

Version 2020 SP2

# LoadRunner Professional and LoadRunner Enterprise

## Supported Protocols



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## Protocols

The following table lists the supported Vuser protocols in LoadRunner. Software must be supported by both LoadRunner and the vendor. We recommend checking the relevant product support matrix from the vendor.

Protocol	Application	Application supported versions	Server supported versions	Native 64-bit client recording	64-bit replay	Async	IPv6 support	IP spoofing support	NV 2020 support	Load Generator OS	Multi-protocol	Comments
<b>Remote protocols</b>												
Citrix ICA	Citrix Receiver for Windows	Citrix Receiver 4.9 Citrix Workspace 1912 without cumulative updates (19.12.0.119)	XenApp and XenDesktop 7.6.715 Citrix Virtual Apps and Desktops 1903, 1906, 1912	N	N	N	Y	N	Y	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 4.9. Recommended version of Citrix Workspace is 19.12.0.119. Citrix Agent 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)	Remote Desktop Connection	8.1, 10, 10.2, 10.4, 10.6, 10.7	Windows 8.1 Windows Server 2012 Standard/R2 Windows 10 (1809, 1903, 1909) Windows Server 2016 Windows Server 2019	Y	N	N	Y	Y	Y	Any supported Windows OS	Y	Requires workaround connection to Windows 10 or Windows Server 2016.
Teradici PCoIP	Teradici PCoIP Client and compatible implementations	N/A	Teradici PCoIP Agent 2.12 - 2.14.0 Teradici PCoIP Connection Manager 1.8.0 - 1.8.2 Teradici PCoIP Security Gateway 1.14 - 1.14.1 VMware Horizon View 6.2.1	N	N	N	N	N	Y	Any supported Windows OS	N	Network Virtualization supports Load Generator mode only. LoadRunner PCoIP client does not support connection to application pools (published applications). You can connect only to desktop pools.
RTE (Remote Terminal Emulator)	Power Term for Micro Focus (built-in version with LoadRunner Professional). Supported modes: 3270, 5250, VTxxx	12.2	N/A	N	N	N	Y	N	Y	Any supported Windows OS	N	
<b>GUI protocols</b>												
SAP GUI	SAP GUI for Windows	7.6	SAP R/3 4.60c SAP ERP ECC 5.0 SAP ERP ECC 6.0 SAP HANA Edition	N	N	N	Y	N	Y	Any supported Windows OS	Y	
TruClient - Web	MS Internet Explorer Chromium TruClient Browser	IE 11 Built-in 80.0.3987.87 (64-bit) Built-in 71.0.0.7445 (64-bit)	N/A	Y	Y	N/A	Y	Y	Y	Any supported Windows OS	N	TruClient Browser is based on Mozilla technology.
TruClient - Mobile Web	TruClient Browser	Built-in 71.0.0.7445 (64-bit)	N/A	Y	Y	N/A	Y	Y	Y	Any supported Windows OS	N	

