

ExtremeCloud IQ Release Notes

23.5.3

September 2023



Copyright © 2023 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: www.extremenetworks.com/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

| | |
|--|-----------|
| General Release Information..... | 4 |
| Current Release: 23.5.3..... | 4 |
| Minor Release 3: 23.5.3.4 Addressed Issues..... | 4 |
| Minor Release 2: 23.5.2.1 New Features and Addressed Issues..... | 4 |
| Minor Release 1: 23.5.1.7 New Features and Addressed Issues..... | 5 |
| ExtremeCloud IQ Public IP Address Blocks..... | 5 |
| Supported IQ Engine 10.6.3 Software..... | 6 |
| New Features in 23.5.0.41..... | 7 |
| Addressed Issues in 23.5.0.41..... | 13 |
| Known Issues in 23.5.0.41..... | 14 |
| Device Support Information..... | 18 |
| Controllers..... | 18 |
| Access Points..... | 19 |
| Universal Hardware..... | 19 |
| IQ Engine (Cloud Native)..... | 20 |
| ExtremeWireless WiNG..... | 21 |
| Extreme Wireless..... | 22 |
| Switches..... | 23 |
| Universal Hardware..... | 23 |
| ExtremeXOS..... | 28 |
| VOSS..... | 30 |
| IQ Engine (Cloud Native)..... | 31 |
| Dell EMC..... | 31 |
| Routers..... | 32 |
| ExtremeCloud IQ - Site Engine..... | 33 |
| ExtremeCloud IQ CoPilot..... | 35 |
| ExtremeCloud A3..... | 36 |
| Supported Browsers and Display Settings..... | 36 |
| Desktop and Mobile Browser Support..... | 36 |
| Display Settings..... | 37 |



General Release Information

Current Release: 23.5.3

September 2023

Minor Release 3: 23.5.3.4 Addressed Issues

| Issue ID | Description |
|------------------------|--|
| XIQ-22863 | Addressed an issue where ExtremeCloud IQ - Site Engine did not receive license information from ExtremeCloud IQ when there were expired licenses in ExtremeCloud IQ License Management tables. |
| XIQ-18285 | Administrators outside the organization (external admin) now have the privilege to grant additional external admin access to the VIQ to which the external admin has access. |
| CFD-9608 (02808324) | Addressed an issue where some APs could not be placed in the correct location on the floor map. |
| CFD-9391 (02777463) | Addressed an issue with Swagger API. API to assign ports to devices in the network policy is now fixed. |

Minor Release 2: 23.5.2.1 New Features and Addressed Issues

Table 1: New Features and Addressed Issues

| Issue ID | Description |
|------------------------|--|
| XIQ-22956 | Support for IQ Engine 10.6.3a |
| XIQ-22858 HOS-19697 | AP305C(X) and AP410C support for Montenegro and Bosnia |
| CFD-9572 | Fixed an issue where the USB port configuration was missing from the AP configuration screens. |

Minor Release 1: 23.5.1.7 New Features and Addressed Issues

Table 2: New Features

| Issue ID | Description |
|-----------|---|
| XIQ-20152 | The Port Efficiency anomaly algorithm is improved to decrease its responsiveness to intermittent issues. In the past, a single duplex or data rate change prompted the detection of an anomaly. With this enhancement, anomalies are flagged only if the duplex or data rate change persists through two consecutive periods. |
| XIQ-20783 | <p>Introduced an enhanced ExtremeCloud IQ CoPilot user experience with advanced features for data filtering, searching, and summarization. These improvements empower users to efficiently access ExtremeCloud IQ CoPilot data. The new user interface will be released in two phases. ExtremeCloud IQ v23.5.1 offers the following enhancements:</p> <ul style="list-style-type: none"> • The ability to toggle between the new and legacy interfaces: Users gain the ability to toggle between the legacy view and the new view. • Anomalies and Connectivity Experience Tabs: ExtremeCloud IQ CoPilot data is now organized into two distinct tabs, providing separate access to anomalies and the connectivity experience. • Global Filters: On the anomalies page, users can apply global filters based on site, severity, type, and duration. • Anomaly Trends: The Assurance Scan widget has been relocated. Select the Trends button to filter graph data by anomaly type. • Anomalies Widgets: Summarized data is presented through three widgets: Top Sites by Anomalies, Anomalies by Severity, and Top Anomalies by Type. • Anomalies Table: The Anomalies table provides a comprehensive list of anomaly data for the chosen duration, featuring search, sorting, and download functionality. In future releases, ExtremeCloud IQ will introduce the new Connectivity Experience user interface that will build on these enhancements. |

