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Data Sheet

Silk Performer

Silk Performer is a proven, easy-to-use load and stress testing solution for optimizing business application performance. Accurate, realistic tests are easy to create, providing a simulation of as many users as needed, in a range of enterprise environments and platforms.

Product Highlights

The tests in OpenText™ Silk Performer isolate issues and bottlenecks that could impact reliability, performance, and scalability. Leverage intuitive diagnostic and analysis tools to help resolve issues quickly, reducing test-and-fix cycles and accelerating time-to-market. To reduce costs further and increase testing for more people, Silk Performer removes the usage restrictions common in other solution.

Key Features

Reduce Costs and the Risks of Performance-Related Failures

Silk Performer ensures the quality of business applications by measuring their performance from the end user's perspective, while monitoring system performance in a variety of scenarios under dynamic load conditions. Silk Performer reduces costs and minimizes 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
- Assess global readiness with unlimited scalability from the cloud
- 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:

- Gain ease of use with built-in, step-by-step workflow wizards
- Create tests and executions with Silk Performer's intuitive interface, or leverage the Micro Focus™ Visual COBOL for Eclipse by OpenText™ or Micro Focus™ Visual COBOL for Visual Studio by OpenText™
- Develop performance tests using Visual Studio and C#: Record web tests within Visual Studio and combine its rich development feature set, including all debugging features, with the powerful load testing capabilities of Silk Performer
- Speed up test cycles by reusing existing OpenText™ Silk Test or Selenium functional tests for performance testing
- Easily identify performance issues across builds within your continuous delivery pipeline
- Test a wide range of enterprise environments with multi-protocol virtual user types, which are versatile and sharable
- Reuse test cases in different environments and scenarios without changing test scripts
- Analyze load tests in real time to avoid invalid test results that need time-intensive test-case reruns

Key Benefits

- Ensure high performance across all web, mobile, and enterprise environments
- Quickly detect, isolate, and resolve the root cause of performance problems with integrated diagnostics and trending reports
- Gain confidence in your applications from realistic user scenarios prior to launch
- Reduce R&D costs, minimize test and fix cycles, and make better use of expensive resources
- Improve ROI by providing greater access to test creation and execution for more team members and supporting 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
- Gain ease of use with step-by-step workflow wizards

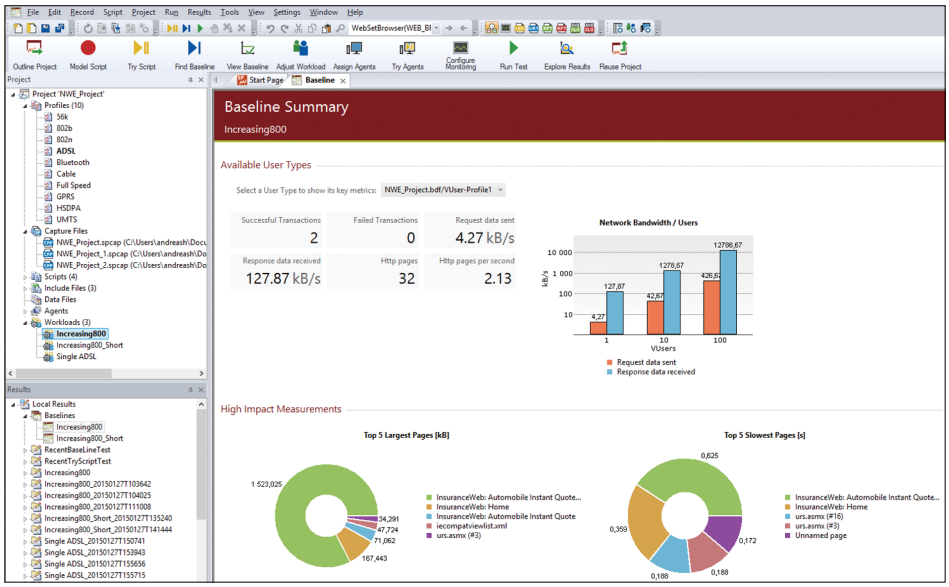

Figure 1. Silk Performer summary report

Easy, Full Spectrum Support for the Latest Web Environments

Silk Performer supports all major web environments, including HTML5 and AJAX. As well as assisting modern web application testing on the protocol level (HTTP and HTTP/2), Silk Performer's Browser Driven Load Testing (BDLT) enables you to use real web browsers to generate load. This enables you to leverage the AJAX logic built-in to 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 testing web applications on Edge, Internet Explorer, Chrome, Firefox and Opera.