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TruClient - Native Mobile	<a href="#">Refer to the UFT Mobile documentation for details</a>		UFT Mobile 3.4	N/A	N/A	N/A	N/A	N/A	Y (Supported through UFT Mobile server)	Any supported Windows OS	N	UFT Mobile is required for this protocol. Physical devices are necessary to record and replay scripts. TruClient Native Mobile Browser is based on Mozilla technology and has built-in version 50.0.0 (64-bit)
<b>Add-in protocols</b>												
C#.NET Template (Visual Studio Add-in)	MS Visual Studio	2013, 2015, 2017	N/A	N/A	N/A	N/A	N/A	Y	Y	Any supported Windows OS	N	
C#.NET Template (Visual Studio Add-in)	MS Visual Studio	2013, 2015, 2017	N/A	N/A	N/A	N/A	N/A	Y	Y	Any supported Windows OS	N	
VB.NET Template (Visual Studio Add-in)	MS Visual Studio	2013, 2015, 2017	N/A	N/A	N/A	N/A	N/A	Y	Y	Any supported Windows OS	N	
Java User for Continuous Delivery (Eclipse Add-in for Developers)	Eclipse IDE	2019-06 (4.12), 2019-09 (4.13), 2019-12 (4.14)	N/A	N/A	N/A	N/A	N/A	N/A	Y	Any supported Windows OS	N	Recommended to use Selenium 3.13 and JUnit 5.4.0. Java JRE is required. Supported versions are Java 7, 8 and 11.
	JUnit	5.3.1, 5.4.0										
	Selenium	3.12, 3.13, 3.14										
Java User for Continuous Delivery (IntelliJ IDEA Add-in)	IntelliJ IDEA	2019.1, 2019.2, 2019.3	N/A	N/A	N/A	N/A	N/A	N/A	Y	Any supported Windows OS	N	
Unit Test based on .NET (Visual Studio Add-in for Developers)	MS Visual Studio	2013, 2015, 2017	N/A	N/A	N/A	N/A	N/A	N/A	Y	Any supported Windows OS	N	
	NUnit	3.10, 3.11, 3.12										
Custom Protocols developed with Protocol SDK	Vendor dependent	Visual Studio 2015 .Net 4.8	Vendor dependent	Vendor dependent	Vendor dependent	Vendor dependent	Vendor dependent	Vendor dependent	Y	Vendor dependent	N	
<b>Web protocols</b>												
Flex	Flex SDK 4.6 AMF0 AMF3 RTMP RTMPS		LCDS 3.1/4.7 BlazeDS 4 FMS3 FMS4 GraniteDS 2.2	Y	N	Y	Y	Y	Y	Any supported Windows OS Supported on Windows Dockerized LGs	Y	
	Browser support: IE	Same support as in Web HTTP/HTML										
Oracle NCA	Oracle Applications	JInitiator 1.3.1.18, 1.1.8.16	Forms 10gR2, 11g Oracle E-Business Suite 11, 12.2.x	Y	N	N	Y	Y	Y	Any supported OS Supported on Dockerized LGs	Y	To work with Oracle client, install one of the following JVMs: JRE 7/8 or JDK 7/8.
Oracle - Web	MS Internet Explorer	Same as Web - HTTP/HTML protocol	N/A	Y	N	Y	Y	Y	Y	Any supported OS Supported on Dockerized LGs	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, 1.1.8.16	Forms 10gR2, 11g Oracle E-Business Suite 11, 12.2.x									
SAP - Web	Same as Web - HTTP/HTML protocol	Same as Web - HTTP/HTML protocol	N/A	Y	N	N	Y	Y	Y	Any supported OS Supported on Dockerized LGs	Y	DFE is not supported in Linux OSs.
Siebel - Web	Oracle (Siebel) CRM	N/A	8, 8.1, 8.2.2 (OpenUI)	Y	N	N	Y	Y	Y	Any supported OS	Y	

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Web - HTTP/HTML	MS Internet Explorer	IE 11 Edge	N/A	Y	N	Y	Y	Y	Y	Any supported OS Supported on Dockerized LGs	Y	GWT: GWT Request Factory requires GWT 2.7.0 / 2.8.0 and Java 1.8. DFE is not supported in Linux OSs.
	Google Chrome	latest		Y								
	Firefox	latest		N								
	PCAP	libpcap tcpdump										
	Network Sniffer	WinPcap 4.1.3 Wireshark 2.2.0 - 3.0.2 Fiddler 4.5.x - 5.0.x HAR file 1.2		N/A								
Web Services	MS Internet Explorer Google Chrome Firefox	IE 11, Edge latest latest	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	N	Y	Y	Y	Y	Any supported Windows OS Supported on Windows Dockerized LGs	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.
DevWeb	N/A	N/A	N/A	N/A	Y	Y	N	N	N	Any supported Windows OS RHEL 8.0 64-bit Ubuntu 18.04 64-bit Oracle Enterprise Linux 7.3 64-bit Supported on Dockerized LGs	N	Replay is supported only in 64-bit mode.
IoT protocols												
MQTT	MQTT protocol 3.1, 3.1.1 (built-in version with LoadRunner Professional)		RabbitMQ Mosquitto EMQ HiveMQ	N/A	N	N	N	Y	Y	Any supported OS Supported on Dockerized LGs	Y	
.NET/Java protocols												
.NET	.NET Framework	3.5 SP1* 4.5.2* - 4.7.2*, 4.8	N/A	Y**	N	N	N/A	N	Y	Any supported Windows OS Supported on Windows Dockerized LGs	N	* Supported on backward compatibility level. ** AUTs compiled in "AnyCPU" mode only.
Java Record Replay	*Oracle JDK, Common OpenJDK distributions (32/64-bit)	1.7.x, 1.8.x, 11.x	WebLogic 11.x, 12.1.3 Generic	Y	Y	N	N/A	N	Y	Any supported Windows OS Supported on Windows Dockerized LGs	N	Network Virtualization supports Load Generator mode only. * Refer to the LoadRunner Professional Help for detailed JDK support matrix.
Java over HTTP	*Oracle JDK, Common OpenJDK distributions (32/64-bit)	1.7.x, 1.8.x, 11.x	N/A	Y	N	N	Y	Y	Y	Any supported Windows OS Supported on Windows Dockerized LGs	N	64-bit JRE is supported for recording only. * Refer to the LoadRunner Professional Help for detailed JDK support matrix.
	Browser support: IE	Same as in Web - HTTP/HTML										
Java Vuser	*Oracle JDK, Common OpenJDK distributions (32/64-bit)	1.7.x, 1.8.x, 11.x	N/A	N/A	Y	N	N/A	N	Y	Any supported Windows OS Supported on Windows Dockerized LGs	N	Network Virtualization supports Load Generator mode only. * Refer to the LoadRunner Professional Help for detailed JDK support matrix.
Mail protocols												
IMAP (Internet Messaging)	N/A	N/A	N/A	N	N	N	Y	Y	Y	Any supported OS Supported on Dockerized LGs	Y	
MAPI (Microsoft Exchange)	Outlook	2010, 2013, 2016	Exchange Server 2010, 2013, 2016	N/A	.	N	N/A	N	Y	Any supported Windows OS	N	Network Virtualization supports Load Generator mode only.
POP3 (Post Office Protocol)	N/A	N/A	N/A	N	N	N	Y	Y	Y	Any supported OS Supported on Dockerized LGs	Y	POP3 S:SSL support.

