

Cloud Agent

Getting Started Guide

February 3, 2022

Copyright 2015-2022 by Qualys, Inc. All Rights Reserved.

Qualys and the Qualys logo are registered trademarks of Qualys, Inc. All other trademarks are the property of their respective owners.

Qualys, Inc.
919 E Hillsdale Blvd
4th Floor
Foster City, CA 94404
1 (650) 801 6100

Table of Contents

About this Guide 4

About Qualys 4
Qualys Support 4

Get Started 5

Overview 5
What do I need to know? 5
Cloud Agent Platform Availability Matrix 8
Cloud Agent Platform Windows Hotfixes Needed 14
It's easy to install agents 15
Installing agents in AWS 18
We're syncing asset data to the cloud! 18
Continuous scanning in the cloud 19
Cloud Agent Cloud Provider Metadata 20

Manage Your Agents 25

A quick look at your agents 25
Tell me about agent status 26
Easily view current Asset Details 28
Take bulk actions on agents 29
Change configuration 29
Tagging agent hosts 31
Looking for agent files? 32

Appendix 33

End-of-Service Cloud Agent Versions 33
How to find agents that are no longer supported? 33
What action do I need to take? 36
Best Practices for Agent Binary Upgrade 37
Why should I upgrade my agents to the latest version? 37

About this Guide

Thank you for your interest in our revolutionary new Qualys Cloud Agent Platform. This new platform extends the Qualys Cloud Platform to continuously assess global IT infrastructure and applications using lightweight agents. All you have to do is install agents on your IT assets. We'll help you get started quickly!

About Qualys

Qualys, Inc. (NASDAQ: QLYS) is a pioneer and leading provider of cloud-based security and compliance solutions. The Qualys Cloud Platform and its integrated apps help businesses simplify security operations and lower the cost of compliance by delivering critical security intelligence on demand and automating the full spectrum of auditing, compliance and protection for IT systems and web applications.

Founded in 1999, Qualys has established strategic partnerships with leading managed service providers and consulting organizations including Accenture, BT, Cognizant Technology Solutions, Deutsche Telekom, Fujitsu, HCL, HP Enterprise, IBM, Infosys, NTT, Optiv, SecureWorks, Tata Communications, Verizon and Wipro. The company is also a founding member of the Cloud Security Alliance (CSA). For more information, please visit www.qualys.com

Qualys Support

Qualys is committed to providing you with the most thorough support. Through online documentation, telephone help, and direct email support, Qualys ensures that your questions will be answered in the fastest time possible. We support you 7 days a week, 24 hours a day. Access support information at www.qualys.com/support/

Get Started

With Qualys Cloud Agent you'll get continuous network security updates through the cloud. As soon as changes are discovered on your hosts they'll be assessed and you'll know about new security threats right away. All you have to do is install lightweight agents on your hosts - we'll help you do this quickly!

Overview

Install lightweight agents in minutes on your IT assets. These can be installed on your on-premise systems, dynamic cloud environments and mobile endpoints. Agents are centrally managed by the cloud agent platform and are self-updating (no reboot needed).

Scanning in the Cloud We'll start syncing asset data to the cloud agent platform once agents are installed. Agents continuously collect metadata, beam it to the cloud agent platform where full assessments occur right away. Since the heavy lifting is done in the cloud the agent needs minimal footprint and processing on target systems.

Stay updated with network security Scanning in the cloud uses the same signatures (vulnerabilities, compliance datapoints) as traditional scanning with Qualys scanners. You'll get informed right away about new security threats using your Qualys Cloud Platform applications - Vulnerability Management (VM), Policy Compliance (PC), Continuous Monitoring (CM), AssetView (AV) and more!

What do I need to know?

Here's a few things to know before you install agents on hosts within your network.

Get informed quickly about Qualys Cloud Agent (CA).

Video Tutorials

Cloud Agent Platform Introduction (2m 10 s)

Getting Started Tutorial (4m 58s)

Cloud Agent requirements

- We support these systems: Windows, Linux/Unix (.rpm), Linux (.deb), BSD(.txz), Apple Mac OSX (.pkg)

Cloud Agent Platform Availability Matrix

- Your hosts must be able to reach your Qualys Cloud Platform (or the Qualys Private Cloud Platform) over HTTPS port 443. Go to Help > About to see the URL your hosts need to access.

- To install Windows Agent you must have local administrator privileges on your hosts. Proxy configuration is supported

- To install Linux Agent, BSD Agent, Unix Agent, MacOS Agent you must have root privileges, non-root with Sudo root delegation, or non-root with sufficient privileges (VM scan only). Proxy configuration is supported.

Steps to install agents

- Create an activation key. This provides a way to group agents and bind them to your account.

- Download the agent installer to your local machine.

- Run the installer on each host from an elevated command prompt, or use group policy or a systems management tool.

- Activate agents for modules in your subscription (VM, PC, FIM, EDR, PM, etc). A license will be consumed for each agent activated.

Our Quick Start Guide helps you get started

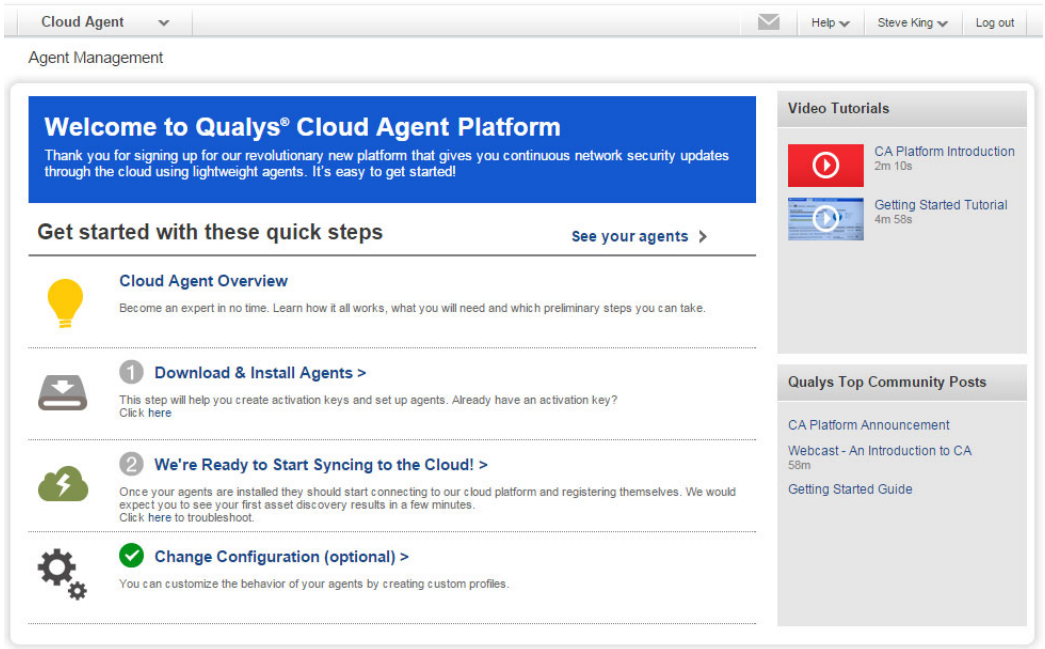
Check out our Quick Start Guide (you can go to user name menu and select this option). On the left you'll see step by step instructions with links to the right places to take actions. On the right you'll find links to video tutorials.

Qualys URL your hosts need to access

The Qualys URL you use depends on the Qualys platform where your account is located.

Refer https://www.qualys.com/platform-identification/

Tip - You can click **Cloud Agent Overview** to get helpful information on requirements, proxy support and more.



Looking for training? You might want to check out these options.

Free Training

Take a free CA self paced class

CA video library

Cloud Agent Platform Availability Matrix

Windows | Linux | Linux arm_64 | IBM AIX | Apple MacOS

Qualys certifies the two latest Agent releases for new operating systems and their updates. While not explicitly certified, all Agent versions that are not End-of-Service should also support these operating systems.

Windows

Current Release: 4.6.1

End-of-Service versions: See Appendix

Supported Platforms				Supported Qualys Modules/Agent Versions						
Vendor	**Operating System**	**Arch**	**Installer**	**Inventory / VM**	**PC**	**PC UDC**	**SCA**	**EDR**	**FIM**	**PM**
Microsoft	Windows XP SP 3+ Vista	x86_64 x86_32	(.exe) (.msi)	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	*not available*	*not available*	4.6.1, 4.4 (excluding XP)
Microsoft	Windows Embedded 7	x86_64 x86_32	(.exe) (.msi)	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	*not available*	4.6.1, 4.4
Microsoft	Windows 7 Windows 8/8.1 Windows 10** (1507 through 21H1)	x86_64 x86_32	(.exe) (.msi)	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4
Microsoft	Server 2003 SP2+ through Server 21H1*	x86_64 x86_32	(.exe) (.msi)	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4	4.6.1, 4.4 (excluding Server 2003 and 2008)	4.6.1, 4.4 (excluding Server 2003 and 2008)	4.6.1, 4.4 (excluding Server 2003)

*all editions plus Server Core and Semi-Annual Channel (SAC)

** Cloud Agent supports Windows 10 Enterprise Multi-Session

Important Notes

- Windows XP and Server 2003 do not have Cryptography Next Generation (CNG) Suite B algorithms (including SHA2) included in the operating systems. The Qualys certification uses SHA2-512 so any validation against that certification will fail because the platform doesn't have the algorithm to validate the certification installed or to install the certification. Hotfixes must be installed to add the necessary SHA2-256/318/512 support to the system. Click here for the hotfixes needed.