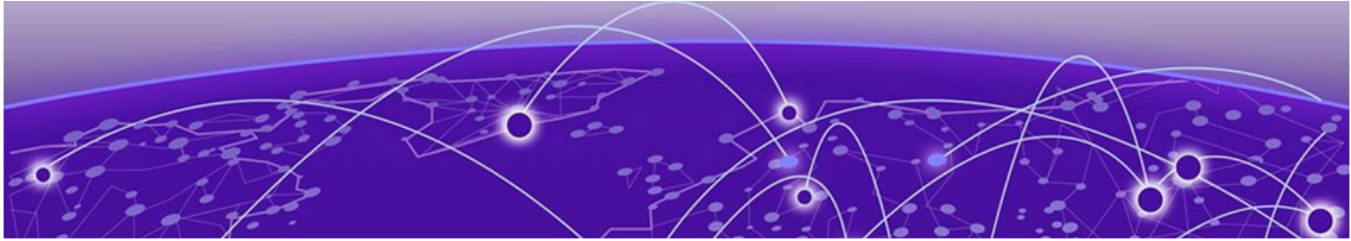
ExtremeCloud IQ Public IP Address Blocks

| 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 | |
| US East (VA) | 34.202.197.0/26 44.192.245.0/26 3.234.248.0/27 | Firewall Address and Port Information |

| Data Center | IP Block | Addresses and Ports |
|-----------------------------|--|---|
| US East 2 (VA2) | 34.202.197.0/26 44.192.245.0/26 3.234.248.0/27 | Firewall Address and Port Information |
| Ireland (IE) | 34.253.190.192/26 | Firewall Address and Port Information |
| India (IN) | 13.232.67.8/29 3.6.70.64/29 | Firewall Address and Port Information |
| Germany (FRA) | 3.67.81.96/27 18.194.95.0/28 | Firewall Address and Port Information |
| Sweden (SE) | 13.48.186.224/29 13.48.4.184/29 | Firewall Address and Port Information |
| Brazil (BR) | 18.228.70.16/28 | Firewall Address and Port Information |
| Australia (AUS) | 13.210.3.192/28 | Firewall Address and Port Information |
| Japan (JP) | 18.176.203.112/29 13.231.6.232/29 | Firewall Address and Port Information |
| Azure, US East (AVA) | 52.226.89.112/28 | Firewall Address and Port Information |
| Bahrain (BH) | 15.184.70.208/28 | Firewall Address and Port Information |
| The Netherlands (NL-GCP) | 34.91.82.64/27 | Firewall Address and Port Information |
| US-Iowa (IA-GCP) | 34.67.130.64/27 | Firewall Address and Port Information |
| Switzerland (ACH) | 51.107.1.192/28 | Firewall Address and Port Information |
| Azure, Canada Central (ACA) | 20.151.64.48/28 | Firewall Address and Port Information |
| Singapore (SG-GCP) | 34.87.158.80/28 | Firewall Address and Port Information |
| United Kingdom (UK-AGB) | 51.143.233.80/28 | Firewall Address and Port Information |

Supported IQ Engine 10.6.3 Software

See the [Release Notes](#) for the current IQ Engine version that ExtremeCloud IQ supports.



New Features in 23.5.0.41

Device OS Support

This release adds support for the following device operating systems:

- **ExtremeXOS/Switch Engine:** 31.7.2 Patch Download Image Support
- **ExtremeXOS/Switch Engine:** 32.5 Download Image Support
- **VOSS/Fabric Engine:** 8.8.3 and 8.10.1 Download Image Support

New Hardware Support

There is no new hardware support in this release.

| Feature ID | Feature | Description |
|------------|---|--|
| XIQ-985 | New evaluation accounts are now limited to 90 days | The previous trial period for ExtremeCloud IQ was 30 days. We extended the trial period to 90 days and removed the 10-device limit. Trials are now unlimited for 90 days. |
| XIQ-1058 | Implemented advanced warning of impending license shortages, by GUI banner and by email | 90/60/30 days prior to the term expiration for one or more licenses or grace periods, ExtremeCloud IQ notifies administrators by displaying a banner in the GUI and optionally, by email. |
| XIQ-1298 | Implemented daily warning of impending license shortages, by GUI banner and by email | Seven days prior to the expiration of one or more licenses or grace periods, ExtremeCloud IQ begins notifying administrators daily by displaying a banner in the GUI and optionally, by email. |
| XIQ-4794 | Implemented 30-day grace period for CoPilot licenses | When the CoPilot feature is enabled and there are not enough CoPilot licenses to cover all CoPilot-eligible devices, the 30-day grace period automatically starts. During this period, the CoPilot feature processes data for devices without a valid CoPilot license. |

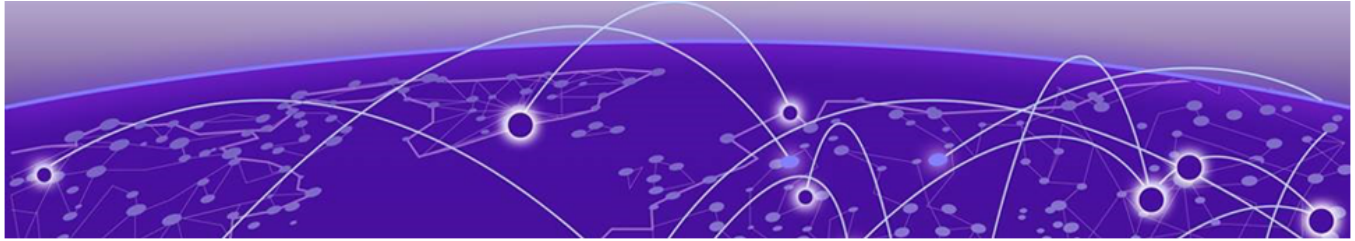
| Feature ID | Feature | Description |
|------------|---|---|
| XIQ-12782 | Ability to configure device level settings such as LLDP/CDP, MAC locking enable/disable, ERLP enable/disable, STP mode, and IGMP snooping | LLDP/CDP, MAC locking, and ERLP are now available to configure at Manage > Device Configure > Port Configuration for Switch Engine devices. Device level configurations override template level configurations. |
| XIQ-12783 | Port Details tab config consolidation | ExtremeCloud IQ now detects if Switch Engine and Fabric Engine devices have administrative port state configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 and Fabric Engine 8.10.1 to be installed. |
| XIQ-12784 | Port Settings tab config consolidation | ExtremeCloud IQ now detects if Switch Engine and Fabric Engine devices have port configurations such as MTU, transmission speed or duplex, flow control, and CDP which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 and Fabric Engine 8.10.1 to be installed. |
| XIQ-12785 | Port STP tab config consolidation | ExtremeCloud IQ now detects if Switch Engine and Fabric Engine devices have spanning tree configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 and Fabric Engine 8.10.1 to be installed. |
| XIQ-12786 | Port Storm Control tab config consolidation | ExtremeCloud IQ now detects if Switch Engine and Fabric Engine devices have port storm control configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 and Fabric Engine 8.10.1 to be installed. |

