

Silk Performer®

Product overview

Silk Performer® is a proven, powerful and easy-to-use load and stress testing solution for optimizing the performance of business applications. Easy-to-create, accurate and realistic tests simulate tens or even tens of thousands of IT system users in a wide range of enterprise environments and platforms.

The tests isolate issues and bottlenecks that could impact reliability, performance and scalability. Intuitive diagnostic and analysis capabilities help resolve the issue quickly, reducing test-and-fix cycles, accelerating time-to-market, and supporting critical release decisions related to application performance.

To further reduce costs and promote an increase in testing by more people, Silk Performer removes the usage restrictions common in other solutions with its flexible, sharable deployment model.

Detailed feature overview

Reduce costs, fewer risks of performance related failures

Silk Performer ensures the quality of business applications by measuring their performance from the end-user perspective - while also monitoring system performance - in a variety of scenarios under dynamic load conditions. Silk Performer can reduce costs and minimize performance risks by helping you:

- Accurately assess application performance, scalability and reliability characteristics before deployment
- Create realistic, reproducible load test scenarios to cover all critical use cases and requirements
- Isolate and resolve the root cause of performance problems in cross-platform systems quickly and easily
- Lower IT infrastructure costs through tuning and accurate capacity planning before deployment

Efficient test creation and test cycles

Silk Performer facilitates testing without compromising on quality.

- Discover ease of use with the built-in step-by-step workflow wizards
- Create tests and executions with Silk Performer's intuitive interface, or leverage the Eclipse IDE or Visual Studio

Key Benefits

- Reduced R&D costs. Minimize test and fix cycles and better utilize expensive resources
 - Improved ROI. Provide greater access to test creation and execution for more team members and support a higher number of virtual users per box
 - Leverage current investments. Reduce your investment in multiple tools and training, exploit new technologies and maintain business confidence even as technologies change
 - Quick user adoption. Discover ease of use with step-by-step workflow wizards
- Test a wide range of enterprise environments with versatile, sharable, multi-protocol virtual-user types
 - Reuse test cases in different environments and scenarios without changing test scripts
 - Analyze load tests in real time to avoid invalid test results that require time-intensive test-case reruns

Easy, full spectrum support for Web 2.0

Silk Performer supports all major Web 2.0 environments like Adobe's Flash/Flex, Microsoft Silverlight, and HTML/AJAX. In addition to facilitating testing of today's modern web applications on the protocol level (HTTP), Silk Performer's Browser-Driven Load-Testing feature (BDLT) enables you to use real web browsers (Internet Explorer) to generate load. In this way, you can leverage the AJAX logic built into web browsers to precisely simulate complex AJAX behavior during testing.

This powerful testing approach cuts scripting time up to 80% and provides results that reflect real-world end user browsing experience, including rendering time and protocol-level statistics. BDLT supports the full range of Web applications that are developed for Internet Explorer.

IPv6 Testing

Silk Performer supports record and replay of applications in IPv6 (Internet Protocol version 6) networks. Make sure your applications and network infrastructure are IPv6 ready, so that the future expansion of your business is not compromised by IPv4 address exhaustion.

Testing web & native apps for mobile devices

Silk Performer supports performance testing of mobile web applications and mobile native applications that communicate with servers over HTTPs. Due to smaller screen sizes and use of touch screen on mobile devices, many web applications look different when loaded compared to a full site. From an application performance testing perspective, such mobile versions of a web page need to be treated as separate applications, even though they might share some components on the back-end.

With a complete set of profiles for a variety of mobile phones, such as Android iOS, Windows Phone and BlackBerry, Silk Performer enables you to record test scripts from a PC, an emulator of a mobile device. Moreover it can simulate the bandwidth limitations of mobile network connections. Silk Performer supports all existing and upcoming mobile phone standards like GPRS, EDGE, UMTS, HSDPA, HSPA+, and LTE.

It is also important to test across geographies for global access for mobile users on-the-go. Silk Performer's Mobile Browser Simulation is fully compatible with CloudBurst to emulate traffic of mobile devices from different parts of the world.

