



# Version history

	Document version	Summary of Changes
	124.02	Updated links to the LSEG Workspace documentation site and other documents
124.01 Tests added to the Office section		Tests added to the Office section for Workspace Add-in requirements
	123 01	Initial version of the LSEG Workspace System Test Guide

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#### About this document

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## In this guide

A System Test is a suite of tests that verifies whether your hardware, software, and network environments are suitable to run LSEG Workspace and its associated applications.

The set of tests performed depends on when you run them; before installation, during installation, or once the product is installed.

For information about the Financial Community Network (FCN) and Delivery Direct, see the repository for the Customer Connectivity DNS Migration Guide and Finance Community Network (FCN) document:

https://my.refinitiv.com/content/mytr/en/policies/private-network-overview.html

## Intended readership

This document is targeted at the following:

- Anyone who is considering installing Workspace can run System Test to make sure that their computer meets the necessary minimum requirements.
- Any Workspace user can run System Test at any time to verify that Workspace is running correctly.

## Contact information

#### To:

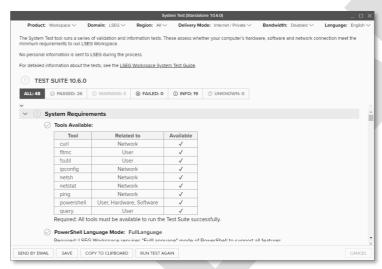
- Receive further assistance, contact Support.
- Provide feedback on this document or other Workspace technical content, contact DocFeedback@lseg.com.

# Running system and network testing

To check whether your system meets the minimum requirements, run one of the following:

- Standalone System Test, illustrated opposite, or
- Embedded System Test
- Web System Test

# Running the standalone System Test



The System Test (Standalone) product is updated more frequently than the embedded version. As such, it is highly recommended that you use this method to assess system compatibility, before installing Workspace for the first time.

- 1. Go to the Workspace download page that is accessible in your enterprise. See Download locations, below.
- 2. Click the **Download for Windows** button.
  - ① To toggle the operating system, click the **macOS** hyperlink.
- 3. Open the downloaded executable to run System Test (Standalone).

## Running the embedded System Test

#### From the command line

- 1. Open a command prompt and navigate to the Workspace executable location.
- 2. Run the following command:

RefinitivWorkspace.exe -- systemtest

#### From in-product

- 1. Run Workspace.
- 2. Select the **Help** menu > **System Test**



## Running the Web System Test

- 1. Go to the Workspace download page that is accessible in your enterprise. See Download locations, below.
- 2. Click the Open in Web button.

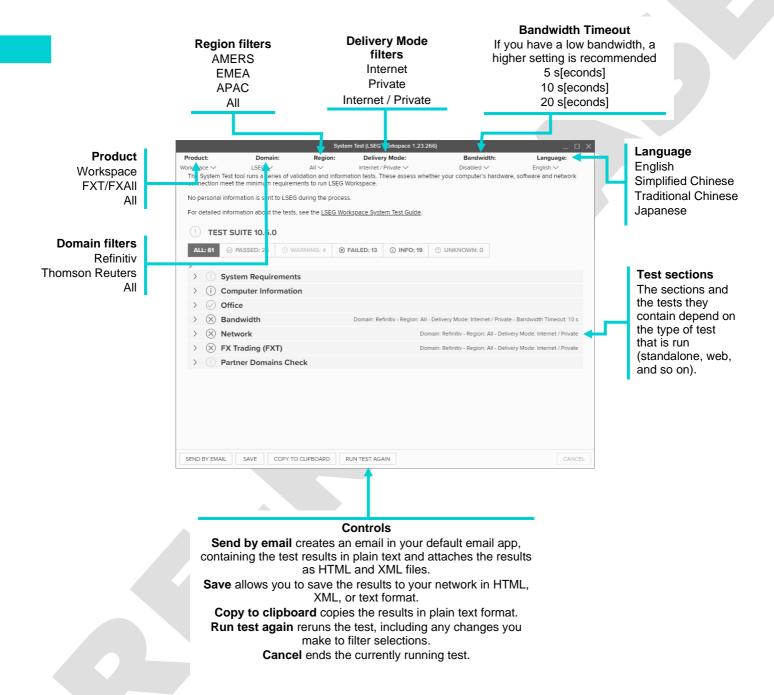
Web System Test opens in the same tab and runs immediately.

#### **Download locations**

For both Windows and macOS, you can download Workspace and the standalone version of System Test from the following locations:

- https://workspace.refinitiv.com/Apps/ProductSystemTest/
- https://workspace.extranet.refinitiv.biz/Apps/ProductSystemTest/

# System Test user interface



# Pre-requisites

System Test requires the following operating system tools to produce the full set of results.