- Cloud Agent support for EDR and FIM on Windows 7 and Windows Server 2008 R2 is available only with SHA2 update. For more information, refer KB Article.

Linux x86_64

Current Release: 4.7

End-of-Service versions: See Appendix

Supported Platforms				Supported Qualys Modules/Agent Versions					
Vendor	**Operating System**	**Installer**	**Inventory / VM**	**PC**	**PC UDC**	**SCA**	**EDR**	**FIM**	**PM**
Red Hat	Red Hat Enterprise Linux 5.4+	(.rpm)	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*	*not available*	*not available*
Red Hat	Red Hat Enterprise Linux 6	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	4.7, 4.6
Red Hat	Red Hat Enterprise Linux 7 through 7.9	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	4.7, 4.6
Red Hat	Red Hat Enterprise Linux 8 through 8.5	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	4.7, 4.6
Red Hat	CentOS 5.4+	(.rpm)	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*	*not available*	*not available*
Red Hat	CentOS 6	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	4.7, 4.6
Red Hat	CentOS 7 7.1 through 7.8	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	4.7, 4.6
Red Hat	CentOS 8 through 8.5	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Red Hat	Fedora 22 through 33	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	*not available*	*not available*
Microsoft	CBL-Mariner	(.rpm)	4.7, 4.6	*not available*	*not available*	*not available*	*not available*	*not available*	*not available*
SUSE	SUSE Linux Enterprise Server (SLES) 15	(.rpm)	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*	4.7, 4.6	*not available*
SUSE	SUSE Linux Enterprise Server (SLES) 12 SUSE Linux Enterprise Server (SLES) 11	(.rpm)	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*	4.7, 4.6	*not available*

Supported Platforms			Supported Qualys Modules/Agent Versions						
Vendor	**Operating System**	**Installer**	**Inventory / VM**	**PC**	**PC UDC**	**SCA**	**EDR**	**FIM**	**PM**
SUSE	openSUSE Leap 15.3 (2.6.0 or later) openSUSE Leap 15.2 (2.6.0 or later) openSUSE Leap 15.1 openSUSE Leap 15.0 OpenSUSE 13 OpenSUSE 12	(.rpm)	4.7, 4.6	*not available*	*not available*	4.7, 4.6	*not available*	*not available*	*not available*
SUSE	openSUSE Leap 42.1 Tumbleweed	(.rpm)	4.7, 4.6	*not available*	*not available*	*not available*	*not available*	*not available*	*not available*
Amazon	Amazon Linux 2015.09 through 2018.03	(.rpm)	4.7, 4.6	4.7, 4.6	*not available*	*not available*	*not available*	*not available*	*not available*
Amazon	Amazon Linux 2 2017.03 through 2.0.2021	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Oracle	Oracle Enterprise Linux (OEL) 5.11	(.rpm)	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*	*not available*	*not available*
Oracle	Oracle Enterprise Linux 8.0 through 8.5	(.rpm)	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Oracle	Oracle Enterprise Linux (OEL) 7.0 through 7.9 Oracle Enterprise Linux (OEL) 6	(.rpm)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Debian	Debian 11.x Debian 10.x Debian 9.x Debian 8.x Debian 7.x (Vendor EOL May 2018)	(.deb)	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Ubuntu	12.04 LTS	(.deb)	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*	*not available*	*not available*

Supported Platforms			Supported Qualys Modules/Agent Versions						
Vendor	Operating System	Installer	Inventory / VM	PC	PC UDC	SCA	EDR	FIM	PM
Ubuntu	14.04 LTS	(.deb)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Ubuntu	15.x	(.deb)	4.7, 4.6	*not available*	*not available*	*not available*	*not available*	*not available*	*not available*
Ubuntu	16.04 LTS	(.deb)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Ubuntu	18.04 LTS	(.deb)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Ubuntu	19.10	(.deb)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*
Ubuntu	20.04 LTS	(.deb)	4.7, 4.6	4.7, 4.6	4.7, 4.6	4.7, 4.6	*not available*	4.7, 4.6	*not available*

Linux arm_64

Current Release: 2.6.2

End-of-Service versions: See Appendix

Supported Platforms			Supported Qualys Modules/Agent Versions						
Vendor	Operating System	Installer	Inventory / VM	PC	PC UDC	SCA	EDR	FIM	PM
Red Hat	Red Hat Enterprise Linux 5.4+, 6, 7, and 8	(.rpm)	2.6.2	2.6.2	2.6.2	2.6.2	*not available*	*not available*	*not available*
Amazon	Amazon Linux 2 2017.03 through 2.0.2021	(.rpm)	2.6.2	2.6.2	2.6.2	2.6.2	*not available*	*not available*	*not available*
Ubuntu	12.04 LTS	(.deb)	2.6.2	2.6.2	*not available*	2.6.2	*not available*	*not available*	*not available*
Ubuntu	14.04 LTS 15.x 16.04 LTS 18.04 LTS 19.10 20.04 LTS	(.deb)	2.6.2	2.6.2	2.6.2	2.6.2	*not available*	*not available*	*not available*

BSD

Current Release: 3.12

Supported Platforms					Supported Qualys Modules/Agent Versions				
Vendor	Operating System	Arch	Installer	Inventory / VM	PC	PC UDC	EDR	FIM	PM
FreeBSD	FreeBSD 13.0 12.2, 11.3	x86_64	(.txz)	3.12, 2.4	3.12	*not available*	*not available*	*not available*	*not available*

IBM AIX

Current Release: 3.1

End-of-Service versions: See Appendix

Supported Platforms					Supported Qualys Modules/Agent Versions					
Vendor	Operating System	Arch	Installer	Inventory / VM	PC	PC UDC	SCA	EDR	FIM	PM
IBM	AIX 7.1 TL1, TL2, TL3, TL4, TL5, TL5 SP4 AIX 7.2 TL1, TL2, TL3, TL4 (Standard and Enterprise Editions)	POWER 64-bit	.bff (.rpm)	3.1, 2.5	3.1, 2.5	3.1, 2.5	3.1, 2.5	*not available*	*not available*	*not available*
IBM	AIX 6.1 TL0-9 (Standard and Enterprise Editions)	POWER 64-bit	.bff (.rpm)	3.1, 2.5	3.1, 2.5	3.1, 2.5	3.1, 2.5	*not available*	*not available*	*not available*

Apple MacOS

Current Release: 3.7

End-of-Service versions: See Appendix

Supported Platforms					Supported Qualys Modules/Agent Versions					
Vendor	Operating System	Arch	Installer	Inventory / VM	PC	PC UDC	SCA	EDR	FIM	PM
Apple	macOS High Sierra (10.13)	x86_64	(.pkg)	3.7, 2.5	3.7, 2.5	*not available*	3.7, 2.5	*not available*	*not available*	*not available*
Apple	macOS Mojave (10.14)	x86_64	(.pkg)	3.7, 2.5	3.7, 2.5	*not available*	3.7, 2.5	*not available*	*not available*	*not available*
Apple	macOS Catalina (10.15) including Supplement Update 1,2,3,4	x86_64	(.pkg)	3.7, 2.5	3.7, 2.5	*not available*	3.7, 2.5	*not available*	*not available*	*not available*

Supported Platforms					Supported Qualys Modules/Agent Versions					
Vendor	Operating System	Arch	Installer	Inventory / VM	PC	PC UDC	SCA	EDR	FIM	PM
Apple	macOS Big Sur(11)	x86_64 Apple M1 with Rosetta 2	(.pkg)	3.7, 2.5	3.7, 2.5	*not available*	3.7, 2.5	*not available*	*not available*	*not available*
Apple	macOS Monterey (12.0.1)	x86_64	(.pkg)	3.7, 2.5	3.7, 2.5	*not available*	*not available*	*not available*	*not available*	*not available*

PowerPC

Current Release: 2.6

Supported Platforms					Supported Qualys Modules/Agent Versions				
Vendor	Operating System	Arch	Installer	Inventory	VM	PC	PC UDC	EDR	FIM
SUSE	SUSE Linux Enterprise Server SLES 12 and 15 on IBM PowerPC	IBM Power PC [ppc64 le]	(.rpm)	2.6	2.6	2.6	*not available*	*not available*	*not available*

Solaris

Current Release: 3.11

Supported Platforms					Supported Qualys Modules/Agent Versions				
Vendor	Operating System	Arch	Installer	Inven-tory/VM	PC	PC UDC	SCA	EDR	FIM
Solaris	Solaris 10 and 11	x86	(.pkg)	3.11, 2.6.9	3.11, 2.6.9	3.11, 2.6.9	3.11, 2.6.9	*not available*	*not available*

CoreOS

Current Release: 3.5.0

Supported Platforms					Supported Qualys Modules/Agent Versions				
Vendor	Operating System	Arch	Installer	Inven-tory/VM	PC	PC UDC	SCA	EDR	FIM
RHEL Openshift	CoreOS	x86	(.tar.xz)	3.5.0	3.5.0	*not available*	*not available*	*not available*	*not available*

Cloud Agent Platform Windows Hotfixes Needed

The following hotfixes are required to successfully install the Windows Agent.

