



# Silk Performer 20.0

Release Notes

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# Silk Performer 20.0 Release Notes

These release notes contain information that might not appear in the Help. Read them in their entirety before you install the product.



**Note:** This document contains a number of links to external websites. Micro Focus cannot be responsible for the contents of the website or for the contents of any site to which it might link. Websites by their nature can change rapidly and although we try to keep our links up-to-date, we cannot guarantee that they will always work as expected.

For information about installation, deployment, and licensing issues, refer to the [Silk Performer Installation Help](#).

# System Requirements

The following sections describe the system requirements for installing and running Silk Performer.

To run the Silk Performer agent software, or both controller and agent software, and to use the full potential of Silk Performer to run large-scale load tests, your system must meet the following minimum requirements:

## Hardware Requirements

System Area	Requirement
Processor	Intel Core 2 Duo or equivalent CPU
RAM	4 GB
Hard disk space	2.2 GB for controller software installation 1 GB for agent-only installation Depending on the size of your load tests, make sure you have enough space on your hard disk for result files.
Network	Network connectivity to the system under test and to all Silk Performer agent computers.

## Operating System Requirements

- Both the Silk Performer controller and the Silk Performer agent can be installed on any Windows client or server operating system of version 6.1 or newer. This means Silk Performer requires Microsoft Windows 7 or newer, or Microsoft Windows Server 2008 R2 or newer.
- Installing the network emulation driver is currently not supported for Microsoft Windows 10 and Microsoft Windows Server 2016 and 2019.

## Software Requirements

To install and run Silk Performer, your system requires a minimum set of software components.

The required components vary based on installation type. For example, to run Silk Performer Java Explorer, your system must be equipped with the appropriate Java Development Kit. Download components from the respective websites.

- Internet Explorer 10, 11 for browser-driven load testing.
- PDF viewer to view documentation .
- Citrix Receiver for Microsoft Windows 4.9.7 (LTSR) to test Citrix applications.
- Java Runtime Environment (JRE): Both 32- and 64-bit versions are required on 64-bit operating systems.
- Java Development Kit 7, 8 (32-bit) to test Java applications with Java Explorer.
- Visual Studio 2013, 2015, or 2017 for Visual Studio extension. To use Visual Studio 2012, Visual Studio 2013 needs to be installed as well.

## Working with Silk Performer on a multi-user system

Silk Performer can be installed on a machine with terminal services enabled for multi-user access. In general, it is not recommended to work in multiple sessions simultaneously. If you want to do so nevertheless, keep the following in mind:

- **Recording:** The Silk Performer Recorder uses a system-wide hooking mechanism. If one user starts the Recorder, the traffic of all other users might be recorded as well.

- **Workbench:** Multiple users can work on different projects simultaneously. Working on the same project is not recommended. The project will be opened in read-only mode for the second and all further users.
- **Executing tests:** Multiple users can execute tests simultaneously from one machine. However, multiple simultaneously running tests will influence each other as they share the same resources (CPU, memory, network bandwidth).
- **Monitoring tests:** Performance Explorer does not differentiate between test metrics of multiple running tests. Therefore, real-time values of the wrong test might be displayed.

# What's New in Silk Performer 20.0

Silk Performer 20.0 introduces significant enhancements and changes.

## New Editor

The code editor in Silk Performer 20.0 has been completely refreshed. It comes with a bulk of useful state-of-the-art IDE features, which greatly facilitates script development. The new code writing experience includes:

- line numbers
- rich find/replace functionality including find/replace in files
- an **Active Script** pane that updates in real-time
- auto indentation
- highlighting of same words
- code completion
- code collapsing
- code snippets insertion
- script error list pane and highlighting of syntax errors in the script
- inline variable declaration
- inline form view
- zooming
- split view
- column mode

The new editor makes you faster, thus you can keep concentrating on testing rather than writing test scripts.

## Dynatrace Integrations

### Dynatrace AppMon

Initially, the Silk Performer Dynatrace plugin was created by Dynatrace. Later on, the plugin was open-sourced and now with Silk Performer 20.0 the plugin is maintained by Micro Focus. The new plugin allows to disable request tagging for Try Script runs. Furthermore, the plugin enables users to configure the tag selection for the additional HTTP header. Linking from the HTML report to the Overall API breakdown in AppMon has been disabled due to a defect in the Dynatrace interface.