Realistic, lightweight and accurate simulation

The innovative Silk Performer technology minimizes the hardware resources needed per virtual user, enabling more and larger load tests. Within a single load test, virtual users working with different internet, middleware and database protocols - across varied computing environments - can be simulated. For internationalized applications that utilize Unicode®, Silk Performer supports multibyte character sets and UTF-8. Client IP address simulation allows for the testing of load-balanced sites.

Peak-loads with Silk Performer CloudBurst

Silk Performer CloudBurst enables software quality teams to rapidly launch any size peak-load performance test without the burden of managing complex infrastructures. Now, you can test and diagnose internet-facing applications under immense global peak loads.

Borland offers Borland Credits, a new virtual currency that provides maximum flexibility for Cloud testing services while significantly reducing testing costs. Borland Credits for CloudBurst give you better control over your testing expenditure, while ensuring that your applications run at optimum levels, wherever they may be. Please refer to the Silk Performer CloudBurst datasheet for details.

Problem isolation and correction

Powerful end-to-end diagnostics capabilities help identify the root cause of performance problems, then take corrective action and report on activities.

Client-side diagnostics

The unrivaled TrueLog™ technology of Silk Performer provides visual front-end diagnostics from the end-user perspective. TrueLog visually recreates the data that users provide and receive during load tests - for HTML pages this includes all embedded objects. This enables you to visually analyze the behavior of your application as errors occur during load tests. Detailed response timer statistics help you uncover the root causes of missed service levels before your application goes live.

Server-side diagnostics

With the addition of the Server Analysis Module, you can monitor server statistics and automatically correlate data with load test results. This enables you to identify ongoing problems with your system's back-end servers, even those located behind firewalls.

Performance Trend Reporting with Silk Central

To enable rapid response times to issues as they arise, Borland provides Performance Trend Reporting. This enables users developing in rapid Agile, or iterative, sprints to identify potential issues as they occur, from preconfigured graphs. This integrated facility using Silk Performer and Silk Central® enables users to effectively and easily control their environment.

Diagnostics for Java and .NET applications

For deep down, code-level resolution of performance issues, Silk Performer provides integrations with AppDynamics and dynaTrace. Fully integrated, click-through drill down delivers a multi-tier performance breakdown to identify the root cause of performance bottlenecks, through to the offending line of code for both Java and .NET applications.

TECHNICAL

System requirements

Operating System

- Microsoft® Windows 8, Microsoft® Windows 7, Windows 2012, Windows Vista, Windows 2008, Windows 2003, Windows XP, Windows 8.1, Windows Server 2012R2

Memory

- 1 GB recommended minimum

Networking

- 10 Mbit Ethernet (100 Mbit recommended)

Supported environments

Protocols and Interfaces for Load Testing

- HTTP(S)/HTML, IPv6, Ajax, Silverlight, Mobile devices, Java over HTTP, Adobe® Flex/AMF3, Granite DS Flex, Unicode (UTF-8), SOAP (XML), FTP, LDAP, MAPI, IMAP, SMTP/POP, SSL, CORBA (IIOP), Java RMI (EJB/J2EE), .NET Remoting, Oracle® Forms, Citrix® ICA, ODBC, Oracle Call Interface (OCI), DB2 CLI, TCP/IP, UDP,

Tuxedo® ATMI, Jolt, TN3270E, TN5250, and T100/200+

Open Interfaces

- .NET Framework
- Java Framework
- DLL Interface

Packaged Applications (CRM/ERP)

- Remedy ARS Web
- SAP
- PeopleSoft
- Siebel
- Oracle Applications
- Oracle Forms

Real-time Server Monitors

- Windows and UNIX® system/network counters
- JMX
- SNMP
- For Microsoft IIS
- Apache™
- IBM® WebSphere®
- WebLogic®
- IBoss
- Oracle®
- SAP
- VMWare
- IBM® DB2®
- Microsoft® SQL Server™

About Borland

Originating in 1983, Borland is a Micro Focus Ltd brand. Our world class software development products work across the entire Application Development Lifecycle to transform good software into great software. Uniquely, our tools are Open, Agile, and fit for Enterprise. borland.com