Hotfix	KB Article	Archive	Language	Platform
Windows XP SP3+ x86 SHA2 Cert Hotfix	968730	375554_ENU_i386_zip.exe	English	i386
Windows Server 2003 SP2+ x86 SHA2 Cert Hotfix	968730	375510_ENU_i386_zip.exe	English	i386
Windows XP SP3+ x64 & Windows Server 2003 SP2+ x64 SHA2 Cert Hotfix	968730	375531_ENU_x64_zip.exe	English	x64

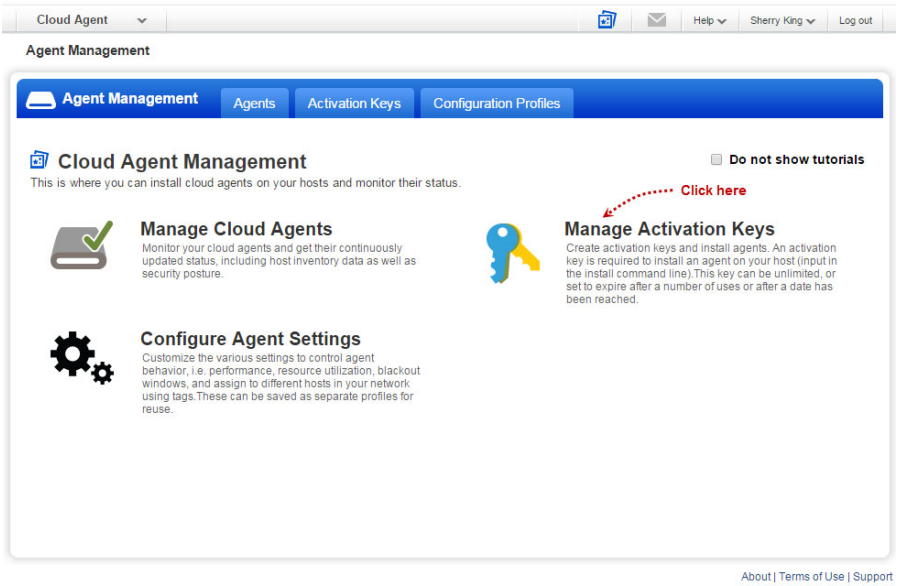
Note: Archive names may change in the future.

It's easy to install agents

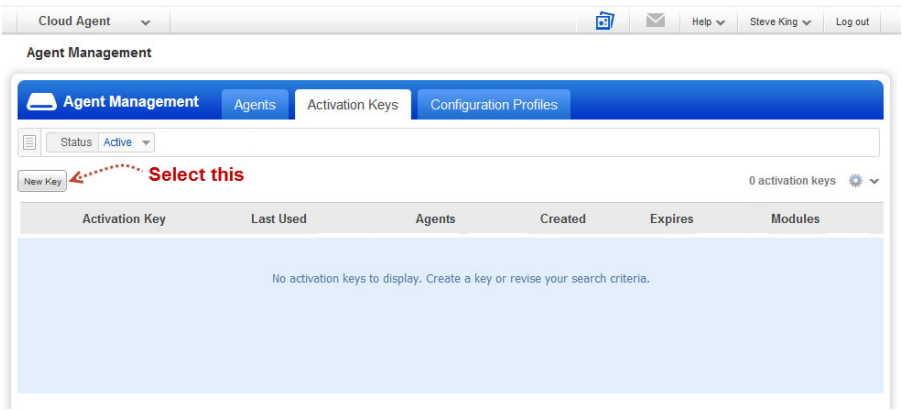
It just takes a couple minutes to install an agent. Our wizard will help you do it quickly!

Help me with the steps

Start the wizard Choose Agent Management and select Manage Activation Keys (or go to the Activation Keys tab).



Select New Key to create a new activation key. An activation key is used to install agents.

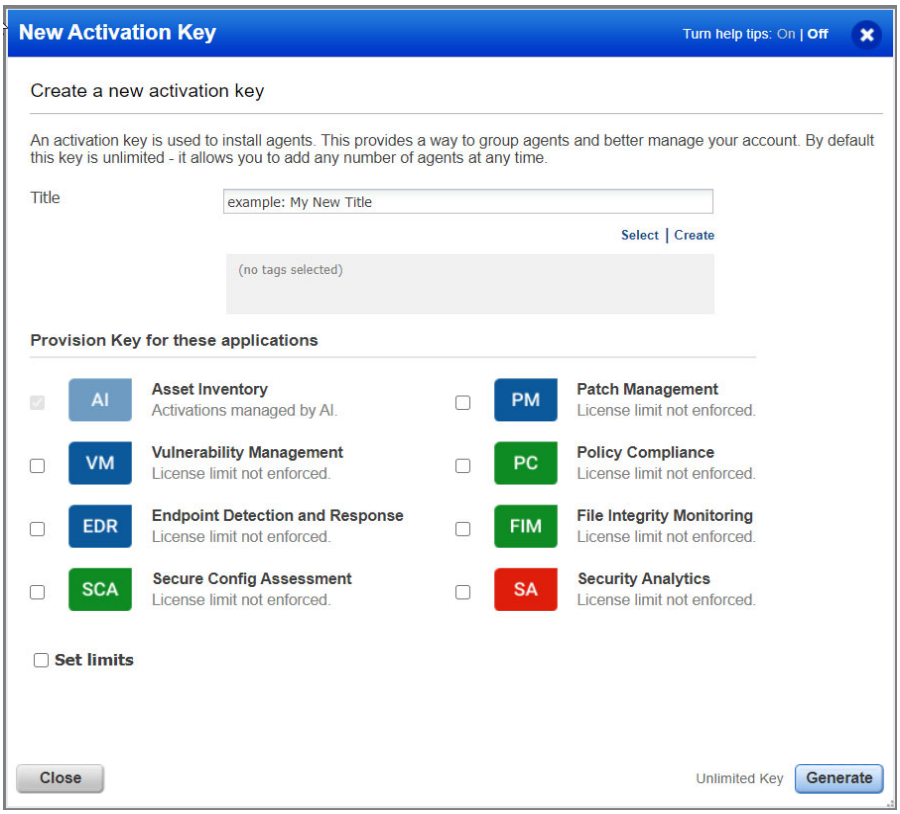


The activate key provides a way to group agents and bind them to your account.

For example, you can create different keys for various business functions and

Already have a key? Just select a key from the list, and select Install Agent from the Quick Actions menu.

Generate a new activation key Click the Generate button.



Give your key a meaningful name to easily identify it later.

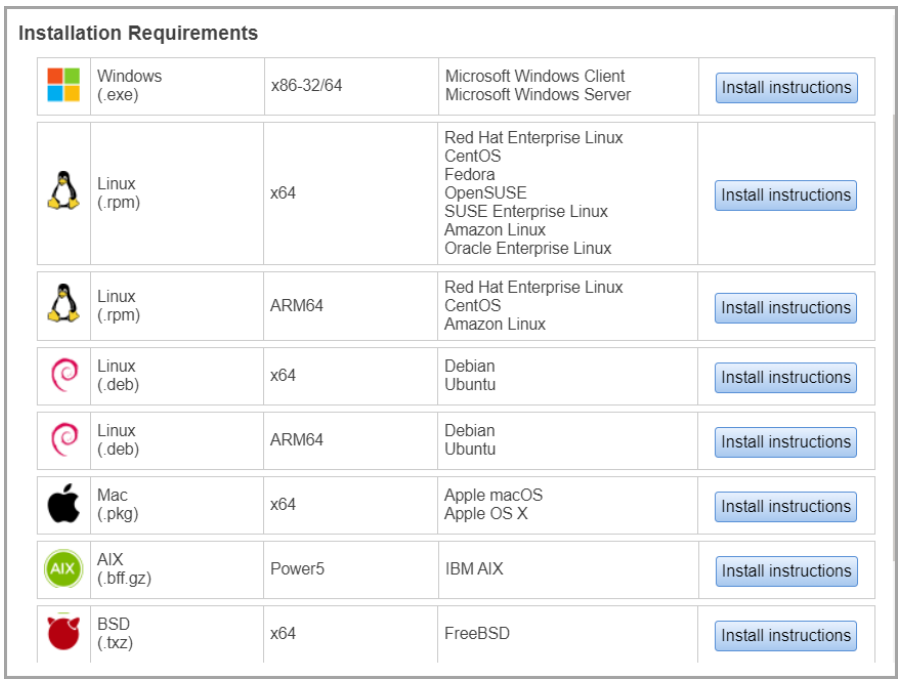
Why add tags? This helps you manage agents - we'll associate tags to agent hosts.

