test Results. If there is no such template it will look for any template containing results information. If no such template is defined an error will be reported.

## 5.5 Regression Report

The Regression Report shows differences in results between Test Cases in two or more Test Sessions.

The report provides comparisons of different test runs that are useful for purposes such regression analysis across different releases and comparing behavior of a product on different hardware/software platforms.

The Regression Report also links to reports for the Test Sessions and Test Cases it is reporting on, allowing easy access to more detailed information on specific tests and results.

- Click an underlined Test Session name to see a complete Templated report for that Session.
- Click a gray triangle in the Result Totals table to see a Templated report for all Test Cases with a particular result in a particular Session.
- Click a Test Case name in the `Results that are different` table or the `Results that are the same` table to view the Test Case.
- Click a gray triangle in the `Results that are different` table or the `Results that are the same` table to see a Templated report for a particular Test Case in a particular Session.

### 5.5.1 Customizing the Regression Report

Using the Customize Report screen a Regression Report can be customized in various ways, such as:

## **VIEWING REPORTS**

- Whether an HTML or CSV (Comma Separated Values) format should be generated. If a CSV report is selected the browser should invoke an application such as Excel to view and further process the report information.
- The results to be displayed.

A table of results that are different between the Test Sessions being compared is always shown.

A table of results that are the same across all these Sessions may also be shown and the test results that are shown can be selected. For example, a report showing Test Cases with results that were different in some Test Sessions along with those Test Cases that failed in all Sessions.

- How the results are sorted. Up to four different sort criteria and the order in which they are applied can be specified. For example tests sorted by result and then by Class of test within each result, or perhaps first sorted by Class and then by result within each Class.

