



ExtremeCloud™ IQ Site Engine Installation Guide

1/2024
23.11.12
PN: 9038009-01
Subject to Change Without Notice



Copyright © 2024 Extreme Networks, Inc. All Rights Reserved.

Legal Notices

Extreme Networks, Inc., on behalf of or through its wholly-owned subsidiary, Enterasys 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, please see:
www.extremenetworks.com/company/legal/trademarks/

Contact

If you require assistance, contact Extreme Networks using one of the following methods.

- [Global Technical Assistance Center \(GTAC\) for Immediate Support](#)
 - **Phone:** 1-800-998-2408 (toll-free in U.S. and Canada) or 1-603-952-5000. For the Extreme Networks support phone number in your country, visit:
www.extremenetworks.com/support/contact
 - **Email:** support@extremenetworks.com. To expedite your message, enter the product name or model number in the subject line.
- [GTAC Knowledge](#) — Get on-demand and tested resolutions from the GTAC Knowledgebase, or create a help case if you need more guidance.
- [The Hub](#) — A forum for Extreme customers to connect with one another, get questions answered, share ideas and feedback, and get problems solved. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.
- [Support Portal](#) — Manage cases, downloads, service contracts, product licensing, and training and certifications.



Extreme Networks® Software License Agreement

This Extreme Networks Software License Agreement is an agreement ("Agreement") between You, the end user, and Extreme Networks, Inc. ("Extreme"), on behalf of itself and its Affiliates (as hereinafter defined and including its wholly owned subsidiary, Enterasys Networks, Inc. as well as its other subsidiaries). This Agreement sets forth Your rights and obligations with respect to the Licensed Software and Licensed Materials. BY INSTALLING THE LICENSE KEY FOR THE SOFTWARE ("License Key"), COPYING, OR OTHERWISE USING THE LICENSED SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT, WHICH INCLUDES THE LICENSE AND THE LIMITATION OF WARRANTY AND DISCLAIMER OF LIABILITY. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, RETURN THE LICENSE KEY TO EXTREME OR YOUR DEALER, IF ANY, OR DO NOT USE THE LICENSED SOFTWARE AND CONTACT EXTREME OR YOUR DEALER WITHIN TEN (10) DAYS FOLLOWING THE DATE OF RECEIPT FOR A REFUND. IF YOU HAVE ANY QUESTIONS ABOUT THIS AGREEMENT, CONTACT EXTREME, Attn: LegalTeam@extremenetworks.com.

- 1. DEFINITIONS.** "Affiliates" means any person, partnership, corporation, limited liability company, or other form of enterprise that directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with the party specified. "Server Application" shall refer to the License Key for software installed on one or more of Your servers. "Client Application" shall refer to the application to access the Server Application. "Licensed Materials" shall collectively refer to the licensed software (including the Server Application and Client Application), Firmware, media embodying the software, and the documentation. "Concurrent User" shall refer to any of Your individual employees who You provide access to the Server Application at any one time. "Firmware" refers to any software program or code imbedded in chips or other media. "Licensed Software" refers to the Software and Firmware collectively.
- 2. TERM.** This Agreement is effective from the date on which You install the License Key, use the Licensed Software, or a Concurrent User accesses the Server Application. You may terminate the Agreement at any time by destroying the Licensed Materials, together with all copies, modifications and merged portions in any form. The Agreement and Your license to use the Licensed Materials will also terminate if You fail to comply with any term of condition herein.
- 3. GRANT OF SOFTWARE LICENSE.** Extreme will grant You a non-transferable, non-exclusive license to use the machine-readable form of the Licensed Software and the accompanying documentation if You agree to the terms and conditions of this Agreement. You may install and use the Licensed Software as permitted by the license type purchased as described below in License Types. The license type purchased is specified on the invoice issued to You by Extreme or Your dealer, if any. YOU MAY NOT USE, COPY, OR MODIFY THE LICENSED MATERIALS, IN WHOLE OR IN PART, EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT.
- 4. LICENSE TYPES.**
 - *Single User, Single Computer.* Under the terms of the Single User, Single Computer license, the license granted to You by Extreme when You install the License Key authorizes You to use the Licensed Software on any one, single computer only, or any replacement for that computer, for internal use only. A separate license, under a separate Software License Agreement,

is required for any other computer on which You or another individual or employee intend to use the Licensed Software. A separate license under a separate Software License Agreement is also required if You wish to use a Client license (as described below).

- *Client*. Under the terms of the Client license, the license granted to You by Extreme will authorize You to install the License Key for the Licensed Software on your server and allow the specific number of Concurrent Users shown on the relevant invoice issued to You for each Concurrent User that You order from Extreme or Your dealer, if any, to access the Server Application. A separate license is required for each additional Concurrent User.

5. AUDIT RIGHTS. You agree that Extreme may audit Your use of the Licensed Materials for compliance with these terms and Your License Type at any time, upon reasonable notice. In the event that such audit reveals any use of the Licensed Materials by You other than in full compliance with the license granted and the terms of this Agreement, You shall reimburse Extreme for all reasonable expenses related to such audit in addition to any other liabilities You may incur as a result of such non-compliance, including but not limited to additional fees for Concurrent Users over and above those specifically granted to You. From time to time, the Licensed Software will upload information about the Licensed Software and the associated devices to Extreme. This is to verify the Licensed Software is being used with a valid license. By using the Licensed Software, you consent to the transmission of this information. Under no circumstances, however, would Extreme employ any such measure to interfere with your normal and permitted operation of the Products, even in the event of a contractual dispute.

6. RESTRICTION AGAINST COPYING OR MODIFYING LICENSED MATERIALS. Except as expressly permitted in this Agreement, You may not copy or otherwise reproduce the Licensed Materials. In no event does the limited copying or reproduction permitted under this Agreement include the right to decompile, disassemble, electronically transfer, or reverse engineer the Licensed Software, or to translate the Licensed Software into another computer language.

The media embodying the Licensed Software may be copied by You, in whole or in part, into printed or machine readable form, in sufficient numbers only for backup or archival purposes, or to replace a worn or defective copy. However, You agree not to have more than two (2) copies of the Licensed Software in whole or in part, including the original media, in your possession for said purposes without Extreme's prior written consent, and in no event shall You operate more copies of the Licensed Software than the specific licenses granted to You. You may not copy or reproduce the documentation. You agree to maintain appropriate records of the location of the original media and all copies of the Licensed Software, in whole or in part, made by You. You may modify the machine-readable form of the Licensed Software for (1) your own internal use or (2) to merge the Licensed Software into other program material to form a modular work for your own use, provided that such work remains modular, but on termination of this Agreement, You are required to completely remove the Licensed Software from any such modular work. Any portion of the Licensed Software included in any such modular work shall be used only on a single computer for internal purposes and shall remain subject to all the terms and conditions of this Agreement. You agree to include any copyright or other proprietary notice set forth on the label of the media embodying the Licensed Software on any copy of the Licensed Software in any form, in whole or in part, or on any modification of the Licensed Software or any such modular work containing the Licensed Software or any part thereof.

7. TITLE AND PROPRIETARY RIGHTS

- a. The Licensed Materials are copyrighted works and are the sole and exclusive property of Extreme, any company or a division thereof which Extreme controls or is controlled by, or which may result from the merger or consolidation with Extreme (its "Affiliates"), and/or their suppliers. This Agreement conveys a limited right to operate the Licensed Materials and shall not be construed to convey title to the Licensed Materials to You. There are no implied rights. You shall not sell, lease, transfer, sublicense, dispose of, or otherwise make available the Licensed Materials or any portion thereof, to any other party.
- b. You further acknowledge that in the event of a breach of this Agreement, Extreme shall suffer severe and irreparable damages for which monetary compensation alone will be inadequate. You therefore agree that in the event of a breach of

this Agreement, Extreme shall be entitled to monetary damages and its reasonable attorney's fees and costs in enforcing this Agreement, as well as injunctive relief to restrain such breach, in addition to any other remedies available to Extreme.

8. PROTECTION AND SECURITY. In the performance of this Agreement or in contemplation thereof, You and your employees and agents may have access to private or confidential information owned or controlled by Extreme relating to the Licensed Materials supplied hereunder including, but not limited to, product specifications and schematics, and such information may contain proprietary details and disclosures. All information and data so acquired by You or your employees or agents under this Agreement or in contemplation hereof shall be and shall remain Extreme's exclusive property, and You shall use your best efforts (which in any event shall not be less than the efforts You take to ensure the confidentiality of your own proprietary and other confidential information) to keep, and have your employees and agents keep, any and all such information and data confidential, and shall not copy, publish, or disclose it to others, without Extreme's prior written approval, and shall return such information and data to Extreme at its request. Nothing herein shall limit your use or dissemination of information not actually derived from Extreme or of information which has been or subsequently is made public by Extreme, or a third party having authority to do so.
You agree not to deliver or otherwise make available the Licensed Materials or any part thereof, including without limitation the object or source code (if provided) of the Licensed Software, to any party other than Extreme or its employees, except for purposes specifically related to your use of the Licensed Software on a single computer as expressly provided in this Agreement, without the prior written consent of Extreme. You agree to use your best efforts and take all reasonable steps to safeguard the Licensed Materials to ensure that no unauthorized personnel shall have access thereto and that no unauthorized copy, publication, disclosure, or distribution, in whole or in part, in any form shall be made, and You agree to notify Extreme of any unauthorized use thereof. You acknowledge that the Licensed Materials contain valuable confidential information and trade secrets, and that unauthorized use, copying and/or disclosure thereof are harmful to Extreme or its Affiliates and/or its/their software suppliers.
9. MAINTENANCE AND UPDATES. Updates and certain maintenance and support services, if any, shall be provided to You pursuant to the terms of an Extreme Service and Maintenance Agreement, if Extreme and You enter into such an agreement. Except as specifically set forth in such agreement, Extreme shall not be under any obligation to provide Software Updates, modifications, or enhancements, or Software maintenance and support services to You.
10. DEFAULT AND TERMINATION. In the event that You shall fail to keep, observe, or perform any obligation under this Agreement, including a failure to pay any sums due to Extreme, or in the event that you become insolvent or seek protection, voluntarily or involuntarily, under any bankruptcy law, Extreme may, in addition to any other remedies it may have under law, terminate the License and any other agreements between Extreme and You.
 - a. Immediately after any termination of the Agreement or if You have for any reason discontinued use of Software, You shall return to Extreme the original and any copies of the Licensed Materials and remove the Licensed Software from any modular works made pursuant to Section 3, and certify in writing that through your best efforts and to the best of your knowledge the original and all copies of the terminated or discontinued Licensed Materials have been returned to Extreme.
 - b. Sections 1, 7, 8, 10, 11, 12, 13, 14 and 15 shall survive termination of this Agreement for any reason.
11. EXPORT REQUIREMENTS. You are advised that the Software is of United States origin and subject to United States Export Administration Regulations; diversion contrary to United States law and regulation is prohibited. You agree not to directly or indirectly export, import or transmit the Software to any country, end user or for any Use that is prohibited by applicable United States regulation or statute (including but not limited to those countries embargoed from time to time by the United States government); or contrary to the laws or regulations of any other governmental entity that has jurisdiction over such export, import, transmission or Use.
12. UNITED STATES GOVERNMENT RESTRICTED RIGHTS. The Licensed Materials (i) were developed solely at private expense; (ii) contain "restricted computer software" submitted with restricted rights in accordance with section 52.227-19 (a) through (d) of the Commercial Computer Software-Restricted Rights Clause and its successors, and (iii) in all respects is proprietary data belonging

to Extreme and/or its suppliers. For Department of Defense units, the Licensed Materials are considered commercial computer software in accordance with DFARS section 227.7202-3 and its successors, and use, duplication, or disclosure by the U.S. Government is subject to restrictions set forth herein.

