



# LoadRunner and Performance Center

Software Version: 12.56

## System Requirements (Product Availability Matrix)

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This document (previously named Product Availability Matrix or PAM) provides up-to-date system requirements and supported environments for installing and running LoadRunner and Performance Center.

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# LoadRunner and Performance Center Host System Requirements (Windows)

This section provides system requirement information for the following products:

- LoadRunner Full
- Performance Center Host
- VuGen Standalone
- Analysis Standalone
- Load Generator
- Monitor Over Firewall
- MI Listener
- TruClient Standalone

## Hardware requirements

This table provides hardware requirements for the products listed above. Memory and CPU requirements vary per protocol and system under test.

<b>Hardware component</b>	<b>Supported</b>	<b>Recommended</b>
Processor	2 core CPU	8 core CPU
Processor for UI level protocols*	8 core CPU	16 core CPU
Memory (RAM)	8 GB	16 GB
Memory (RAM) for UI level protocols*	16 GB	32 GB
Available hard disk space	50 GB	100 GB; SSD drive
Network card	1 GBit/s	

\* Such as TruClient, Citrix, SAPGUI, and so on.

## Software requirements

This table provides software requirements for the products listed above.

<b>Software component</b>	<b>Supported</b>	<b>Recommended</b>
Operating system (See <a href="#">Windows Updates</a> below)	<ul style="list-style-type: none"> <li>• Microsoft Windows 8.1 64-bit*</li> <li>• Microsoft Windows 10 64-bit (Creators and Fall Creators Update)</li> <li>• Microsoft Windows Server 2008 R2 SP1 64-bit**</li> <li>• Microsoft Windows Server 2016 64-bit</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Windows 7 SP1 64-bit</li> <li>• Microsoft Windows Server 2012 R2 64-bit*</li> </ul>
Browser	<ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 10</li> <li>• Microsoft Edge (not supported for TruClient)</li> </ul>	Microsoft Internet Explorer 11
Screen resolution	1366x768 or higher	1600x900 or higher

\* Can be used only with IE 11.

\*\* Recommended for TruClient Vusers.

## Windows updates

Before you install any components on a Windows machine, make sure that the full set of Windows updates has been installed, or install the Windows updates listed in the table below.

**Note:** Before you install any of the Windows updates, disable UAC (User Account Control) and restart the computer. For details on how to disable UAC, refer to the [Microsoft Windows documentation](#).

Windows version	Required updates
<ul style="list-style-type: none"> <li>Windows 7 64-bit</li> <li>Windows 2008 R2 64-bit</li> </ul>	<ul style="list-style-type: none"> <li>SP1</li> <li>Update for Universal C Runtime (UCRT) in Windows <a href="#">KB2999226</a> x64</li> </ul>
<ul style="list-style-type: none"> <li>Windows 8.1 64-bit*</li> <li>Windows 2012 R2 64-bit*</li> </ul>	Install the following pack of updates: <ol style="list-style-type: none"> <li>KB2919442 x64 or KB2970551 x64 (one of these two updates)</li> <li>KB2919355 x64</li> <li>KB2932046 x64</li> <li>KB2959977 x64 (if applicable)</li> <li>KB2937592 x64</li> <li>KB2938439 x64</li> <li>KB2934018 x64</li> <li>KB2999226 x64</li> </ol>
<ul style="list-style-type: none"> <li>Windows 10 64-bit*</li> </ul>	<a href="#">KB4022725</a>

\* The list of required updates might change due to Microsoft's update delivery policy or new Windows update releases. If you experience any issues, please contact [Micro Focus Software Support](#).

## Component coexistence

The LoadRunner Full installation is installed on a single machine.

Every other LoadRunner component must be installed on a separate machine, except for Analysis Standalone which can coexist on the same machine with VuGen Standalone or TruClient Standalone.