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SMTP (Simple Mail Protocol)	N/A	N/A	N/A	N	N	N	Y	Y	Y	Any supported OS Supported on Dockerized LGs	Y	SMTP S:SSL support.
<b>Database protocols</b>												
ODBC	ODBC	ODBC Driver Mgr 6.1 - 10.0	N/A	Y	Y	N	N	N	Y	Any supported OS Supported on Dockerized LGs	Y	
Oracle - 2 Tier	Oracle Client	11g R2 12c	Oracle 11g R2 Oracle 12c	Y	N	N	N	N	Y	Any supported OS Supported on Dockerized LGs	Y	
<b>Non-Web protocols</b>												
C Vuser	N/A	N/A	N/A	N/A	Y	N	N/A	Y	Y	Any supported OS Supported on Dockerized LGs	N	Replay only.
DNS (Domain Name Resolution)	N/A	N/A	N/A	N	N	N	Y	Y	Y	Any supported OS Supported on Dockerized LGs	N	Replay only.
FTP (File Transfer Protocol)		N/A	N/A	Y	N	N	Y	Y	Y	Any supported OS Supported on Dockerized LGs	Y	FTPS is supported in passive mode only. Dockerized LG supports 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	N	N	N	Y	Any supported OS Supported on Dockerized LGs	Y	
Tuxedo	Tuxedo	8.1	8.1	N	N	N	N	N	N	Any supported Windows OS	N	
Windows Sockets	Winsock	2.x	N/A	Y	N	N	Y	Y	Y	Any supported OS Supported on Dockerized LGs	Y	
<b>Third-party protocols</b>												
SMP (SAP Mobile Platform)			2.3	N/A	N/A	N	N/A	Y	Y	Any supported Windows OS Supported on Windows dockerized LGs	N	Same as .NET protocol support.
MQTester (Client and Server)	WebSphere MQ	To get updated info about the supported versions, contact OpenText support.		N	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/A	N	N	N	Y	Any supported Windows OS	Y	Third-party solution by Endpoint IOT.
<b>Open source protocols</b>												
JMeter	Apache JMeter	5.0, 5.1, 5.2	N/A	N/A	N/A	N	N/A	N	N	Any supported OS Supported on Dockerized LGs	N	Apache JMeter requires Java JRE or JDK to be installed. Supported JRE or JDK versions are aligned with JMeter.
Gatling	Gatling	3.x	N/A	N/A	N/A	N	N/A	N	N	Any supported OS	N	Gatling requires Java JDK and Gatling to be installed. Supported JRE or JDK versions are aligned with Gatling.