| Feature ID | Feature | Description |
|------------|---|--|
| XIQ-12787 | Port ELRP tab config consolidation | ExtremeCloud IQ now detects if Switch Engine devices have port ELRP configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 to be installed. |
| XIQ-12788 | Port Voice tab config consolidation | ExtremeCloud IQ now detects if Switch Engine devices have port voice configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 and Fabric Engine 8.10.1 to be installed. |
| XIQ-12789 | Port PSE tab config consolidation | ExtremeCloud IQ now detects if Switch Engine and Fabric Engine devices have port PSE configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 and Fabric Engine 8.10.1 to be installed. |
| XIQ-12790 | Port MAC Locking tab config consolidation | ExtremeCloud IQ now detects if Switch Engine devices have port MAC locking configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 to be installed. |
| XIQ-12819 | Device Hostname and Location config consolidation | ExtremeCloud IQ now detects if Switch Engine and Fabric Engine devices have hostname and location configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 and Fabric Engine 8.10.1 to be installed. |

| Feature ID | Feature | Description |
|------------------------|--|---|
| XIQ-12821 | VIM and partition selector for device level on Switch Engine 5520 and 5720 | VIM and partition mode are now available to configure at Manage > Device Configure > Port Configuration for Switch Engine and Fabric Engine devices. Device level configurations override template level configurations. |
| XIQ-13051 | Consolidate LLDP and CDP config at device level and port level | ExtremeCloud IQ now detects if Switch Engine devices have LLDP or CDP configurations which are out of sync with assigned network policy configurations when network policy and configuration updates are performed. This feature requires a minimum version of Switch Engine 32.5 to be installed. |
| XIQ-14171 | Implemented an option to opt-in or to opt-out of receiving <i>Proactive license warning email messages</i> | ExtremeCloud IQ provides advance notification for impending grace period and license term expiration. Administrators can choose whether to opt-in or opt-out of receiving the email notifications. |
| XIQ-14344 | Implemented automatic license alignments for license pool changes | When the license pool shrinks or grows, ExtremeCloud IQ automatically changes license assignments to avoid license violations and the need for manual adjustments. |
| XIQ-16263 | Implemented two new options to manage CoPilot licenses: Activate and Revoke | Administrators can now manually control which devices use ExtremeCloud IQ CoPilot licenses. |
| XIQ-16538 | Update the CoPilot not enough licenses banner with a link | ExtremeCloud IQ CoPilot license violation banner wording is changed and includes a link to information about eligible devices. |
| XIQ-17199 | xAPI - Allow basic AP config when using Onboard API | Added a new xAPI for advanced onboarding, allowing a user to assign network policies and locations, and change hostnames during the onboarding process. |
| XIQ-17621 | Sort does not work as expected | Redesigned hostname sort. New design returns accurate results when a user interface change does not match the current device configuration. |
| XIQ-17878 XIQ-17879 | VOSS/Fabric Engine 8.8.3 and 8.10.1 Download Image Support | ExtremeCloud IQ now supports VOSS/ Fabric Engine 8.8.3 and 8.10.1 image download for all supported VSP/ Fabric Engine SKUs. |

| Feature ID | Feature | Description |
|--|---|---|
| XIQ-17887 | Fabric Engine Digital Twin images to be removed in XIQ release 23.5.0 | Fabric Engine 8.7.x images are now unavailable to Digital Twin in ExtremeCloud IQ CoPilot. |
| XIQ-18341 | Separate Switch S-CLI from UI generated delta configuration update | Supplemental CLI device update improvement for Switch Engine and Fabric Engine. If supplemental CLI is appended to delta configuration and the supplemental CLI portion fails device update, only the supplemental CLI is regenerated for subsequent device updates. This feature requires a minimum version of Switch Engine 32.5 and Fabric Engine 8.10.1 to be installed. |
| XIQ-18382 (02737904, 02737921, 02733002, 02740115, 02740972, 02741127, 02745668, 02747138, 02749498, 02748687, 02745370, 02760625, 02761325, CFD-8985) | Added an option to synchronize licenses from Extreme Portal on-demand | ExtremeCloud IQ now provides administrators a more convenient way to sync licenses from the Extreme Portal license pool. Previously, administrators had to unlink and link again to the Extreme Portal, or wait for the scheduled automatic synchronization. |
| XIQ-18429 | Dominican Republic - AP5010 Regulatory Changes | For AP5010 deployments in the Dominican Republic, channels 120-128 are removed, and power is reduced on channels 36-48. |
| XIQ-18572 | Connect level - Limit the number of devices to 10 - adding devices | Introduced a limit of 10 devices for subscription-free ExtremeCloud IQ Connect accounts. |
| XIQ-18574 | Connect level - Limit the number of policies to 2 | Introduced a limit of two network policies for subscription-free ExtremeCloud IQ Connect accounts. |
| XIQ-18575 | Connect level - Limit the number of SSIDs to 4 | Introduced a limit of four SSIDs for subscription-free ExtremeCloud IQ Connect accounts. |
| XIQ-18578 | Connect level - Inform Connect customers over the limit of 10 devices | Introduced a banner announcing upcoming limitations to ExtremeCloud IQ Connect customers with more than 10 devices. |
| XIQ-19167 | Added new filter values for CoPilot licenses to match the options in the CoPilot column | On the Devices page, administrators filtering by License > CoPilot can select two new values: CoPilot Grace Period and CoPilot Unlicensed. |

