

# ExtremeCloud IQ v24.6.0.82 Release Notes

# Enhancements, Fixes, and Supported Devices

9038991-03 Rev AA October 2024



Copyright © 2024 Extreme Networks, Inc. All rights reserved.

#### Legal Notice

Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.

The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

#### Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries.

All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.

For additional information on Extreme Networks trademarks, see: https:// www.extremenetworks.com/about-extreme-networks/company/legal/trademarks

#### **Open Source Declarations**

Some software files have been licensed under certain open source or third-party licenses. End-user license agreements and open source declarations can be found at: https:// www.extremenetworks.com/support/policies/open-source-declaration/

# **Table of Contents**

Abstract	iv
General Release Information	5
Current Release: 24.6.0.82	5
Release: 24.6.0.81 Addressed Issues	5
Release: 24.6.0.79 Addressed Issues	5
ExtremeCloud IQ Public IP Address Blocks	6
Supported IQ Engine v10.7.3 Software	7
Previous Release	
New Features in 24.6.0.74	8
Addressed Issues in 24.6.0.74	
Known Issues in 24.6.0	20
Device Support Information	
Controllers	
Access Points	
Universal Hardware	
IQ Engine (Cloud Native)	
ExtremeWireless WiNG	
Extreme Wireless	
Switches	
Universal Hardware	
ExtremeXOS	
VOSS	
IQ Engine (Cloud Native)	
Dell EMC	51
Routers	51
ExtremeCloud IQ Site Engine	
ExtremeCloud IQ CoPilot	
ExtremeCloud A3	
Supported Browsers and Display Settings	
Desktop and Mobile Browser Support	
Display Settings	



# Abstract

The ExtremeCloud IQ v24.6.0.82 Release Notes detail several technical enhancements, new features, and critical fixes introduced in this release for network administrators managing the ExtremeCloud IQ platform. This update supports advanced device operating systems such as ExtremeXOS/Switch Engine (32.7.1.9, 32.6.3.127) and VOSS/ Fabric Engine (8.10.4), alongside IQ Engine 10.7.3 for improved network orchestration. Key feature additions include the ability to configure LLDP with multicast filters, enhanced ELRP settings for port management, and WPA3-SAE support with Protected Management Frames (PMF) for 6 GHz radios. The AP5020 now supports dynamic packet capture and dual 5 GHz/6 GHz radio modes, improving wireless performance diagnostics. Additionally, new VLAN attributes, real-time RF heat maps, and roaming trail visualization on the client map enhance network management. Addressed issues include performance fixes for AP5020 wired speed display, client session duplication, and syslog hostname configurations. Known issues highlight potential configuration push errors, Wi-Fi 6E support limitations, and unresolved firmware version discrepancies for certain devices. This release is designed for IT professionals and network engineers focused on optimizing and troubleshooting complex wireless deployments.



# **General Release Information**

## Current Release: 24.6.0.82

October 2024

#### Table 1: Addressed Issues in Release 24.6.0.82

Issue ID	Description	
	We resolved an issue where configuration updates failed after disabling Management Options in the network policy.	

### Release: 24.6.0.81 Addressed Issues

In this release of ExtremeCloud IQ, we added backwards compatibility for Elastic 7.x and Role-Based Access Control (RBAC) support for all POST API roles.

#### Table 2: Addressed Issues in Release 24.6.0.81

Issue ID	Description
CFD-12615	We resolved an issue with the config audit containing incorrect configuration information for SR2300 switches. Changes to port sorting for the Mixed Lag feature apply only to EXOS, while SR and VOSS use the previous method of port sorting.

### Release: 24.6.0.79 Addressed Issues

#### Table 3: Addressed Issues in Release 24.6.0.79

Issue ID	Description
CFD-12574 (03016583,03016843, and 03016936)	We resolved an issue with wireless clients getting DHCP after a configuration update.
XIQ-35984	We resolved an issue that caused Pendo to be disabled for some accounts.

# ExtremeCloud IQ Public IP Address Blocks

Data Center	IP Block	Addresses and Ports
Global Data Center (GDC)	44.234.22.92/30 18.194.95.0/28 34.253.190.192/26 3.234.248.0/27	
Australia (AUS)	13.210.3.192/28	Firewall Address and Port Information
Azure, Canada Central (ACA)	20.151.64.48/28	Firewall Address and Port Information
Azure, US East (AVA)	52.226.89.112/28	Firewall Address and Port Information
Brazil (BR)	18.228.70.16/28	Firewall Address and Port Information
Germany (FRA)	3.67.81.96/27 18.194.95.0/28	Firewall Address and Port Information
India (IN)	13.232.67.8/29 3.6.70.64/29	Firewall Address and Port Information
Ireland (IE)	34.253.190.192/26	Firewall Address and Port Information
Japan (JP)	18.176.203.112/29 13.231.6.232/29 57.181.58.0/28	Firewall Address and Port Information
Netherlands (NL- GCP)	34.91.82.64/27	Firewall Address and Port Information
Singapore (SG- GCP)	34.87.158.80/28	Firewall Address and Port Information
Spain (ES)	18.101.49.128/27	Firewall Address and Port Information
Sweden (SE)	13.48.186.224/29 13.48.4.184/29 13.48.4.240/28	Firewall Address and Port Information
Switzerland (ACH)	51.107.1.192/28	Firewall Address and Port Information
United Arab Emirates (UAE)	3.28.159.128/28	Firewall Address and Port Information
United Kingdom (UK-AGB)	51.143.233.80/28	Firewall Address and Port Information
US East (VA )	34.202.197.0/26 44.192.245.0/26 3.234.248.0/27	Firewall Address and Port Information
US East 2 (VA2)	34.202.197.0/26 44.192.245.0/26 3.234.248.0/27	Firewall Address and Port Information
US-Iowa (IA-GCP)	34.67.130.64/27	Firewall Address and Port Information
US Ohio (OH)	3.145.235.64/26	Firewall Address and Port Information

# Supported IQ Engine v10.7.3 Software

See the IQ Engine v10.7.3 Release Notes for information about the current release of IQ Engine.



# **Previous Release**

New Features in 24.6.0.74 on page 8 Addressed Issues in 24.6.0.74 on page 15

This section lists the new features, addressed issues, and known issues for the previous release.

### New Features in 24.6.0.74

#### Device OS Support

This release supports the following device operating systems:

- ExtremeXOS/Switch Engine:
  - 33.1 Image Download Support
  - 33.1 Onboard, Monitor, Config, Image Drag & Drop Support
  - 32.6.3.127 Patch 1-X Image Download Support
  - 32.6.3.127 Patch 1-X Onboard, Monitor, Config, Image Drag & Drop Support
  - 32.7.1.9 Patch 1-X Image Download Support
  - 32.7.1.9 Patch 1-X Onboard, Monitor, Config, Image Drag & Drop Support
  - EXOS IQAgent 0.8.21—Switch Engine supports IQAgent 0.8.21
- VOSS/Fabric Engine:
  - VOSS IQAgent 0.9.13—Fabric Engine supports IQAgent 0.9.13
- IQ Engine:
  - IQ Engine 10.7.3

#### New Hardware Support

There is no new hardware support in this release.