## VIEWING REPORTS

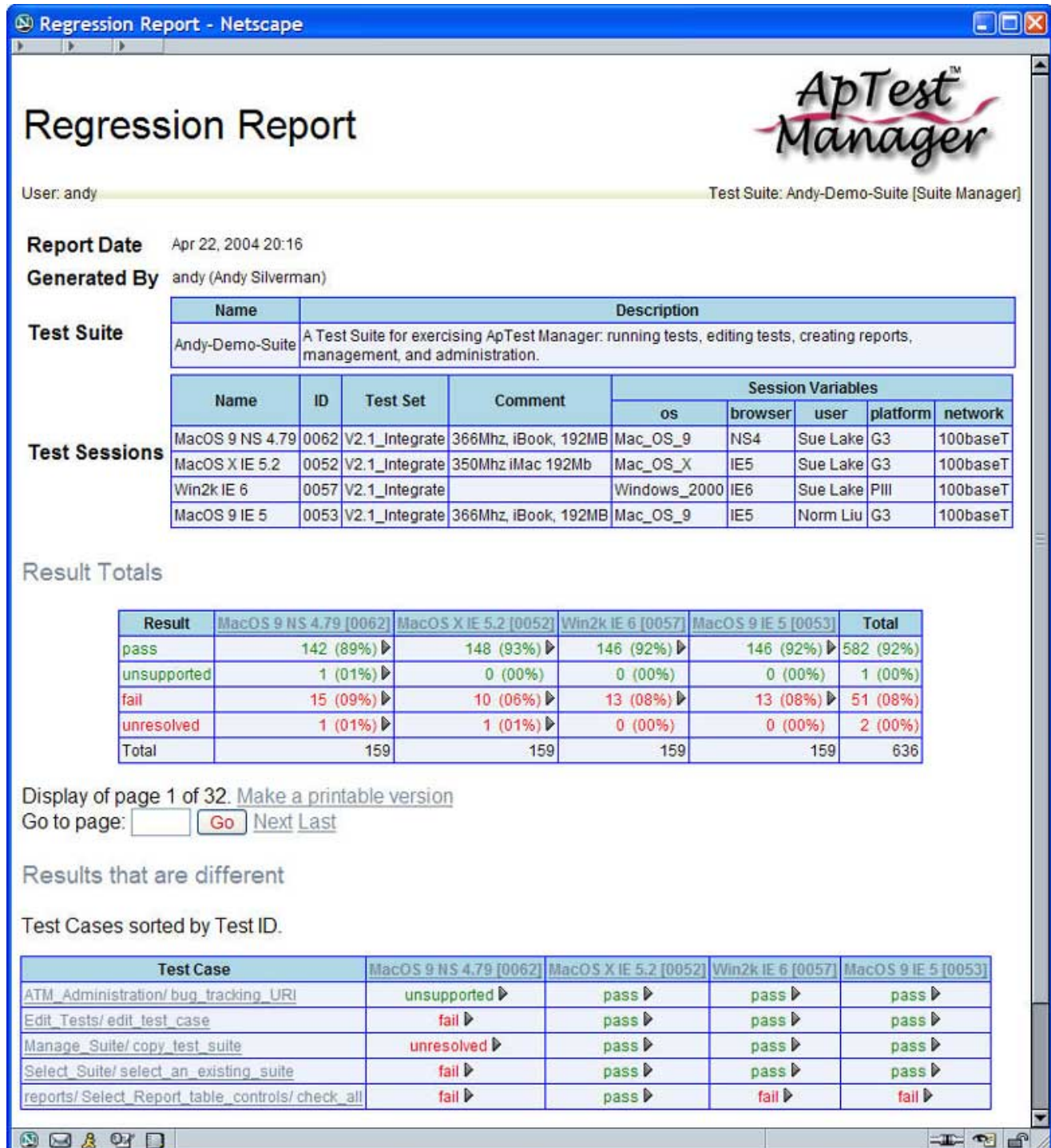


Figure 19 - Regression Report

## 5.6 Progress Report

The Progress Report provides a summary and several levels of detail about a test project composed of one or more Test Sessions. If all of a project's Sessions are included the report shows the status of the whole project. A report can also apply to any portion of a project, for example just covering a specific test environment or a specific test cycle.

Tables summarizing the results of the project by Test Sessions, Test Sets and the values of selector Fields can be included.

If Time Tracking is enabled for the Test Suite, the Progress Report also shows planned and actual execution times and the variance between planned and actual test schedules.

Details of the results of Test Cases across the Sessions in the report are also provided, showing

- Results
- Notes
- The user who executed the test and the execution date (for tests not yet run the assigned user is shown)
- The expected and actual execution time and any variance

The Progress Report also links to reports for the Test Cases and Test Sessions it is reporting on, allowing easy access to more detailed information on specific tests.

- Click an underlined Test Session name in the `Results by Session` table or the `Test Case Details` table to see a complete Templated report for that Session.
- Click a Test Case name in the `Test Case Details` table to View a particular Test Case.
- Click a gray triangle in the `Test Case Details` table to see a Templated report for a particular Test Case in a particular Session.

### 5.6.1 Customizing the Progress Report

Using the Customize Report screen a Progress Report can be customized in various ways, such as:

- If graphs are to be included.
- Whether tables summarizing the number of tests by selector values should be generated. Tables may be generated for selector Fields of type Menu, ID, and Author.

## VIEWING REPORTS

- Whether tables summarizing results by Set and Session, the Test Case Details table, and the Session Completion table should be generated and whether Session Variable information should be displayed.
- What results define the tests included in the Test Case Details section. By default details are shown for all Test Cases. Selecting one or more results limits the tests included in this section to just those with the specified result codes in one or more Sessions.
- How the tests in the Test Case Details section are sorted. Up to four different sort criteria and the order in what they are applied can be specified. For example tests sorted by result and then by Class of test within each result, or perhaps first sorted by Class and then by result within each Class.
- What Test Cases in the Test Sessions should be included in the report. Values for any combination of Fields can be entered to query Test Cases for inclusion in the report.

For example:

- To see a report on just those tests where Problem Reports were filed, enter “^.+” (without the quotation marks) into the Problem Report IDs string and click the Regular Expression checkbox (this will match any non empty Field value).
- To see a report for just those tests run during a period of time, use the calendar controls for Last Execution Time to specify the start and end dates of the period.

## VIEWING REPORTS

**Progress Report - Netscape**

**Test Case Details**

Information on Test Cases whose result is at least one session is one of the following:  
**fail, unresolved**

Test Cases sorted by Test ID.

