



ExtremeCloud A3 Upgrade Guide

Version 5.0.0

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Preface

Read the following topics to learn about:

- The meanings of text formats used in this document.
- Where you can find additional information and help.
- How to reach us with questions and comments.

Text Conventions

Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as ExtremeSwitching switches or SLX routers, the product is referred to as *the switch* or *the router*.

Table 1: Notes and warnings






Icon	Notice type	Alerts you to...
	Tip	Helpful tips and notices for using the product
	Note	Useful information or instructions
	Important	Important features or instructions
	Caution	Risk of personal injury, system damage, or loss of data
	Warning	Risk of severe personal injury

Table 2: Text

Convention	Description
screen displays	This typeface indicates command syntax, or represents information as it is displayed on the screen.
The words <i>enter</i> and <i>type</i>	When you see the word <i>enter</i> in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says <i>type</i> .
Key names	Key names are written in boldface, for example Ctrl or Esc . If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press Ctrl+Alt+Del
Words in italicized type	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.
NEW!	New information. In a PDF, this is searchable text.

Table 3: Command syntax

Convention	Description
bold text	Bold text indicates command names, keywords, and command options.
<i>italic</i> text	Italic text indicates variable content.
[]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{ x y z }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x y	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, such as passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, <i>member</i> [<i>member</i> ...].
\	In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

Documentation and Training

Find Extreme Networks product information at the following locations:

[Current Product Documentation](#)

[Release Notes](#)

[Hardware and software compatibility](#) for Extreme Networks products

[Extreme Optics Compatibility](#)

[Other resources](#) such as white papers, data sheets, and case studies

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit www.extremenetworks.com/education/.

Help and Support

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

Extreme Portal

Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

The Hub

A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

Call GTAC

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2826. For the support phone number in your country, visit: www.extremenetworks.com/support/contact

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

Subscribe to Product Announcements

You can subscribe to email notifications for product and software release announcements, Field Notices, and Vulnerability Notices.

1. Go to [The Hub](#).
2. In the list of categories, expand the **Product Announcements** list.
3. Select a product for which you would like to receive notifications.
4. Select **Subscribe**.
5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

You can modify your product selections or unsubscribe at any time.

Send Feedback

The Information Development team at Extreme Networks has made every effort to ensure that this document is accurate, complete, and easy to use. We strive to improve our documentation to help you in your work, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information.

- Improvements that would help you find relevant information.
- Broken links or usability issues.

To send feedback, do either of the following:

- Access the feedback form at <https://www.extremenetworks.com/documentation-feedback/>.
- Email us at documentation@extremenetworks.com.

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.



Upgrade Guide

[Upgrade Process](#) on page 8

[Upgrade to Version 4.1.1](#) on page 9

[Create and Download the Configuration Backup](#) on page 10

[Install Version 5.0.0 and Set Up Networking](#) on page 11

[Restore the Backup](#) on page 13

[Form the New Cluster](#) on page 14

[Join the Master and Cluster Members to Active Directory](#) on page 15

[Reallocate Licenses to the New Cluster](#) on page 16

ExtremeCloud A3 versions 4.1.1 and older are based on the *CentOS Linux release*. Due to changes in the CentOS project, A3 5.0.0 is based on *Debian*. This document describes the procedures for upgrading to A3 5.0.0. These procedures are the same for HyperV and VMware hypervisors. The upgrade process impacts the service, so the maintenance window should be properly scheduled.



Note

As of A3 4.0.0, the new subscription licensing is used. If the A3 is running a version earlier than 4.0.0, ensure that you have new licenses available. For more information, see [A3 Licensing](#).

Upgrade Process

The process for upgrading to A3 version 5.0.0 is as follows:

- [Upgrade to Version 4.1.1](#) on page 9. Take this step only if your environment is running a version of A3 that is earlier than 4.1.1.
- [Create and Download the Configuration Backup](#) on page 10.
- [Install Version 5.0.0 and Set Up Networking](#) on page 11 on the A3 virtual machine on which you will restore the backup.
- [Restore the Backup](#) on page 13.
- Repeat [Install Version 5.0.0 and Set Up Networking](#) on page 11 for any additional A3 virtual machines to add to the new cluster.
- [Form the New Cluster](#) on page 14, which will consist of the A3 virtual machine on which you restored the backup and any additional A3 virtual machines on which you installed version 5.0.0.
- [Join the Master and Cluster Members to Active Directory](#) on page 15 if your A3 environment uses Active Directory.
- [Reallocate Licenses to the New Cluster](#) on page 16.

Upgrade to Version 4.1.1

Upgrade to version 5.0.0 is supported only from an A3 that is running 4.1.1.

About This Task

If your installation of A3 is running an older version, you must upgrade to 4.1.1 before upgrading to 5.0.0.

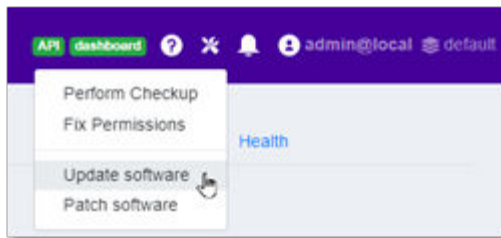
Take the following steps to upgrade to 4.1.1.