### Dynatrace SaaS & Managed

The Dynatrace SaaS & Managed plugin not only offers similar functionality as the AppMon plugin but adds the possibility to send general information about the load test or error details to Dynatrace for further analysis. It automatically creates request attributes based on the selected tags and even creates request naming rules automatically within Dynatrace.

The Dynatrace SaaS & Managed plugin offers a set of tags to be sent within an additional HTTP header for each request.

# CloudBurst Enhancements

## Instance scheduling

With Silk Performer 20.0 you are now able to schedule cloud agent instances. By specifying the date and time you want to start testing, the requested number of agents will be ready to use. Thus, no time wasted with waiting for cloud instances to become ready.

## Sorting options in Cloud Agent Manager

Cloud Agent Manager now allows to sort the agent list according to several columns. Additionally, the agents can be grouped by region.

## Immediate feedback from cloud vendor

The Cloud Agent Manager now displays the current detailed state information in the tooltip of each agent status field.

## Smart UI refreshing in Cloud Agent Manager

Collecting the current status from each cloud agent can be a lengthy, demanding process. Cloud Agent Manager now adapts the refresh interval depending on the state of each agent. If status updates are expected sooner the shorter is the refresh interval. During load tests when most agents are in use, status updates will occur less frequently.

## Credit card payments method removed

The credit card payment option has been removed for various reasons. The preferred way to purchase Micro Focus credits is to contact a sales person.

# Web on protocol-level Enhancements

## WebSockets

WebSocket text messages can now also be used with binary data. Some technologies use text messages for sending binary data, rather than the binary message type.

## Multipart form API

Silk Performer now offers additional BDL functions to handle multipart form post requests. For further detail see `WebAddMultiPart`, `WebAddMultiPartFromFile`, and `WebPostMultiPart`.

# Other Enhancements

Silk Performer 20.0 provides a number of other enhancements:

- The new Micro Focus Community is fully integrated, including *Idea Exchange* as the replacement for *User Voice*. Relevant content has been migrated to the new platform, which can easily be accessed as usual from within the Silk Performer start page.
- Designing workloads can get quite complex and elaborate. The workload initialization dialog has been redesigned to better support performance engineers with defining workloads with multiple user types and consequently minimize the time required to setup complex workloads.

- The load test controller has been improved in stability and logging. The controller/agent communication is now more robust and fault tolerant under challenging network conditions. In addition, the Silk Performer SDK is now available in 64-bit, which allows integration in 64-bit native as well as Java 64-bit processes.

## Technology Updates

### **OpenSSL**

OpenSSL has been upgraded to version 1.1.1b. With this upgrade TLS 1.3 is the default security level used unless the server does not support it.

### **Other components**

Several third-party components have been upgraded to their latest versions to remediate all known vulnerabilities and other defects.

# Resolved Issues and Customer-Driven Enhancements

The following table lists issues that have been resolved in Silk Performer 20.0 as well as enhancements that have been implemented in this version:

