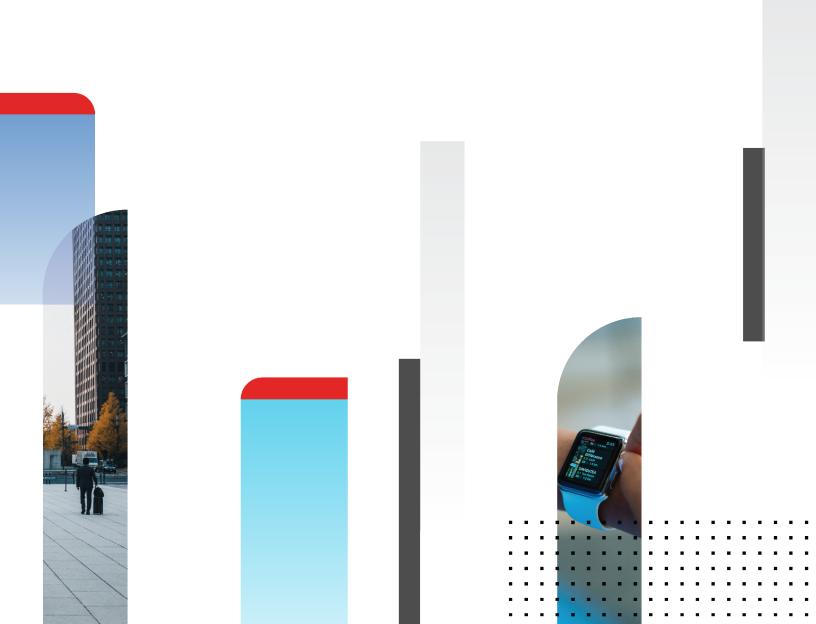


# **Release Notes**

FortiClient EMS 7.0.4



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#### Introduction

FortiClient Endpoint Management Server (EMS) is a system intended to be used to manage installations of FortiClient. It uses the Endpoint Control protocol and supports all FortiClient platforms:

- · Microsoft Windows
- macOS
- Linux
- Android OS
- · Apple iOS
- · Chrome OS

FortiClient EMS runs on a Microsoft Windows server.

This document provides the following information for FortiClient EMS 7.0.4 build 0276:

- Special notices on page 7
- · What's new on page 8
- Upgrading on page 9
- · Product integration and support on page 10
- · Resolved issues on page 12
- Known issues on page 15

For information about FortiClient EMS, see the FortiClient EMS 7.0.4 Administration Guide.

#### **Endpoint requirements**

The following FortiClient platforms are supported:

- FortiClient for Microsoft Windows
- FortiClient for macOS
- FortiClient for Linux
- · FortiClient for Android OS
- · FortiClient for iOS
- · FortiClient for Chromebooks

See Product integration and support on page 10 for FortiClient version support information.

FortiClient is supported on multiple Microsoft Windows, macOS, and Linux platforms. EMS supports all such platforms as endpoints.

# Supported web browsers

The latest version of the following web browsers can be used to connect remotely to the FortiClient EMS 7.0.4 GUI:

- · Google Chrome
- · Microsoft Edge
- Mozilla Firefox

Internet Explorer is not recommended. You may need to enable remote access from the FortiClient EMS GUI. See To enable remote access to FortiClient EMS.

### **Licensing and installation**

For information on licensing and installing FortiClient EMS, see the FortiClient EMS Administration Guide.



Ensuring that all installed software, including EMS and SQL Server, is up-to-date, is considered best practice.

## Special notices

#### FortiClient EMS Microsoft Visual C++ installation

The EMS installation includes installation of Microsoft Visual C++ (VC) 2015. If the server already has a newer version of VC installed, the installation fails. See VC++ 2015 Redistributable installation returns error 1638 when newer version already installed.

If you have a version of VC installed on your server that is newer than 2015, uninstall VC before installing EMS.