| Feature ID | Feature | Description |
|------------|--|--|
| XIQ-19485 | ExtremeXOS/Switch Engine 32.5 Download Image Support | ExtremeCloud IQ now supports ExtremeXOS/Switch Engine 32.5 image download. |
| XIQ-19557 | Ability to enable STP at device level regardless of template setting | <p>You can now override template settings for a specific Switch Engine and Fabric Engine device. The following settings can be configured at the device level:</p> <ul style="list-style-type: none"> • STP Mode • Priority • Forwarding Delay • Max Age <p>The device level configurations override the template configuration.</p> |
| XIQ-19697 | Connect level - Limit the number of devices to 10 - Unmanage to Manage devices | Introduced a banner to warn about device management limitations for ExtremeCloud IQ Connect accounts. If a user chooses the to manage more than 10 devices at the Connect level, a banner displays. |
| XIQ-19715 | Add Copy function to Configuration events | It is now possible to copy text in the Description column for individual logs displayed under the Events and Configuration Events tabs on the Monitor > Events page. |
| XIQ-19748 | VOSS ExtremeCloud IQ Agent 0.6.14 | Fabric Engine now supports ExtremeCloud IQ Agent 0.6.14. |
| XIQ-19749 | ExtremeXOS ExtremeCloud IQ Agent 0.7.34 | Switch Engine now supports ExtremeCloud IQ Agent 0.7.34. |
| XIQ-19831 | Filter sections shall be collapsed by default | On the Manage > Devices page, the filter sections within the Filter sidebar are now collapsed by default. |
| XIQ-20158 | ExtremeXOS/Switch Engine 31.7.2 Patch 1-8 Image Download Support | ExtremeCloud IQ now supports ExtremeXOS/Switch Engine 31.7.2 Patch image download. |
| XIQ-21197 | Digital Twin: (23R5) Add support for the ExtremeXOS 32.5.1.x image | Added new Switch Engine 32.5.1 image firmware to Digital Twin (an ExtremeCloud IQ CoPilot feature). |



Addressed Issues in 23.5.0.41

| Issue ID | Description |
|-----------|---|
| XIQ-19637 | Addressed an issue where ExtremeCloud IQ CoPilot was automatically disabled if the same license pool was shared by multiple Virtual ExtremeCloud IQ accounts. |
| XIQ-19811 | Addressed an issue where ExtremeCloud IQ CoPilot license status was wrong for stack devices. |
| XIQ-20096 | Addressed an issue where on the Manage > Devices > <switch> > Device Details > Monitor > Overview page, inconsistencies were observed between details displayed for a channelized port listed in the table versus the details displayed in the Port Info pop-up window (accessed by selecting the channelized port in the port status panel). |
| XIQ-20249 | Addressed an issue that was found while verifying monitoring function for the 7520 platform. After selecting port from 1/49 to 1/54 and ACTIONS Bounce Port, UP ports are NOT bounced. The error message did not indicate all of the down interfaces. |
| XIQ-20399 | Addressed an issue on the Configure-User Management > Private Client Groups page, where the Enable Key-Based Groups button would not toggle to Enabled . |
| XIQ-20427 | Addressed an issue that occurred when adding a non-admin user under Global Settings > Account Management . Once added, the user received a <i>Welcome to ExtremeCloud IQ</i> email from which they linked to the Setup Password page; if their browser window was not maximized, the page was blank. |
| XIQ-20615 | Corrected an issue where the Bootstrap state would hang when moving a device to another Virtual ExtremeCloud IQ instance. |
| XIQ-20746 | Addressed an issue where there was a need to re-onboard the 7x20 stack case. This requirement lead to inconsistencies in port values with respect to channelization and stack visibility in D360. This fix basically removes wrongly identified stack ports from DB table hm_device_interface (and all necessary interfaces-mapped tables). This fix allows the user to continue using the already onboarded stack even after ExtremeCloud IQ (23.5.X) and ExtremeXOS (32.5.0.146) upgrade without the need for re-onboarding. The historical data associated with these invalid stack ports, if any, are not handled in this change. |
| XIQ-21324 | |



Known Issues in 23.5.0.41

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).