Feature ID	Feature	Description
XCP-1263	Send License usage information to ExtremeCloud IQ Site Engine	ExtremeCloud IQ sends the total number of licenses in the license pool to ExtremeCloud IQ Site Engine, instead of activated quantities together with available quantities.
XCP-1511	User interface changes for LEK enforcement	<ul> <li>If both Legacy Entitlement Keys and Pilot, CoPilot, Navigator, or NAC licenses are present in the <b>Entitlements</b> table (Linked Extreme Portal), the following actions are not supported and will fail:</li> <li>Onboarding new devices</li> <li>Changing from the Unmanaged state to Managed state</li> </ul>
		Move your Legacy Entitlement Keys to Entitlements. For more information, see https://extreme- networks.my.site.com/ExtrArticleDetail? an=000119743.
XCP-1893	Alerts: Add column Alert name	The <b>Device Temperature</b> alert is renamed to <b>Switch Temperature</b> to better describe the function and avoid confusion. The <b>Alert Name</b> column completes the list view for alerts.
XIQ-16544	AP5020: Essentials Support on AP5020—BLE	With this feature, the Essentials BLE webhook can send BLE iBeacon and Generic scan data from an AP5020 to a third-party server.
XIQ-20332	OWE transition mode putting clients on OWE SSID in default user profile	In OWE Transition mode, devices connected to the hidden OWE network should be assigned the same user profile (including VLAN) as those on the open network. The user profile assignment logic used for clients on the open network is consistently applied to clients on the OWE network.
XIQ-22665	Support LAG across VIM or partitioned ports or other front-panel ports of single and stack slot ports	Switch Engine supports the ability to define a LAG between different port types such as VIM and non-VIM ports for single switches and across stack slots.
XIQ-22987	ACSP Enhancement: Add option to allow Background Scan on DFS	We added a new Radio Profile option for 5 GHz. This option provides the ability to toggle background scanning on or off, when Dynamic Frequency Selection (DFS) is enabled.

#### Table 4: New Features in 24.6.0.74

Feature ID	Feature	Description
XIQ-23028	Support Ability to Define ELRP Excluded Port and Timeout in Port Type EXOS/ Switch Engine	Switch Engine switches supports configuration of <b>ELRP exclude</b> on a port type which does not allow ELRP to disable the port when it receives ELRP packets. If ELRP exclude is not enabled, you can also define the ELRP disable port duration timeout.
XIQ-23777	Alias Import Icon moved to same area as other icons	We moved the <b>Alias Import</b> icon located on the device-level page. It is grouped with the other icons, located on the right.
XIQ-25106	Show roaming trail for selected client	ExtremeCloud IQ supports real-time map client roaming trails. Roaming trail playback displays a visual on-map animation of the roaming trail for the selected client. The roaming trail playback is available for 24 hours. By default, the timeline is the maximum amount of time for which the data exists (up to 24 hours). The roaming trail is green if roaming is speed is good (fast roam) and red if roaming speed is too slow. A pop up label shows the RSSI and channel of the new AP, that is the AP to which the client roamed.
XIQ-26445	AP5020 Radio Mode Configuration (modes 5 and 6)	<ul> <li>The AP5020 supports two new radio modes:</li> <li>Mode 5 (Dual 5 GHz w/ 2.4 GHz: 5 GHz-Low (Radio 1), 5 GHz-High (Radio 2), 2.4 GHz Radio 3</li> <li>Mode 6 (Dual 6 GHz w/ 5 GHz): 6 GHz-Low (Radio 1), 5 GHz-Full (Radio 2), 6 GHz-High (Radio 3)</li> </ul>
XIQ-26586	Real time RF heat maps	<ul> <li>ExtremeCloud IQ supports the following new real-time map types:</li> <li>SNR</li> <li>Interference</li> <li>Co-channel interference</li> </ul>
XIQ-26592	Individual AP actions	<ul> <li>ExtremeCloud IQ offers the following new real-time map actions when you select a connected AP:</li> <li>Locate an AP</li> <li>Reboot the Selected AP</li> <li>Perform a VLAN Probe</li> <li>Reset an AP to Factory Defaults</li> <li>Upgrade AP Firmware</li> <li>Configure AP Radio and Power Settings</li> </ul>

Feature ID	Feature	Description
XIQ-26969	Enhance DHCP Option 82— In circuit id, replaced the MAC with hostname	ExtremeCloud IQ offers a new option for enhanced handling for DHCP Option 82. In circuit-id, it replaces the MAC with hostname of the access point.
XIQ-27102	Support enabling node alias for Instant Secure Port and UZTNA	Instant Secure Port (ISP) supported through Universal ZTNA-enabled accounts support the Switch Engine node alias. Node alias is enabled for ports that have ISP enabled. Node alias discovers additional information about wired clients such as IP address on a per-port basis. Wired client data is then updated with information from the node alias, which is also shared with Universal ZTNA.
XIQ-27311	Wi-Fi Status Summary to Include WiFi2	The Wi-Fi Status Summary includes the Wifi2 radio summary for 6 GHz.
XIQ-27312	Enhanced Open SSID to support Captive Web Portal (CWP)	ExtremeCloud IQ supports the inclusion of on-AP Captive Web Portals for Enhanced Open SSIDs.
XIQ-27313	WPA3 SAE PWE settings support for ExtremeCloud IQ	The ExtremeCloud IQ SSID page offers extended settings for WPA3-SAE Password Elements (PWE). The default is HNP (Hunting-and-Pecking) and H2E (Hash-to-Element), or you can configure each one independently.
XIQ-27400	WPA3+WPA2-Enterprise Transition Mode with 6GHz support for ExtremeCloud IQ	The ExtremeCloud IQ SSID configuration page supports transition mode on the legacy bands (2.4 GHz and 5 GHz) while simultaneously supporting the 6 GHz band. This enhancement introduces a new Protected Management Frames (PMF) setting: <b>auto</b> . See the <i>ExtremeCloud IQ User</i> <i>Guide</i> for configuration options and corresponding security settings. <b>Note:</b> IQ Engine 10.7.3 is required.
XIQ-27980	Support for creating a VLAN in VLAN Attributes from VLAN Common Object	VLAN Attributes within the network policy switching section supports the creation of a VLAN attribute as a VLAN common object.

#### Table 4: New Features in 24.6.0.74 (continued)

Feature ID	Feature	Description
XIQ-28172	[Tunnel Concentrator]—Allow hostname change for Tunnel Concentrator Instance after onboarding to ExtremeCloud IQ	ExtremeCloud IQ supports changing the hostname for Tunnel Concentrator devices.
XIQ-28891	Support for IQ Engine 10.7.3	ExtremeCloud IQ supports ExtremeCloud IQ Site Engine 10.7.3.
XIQ-29486	Support for DHCP Snooping Telegraf Data into ExtremeCloud IQ client table	When DHCP snooping is enabled within a policy under <b>Common</b> <b>Settings</b> or in a switch template for Switch Engine devices, the wired client information such as IP address is updated based on DHCP snooping information. The wired client information is also shared when Universal ZTNA is enabled with Instant Secure Port as well. Switch Engine v33.1 is required.
XIQ-30038	Thread- add support for add domain name to forwarded DNS queries	<ul> <li>The Thread IoT Profile page supports the option to Add domain to upstream DNS queries. When a Thread router receives a DNS request from a Thread client, this option appends the domain name to the hostname before forwarding the DNS query when the following are true:</li> <li>The hostname is not a fully-qualified domain name (FQDN).</li> <li>The router has a domain name specified.</li> </ul>
XIQ-30110	AP5020: Support for 802.11mc	The AP5020 supports 802.11mc.