#### Windows tools

Tool	Туре	Summary	System Test use
chcp		Used to change the active console code page to UTF-8.	Changes the default console code page to UTF-8.
cmd		Used to run other commands, such as curl.	
curl	Network	Used to get or send data including files using URL syntax.	Tests IP address accessibility.
findstr		Used to search for a specific text string in files.	Retrieves a specific text string in a file.
fltmc	User	Used to load and unload mini-filter drivers, which monitor or track file system data, attach, or detach mini-filter drivers from volumes, and enumerate mini-filter drivers, instances, and volumes.	Retrieves the installed mini-filter drivers.
fsutil	User	Lists hard links for a file or creates a hard link (a directory entry for a file).	Checks admin rights.
ipconfig	Network	Determines the IP address of your computer, together with other information, such as the address of its default gateway.	
netsh	Network	Allows you to display or modify the network configuration of a computer that is currently running.	Retrieves the proxy settings.
netstat	Network	Displays incoming and outgoing TCP network connections, routing tables, and several network interface and network protocol statistics.	Retrieves the routing table.
ping	Network	Used to troubleshoot connectivity, reachability, and name resolution.	Tests IP address accessibility.
powershell	Hardware, Software	A task-based command-line shell and scripting language, used to automate tasks in the Windows ecosystem, including active directory and exchange.	Retrieves screen resolutions.
query	User	Displays information about processes, sessions, and Remote Desktop Session Host servers.	
reg	Hardware, Software	Used to perform operations on registry subkey information and values in registry entries.	Reads registry entries.
taskkill		Used to end the RefinitivWorkspace.exe process.	
tasklist		Often used in conjunction with taskkill, this identifies whether Refinitiworkspace.exe and Microsoft Office applications are running.	
where	Software	Displays the location of files that match a search pattern.	Retrieves the location of tools files.
whoami	User	Used to display user, group, and privilege information for the user who is currently logged into the local system. If used without parameters, it displays the current domain and username.	Retrieves the security identifier of the current user.

## macOS tools

Tool	Туре	Summary	System Test use
cat	Software	Allows the creation of single or multiple files, view contents of files, concatenate files, and redirect output.	

Tool	Туре	Summary	System Test use
defaults		• • • • • • • • • • • • • • • • • • •	Used to retrieve the language settings on the machine.
df	Hardware	Displays disk usage information based on file system.	Retrieves the amount of available disk space.
diskutil	Hardware	A native Apple command-line utility used to retrieve detailed disk information, such as disk partitioning.	Retrieves disk and partitioning information.
echo	Software	Used to output the strings it is passed as arguments.	
exec()		This command can be used to run a script file on a local computer. It can also be used perform tasks in a backup or restore process.	
grep	Software	Used to search text and strings in files.	
hostname			Used to retrieve the machine ID.
ioreg	Hardware	Displays the I/O Kit registry.	
ifconfig	Hardware, Software	Used to configure network interface parameters.	Retrieves network information.
ipconfig	Software	Manages the IP configuration state.	
locale			Used to retrieve the system language.
netstat	Network	Displays incoming and outgoing TCP network connections, routing tables, and several network interface and network protocol statistics.	Retrieves the routing table.
route	Network	Used to retrieve network routing table information, such as the default gateway.	Retrieves information on the default gateway and network interfaces.
scutil	Network	Used to manage system configuration parameters: scutil-nwi Retrieves network information scutil-dns Retrieves DNS information scutil-proxy Retrieves system proxy settings	Retrieves network, DNS, and system proxy information.
sw_vers	Software	Displays the macOS version.	Retrieves the macOS version.
sysctl	Software	Allows kernel variables to be queried and set.	Retrieves system information.
system_profiler	Hardware, software	Used to retrieve system hardware and software configuration information.	Retrieves memory system information.
vm_stat			Used to retrieve machine virtual memory statistics.
who	User	Displays who is currently logged into a machine.	
whoami	User	Used to display user, group, and privilege information for the user who is currently logged into the local system. If used without parameters, it displays the current domain and username.	Retrieves the security identifier of the current user.

## Test sections and results

#### Test result icons

When you run a System Test, Workspace displays the test results with relevant messages and a status. The result displays the test status as an icon.

The tables that follow summarise the meaning of the network test and system test result icons.

#### Network tests

For the standalone and embedded versions of System Test, checks are performed using the following command:

```
curl -v -I -L -s -connect-timeout 5 -m 5
https://login.ciam.refinitiv.biz/.well-known/openid-configuration
```

For the Web version of System Test, the browser uses the Fetch method to check network accessibility.