13. LIMITED WARRANTY AND LIMITATION OF LIABILITY. The only warranty that Extreme makes to You in connection with this license of the Licensed Materials is that if the media on which the Licensed Software is recorded is defective, it will be replaced without charge, if Extreme in good faith determines that the media and proof of payment of the license fee are returned to Extreme or the dealer from whom it was obtained within ninety (90) days of the date of payment of the license fee. NEITHER EXTREME NOR ITS AFFILIATES MAKE ANY OTHER WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, WITH RESPECT TO THE LICENSED MATERIALS, WHICH ARE LICENSED "AS IS". THE LIMITED WARRANTY AND REMEDY PROVIDED ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED, AND STATEMENTS OR REPRESENTATIONS MADE BY ANY OTHER PERSON OR FIRM ARE VOID. ONLY TO THE EXTENT SUCH EXCLUSION OF ANY IMPLIED WARRANTY IS NOT PERMITTED BY LAW, THE DURATION OF SUCH IMPLIED WARRANTY IS LIMITED TO THE DURATION OF THE LIMITED WARRANTY SET FORTH ABOVE. YOU ASSUME ALL RISK AS TO THE QUALITY, FUNCTION AND PERFORMANCE OF THE LICENSED MATERIALS. IN NO EVENT WILL EXTREME OR ANY OTHER PARTY WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION OR DELIVERY OF THE LICENSED MATERIALS BE LIABLE FOR SPECIAL, DIRECT, INDIRECT, RELIANCE, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING LOSS OF DATA OR PROFITS OR FOR INABILITY TO USE THE LICENSED MATERIALS, TO ANY PARTY EVEN IF EXTREME OR SUCH OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL EXTREME OR SUCH OTHER PARTY'S LIABILITY FOR ANY DAMAGES OR LOSS TO YOU OR ANY OTHER PARTY EXCEED THE LICENSE FEE YOU PAID FOR THE LICENSED MATERIALS.
Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to You. This limited warranty gives You specific legal rights, and You may also have other rights which vary from state to state.
14. JURISDICTION. The rights and obligations of the parties to this Agreement shall be governed and construed in accordance with the laws and in the State and Federal courts of the State of California, without regard to its rules with respect to choice of law. You waive any objections to the personal jurisdiction and venue of such courts. None of the 1980 United Nations Convention on the Limitation Period in the International Sale of Goods, and the Uniform Computer Information Transactions Act shall apply to this Agreement.
15. GENERAL.
 - a. This Agreement is the entire agreement between Extreme and You regarding the Licensed Materials, and all prior agreements, representations, statements, and undertakings, oral or written, are hereby expressly superseded and canceled.
 - b. This Agreement may not be changed or amended except in writing signed by both parties hereto.
 - c. You represent that You have full right and/or authorization to enter into this Agreement.
 - d. This Agreement shall not be assignable by You without the express written consent of Extreme. The rights of Extreme and Your obligations under this Agreement shall inure to the benefit of Extreme's assignees, licensors, and licensees.
 - e. Section headings are for convenience only and shall not be considered in the interpretation of this Agreement.
 - f. The provisions of the Agreement are severable and if any one or more of the provisions hereof are judicially determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions of this Agreement shall nevertheless be binding on and enforceable by and between the parties hereto.
 - g. Extreme's waiver of any right shall not constitute waiver of that right in future. This Agreement constitutes the entire understanding between the parties with respect to the subject matter hereof, and all prior agreements, representations,

statements and undertakings, oral or written, are hereby expressly superseded and canceled. No purchase order shall supersede this Agreement.

- h. Should You have any questions regarding this Agreement, You may contact Extreme at the address set forth below. Any notice or other communication to be sent to Extreme must be mailed by certified mail to the following address:

Extreme Networks, Inc.
145 Rio Robles
San Jose, CA 95134 United States
ATTN: General Counsel

Table of Contents

ExtremeCloud™ IQ Site Engine Installation Guide	1
Extreme Networks® Software License Agreement	3
Table of Contents	8
ExtremeCloud IQ Site Engine Suite Installation	11
General Information	11
Operating System Requirements	11
ExtremeCloud IQ Site Engine Server Requirements	11
ExtremeCloud IQ Site Engine Client Requirements	11
ExtremeCloud IQ Site Engine Server and Client Hardware Requirements	12
ExtremeCloud IQ Site Engine Server	12
ExtremeCloud IQ Site Engine Client	12
ExtremeControl Engine Version Requirements	13
Screen Resolution	13
ExtremeCloud IQ Site Engine Services	13
Important Upgrade Information	14
Important Upgrade Considerations	15
License Renewal	15
Free Space Consideration	15
Site Discover Consideration	16
ExtremeAnalytics Upgrade Information	16
ExtremeControl Version 8.0 and later	16
Other Upgrade Information	17
Upgrading ExtremeControl Engine to Version 23.11.12	17
General Upgrade Information	17
Agent Version for NAC Agent-Based Assessment - Legacy	17
LDAPS servers with FQDN	18
Upgrading to Policy Manager 23.11.12	18
Pre-Installation Checklist	18

ExtremeCloud IQ Site Engine Installation	19
Installing ExtremeCloud IQ Site Engine	19
Preparing for CD Installation	19
Install and Launch ExtremeCloud IQ Site Engine	21
Performing a Silent Install	23
Select the deployment mode and licensing for ExtremeCloud IQ Site Engine	24
Post Installation Procedure for Ubuntu 18.04 LTS (Bionic Beaver)	24
Restoring a Database from a Windows Server to a Linux Server	24
Console	25
Syslog	25
Traps	25
Inventory Manager	25
Systems with Multiple NICs	25
Binding to One Interface	26
Uninstalling ExtremeCloud IQ Site Engine	26
Extreme Networks Support	26
ExtremeCloud IQ Site Engine Licensing	28
Licensing for Devices in Connected Mode	29
Licensing for Devices in Air Gap Mode	30
Revoke Air Gap License	31
License Limits and Violations	32
Devices Marked as Unmanaged	33
Licensing for ExtremeControl (Network Access Control)	34
After Upgrading from Extreme Management Center	34
Upon Initial Installation	34
Logging into ExtremeCloud IQ Site Engine	35
Post upgrade from Extreme Management Center Version 8.5.5 or newer	35
Initial installation of ExtremeCloud IQ Site Engine or upgrading from Extreme Management Center ..	35
Onboarding Devices (Connected mode only)	39
XIQ Onboarded Status for Devices (Connected mode only)	39
Convert from Connected to Air Gap deployment	42

Convert from Air Gap to Connected deployment	44
--	----

ExtremeCloud IQ Site Engine Suite Installation

This document provides instructions for installing and launching ExtremeCloud IQ Site Engine, and for launching ExtremeCloud IQ Site Engine applications on remote ExtremeCloud IQ Site Engine clients. It also includes information for those upgrading from an earlier version of Extreme Management Center.

IMPORTANT: Backup the Extreme Management Center database prior to performing the upgrade and save it to a safe location. Use the **Administration > Backup/Restore** tab.

General Information

Before you install ExtremeCloud IQ Site Engine, read the *ExtremeCloud IQ Site Engine Release Notes*. The most recent version of these release notes can be found at the [ExtremeCloud IQ Site Engine Documentation site](#). Select **Release Notes** at the top of the page.

NOTE: The terms engine, gateway, and appliance are used interchangeably throughout ExtremeCloud IQ Site Engine documentation.

Operating System Requirements

ExtremeCloud IQ Site Engine Server Requirements

These are the operating system requirements for the ExtremeCloud IQ Site Engine server.

Manufacturer	Operating System
Linux	Red Hat Enterprise Linux WS and ES v6 and v7 Ubuntu 20.04
VMware® (ExtremeCloud IQ Site Engine Virtual Engine)	VMware ESXi™ 6.0 server VMware ESXi™ 6.5 server VMware ESXi™ 6.7 server VMware ESXi™ 7.0 server vSphere (client only)™
Microsoft® Hyper-V (ExtremeCloud IQ Site Engine Virtual Engine)	Windows® Server 2012 R2 Windows® Server 2016

ExtremeCloud IQ Site Engine Client Requirements

These are the operating system requirements for remote ExtremeCloud IQ Site Engine client machines.

Manufacturer	Operating System
Windows (qualified on the English version of the operating systems)	Windows® 10 and 11

Manufacturer	Operating System
Linux	Red Hat Enterprise Linux WS and ES v6 and v7 Ubuntu 20.04
Mac OS X ^o	Monterey

ExtremeCloud IQ Site Engine Server and Client Hardware Requirements

These are the hardware requirements for the ExtremeCloud IQ Site Engine server and ExtremeCloud IQ Site Engine client machines:

ExtremeCloud IQ Site Engine Server

	Small	Medium	Enterprise	Large Enterprise
Total CPUs	1	2	2	2
Total CPU Cores	8	16	24	24
Memory	16 GB	32 GB	64 GB	64 GB
Disk Size	240 GB	480 GB	960 GB	1.92 TB
IOPS	200	200	10,000	10,000

Recommended scale based on server configuration:

Maximum APs	250	2,500	25,000	25,000
Maximum Wireless MUs	2,500	25,000	100,000	100,000
Maximum Managed Devices	100	1,000	10,000 air gap 8,000 connected	10,000 air gap 8,000 connected
ExtremeControl End-Systems	N/A	50,000	200,000	200,000
Statistics Retention (Days)	90	180	180	360
ExtremeAnalytics	No	Yes	Yes	Yes
MU Events	No	Yes	Yes	Yes

ExtremeCloud IQ Site Engine Client

	Requirements
CPU Speed	3.0 GHz Dual Core Processor
Memory	8 GB (4 GB for 32-bit OS)
Disk Size	300 MB (User's home directory requires 50 MB for file storage)
Java Runtime Environment (JRE) (Oracle Java only)	Version 8
Browser ¹ (Enable JavaScript and Cookies)	Microsoft Edge Mozilla Firefox Google Chrome

¹Browsers set to a zoom ratio of less than 100% might not display ExtremeCloud IQ Site Engine properly (for example, missing borders around windows). Setting your browser to a zoom ratio of 100% corrects this issue.