#### Table 4: New Features in 24.6.0.74 (continued)

Feature ID	Feature	Description
XIQ-30523	AFC: Using the AFC Wireless view to troubleshoot AFC issues	<ul> <li>The Manage &gt; Devices page includes the AFC Wireless view, for viewing and troubleshooting devices that have 6 GHz Standard power radios enabled. Users can see the following device information: <ul> <li>Status</li> <li>Hostname</li> <li>Model</li> <li>Serial number</li> <li>Geo location</li> <li>Requested channel and assigned channel</li> <li>Requested power and assigned power</li> <li>AFC lease expiration</li> </ul> </li> <li>Summary tiles include details on AFC status, geo location, and spectrum mismatch.</li> </ul>
XIQ-30631	XAPI: Per site device update	ExtremeCloud IQ includes API for a per site device upgrade option. You can run the upgrade immediately, or schedule it for up to 30 days ahead.
XIQ-31081	Visualization of ExtremeCloud IQ Controller in ExtremeCloud IQ	For ExtremeCloud IQ Controller onboarded to ExtremeCloud IQ, we improved data accuracy and consistency, including Device 360 client and AP-related information.
XIQ-31392	Add recalibration tool to maps	Real-Time RF Maps introduced a calibrate tool for rescaling maps. Users can recalibrate maps after importing.
XIQ-31423	Support for onboarding the CE1000 to the cloud	The ExtremeCloud Edge Universal Compute Platform hosts the ExtremeCloud IQ Controller application. ExtremeCloud IQ Controller is a highly scalable and highly available enterprise wireless controller that can support up to 250 APs in standalone mode, and 500 APs in an high availability pair. The ExtremeCloud IQ Controller application supports self-orchestration on the 1130C controller.
XIQ-31459	AP5020: Enable iBeacon Cloud Reporting option in ExtremeCloud IQ	ExtremeCloud IQ supports Cloud Reporting for iBeacon.
XIQ-31817	Sort for Common Objects —configuration groups and user profiles	We updated the sort design to work as expected for all Common Objects.

Feature ID	Feature	Description
XIQ-31820	Ability to onboard ExtremeCloud IQ Site Engine to ExtremeCloud IQ with 2FA enabled	We added the option to onboard ExtremeCloud IQ Site Engine to ExtremeCloud IQ with enabled 2FA. In the <b>Compatible Site Engines</b> section, version 24.06.10 includes a new <b>Onboarding with enabled 2FA</b> radio button.
XIQ-31867	Enable 6 GHz Radio for Taiwan for all Wi-Fi 6E and Wi-Fi 7 APs	We enabled 6 GHz Radio (LPI) in Taiwan on all Wi-Fi 6E and Wi-Fi 7 APs, AP3000, AP3000X, AP4000, AP5010, AP5050U (indoor), AP5050D (indoor), and AP5020.
XIQ-31868	Enable 6 GHz Radio for Philippines for all Wi-Fi 6E and Wi-Fi 7 APs	We enabled 6 GHz Radio (LPI) in the Philippines on all Wi-Fi 6E and Wi- Fi 7 APs, AP3000, AP3000X, AP4000, AP5010, AP5050U (indoor), AP5050D (indoor), and AP5020.
XIQ-31869	AFC: Support manual trigger of AFC spectrum update for AP	We enabled 6 GHz Radio (LPI) in Pakistan on all Wi-Fi 6E and Wi-Fi 7 APs, AP3000, AP3000X, AP4000, AP5010, AP5050U (indoor), AP5050D (indoor), and AP5020.
XIQ-32080	New generation maps: Support IoT coverage	Real-time maps can display 2.4 GHz BLE RSSI coverage.
XIQ-32188	AFC: Support manual trigger of AFC spectrum update for AP	ExtremeCloud IQ includes a new Refresh AFC Spectrum operation. Go to Manage > Devices > AFC Wireless View, and select the ACTIONS menu.
XIQ-32999	Add Brunei for AP410C	The AP410C is supported in Brunei.
XIQ-33104	Add El Salvador and Trinidad and Tobago for AP5010, AP4000, AP3000 and AP5050D	The AP5010, AP4000, AP3000 and AP5050D are supported in El Salvador, Trinidad and Tabago.
XIQ-33112	Add Algeria for AP305C-WR	The AP305C-WR is supported in Algeria.
XIQ-33883	VOSS/Fabric Engine 8.10.5 Onboard, Monitor, Config, and Download Image Support	ExtremeCloud IQ supports Fabric Engine/VOSS 8.10.5 image download for all supported VSP/Fabric Engine SKUs.
XIQ-33896	Fabric Engine/VOSS 9.0.4 Onboard, Monitor, Config, and Download Image Support	ExtremeCloud IQ supports Fabric Engine/VOSS 9.0.4 image download for all supported VSP/Fabric Engine SKUs.
XIQ-34190	EXOS/Switch Engine 31.7.3- patch1-44 Onboard, Monitor, Config (Drag/Drop) Support	ExtremeCloud IQ supports Switch Engine and EXOS 31.7.3-patch1-44 image through local image management.

Feature ID	Feature	Description
XIQ-34191	EXOS/Switch Engine 31.7.3- patch1-44 Download Image Support	ExtremeCloud IQsupports Switch Engine and EXOS 31.7.3-patch1-44 image download.
XIQ-34215	EXOS/Switch Engine 33.1 Onboard, Monitor, Config (Drag/Drop) Support	ExtremeCloud IQ supports Switch Engine and EXOS 33.1 image through local image management.
XIQ-34271	Fabric Engine/VOSS 9.1 Onboard, Monitor, Config (Drag/Drop) Support	ExtremeCloud IQ supports onboarding, monitoring, and configuration with image drag and drop, with Fabric Engine/VOSS 9.1. Supported switch models are 7720, 7520, 5720, 5520, 5420 and 5320 Universal switches, as well as VSP7400 and VSP4900.
XIQ-35123	EXOS/Switch Engine 32.7.1.9- patch1-49 Onboard, Monitor, Config (Drag/Drop) Support	ExtremeCloud IQ support Switch Engine and EXOS 32.7.1.9-patch1-49 image through local image management.

# Addressed Issues in 24.6.0.74

#### Table 5: Addressed Issues in 24.6.0.74

Issue ID	Description
CFD-7207 (02474253)	We resolved an issue with multiple configuration errors caused by including the character " in the WPA3-SAE key.
CFD-7994	We resolved an issue with ExtremeCloud IQ inability to run a configuration update because of WiNG devices included in the queue.
CFD-8104 (02621002, 02830472)	We resolved an issue with ExtremeCloud IQ not displaying heat maps for all APs in a location.
CFD-8461 (02655589, 02662935, 02662967, 02658488)	We resolved an issue that prevented ExtremeCloud IQ from enabling or saving Layer 2 IPsec VPN Service settings.
CFD-8836 (02716755)	We resolved an issue with ExtremeCloud IQ not disabling AMPDU when it is turned off in the radio profile.
CFD-10125 (02859247)	We resolved an issue with ExtremeCloud IQ failing to report power issues for AP5010 devices on 802.3af.
CFD-10139 (02812525)	We resolved a formatting issue for Captive Web Portal with UPA enabled, using the German language and truncating the button text.
CFD-10198 (02868637)	We resolved an issue with Active alarms on VGVA not opening, and a non related alarms "Device license expiration warning".