### Supported coexistence

✓	<b>Analysis Standalone</b> installed with <b>VuGen Standalone</b>
✓	<b>Analysis Standalone</b> installed with <b>TruClient Standalone</b>

## Analysis database types

The following table lists the database types and versions that are supported by LoadRunner Analysis.

Supported database type	Versions
MS Access	2010, 2013
MS SQL	2008 R2, 2012
SQLite	v3

# LoadRunner System Requirements (Linux)

## Linux installation

The following table lists the system requirements and distributions for installing the Load Generator component on a Linux machine (Only the Load Generator component is supported for installation on Linux).

**Note:** Load Generators support all X Servers.

Component	Supported	Recommended
Processor	2 core CPU	8 core CPU
Distribution	<ul style="list-style-type: none"> <li>• Oracle Enterprise Linux 7.1 UEK, 7.3 64-bit</li> <li>• Red Hat Enterprise Linux 6.4 64-bit</li> <li>• SUSE Linux Server Enterprise (SLES) version 12.1 64-bit</li> <li>• Ubuntu Server Linux 14.04 LTS 64-bit</li> </ul>	<ul style="list-style-type: none"> <li>• Ubuntu Server Linux 16.04 LTS 64-bit*</li> <li>• Red Hat Enterprise Linux 7.3 64-bit*</li> </ul>
Memory (RAM)	8 GB	16 GB
Available hard disk space	10 GB	20 GB

\* Supports dockerized load generators.



## Prerequisite packages for 64-bit installations

The following table lists the packages that must be installed on Linux machines before installing the 64-bit version of a load generator.

Distribution	Prerequisites	How to check if it is installed	How to install
Red Hat family including Oracle Linux	<ul style="list-style-type: none"> <li>• glibc.i686</li> <li>• glib2.i686</li> <li>• keyutils-libs.i686</li> </ul>	<ul style="list-style-type: none"> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'glibc\.(i686 i386)'</li> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'glib2\.(i686 i386)'</li> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'keyutils-libs\.(i686 i386)'</li> </ul>	<ul style="list-style-type: none"> <li>• yum install &lt;package_name&gt;</li> <li>• yum install keyutils-libs.i686</li> <li>• yum install libidn.i686</li> </ul> <p><b>Note:</b> If your machine already has glib 64-bit (such as OEL7), make sure to update it to the latest version to avoid conflicts before installing glib2 32-bit.</p>
	<ul style="list-style-type: none"> <li>• libstdc++.i686</li> <li>• libstdc++47.i686 (Amazon Linux)</li> </ul>	<ul style="list-style-type: none"> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'libstdc\+\+[0-9]*\.(i686 i386)'</li> </ul>	
	<ul style="list-style-type: none"> <li>• libidn.i686</li> </ul>	<ul style="list-style-type: none"> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'libidn\.(i686 i386)'</li> </ul>	
	<ul style="list-style-type: none"> <li>• ncurses-libs.i686 (required by Security Console)</li> </ul>	<ul style="list-style-type: none"> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'ncurses(-libs)?\.(i686 i386)'</li> </ul>	
Ubuntu Server	<ul style="list-style-type: none"> <li>• libc6-i386</li> <li>• libglib2.0-0:i386</li> <li>• lib32stdc++6</li> <li>• libkeyutils1:i386</li> <li>• lib32ncurses5 (required by Security Console)</li> <li>• libidn11:i386</li> </ul>	<ul style="list-style-type: none"> <li>• dpkg -l libc6-i386   grep 'ii'</li> <li>• dpkg -l libglib2.0-0:i386   grep 'ii'</li> <li>• dpkg -l lib32stdc++6   grep 'ii'</li> <li>• dpkg -l libkeyutils1:i386   grep 'ii'</li> <li>• dpkg -l lib32ncurses5   grep 'ii'</li> <li>• dpkg -l libidn11:i386   grep 'ii'</li> </ul>	<ul style="list-style-type: none"> <li>• apt-get install &lt;package_name&gt;</li> <li>• apt-get install libkeyutils1:i386</li> <li>• apt-get install libidn11:i386</li> </ul>