²When accessing ExtremeCloud IQ Site Engine using Firefox version 59.0.1 on a non-touchscreen system on which a Windows operating system is installed, the vertical scroll arrows do not display.

ExtremeControl Engine Version Requirements

For complete information on ExtremeControl engine version requirements, see [Important Upgrade Information](#).

Screen Resolution

For optimum display of ExtremeCloud IQ Site Engine windows and tables, the recommended minimum screen resolution setting for ExtremeCloud IQ Site Engine clients is 1024 by 768 pixels. For optimum display of graphs and tables, the recommended minimum screen resolution setting is 1280 by 1024 pixels.

ExtremeCloud IQ Site Engine Services

During the ExtremeCloud IQ Site Engine installation, you can enable the ExtremeCloud IQ Site Engine Services, allowing it to run in the background on the ExtremeCloud IQ Site Engine server. The service starts automatically by default, and if you shut down and restart the machine, the service is restarted automatically.

You can also restart the services manually or disable a service so it does not start automatically when you restart the server.

- **SNMPTrap Service** - Enables SNMP trap messages to be received and logged when problems or irregularities are detected on network devices. Only one trap service may be running at a time on a server. If you are also running a network management system on the server, you may wish to use the network management trap service.
- **TFTP** - Enables you to upload and download configuration files, and download firmware to devices. Only one TFTP service may be running at a time on a machine.

NOTE: The ExtremeCloud IQ Site Engine TFTP Service does not support IPv6.

Typically, the TFTP service that exists in Linux is disabled; however, if it is enabled, you may wish to disable it and enable the ExtremeCloud IQ Site Engine version of TFTP which provides additional features for ExtremeCloud IQ Site Engine. If you elect to enable the ExtremeCloud IQ Site Engine version on the Linux platform, you must first disable the Linux TFTP service and perform some configuration as follows:

1. Using a text editor, edit the file `/etc/xinetd.d/tftp`
2. Set `disable = yes`
Sample file:

```
service tftp
{
  flags = REUSE
  socket_type = stream
  wait = no
```

```

user = root
server = /usr/sbin/in.tftp
disable = yes
}

```

3. Then run: `/etc/rc3.d/S56xinetd restart`

Important Upgrade Information

ExtremeCloud IQ Site Engine version 23.11.12 supports upgrades from Extreme Management Center 8.5.7 or ExtremeCloud IQ Site Engine 23.4.12 only. The following table details the upgrade path supported for each NetSight, Extreme Management Center or ExtremeCloud IQ Site Engine version.

ExtremeCloud IQ Site Engine Version 23.11.12 contains an OS upgrade. Internet connectivity is required to download custom packages.

NOTE:

The installer prompts "Do you want to use the Internet to perform the OS upgrade?". The offline upgrade path is supported when no custom packages are installed (answer N). The online upgrade is required when custom packages are manually installed (answer Y). An online upgrade is recommended when an online upgrade was used previously, however there is a risk of session timeout due to 15 minutes of screen inactivity.

To upgrade Access Control Engines and Application Analytics Engines you can use the directive `--keepalive` to decrease the chance of a session expiry timeout from 15 minutes of no screen activity.

From Version (currently running)	To Version (next step in upgrade path)
ExtremeCloud IQ Site Engine 23.4.12, 23.7	ExtremeCloud IQ Site Engine 23.11
ExtremeCloud IQ Site Engine 21.x, 22.x, 23.2.x 23.4.10, 23.4.11	ExtremeCloud IQ Site Engine 23.4.12
Extreme Management Center version 8.5.7	ExtremeCloud IQ Site Engine 23.11
Extreme Management Center version 8.2.x to 8.5.6	Extreme Management Center 8.5.7
Extreme Management Center version 8.0.x to 8.1.x	Extreme Management Center 8.3.3.11
NetSight version 7.1.4.1	Extreme Management Center 8.3.3.11
NetSight version 7.x	NetSight 7.1.4.1
NetSight version 6.3.0.186	NetSight 7.1.4.1
NetSight version 6.x	NetSight 6.3.0.186

IMPORTANT:

A backup (**Administration > [Backup/Restore](#)**) of the database must be performed prior to the upgrade and saved to a safe location.

If you use LDAPS with a Fully Qualified Domain Name (FQDN) in the URL to authorize the user, then the ExtremeCloud IQ Site Engine presents the internal Communication Certificate to the LDAPS server. The best practice is to use a trusted certificate if the LDAPS URL is defined with FQDN. If you use an untrusted certificate the LDAPS server might not accept the LDAPS connection. The alternative option is to use an IP address in the LDAPS URL instead of a FQDN.

Important Upgrade Considerations

- If your network is using ExtremeAnalytics or ExtremeControl engines, or another add-on feature, you must first perform the ExtremeCloud IQ Site Engine upgrade to version 23.11.12 and then upgrade the feature.
- To upgrade Traffic Sensor from version 21.x, a fresh installation is recommended. If the fresh installation cannot be used, then please check [Knowledge Base](#) for a special procedure.
- If the online upgrade fails due to an Internet connectivity issue, fix the connectivity issue and rerun the upgrade.

IMPORTANT:

When performing an upgrade, be sure to back up the database prior to performing the upgrade, and save it to a safe location. Use the **Administration** > [Backup/Restore](#) tab to perform the backup.

- When upgrading the ExtremeCloud IQ Site Engine server, ExtremeAnalyticsengine, or ExtremeControlengine to version 23.11.12, ensure the DNS server IP address is correctly configured.
- When upgrading to ExtremeCloud IQ Site Engine version 23.11.12, if you adjusted the ExtremeCloud IQ Site Engine memory settings and want them to be saved on upgrade, a flag (`-DcustomMemory`) needs to be added to the `/usr/local/Extreme_Networks/NetSight/services/nserver.cfg` file.

For example:

```
-Xms12g -Xmx24g -XX:HeapDumpPath=../../nsdump.hprof -  
XX:+HeapDumpOnOutOfMemoryError -XX:MetaspaceSize=128m -DcustomMemory
```

License Renewal

Upgrading to ExtremeCloud IQ Site Engine version 23.11.12 requires you to transition from perpetual to subscription-based license model. Existing NMS licenses do not provide access to ExtremeCloud IQ Site Engine. If your perpetual licenses were not transitioned to subscription-based licenses, contact your Extreme Networks Representative for assistance.

Free Space Consideration

When upgrading to ExtremeCloud IQ Site Engine version 23.11.12, a minimum of 15 GB of free disk space is required on the ExtremeCloud IQ Site Engine server

To increase the amount of free disk space on the ExtremeCloud IQ Site Engine server, perform the following:

- Decrease the number of ExtremeCloud IQ Site Engine backups (by default, saved in the `/usr/local/Extreme_Networks/NetSight/backup` directory).
- Decrease the Data Persistence settings (**Administration > Options > Access Control > Data Persistence**).
- Remove unnecessary archives (**Network > Archives**).
- Delete the files in the `<installation_directory>/NetSight/.installer` directory.

Site Discover Consideration

Discovering devices via the **Site** tab using a **Range**, **Subnet**, or **Seed** discover might not successfully add all expected devices. To correct the issue, increase the **Length of SNMP Timeout** value on the **Administration > Options > Site** tab in the Discover First SNMP Request section.

ExtremeAnalytics Upgrade Information

Enabling or disabling the disk flow export feature might cause enforce operations to time out. Enforcing again resolves the issue.

When you delete an ExtremeXOS/Switch Engine device that is configured as a flow source via the Flow Sources table of the **Analytics > Configuration > Engines > Configuration** tab from the Devices list on the **Network > Devices** tab, an error message is generated in the `server.log`. The message does not warn you that the device is in use as a flow source. Adding the device back in the Devices list on the **Network > Devices** tab or removing the device from the Flow Source table fixes the issue.

The Flow Sources table on the **Analytics > Configuration > engine > Configuration** tab may take a few minutes to load.

ExtremeControl Version 8.0 and later

Beginning in version 8.0, ExtremeControl may fail to join Active Directory when accessing as a **Standard Domain User with Descendant Computer Objects ("Reset password" permissions only)** group member.

To allow this functionality, add the following permissions:

- Reset Password
- Validated write to DNS host name
- Validated write to service principal
- Read and write account restrictions
- Read and write DNS host name attributes
- Write servicePrincipalName

Other Upgrade Information

Immediately after you install version 23.11.12 on the ExtremeControlengine, the date and time does not properly synchronize and the following error message displays:

```
WARNING: Unable to synchronize to a NTP server. The time might not be
correctly set on this device.
```

Ignore the error message and the date and time automatically synchronize after a short delay.

Additionally, the following message might display during the ExtremeControl upgrade to version 23.11.12:

No domain specified

```
To stop domain-specific winbindd process, run /etc/init.d/winbindd stop {example-
domain.com}
```

Upgrading ExtremeControl Engine to Version 23.11.12

General Upgrade Information

The EAP-TLS Certificates with SHA1 are considered weak and are not accepted anymore. The radius server fails to start with the SHA1 certificate. You can use a more secure certificate, such as SHA256.

You are not required to upgrade your ExtremeControl engine version to 23.11.12 when upgrading to ExtremeCloud IQ Site Engine version 23.11.12. However, both ExtremeCloud IQ Site Engine and ExtremeControl engine must be at version 23.11.12 in order to take advantage of the new ExtremeControl version 23.11.12 features. ExtremeCloud IQ Site Engine version 23.11.12 supports managing ExtremeControl engine versions 8.5.7, 21.x, 22.x, 23.x and up to 23.11.12.

In addition, if your ExtremeControl solution utilizes a Nessus assessment server, you should also upgrade your assessment agent adapter to version 23.11.12 if you upgrade to ExtremeControl version 23.11.12.

You can download the latest ExtremeControl engine version at the [Extreme Portal](#).

Agent Version for NAC Agent-Based Assessment - Legacy

If you are using onboard agent-based assessment, be aware that the agent version is upgraded during the ExtremeControl engine software upgrade. If you would like end-systems to update their agent to the new version, you must configure your assessment test set to test for the new agent version. Refer to the [Important Upgrade Information](#) section in the [ExtremeCloud IQ Site Engine Release Notes](#) or the agent version included in the ExtremeControlengine software.

LDAPS servers with FQDN

If the LDAPS server URL uses Fully Qualified Domain Names (FQDN) then the LDAPS client (of both Access Control Engine and ExtremeCloud IQ Site Engine) presents the internal Communication Certificate to the LDAPS server. The best practice is to use a trusted certificate if the LDAPS URL is defined with FQDN, otherwise the LDAPS server may not accept the LDAPS connection.

If the LDAPS server URL uses IP address then the LDAPS client (of both Access Control Engine and ExtremeCloud IQ Site Engine) does not present the Internal Communication Certificate to the LDAPS server.