Agile and Shift-Left Testing

Leverage your functional test assets for performance testing to reduce the burden of script duplication. Simply take existing Silk Test or Selenium scripts, upload them to Silk Performer, and immediately see how the application performs under load.

Responsive Web Design

Responsive web pages change their layout depending on the viewport width of the browser on the device that is being used. When testing responsive design, it's important to make sure that it renders and performs well on a variety of devices. Silk Performer detects visual breakpoints and emulates the device browser and viewport width to test the correct layout of the responsive web design. Load generation and performance metrics can then take these performance breakpoints into account during tests.

Measure 'Perceived' Loading Times

When load testing modern websites, often the perceived loading time differs considerably from the measured loading time. A user can consider a web page as ready, although the processing in the background is not yet completed. To get an indication of when a web page is ready for the user interaction, Silk Performer introduced the so-called time to interact, or TTI for short.

In Silk Performer terminology, the time to interact is defined as the time from a user interaction (such as navigating to a URL or a click on a link) until all relevant elements a user requires to interact with the page are ready; even if the page has not yet completely loaded. Use 'Time to Interact' to better understand the impact of web page response times on conversion and bounce rates and measure the UX.

HLS (HTTP Live Streaming)

HTTP Live Streaming (HLS) has become the de-facto industry standard for adaptive bitrate video streaming, delivering optimized content to the broadest range of devices. Regardless of whether it is embedded in a web page or consumed through a standalone video player, Silk Performer automatically detects HLS traffic during recording and simulates concurrent video players consuming HLS data during playback. Silk Performer provides comprehensive quality statistics and metrics for streams and reliably detects stoppages due to bandwidth constraints or server issues.

IPv6 Testing

Silk Performer supports record and replay of applications in Internet Protocol version 6 (IPv6) networks. Make sure your applications and network infrastructure are IPv6-ready so that IPv4 address exhaustion doesn't compromise future expansion of your business.

Testing Web and Native Apps for Mobile Devices

Silk Performer supports performance testing of mobile web and mobile native applications that communicate with servers over HTTP(s). Due to smaller screen sizes and use of touch screens 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 mobiles, such as Android, iOS, and Windows Phone, Silk Performer enables you to record test scripts from a PC, an emulator, or a mobile device.

Testing across geographies for global mobile access for users is important for many organizations. Silk Performer's Mobile Browser Simulation is fully compatible with OpenText™ Silk Performer CloudBurst to emulate mobile device traffic from different parts of the world.

Network Emulation

To understand the true end-user experience, Silk Performer simulates a variety of wired, wireless, and mobile network technologies such as 3G, HSPA+, and LTE.

Realistic, Lightweight, and Accurate Simulation

Silk Performer minimizes the hardware resources needed per virtual user, which enables more and larger load tests. Within a single load test, you can simulate virtual users working with different internet, middleware, and database protocols—across varied computing environments. For internationalized applications that use Unicode, Silk Performer supports multibyte character sets and UTF-8. Client IP address simulation enables 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 and—with built-in VPN functionality—even internal applications under immense global peak loads from the cloud.