#### **SQL Server Standard or Enterprise with 5000 or more endpoints**

When managing more than 5000 endpoints, install SQL Server Standard or Enterprise instead of SQL Server Express, which the EMS installation also installs by default. Otherwise, you may experience database deadlocks. The minimum SQL Server version that FortiClient EMS supports is 2017. See Upgrading Microsoft SQL Server Express to Microsoft SQL Server Standard or Enterprise.

#### Split tunnel

In EMS 7.0.4, you configure application split tunnel using per-tunnel configuration, not a global configuration. If you are upgrading from an older version that uses the global application split tunnel configuration, ensure that you change the configuration to per-tunnel.

# What's new

For information about what's new in FortiClient EMS 7.0.4, see the FortiClient & FortiClient EMS 7.0 New Features Guide.

# **Upgrading**

#### **Upgrading from previous EMS versions**



You must upgrade EMS to 7.0.3 before upgrading FortiClient.

FortiClient EMS supports direct upgrade from EMS 6.2, 6.4, and 7.0. To upgrade older EMS versions, follow the upgrade procedure outlined in *FortiClient and FortiClient EMS Upgrade Paths*.

With the new endpoint security improvement feature, there are backward compatibility issues to consider while planning upgrades. See Recommended upgrade path.

### **Downgrading to previous versions**

FortiClient EMS does not support downgrading to previous EMS versions.

# Product integration and support

The following table lists version 7.0.4 product integration and support information:

Server operating systems	<ul> <li>Windows Server 2022</li> <li>Windows Server 2019</li> <li>Windows Server 2016</li> <li>Windows Server 2012 R2</li> </ul>
	<ul> <li>2.0 GHz 64-bit processor, six virtual CPUs (6 vCPU)</li> <li>8 GB RAM (10 GB RAM or more is recommended)</li> <li>40 GB free hard disk</li> <li>Gigabit (10/100/1000baseT) Ethernet adapter</li> <li>Internet access is recommended, but optional, during installation. SQL Server may require some dependencies to be downloaded over the Internet. EMS also tries to download information about FortiClient signature updates from FortiGuard.</li> <li>You should only install FortiClient EMS and the default services for the operating system on the server. You should not install additional services on the same server as FortiClient EMS.</li> </ul>
	<ul> <li>7.0.0 and later</li> <li>6.4.0 and later</li> <li>Although EMS supports the listed FortiAnalyzer versions, confirming the compatibility between your FortiAnalyzer and FortiClient versions is recommended. Otherwise, not all features may be available. See the FortiClient Release Notes.</li> </ul>
1	If Use SSL certificate for Endpoint Control is enabled on EMS, EMS supports the following FortiClient (Linux) versions:  • 7.0.2 and later  • 6.4.7 and later  If Use SSL certificate for Endpoint Control is disabled on EMS, EMS supports the following FortiClient (Linux) versions:  • 7.0.0 and later  • 6.4.0 and later
`	If Use SSL certificate for Endpoint Control is enabled on EMS, EMS supports the following FortiClient (macOS) versions:  • 7.0.2 and later  • 6.4.7 and later  If Use SSL certificate for Endpoint Control is disabled on EMS, EMS supports the following FortiClient (macOS) versions:  • 7.0.0 and later
	6.4.0 and later

	<ul> <li>7.0.2 and later</li> <li>6.4.7 and later</li> <li>If Use SSL certificate for Endpoint Control is disabled on EMS, EMS supports the following FortiClient (Windows) versions:</li> <li>7.0.0 and later</li> <li>6.4.0 and later</li> </ul>
FortiOS	<ul><li>7.0.0 and later</li><li>6.4.0 and later</li></ul>
FortiSandbox	<ul> <li>4.0.0 and later (for detailed reports on files that FortiSandbox has detected)</li> <li>3.2.0 and later (for detailed reports on files that FortiSandbox has detected)</li> <li>3.1.0 and later (for detailed reports on files that FortiSandbox has detected)</li> <li>3.0.0 and later</li> <li>2.5.0 and later</li> </ul>



Installing and running EMS on a domain controller is not supported.