Upgrading to Policy Manager 23.11.12

- Policy Manager 23.11.12 only supports ExtremeWireless Controller version 10.51. If you upgrade to ExtremeCloud IQ Site Engine 23.11.12 prior to upgrading your controllers, then Policy Manager does not allow you to open a domain where the controllers already exist or add them to a domain. A dialog is displayed indicating your controllers do not meet minimum version requirements and that they must be upgraded before they can be in a domain.
- Following an upgrade to Wireless Controller version 8.31 and higher, a Policy Manager enforce fails if it includes changes to the default access control or any rules that are set to contain. To allow Policy Manager to modify the default access control or set rules to contain, you must disable the **"Allow" action in policy rules contains to the VLAN assigned by the role** checkbox accessed from the Wireless Controller's web interface on the Roles > **Policy Rules** tab. This will allow the enforce operation to succeed.

Pre-Installation Checklist

Please review the following checklist prior to performing an ExtremeCloud IQ Site Engine software installation or upgrade.

Backup database. If performing an upgrade, be sure to backup the Extreme Management Center database prior to performing the upgrade. Use the **Backup/Restore** tab to perform the backup (**Administration** > **Backup/Restore** tab).

If you are an existing Extreme Management Center customer, contact your representative to have your Extreme Management Center license migrated to an ExtremeCloud IQ Site Engine license. The ExtremeCloud IQ Site Engine license also includes licensing for ExtremeAnalytics.

IMPORTANT:

- For upgrade and installation requirements, as well as configuration considerations, see [ExtremeCloud IQ Site Engine Configuration and Requirements](#).
 - ExtremeCloud IQ Site Engine version 23.11.12 receives the licenses from ExtremeCloud IQ. ExtremeCloud IQ Site Engine is a subscription-based -only licensing model. Existing NMS licenses do not provide access to ExtremeCloud IQ Site Engine. You can view the status of your license by accessing [Administration > Licenses](#).
-

ExtremeCloud IQ Site Engine Installation

If you are an existing Extreme Management Center customer, contact your representative to have your Extreme Management Center license migrated to an ExtremeCloud IQ Site Engine license. The ExtremeCloud IQ Site Engine license also includes licensing for ExtremeAnalytics.

Installing ExtremeCloud IQ Site Engine

Use the following instructions to install ExtremeCloud IQ Site Engine. Please read through the following items before beginning the installation.

- The user performing the installation must be the root user. During the installation process you can specify another user to launch and run the server, if desired.
- If you are installing ExtremeCloud IQ Site Engine on a Linux system that doesn't support a GUI, see [Performing a Silent Install](#) for information on installing ExtremeCloud IQ Site Engine without using its GUI Installation wizard.
- If you are installing ExtremeCloud IQ Site Engine on a Linux system that requires an operating system upgrade, you [are prompted](#) to upgrade using either an internet connection or locally if no additional Ubuntu packages need to be installed.
- Prior to beginning installation, verify that your `/etc/hosts` file has the local host name specified. It should have an entry that looks like:

```
127.0.0.1 localhost
```
- You may encounter a Java exception during the install when becoming the root user with the `su -` command. Be sure that your system's root environment has a proper `DISPLAY` variable setting. The Installation program reports a Java exception (`InvocationTargetException`) if the `DISPLAY` variable is undefined. If this occurs:

Before using the `su -` command, set the system display variable to accept a remote display with the command:

```
/usr/openwin/bin/xhost +test 111 111
```

After using the `su -` command, set the display variable in the environment where the `su -` was done.

For C shell: `setenv DISPLAY :0.0`

For Korn shell: `export DISPLAY=:0.0`

Preparing for CD Installation

Perform the following steps if you will be installing the ExtremeCloud IQ Site Engine software from a CD. The following procedures assume that the CD drive from which you are installing is physically attached to the system where ExtremeCloud IQ Site Engine is being installed.

1. Insert the ExtremeCloud IQ Site Engine CD into the CD drive.
2. Use an xterm where you are logged in as root. (Be sure that your system's root environment has a proper DISPLAY variable setting. For more information see the above [note](#).)
3. Using the cd command, cd to the `/mnt/cdrom` directory.
4. Using the ls command, check to see if the CD drive is mounted. If no files are listed, issue the following commands:

```
mount /mnt/cdrom
```

Install and Launch ExtremeCloud IQ Site Engine

1. Download *XIQ-SE Install and Upgrade* from the ExtremeCloud IQ section of the [Extreme Portal](#).
2. Use an xterm where you are logged in as root. (Be sure that your system's root environment has a proper DISPLAY variable setting. For more information see the above [note](#).)
3. Change the permissions on the upgrade file by entering the following command:
`chmod u+x File_Name_<version>_install.bin`
4. If installing ExtremeCloud IQ Site Engine on a system on which Ubuntu 18.04 LTS (Bionic Beaver) is installed, continue to step 5; otherwise, proceed to step 9.
5. Edit the `rsyslog.conf` file.
6. Uncomment (remove the # from the beginning of the line) for the lines that include `imudp/514` and `imtcp/514`:

```
#ENABLE_RSYSLOG_SERVICE
cp /etc/rsyslog.conf /etc/rsyslog.conf.original
sed -i 's/#module(load=\\"imudp\\")/module(load=\\"imudp\\")/g' /etc/rsyslog.conf
sed -i 's/#input(type=\\"imudp\\" port=\\"514\\")/input(type=\\"imudp\\" port=\\"514\\")/g' /etc/rsyslog.conf
sed -i 's/#module(load=\\"imtcp\\")/module(load=\\"imtcp\\")/g' /etc/rsyslog.conf
sed -i 's/#input(type=\\"imtcp\\" port=\\"514\\")/input(type=\\"imtcp\\" port=\\"514\\")/g' /etc/rsyslog.conf
systemctl restart rsyslog
```

7. Edit the `/etc/hosts` file.
8. Ensure the `ip fqdn hostname` line is configured (the last line in the following codeblock):

```
#IF_DNS_NOT_CONFIGURED
hostnamectl set-hostname <set_your_hostname_here>
domainname <set_your_domain_here>
export HOST_IP=`hostname -i|awk '{print $1}'`
export HOST_FQDN=`hostname -f`
export HOST_NAME=`hostname`
cp /etc/hosts /etc/hosts.original
echo $HOST_IP $HOST_FQDN $HOST_NAME >> /etc/hosts
#
# If DNS is configured on the system ensure the /etc/hosts contains an
# entry of the format:
# <ip> <fqdn> <hostname>
# 192.168.1.150 xmc1804.extremenetworks.com xmc1804
```

9. Start the Installer.
 - **If you have downloaded the software**, cd to the directory where you downloaded the installer and start the Installer with the following command:
`./ExtremeCloudIQSiteEngine_<version>_64bit_install.bin`

- **If you are installing from a CD**, start the installer with the command:
`/mnt/cdrom/ExtremeCloudIQSiteEngine_<version>_64bit_install.bin`
10. The ExtremeCloud IQ Site Engine Installer leads you through a series of windows that ask for all the information required in order to install ExtremeCloud IQ Site Engine. You need the following information for the Installer Program:
- **Service Configuration** – There are two Service Configuration screens.
 - In the first screen, you can specify a user other than root to own the ExtremeCloud IQ Site Engine server and its supporting files, if desired. This user becomes the admin user for the server. Select **Use existing user** if you already have a user defined on the machine and enter the user name. Select **Create local netsight user** if you want to create a new "netsight" user (netsight is the user name) and enter the password for this new user. Leave the **Use existing user** option set to **root** if you do not want to specify another user.
 - In the second screen, enable and start the ExtremeCloud IQ Site Engine Services. (For more information on the services offered on the Linux platform, see [ExtremeCloud IQ Site Engine Services](#).)
 - **Destination Directory** – This is the path to your ExtremeCloud IQ Site Engine Installation Directory. In the Destination Directory window, select **Choose** to navigate to the directory, or type the path in manually.
 - **Operating System Upgrade Method** – If your Linux system requires an operating system upgrade, you are prompted to upgrade using either an internet connection or locally (without an internet connection) if no additional Ubuntu packages need to be installed:

!!! ATTENTION !!!

We can attempt to upgrade the OS without using the Internet if there were no extra Ubuntu packages installed. If there were extraneous packages installed, the upgrade will fail with this method.

Do you want to attempt a local in-place upgrade of the OS and reboot when complete? (Y/n)

When you have finished with this series of windows, ExtremeCloud IQ Site Engine is installed according to your specifications.

11. When the installation is complete, the database and server are started automatically. You must wait until the ExtremeCloud IQ Site Engine server has started all its various server components before you can connect to the server and launch the ExtremeCloud IQ Site Engine applications. On the installation screen, you see an hourglass icon while the server starts its components. When the server is ready for connections, the installation screen displays a green check.
12. On the installation screen, select the **Show Launch Page** link to open the ExtremeCloud IQ Site Engine Launch Page.
13. The ExtremeCloud IQ Site Engine Launch Page opens. At the top of the web page you will see tabs for the following functions:

- **Home** – Launch your ExtremeCloud IQ Site Engine applications by selecting the names or icons of any of the listed applications.
 - **Getting Started** – In order to launch your ExtremeCloud IQ Site Engine applications, you must have Java Runtime Environment (JRE) 6 (also referred to as 1.6) or higher installed on your system. This page tells you if you have met this requirement and provides instructions for installing the Java Runtime Environment (JRE), if required.
 - **Administration** – Provides access to specific server administration functions such as client and server diagnostics, and server utilities.
14. Verify that you have met the JRE requirement by accessing the **Getting Started** tab, and install the JRE according to the instructions on the **Install Java** tab, if required.
 15. Select the **Home** tab and launch the desired ExtremeCloud IQ Site Engine application by selecting the name or icon.
 16. A login window appears. ExtremeCloud IQ Site Engine requires a user login as a way to restrict access to the ExtremeCloud IQ Site Engine server, perform audit trails, and assign user capabilities according to the Authorization Group the user belongs to.
 - a. Select the ExtremeCloud IQ Site Engine server to which you wish to connect.
 - b. Enter your username.
 - c. Enter your password and select **OK**.

NOTES: The initial user to log in must be the user that performed the ExtremeCloud IQ Site Engine installation, which is either root or the user defined in the [Service Configuration screen](#) during the installation. This is because the ExtremeCloud IQ Site Engine server has a single pre-defined user. After the initial user has logged in, additional users can be defined.

The password for the root user does not expire. To configure the password to age so it expires after 60 days, see [Configure Your Password to Expire](#).

17. The application main window opens.

Performing a Silent Install

If you are installing ExtremeCloud IQ Site Engine on a Linux system that doesn't support a GUI, you must add the cli flag (`--cli`) to the install command, in order to allow the ExtremeCloud IQ Site Engine installer to prompt for any required input.