SI #	RPI #	Description
	1116569	The <b>Initialize</b> button on the <b>Adjust Workload</b> dialog does not work as expected.
	637272	When executing a load test, an AbortTransactionException occurs.
3108872	1109774	TrueLog Explorer does not support customization of API calls that are located in .bdh files.
3121966	630091	Installing the agent version of Silk Performer 17.5 or 18.0 causes error entries in the log files.
3154094	634527	The Cloud Agent Manager login button is disabled when a proxy is enabled and a user name and password are entered. However, when pressing the <b>Enter</b> key, the data is submitted anyway.
3165342	1114822	Request to persist the floating window that appears when typing an opening bracket.
3174750	1115649	When opening the Cloud Agent Manager, a message states that Micro Focus servers are not available.
3174880	1115717	Internet Explorer crashes during recording.
3176368	1115803	Transaction names are limited to 39 characters.
3177580	636841	The perfrun.exe crashes when a measure bound is violated, rather than terminating the transaction.
3177872	1116141	When executing a Try Script run with a script that contains the function <code>Silk4JInitSession</code> , an error occurs.
3179163	1116020	Memory leak in Silk Performer 19.0 and 19.5.
3179330	1116204	Internet Explorer is prompting for a proxy authentication in Silk Performer 19.5.
3179457	1116083	Silk Performer 19.0 HF1 crashes during a load test execution when clicking the <b>Errors</b> tab.
3180614	1116121	Request for additional information around the option <code>ALLOW_USER_DATA_COLLECTION</code> within the documentation for the silent installation mode.
3181853	1116286	When executing a script, the following error message displays: <code>RUNERR: 3 - RUN invalid data address.</code>
3181914	1116342	It is not possible to send more than 20 cookies using the <code>WebURL</code> request.
3182580	1116335	The Silk Performer Recorder does not correctly restore the Internet Explorer and Edge proxy/pac settings.
3182815	636498	Silk Performer crashes when attempting to use the <b>Path and Query Filter</b> settings on the <b>Capture File</b> page.

# Known Issues

You can find a list of known issues including resolutions in the Online Help: <https://documentation.microfocus.com/known-issues>

# Updates and SupportLine

Our Web site gives up-to-date details of contact numbers and addresses.

## Contacting Micro Focus

Micro Focus is committed to providing world-class technical support and consulting services. Micro Focus provides worldwide support, delivering timely, reliable service to ensure every customer's business success.

All customers who are under a maintenance and support contract, as well as prospective customers who are evaluating products, are eligible for customer support. Our highly trained staff respond to your requests as quickly and professionally as possible.

Visit <http://supportline.microfocus.com/assistedservices.asp> to communicate directly with Micro Focus SupportLine to resolve your issues, or email [supportline@microfocus.com](mailto:supportline@microfocus.com).

Visit Micro Focus SupportLine at <http://supportline.microfocus.com> for up-to-date support news and access to other support information. First time users may be required to register to the site.

## Information Needed by Micro Focus SupportLine

When contacting Micro Focus SupportLine, please include the following information if possible. The more information you can give, the better Micro Focus SupportLine can help you.

- The name and version number of all products that you think might be causing an issue.
- Your computer make and model.
- System information such as operating system name and version, processors, and memory details.
- Any detailed description of the issue, including steps to reproduce the issue.
- Exact wording of any error messages involved.
- Your serial number.

To find out these numbers, look in the subject line and body of your Electronic Product Delivery Notice email that you received from Micro Focus.

# Silk Performer Licensing

The Silk Performer licensing model is based on virtual users (VUsers).

Starting and using the Silk Performer Workbench does not require a license. You can model and customize scripts as well as adjust many other load test settings without a license. Also, executions that are performed with only one virtual user (like try script or baseline executions) do not require a license.

Starting a load test run requires licenses for the virtual users employed in the execution.

Silk Performer offers two licensing models:

- on-premise licensing
- online licensing

When you upgrade from an older Silk Performer version, new licenses are required for executing load tests with the new version. During the upgrade process, you can keep the old licenses for a period of 90 days.

Silk Performer works with three types of VUsers. Each type allows to simulate different application types:

- Web
- Standard
- Premium

VUser Type	Application Type
Web	Web Browser-Driven GUI-level testing in single session mode with selected web browsers HTTP(S) (Web browser low level) HTTP(S)/HTML (Web browser high level) HTTP(S)/XML (Web services, SOAP) HTTP Live Streaming (HLS) Silverlight Mobile SAP NetWeaver WebDAV (MS Outlook Web Access) Email (SMTP/POP) FTP TCP/IP UDP AMF0/AMF3/FLEX Java over HTTP DLL Interface
Standard	All of <i>Web</i> , plus: Visual Studio Extension Java Add-On DB2-CLI Add-On

VUser Type	Application Type
Premium	OCI Add-On ODBC Add-On Visual Basic Add-On (Framework) Directory server (LDAP) CORBA Add-On All of <i>Standard</i> , plus: GUI Level Testing (Silk4J, Silk4NET, Silk Test Classic) Remedy Web ARS SAPGUI Add-On for Silk Performer Oracle Applications/Forms Add-On PeopleSoft Add-On Siebel Add-On Citrix Add-On Terminal Emulation (Green-Screen) Add-On Tuxedo/ATMI Add-On

## Silk Performer SOA Edition Licensing

### What is the Silk Performer SOA edition?

The Silk Performer SOA edition (Service Oriented Architecture) is specifically targeted at testing remote services and APIs, such as web services or remote Java and .NET components.