Your key is unlimited by default - install any number of agents at any time.

Set limits if you want the key to expire after a number of agents, or on a certain date, or both.

Auto activate agents for apps in your account. Skip this step to activate agents at a later time.

Review requirements and click Install Instructions for the target agent host.



Don't see all of the options? Just go to Help > Contact Support and we'll help you with this quickly

Install your agents You'll download the agent installer and run on your hosts. To run the installer you just copy and paste the command shown - it's that simple.

Depending on the OS type, you'll download respective agent installer and install the agent from Install Instructions.

Few examples:

For Linux (.rpm) ARM64, you'll click Download .rpm button to download the agent installer.

For Linux (.deb) ARM64, you'll click Download .deb button to download the agent installer.

For MacOS (.pkg) x64, you'll click Download .pkg button to download the agent installer.

Setup proxy support Our installation guides help you with this and more options.

Installation Guides: Windows Agent | Linux Agent | BSD Agent | Unix Agent | MacOS Agent

Installing agents in AWS

Please follow the installation steps provided at the link below.

Learn more

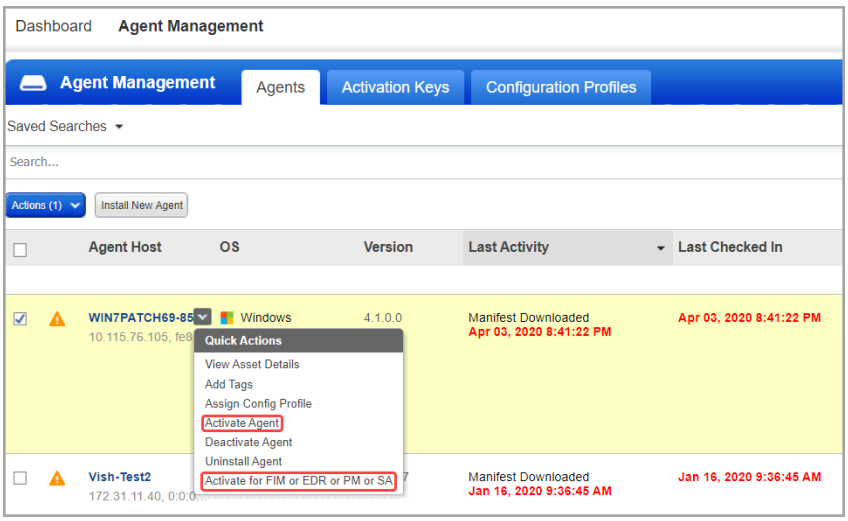
Installing Cloud Agent in AWS

We're syncing asset data to the cloud!

The agent immediately connects to the cloud agent platform and registers itself. We would expect you to see your first asset discovery results within a few minutes. This is a light scan that collects asset inventory data: IP address, OS, DNS/NetBIOS names, MAC address.

Status messages are continuously updated. Learn more

Be sure to Activate Agents for modules (VM/PC) or (FIM/EDR/PM/SA). Activate Agent from the Quick Actions menu (or do it for many agents in bulk using the Actions menu). If you skip this step your agents will sync inventory information only (IP address, OS, DNS and NetBIOS names, MAC address) and the cloud agent platform will not perform host assessments and report security threats.



No agent status? You should see the status of your agent (on the Agents tab) a few minutes after installation. If there's no status this means your agent has not been installed - it did not successfully connect to the cloud platform and register itself.

There are 2 common reasons for this:

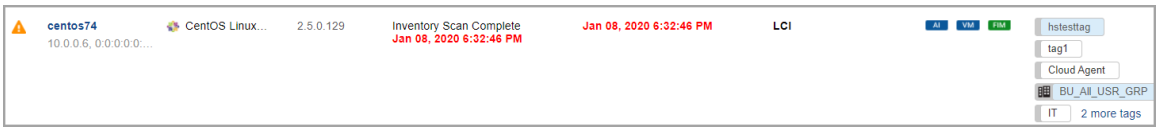
1) The agent host cannot reach the Qualys Cloud Platform (or the Qualys Private Cloud Platform if this applies to you) over HTTPS port 443. Check network access and be sure to whitelist the platform URL listed in your account. Just go to Help > About for details.

2) You have a custom proxy. Our Quick Start Guide > Cloud Agent Overview will help you with this quickly.

Still need help? Keep in mind your agents must connect to the cloud platform to start syncing asset data to the cloud. Read our troubleshooting tips (under Help > Online Help).

Continuous scanning in the cloud

The first assessment scan in the cloud takes some time, after that scans complete as soon as new host metadata is uploaded to the platform.



How it works The agent sends up an upload of the baseline snapshot to the cloud agent platform for assessment. For the initial upload the agent collects comprehensive metadata about the target host (a few megabytes) and sends a baseline snapshot to the cloud for assessment. The status Scan Complete is reported upon success. This first scan typically takes 30 minutes to 2 hours using the default configuration - after that scans run instantly on the delta uploads (a few kilobytes each).

The asset data the agent collects includes many things for the baseline snapshot like network posture, OS, open ports, installed software, registry info, what patches are installed, environment variables, and metadata associated with files. The agent stores a snapshot on the agent host to quickly determine deltas to host metadata it collects.

What signatures are tested? Agent-based scanning uses the same signatures (vulnerabilities, compliance datapoints) as traditional scanning with Qualys scanners. If you've activated your agents for VM, we'll test for vulnerability signatures. If you've activated your agents for PC we'll check for compliance datapoints.

Cloud Agent Cloud Provider Metadata

Available starting with Cloud Agent Linux 1.7.0 and Cloud Agent Windows 1.6.0 releases, the Qualys Cloud Agent collects instance metadata from supported public cloud providers, including Amazon Web Services, Microsoft Azure, and Google Compute Platform.

The agent collects the instance metadata from the cloud provider's instance metadata web services locally available from each running instance via HTTP as part of the agent's default inventory collection. The collected instance metadata is available in the Qualys AssetView module (Asset Details and new search tokens) and Asset Management API.

Cloud Provider Instance Metadata

The following table lists the instance metadata currently collected by the Cloud Agent for each cloud provider. Refer to the Cloud Agent Release Notes for additional instance metadata collected from public cloud providers in future versions of the Cloud Agent.

For AWS

Cloud Agent Windows	Cloud Agent Linux
accountId	accountId
ami-id	ami-id
availability-zone	availability-zone
instance-id	instance-id
instance-type	instance-type
kernel-id	kernel-id
local-hostname	local-hostname
local-ipv4	local-ipv4
network/interfaces/macs/mac/mac	network/interfaces/macs/mac/mac
network/interfaces/macs/mac/subnet-id	network/interfaces/macs/mac/subnet-id
public-hostname	public-hostname
public-ipv4	public-ipv4
region	region
reservation-id	reservation-id
security-groups	security-groups
security-groups-ids	security-groups-ids
vpc-id	vpc-id
asset.aws.ec2.availabilityZone	asset.aws.ec2.instanceId
asset.aws.ec2.accountId	asset.aws.ec2.instanceType
asset.aws.ec2.region	asset.aws.ec2.privateIpAddress
asset.aws.ec2.VPCId	asset.aws.ec2.region
asset.aws.ec2.publicIpAddress	asset.aws.ec2.kernelId
asset.aws.ec2.document	asset.aws.ec2.availabilityZone
asset.aws.ec2.macAddress-find	asset.aws.ec2.amiId
asset.aws.ec2.instanceId	asset.aws.ec2.accountId
asset.aws.ec2.kernelId	asset.aws.ec2.hostname
asset.aws.ec2.macAddress	asset.aws.ec2.hostnamePublic
asset.aws.ec2.hostnamePublic	asset.aws.ec2.publicIpAddress
asset.aws.ec2.subnetId	asset.aws.ec2.macAddress
asset.aws.ec2.securityGroups	asset.aws.ec2.reservationId
asset.aws.ec2.reservationId	asset.aws.ec2.ami-launch-index
asset.aws.ec2.instanceType	asset.aws.ec2.ami-manifest-path
asset.aws.ec2.securityGroupIds	asset.aws.ec2.instance-action
asset.aws.ec2.privateIpAddress	asset.aws.ec2.securityGroups
asset.aws.ec2.amiId	asset.aws.ec2.VPCId
asset.aws.ec2.hostname	asset.aws.ec2.securityGroupsIds
	asset.aws.ec2.subnetId

