

# Release Notes

FortiAI Ops 1.1.1



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December 22, 2022

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## Change log

Date	Change description
2022-12-22	FortiAI Ops version 1.1.1 release version.

# About FortiAI Ops 1.1.1

This release of FortiAI Ops delivers some new features and enhancements, see section [What's New](#)

**Note:** This release of FortiAI Ops requires FortiManager version 7.2.1/7.2.2.

## Overview

FortiAIops aims at diagnosing and troubleshooting network issues by analyzing potential problems and suggesting remedial steps based on the Artificial Intelligence (AI) and Machine Learning (ML) architecture that it is built upon. FortiAIops learns from your network data to report statistics on a comprehensive and simple dashboard, providing network visibility and deep insight into your network. Thus, enabling you to effectively manage your connected devices and resolve network issues swiftly with the help of AI/ML.

The FortiAIops Management Extension Application (MEA) container is hosted on the FortiManager integrated platform that provides centralized management of Fortinet products and other devices. For more information on FortiManager operations, see related [product documentation](#).

## What's New

This release of FortiAI Ops 1.1.1 delivers the following new features.

Feature	Description
<b>Role based access</b>	The access privileges to FortiAI Ops are defined as per permissions configured in the administrator profile on FortiManager.
<b>Automatic addition of devices</b>	You can now automatically import the FortiGate controllers from FortiManager.
<b>FortiExtender</b>	FortiAI Ops now monitors the FortiExtender devices managed by FortiGate.
<b>Firmware Upgrade</b>	You can now upgrade firmware from the FortiAI Ops GUI.
<b>Diagnostics</b>	You can now collect the FortiAI Ops diagnostics comprising of system, application and process logs for troubleshooting purposes.
<b>Throughput/Coverage SLA enhancements</b>	FortiAI Ops now considers neighbour AP parameters to compute Throughput/Coverage failures with increased accuracy.

## Supported Hardware and Software

The following versions are supported with this release of FortiAI Ops.

Software		Supported Versions
<b>FortiOS</b>		<ul style="list-style-type: none"> <li>• 7.2.2</li> <li>• 7.2.3</li> <li>• 7.2.4</li> <li>• 7.2.5</li> </ul>
<b>FortiSwitchOS</b>		<ul style="list-style-type: none"> <li>• 7.2.2</li> <li>• 7.2.3</li> </ul>
<b>FortiAP</b>	<b>FortiAP</b>	• 7.2.1
	<b>FortiAP-U</b>	• 6.2.4
<b>FortiExtender</b>		• 7.2.2

The following are the recommended resource requirements for FortiAI Ops. For more information, see the [FortiManager Release Notes](#).

Maximum devices (FortiGate/FortiSwitches/FortiExtenders/APs/Clients)	Recommended Hardware (FortiManager)
30/30/30/60/600	4 CPU/16 GB RAM/500 GB storage
100/100/300/200/4000	6 CPU/16 GB RAM/500 GB storage
600/600/600/1200/24000	8 CPU/32 GB RAM/2 TB storage
1600/1600/1200/3200/64000	16 CPU/64 GB RAM/2 TB storage
3200/3200/3200/6400/128000	32 CPU/128 GB RAM/2 TB storage



# Upgrading FortiAI Ops

Run the `diagnose docker upgrade fortiaios` command in the FortiManager CLI to upgrade FortiAI Ops to the latest version. Ensure that FortiAI Ops is enabled and a new version is available for installation.

# Recommendations and Limitations

- [Recommendations](#)
- [Limitations](#)

## Recommendations

Fortinet **recommends** the following versions and configurations to use with FortiAIops.

Product	Recommendation
<b>FortiManager</b>	<ul style="list-style-type: none"> <li>• This release of FortiAIops requires FortiManager version 7.2.1/7.2.2.</li> <li>• The ADOM version supports FortiOS version 7.0.x and 7.2.x.</li> <li>• Configure and enable syslog.</li> </ul>
<b>FortiAP/FortiAP-U</b>	<ul style="list-style-type: none"> <li>• FortiAP (FAP) version 7.2.1 and FortiAP-U (FAP-U) version 6.2.4 are recommended.</li> </ul>
<b>FortiSwitch</b>	<ul style="list-style-type: none"> <li>• FortiSwitch OS version 7.2.1 and later is recommended.</li> </ul>
<b>FortiOS</b>	<ul style="list-style-type: none"> <li>• FortiOS version 7.2.1 and later is recommended to generate all events in FortiAIops.</li> </ul>
<b>FortiExtender</b>	<ul style="list-style-type: none"> <li>• FortiExtender version 7.2.2 is recommended.</li> </ul>
<b>FortiGate</b>	<ul style="list-style-type: none"> <li>• [FortiGate/FortiAnalyzer] Configure the FortiManager IP address in the FortiGate syslog or FortiAnalyzer to send events to FortiAIops.</li> <li>• Ensure that you enable the detection of interfering SSIDs in FortiGate to allow reporting of <i>Throughput</i> SLA - interference issues in FortiAIops. To detect interfering SSIDs in FortiGate, configure the FortiAP profile to use <i>Radio Resource Provisioning</i> or a <i>WIDS</i> profile with AP scan enabled.</li> <li>• To receive SD-WAN congestion logs, ensure that the SD-WAN monitoring license is applied in FortiGate.</li> <li>• Configure the <i>sla-fail</i> and <i>sla-pass</i> log failure period, the recommended duration is 30 to 60 seconds.</li> <li>• Application Control must be enabled in firewall policy to check client traffic and identify WAN impacted clients.</li> </ul>

## Limitations

The following **limitations** apply to FortiAIops.

- The Time to Connect DNS is not supported.
- For wired SLA, only Linux/Windows/MacBook devices are considered as end clients.
- Backup and restore operations are not supported.
- All *Throughput* SLAs are not supported in FortiAIops, if the FortiOS/FortiAP/FortiAP-U deployed are below the recommended versions.
- Currently FortiAIops evaluates only some de-authentication reasons.

- Configuring the *set sla-fail-log-period* to less than 30 seconds generates many SD-WAN logs. Also, this may overload FortiAIOps.
- Currently FortiAIOps receives the channel utilization data excluding WiFi and non-WiFi interference utilization data.
- Retry information is not available for these FortiAP models, FAP-43xF, FAP-U43xF, FAP-23xF.
- Neighbor AP statistics displayed will not be accurate for APs with three radios, if the third radio is in monitor mode.

## Fixed Issues

This release of FortiAIOps resolves the issues described in this section.

Issue ID	Description
783916	The impacted client details displayed in the graph and pop-up window do not match, in the dashboard.
805319	Impacted clients graphs in the <b>Summary</b> and <b>Wireless</b> panels display incorrect data when the client roams across SSIDs/bands.
795205	[Scale deployment] Active client count displayed in the dashboard is not accurate.

## Known Issues

The following issues are known in FortiAIOPS version 1.1.1. For inquiries about a particular issue, contact *Customer Support*.

Issue ID	Description
868732	If there are more than 10,000 clients in an ADOM, the active clients count is not accurate.
868330	[Scale deployment] Delay in displaying wired client information in Connected Clients.
863843	Neighbor AP statistics shown for three radio AP is not accurate.
853400	FortiExtender crash is not reported in FortiAIOPS.
842945	User cannot configure date and time in SLA Dynamic Baseline using Firefox browser.
868975	[Scale deployment] Delay in displaying wired client information in Active Clients.