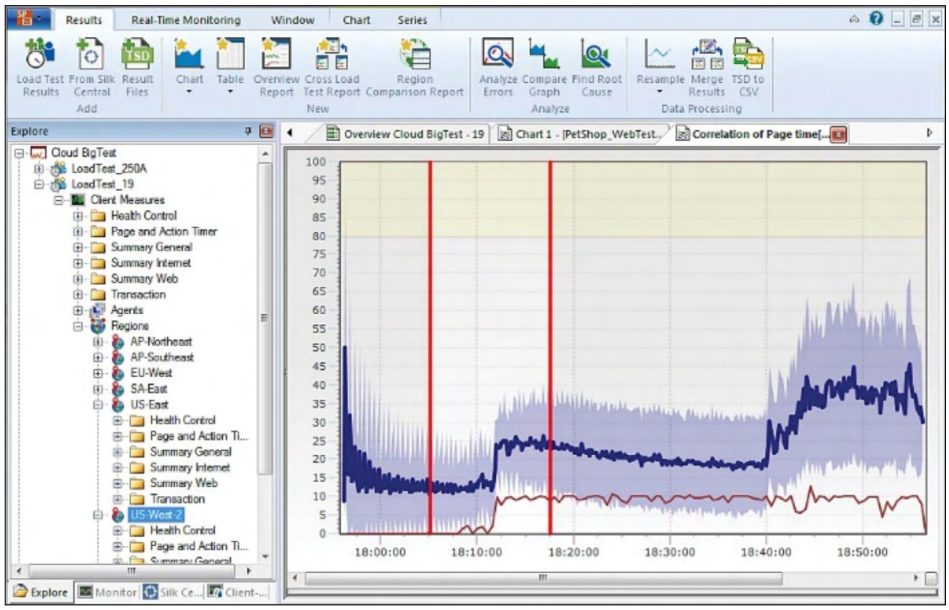

Figure 2. Root cause analysis

OpenText™ offers OpenText Credits, a new virtual currency that provides maximum flexibility for cloud testing services while significantly reducing testing costs. OpenText Credits for CloudBurst offer 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

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

Client-Side Diagnostics

Silk Performer's unrivaled TrueLog technology provides visual front-end diagnostics from the end user's perspective. TrueLog visually recreates the data that users provide and receive during load tests, including all embedded objects for HTML pages. 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.

TrueLog provides recommendations for speeding up web applications through code optimization.

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 Dashboard with Silk Central

To enable rapid response times to issues as they arise, OpenText provides performance trend dashboards and 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 OpenText Silk Central enables users to effectively and easily control their environment.

Results Publishing with InfluxDB and Grafana

Export all data to InfluxDB, an open source time series database. During a test, Silk Performer can push real-time data to InfluxDB, after a test you can manually export time series data (aggregated) or raw data. This lets you quickly display and share your load test results using tools such as Grafana. For Grafana in particular, you can download a pre-configured set of dashboards, perfectly suited for real-time viewing or results analysis.

Reuse Script Assets for Synthetic Monitoring

Efficiently reuse load-testing scripts for synthetic monitoring in Silk Performance Manager to measure user experience of an application in production. Please refer to the Silk Performance Manager for details.

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.

Learn more at
www.opentext.com

Technical Specification

Operating Systems
- Windows 10
- Windows 8.1
- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 & 2012 R2

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
- Microsoft IIS
- Apache
- IBM WebSphere
- WebLogic
- iBoss
- Oracle
- SAP
- IBM DB2
- Microsoft SQL Server

Protocols and Interfaces for Load Testing
- HTTP(S)/HTML, HTTP/2, IPv6, Ajax, mobile devices, Java over HTTP, HTTP Live Streaming (HLS), Unicode (UTF-8), SOAP (XML), FTP, LDAP, MAPI, IMAP, SMTP/POP, SSL, CORBA (IIOP), Java RMI (EJB/J2EE), .NET Remoting, Oracle Forms, Citrix, ODBC, Oracle Call Interface (OCI), DB2 CLI, TCP/IP, UDP, Tuxedo ATMI, Jolt, TN3270E, TN5250, T100/200+, and UI-Level (Silk Test, Selenium)

Open Interfaces
- .NET Framework
- Java Framework
- DLL Interface

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