Issue ID	Description
CFD-10259 (02856003)	We resolved an issue with Wi-Fi client counts not updating in the Device List after a CAPWAP outage if the SSID protocol suite is WPA3.
CFD-10488 (02885559)	We resolved an issue with configuration updates failing for an AP5010 onboarded using a CSV file. This issue was caused by ExtremeCloud IQ attempting to assign the 5 GHz radio profile for <b>WiFi1</b> to the 6 GHz interface <b>WiFi2</b> .
CFD-10491 (02727270)	We resolved an issue where the <b>Use 802.11w protection for</b> <b>broadcasts/multicasts</b> setting (mfp mandatory bip) was disabled by the configuration for Enterprise WPA3 SSIDs when the <b>Broadcast SSID Using</b> setting was set to 6 GHz.
CFD-10516 (02874094)	We resolved an issue with Delta updates failing on AP302W models using a specific network policy.
CFD-11078 (02933498)	We resolved an issue where auto-provisioning failed on a CSV import containing duplicate serial number entries.
CFD-11109 (02933999)	We resolved an issue with being unable to create or modify a radio profile when using ExtremeCloud IQ with the French language.
CFD-11117 (02934361)	We resolved an issue with VGVAs in L2VPN mode returning an error for <b>Management &gt; Diagnostics &gt; Show GRE Tunnel</b> .
	Note: This issue is also fixed in ExtremeCloud IQ 24.5.0 and later.
CFD-11126 (02935941)	We resolved an issue with the formatting of the self-registration splash page for Captive Web Portal on iPhone and Android.
CFD-11442 (02874094)	We found a solution for delta update failures caused by invalid CLI. <b>Solution:</b> Avoid linking a user-profile policy to a non existing security object. Create the security object first.
CFD-11484 (123456789)	We resolved an issue with VGVA and BR200WP platforms not accepting SSL certificates.
	Note: This issue is also fixed in ExtremeCloud IQ 24.5.0 and later.
CFD-11493 (02949524)	We resolved an issue where locations created under <b>Planning</b> were missing from the <b>Location Essentials</b> dashboard.
CFD-11574 (02945756)	We resolved an issue with the License Management Application not displaying all licenses.
CFD-11593 (02957302)	We resolved an issue with the WiFi0 interface appearing in Monitoring as WiFi1, when the AP is configured as Dual 5 GHz.
CFD-11614 (02962113)	We resolved an issue with Assign SSIDs using Classification Rules being disabled after updating the Supplemental CLI form. <b>Solution:</b> Explicitly send the existing value of "Assign SSIDs using Classification Rules" when updating the Supplemental CLI form.
CFD-11620 (02961975)	We resolved an issue with AP230s not receiving configuration changes from the <b>Proxy ARP</b> settings slider.

Issue ID	Description
CFD-11622 (02963019)	We resolved an issue with ExtremeCloud IQ not generating the DFS config (for Dynamic Frequency Selection) for APs onboarded with the country code set to Japan (country-ID 392).
CFD-11624 (02959059)	We resolved an issue with SSIDs with classification rules raising null pointer exceptions.
CFD-11628 (02960299)	We resolved an issue with devices not appearing under the <b>Routing</b> section of <b>Network Allocation</b> .
CFD-11633 (02961407)	We resolved an issue with device settings not matching the template settings when enabling SES-Imagotag.
CFD-11684 (02964108, 02967510)	We resolved an issue where the option to use an <b>Emergency</b> <b>Recovery Code with Multi-Factor Authentication</b> was missing from the login screens.
CFD-11777 (02926505)	We resolved an issue where ExtremeCloud IQ was not generating the required CLI configuration to enable OFDMA, BSS-Coloring, TWT for 802.11AX profiles for all supported APs.
CFD-11812 (02970648)	We resolved an issue in Client 360 where a large VLAN/IP combo for a client wrapped the column incorrectly.
CFD-11829 (02966816)	We resolved an issue where the site policy failed to save in ExtremeCloud IQ under <b>Manage &gt; Alerts &gt; Alert Policy &gt; Site</b> <b>Policies &gt; Add Site Policy</b> .
CFD-11867 (02974859)	We disabled the share button when only <b>WiFi STATISTICS SUMMARY</b> report is selected.
CFD-11887 (02972427)	We resolved an issue where ExtremeCloud IQ displayed an error message during Captive Web Portal customization when uploading a custom logo image if the file name contains spaces.
CFD-11917 (02979262)	Resolved an issue that caused "An unknown error has occurred" message while importing Ekahau Real-Time Maps.
CFD-11920 (02979452)	We changed the LocationID Name to BuildingID in the Clients API.
CFD-12055 (02985286)	We resolved an issue where filtering for unassigned devices broke filtering by other criteria.
CFD-12065 (02986475)	We resolved an issue with the ExtremeCloud IQ License Violation banner incorrectly showing Available licenses as "0".
CFD-12082 (2986304)	We resolved an issue with the AP5020 not being recognized during onboarding to ExtremeCloud IQ Connect.
CFD-12101 (02987297, 02987205, 02987302, 02987312)	We resolved an issue with ExtremeCloud IQ sending invalid messages to Site Engines, if there was no NAC license. This issue caused Site Engine to display a license violation message: "NAC License Violation You have been in violation of your NAC/IAM License."
CFD-12105 (02985303)	We resolved an issue with the sensor check box unexpectedly being enabled after checking and clearing the client mode check box.

#### Table 5: Addressed Issues in 24.6.0.74 (continued)

	· · ·
Issue ID	Description
CFD-12106 (02985295)	We resolved an issue with the <b>Device</b> list grid column data not aligning with the respective grid column header when the filter panel is collapsed.
CFD-12125 (02989836)	We resolved an issue where clients with the connection types Wired and N/A were incorrectly categorized as 6 GHz clients in Manage > Clients.
CFD-12134 (02989965)	We resolved an issue with the VLAN assignment on wired ports not being applied.
CFD-12154 (02992168)	We resolved an issue with being unable to use a \ character when using the ExtremeCloud IQ API to create a new I3-address-profile.
CFD-12155 (02991680)	We resolved an issue with cloud PPSK clients getting disconnected 10 minutes after association because IDM accounting cannot handle SSID names with ampersand (&).
CFD-12161 (2991704, 02992895, 02995271)	We resolved an issue with <b>Manage</b> > <b>Devices</b> displaying incorrect X of Y values if filters were applied. The X of Y value does not include stack units.
CFD-12163 (02992337)	We resolved an issue that prevented large numbers of cloud- based PPSK users in multiple user groups from being added to existing PPSK networks.
CFD-12187 (02993594)	We resolved an issue that caused authentication errors for AirDefense and Location Essentials after migrating the VIQ.
CFD-12192 (02993579)	We resolved an issue with the Locations/Floor API call returning duplicate results.
CFD-12201 (02987981)	We resolved an issue with the GET /devices/stats API returning incorrect results.
CFD-12207 (02992561)	We resolved an issue with the GET /devices/stats API returning an incorrect number of managed and connected devices.
CFD-12264 (02997201)	We resolved an issue where the download option in ExtremeCloud IQ under <b>Manage</b> > <b>Client Monitor and Diagnosis</b> did not work.
CFD-12272 (02992329)	We improved the wording of the license violation warning banner.
XCP-1874	We resolved an issue when trying to perform <b>Action</b> > <b>Manage</b> for unrecognized device types, such as EXOSSWITCH, VSP-SWITCH, or WiNGAP, causing the following error: Cannot apply a license to generic device type.
XCP-1877	We renamed the Manage > Devices > Actions menu item Manage Device License to Manage Feature License.
XCP-1902	We resolved an issue with the <b>Manage</b> > <b>Devices</b> view being blank, and not displaying the license violation banner.