### How does the SOA edition licensing work?

The SOA edition is a complete Silk Performer installation that is restricted by a SOA edition license. This license enables you to

- execute load tests with up to 5 virtual users
- perform .NET or Java testing
- perform basic web and XML testing

### What can be tested with the SOA Edition?

To be able to test remote components, you need to create test clients first. Silk Performer offers the following approaches to create test clients:

- visual creation using Java Explorer (requires no programming)
- visual creation using .NET Explorer (requires no programming)
- recording an existing test client
- importing JUnit tests
- importing NUnit tests
- importing Java classes
- importing .NET classes

# Tested Software

This section lists the software with which Silk Performer has been tested.

The listed software is complete in terms of supported technologies, but not in terms of supported versions and products.

System Area	Tested With
Operating systems	<ul style="list-style-type: none"><li>• Microsoft Windows Server 2008 R2</li><li>• Microsoft Windows Server 2012</li><li>• Microsoft Windows Server 2012 R2</li><li>• Microsoft Windows Server 2016</li><li>• Microsoft Windows Server 2019</li><li>• Microsoft Windows 7 32/64bit</li><li>• Microsoft Windows 8 32/64bit</li><li>• Microsoft Windows 8.1 32/64bit</li><li>• Microsoft Windows 10 32/64bit</li></ul>
Web browsers	<p>For protocol-based load testing:</p> <ul style="list-style-type: none"><li>• Internet Explorer</li><li>• Mozilla Firefox</li><li>• Google Chrome</li><li>• Apple Safari</li></ul> <p>For browser-driven load testing:</p> <ul style="list-style-type: none"><li>• Internet Explorer 10, 11</li><li>• Google Chrome and Mozilla Firefox (for replay only)</li></ul> <p>For GUI-level testing in single-session mode:</p> <ul style="list-style-type: none"><li>• Mozilla Firefox</li><li>• Google Chrome</li></ul> <p>For GUI-level testing in multi-session mode:</p> <ul style="list-style-type: none"><li>• Internet Explorer</li><li>• Microsoft Edge</li><li>• mobile browsers</li></ul>
Terminal emulation products	<ul style="list-style-type: none"><li>• AttachMate Extra 8</li><li>• AttachMateWRQ 13.0</li><li>• Distinct IntelliTerm 8.1</li><li>• Ericom Powerterm Pro v8.8.1</li><li>• HummingBird_Exceed 11.0 (hooking via socks proxy)</li><li>• JProtector 4.5.2.0</li><li>• MochaSoft 5.3 (hooking via socks proxy)</li><li>• NetTerm 5.1.1</li><li>• Nexus Terminal 5.3</li><li>• PassportPC2Host 3</li><li>• Quick3270 3.73</li></ul>