Start the installation with the following command:

```
./ExtremeCloudIQSiteEngine_<version>_64bit_install.bin --cli
```

If you are installing as a user other than root, you must use the `--user` command to specify the different user. The user must already be configured on the machine before you install. For example:

```
./ExtremeCloudIQSiteEngine_<version>_64bit_install.bin --cli --user
<username>
```

To perform the install and create a new local "netsight" user (where netsight is the user name), use the --password command to set the password for the new "netsight" user. For example:

```
./ExtremeCloudIQSiteEngine_<version>_64bit_install.bin --cli --password
<password>
```

Select the deployment mode and licensing for ExtremeCloud IQ Site Engine

After installing or upgrading to ExtremeCloud IQ Site Engine, you need to select your deployment mode and licensing for ExtremeCloud IQ Site Engine. Refer to [First log in to ExtremeCloud IQ - Site Engine](#) for the procedure.

Post Installation Procedure for Ubuntu 18.04 LTS (Bionic Beaver)

If installing ExtremeCloud IQ Site Engine on a system on which Ubuntu 18.04 LTS (Bionic Beaver) is installed, follow this procedure when ExtremeCloud IQ Site Engine is installed:

1. Open a command prompt on the ExtremeCloud IQ Site Engine server.
2. Enter `cp /var/Extreme_Networks/.netsight /var/Extreme_Networks/.netsight.original`.
3. Enter `export HOST_IP=`hostname -i|awk '{print $1}'``.
4. Enter `sed -i "\$aJBoss_HOSTNAME=$HOST_IP" /var/Extreme_Networks/.netsight`.
5. Install OpenSSH for SCP-based archives support and allow root login:
 - a. Open the `/etc/ssh/sshd_config` file and change **PermitRootLogin** to **yes**.
 - b. Enter `apt-get install openssh-server`.
6. Allow root access to the ExtremeCloud IQ Site Engine server via SSH.
 - a. Enter `cp /etc/ssh/sshd_config /etc/ssh/sshd_config.original`.
 - b. Enter `sed -i 's/#PermitRootLogin prohibit-password/PermitRootLogin yes/g' /etc/ssh/sshd_config`.

Restoring a Database from a Windows Server to a Linux Server

This section describes several ExtremeCloud IQ Site Engine configuration changes required if you are moving your ExtremeCloud IQ Site Engine installation from a Windows platform system to a Linux platform system. The steps are performed after restoring your database to the new server.

In addition, there are two changes that must be made in the legacy Console java application and one change in the legacy Inventory Manager application.

Console

Use the following instructions to change the location of syslog and trap information to the new location on the Linux system.

Syslog

Change the Syslog Log Manager to point to the new location on the Linux system. This allows the display of syslog information in the **Syslog Event View** tab.

1. From the Console menu bar, select **Tools > Alarm/Event > Event View Manager**.
2. Select the Syslog entry under Available Log Managers, and select the **Edit** button. The Log Manager Parameters window opens.
3. Change the path in the Log Directory field to `/var/log/syslog`.
4. Change the Pattern to Red Hat LINUX Syslog Pattern.
5. Select **OK**.

Traps

Change the Traps Log Manager to point to the new location on the Linux system. This allows the display of trap information in the **Traps Event View** tab.

1. From the Console menu bar, select **Tools > Alarm/Event > Event View Manager**.
2. Select the Traps entry under Available Log Managers, and select the **Edit** button. The Log Manager Parameters window opens.
3. Change the path in the Log Directory field to `%logdir%/traps`.
4. Select **OK**.

Inventory Manager

If you are using Inventory Manager, you need to change the Data Storage Directory path to point to the new location on the Linux system. The Data Storage directory is where all Inventory Manager data is stored, including capacity planning reports, configuration templates, archived configurations, and property files.

1. From the Inventory Manager menu bar, select **Tools > Options**. Expand the Inventory Manager options folder and select **Data Storage Directory Path**.
2. Change the path to the correct new location. On a default Linux install, the path would be:
`<user's home directory>/appdata/InventoryMgr`
3. Select **OK**.

Systems with Multiple NICs

This section provides instructions for configuring ExtremeCloud IQ Site Engine servers with multiple NICs (Network Interface Cards). During the startup process, the ExtremeCloud IQ Site

Engine server automatically binds to the first available NIC, which may not be the correct interface for the server to use. In addition, changes on the network can cause the server to bind to an incorrect interface, should the server restart during a change.

If the system has multiple NICs installed, it is a good practice to either:

- configure the server to bind to a preferred IP address, if using only one interface for connections or
- configure multiple network interfaces, if using more than one interface for connections.

This ensures that local and remote clients, as well as ExtremeControl engines, are able to connect to the ExtremeCloud IQ Site Engine server.

Binding to One Interface

If the ExtremeCloud IQ Site Engine server has multiple NICs installed but only one interface is used to access ExtremeCloud IQ Site Engine, use the following instructions to configure the preferred interface for the ExtremeCloud IQ Site Engine server.

Configure the ExtremeCloud IQ Site Engine server to bind to the correct IP address.

1. Open the `/var/Extreme_Networks/.netsight` file. Edit the line `JBOSS_HOSTNAME=<server IP>` to add the correct NIC IP address.
2. Restart the ExtremeCloud IQ Site Engine server.

NOTE: User preferences and application data (such as FlexViews and MIBs) for remote clients are stored in the following local directory on the client machine: `C:\Documents and Settings\<username>\Application Data\NetSight`.

Uninstalling ExtremeCloud IQ Site Engine

Use the procedures below to uninstall your ExtremeCloud IQ Site Engine Suite of products. The uninstall removes all ExtremeCloud IQ Site Engine data from the database. Be sure to backup your database prior to uninstalling.

Navigate to the `<install directory>/uninstaller` directory and start the Uninstaller by issuing the command:

```
./uninstall.sh
```

Extreme Networks Support

If you require assistance, contact Extreme Networks Global Technical Assistance Center using one of the following methods.

Web www.extremenetworks.com/support/

Phone 1-800-872-8440 (toll-free in U.S. and Canada) or 1-603-952-5000
For the Extreme Networks Support phone number in your country:
www.extremenetworks.com/support/contact/

Email support@extremenetworks.com

ExtremeCloud IQ Site Engine Licensing

ExtremeCloud IQ Site Engine includes all the features and functionality of Extreme Management Center. If you are an existing Extreme Management Center customer, contact your representative to have your Extreme Management Center license migrated to an ExtremeCloud IQ Site Engine license. The ExtremeCloud IQ Site Engine license also includes licensing for ExtremeAnalytics.

- NOTES:**
- ExtremeCloud IQ Site Engine is a subscription-based -only licensing model.
 - is not compatible with ExtremeCloud IQ Site EngineExtremeCloud IQ Connect level account. The Pilot level is mandatory.
-

You can view ExtremeCloud IQ and ExtremeCloud IQ Site Engine license information by accessing [Administration > Licenses](#).

This Help topic includes information on the following:

- [Licensing for Devices in Connected Mode](#)
- [Licensing for Devices in Air Gap Mode](#)
- [Revoke Air Gap License](#)
- [License Limits and Violations](#)
- [Licensing for ExtremeControl](#)

There are three tiers of licenses for ExtremeCloud IQ Site Engine and devices:

- Pilot - Natively supported Extreme devices
- Navigator - 3rd party devices, Extreme Campus Controller, ExtremeCloud IQ Controller, WiNG wireless devices, and devices not natively supported by ExtremeCloud IQ Site Engine
- No License - Status-Only devices

ExtremeCloud IQ Site Engine can be deployed in two ways, using connected mode or air gap mode:

- Connected mode:
 - ExtremeCloud IQ - Site Engine uses ExtremeCloud IQ to determine if you meet or exceed the [license limits](#) for each license type.
 - All ExtremeCloud IQ - Site Engines connected to the same customer account share a pool of licenses, one serial number consumes one license entitlement, regardless of the number of monitoring entities.
 - ExtremeCloud IQ - Site Engine shares information with ExtremeCloud IQ.
 - ExtremeCloud IQ can cooperate with ExtremeCloud IQ - Site Engine.

- Air gap mode:
 - ExtremeCloud IQ - Site Engine does not require internet access.
 - ExtremeCloud IQ - Site Engine uses a license file to determine if you meet or exceed the [license limits](#) for each license type.
 - ExtremeCloud IQ - Site Engines can not share licenses.

Devices that do not have serial numbers or MAC addresses in Extreme Management Center must be Rediscovered after you upgrade to ExtremeCloud IQ Site Engine in connected mode before they can be onboarded to ExtremeCloud IQ.

NOTE:

If your number of devices exceeds your licenses available, ExtremeCloud IQ Site Engine transitions to a license violation state and your access to ExtremeCloud IQ Site Engine features and functionality is degraded. To resolve the license shortage you need to access the Extreme Networks License Portal or ExtremeCloud IQ to evaluate the quantities of available Pilot, Navigator, and NAC licenses versus the number of licenses required by ExtremeCloud IQ Site Engine.

Licensing for Devices in Connected Mode

When ExtremeCloud IQ Site Engine has been [onboarded](#), it starts sending requests to add the devices from its database to ExtremeCloud IQ.

As devices are added and discovered in ExtremeCloud IQ Site Engine, they are onboarded to ExtremeCloud IQ, with a request for a license of the appropriate tier (Navigator, Pilot or No License) that each device will require.

Devices may be marked as [Unmanaged](#) in ExtremeCloud IQ, which means they are not using a license and available features are very limited.

The following grid details the type of license required by each device and engine type:

Device Type	License Tier Type	Number of Licenses Per Device
Extreme-supported Device (Includes Universal Platform Fabric Engine, Universal Platform VOSS, VSP series, SLX, Extreme Access Series, VDX Series, Fabric Manager, ICX Series, Security Appliances, MLXe Series, VDX Series)	Pilot	1
Extreme-supported Device (Universal Platform Switch Engine, Universal Platform EXOS, Summit Series, ERS Series, A Series, B Series, C Series, 7100 Series, 200 Series)	Pilot	1 for each unit

Device Type	License Tier Type	Number of Licenses Per Device
Extreme-supported Device (S-Series, K-Series)	Pilot	1 for each chassis
Extreme-supported Chassis (Includes S series, K series, N series, E series, Black Diamond, Black Diamond X, X series, VSP series, MLXe series, VDX series, SLX series)	Pilot	1 for each chassis
ExtremeControl engine	Pilot	1
ExtremeAnalytics engine	Pilot	1
ExtremeCloud IQ Site Engine*	Pilot	1
vSensor	Pilot	1
All Other Devices (Includes Non-Extreme Device)	Navigator	1
Devices with Ping-Only profile	No License	0

*There is one license required for the ExtremeCloud IQ Site Engine itself. Each ExtremeCloud IQ Site Engine consumes only one license even if there are multiple ExtremeCloud IQ Site Engine devices are in the device list.

NOTE: For HiveOS APs (IQE) and Dell N-Series, a Pilot license is required, but currently not enforced in ExtremeCloud IQ Site Engine. These are not onboarded to ExtremeCloud IQ through ExtremeCloud IQ Site Engine.