Result	Test Session	Notes	Run		Staff Time		
			By	Date	Plan	Actual	Delta
<b>ATM_Administration/Change_existing_accounts/edit_user_address</b>							
fail ▶	MacOS X NS 7 [0063]	The new email address was not retained.	Joe Rice	Apr 18, 2003	5m	10m	5m
fail ▶	MacOS 9 NS 4.79 [0062]	The new email address was not retained.	Joe Rice	Apr 24, 2003	5m	10m	5m
fail ▶	MacOS X IE 5.2 [0052]	The new email address was not retained.	Sue Lake	Apr 24, 2003	5m	10m	5m
fail ▶	Win2k IE 6 [0057]	The new email address was not retained.	Joe Rice	Apr 22, 2003	5m	10m	5m
fail ▶	MacOS 9 IE 5 [0053]	The new email address was not retained.	Sue Lake	Apr 23, 2003	5m	10m	5m
<b>ATM_Administration/Change_existing_accounts/make_changes_to_existing_account_delete</b>							
fail ▶	MacOS X NS 7 [0063]	Received error message that account could not be deleted. Account was deleted anyway	Norm Liu	Apr 18, 2003	5m	10m	5m
fail ▶	MacOS 9 NS 4.79 [0062]	Received error message that account could not be deleted. Account was deleted anyway	Joe Rice	Apr 24, 2003	5m	10m	5m
fail ▶	MacOS X IE 5.2 [0052]	Received error message that account could not be deleted. Account was deleted anyway	Sue Lake	Apr 24, 2003	5m	10m	5m
fail ▶	Win2k IE 6 [0057]	Received error message that account could not be deleted. Account was deleted anyway	Joe Rice	Apr 22, 2003	5m	10m	5m
fail ▶	MacOS 9 IE 5 [0053]	Received error message that account could not be deleted. Account was deleted anyway	Sue Lake	Apr 23, 2003	5m	10m	5m
<b>Edit_Tests/edit_test_case</b>							
pass ▶	MacOS X NS 7 [0063]		Joe Rice	Apr 18, 2003	2m	2m	-
fail ▶	MacOS 9 NS 4.79 [0062]	Tertiary sort criteria was not applied.	Joe Rice	Apr 24, 2003	2m	2m	-
pass ▶	MacOS X IE 5.2 [0052]		Sue Lake	Apr 25, 2003	2m	2m	-
pass ▶	Win2k IE 6 [0057]		Norm Liu	Apr 22, 2003	2m	2m	-
pass ▶	MacOS 9 IE 5 [0053]		Sue Lake	Apr 22, 2003	2m	2m	-
<b>Edit_Tests/sync_suite_db</b>							
untested	MacOS X NS 7 [0063]		-	-	2m		
fail ▶	MacOS 9 NS 4.79 [0062]	Tests not recognized, database empty after running synchdb	Joe Rice	Apr 24, 2003	2m	2m	-
fail ▶	MacOS X IE 5.2 [0052]	Tests not recognized, database empty after running synchdb	Sue Lake	Apr 25, 2003	2m	2m	-
fail ▶	Win2k IE 6 [0057]	Tests not recognized, database empty after running synchdb	Norm Liu	Apr 22, 2003	2m	2m	-
fail ▶	MacOS 9 IE 5 [0053]	Tests not recognized, database empty after running synchdb	Sue Lake	Apr 22, 2003	2m	5m	3m
<b>Manage_Suite/copy_test_suite</b>							
pass ▶	MacOS X NS 7 [0063]		Joe Rice	Apr 18, 2003	2m	2m	-
unresolved ▶	MacOS 9 NS 4.79 [0062]	Could not create a new test suite for use in copying test.	Joe Rice	Apr 24, 2003	2m	2m	-
pass ▶	MacOS X IE 5.2 [0052]		Sue Lake	Apr 24, 2003	2m	2m	-
pass ▶	Win2k IE 6 [0057]		Joe Rice	Apr 22, 2003	2m	2m	-
pass ▶	MacOS 9 IE 5 [0053]		Sue Lake	Apr 23, 2003	2m	2m	-

Display of page 1 of 4. [Make a printable version](#)

Go to page:  [Go](#) [Next](#) [Last](#)

Copyright © 2000-2004 Applied Testing and Technology, Inc. All rights reserved.

Figure 20 - Progress Report – Result Details

## 5.7 Users Report

The Users Report reports the work performed on a project by one or more users for a test project composed of one or more Test Sessions. If all of a project's Sessions are included the report shows

## VIEWING REPORTS

the use productivity for the whole project. A report can also apply to any portion of a project's Test Sessions.