For Azure

Cloud Agent Windows	Cloud Agent Linux
compute.location	compute.location
compute.name	compute.name
compute.offer	compute.offer
compute.osType	compute.osType
compute.publisher	compute.publisher
compute.resourceGroupName	compute.resourceGroupName
compute.subscriptionId	compute.subscriptionId
compute.tags	compute.tags
compute.version	compute.version
compute.vmId	compute.vmId
compute.vmSize	compute.vmSize
network.interface.ipv4.ipaddress.privateIpAddress	network.interface.ipv4.ipaddress.privateIpAddress
network.interface.ipv4.ipaddress.publicIpAddress	network.interface.ipv4.ipaddress.publicIpAddress
network.interface.ipv4.subnet.address	network.interface.ipv4.subnet.address
network.interface.ipv6.ipaddress.ipAddress	network.interface.ipv6.ipaddress.ipAddress
network.interface.macAddres	network.interface.macAddres
asset.azure.vm.subnet	asset.azure.vm.vmId
asset.azure.vm.offer	asset.azure.vm.name
asset.azure.vm	asset.azure.vm.location
asset.azure.vm.subscriptionId	asset.azure.vm.vmSize
asset.azure.vm.name	asset.azure.vm.offer
asset.azure.vm.publisher	asset.azure.vm.publisher
asset.azure.vm.privateIpAddress	asset.azure.vm.version
asset.azure.vm.vmSize	asset.azure.vm.osType
asset.azure.vm.publicIpAddress	asset.azure.vm.SubscriptionId
asset.azure.tags	asset.azure.tags
asset.azure.vm.version	asset.azure.vm.resourceGroupName
asset.azure.vm.ipv6	asset.azure.vm.subnet
asset.azure.vm.vmId	asset.azure.vm.macAddress
asset.azure.vm.macAddress	asset.azure.vm.publicIpAddress
asset.azure.vm.location	asset.azure.vm.privateIpAddress
asset.azure.vm.resourceGroupName	asset.azure.vm.ipv6
asset.azure.vm.osType	

For GCP

Cloud Agent Windows	Cloud Agent Linux
instance/hostname	instance/hostname
instance/id	instance/id
instance/machine-type	instance/machine-type
instance/network-interfaces/	instance/network-interfaces/
instance/network-interfaces/0/access-configs/0/external-ip	instance/network-interfaces/0/access-configs/0/external-ip
instance/network-interfaces/0/ip	instance/network-interfaces/0/ip
instance/network-interfaces/0/mac	instance/network-interfaces/0/mac
instance/network-interfaces/0/network	instance/network-interfaces/0/network
instance/zone	instance/zone
project/numeric-project-id	project/numeric-project-id
project/project-id	project/project-id
asset.gcp.compute.projectIdNo	asset.gcp.compute.id
asset.gcp.compute.hostname	asset.gcp.compute.hostname
asset.gcp.compute.projectDetails	asset.gcp.compute.machineType
asset.gcp.compute.id-PreAggregate	asset.gcp.compute.zone
asset.gcp.compute.macAddress	asset.gcp.compute.publicIpAddress
asset.gcp.compute.id	asset.gcp.compute.privateIpAddress
asset.gcp.compute.publicIpAddress	asset.gcp.compute.network
asset.gcp.compute.projectId	asset.gcp.compute.macAddress
asset.gcp.compute.networkInterface	asset.gcp.compute.projectIdNo
asset.gcp.compute.zone	asset.gcp.compute.projectId
asset.gcp.compute.network	
asset.gcp.compute.privateIpAddress	
asset.gcp.compute.machineType	

For IBM

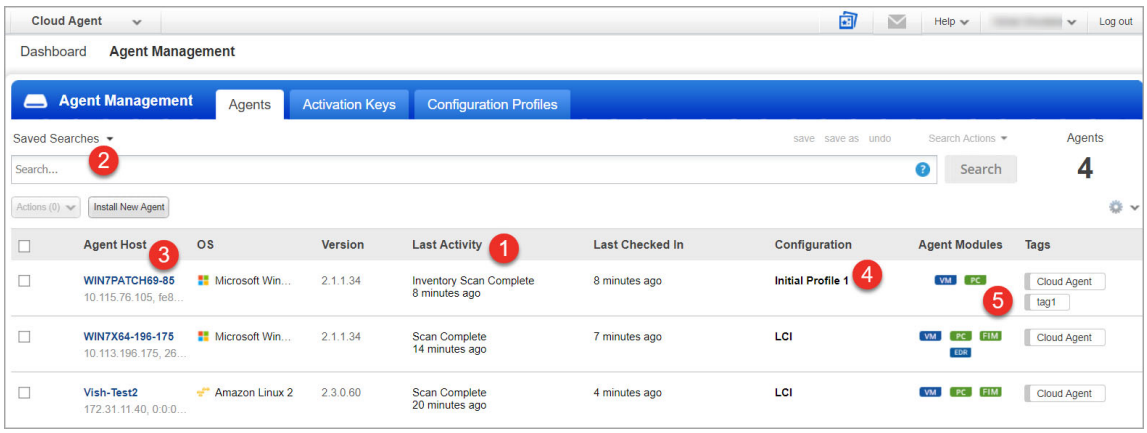
Cloud Agent Windows	Cloud Agent Linux
asset.ibm.virtualServer.frontendMacAddresses	asset.ibm.virtualServer.location
asset.ibm.virtualServer.backendMacAddresses	asset.ibm.virtualServer.datacenterId
asset.ibm.virtualServer.id	asset.ibm.virtualServer.deviceName
asset.ibm.virtualServer.publicIP	asset.ibm.virtualServer.publicIp
asset.ibm.virtualServer.publicVlan	asset.ibm.virtualServer.privateIp
asset.ibm.virtualServer.privateVlan	asset.ibm.virtualServer.id
asset.ibm.virtualServer.domain	asset.ibm.virtualServer.domain
asset.ibm.virtualServer.tags	asset.ibm.tags
asset.ibm.virtualServer.deviceName	asset.ibm.virtualServer.publicVlan
asset.ibm.virtualServer.location	asset.ibm.virtualServer.privateVlan
asset.ibm.virtualServer.pivateIP	
asset.ibm.virtualServer.datacenterId	
asset.ibm.virtualServer.id-PreAggregate	

For OCI

Cloud Agent Windows	Cloud Agent Linux
asset.oracle.compute.image	asset.oracle.compute.instanceId
asset.oracle.compute.vnic	asset.oracle.compute.displayName
asset.oracle.compute.state	asset.oracle.compute.compartmentId
asset.oracle.compute.displayName	asset.oracle.compute.shape
asset.oracle.compute.instanceId	asset.oracle.compute.state
asset.oracle.compute.compartmentId	asset.oracle.compute.region
asset.oracle.compute.timeCreated	asset.oracle.compute.availabilityDomain
asset.oracle.compute	asset.oracle.compute.timeCreated
asset.oracle.compute.definedtags	asset.oracle.compute.image
asset.oracle.compute.freeformtags	asset.oracle.compute.faultDomain
asset.oracle.compute.shape	asset.oracle.compute.hostName
asset.oracle.compute.region	asset.oracle.compute.canonicalRegionName
asset.oracle.compute.faultDomain	asset.oracle.compute.definedtags
asset.oracle.compute.availabilityDomain	asset.oracle.compute.freeformtags
asset.oracle.compute.hostname	asset.oracle.compute.vnic
asset.oracle.compute.canonicalRegionName	

Manage Your Agents

A quick look at your agents



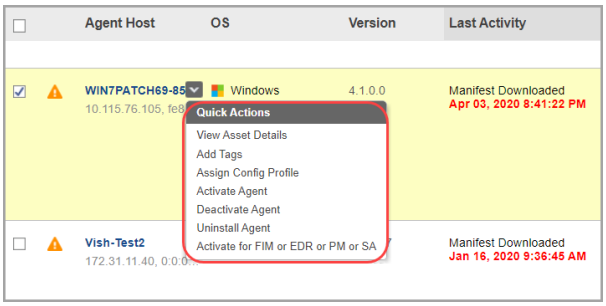
1 You should see status messages within a few minutes after installation. Learn more

2 Search your agents - your agents list includes all installed agents that have connected to the Qualys Cloud Platform.

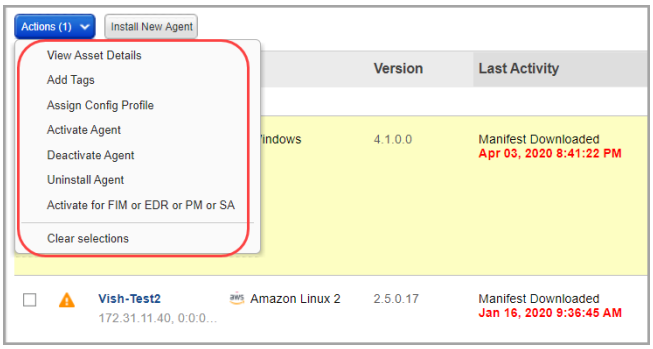
3 Agent hostname - NetBIOS name for a Windows host, DNS name for a Linux host. You can configure the name displayed. Just select View Asset Details from the Quick Actions menu.