## Resolved issues

The following issues have been fixed in version 7.0.4. For inquiries about a particular bug or to report a bug, contact Customer Service & Support.

## **Endpoint management**

Bug ID	Description
756675	Total endpoint count increases in vulnerability dashboard when clicking <i>Total Vulnerabilities</i> .
779309	Domain synchronization fails.

## **Endpoint policy and profile**

Bug ID	Description
694471	FortiClient EMS has issue importing Web Filter profiles from FortiGate after upgrading FortiOS from 6.2.8.
770648	Web Filter profile imported from FortiGate differs from the actual profile on FortiGate.
787732	Enabling <i>Hide User Information</i> enables <i>Hide System Tray Icon</i> . Disabling <i>Hide User Information</i> disables <i>Hide System Tray Icon</i> .

## Install and upgrade

Bug ID	Description
788031	Upgrading EMS 7.0.2 to 7.0.3 fails.

#### **GUI**

Bug ID	Description
551109	FortiClient EMS should have a trusted sources list and logs as a tooltip.

# **Deployment and installers**

Bug ID	Description
788008	Installer displays Server encountered an error, please try again error after upgrade.

## **Zero Trust tagging**

Bug ID	Description
789881	The fct_tags table does not update its update_time when the Devices_ip_mac_list table is updated for /tags API.
791318	EMS deletes all_registered_clients tags when endpoint goes offline.
797595	EMS does not use route_type of 2 in comparisons.

# **Endpoint control**

Bug ID	Description
769878	EMS cannot delete all unused applications from Software Inventory.

#### **Administration**

Bug ID	Description
774596	Domain users cannot log in into EMS.

# **Zero Trust telemetry**

Bug ID	Description
763957	FortiClient prompts for telemetry key when telemetry key changes on EMS.

# **Common Vulnerabilities and Exposures**

Bug ID	Description
771996	FortiClient EMS 7.0.4 is no longer vulnerable to the following CVE References:  • CVE-2021-44790  • CVE-2021-44224  Visit https://fortiguard.com/psirt for more information.
791741	FortiClient EMS 7.0.4 is no longer vulnerable to the following CVE Reference:  • CVE-2022-0778  Visit https://fortiguard.com/psirt for more information.

## **Known issues**

The following issues have been identified in version 7.0.4. For inquiries about a particular bug or to report a bug, contact Customer Service & Support.

#### **Dashboard**

Bug ID	Description
781654	EMS does not remove dashboard outbreak alerts when endpoint disconnects.

## **Endpoint management**

Bug ID	Description
691790	EMS should not allow downloading requested diagnostic result for FortiClient (Linux).
760816	Group assignment rules based on IP addresses do not work when using split tunnel.
780630	EMS Active Directory schema does not fully update on EMS.
785186	EMS does not remove user from policy after deleting the domain.
789330	API displays error 400 while filtering/sorting checksum field for Sandbox events.
792652	EMS cannot delete domain.
794153	Importing domain with certificate has issues.
821704	EMS reports device state as managed in verified and unverified user table after FortiClient is unregistered from EMS.

# **Endpoint policy and profile**

Bug ID	Description
466124	User cannot change <nat_alive_freq> value.</nat_alive_freq>
766445	EMS enables or disables profile feature for all policies that use the defined profile.
768768	You can simultaneously configure Security Risk category under AntiVirus protection and Web Filter, which causes conflicts.