Distribution	Prerequisites	How to check if it is installed	How to install
SUSE Linux Enterprise Server (SLES) 64-bit	<ul style="list-style-type: none"> <li>• lincurses5 32-bit</li> <li>• glibc 32-bit</li> <li>• libglib-2_0-0-32bit</li> <li>• libstdc++6 32-bit</li> <li>• keyutils-libs-32bit</li> <li>• libidn11-32bit</li> </ul>	<ul style="list-style-type: none"> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'ncurses[0-9]*-32bit'</li> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'glibc-32bit'</li> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'libglib-2_0-0-32bit'</li> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'libstdc\+\+6-32bit'</li> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'keyutils-libs-32bit'</li> <li>• rpm -qa --qf '%{NAME}:%{ARCH}\n'   grep -E 'libidn11-32bit'</li> </ul>	<ul style="list-style-type: none"> <li>• zypper install libncurses5-32-bit</li> <li>• zypper install glibc-32-bit</li> <li>• zypper install libglib-2_0-0-32bit</li> <li>• zypper install libstdc++6-32-bit</li> <li>• zypper install libkeyutils1-32bit</li> <li>• zypper install libidn11-32bit</li> </ul>

# Performance Center Server System Requirements

The following table displays the system requirements for installing a Performance Center server.

<b>Component</b>	<b>Supported</b>	<b>Recommended</b>
Processor	4 core CPU	8 core CPU
Memory (RAM)	8 GB	16 GB or higher
Available hard disk space	80 GB	100 GB; SSD drive
Operating system	<ul style="list-style-type: none"><li>• Microsoft Windows Server 2008 R2 SP1 64-bit</li><li>• Microsoft Windows Server 2012 64-bit</li><li>• Microsoft Windows Server 2016 64-bit</li></ul>	Microsoft Windows Server 2012 R2 64-bit
Web server	IIS 7.5, 8.0, 8.5, 10.0	

## Performance Center Web Client System Requirements

The following table displays the system requirements for Performance Center Web client.

<b>Component</b>	<b>Supported</b>	<b>Recommended</b>
Screen resolution	<ul style="list-style-type: none"> <li>• Microsoft Windows: 1366x768 or higher</li> <li>• Mac OS: 1280x800 or higher</li> </ul>	1600x900 or higher
Browser	<ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 10 (on Windows)</li> <li>• Mozilla Firefox 45.x (on Windows)</li> <li>• Apple Safari 9.x (on Mac OS)</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 11 (on Windows)</li> <li>• Google Chrome 49.x (on Windows)</li> </ul>

## ALM System Requirements

As a prerequisite to installing Performance Center components, you must install Micro Focus Application Lifecycle Management (ALM).

For ALM system requirements, see the System Requirements guide available from the [ALM Help Center](#).

# Integrations

The following integrations are supported with this version of LoadRunner and Performance Center.

## Integrations with other Micro Focus products

To view supported product version information online, see the [Micro Focus Integration Catalog](#).

**Note:** IPv6 support is provided for Application Lifecycle Management and SiteScope.

Product	LoadRunner	Performance Center
Application Lifecycle Management (ALM) 12.55, 12.55 Patch 1	✓	✓
Application Lifecycle Management (ALM) 12.53 Patch 4	✓	x
ALM Octane 12.55.4 or later (using Jenkins plugin 5.2 or later)	x	✓
Diagnostics 9.40	✓	✓
Mobile Center 2.6 (supported in TruClient – Native Mobile protocol only)	✓	✓
Network Virtualization 9.13	✓	✓
Real User Monitor (RUM) 9.40	x	✓
Service Virtualization 4.00	✓	✓
SiteScope 11.40	✓	✓
Unified Functional Testing (UFT) 14.01, 14.02, 14.03	✓	✓

## Integration with non-Micro Focus products

The following integrations with non-Micro Focus products are compatible with this version of LoadRunner and Performance Center.