4 A configuration profile has settings that impact agent behavior. Initial Profile is the profile provided by our service to help you get started. Want create a profile with customized settings? Just go to Configuration Profiles and select New Profile.

5 We assign the Cloud Agent tag to agent hosts automatically. This helps you manage and report on you agent assets.



Quick Actions menu lets you
- view asset details
- activate agent for various assessments (VM, PC, etc)
- uninstall agent



Actions menu lets you update multiple agents at once

Tell me about agent status

The agent status is continuously updated to keep you informed about your agent. Not seeing any status? Read our troubleshooting tips (under Help > Online Help).

Provisioned

The agent successfully connected to the cloud platform and registered itself.

Manifest Downloaded

The cloud platform updated the manifest assigned to this agent. This tells the agent what metadata to collect from the host. The updated manifest was successfully downloaded and it is in effect for this agent. For non-Windows agents the status column shows specific manifest download status, such as Inventory Manifest Downloaded for inventory, and the following status for scans:

VM Manifest Downloaded, PC Manifest Downloaded, FIM Manifest Downloaded, or EDR Manifest Downloaded.

Configuration Downloaded

A user updated the configuration profile assigned to this agent. This defines agent behavior, i.e. how the agent will collect data from the host. The updated profile was successfully downloaded and it is in effect for this agent.

Agent Downloaded

A new agent version was downloaded and the agent was upgraded as part of the auto-update process. Note the agent does not need to reboot to upgrade itself.

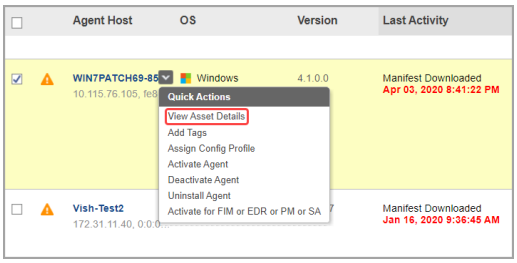
Inventory Scan Complete

The agent completed host discovery, collected some host information and sent it to the cloud platform. During host discovery the agent attempts to collect this information: IP address, OS, NetBIOS name, DNS name, MAC address.

Scan Complete

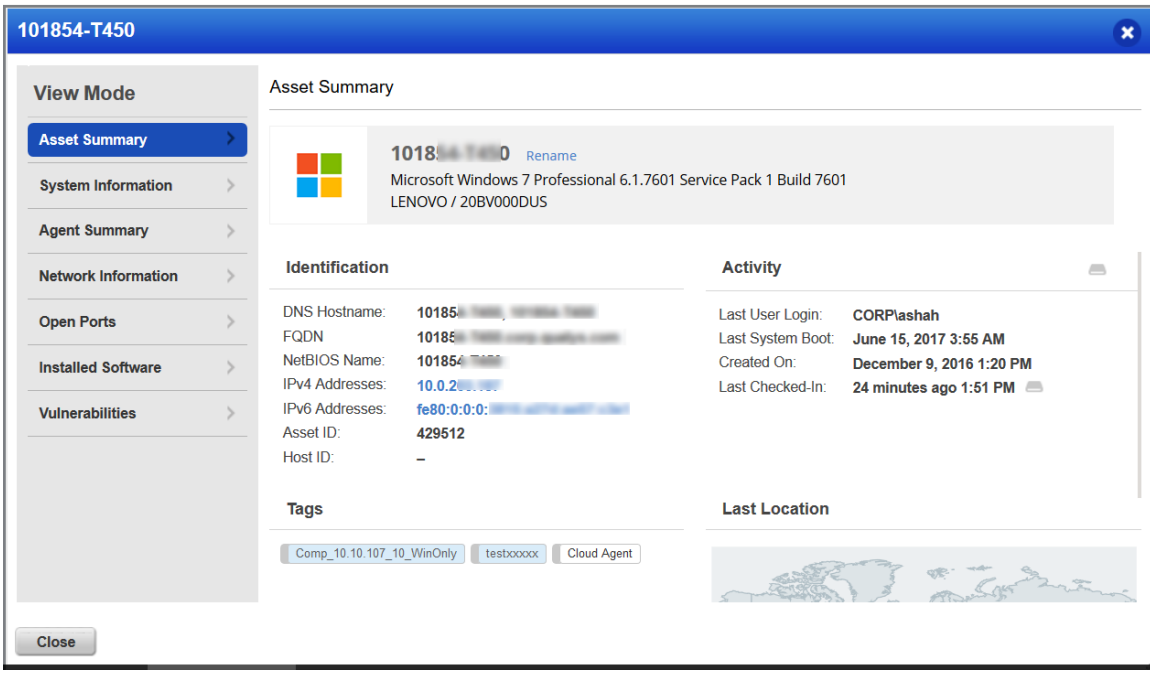
The agent uploaded new host metadata and an assessment was performed on the cloud platform. If there is new assessment data (e.g. new VM vulnerabilities, PC datapoints) the cloud platform processes this data to make it available in your account for viewing and reporting.

Easily view current Asset Details



Select **View Asset Details** from the menu

Asset Summary and sections that follow show you current asset data returned from the latest inventory scan and the latest full scan (assessment).

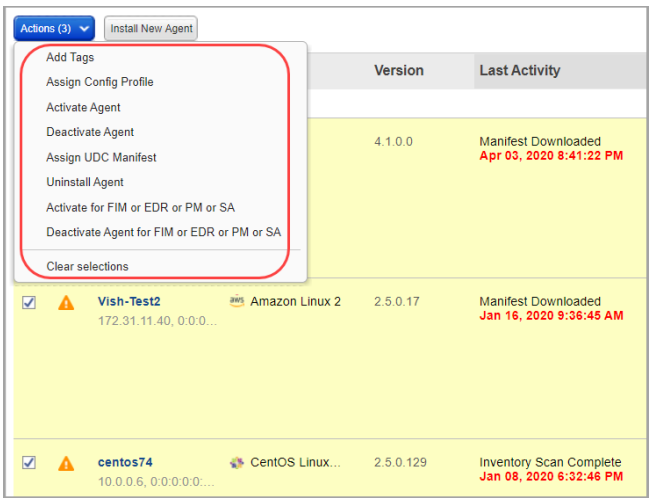


Drill down to the various sections to view comprehensive details returned from vulnerability assessments. You can view control datapoints when your account has Policy Compliance (PC) enabled, and alert notifications when Continuous Monitoring (CM) is enabled.

Take bulk actions on agents

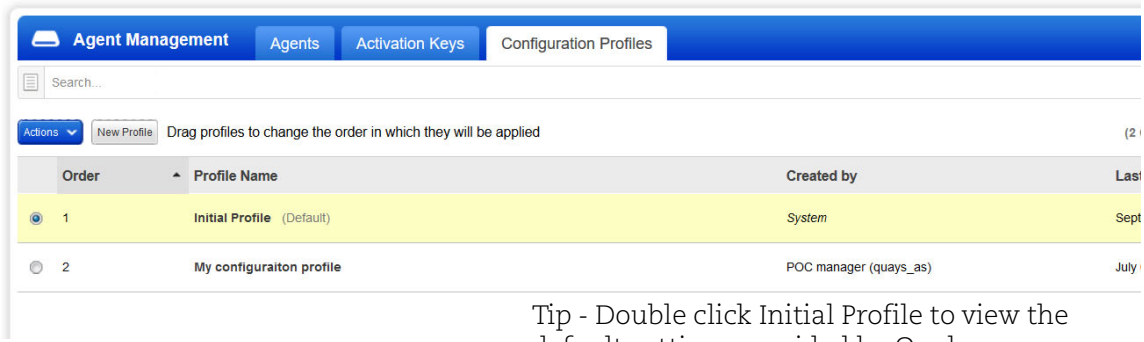
Activate, Deactivate, Uninstall multiple agents in one go!

Select agents from your agents list, open the Actions menu and select the bulk action to apply.



Change configuration

Agents have a default configuration and this controls how agents behave. You can change agent configuration by creating configuration profiles, and change the order they are applied.



Tip - Double click Initial Profile to view the default settings provided by Qualys

Initial Profile is the default profile with configuration settings provided by Qualys. This is assigned to agents by default at installation time. You can easily view the profile settings.