Result	Icon	Description	
Success	Ø	The host IP address is discoverable and was contacted successfully.	
Unable to connect	1	The host IP address is discoverable but is not responding or is returning an error, which is usually a security or credential issue. This can be expected occasionally, as some servers may require a login token. However, in this case, the System Test is disconnected.	
Failed to resolve IP address		The host IP address is not discoverable. This may be caused by any of the following:	
	8	<ul> <li>An authorization issue, due to a security tool blocking access.</li> <li>The server, IP address, or domain is currently not accessible.</li> <li>The server, IP address, or domain has been removed.</li> </ul>	

#### System tests

Result	Icon	Description
None / Unknown	0	No test status has been found.
Passed	Ø	Test matches the required conditions. No further action is required.
Failed	8	Test does not match the required conditions. Further action needs to be taken to address the issue.
Warning	•	Test results may not be critical. If Workspace displays a warning message while running the prerequisite tests, you can continue with the installation process. While running the diagnostics tests, this status may restrict some features, but will not prevent you from using the product.
Information	0	No validation is required for the test, and it is only for information. No further action is required.

## System Requirements

#### Web version

For the Web-based System Test, the System Requirements tests are limited to the following:

Test	Description	Туре
Browser version	Displays your browser name and version. It also indicates whether you are using a supported product.	Validation

#### Embedded and standalone versions

For the embedded and standalone System Tests, this section checks for the pre-requisite operating system tools, described in the Pre-requisites section. It also returns the information described in the table below regarding your operating system.

These initial tests ensure that all software prerequisites<sup>1</sup> (such as operating system version, third-party software, and so on), and all hardware prerequisites (such as the CPU speed, RAM size, and so on), meet the minimum requirements to install Workspace:

Test	Description	Туре
PowerShell Language	Verifies whether the FullLanguage mode of	Validation
Mode	PowerShell is available. This is the default language mode and is a requirement for Workspace to support all features.	<ul> <li>Required: FullLanguage</li> </ul>
Operating System	Verifies if the operating system version installed on your workstation is compatible with Workspace.	Information
		<ul> <li>Windows release number</li> </ul>
		See Windows 10 in the list of Microsoft Windows versions.
		<ul> <li>Mac release number</li> </ul>
		See macOS 10.13 onwards in macOS version history.
OS Architecture	Checks whether the operating system is 32- or 64-bit.	Validation
		<ul> <li>Required: 64-bit</li> </ul>
OS Version	Checks whether the operating system version is supported.	Validation  - Supported versions are specified in the Workspace System Requirements document.
OS Service Pack	If relevant, the service pack number of your operating system.	Information
Operating System Language	Displays the interface language of your system.	Information
CPU Description	Displays a description of your system.	Information
CPU Type	Provides information regarding the type of CPU you use.	Information
CPU Speed	Checks whether the minimum CPU speed (in GHz) of your computer supports Workspace.	Information
Number of CPU Cores	The CPU number of cores (= logical cores = physical cores x threads)	Validation  - Required: 2 cores

Currently, some of the values returned by System Test are not in line with the system requirements for Workspace. For further information, refer to the Workspace System Requirements document.

Test	Description	Туре
Installed Memory	This test verifies if you have enough memory installed on your computer for optimal performance. Installed memory is also known as physical memory or random access memory (RAM).	Validation  – Required: 8GB
Primary Screen Resolution	This test is run to verify whether the resolution on your primary screen meets the minimum requirements to support Workspace.	Validation  – Required: 1280 x 1024
Color Depth <sup>2</sup>	Verifies if the value of the color depth that you have on your computer supports Workspace.	Validation  – Required: 24-bit
Free Disk Space	Displays the drive that has the most available free space. It provides information on whether enough free disk space is available for installation of Workspace.	Validation  - Required: 1 GB
Disk Write Permissions	Verifies that you have access rights to the required folders.	Validation
Registry Access Rights	Verifies that you have access rights to the required registry.	Validation

# Computer Information

These tests provide information about the machine on which System Test is run. These details can help your support team identify and rectify issues.