The report shows users' work by Session, result type, and date.

As well, if time tracking is enabled the planned and actual execution time for the Test Cases executed by the users is shown along with the variance between planned and actual schedules.

This report also shows the users that have been assigned to tests, both total assignments per user by Session and per Test Case assignments by Session. The assignment tables also link to reports for the Test Cases and Test Sessions it is reporting on, allowing easy access to more detailed information on specific tests.

- Click an underlined Test Session name in the Per Session User Assignment table or the Per Test Case User Assignment table to see a complete Templated report for that Session.
- Click a Test Case name in the Per Test Case User Assignment table to View a particular Test Case.
- Click a gray triangle in the Per Test Case User Assignment table to see a Templated report for a particular Test Case in a particular Test Session.

### 5.7.1 Customizing the Users Report

Using the Customize Report screen a Users Report can be customized in various ways, such as:

- What users to report on.
- What time period to report on.

If All Dates is selected the report will cover the period from the earliest date that Test Cases were executed to the latest date that Test Cases were executed, for the specified Sessions.

If a fixed time period is selected the report will cover that many days from the date the report is generated.

If a range of dates is specified the report will cover that date range.

A report that covers 30 days or less will show information for each day in the period covered.

A report that covers more than 30 days will show information for each week in the period covered.

- If graphs are to be included.