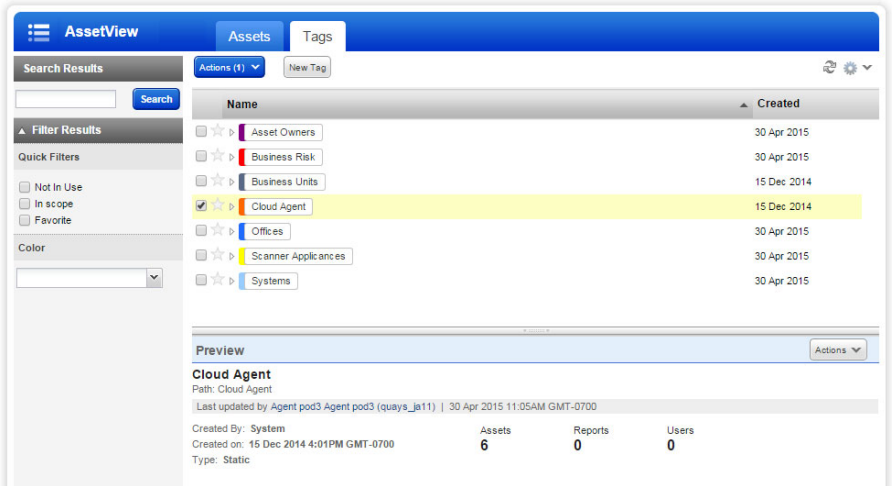
Profile settings impact many agent behaviors. How and when the agent collects metadata, when it should sync with the cloud platform, when to do self-updates, tuning of performance and bandwidth utilization, etc. You can create custom profiles and assign to hosts.

Best Practices You might want to assign different agent configurations for different parts of your network infrastructure, i.e. laptops, servers, desktops, datacenters. Just tag your hosts according to your groupings and assign these tags to different configuration profiles.

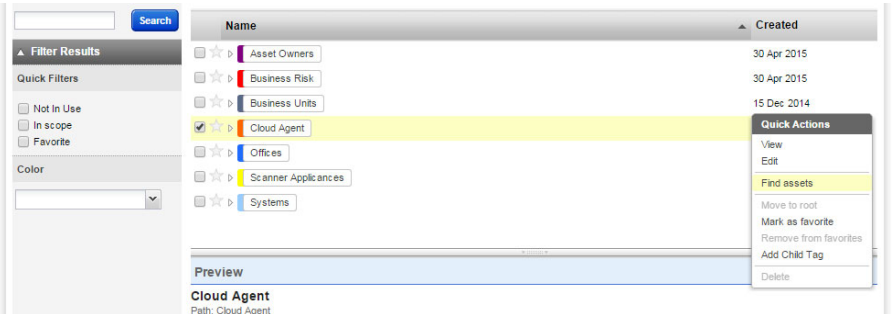
Tagging agent hosts

The dynamic asset tagging features help you manage your agent host assets just like other assets in your subscription.

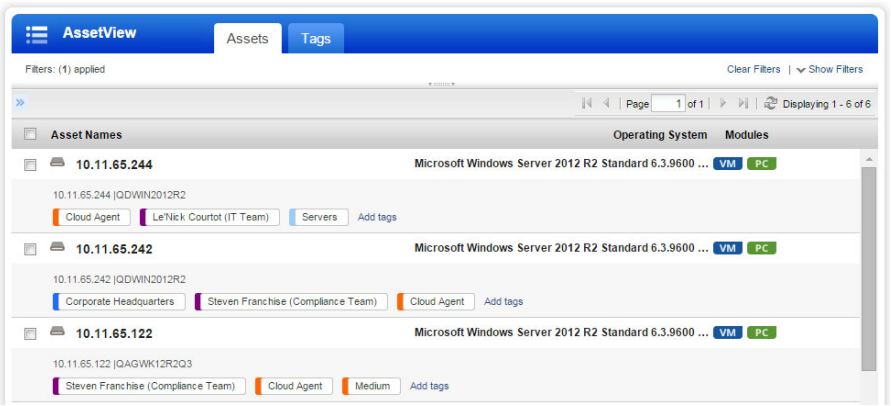
The Cloud Agent tag is assigned to every agent host. Select this tag and you'll see the number of agent hosts (assets).



The Find assets option lets you find agent assets.



You might want to tag agent hosts to help you organize them and report on them.



Looking for agent files?

The agent is centrally managed by the cloud platform. For this reason you should not edit or execute the agent files installed on your hosts - we list these here for your information. For help with troubleshooting you might want to review the log files.

What's included? Program files, the manifest (instructions for what data the agent collects), configuration (how the agent behaves), snapshot database and log files.

Windows Agent

C:\Program Files (x86)\QualysAgent\Qualys\QualysCloudAgent.exe
C:\Program Files (x86)\QualysAgent\Qualys\Uninstall.exe
C:\ProgramData\Qualys\QualysAgent*

Log files (Log.txt, Archive.txt) are located here:
C:\ProgramData\Qualys\QualysAgent
On XP and Server 2003, log files are located here:
C:\Documents and Settings\All Users\Application Data\Qualys\QualysAgent
Have custom variables? No worries, we'll install the agents following the environment settings defined for your hosts.

Linux Agent, BSD Agent, Unix Agent, MacOS Agent

/etc/init.d/qualys-cloud-agent
/etc/rc.d //BSD
/etc/qualys/cloud-agent/qagent-log.conf
/var/log/qualys/qualys-cloud-agent.log
/var/opt/qualys/qualys-cloud-agent.log //Unix
/usr/local/qualys/cloud-agent/* //Linux/BSD, Unix
/Applications/QualysCloudAgent.app/* //MacOS

Still need help? Click Read our troubleshooting tips (under Help > Online Help).

Appendix

End-of-Service Cloud Agent Versions

Please see the table below for the cloud agent versions that are no longer supported.

Platform	End-of-Service Agent Version
Windows	Prior to 3.0
Linux	Prior to 2.6
IBM AIX	Prior to 2.0
MacOS	Prior to 2.0

How to find agents that are no longer supported?

There are a few ways to find your agents from the Qualys Cloud Platform.

- QID 105961 EOL/Obsolete Software: Qualys Cloud Agent Detected
- Search by Agent Version
- Search by Software Lifecycle Stage
- Use Cloud Agent Dashboard

QID 105961 EOL/Obsolete Software: Qualys Cloud Agent Detected

VULNSIGS-2.5.117-2

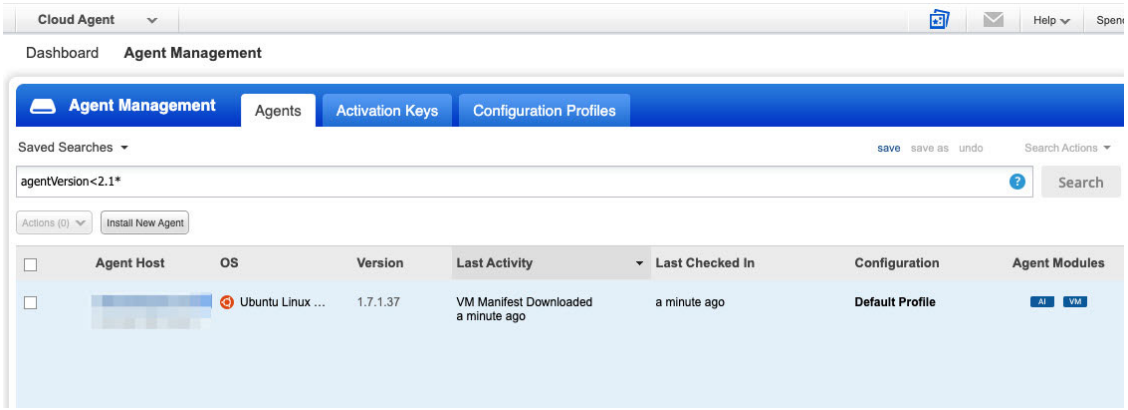
ML-12.2.62-1

Note: There are no vulnerabilities. This is simply an EOL QID. By default, all EOL QIDs are posted as a severity 5

Search by Agent Version

For example, you can find agents by the agent version number by navigating to Cloud Agent > Agent Management > Agents and using the following search query:

