SilkTest

SilkTest® from Segue® is the industry’s leading functional and regression testing product for enterprise applications, whether they are deployed in Web, .NET, Java or traditional client/server-based environments. SilkTest is an easy-to-use test automation environment offering many features that enable users to be highly productive in their software testing efforts. These features include workflow elements for test creation and customization, direct database access and validation, the flexible and robust 4Test® scripting language, a built-in recovery system for unattended testing and the ability to test across multiple platforms, browsers and technologies with one set of test scripts.

Maximize your investment in automation
SilkTest can help mitigate the challenges of a successful automation effort, such as lack of time, budget and resources. Successful automation consists of a manageable development effort, the ability to run the automation whenever and wherever it’s needed and quick and accurate results analysis. SilkTest enables all three of these elements to help make your automated testing effort a success.

Rapid reusable test and automation infrastructure development – With today’s shortened product release cycles, creating enough tests to thoroughly verify your application’s reliability can be a daunting task. SilkTest offers many capabilities to promote rapid test development such as the Basic Workflow for recording tests, the Data Driven Workflow for enabling a single testcase to test data values stored in an external table and AutoComplete™ for improved productivity in script creation and automation infrastructure development.

Test and automation execution – SilkTest offers unique features for running tests such as an out-of-the-box, yet extensible Recovery System and a separate Agent process that provides an efficient means for distributing test execution across multiple platforms, running in parallel. The Recovery System allows tests to run unattended. Should an unexpected error occur, such as an application crash, the error is logged and the application is restored to its original base state so that subsequent tests will still run and produce valid test results.

SilkTest’s Agent technology provides user simulation capabilities, driving the application exactly the way an end-user would, resulting in complete and thorough testing of the user experience. Since the Agent is a separate component of SilkTest and carries a small footprint, it can be deployed out to multiple computers and yet still be controlled by a central SilkTest license. The Agent technology is unique to Segue and allows for the distribution and synchronization of tests across multiple platforms, shortening test execution cycles.

Ease of test maintenance – To help testers cope with changes to the application being tested, SilkTest provides a powerful, highly customizable and low maintenance GUI abstraction layer that maps the graphical elements of the Application Under Test (AUT) to their automatically constructed counterpart objects in SilkTest. When the AUT’s GUI has been sufficiently modified to require updating the abstraction layer, Project Workspaces help you quickly navigate through the layer to find the sole map location to update. Many times, the only maintenance that is required is modifying the abstraction layer; tests that reference objects defined in the layer can continue to run unmodified. Project Workspaces also lessen the effort required to update tests or automation infrastructure when application logic changes occur. SilkTest’s scripting language, 4Test, is an object-based language, thereby providing the built-in ease-of-maintenance features inherent in an object-oriented environment.
Key Benefits

- Leverage existing skill sets and achieve high levels of productivity in automation
- Maximize testing opportunities by running tests unattended 24x7x365
- Reduce the risk of application errors by maximizing test coverage
- Meet demanding release schedules with shortened test cycles

Power testing with the 4Test language

SilkTest’s 4Test language is an object-based fourth-generation language (4GL) designed specifically to address sophisticated testing needs. All tests within SilkTest, whether recorded or scripted, are created using 4Test. The portability of 4Test enables all supported application environments to be tested from one test script – greatly simplifying test maintenance. In addition, the 4Test language offers all the commands, data types and functionality that you would expect from a leading-edge programming language. This allows you to expand the scope of a testcase by adding looping and branching statements. You can also include exception handling to ensure the robustness of scripts. In addition to GUI checks to verify application logic, database verifications using standard ODBC access can be used to ensure the accuracy of complex transactions.

Efficiently manage the quality process

SilkTest offers test planning, development, execution and results reporting across multiple platforms, development environments and browsers. It also seamlessly integrates with other Segue products such as SilkCentral™ Test Manager for more advanced, process-oriented test management, including requirements verification and validation, test execution scheduling and reporting capabilities. SilkCentral Test Manager helps to facilitate application readiness assessment by providing an up-to-the-minute status on application quality. Also, SilkTest integrates with SilkCentral Issue Manager for workflow-oriented defect management.

Selected Features

- Recovery System for 24x7x365 unattended testing
- Basic Workflow for instant productivity
- Data Driven Workflow for testing business logic functionality using externally stored data
- AutoComplete for rapid test customization and automation infrastructure development
- Project Workspaces for organizing and sharing test information
- GUI abstraction layer for more reusable, easier to maintain tests and scripts
- Extensible, highly portable and easy-to-maintain scripting language
- Separate Agent technology for complete simulation of the end-user experience
- Distributed testing for efficient usage of hardware resources and increased productivity
- SilkTest Runtime for test execution and reporting

Supported Environments

- Netscape® Navigator® 4.5, 4.6.1, 4.7x, 6.0, 7.0.1, 7.0.2 and 7.1; Internet Explorer 4.0, 5.0, 5.5, 6 SP 0 and SP 1; AOL® 7.0, 8.0, 8.0 Plus, 9 and 9 Security Edition;
- PowerBuilder® 6.5, 7.0, 8.0, 9.0 and 10;
- ActiveX, Visual Basic 6, JDK 1.1x – 1.5,
- Microsoft® Web browser control, .NET Framework 1.0, 1.1 and 2.0 and Infragistics® NetAdvantage™ 2004 Volume 3 Windows Forms Grid and Toolbar, Most® 2.1 and 2.2 (Linux® and Unix® Agents only)

System requirements

- Intel® Pentium® 200 MHz, 64 MB RAM,
- 60 MB available disk space

Operating System Requirements

- SilkTest IDE and SilkTest Windows Agent: Windows® 95, Windows® 98 SE, Windows® ME, Windows® XP 2.0
- Windows® 2000, Windows® XP (5.1, SP 1 and SP 2) and Windows® Server 2003 (SP 1) – .NET and IE 6 SP 0 are supported via the DOM extension only

- SilkTest Linux and Unix Agent:
  - Red Hat® Enterprise Linux® WS 2.1 and 3.0,
  - Sun® Solaris® 9 and 10

To learn more about what makes Segue® the leader in Software Quality Optimization™, visit www.segue.com.

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