We resolved an issue with the export of the VIQ backup not

#### Table 5: Addressed Issues in 24.6.0.74 (continued)

working.

XCP-1943

Issue ID	Description
XCP-2004	We resolved an issue with the <b>License</b> page not updating correctly, after the quantity of XIQ-NAC licenses decreased.
XCP-2279	We adjusted the behavior of the unlink action, followed by the link action for the Portal Account. When the admin performs the <b>Link Portal Account</b> action and there are already NAC eligible devices (Site Engine or A3), the allocation does not happen automatically. The admin must perform the <b>Save NAC</b> <b>Allocations</b> action. When the admin performs the <b>Unlink Portal Account</b> action, ExtremeCloud IQ revokes the NAC licenses.
XCP-2361	We resolved an issue with XIQ-NAC licenses not being correctly revoked, when the admin changed the NAC license allocation to 0.
XIQ-27175	We resolved an issue that affected Software Defined Radios (SDR) when used with access points running IQ Engine 10.6.5, where a 5 GHz radio profile is pushed to a non-dual 5 GHz access point on Wifi0 (2.4 GHz radio).
XIQ-31645	We resolved an issue with the <b>Configuration View</b> for Tunnel Concentrator with 5000 AP Tunnels taking up to 8 minutes to load completely.
XIQ-32354	We removed Satellite View from legacy maps.
XIQ-34481	We addressed an issue with incorrectly identified Client mode and radio information for Wi-Fi 6E clients connected to AP5010 and AP5020.
XIQ-34634	We addressed an issue with the serial number including an unexpected prefix, in the <b>Site Engine Managed</b> view of the <b>Manage &gt; Devices</b> page.

#### Table 5: Addressed Issues in 24.6.0.74 (continued)



# Known Issues in 24.6.0

The following table lists known product issues. Issues are grouped according to ID prefix and sorted within their group with the most recently logged issue listed first. (Issue IDs are in descending order.)

#### Table 6: Known Issues in 24.6.0

Issue ID	Description
XIQ-34912	Clients discovered through node alias or DHCP snooping fingerprint might not immediately appear in the Device 360 Clients table. It can take up to 10 minutes for the new entries to appear in the Device 360 Clients table.
XIQ-34908	If a template has a Link Aggregation Group with ports from different slots, trying to enable Instant Port Profile or Instant Secure Port on the Link Aggregation Group from the template view of a slot that does not contain the master port results in the feature not getting enabled on the master port. The delta is not properly generated. This limitation applies to a preexisting Link Aggregation Group in the template, or when creating a new Link Aggregation Group, and might result in the failure to enable features like node alias or Instant Port Profile on all Link Aggregation Group member ports.
XIQ-34846	On wired VOSS and Fabric Engine devices for Cisco Discovery Protocol (CDP), configuration pushed via ExtremeCloud IQ still requires enabling LLDP TX/RX status through device CLI, for a CDP neighbor to establish.
XIQ-34724	Delta configuration push fails for Wifi0 with dual 5G mode when 5G-Low channels are not supported.
XIQ-33709	Some IP VLAN pairs from the Client 360 table and Client pages might be missing if they have multiple IPs learned through Node Alias events.
XIQ-33498	AP5050 AFC 6GHz FCC does not support client mode.
XIQ-33103	The AFC View on the Manage Device page displays <i>qualified</i> AFC-governed 6 GHz access points. This feature requires version 10.7.2 or higher. If access points are initially onboarded directly from the AFC View and have firmware below the minimum required version, they do not appear on the AFC View. After upgrade to the minimum required version, the qualified access points appear in the AFC View.
XIQ-32459	The ExtremeCloud IQ deployment API HTTP Success status code changed from 200 to 202.

Issue ID	Description	
XIQ-31639	The IoT heat map is always shown, regardless of whether an IoT profile is configured on the AP. There is no status for IoT radios in the API.	
XIQ-31601	When new perimeter is added or modified from the <b>Planning</b> page; it does not sync with the <b>Realtime</b> maps page.	
XIQ-31433	The <b>Cloud Service</b> component of iBeacon is temporarily disabled. This service will be available in a future release.	
XIQ-26907	A delta configuration push error might occur, when configuring the port Forwarding Rule for Client Mode. <b>Workaround:</b> Push a complete configuration update.	
XIQ-21339	ExtremeCloud IQ not showing error when aggregation is enabled with rate-limit configuration.	
XIQ-20111	A site configuration must include an assigned country. You cannot modify a site configuration that does not include an assigned country.	
XIQ-20909	When configuring 6 GHz radio for a country that does not support it, the configuration push to the AP3000 fails. <b>Workaround:</b> Revert to 2.4 GHz.	
XIQ-19977	The MCast rate configured in an AP template does not take effect when sCLI is presented.	
XIQ-19509	Access points go offline when pushed minimum speed and half duplex transmission mode for eth0, rebooting after some time, and then the configuration reverts back to minimum speed with full duplex.	
XIQ-19498	When the AP5010 eth0 interface is operating with maximum speed, changing the transmission type causes ExtremeCloud IQ to also generate a delta CLI for speed.	
XIQ-19379	Occasionally, APs are not deleted from ExtremeCloud IQ, but are deleted from ExtremeCloud IQ Controller.	
XIQ-19368	The user interface overrides Supplemental CLI. If you add an sCLI object and there is a code conflict with the GUI, the GUI has priority. This is done by placing the sCLI code at the top of the command structure in the audit. To give the sCLI priority, place the sCLI code at the bottom of the command structure in the audit.	
XIQ-19320	The Wi-Fi Interface Transmission power does not update in the <b>Managed Device</b> page after a bulk edit.	
XIQ-12503	Network 360 shows <b>Unknown Error</b> when <b>All Access</b> <b>Points Applications</b> is selected and the user selects both ExtremeWireless WiNG and IQ Engine devices. <b>Workaround</b> : Clear selected ExtremeWireless WiNG devices.	
XIQ-5700	Client Trial showed only the currently connected AP when the client roamed to a different AP from the onboarded ExtremeCloud IQ Controller.	

Issue ID	Description	
CFD-12408 (02996748)	After a firmware upgrade, ExtremeCloud IQ Site Engine reports and records the firmware correctly for all switches and stacks. ExtremeCloud IQ reports and records the firmwar correctly for standalone switches, but incorrectly for stacks.	
CFD-12246 (02996262)	After enabling OFDMA in an AX 6Ghz Radio Profile and saving, the change is not saved and OFDMA is not enabled.	
CFD-12226 (02995025) XMAPP-1689	ExtremeCloud IQ v24.5.0.65 supports XIQ Mobile Application (v12.1). Mobile Application prompts the user to upgrade. Customers must upgrade to Mobile Application v12.1 to authenticate.	
	<b>Important:</b> If users skip the Mobile Application upgrade, they will not be able to login to ExtremeCloud IQ using the previous Mobile Application version.	
	<ul> <li>Mobile App (v12.1) has been released in Apple Store (iOS) and Play Store (Android).</li> <li>Mobile App users are prompted to upgrade to the new version upon launching the App.</li> <li>Mobile App forces an upgrade after 7 days.</li> </ul>	
CFD-11889 (02969862)	The <b>Client Issues</b> section displays information for different clients on different APs, and even at different sites.	
CFD-11783 (02969413)	In specific circumstances, ExtremeCloud IQ generates WPA3- AES-8021x-Suite-B-192 for Enterprise SSID for 10.3r0 AP302W. This issue occurs after the post-onboarding complete update. <b>Workaround</b> : Perform a second complete update.	
CFD-11529 (02957942)	API response data is unclear.	
CFD-10699 (02906999)	Universal Access Points failed to complete the WiNG-OS conversion, even after a successful CAPWAP and STUN binding.	
CFD-8946 (02710778, 02748750)	License descriptions are automatically cleared when the Activated status is updated.	
CFD-7360 (02498292)	For Wing-AP sites, contrary to present implementation, customers expect to see APs offline, when ExtremeCloud IQ / nsight policy is not used for that site.	