Licensing for Devices in Air Gap Mode

ExtremeCloud IQ Site Engine [uses licenses](#) stored locally in a license file. This ensures ExtremeCloud IQ Site Engine does not require an internet connection to verify licenses are available as you add devices.

NOTE: Licenses in one installation of ExtremeCloud IQ Site Engine in air gap mode cannot be shared with other installations of ExtremeCloud IQ Site Engine.

As devices are added and discovered in ExtremeCloud IQ Site Engine, they consume a license of the appropriate tier (Navigator, Pilot or No License) that each device requires against the total listed in the license file.

Devices may be marked as [Unmanaged](#), which means they are not using a license and available features are very limited.

The following grid details the type of license required by each device and engine type:

Device Type	License Tier Type	Number of Licenses Per Device
Extreme-supported Device (Includes Universal Platform Fabric Engine, Universal Platform VOSS, VSP series, SLX, Extreme Access Series, VDX Series, Fabric Manager, ICX Series, Security Appliances, MLXe Series, VDX Series, HiveOS (IQE), Dell N-Series)	Pilot	1
Extreme-supported Device (Universal Platform Switch Engine, Universal Platform EXOS, Summit Series, ERS Series, A Series, B Series, C Series, 7100 Series, 200 Series)	Pilot	1 for each unit
Extreme-supported Chassis (Includes S series, K series, N series, E series, Black Diamond, Black Diamond X, X series, VSP series, MLXe series, VDX series, SLX series)	Pilot	1 for each chassis
ExtremeControl engine	Pilot	1
ExtremeAnalytics engine	Pilot	1
ExtremeCloud IQ Site Engine*	Pilot	1
vSensor	Pilot	1
All Other Devices (Includes Non-Extreme Device)	Navigator	1
Devices with Ping-Only profile	No License	0

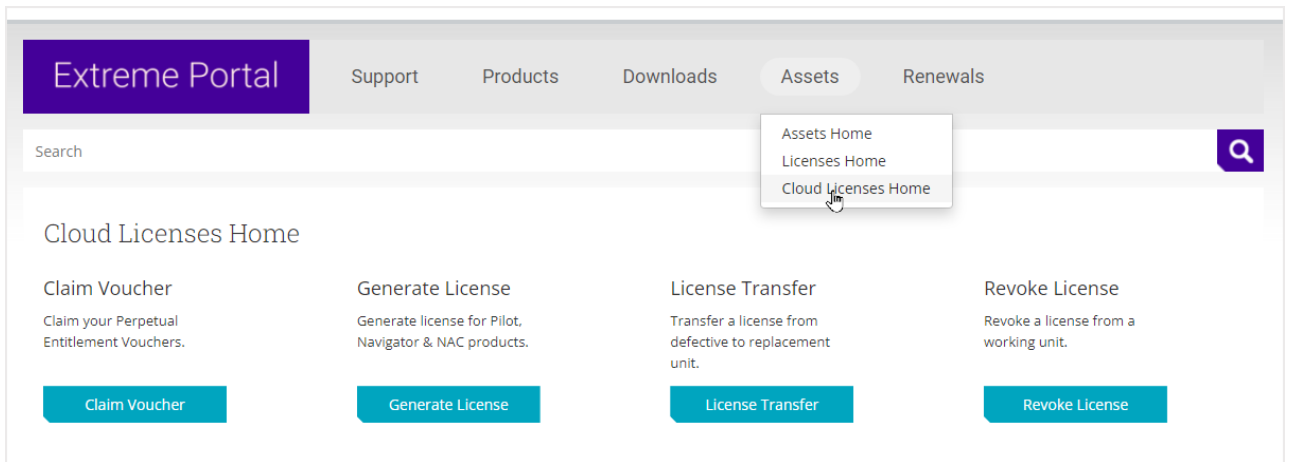
*There is one license required for the ExtremeCloud IQ Site Engine itself. Each ExtremeCloud IQ Site Engine consumes only one license even if there are multiple ExtremeCloud IQ Site Engine devices are in the device list.

Revoke Air Gap License

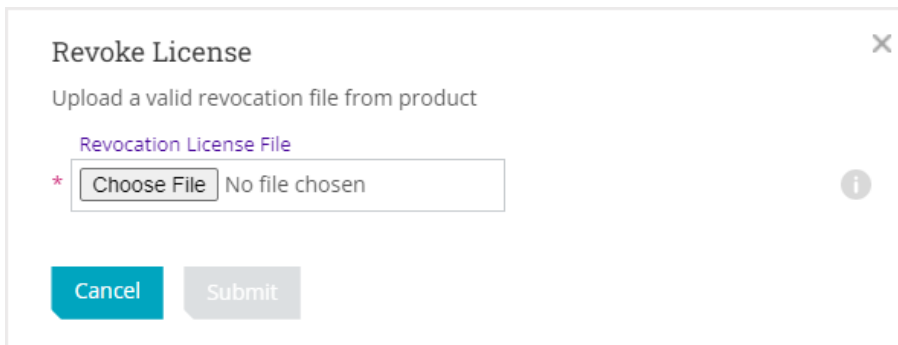
NOTE: A maximum of 10 Air Gap licenses can be revoked in one revocation file.

Follow this procedure to revoke your Air Gap license.

1. Open **Administration > Licenses** or enter this URL.
`https://<Server>:/8443/xiqLicenseSetup.jsp?setupMode=Airgap`
2. Select either the Pilot, Navigator, or NAC license to revoke.
ExtremeCloud IQ Site Engine generates a revocation file.
3. Download the file to your computer.
4. Log into the Extreme Portal (<https://extreme-networks.my.site.com/ExtrCloudLicenseLanding>).
5. Select **Assets > Cloud Licenses Home > Revoke License**.



6. Upload the revocation file and select **Submit**.



The revoked licenses are returned to the license pool. Contact [support](#) if you encounter an error. You will need to provide the revocation file (.rvk) and the error message.

License Limits and Violations

For each request to add a device to ExtremeCloud IQ Site Engine:

- **In connected mode:** ExtremeCloud IQ determines if there are enough licenses of that type available.
- **In air gap mode:** ExtremeCloud IQ Site Engine uses the license file to determine if there are enough licenses of that type available.

As a result for both modes, one of the following actions happens:

- If there are enough licenses, device onboarding is successful.
- If there are not enough Navigator licenses, a Pilot license is used instead.
- If there are not enough Pilot licenses, the request is considered a license violation.

NOTE: When an evaluation license is used for ExtremeCloud IQ Site Engine, all devices are managed with Pilot licenses.

To correct a license limit violation:

- **In connected mode:** You must acquire more licenses (and, when the updated licenses are available in ExtremeCloud IQ, they are used by ExtremeCloud IQ Site Engine).
- **In air gap mode:** You must acquire more licenses by generating a new licensing file from the licensing portal, then install the licensing file in ExtremeCloud IQ Site Engine.

Devices Marked as Unmanaged

When devices are marked as Unmanaged in ExtremeCloud IQ, they are also Unmanaged in ExtremeCloud IQ Site Engine.

Onboarded Unmanaged devices are indicated in the [XIQ Onboarded column](#) of the **Network > Site > Device** table by a red X.

Poll Details	Device Type	Family	Firmware	Reference	Connector	XIQ Onboarded	Update	Archived	Config Changed
Up: 328 Down: 0	H450-02-240-G4	Summit Ser...	31.1.1.3			X			
Up: 196 Down: 0	vm386E105	Summit Ser...	30.4.0.483						
Configuration staged for device									
Up: 2 Down: 162	H435-247-45	Summit Ser...	31.1.1.3	✓	3.6.1.8			✓	
Up: 2 Down: 162	H435-247-45	Summit Ser...	31.1.1.3	✓	3.6.1.8			✓	
Up: 0 Down: 196	Virtual Application A...	Extreme An...	8.5.3.45						
Up: 0 Down: 196	VIRTUAL ACCESS CONTR...	Extreme Co...	8.5.5.12						
Up: 2 Down: 162	FABRICMGR	Fabric Man...	8.5.3.25		3.6.1.8				

For more details on the **Network > Site > Device** table, visit [Onboarding Unmanaged Devices](#).

Licensing for ExtremeControl (Network Access Control)

If the ExtremeCloud IQ Site Engine was [onboarded](#) to ExtremeCloud IQ, ExtremeCloud IQ provides the Network Access Control (NAC) entitlements to ExtremeCloud IQ Site Engine. There is an option to allocate a portion of the available license pool in ExtremeCloud IQ. The full 100% NAC entitlements should be allocated automatically to the first ExtremeCloud IQ Site Engine. If there are more Site Engines, for example, a lab instance and a production instance, then the NAC entitlements allocation can be changed in the ExtremeCloud IQ GUI. It is recommended to check the NAC entitlements allocation in ExtremeCloud IQ.

If the ExtremeCloud IQ Site Engine is operated in air gap deployment mode, the licensed quantity for ExtremeControl is provided through a license file. The license file is generated in Extreme Portal. The licensed quantity for ExtremeControl varies depending on whether ExtremeCloud IQ Site Engine is initially installed or it was upgraded from the Extreme Management Center.

After Upgrading from Extreme Management Center

If you are upgrading from Extreme Management Center to ExtremeCloud IQ Site Engine, the licensing and capabilities of ExtremeControl do not change. The following are included in the licenses:

- NMS-ADV License includes 500 Access Control End-Systems and 50 Guest and IoT Manager (GIM) licenses.
- NMS-xx License includes 250 Access Control End-Systems and 25 GIM licenses.

If your version of ExtremeControl contains NMS or NMS-ADV licenses described above and licenses are **NOTE:** used through ExtremeCloud IQ (in Connected mode) or in a locally stored license file (in Air Gap mode), ExtremeControl will sum those licensed quantities.

Upon Initial Installation

If you are completing an initial install of ExtremeCloud IQ - Site Engine, there is no end-system license included. The evaluation license can be generated on the Extreme Portal which includes unlimited end-systems and Guest and IoT Manager (GIM) licenses.

Logging into ExtremeCloud IQ Site Engine

In connected mode, ExtremeCloud IQ Site Engine gets licenses through ExtremeCloud IQ. ExtremeCloud IQ acts as a license proxy between ExtremeCloud IQ Site Engine and Extreme Portal. Therefore, your ExtremeCloud IQ needs to be linked to your license entitlements in the Extreme Portal before your ExtremeCloud IQ Site Engine can be onboarded to ExtremeCloud IQ and consumes licenses via ExtremeCloud IQ. In Air Gap deployment mode, ExtremeCloud IQ Site Engine utilizes these licenses based on a license file.

Post upgrade from Extreme Management Center Version 8.5.5 or newer

When the Extreme Management Center is onboarded to ExtremeCloud IQ using the soft launch feature, you need to remove Extreme Management Center from ExtremeCloud IQ before onboarding ExtremeCloud IQ Site Engine.