| Issue ID | Description |
|-----------|---|
| XIQ-22462 | Under certain conditions, if there is configuration related to IPv6 on Switch Engine when running software version 32.5.1.5, a configuration update may fail. Workaround: Upgrade to 32.5.1.5 Patch1-1 and then proceed with pushing a device configuration update. |
| XIQ-21943 | When an account goes into License Violation state, the user interface may not be locked until the page is refreshed or the user logs out and logs in again. There is no notification to the user, and some actions do not work in the License Violation state. |
| XIQ-20194 | For ExtremeCloud IQ 23.4 (and older releases), we recommend updating custom filter criteria from CoPilot Expired to CoPilot Unlicensed on the Manage > Devices page. |
| XIQ-19572 | Upon upgrade from ExtremeCloud IQ 23.2.x to 23.3.x, the Manage > Devices page does not retain settings from 23.2.x for the os option under the Column Picker drop-down list. To revert to the 23.2.x page view, the os option must be reselected, and the column repositioned on the page, as desired. |
| XIQ-18679 | Onboarding of Switch Engine instances may result in incorrect license violations reported in ExtremeCloud IQ due to Navigator license consumption when plenty of ExtremeCloud IQ CoPilot licenses are available. Devices may need to be unmanaged and remanaged to remedy the situation. |
| XIQ-18544 | When VGVA configurations fail due to using the same WPA3 SSID in a single network policy, move the APs associated with the WPA3 enabled SSID to a different profile. |

| Issue ID | Description |
|--------------------------------|--|
| XIQ-18175 | <p>The question mark character is allowed in the Global Setting > Device Management Settings password text box, but it cannot be typed into the Policy > Device Credentials password text box.</p> <p>Note: Switch Engine and Fabric Engine do not support the question mark character. A separate password can be created for Switch Engine and Fabric Engine at device-level configuration.</p> |
| XIQ-17024 | <p>The Cable Test action is not supported for x435 switch running the 32.3 software image due to limitations with storage space on the switch.</p> |
| XIQ-16652 | <p>The AP3000x/AP3000/AP5010U Auto Provision Update is failing with country code discover timeout.</p> |
| XIQ-12503 | <p>Network 360 shows Unknown Error when All Access Points Applications is selected and the user is selecting both ExtremeWireless WiNG and IQ Engine devices.</p> <p>Workaround: Deselect ExtremeWireless WiNG devices.</p> |
| XIQ-11984 | <p>For AP3000X/AP3000 and AP5050U/AP5050D devices operating in dual mode, under Manage > Devices > Interface Settings > Modify Multiple : Interface Settings > Wireless Interfaces, the radio Operating Mode drop-down list includes a 5 GHz option which can be selected; however, this option is not supported with this configuration.</p> |
| XIQ-9848 | <p>Duplicate entries in the Client Trail when a client moves away from the AP then comes back.</p> |
| XIQ-9847 | <p>The Roam Time entry in the Client Trail does not always display the correct device name.</p> |
| XIQ-7312 | <p>5720 Switch Engine devices were showing as connected during the reboot process.</p> |
| XIQ-5700 | <p>Client Trial only showed the currently connected AP when the client roamed to a different AP from the onboarded ExtremeCloud IQ Controller.</p> |
| CFD-8946 (02710778, 02748750) | <p>License descriptions are automatically cleared when the "ACTIVATED" status is updated.</p> |
| CFD-8678 (02688797) | <p>VLAN probe category counts are not always accurate.</p> |
| CFD-8677 (02688860) | <p>VLAN probe shows the results of a successful probe while the status says it is still running.</p> |
| CFD-8598 (02670900) | <p>Cannot enable Guest Essentials via Configure > Guest Essentials Users.</p> <p>Workaround: From ExtremeCloud IQ, go to Essentials > Extreme Guest.</p> |
| CFD-8216 (02634924) | <p>When Air Defense Essentials is enabled, Access Points running IQ Engine 10.4.3 or earlier versions cannot receive a delta configuration push from ExtremeCloud IQ. Upgrade the access points to the latest IQ Engine supported version.</p> |

| Issue ID | Description |
|-----------|--|
| APC-41057 | <p>Legend labels on the switch stack graph sometimes disappear when attempting to download or print the graph.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Only download one graph at a time, and open the downloaded file before choosing to download again. 2. The SVG option is the most stable format; PNG, JPG, and PDF have spacing issues on the legend section. |
| APC-22297 | <p>ExtremeCloud IQ displays PoE configuration controls for all ports on the Dell EMC N1108P switch, even though the N1100P only supports PoE on ports 1 - 4.</p> |
| APC-21456 | <p>In rare cases, ExtremeCloud IQ does not upload some IGMP sub-commands successfully.</p> <p>Workaround: Use the Supplemental CLI to upload commands when necessary.</p> |
| APC-20760 | <p>ExtremeCloud IQ reports any wired devices that are connected to an SR2208P switch as unidentified.</p> |
| APC-20734 | <p>When a configuration upload is unsuccessful because of improper Supplemental CLI commands, hovering the mouse over the upload message does not result in a tool tip containing the problematic CLI command.</p> |
| APC-20647 | <p>ExtremeCloud IQ does not successfully upload configurations that contain an external RADIUS server.</p> |
| APC-20172 | <p>The option to configure SSH wrongly displays when attempting bulk edits of multiple switches or of switches and APs together. However, when the admin is performing bulk edits of multiple APs only, ExtremeCloud IQ correctly hides the SSH configuration options.</p> |
| DAPC-385 | <p>ExtremeCloud IQ sometimes displays the incorrect port number in the tool tip when the admin mouses over a stack port on the Port Status page.</p> |
| DAPC-382 | <p>When an administrator attaches a switch stack to HiveManager Virtual Appliance, only the primary switch is auto-detected. The administrator must subsequently onboard the remaining stack members manually.</p> |
| DAPC-240D | <p>When the primary switch is removed from a stack, the stack retains the old MAC address. As a result, the primary switch (now a standalone switch), and the original stack both have the same MAC address, which ExtremeCloud IQ cannot resolve.</p> <p>Workaround: Before removing the primary switch from a stack with the intention of continuing to use the primary as a standalone switch, perform the following steps:</p> <ol style="list-style-type: none"> 1. Remove the stack from ExtremeCloud IQ. 2. Perform the related command line operations on the stack to remove the primary switch. 3. Add the stack and the standalone switch to ExtremeCloud IQ again. |