Test	Description	Туре
Computer Name	Displays the name of the computer.	Information
Computer Domain	Displays the name of the computer domain.	Information
User Account Name	Displays the username used in the current login session. You can see the login information.	Information
Admin Rights	Displays whether you have admin rights on the computer	Information
User Time Zone	Displays the time zone that is set on your system.	Information
Local Time	The Local Time test displays the local time that is set on your system.	Information
User Locale	Displays the language code from your Regional and Language Options. For example, en-US represents English (United States) or en-GB represents English (United Kingdom).	Information
Thin Client Run Mode	Verifies if the current session is running remotely or locally.	Information
Screens	This test collects information on the number of screens.	Information
Screen Details	Displays:  - Model Name  - Screen Resolution  - Primary Screen	Information
Video Adapters	Displays the model, RAM, and manufacturer of the video adapter on your computer.	Information  - Required: 128 MB

## Office

Test	Description	Туре
Microsoft Office	Displays the installed Microsoft Office variant	Information
Microsoft Office version	Verifies the version of Microsoft Office.	Validation

 $<sup>^{2}\,\,</sup>$  Uses the RstPlugPrerequisites.d11 plug-in and Win32 APIs to determine the color depth

Test	Description	Туре
		<ul> <li>Required: Version 15 or higher</li> </ul>
Microsoft Office language	The Microsoft Office Language test displays the language that you have set for Microsoft Office.	Information
Microsoft Office installed through Windows Store	Verifies the installation type of Microsoft Office. If the variant was installed through Microsoft Store, it is unsupported by Workspace.	Validation  - Required: false
Microsoft Edge WebView2 Runtime installed	Verifies whether Microsoft Edge WebView2 Runtime is installed. This is required for certain Workspace Add-In functions <sup>3</sup> to be available in the ribbon.	Validation  - Required: True
Don't allow any web add- ins to start	Verifies whether Group and/or Microsoft 365 Trust Center policies are set to deny the use of Web add-ins.  The <b>Don't allow any web add-ins to start</b> checkbox must be unchecked for certain Workspace Add-In functions <sup>3</sup> to be available in the ribbon.	Validation  - Required: False
Microsoft Office Version for Productivity Tools	Verifies the version of Microsoft Office.  This is required for certain Workspace Add-In functions <sup>3</sup> to be available in the ribbon.	Validation  - Required: Version  16.0.15601 or higher

#### Bandwidth

Test	Description	Туре
Content Delivery Network (CDN)	Checks connectivity with the main and regional CDN servers	Validation  - Minimum recommended download speed: 175 kbit/s
Reverse Proxy		Validation  - Minimum recommended download speed: 175 kbit/s

## Network

Network tests are used to test connectivity, including:

- Missing connection
- Speed of connection
- Connection to services
- Connection to real-time data
- Connection to time series data

Test	Description	Туре
Certificates	Checks whether the trusted Commodo root certificate is installed.	Validation
Check for publisher's certificate revocation	Activating this setting may cause installation to fail because LSEG certificates cannot be updated on a private network without direct Internet access.	Validation  Required: false

Items that are affected include Deals BI, Linking, Hotkeys, Traces, Auto Color, Define Palette, Comp List, Annotations, and Logos. For further information, see the Workspace Add-In Installation Guides on the Workspace documentation site.

Test	Description	Туре
Check for server certificate revocation	Activating this setting may cause the installation to fail because LSEG certificates cannot be updated on a private network without direct Internet access.	Validation  – Required: false
Product page	Tests connectivity to the product page of Workspace.	Validation
Content Delivery Network	Tests connectivity to content delivery network.	Validation
Login – Authentication	Checks login authentication.	Validation
Login – Heartbeat	Checks login heartbeat.	Validation
Customer Identity and Access Management (CIAM)	Checks the accessibility to new authentication services.	Information
Support	Checks connectivity to Support.	Validation
API/s	Checks connectivity to API/s.	Validation
Messenger	Checks connectivity to Messenger.	Validation
Apps	Checks connectivity to Apps.	Validation
Views	Checks connectivity to Views.	Validation
Real-time	Checks the availability of real-time data, the type of network you are using for real-time data delivery (Private or Internet), your deployment model, and whether your IDN permissions are synchronized.	Validation
Datastream	Checks connectivity to Datastream.	Validation

# FX Trading (FXT/FxAII)

Test	Description	Туре
Single Sign On (SSO)	Checks connectivity to SSO servers	Validation
Dealing/Trading session	Checks connectivity to trading servers	Validation
FXall Apps (example Treasury Center)	Checks connectivity to regional servers hosting FXall apps	Validation
Aggregator access to Order Book, Pricestream, Refinitiv FX Matching		Validation
Trade blotter		Validation
Credit admin		Validation
Connectivity test		Validation
FB	Checks connectivity to the Feed Blender service.	Validation
POMS	Checks connectivity to the Portfolio Order Management System, which is an automated FX trade order management and execution system.	Validation
QT	Checks connectivity to the QuickTrade service.	Validation
TC	Checks connectivity to the Trading Code service.	Validation
Options	Checks connectivity to the Trading Code Options service.	Validation

## Partner Domains Check

Test	Description	Туре
Frequently used Partner Domains	Checks DNSs that are permitted and commonly used by Workspace customers. This includes news and search services.	Validation