Initial installation of ExtremeCloud IQ Site Engine or upgrading from Extreme Management Center

Follow these steps to launch ExtremeCloud IQ Site Engine:

1. Enter this `https://<IP Address>:8443` in your browser.



2. Enter your ExtremeCloud IQ Site Engine login credentials and select **Login**. These are the credentials you configured during the installation

3. Accept the License Agreement and select **Next**.

Welcome to ExtremeCloud IQ - Site Engine

License Agreement

PLEASE READ ALL OF THE FOLLOWING TERMS AND CONDITIONS OF THIS END USER LICENSE AGREEMENT.

This End User License Agreement ("Agreement") is a legal agreement between You and/or the entity You represent and Extreme Networks, Inc., on behalf of itself and its affiliates, including, but not limited to, Extreme Network Ireland Ops Limited (collectively, "Extreme") for the Software (defined below) licensed by Extreme or its licensors.

By downloading, installing, copying, accessing, or using the Software, or activating a Software license key, or by clicking an "I Agree" or similar button, or by opening the Software media, You agree to the terms and conditions of this Agreement as a condition of Your use of, and right to use, the Software.

If You do not agree to all the terms and conditions in this Agreement, do not download, install or use the Software. If the Software was delivered to You embedded in an Extreme Hardware Product, do not install or use that Extreme Hardware Product.

Extreme may make changes to this Agreement at any time and will provide written notice of such changes to You and give You an opportunity to accept those changes. Your continued use of the Software after such changes have been posted will signify your assent to acceptance of the revised terms.

If You and Extreme have signed a separate written agreement covering Your rights and duties with respect to the Software, then that written agreement take precedence over any conflicting terms in this Agreement.

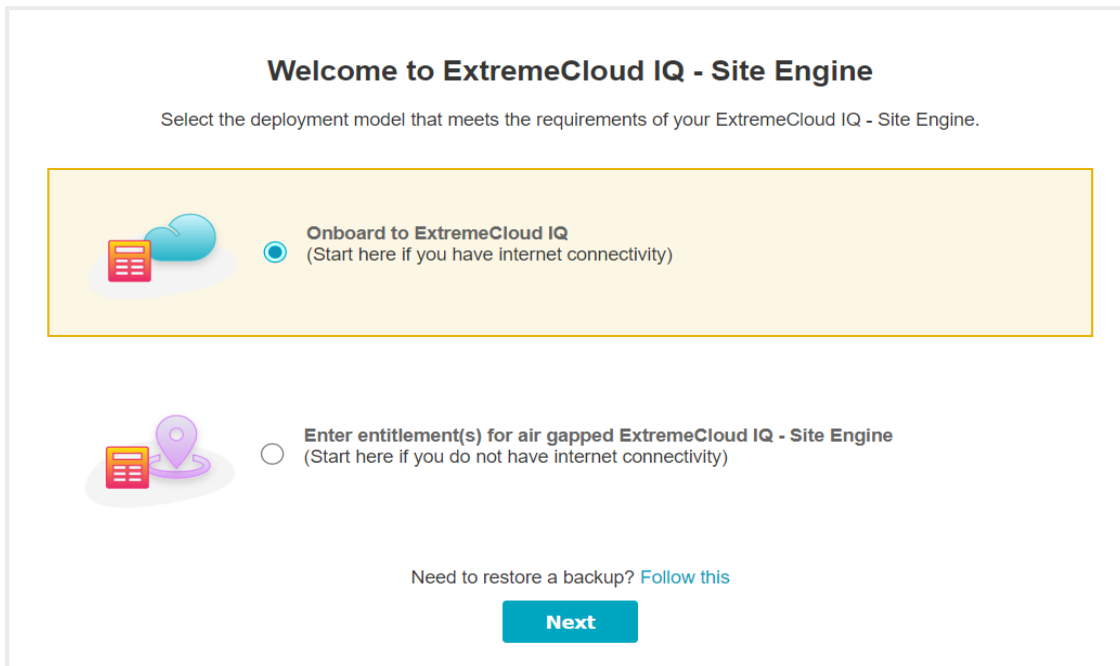
Your privacy is important to Extreme. Extreme's Privacy Policy is located at <https://www.extremenetworks.com/company/legal/privacy/>. Please read our Privacy Policy for information related to Extreme's collection, use and disclosure of Your personal information. By agreeing to the terms of this Agreement, You are also accepting the terms of Extreme's Privacy Policy.

1. DEFINITIONS. Capitalized terms used in this Agreement are defined in Section 18 below.

I accept the License Agreement

Next

4. Select your deployment mode. Refer to the [XIQ-SE Activation](#) document for licensing information.
 - Connected mode - **Onboard to ExtremeCloud IQ Site Engine** - In connected deployment mode, ExtremeCloud IQ Site Engine utilizes these licenses through connection to ExtremeCloud IQ. It is required to link your Extreme Portal to ExtremeCloud IQ. Once those are linked together, you can use the licenses you purchased in both ExtremeCloud IQ and ExtremeCloud IQ Site Engine.
 - Air Gap mode - **Enter entitlement(s) for air gapped ExtremeCloud IQ Site Engine** - In air gap deployment mode, ExtremeCloud IQ Site Engine utilizes these licenses based on a license file. During the generation of the license file, the licenses are assigned to the locking ID of ExtremeCloud IQ Site Engine.



NOTE: The Welcome screen provides a link to the procedure for [restoring](#) ExtremeCloud IQ Site Engine from backup.

5. Click **Next**.
6. Depending on the deployment mode you selected, you will do one of the following:
 - For Connected mode onboarding of ExtremeCloud IQ Site Engine to ExtremeCloud IQ, enter the ExtremeCloud IQ email address and password and select **Onboard**. If your environment requires HTTP Proxy or other advanced settings, select the **Advanced** link. If you do not have an ExtremeCloud IQ account, select the **Register Here** link.

Welcome to ExtremeCloud IQ - Site Engine

[Back](#) **Onboard to ExtremeCloud IQ**

Please enter your ExtremeCloud IQ credentials to onboard the ExtremeCloud IQ - Site Engine.

Email

Password

Don't have an account? [Register here](#)

[Advanced](#)

Onboard

- For Air Gap deployment, drag and drop your entitlements to this screen.

Welcome to ExtremeCloud IQ - Site Engine

[Back](#) **Air Gap License Entitlements**

Enter the entitlement(s) for your air gapped ExtremeCloud IQ - Site Engine.
 After adding entitlements to the table below, click the Continue button to log in to ExtremeCloud IQ - Site Engine.
 ExtremeCloud IQ - Site Engine serial number (Locking ID, UUID): **XIQSE-4464725328CD4130B8D425187D41000**

Don't have a license file? [Generate here](#)

Entitlements 🗂

Drag and drop a license entitlement file into this zone or click here to paste license entitlements.

Feature	License Name	Type	Quantity	Start Date	End Date	Description	
PRD-XIQ-NAV-S-C	XIQ-NAV-S-C	Subscription	20	11/14/2021 07:00:00 PM	11/15/2022 06:59:00 PM	ExtremeCloud IQ - Site Engine - Navigator	🗑
PRD-XIQ-PIL-S-C	XIQ-PIL-S-C	Subscription	Unlimited	11/14/2021 07:00:00 PM	11/15/2022 06:59:00 PM	ExtremeCloud IQ - Site Engine - Pilot	🗑
PRD-XIQ-NAC-S	XIQ-NAC-S	Subscription	100,000	11/14/2021 07:00:00 PM	11/15/2022 06:59:00 PM	ExtremeCloud IQ - Site Engine - Access Control	🗑

Displaying 3 rows

Continue

7. Click **Onboard** (Connected mode) or **Continue** (Air Gap mode). ExtremeCloud IQ Site Engine is ready to use.

You can now access ExtremeCloud IQ Site Engine.

NOTE: If you need to convert your deployment between Connected or Air Gap mode, see [Convert from Connected to Air Gap deployment](#) or [Convert from Air Gap to Connected deployment](#).

Onboarding Devices (Connected mode only)

When ExtremeCloud IQ Site Engine is onboarded, it starts sending requests to add the devices from its database to ExtremeCloud IQ. Cloud Configuration Groups are created in ExtremeCloud IQ that match User Device Groups in ExtremeCloud IQ Site Engine.

NOTE: Devices with IPv6 addresses in ExtremeCloud IQ Site Engine will not be onboarded as locally-managed devices in ExtremeCloud IQ. Only devices with IPv4 addresses qualify.

As devices are added and discovered in ExtremeCloud IQ Site Engine, they are onboarded to ExtremeCloud IQ, with a request for a [license](#) of the appropriate tier (Navigator, Pilot or No License) that each device will require.

If devices that are onboarded are included in User Device Groups in ExtremeCloud IQ Site Engine, they are also included in Cloud Configuration Groups in ExtremeCloud IQ that match the devices' assigned User Device Groups in ExtremeCloud IQ Site Engine.

Cloud Configuration Groups are updated when devices are added to User Device Groups (either by user action or by API call). Cloud Configuration Groups are also updated when devices are removed from a User Device Group or deleted from ExtremeCloud IQ Site Engine.

NOTE: Cloud Configuration Group names include User Device Group parent names (other than "My Network") and are prefixed with "XIQSE-". The Cloud Configuration Group names will be shortened to fit the limit of 128 characters.

View the [ExtremeCloud IQ Site Engine and ExtremeCloud IQ Onboarding Flowchart](#) for a detailed chart on how devices are onboarded to ExtremeCloud IQ and managed by ExtremeCloud IQ Site Engine.

XIQ Onboarded Status for Devices (Connected mode only)

After an attempt is made to onboard a device, the [XIQ Onboarded](#) column in the table **Network > Site > Device**) indicates the status of the onboarding attempt.

Port Details	Device Type	Family	Firmware	Reference	Connector	XIQ Onboarded	Upda...	Archived	Config Changed
Up: 328 Down: 0	H450-52-240-04	Summit Ser...	31.1.1.3			X			
Up: 196 Down: 0	vm386EiOS	Summit Ser...	30.4.0.483						
Configuration staged for device									
	vm386EiOS	Summit Ser...	31.1.1.3		3.6.1.8				
Up: 2 Down: 162	H435-247-45	Summit Ser...	31.1.1.3	✓	3.6.1.8			✓	
Up: 0 Down: 162	H435-247-45	Summit Ser...	31.1.1.3	✓	3.6.1.8			✓	
Up: 0 Down: 196	Virtual Application A...	Extreme An...	8.8.3.46						
Up: 0 Down: 196	Virtual Access Contr...	Extreme Co...	8.5.5.12						
Up: 2 Down: 162	R4BRClxBR	Retro Man...	8.8.3.26		3.6.1.6				

- Black check mark - Indicates that the device is onboarded to ExtremeCloud IQ.
- Red X - Indicates the device is onboarded but Unmanaged, which means it is not using a license, it has read-only device-level support, and available features in ExtremeCloud IQ Site Engine are limited. Other functionality, including Status Polling, Historical Device + Port Statistics Collection, Existing Scheduled Tasks, and Archives, are supported for devices with Unmanaged status, but these devices cannot be configured for new tasks or new archives.