| Issue ID | Description |
|----------|---|
| DAPC-222 | After an admin uploads a stack template to a switch stack, ExtremeCloud IQ displays [-No Change-] in the Stack Template drop-down list, rather than the new template name. |
| DAPC-186 | ExtremeCloud IQ does not display the management VLAN information in the Devices table. |
| DAPC-73 | When resetting multiple switches simultaneously to factory default settings, ExtremeCloud IQ erroneously reports that the reset was unsuccessful. |



Device Support Information

- [Controllers](#) on page 18
- [Access Points](#) on page 19
- [Switches](#) on page 23
- [Routers](#) on page 32
- [ExtremeCloud IQ - Site Engine](#) on page 33
- [ExtremeCloud IQ CoPilot](#) on page 35
- [ExtremeCloud A3](#) on page 36
- [Supported Browsers and Display Settings](#) on page 36

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

Controllers

| Device Model | Latest Supported Release | Comments |
|----------------|--------------------------|--------------|
| E1120 | XIQC 10.06.02 | Monitor only |
| E2120 | XIQC 10.06.02 | Monitor only |
| E2122 | XIQC 10.06.02 | Monitor Only |
| E3120 | XIQC 10.06.02 | Monitor only |
| VE6120 | XIQC 10.06.02 | Monitor only |
| VE6120H | XIQC 10.05.02 | Monitor only |
| VE6120K | XIQC 10.06.02 | Monitor Only |
| VE6125 | XIQC 10.06.02 | Monitor only |
| VE6125K | XIQC 10.06.02 | Monitor Only |
| NX5500 | WiNG OS 7.9.2.0 | Monitor only |
| NX7500 Series | WiNG OS 7.9.2.0 | Monitor only |
| NX9500 Series | WiNG OS 7.7.1.5 | Monitor only |
| NX9600 Series | WiNG OS 7.9.2.0 | 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 7.9.2.0 | Monitor only |

Access Points

Access Point information is provided in the following sections:

- [Universal Hardware](#) on page 19
- [IQ Engine \(Cloud Native\)](#) on page 20
- [ExtremeWireless WiNG](#) on page 21
- [Extreme Wireless](#) on page 22

Universal Hardware

| Device Model | Latest Supported Release | Comments |
|--------------|--|---|
| AP302W | IQ Engine 10.6.3 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.3.1 |
| AP305C | IQ Engine 10.6.3 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.1.1 |
| AP305C-1 | IQ Engine 10.6.1 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.4.6 |
| AP305CX | IQ Engine 10.6.3 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.1.1 |
| AP3000 | IQ Engine 10.6.2 AP 10.6.2 | Platform support introduced with IQ engine 10.6.1 |
| AP3000X | IQ Engine 10.6.3 | Platform support introduced with IQ Engine 10.6.3 |
| AP4000 | IQ Engine 10.6.1 AP 10.6.2 | Platform support introduced with IQ Engine 10.4.1 |
| AP4000-1 | IQ Engine 10.6.1 AP 10.6.2 | Platform support introduced with IQ Engine 10.4.2 |
| AP410C | IQ Engine 10.6.3 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.1.2 |
| AP410C-1 | IQ Engine 10.6.1 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.4.6 |
| AP460C | IQ Engine 10.6.3 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.1.2 |
| AP460S6C | IQ Engine 10.6.3 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.1.2 |

| Device Model | Latest Supported Release | Comments |
|--------------|--|---|
| AP460S12C | IQ Engine 10.6.3 WiNG OS 7.9.2.0 AP 10.6.2 | Platform support introduced with IQ Engine 10.1.2 |
| AP630 | IQ Engine 10.6.3 | Platform support introduced with IQ Engine 10.6.3 |
| AP650 | IQ Engine 10.6.3 | Platform support introduced with IQ Engine 10.6.3 |
| AP650X | IQ Engine 10.6.3 | Platform support introduced with IQ Engine 10.6.3 |
| AP5010 | IQ Engine 10.6.2 AP 10.6.2 WiNG OS 7.9.2.0 | Platform support introduced with IQ Engine 10.5.1 |
| AP5010C | IQ Engine 10.6.3 | Platform support introduced with IQ Engine 10.6.3 |
| AP5010CX | IQ Engine 10.6.3 | Platform support introduced with IQ Engine 10.6.3 |
| AP5050U | IQ Engine 10.6.3 AP 10.6.2 | Platform support introduced with IQ Engine 10.5.3 |
| AP5050D | IQ Engine 10.6.3 AP 10.6.2 | Platform support introduced with IQ Engine 10.5.3 |