#### Table 6: Known Issues in 24.6.0 (continued)

Issue ID	Description
APC-41057	Legend labels on the SR2200/2300 switch stack graph sometimes disappear when attempting to download or print the graph. <b>Workaround</b> :
	Download one graph at a time, and open the downloaded file before choosing to download again.
	<b>Note:</b> The SVG option is the most stable format; PNG, JPG, and PDF have spacing issues on the legend section.
APC-21456	In rare cases, ExtremeCloud IQ does not upload some IGMP sub-commands successfully.
	Note: SR2200/2300 only.
	Workaround: Use the Supplemental CLI to upload commands when necessary. To use the supplemental CLI tool, go to Global Settings > VIQ Management, and set the Supplemental CLI slider to ON.

#### Table 6: Known Issues in 24.6.0 (continued)



# **Device Support Information**

Controllers on page 24 Access Points on page 25 Switches on page 29 Routers on page 51 ExtremeCloud IQ Site Engine on page 52 ExtremeCloud IQ CoPilot on page 55 ExtremeCloud A3 on page 55 Supported Browsers and Display Settings on page 55

This section lists the devices that ExtremeCloud IQ supports and includes the latest version of the software that each device supports.

Device Model	Latest Supported Release	Comments
E1120	XIQC 10.11.01	Monitor only
E2120	XIQC 10.11.01	Monitor only
E2122	XIQC 10.11.01	Monitor only
E3120	XIQC 10.11.01	Monitor only
VE6120	XIQC 10.11.01	Monitor only
VE6120H	XIQC 10.05.02	Monitor only
VE6120K	XIQC 10.10.02	Monitor only
VE6125	XIQC 10.10.02	Monitor only
VE6125K	XIQC 10.10.02	Monitor only
NX5500	Wing os 7.9.5.0	Monitor only
NX7500 Series	WiNG OS 7.9.5.0	Monitor only
NX9500 Series	Wing os 7.7.1.9	Monitor only
NX9600 Series	WiNG OS 7.9.5.0	Monitor only
RFS4000 Series	Wing os 5.9.7.1	Monitor only
RFS6000 Series	WiNG OS 5.9.1.8	Monitor only
RFS7000 Series	WiNG OS 5.8.6.11	Monitor only
VX9000	WiNG OS 7.9.5.0	Monitor only

### Controllers

### **Access Points**

Access Point information is provided in the following sections:

- Universal Hardware on page 25
- IQ Engine (Cloud Native) on page 26
- ExtremeWireless WiNG on page 27
- Extreme Wireless on page 28

#### Universal Hardware

Device Model	Latest Supported Release	Comments	
AP302W	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.3.1	
AP305C	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.1.1	
AP305C-1	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.4.6	
AP305CX	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.1.1	
AP3000	IQ Engine 10.7.3 AP 10.11.1	Platform support introduced with IQ engine 10.6.1	
AP3000X	IQ Engine 10.7.3	Platform support introduced with IQ Engine 10.6.1	
AP4000	IQ Engine 10.7.3 AP 10.11.1	Platform support introduced with IQ Engine 10.4.1	
AP4000-1	IQ Engine 10.7.3 AP 10.11.1	Platform support introduced with IQ Engine 10.4.2	
AP410C	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.1.2	
AP410C-1	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.4.6	
AP460C	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.1.2	

Device Model	Latest Supported Release	Comments
AP460S6C	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.1.2
AP460S12C	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.1.2
AP5010	IQ Engine 10.7.3 WiNG OS 7.9.5.0 AP 10.11.1	Platform support introduced with IQ Engine 10.5.1
AP5020	IQ Engine 10.7.3 AP 10.11.1	Platform support introduced with IQ Engine 10.7.2
AP5050U	IQ Engine 10.7.3 AP 10.11.1	Platform support introduced with IQ Engine 10.5.3
AP5050D	IQ Engine 10.7.3 AP 10.11.1	Platform support introduced with IQ Engine 10.5.3
AP510C/CX	IQ Engine 10.7.3	Platform support introduced with IQ Engine 10.0.8

## IQ Engine (Cloud Native)

Device Model	Latest Supported Release	Comments	
AP630	IQ Engine 10.6.7	Platform support introduced with IQ Engine 10.0.1. End of Life Information	
AP650	IQ Engine 10.6.7	Platform support introduced with IQ Engine 10.0.1. End of Life Information	
AP650X	IQ Engine 10.6.7	Platform support introduced with IQ Engine 10.0.1. End of Life Information	
AP1130	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 8.2.1. End of Life Information	
AP550	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 7.0.3. End of Life Information	
AP390	IQ Engine 6.5.16	End of Life Information	
AP370	IQ Engine 6.5.16	End of Life Information	
AP350	IQ Engine 6.5.16	End of Life Information	
AP340	IQ Engine 6.5.10	End of Life Information	
AP330	IQ Engine 6.5.16	End of Life Information	

Device Model	Latest Supported Release	Comments
AP320	IQ Engine 6.5.10	End of Life Information
AP250	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 7.0.2.
AP245X	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 7.0.2. End of Life Information
AP230	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 8.2.1. End of Life Information
AP170	IQ Engine 6.5.16	End of Life Information
AP150W	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 8.1.1. End of Life Information
AP141	IQ Engine 6.5.16	End of Life Information
AP130	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 8.2.1. End of Life Information
AP122	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 7.0.4.
AP122X	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 8.2.1. End of Life Information
AP121	IQ Engine 6.5.16	End of Life Information
AP120	IQ Engine 6.5.10	End of Life Information
Atom AP30	IQ Engine 10.6.1a	Platform support introduced with IQ Engine 8.3.2. End of Life Information

## ExtremeWireless WiNG

Device Model	Latest Supported Release	Comments
AP560i	WiNG OS 7.9.5.0 Monitor only	
AP560h	WiNG OS 7.9.5.0	Monitor only
AP505	Wing os 7.9.5.0	Monitor only
AP510i	Wing os 7.9.5.0	Monitor only
AP510i-1	Wing os 7.9.5.0	Monitor only
AP460i/e	WiNG OS 7.9.5.0	Monitor only
AP410i/e	Wing os 7.9.5.0	Monitor only
AP410i-1	WiNG OS 7.9.5.0 Monitor only	
AP360i/e	Wing os 7.9.5.0	Monitor only
AP310i/e	WiNG OS 7.9.5.0 Monitor only	
AP310i/e-1	Wing os 7.9.5.0	Monitor Only
AP3000	WiNG OS 7.9.5.0 Monitor Only	
AP8533	WiNG OS 7.7.1.9	Monitor only