In ExtremeCloud IQ Site Engine version 23.11.12, only use ExtremeCloud IQ to set an ExtremeCloud IQ Site Engine onboarded device to Unmanaged as a temporary measure while you obtain more licenses.

NOTE:

If you mark a device as Unmanaged so it does not trigger a [license limit violation](#), you can then access ExtremeCloud IQ Site Engine and delete the device before the license violation occurs.

You can perform an enforce for an ExtremeControl engine with an Unmanaged status; however, if the device has an Unmanaged status, then the enforce does not reconfigure the device and changes are not written to the device.

When devices are marked as Unmanaged in ExtremeCloud IQ, they are also Unmanaged in ExtremeCloud IQ Site Engine.

In addition, existing ExtremeAnalytics functionality for devices with an Unmanaged status is still supported, but only with existing configuration.

- Blank - Indicates the device is not successfully onboarded to ExtremeCloud IQ from the ExtremeCloud IQ Site Engine because either it is already onboarded to ExtremeCloud IQ (either from another

ExtremeCloud IQ Site Engine or by using the IQ Agent to connect directly), or because ExtremeCloud IQ Site Engine lost its connection to ExtremeCloud IQ.

NOTE: If a device's status is Blank, it has limited features available in ExtremeCloud IQ Site Engine because management of the device is owned by ExtremeCloud IQ.

- N/A - Indicates the device is not eligible to be onboarded to ExtremeCloud IQ because it does not have a valid serial number or MAC address, or Extreme does not yet offer onboarding support for the device.

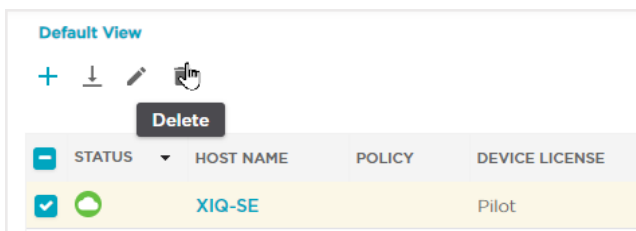
NOTE: If ExtremeCloud IQ Site Engine does not recognize a device's serial number or MAC address, right-click on the device and select Rediscover to attempt to discover the device's serial number or MAC address. When the device's serial number or MAC address is discovered, it can be onboarded to ExtremeCloud IQ during the next onboarding cycle.

IMPORTANT: After you complete these procedures, you must return to the next step [Post Installation Procedure for Ubuntu 18.04 LTS \(Bionic Beaver\)](#) ExtremeCloud IQ Site Engine Suite Installation.

Convert from Connected to Air Gap deployment

Follow this procedure if you need to convert from Connected mode to Air Gap mode.

1. Delete ExtremeCloud IQ Site Engine from ExtremeCloud IQ



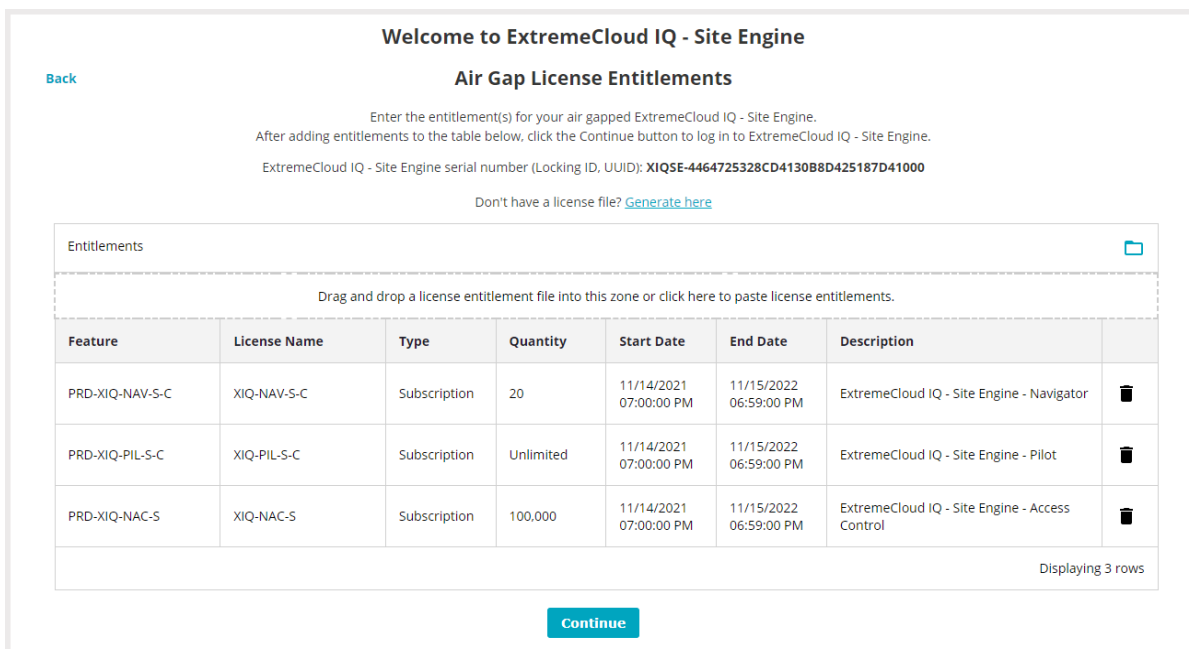
2. In the next 48 hours, all subscriptions will be deactivated automatically. During this time period:

- The ExtremeCloud IQ Site Engine will report Connection Lost with ExtremeCloud IQ
- New devices cannot be added to ExtremeCloud IQ Site Engine

3. Log in to ExtremeCloud IQ Site Engine

4. Go to **Air Gap License Entitlements** using

HTTPS://<SiteEngineIP>:8443/xiqLicenseSetup.jsp?setupMode=Airgap



5. Copy the ExtremeCloud IQ Site Engine serial number (Locking ID, UUID) from the entitlements screen

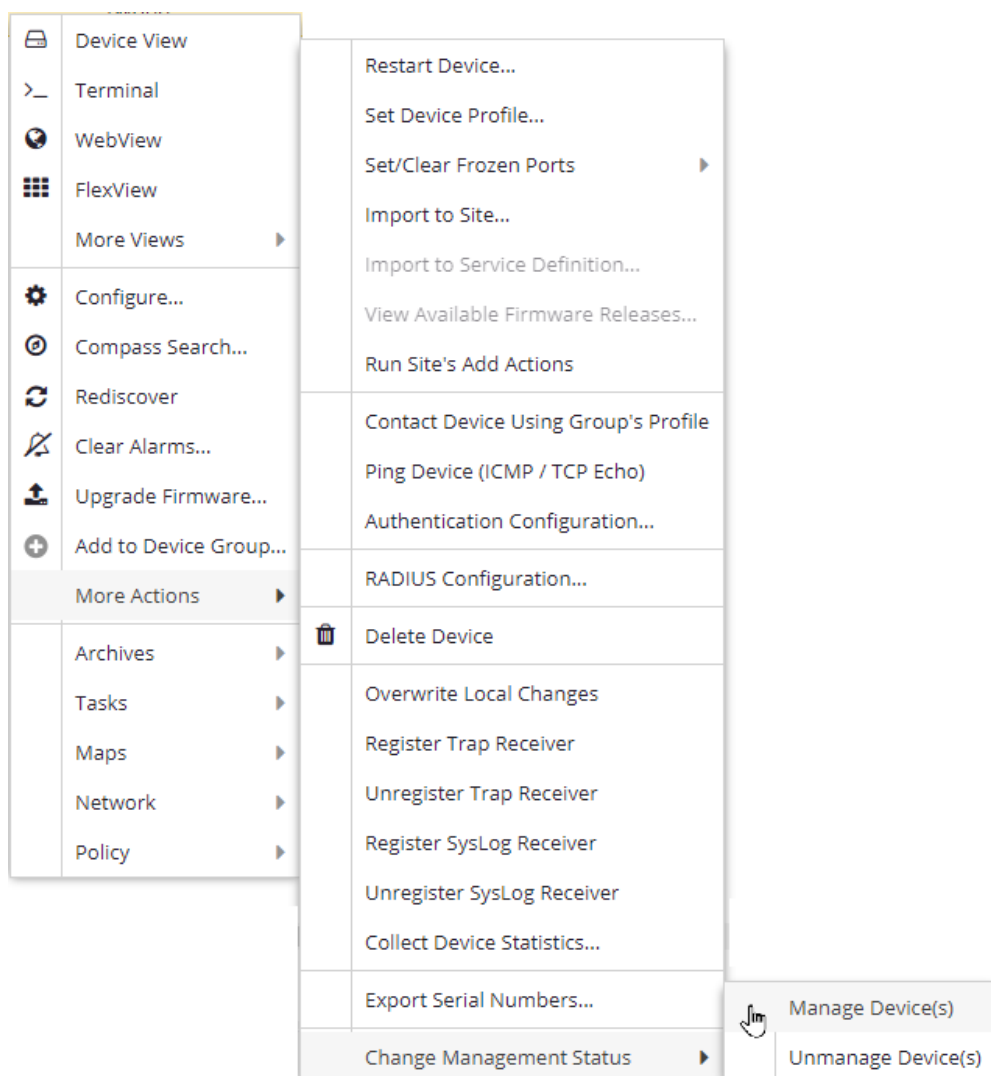
6. Generate a license file. Follow the license generation procedure in section *Air gap deployment mode: Generate and Install the License File* found in the [Activation Instructions](#) guide
7. Drag and drop the license file in the **Entitlements** section of the **Air Gap License Entitlements** screen (see [step 4](#)).
8. Click **Continue**
9. Restart your ExtremeCloud IQ Site Engine server.

After the restart, your Site Engine is ready to use.

Convert from Air Gap to Connected deployment

Follow this procedure if you need to convert from Air Gap mode to Connected mode.

1. Check the connectivity from ExtremeCloud IQ Site Engine to ExtremeCloud IQ. If there is a connectivity issue, fix it before continuing.
2. Make all of the devices managed or delete all unmanaged devices from ExtremeCloud IQ Site Engine.



3. Revoke all Air Gap licenses. For information on how to revoke the licenses, see [Revoke Air Gap License](#).
4. Go to `HTTPS://<SiteEngineIP>:8443/xiqLicenseSetup.jsp?setupMode=Auto`
5. If you do not have an ExtremeCloud IQ account, then you need to create one.

6. If your ExtremeCloud IQ account is not linked to your Extreme Portal account, follow the procedure in the [Activation Instructions](#).
7. Onboard ExtremeCloud IQ Site Engine to ExtremeCloud IQ. For more information on how to onboard Site Engine, see [Logging into ExtremeCloud IQ - Site Engine](#).
8. Restart your ExtremeCloud IQ Site Engine server.

After the restart, your Site Engine is ready to use.