## VIEWING REPORTS

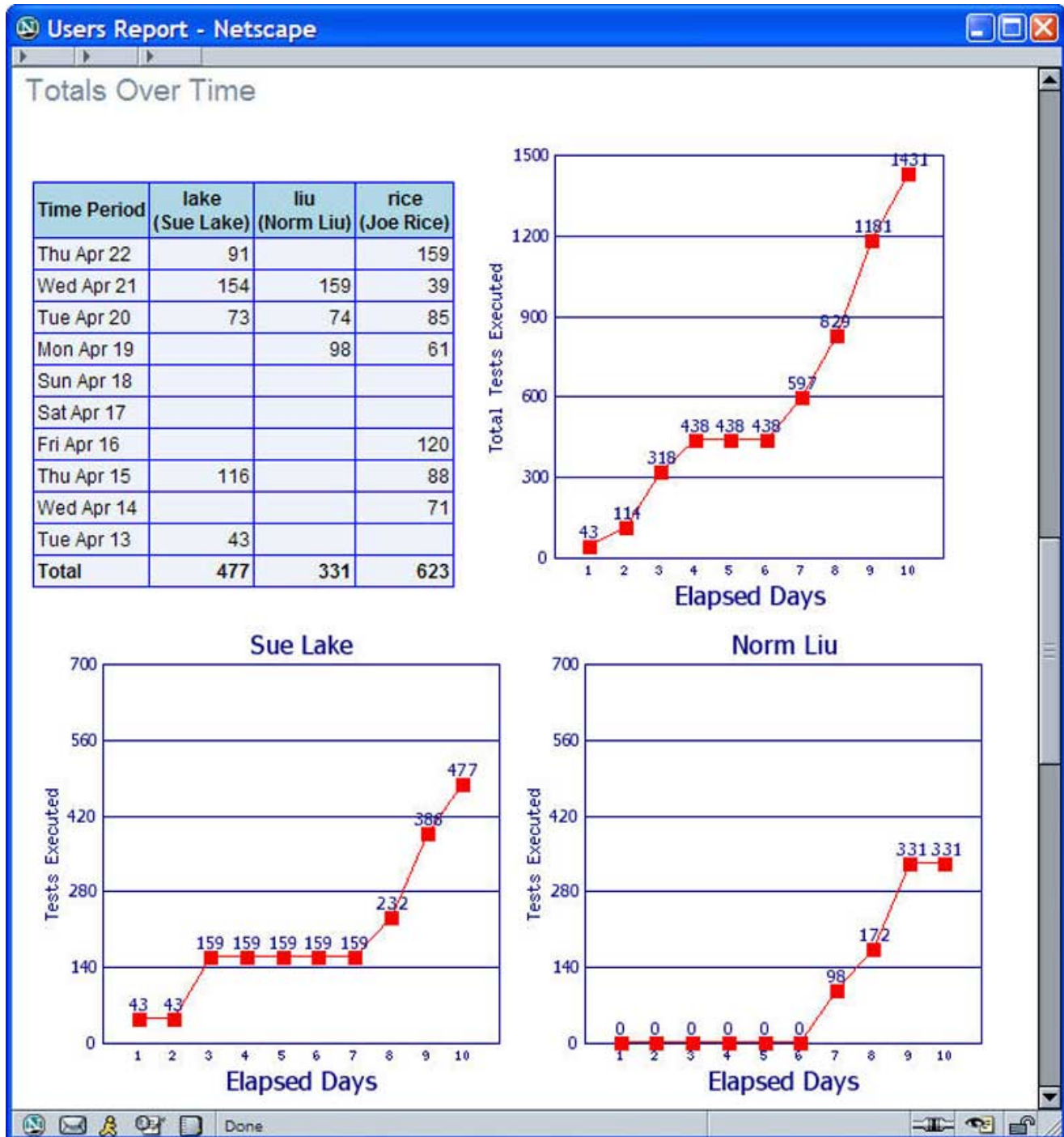


Figure 21 - Users Report

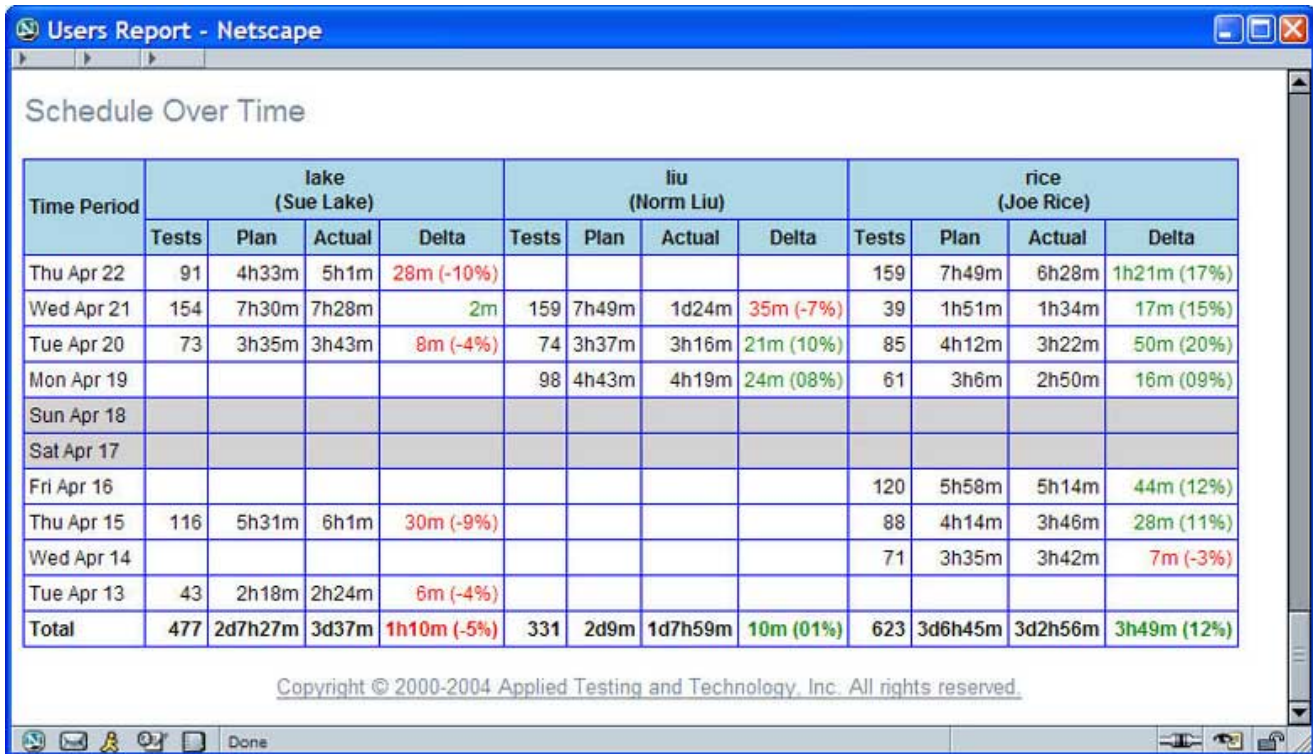


Figure 22 - Users Report – Result Details

## 5.8 Coverage Report

The Coverage Report shows the extent to which a group of Test Sessions has covered a group of Test Cases. The number of times each Test Case has been executed in these Test Sessions is shown along with a color coded representation of their results in each Session. Click a colored square to see a Templated report for a particular Test Case in a particular Session.