Supported products	Supported versions	Comments
Visual Studio IDE plugin	2013, 2015	NUnit 2.6.2 - 3.4
Eclipse IDE plugin	Neon/Mars/Luna/Oxygen	<b>Required:</b> <ul style="list-style-type: none"> <li>• Java 1.7x, 1.8x 32/64-bit supported</li> </ul> <b>Recommended:</b> <ul style="list-style-type: none"> <li>• JUnit 4.9.0 or later</li> <li>• Selenium 2.24.1 - 2.48.0 or later</li> </ul>
Jenkins	Jenkins server 1.0, 2.0	Uses Micro Focus Jenkins plugin 5.3. See the <a href="#">Micro Focus Jenkins</a> documentation.
Bamboo	Tested with 6.1.1	Uses Bamboo plugin 1.01, available from <a href="#">Atlassian Marketplace</a> . See the <a href="#">Performance Center Bamboo Plugin</a> documentation in the Performance Center help.
New Relic	Tested with New Relic REST API (v2)	Supported in Performance Center only. See the <a href="#">New Relic Monitor</a> documentation in the Performance Center help.
Dynatrace	Tested with 7.0	See the Dynatrace Monitor documentation in the <a href="#">LoadRunner</a> or <a href="#">Performance Center</a> help.
AppDynamics	Tested with 4.4	See the <a href="#">AppDynamics Monitor</a> documentation in the Performance Center help.

## Supported GUI Languages

Language Packs enable you to view the LoadRunner and Performance Center user interfaces in your local language. The following languages are supported:

<b>Language</b>	<b>LoadRunner</b>	<b>Performance Center</b>
Chinese – Simplified	✓	✓
French	✓	✓
German	✓	✓
Italian	✓	x
Japanese	✓	✓
Korean	✓	✓
Russian	✓	✓
Spanish	✓	x

# Protocols

The following table lists the supported Vuser protocols in LoadRunner.

Protocol	Program	Supported versions	Supported servers	Native 64-bit client recording	IPv6 support	HPE NV 9.13 support	IP spoofing support	Speed emulation support	Load Generator OS	Multi-protocol	Comments
<b>Remote protocols</b>											
Citrix ICA	Citrix Receiver for Windows	4.x or later. Check the Citrix Product Matrix for Receiver and Server compatibility.	Citrix XenApp and XenDesktop 5.x or later StoreFront/Web Interface 2.x or later	N	Y	Y	N	N	Any supported Windows OS	Y	Citrix Agent supports XenApp and XenDesktop servers. Network Virtualization supports Load Generator mode only. Recommended version of Citrix Receiver is 4.7. CitrixAgent does not support text-trapping functions (ctrx_sync_on_text_ex and ctrx_get_text) on Windows 10, Windows Server 2016, or later versions of Windows.
RDP (Remote Desktop Protocol)	RDP	7 7.1 8.1 10 10.2 10.4	Windows 2008 Standard/R2 Windows 7 32/64-bit Windows 8/8.1 Windows 2012 Standard/R2 Windows 10 Windows 2016	Y	Y	Y	Y	N	Any supported Windows OS	Y	Requires workaround connection to Windows 10 or Windows Server 2016.
Teradici PCoIP	Teradici PCoIP Client and compatible implementations	Teradici VMware Horizon	Teradici PCoIP Agent 2.7-2.10 Teradici PCoIP Connection Manager 1.5-1.7 Teradici PCoIP Security Gateway1.11-1.13 VMware Horizon 6.2.1	N	N	Y	N	N	Any supported Windows OS	N	Network Virtualization supports Load Generator mode only.
RTE (Remote Terminal Emulator)	PowerTerm for HPE(built-in version with LoadRunner). Supported modes: 3270, 5250, VTxxx	9.1 9.2 10.2	N/A	N	Y	Y	N	N	Any supported Windows OS (except Windows 10 and Windows 2016)	N	
<b>GUI protocols</b>											
Ajax - Click and Script	Internet Explorer	IE 10/11	N/A	N	Y	Y	Y	Y	Windows 7 64-bit Windows Server 2008 R2 64-bit Windows Server 2012 R2 64-bit	Y	Recommended: Record Ajax Click & Script scripts on Windows 7 or Windows 8.1. Windows 10 and Windows Server 2016 are not supported.
SAP GUI	SAPGUI	7.40 patch 13	SAP R/3 4.60c ECC 5.0 (ERP 2004) SAP HANA Edition 6.0 (ERP 2005)	N	Y	Y	N	N	Windows 7 64-bit Windows Server 2008 R2 64-bit Windows Server 2012 R2 64-bit	Y	Recommended: Use the most recent SAPGUI patch. SAP GUI is not supported on Windows 10 and Windows Server 2016.
TruClient - Web	Mozilla Firefox	Built-in 40.0.3	N/A	N/A	Y	Y	Y	Y	Any supported Windows OS	N	TruClient Browser is based on Mozilla Firefox technology and supported in Tech Preview mode only
	MS Internet Explorer	IE 10,11									
	Chromium	Built-in 55.0.2883.87 (64-bit)									
	TruClient Browser	Built-in 55.0.3 (64-bit)									