IQ Engine (Cloud Native)

| Device Model | Latest Supported Release | Comments |
|--------------|--------------------------|---|
| AP630 | IQ Engine 10.6.2 | Platform support introduced with IQ Engine 10.0.1. End of Life Information |
| AP650 | IQ Engine 10.6.2 | Platform support introduced with IQ Engine 10.0.1. End of Life Information |
| AP650X | IQ Engine 10.6.2 | Platform support introduced with IQ Engine 10.0.1. End of Life Information |
| AP1130 | IQ Engine 10.5.3 | Platform support introduced with IQ Engine 8.2.1. End of Life Information |
| AP550 | IQ Engine 10.5.3 | 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 |

| Device Model | Latest Supported Release | Comments |
|--------------|--------------------------|--|
| AP350 | IQ Engine 6.5.10 | End of Life Information |
| AP340 | IQ Engine 6.5.16 | End of Life Information |
| AP330 | IQ Engine 6.5.16 | End of Life Information |
| AP320 | IQ Engine 6.5.10 | End of Life Information |
| AP250 | IQ Engine 10.6.1 | Platform support introduced with IQ Engine 7.0.2. |
| AP245X | IQ Engine 10.5.3 | Platform support introduced with IQ Engine 7.0.2. End of Life Information |
| AP230 | IQ Engine 10.5.3 | 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 10.6.1 | Platform support introduced with IQ Engine 8.1.1. |
| AP141 | IQ Engine 6.5.16 | End of Life Information |
| AP130 | IQ Engine 10.6.1 | Platform support introduced with IQ Engine 8.2.1. End of Life Information |
| AP122 | IQ Engine 10.6.1 | Platform support introduced with IQ Engine 7.0.4. |
| AP122X | IQ Engine 10.5.3 | 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 10.6.1 | Platform support introduced with IQ Engine 8.3.2. |
| AP510C/CX | IQ Engine 10.6.2 | Platform support introduced with IQ Engine 10.0.8 |

ExtremeWireless WiNG

| Device Model | Latest Supported Release | Comments |
|--------------|--------------------------|--------------|
| AP560i | WiNG OS 7.9.2.0 | Monitor only |
| AP560h | WiNG OS 7.9.2.0 | Monitor only |
| AP505 | WiNG OS 7.9.2.0 | Monitor only |
| AP510i | WiNG OS 7.9.2.0 | Monitor only |
| AP510i-1 | WiNG OS 7.9.2.0 | Monitor only |
| AP460i/e | WiNG OS 7.9.2.0 | Monitor only |
| AP410i/e | WiNG OS 7.9.2.0 | Monitor only |
| AP410i-1 | WiNG OS 7.9.2.0 | Monitor only |
| AP360i/e | WiNG OS 7.9.2.0 | Monitor only |
| AP310i/e | WiNG OS 7.9.2.0 | Monitor only |
| AP310i/e-1 | WiNG OS 7.9.2.0 | Monitor Only |

| Device Model | Latest Supported Release | Comments |
|--------------|--------------------------|--------------|
| AP8533 | WiNG OS 7.7.1.8 | Monitor only |
| AP8432 | WiNG OS 7.7.1.8 | 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 7.7.1.8 | Monitor only |
| AP7632 | WiNG OS 7.7.1.8 | Monitor only |
| AP7622 | WiNG OS 5.9.7.1 | Monitor only |
| AP7612 | WiNG OS 7.7.1.8 | Monitor only |
| AP7602 | WiNG OS 5.9.7.1 | Monitor only |
| AP7562 | WiNG OS 7.7.1.8 | Monitor only |
| AP7532 | WiNG OS 7.7.1.8 | Monitor only |
| AP7522 | WiNG OS 7.7.1.8 | 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 23
- [ExtremeXOS](#) on page 28
- [VOSS](#) on page 30
- [IQ Engine \(Cloud Native\)](#) on page 31
- [Dell EMC](#) on page 31

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 |
|--------------|--|--|--|
| 7520-48Y | Switch Engine 32.5 Fabric Engine 8.10 | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy Fabric Engine: Monitor | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 7520-48XT | Switch Engine 32.5 Fabric Engine 8.10 | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy Fabric Engine: Monitor | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 7720-32c | Switch Engine 32.5 Fabric Engine 8.10 | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy Fabric Engine: Monitor | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5320-16P-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|-----------------|--|--|--|
| 5320-16P-4XE-DC | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy | Switch Engine: <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy |
| 5320-24T-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy |
| 5320-24PT-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy |
| 5320-48P-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy |
| 5320-48T-4XL | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy |
| 5420F-24T-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy |
| 5420F-24P-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy |
| 5420F-24S-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy | <ul style="list-style-type: none"> Monitor Template- and device-level configuration SSH Proxy |

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|--------------------|--|--|--|
| 5420F-48T-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420F-48P-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420F-48P-4XL | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420F-8W-16P-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420F-16W-32P-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420F-16MW-32P-4XE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420M-24T-4YE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420M-24W-4YE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|--------------------|--|--|--|
| 5420M-48T-4YE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420M-48W-4YE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5420M-16MW-32P-4YE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5520-24W | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5520-24T | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5520-48W | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5520-48T | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5520-12MW-36W | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|--------------|--|--|--|
| 5520-48SE | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5520-24X | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5720-24MW | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5720-48MW | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5720-24MXW | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| 5720-48MXW | Switch Engine 32.5 Fabric Engine 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Switch Engine: <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |