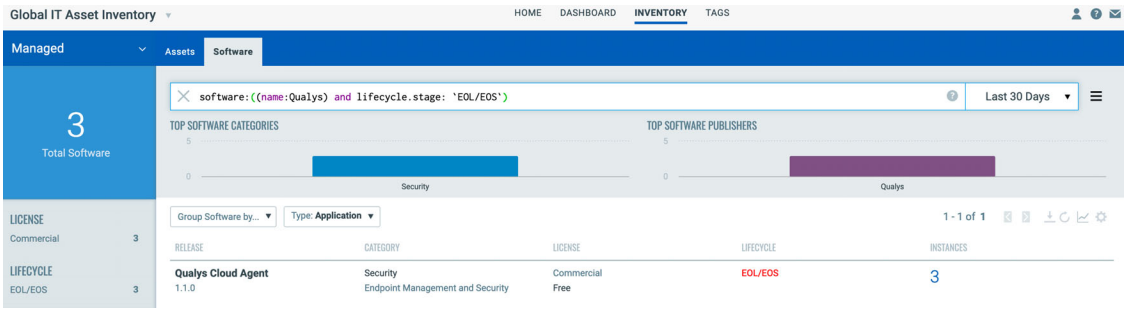
```
agentVersion<2.1*
```



Search by Software Lifecycle Stage

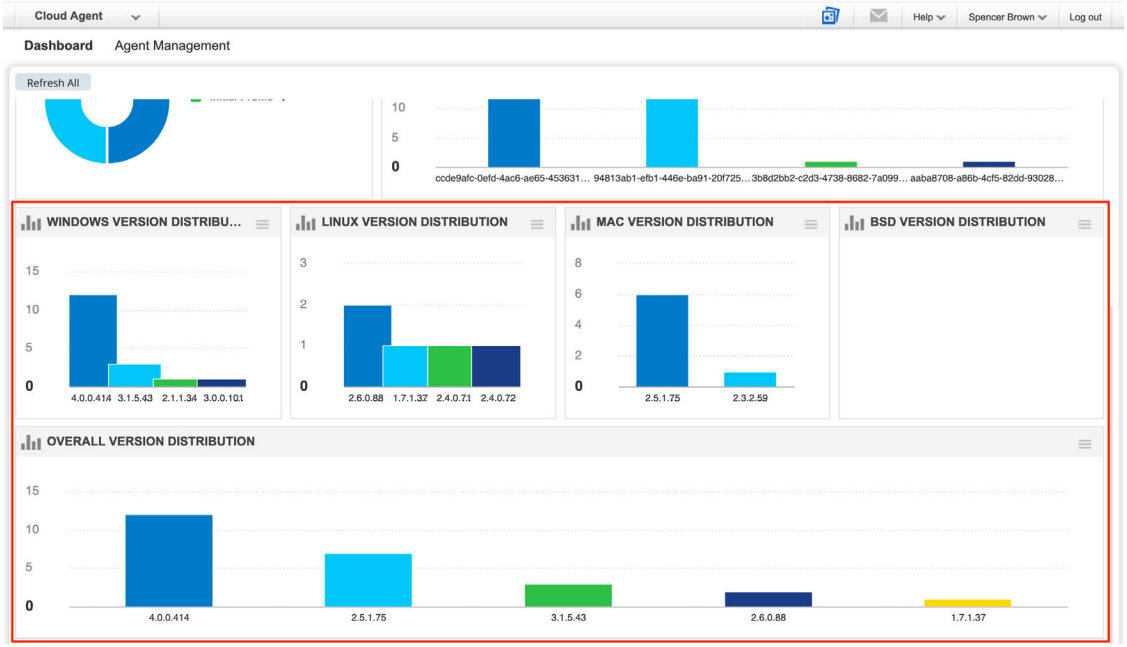
For example, you can find agents by the software name and lifecycle stage by navigating to Global IT Asset Inventory > Inventory > Software and using the following search query:

```
Software:((name:Qualys) and lifecycle.stage: 'EOL/EOS')
```



Use Cloud Agent Dashboard

Go to Dashboard and you'll see widgets that show distribution by platform.



What action do I need to take?

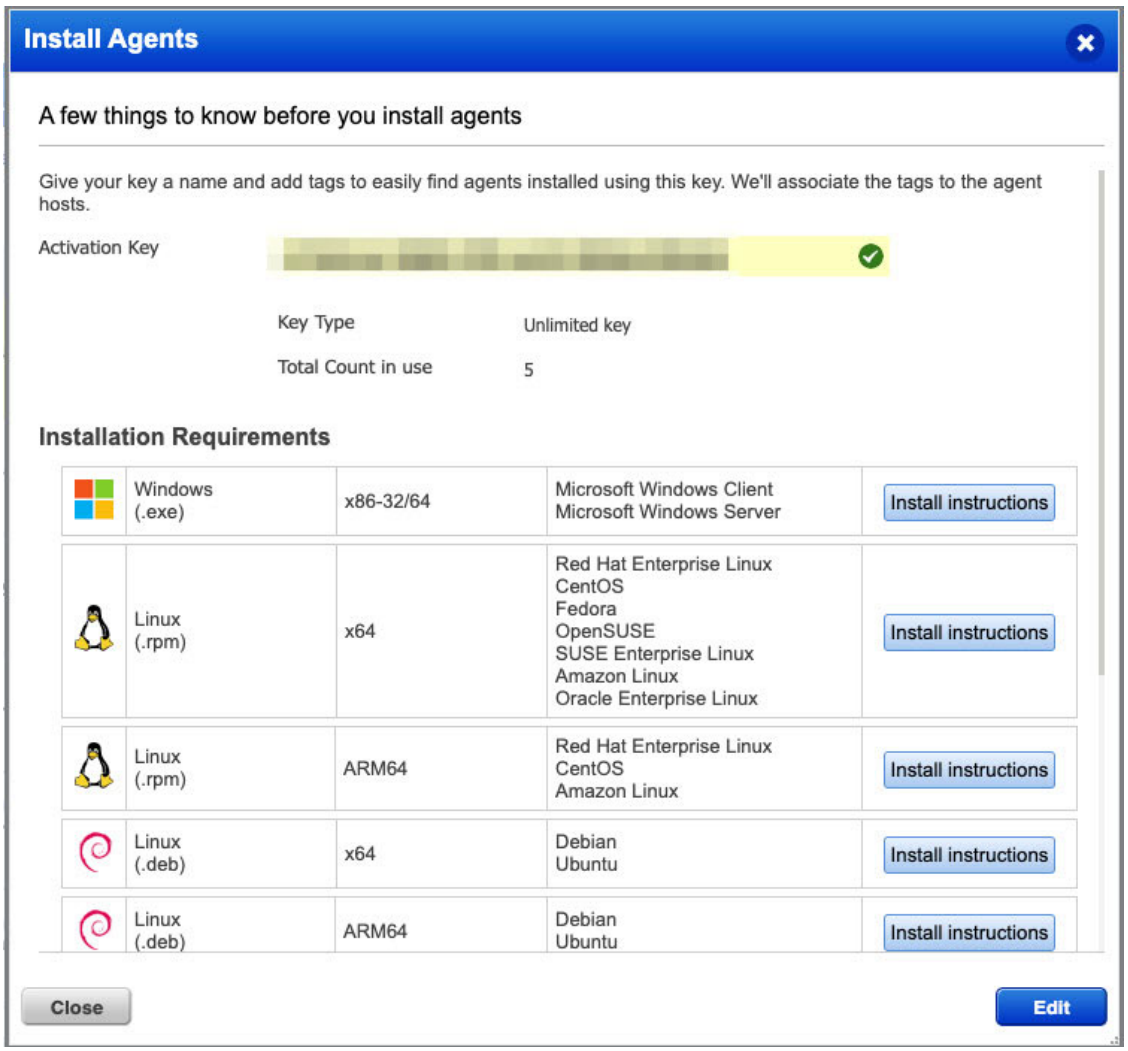
Upgrade your deployed agents

Upgrade your cloud agents to the latest version. See instructions for upgrading cloud agents in the following installation guides: Windows | Linux | AIX/Unix | MacOS | BSD

Tip - All Cloud Agent documentation, including installation guides, online help and release notes, can be found at qualys.com/documentation.

Install the latest version for future deployments

You'll want to download and install the latest agent versions from the Cloud Agent UI. Please refer Cloud Agent Platform Availability Matrix for details.



Best Practices for Agent Binary Upgrade

1) We recommend customers use the auto upgrade feature, or upgrade agents quarterly:

- Best: Enable auto upgrade in the agent Configuration Profile. This method is used by ~80% of customers today. This is the best method to quickly take advantage of Qualys' latest agent features.

- Better: Certify and upgrade agents via a third-party software package manager on a quarterly basis.

- Good: Upgrade agents via a third-party software package manager on an as-needed basis.

2) Qualys highly recommends that customers download and update their Gold Image builds quarterly, even if auto upgrade is enabled in the Configuration Profile.

Why should I upgrade my agents to the latest version?

Beyond routine bug fixes and performance improvements, upgraded agents offer additional features, including but not limited to:

Cloud provider metadata - Attributes which describe assets and the environment in the Public Cloud (AWS, Azure, GCP, etc.)

Enhanced Java detections – Discover Java in non-standard locations

Middleware auto discovery – Automatically discover middleware technologies for Policy Compliance

Support for other modules – Patch Management, Endpoint Detection and Response, File Integrity Monitoring, Security Analytics

ARM support – ARM architecture support for Linux

User Defined Controls – Create custom controls for Policy Compliance

On Demand Scan – Force agent to start collection for Vulnerability Management, Policy Compliance, etc.

Multiple proxy support – Set secondary proxy configuration

Unauthenticated Merge – Merge unauthenticated scans with agent collections