Bug ID	Description
777067	EMS does not import Web Filter profiles from FortiOS if login banners are enabled.
783386	Web Filter profile imported from FortiOS shows as enabled in the GUI but disabled in XML.
786109	Testing Sandbox connection fails with dev tool errors.
789344	You can configure <candc_enabled> tag on both the Malware Protection and Application Firewall profiles in XML.</candc_enabled>
792793	Quick Scan option does not work in GUI when trying to set scheduled scan.
797556	User cannot enable Exclude Files from Trusted Sources in Endpoint Profiles > Sandbox Detection.
798386	EMS falsely correlates some FortiAnalyzer settings.
823595	For a newly created profile, the invalid certificate action should be set to warning by default when EMS applies a valid certificate.

#### License

Bug ID	Description
823458	EMS with Endpoint Protection Platform (EPP) only license and zero trust network access feature enabled reports the EPP license as consumed, but fails to quarantine the endpoint.

# **Installation and upgrade**

Bug ID	Description
754722	Uninstall deployment from EMS does not work on FortiClient 6.4.6.
798556	Upgrade from 6.4.7 to 7.0.3 fails with invalid object name 'dbo.lags_raw' error.

# **Zero Trust tagging**

Bug ID	Description
726835	FortiGate cannot get the updated VPN IP address in firewall dynamic EMS tag address when FortiClient establishes the VPN tunnel.
765375	User in Active Directory Group Zero Trust Network Access rule does not identify domains.

# **Deployment and installers**

Bug ID	Description
666289	EMS does not report correct deployment package state.
773672	Disabling installer ID in FortiClient installer does not take effect.

# **System Settings**

Bug ID	Description
753951	EMS does not recognize disabling <i>Use FortiManager for client software/signature updates</i> > Failover.
784554	EMS displays error while importing ACME certificate.

## Chromebook

Bug ID	Description
777957	EMS assigns the wrong profile.

#### **Administration**

Bug ID	Description
678899	Persisting LDAP configuration in multitenancy global/default/non-default administration users.
786722	Site administrator cannot delete admin user account.

### **Performance**

Bug ID	Description
731097	Updating or disabling policy assigned to large number of AD endpoints takes long time to process.
759729	Possible slow httpd file handle leak.

## **FortiGuard Outbreak Alert**

Bug ID	Description
773928	EMS only lists FortiGuard outbreak detection rules in default site.

# Configuration

Bug ID	Description
745913	SMTP configuration fails authentication.

# **Endpoint control**

Bug ID	Description
776626	FortiClient may fail to get Web Filter custom message when EMS runs in high availability mode.
777546	Regenerating ACME certificate option does not appear after adding, deleting, or editing a site.
779652	IPsec VPN shows offline status in FortiGate endpoint record list and fails to resolve VPN IP address to EMS tag firewall dynamic address.
783838	Custom messages for stop and reevaluation do not reflect on the preview GUI.
800451	Zero Trust tag for on-Fabric rule type applies when endpoint is off-Fabric.

#### **GUI**

Bug ID	Description
632427	Software Inventory filter and sorting action in heading does not work.
717433	Patching a vulnerability for a specific endpoint patches it on others.
731074	Importing the same JSON file for zero trust tagging twice introduces duplicate tags.
770204	When CX changes the invitation link expiry date, the previous invitation link does not work.
771027	FortiClient does not detect virus within large zip file, but detects it when extracted.
774880	You can import the same Zero Trust tagging rules multiple times by clicking the <i>Import</i> button multiple times.

Bug ID	Description
793313	Detailed deployment states list does not fit in window.
800867	Disclaimer message adds extra new lines after first line break on GUI saves.

### **Malware Protection and Sandbox**

Bug ID	Description
793926	FortiShield blocks spoolsv.exe on Citrix virtual machine servers.

## Web Filter and plugin

Bug ID	Description
793017	Web Filter disconnects an application's underlying connection.

### **Other**

Bug ID	Description
752052	EMS does not sending alert emails.
759986	Handle SMTP message size limit.
786181	EMS is not sending EMS and endpoint alert emails.

# Change log

Date	Change Description
2022-04-27	Initial release.