ExtremeXOS

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|-------------------|--------------------------|--|--|
| X435-8P-2T-W | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | N/A |
| X435-24T-4S | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | N/A |
| X435-24P-4S | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | N/A |
| X435-8T-4S | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | N/A |
| X435-8P-4S | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | N/A |
| X440-G2-12p-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| X440-G2-12t-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| X440-G2-24p-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| X440-G2-24t-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|-------------------|--------------------------|--|--|
| X440-G2-48p-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| X440-G2-48t-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy |
| X450-G2-24p-GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |
| X450-G2-24p-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |
| X450-G2-48p-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |
| X460-G2-24p-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |
| X460-G2-48p-10GE4 | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |
| X465-24W | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |
| X465-48W | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|---------------|--------------------------|--|---------------|
| X465-24MU | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |
| X465-48P | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |
| X465-24MU-24W | ExtremeXOS 32.5 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Monitor |

VOSS

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|--------------|--------------------------|--|---------------|
| VSP7432CQ | VOSS 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Not supported |
| VSP7400-48Y | VOSS 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Not supported |
| VSP4900-48P | VOSS 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Not supported |
| VSP4900-24XE | VOSS 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Not supported |
| VSP4900-24S | VOSS 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Not supported |

| Device Model | Latest Supported Release | Standalone Support | Stack Support |
|--------------------|--------------------------|--|---------------|
| VSP4900-12MXU-12XE | VOSS 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Not supported |
| XA1480 | VOSS 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Not supported |
| XA1440 | VOSS 8.10 | <ul style="list-style-type: none"> • Monitor • Template- and device-level configuration • SSH Proxy | Not supported |

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 |

| Device Model | Latest Supported Release |
|--------------|--------------------------|
| 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 |
|---|--------------------------|--|
| BR100 End of Life | IQ Engine 6.5.12 | <i>Not supported in ExtremeCloud IQ</i> |
| BR200 End of Life | IQ Engine 6.5.12 | <i>Not supported in ExtremeCloud IQ</i> |
| BR200-LTE-VZ End of Life | IQ Engine 6.5.12 | <i>Not supported in ExtremeCloud IQ</i> |
| BR200WP End of Life | IQ Engine 6.9.7 | |
| XR200P | IQ Engine 6.9.7 | Platform support introduced with IQ Engine 6.9.2 |

| Device Model | Latest Supported Release | Standalone Support |
|--------------|--------------------------|--|
| XR600 | IQ Engine 10.0.11 | Platform support introduced with IQ Engine 9.0.1 |
| 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 |
|---------------------------------------|--|
| 22.06.12.13 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO |
| 22.06.13.09 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO |
| 22.09.10.73 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO |
| 22.09.11.14 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO |
| 22.09.12.14 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO |

| ExtremeCloud IQ - Site Engine Version | Supported Features |
|---------------------------------------|---|
| 22.09.13.5 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO |
| 23.02.10 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO • Stack members |
| 23.02.11 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO • Stack members |
| 23.04.10 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO • Stack members |
| 23.04.11 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO • Stack members |

| ExtremeCloud IQ - Site Engine Version | Supported Features |
|---------------------------------------|---|
| 23.04.12 | <ul style="list-style-type: none"> • License allocation • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO • Stack members |
| 23.07.10 | <ul style="list-style-type: none"> • License allocation • Device Assignment to the ExtremeCloud IQ Location • Device Statistics • Port Statistics • Unmanage/Manage device • Device Group to CCG mapping • Open Site Engine with SSO • Stack members • NAC details update for wireless end-systems |

ExtremeCloud IQ CoPilot

| ExtremeCloud IQ CoPilot Feature | Minimum Firmware | | | | |
|---|------------------|---------------|---------------|--------------|------|
| | IQ Engine | Switch Engine | Fabric Engine | Extre meXO S | 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 |
| Time to Associate (Wireless Connectivity Experience) | 10.5.2* | -- | -- | -- | -- |
| Time to Authenticate (Wireless Connectivity Experience) | 10.5.2* | -- | -- | -- | -- |
| Time to obtain IP (Wireless Connectivity Experience) | 10.5.2 | -- | -- | -- | -- |
| Port Errors (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 |
|-------------------------|---|
| 5.0.0-12 | <ul style="list-style-type: none"> • Licensing • Status Monitoring • SSO • Client Details |
| 5.0.1-4 | <ul style="list-style-type: none"> • Licensing • Status Monitoring • SSO • Client Details |

Supported Browsers and Display Settings

Desktop and Mobile Browser Support



Note

ExtremeCloud IQ does not support 32-bit browsers.

Table 3: Desktop Browsers

| Desktop Browsers | Version Supported |
|-------------------|-------------------|
| Chrome | v73 |
| Edge | v79 |
| Firefox | v67 |
| Internet Explorer | Not supported |
| Opera | v60 |
| Safari | v13 |

Table 4: Mobile Browsers

| Mobile Browsers | Version Supported |
|---------------------|-------------------|
| Android Webview | v73 |
| Chrome for Android | v73 |
| Edge | v79 |
| Firefox for Android | v67 |
| 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.