Device Model	Latest Supported Release	Comments
AP8432	Wing os 7.7.1.9	Monitor only
AP8232	WiNG OS 5.9.1.8	Monitor only
AP8222	WiNG OS 5.8.6.11	Monitor only
AP8163	Wing os 5.9.7.1	Monitor only
AP8132	WiNG OS 5.9.1.8	Monitor only
AP8122	WiNG OS 5.9.1.8	Monitor only
AP7662	Wing os 7.7.1.9	Monitor only
AP7632	WiNG OS 7.7.1.9	Monitor only
AP7622	Wing os 5.9.7.1	Monitor only
AP7612	WiNG OS 7.7.1.9	Monitor only
AP7602	Wing os 5.9.7.1	Monitor only
AP7562	WiNG OS 7.7.1.9	Monitor only
AP7532	Wing os 7.7.1.9	Monitor only
AP7522	WiNG OS 7.7.1.9	Monitor only
AP7502	Wing os 5.9.7.1	Monitor only
AP7161	WiNG OS 5.9.1.8	Monitor only
AP7131	WiNG OS 5.8.6.11	Monitor only
AP6562	WiNG OS 5.9.1.8	Monitor only
AP6532	WiNG OS 5.9.1.8	Monitor only
AP6522	WiNG OS 5.9.1.8	Monitor only
AP6521	WiNG OS 5.9.1.8	Monitor only
AP6511	WiNG OS 5.8.6.11	Monitor only

### Extreme Wireless

Device Model	Latest Supported Release	Comments
AP3965	ExtremeWireless 10.51	Monitor only
AP3935	ExtremeWireless 10.51 Monitor only	
AP3917	ExtremeWireless 10.51	Monitor only
AP3916C	ExtremeWireless 10.51	Monitor only
AP3915	ExtremeWireless 10.51 Monitor only	
AP3912	ExtremeWireless 10.51 Monitor only	
SA201	ExtremeWireless 10.51 Monitor only	

## Switches

Switch information is provided in the following sections:

- Universal Hardware on page 30
- ExtremeXOS on page 45
- VOSS on page 49
- IQ Engine (Cloud Native) on page 50
- Dell EMC on page 51

For the latest release notes for Fabric Engine and Switch Engine , see the Extreme Networks Documentation Site.

### Universal Hardware

Device Model	Latest Supported Release	Standalone Support	Stack Support
4120-24MW-4Y	Switch Engine 32.7.1	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul> Note: Pilot license required to configure advanced features.	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>200Gb stacking through two built-in QSFP28 ports</li> </ul> Note: Can only stack with other 4120 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.
4120-48MW-4Y	Switch Engine 32.7.1	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Note: Pilot license required to configure advanced features.</li> </ul>	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>200Gb stacking through two built-in QSFP28 ports</li> </ul> Note: Can only stack with other 4120 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.

Device Model	Latest Supported Release	Standalone Support	Stack Support
4120-Series-Stack	Switch Engine 32.7.1	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul> Note: Pilot license required to configure advanced features.	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>200Gb stacking through two built-in QSFP28 ports</li> <li>Note: Can only stack with other</li> <li>4120 devices. Cross stacking between</li> <li>4120 and 4220 is not supported. Cross stacking between</li> <li>4000 and 5000 is not supported.</li> </ul>
4220-12P-4X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Note: Pilot license required to configure advanced features.</li> </ul>	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.

Device Model	Latest Supported Release	Standalone Support	Stack Support
4220-12T-4X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul> Note: Pilot license required to configure advanced features.	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.
4220-24P-4X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul> Note: Pilot license required to configure advanced features.	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.

Device Model	Latest Supported Release	Standalone Support	Stack Support
4220-24T-4X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul> Note: Pilot license required to configure advanced features.	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.
4220-48P-4X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Note: Pilot license required to configure advanced features.</li> </ul>	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.

Device Model	Latest Supported Release	Standalone Support	Stack Support
4220-48T-4X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul> Note: Pilot license required to configure advanced features.	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.
4220-4MW-20P-4 X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Note: Pilot license required to configure advanced features.</li> </ul>	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.

Device Model	Latest Supported Release	Standalone Support	Stack Support
4220-4MW-8P-4X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul> Note: Pilot license required to configure advanced features.	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> <li>Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.</li> </ul>
4220-8MW-40P-4 X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Note: Pilot license required to configure advanced features.</li> </ul>	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> <li>Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
4220-8X	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul> Note: Pilot license required to configure advanced features.	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.
4220-Series-Stack	Switch Engine 32.7.1 Fabric Engine 9.0	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Note: Pilot license required to configure advanced features.</li> </ul>	<ul> <li>Onboard</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Up to 8 unit stacking</li> <li>40Gb stacking through two built-in SFP+ uplink ports</li> </ul> Note: Can only stack with other 4220 devices. Cross stacking between 4120 and 4220 is not supported. Cross stacking between 4000 and 5000 is not supported.

Device Model	Latest Supported Release	Standalone Support	Stack Support
5320-16P-4XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5320-16P-4XE-DC	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5320-24T-8XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5320-24P-8XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5320-48T-8XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
5320-48P-8XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420F-24T-4XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420F-24P-4XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420F-24S-4XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420F-48T-4XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
5420F-48P-4XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420F-48P-4XL	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> </ul>
5420F-8W-16P-4X E	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420F-16W-32P-4 XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420F-16MW-32P -4XE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
5420M-24T-4YE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420M-24W-4YE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420M-48T-4YE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420M-48W-4YE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5420M-16MW-32P -4YE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
5520-24W	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5520-24T	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5520-24T-ACDC	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5520-24X-ACDC	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5520-48W	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
5520-48T	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5520-48T-ACDC	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5520-12MW-36W	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5520-48SE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5520-48SE-ACDC	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
5520-24X	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5720-24MW	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5720-48MW	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
5720-24MXW	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
5720-48MXW	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
7520-48Y	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Fabric Engine: Monitor</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
7520-48YE	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Fabric Engine: Monitor</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
7520-48XT	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Fabric Engine: Monitor</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>
7720-32c	Switch Engine 32.7 Fabric Engine 9.0	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> <li>Fabric Engine: Monitor</li> </ul>	<ul> <li>Switch Engine:</li> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy</li> <li>Note: Cross stacking between 4000 and 5000 is not supported.</li> </ul>



### Note

\* SSH Proxy and Supplemental CLI can be used for configuring additional parameters not currently available within template or device-level configurations.

## ExtremeXOS

Device Model	Latest Supported Release	Standalone Support	Stack Support
X435-8P-2T-W	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	N/A
X435-24T-4S	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	N/A

Device Model	Latest Supported Release	Standalone Support	Stack Support
X435-24P-4S	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	N/A
X435-8T-4S	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	N/A
X435-8P-4S	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	N/A
X440- G2-12p-10GE4	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>
X440-G2-12t-10GE4	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>
X440- G2-24p-10GE4	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>
X440- G2-24t-10GE4	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>

Device Model	Latest Supported Release	Standalone Support	Stack Support
X440- G2-48p-10GE4	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>
X440- G2-48t-10GE4	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>
X450-G2-24p-GE4	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Monitor
X450-	ExtremeXOS	<ul> <li>Monitor</li> <li>Template- and device-</li></ul>	Monitor
G2-24p-10GE4	32.6.3	level configuration <li>SSH Proxy*</li> <li>Supplemental CLI*</li>	
X450-	ExtremeXOS	<ul> <li>Monitor</li> <li>Template- and device-</li></ul>	Monitor
G2-48p-10GE4	32.6.3	level configuration <li>SSH Proxy*</li> <li>Supplemental CLI*</li>	
X460-	ExtremeXOS	<ul> <li>Monitor</li> <li>Template- and device-</li></ul>	Monitor
G2-24p-10GE4	32.6.3	level configuration <li>SSH Proxy*</li> <li>Supplemental CLI*</li>	
X460-	ExtremeXOS	<ul> <li>Monitor</li> <li>Template- and device-</li></ul>	Monitor
G2-48p-10GE4	32.6.3	level configuration <li>SSH Proxy*</li> <li>Supplemental CLI*</li>	

Device Model	Latest Supported Release	Standalone Support	Stack Support
X465-24W	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Monitor
X465-48W	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Monitor
X465-24MU	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Monitor
X465-48P	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Monitor
X465-24MU-24W	ExtremeXOS 32.6.3	<ul> <li>Monitor</li> <li>Template- and device- level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Monitor



#### Note

\* SSH Proxy and Supplemental CLI can be used for configuring additional parameters not currently available within template or device-level configurations.