# System Requirements

Protocol	Program	Supported versions	Supported servers	Native 64-bit client recording	IPv6 support	HPE NV 9.13 support	IP spoofing support	Speed emulation support	Load Generator OS	Multi-protocol	Comments
TruClient - Mobile Web	Firefox	Built-in 40.0.3	N/A	N/A	Y	Y	Y	Y	Any supported Windows OS	N	
TruClient - Native Mobile	<a href="#">Refer to the Mobile Center documentation for details</a>		Mobile Center 2.6	N/A	N/A	Y (Supported through Mobile Center server)	N/A	N/A	Any supported Windows OS	N	Mobile Center is required for this protocol. Physical devices are necessary to record and replay scripts.
<b>Add-in protocols</b>											
C++.NET Template (Visual Studio Add-in)	MS Visual Studio	2013 2015	N/A	N/A	N/A	Y	Y	Y	Any supported Windows OS	N	
C#.NET Template (Visual Studio Add-in)	MS Visual Studio	2013 2015	N/A	N/A	N/A	Y	Y	Y	Any supported Windows OS	N	
VB.NET Template (Visual Studio Add-in)	MS Visual Studio	2013 2015	N/A	N/A	N/A	Y	Y	Y	Any supported Windows OS	N	
Java User for Continuous Delivery (Eclipse Add-in for Developers)	Eclipse IDE	Neon,Mars,Luna,Oxygen	N/A	N/A	N/A	Y	N/A	N/A	Any supported Windows OS	N	
Unit Test based on .NET (Visual Studio Add-in for Developers)	MS Visual Studio Unit 3.2 Unit 3.4	2013 2015	N/A	N/A	N/A	Y	N/A	N/A	Any supported Windows OS	N	
Custom Protocols developed with Protocol SDK	Vendor dependent	Visual Studio 2015	Vendor dependent	Vendor dependent	Vendor dependent	Y	Vendor dependent	N	Vendor dependent	N	
<b>Web protocols</b>											
Flex	Same Internet Explorer support as in Web HTTP/HTML	Flex SDK 4.6 AMF0 AMF3 RTMPT RTMP, RTMPS	LCDS 3.1/4.7 BlazeDS 4 FMS3 FMS4 GraniteDS 2.2	Y	Y	Y	Y	Y	Any supported Windows OS	Y	
Oracle NCA	Oracle Applications	JInitiator 1.3.1.18 JInitiator 1.1.8.16	Forms 4.5.10.8 Forms 6i+ Oracle E-Business Suite 12.2.x	Y	Y	Y	Y	Y	Any supported OS	Y	To work with Oracle client, install one of the following JVMs: JRE 7/8 or JDK 7/8.