A white result for a Session indicates a Test Case is not contained in that Test Session. If you run a Coverage Report on one or more Sessions from one or more Sets, tests that have an entire row of white squares are not contained in any of the Sessions and hence are not contained in any of the Sets.

### 5.8.1 Creating Coverage Test Sets

Click **Create Set** to create a Test Set of Test Cases from the Coverage Report based on how many times they have been executed. For example just Test Cases that have never been executed or only those which have been executed already. This can be useful to run tests to fill in gaps in test

coverage, or to produce reports on just those tests which have been run as part of the test campaign to date. Note these Sets and Test Sessions derived from them will revert to selecting all the Test Cases in the current Test Suite if they are refreshed.

### 5.8.2 Customizing the Coverage Report

Using the Customize Report screen a Coverage Report can be customized in various ways, such as:

- Whether to report on coverage for the entire Test Suite, or for one or more Test Sets
- How to sort the results
- Whether to show coverage by result or by the values of a Session Variable (for Variables of type single or multi-select menu which are not hidden)

## VIEWING REPORTS

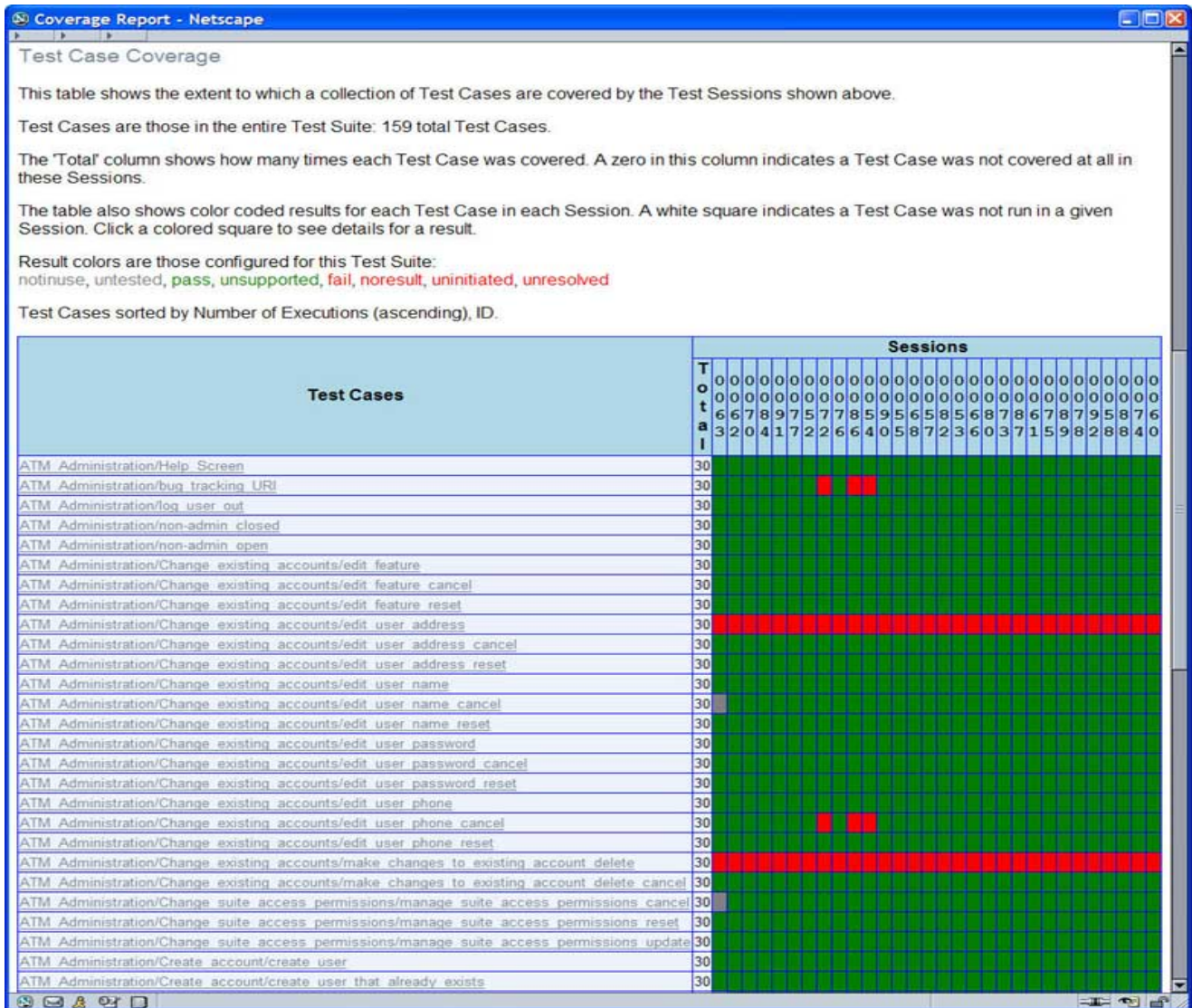


Figure 23 - Coverage Report

## INDEX

AtmResultFile .....	4-8	customizing .....	5-3
Backup .....	2-4	digitally signed .....	2-13
Browser requirements .....	2-1	export to CSV .....	5-9
Bug Tracking .....	1-3	grouping by field .....	5-9
CFR 21 .....	2-13	queries .....	5-4
Comma Separated Values (CSV)		requirements coverage .....	5-9
export to .....	5-9	Requirements Coverage Report .....	5-9
import from .....	4-18	Session Variables .....	1-6, 4-2, 4-12
Email notifications .....	2-3	coverage .....	5-21
Error messages .....	2-2	reference .....	3-16