System Area	Tested With
ERP/CRM solutions	<ul style="list-style-type: none"> <li>• Rumba 9</li> <li>• SDI TN3270 Plus v2.4</li> <li>• SecureCRT 1.0</li> <li>• TeraTermPro 2.3</li> <li>• TN5250_sourceforge 0.17.3</li> <li>• TNBridge</li> </ul> <p><b>SAPGUI Clients:</b></p> <ul style="list-style-type: none"> <li>• SAPGUI client 740, 750</li> </ul> <p><b>PeopleSoft Systems:</b> PeopleSoft 8.0, 8.3, 8.4, 8.8, 9.0</p> <p><b>Siebel Systems:</b></p> <ul style="list-style-type: none"> <li>• Siebel 6.3 using MS SQL Server</li> <li>• Siebel 6.3 using IBM DB2</li> <li>• Siebel 6.3 using Oracle</li> <li>• Siebel 7</li> <li>• Siebel 8.0, 8.1</li> </ul> <p><b>Remedy Web ARS:</b> Remedy Web ARS 9.0, 9.1, 9.1 SP2, SP3, and SP4</p> <p><b>Oracle Forms:</b></p> <ul style="list-style-type: none"> <li>• Oracle Forms 6i, 9i, 10g, 11g, 12c</li> <li>• Oracle EBS 11i, 12.x</li> <li>• Oracle Fusion 10g, 11g, 12c</li> </ul>
Citrix clients	<ul style="list-style-type: none"> <li>• Citrix XenApp Client 12.x</li> <li>• Citrix Web Interface 5.1, 5.2, 5.3, 5.4</li> <li>• Citrix StoreFront / Netscaler Gateway</li> <li>• Citrix Receiver for Microsoft Windows 4.9.7 (LTSR)</li> <li>• Citrix Workspace-App</li> </ul>
SOAP stacks	<ul style="list-style-type: none"> <li>• Microsoft SOAP Toolkit 2.0 Service Pack 2 (SP2), Internet Information Server 5</li> <li>• Apache-SOAP Version 2.1, TOMCAT Version 3.1</li> </ul>
WebService frameworks	<ul style="list-style-type: none"> <li>• Axis 1.x</li> <li>• Axis2 1.7.7</li> <li>• GlassFish Metro 1.5</li> <li>• Apache CXF 3.2.4</li> </ul>
Database products	<ul style="list-style-type: none"> <li>• IBM Universal Database Systems 5.2, 6.1, 7.1</li> <li>• Microsoft SQL Server 2008, 2008 R2, 2012</li> <li>• Oracle Database 10g Release 2</li> <li>• Oracle Database 11g Release 2</li> <li>• Oracle Database 12c</li> <li>• Sybase SQL Anywhere Network Server 5.5.04</li> </ul>

System Area	Tested With
Corba products	<ul style="list-style-type: none"> <li>• Oracle WebLogic Enterprise</li> <li>• Micro Focus VisiBroker</li> <li>• Micro Focus Orbix</li> <li>• IBM WebSphere</li> </ul>
Tuxedo	<ul style="list-style-type: none"> <li>• Oracle TUXEDO Server 6.3, 6.4, 7.0, 7.1, 8.0, 9.0</li> <li>• Oracle WebLogic Enterprise 4.2</li> </ul>
Jolt	Oracle Jolt 1.1 (including Oracle TUXEDO Server 6.4), 1.2
Java support	<ul style="list-style-type: none"> <li>• Java Development Kit 7, 8</li> <li>• IBM Java Development Kit</li> <li>• Eclipse</li> </ul>
.Net-based technologies	<ul style="list-style-type: none"> <li>• Microsoft .NET Framework 2.0, 3.0, 3.5, 4.0, 4.5, 4.6, 4.7</li> <li>• Microsoft Visual Studio 2013, 2015, 2017</li> <li>• WCF Web Services</li> </ul>
Rich Internet applications (Web 2.0)	<ul style="list-style-type: none"> <li>• Microsoft Silverlight 4, 5</li> <li>• Apache Flex 2, 3, 4</li> <li>• GraniteDS 2.3.2</li> <li>• BlazeDS 3.2.0</li> <li>• Google Web Toolkit</li> <li>• ExtJS</li> <li>• Eclipse RAP</li> <li>• script.aculo.us</li> </ul>
SNMP	<ul style="list-style-type: none"> <li>• SNMPv2-MIB</li> <li>• RFC1213-MIB</li> <li>• RDBMS-MIB</li> <li>• ORADB-MIB</li> <li>• httpServer-MIB</li> <li>• ftpServer-MIB</li> <li>• SUN-MIB</li> <li>• BEA-WEBLOGIC-MIB</li> <li>• APPSRV_MIB (NetDynamics)</li> <li>• SQUID-MIB</li> </ul> <p> <b>Note:</b> To find RFCs and vendor MIBs on the Web, visit <a href="#">The Internet Engineering Task Force</a>.</p>
Proxy servers for firewall tunneling	<ul style="list-style-type: none"> <li>• WinGate</li> <li>• Squid</li> <li>• Dante</li> <li>• Microsoft ISA Server</li> </ul>