### VOSS

Device Model	Latest Supported Release	Standalone Support	Stack Support
VSP7432CQ	VOSS 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Not supported
VSP7400-48Y	VOSS 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Not supported
VSP4900-48P	VOSS 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Not supported
VSP4900-24XE	VOSS 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Not supported
VSP4900-24S	VOSS 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Not supported
VSP4900-12MXU-12XE	VOSS 9.0	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Not supported

Device Model	Latest Supported Release	Standalone Support	Stack Support
XA1480	VOSS 8.10	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Not supported
XA1440	VOSS 8.10	<ul> <li>Monitor</li> <li>Template- and device-level configuration</li> <li>SSH Proxy*</li> <li>Supplemental CLI*</li> </ul>	Not supported



#### Note

\* SSH Proxy and Supplemental CLI can be used for configuring additional parameters not currently available within template or device-level configurations.

## IQ Engine (Cloud Native)

Device Model	Latest Supported Release
SR2024 End of Life	IQ Engine 6.5.12
SR2024P End of Life	IQ Engine 6.5.12
SR2124P End of Life	IQ Engine 6.5.12
SR2148P End of Life	IQ Engine 6.5.12
SR2208P	FASTPATH 8.2.0.2 v1.0.1.29 ExtremeCloud IQ Agent 1.1.31
SR2224P	FASTPATH 8.2.0.2 v1.0.1.29 ExtremeCloud IQ Agent 1.1.31
SR2324P	FASTPATH 8.2.0.2 v1.0.1.29 ExtremeCloud IQ Agent 1.1.31
SR2348P	FASTPATH 8.2.0.2 v1.0.1.29 ExtremeCloud IQ Agent 1.1.31

## Dell EMC

Device Model	Latest Supported Release
N3132PX	IQAgent 1.1.29
N3024EF	IQAgent 1.1.29
N3024EP	IQAgent 1.1.29
N3024ET	IQAgent 1.1.29
N3048EP	IQAgent 1.1.29
N3048ET	IQAgent 1.1.29
N3024	IQAgent 1.1.29
N3024F	IQAgent 1.1.29
N3024P	IQAgent 1.1.29
N3048	IQAgent 1.1.29
N3048P	IQAgent 1.1.29
N2128PX	IQAgent 1.1.29
N2024	IQAgent 1.1.29
N2024P	IQAgent 1.1.29
N2048	IQAgent 1.1.29
N2048P	IQAgent 1.1.29
N1524	IQAgent 1.1.29
N1524P	IQAgent 1.1.29
N1548	IQAgent 1.1.29
N1548P	IQAgent 1.1.29
N1108T-ON	IQAgent 1.1.29
N1108P-ON	IQAgent 1.1.29
N1124T-ON	IQAgent 1.1.29
N1124P-ON	IQAgent 1.1.29
N1148T-ON	IQAgent 1.1.29
N1148P-ON	IQAgent 1.1.29

## Routers

Device Model	Latest Supported Release	Standalone Support
BR200WP End of Life	IQ Engine 6.9.7	
XR200P	IQ Engine 6.9.7	Platform support introduced with IQ Engine 6.9.2
XR600	IQ Engine 10.0.11	Platform support introduced with IQ Engine 9.0.1

Device Model	Latest Supported Release	Standalone Support
XR600P	IQ Engine 10.0.11	Platform support introduced with IQ Engine 9.0.1
VGVA	IQ Engine 6.9.7	

# ExtremeCloud IQ Site Engine

ExtremeCloud IQ Site Engine Version	Supported Features
23.07.13	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine without SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> </ul>
23.11.10	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine without SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> </ul>
23.11.11	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine without SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> </ul>
23.11.12	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine without SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> </ul>

ExtremeCloud IQ Site Engine Version	Supported Features
24.2.10	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine without SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> <li>Wired end-systems reported to ExtremeCloud IQ</li> </ul>
24.2.11	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine without SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> <li>Wired end-systems reported to ExtremeCloud IQ</li> </ul>
24.2.12	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine without SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> <li>Wired end-systems reported to ExtremeCloud IQ</li> </ul>
24.2.13	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine without SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> <li>Wired end-systems reported to ExtremeCloud IQ</li> </ul>

ExtremeCloud IQ Site Engine Version	Supported Features
24.02.14	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine with SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> <li>Wired end-systems reported to ExtremeCloud IQ</li> </ul>
24.02.15	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine with SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> <li>Wired end-systems reported to ExtremeCloud IQ</li> </ul>
24.07.10	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine with SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> <li>Wired end-systems reported to ExtremeCloud IQ</li> </ul>
24.07.11	<ul> <li>License allocation</li> <li>Device Assignment to the ExtremeCloud IQ Location</li> <li>Device Statistics</li> <li>Port Statistics</li> <li>Unmanage/Manage device</li> <li>Device Group to CCG mapping</li> <li>Open Site Engine with SSO</li> <li>Stack members</li> <li>NAC details update for wireless end-systems</li> <li>Wired end-systems reported to ExtremeCloud IQ</li> </ul>

# ExtremeCloud IQ CoPilot

ExtremeCloud IQ CoPilot	Minimum Firmware				
Feature	IQ Engine	Switch Engine	Fabric Engine	Extreme XOS	VOSS
WiFi Efficiency	10.5.2*				
WiFi Capacity	10.5.2*				
PoE Stability	10.5.2*	32.1	8.6	32.1	8.6
Port Efficiency	10.5.2**	31.7	8.6	31.7	8.6
DFS Recurrence	10.5.2*				
Adverse Traffic Patterns	10.5.2*	31.7	8.6	31.7	8.6
Wireless Connectivity Experience	10.5.2				
Wired Connectivity Experience		31.7	8.6	31.7	8.6

\*beta support from 10.4

\*\*beta support from 10.5.1

## ExtremeCloud A3

ExtremeCloud A3 Version	Supported Features
5.0.1-4	<ul> <li>Licensing</li> <li>Status Monitoring</li> <li>SSO</li> <li>Client Details</li> </ul>

# Supported Browsers and Display Settings

## Desktop and Mobile Browser Support



Note

ExtremeCloud IQ does not support 32-bit browsers.

### Table 7: Desktop Browsers

Desktop Browsers	Version Supported
Chrome	v116
Edge	v115
Firefox	v115
Internet Explorer	Not supported

### Table 7: Desktop Browsers (continued)

Desktop Browsers	Version Supported
Opera	v60
Safari	v13

#### **Table 8: Mobile Browsers**

Mobile Browsers	Version Supported
Android Webview	v73
Chrome for Android	v116
Edge	√79
Firefox for Android	∨67
Opera for Android	v52
Safari for iOS	v13
Samsung Internet	Not supported

## **Display Settings**

ExtremeCloud IQ supports display resolutions of 1280 x 1024 or higher.