Export		Skip Test .....	4-7
CSV .....	5-9	Source Code Control .....	1-3
reports .....	5-9	Suite bar .....	2-7
to Excel .....	2-1	Table	
Field Type		sorting .....	2-2
table .....	3-15	Test Case	
File		assign .....	4-6
copy .....	3-18	copy .....	3-17, 3-18
delete .....	3-19	create .....	3-11
link to .....	3-15	delete .....	3-4, 3-18
rename .....	3-19	edit .....	3-11
upload .....	4-8	edit note .....	4-9, 4-10
File reference .....	3-15, 4-7	import .....	3-9
Folder .....	2-13, 3-1	rename .....	3-18
copy .....	3-7	re-run .....	4-9
delete .....	3-8	run .....	4-9
rename .....	3-7	search by ID .....	3-2, 3-8
search .....	3-8	search tests .....	3-8
Graphs .....	5-8	skip .....	4-7
Help .....	2-1	table .....	3-2
ID field		tree .....	2-13, 3-1
query .....	4-11, 5-5	view .....	4-10
IEEE 829 .....	ix	Test Cases .....	3-1
Import		Test Session .....	4-12
test results .....	4-18	arrange Test Cases .....	4-15, 4-19
Inserting images .....	3-16	assign .....	4-6, 4-20
Menu bar .....	2-7	change name .....	4-17, 4-18
Naming conventions .....	3-3	clear results .....	4-18
Pagination .....	2-8	copy .....	4-18
Passwords .....	2-5	create .....	4-12
Printing .....	2-2	delete .....	4-18
header/footer .....	2-2	import results .....	4-18
Problem Report		lock .....	4-20, 4-21
integration .....	1-3	refresh .....	4-21
querying .....	5-5	run .....	4-6
recording .....	4-8	run one at a time .....	4-7
reporting .....	5-11, 5-16	unlock .....	4-21
Report		variables .....	4-2, 4-12
coverage .....	5-20	view summary .....	4-9
regression .....	5-12	Test Set	
Reports		change options .....	4-14

## I N D E X

copy .....	4-15	code.....	3-13
create .....	4-10	formatted.....	3-13
lock .....	4-16	html .....	3-13
refresh.....	4-17	wysiwyg.....	3-13
unlock .....	4-16	Timezone.....	2-2
Test Suite .....	1-4	Upload file.....	4-8
selecting.....	2-6	User interface .....	2-1
Textarea Field Style		Warning messages.....	2-2