# System Requirements

Protocol	Program	Supported versions	Supported servers	Native 64-bit client recording	IPv6 support	HPE NV 9.13 support	IP spoofing support	Speed emulation support	Load Generator OS	Multi-protocol	Comments
Oracle - Web	MS Internet Explorer	Same as Web - HTTP/HTML protocol	N/A	Y	Y	Y	Y	Y	Any supported OS	Y	To work with Oracle client, install one of the following JVMs: JRE 7/8 or JDK 7/8.
	Oracle Applications	JInitiator 1.3.1.18 JInitiator 1.1.8.16	Forms 4.5.10.8 Forms 6i+ Oracle E-Business Suite 12.2.x								
SAP - Web		Same as Web - HTTP/HTML protocol	N/A	Y	Y	Y	Y	Y	Any supported OS	Y	
Siebel - Web	Oracle (Siebel) CRM	N/A	7.5.2 7.5.3 7.7 7.8 8 8.1 8.2.2 (OpenUD)	Y	Y	Y	Y	Y	Any supported OS	Y	
Web - HTTP/HTML	MS Internet Explorer	IE 10, 11, Edge	N/A	Y	Y	Y	Y	Y	Any supported OS	Y	GWT: GWT Request Factory requires GWT 2.7.0 and Java 1.8. JavaScript language is not supported in Linux RHEL 6.x (use other Linux distributions). DFE is not supported in Linux OSs.
	Google Chrome	latest		Y							
	Firefox	latest		N							
	PCAP	libpcap tcpdump		N/A							
	Network Sniffer	WinPcap 4.1.3 Wireshark 2.2.0-2.2.7 Fiddler 4.5.x HAR file 1.2									
Web Services	MS Internet Explorer Google Chrome Firefox	MS Internet Explorer Google Chrome Firefox	WSDL 1.0/1.1 SOAP 1.1/1.2 WCF UDDI 2/3 WS-Security 1.0/1.1 Attachments: Dime/Mime/MTOM/ Base64Binary JMS	Y	Y	Y	Y	Y	Any supported Windows OS	Y	Supported SOAP features: WS HTTP-binding, Net TCP Binding, Named Piped, Basic HTTP Binding and various custom binding, Federation scenarios, WS-SecureConversation, WS-ReliableMessaging, WS-Addressing, Username Token, X509 Certificate Token, Kerberos Token, Message signature, Message encryption.
IoT protocols											
MQTT	N/A	3.1, 3.1.1	RabbitMQ 3.6.6 Mosquitto 1.4.11	N/A	N	Y	Y	N	Any supported OS	Y	

# System Requirements

Protocol	Program	Supported versions	Supported servers	Native 64-bit client recording	IPv6 support	HPE NV 9.13 support	IP spoofing support	Speed emulation support	Load Generator OS	Multi-protocol	Comments
<b>.NET/Java protocols</b>											
.NET	.NET Framework	2 3.0 3.5* 3.5 SP1* 4* 4.5*	N/A	Y**	N/A	Y	N	Y	Any supported Windows OS	N	* Supported on backward compatibility level. ** AUTs compiled in "AnyCPU" mode only.
Java Record Replay	Oracle JDK (32/64-bit)	1.6.x 1.7.x 1.8.x	WebLogic 11.x Generic	Y	N/A	Y	N	N	Any supported Windows OS	N	Oracle 64-bit JRE is supported for recording only. Network Virtualization supports Load Generator mode only.
Java over HTTP	Oracle JDK (32/64-bit)	1.6.x 1.7.x 1.8.x	Browsers support: IE and Firefox same as in Web HTTP/HTML	Y	Y	Y	Y	Y	Any supported Windows OS	N	Recording using Oracle 64-bit JRE is not supported on Windows 10. Remote Proxy recording is not supported for Firefox 38 or later.
Java Vuser	Oracle JDK (32/64-bit)	1.6.x 1.7.x 1.8.x	N/A	N/A	N/A	Y	N	N	Any supported Windows OS	N	Network Virtualization supports Load Generator mode only.
<b>Mail protocols</b>											
IMAP (Internet Messaging)	N/A	N/A	N/A	N	Y	Y	Y	Y	Any supported OS	Y	
MAPI (Microsoft Exchange)	Outlook	2007 2010	N/A	N/A	N/A	Y	N	N	Any supported Windows OS	N	Network Virtualization supports Load Generator mode only.
POP3 (Post Office Protocol)	N/A	N/A	N/A	N	Y	Y	Y	Y	Any supported OS	Y	POP3S: SSL support.
SMTP (Simple Mail Protocol)	N/A	4.x	N/A	N	Y	Y	Y	Y	Any supported OS	Y	SMTPS: SSL support.
<b>Database protocols</b>											
ODBC	ODBC	ODBC Driver Mgr 6.1 -10.0	N/A	Y	N	Y	N	Y	Any supported OS	Y	
Oracle - 2 Tier	Oracle	9.2	9.2	Y	N	Y	N	Y	Any supported OS	Y	
		10G	10G								
		11G	11G								
		11G R2\12c	11G R2 \12c								

# System Requirements

Protocol	Program	Supported versions	Supported servers	Native 64-bit client recording	IPv6 support	HPE NV 9.13 support	IP spoofing support	Speed emulation support	Load Generator OS	Multi-protocol	Comments
<b>Non-Web protocols</b>											
COM/DCOM	N/A	N/A	N/A	N	N	N	N	N	Any supported Windows OS	Y	
C Vuser	N/A	N/A	N/A	N/A	N/A	Y	Y	N	Any supported OS	N	Support for replay only.
DNS (Domain Name Resolution)	N/A	N/A	N/A	N	Y	Y	Y	N	Any supported OS	N	Support for replay only.
FTP (File Transfer Protocol)		N/A	N/A	Y	Y	Y	Y	Y	Any supported OS	Y	FTPS is supported in passive mode only.
LDAP (Listing Directory Service)	Based on Microsoft API	Based on Mozilla API	(Oracle) Sun ONE 5.2 Oracle DS 11	Y	N	Y	N	Y	Any supported OS	Y	
Windows Sockets	Winsock	2.x	N/A	Y	Y	Y	Y	Y	Any supported OS	Y	
<b>Third-party protocols</b>											
SMP (SAP Mobile Platform)		2.3		N/A	N/A	Y	Y	N	Any supported Windows OS	N	Same as .NET protocol support.
MQTester (Client and Server)	WebSphere MQ	To get updated details about the supported versions, contact OpenText support.		N	N	N	N	N	Any supported Windows OS	N	Third-party solution by OpenText. See MQTester documentation for more details and for contact information.
COAP	<a href="https://marketplace.microfocus.com/appdelivery/content/coap-protocol">Refer to AppDelivery Marketplace for details: https://marketplace.microfocus.com/appdelivery/content/coap-protocol</a>			N/A	N	Y	N	N	Any supported Windows OS	Y	Third-party solution by Endpoint IOT.
<b>Open source protocols</b>											
JMeter	Apache JMeter	Apache JMeter 2.13 Apache JMeter 3.1 Apache JMeter 3.2 Apache JMeter 3.3 Java 1.7 Java 1.8	N/A	N/A	N/A	N	N	N	Any supported OS	N	No interference on script execution with Apache JMeter.

## Send Us Feedback:



Let us know how we can improve your experience with the System Requirements Guide.

Send your email to: [docteam@microfocus.com](mailto:docteam@microfocus.com)