Procedure

1. Log in to the ExtremeCloud A3 user interface.
2. Select **Tools**.

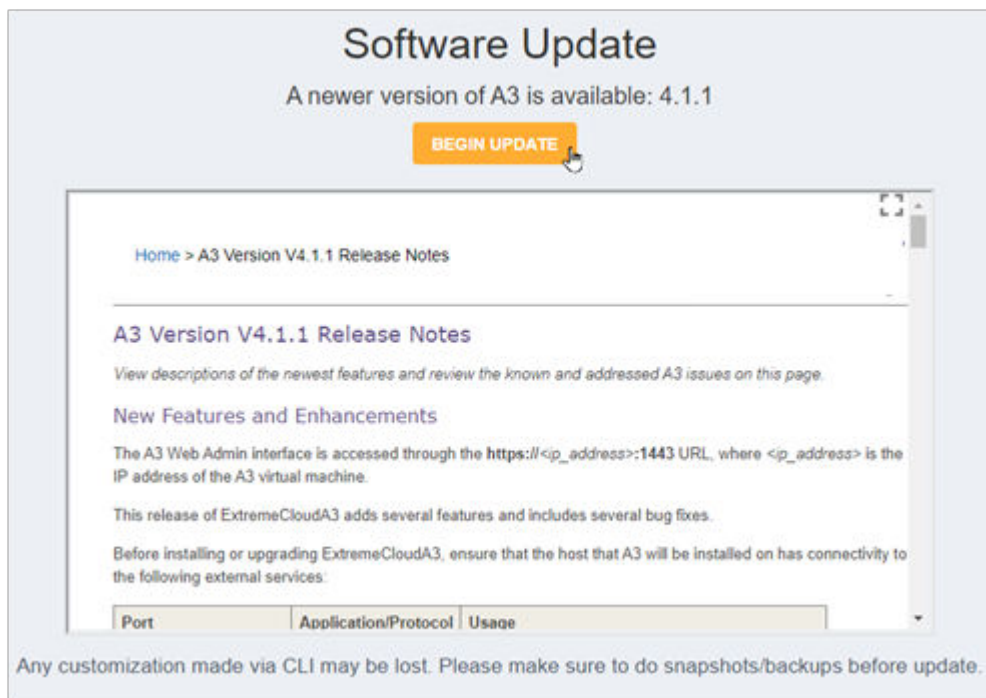


3. Select **Update software**.

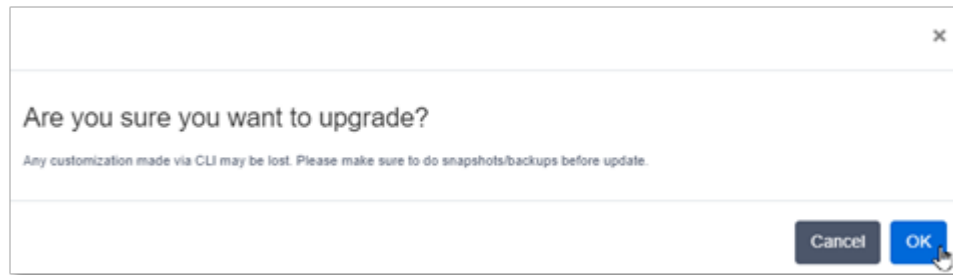


The Upgrade Software dialog opens.

4. Select **Begin Update**.



- When prompted, select **OK** to confirm the upgrade.



The upgrade proceeds.

- When the upgrade is complete, continue with [Create and Download the Configuration Backup](#) on page 10.

Create and Download the Configuration Backup

Back up the configuration of A3 4.1.1 and download the backup file.

About This Task

The following steps produce the *.tgz file that contains the backup configuration.

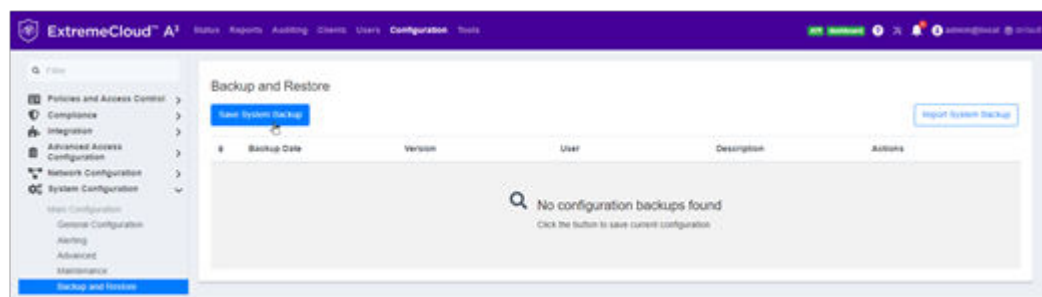


Note

The networking settings (such as IP address, network mask, and gateway) are not part of the backup. If you plan to reuse the existing IP addresses, then you should disconnect (shut down) the old A3 virtual machine before you apply the same IP address to the new A3 instance running 5.0.0.

Procedure

- Log in to the ExtremeCloud A3 user interface.
- Navigate to **Configuration > System Configuration > Main Configuration > Backup and Restore**.
- Select **Save System Backup**.



The Save Configuration dialog opens.

- Provide a description and select **Save**.

The backup process begins and messages display the progress. When the process is complete, the backup file is displayed in the Backup and Restore page.

5. Select **Download Backup**.



The `export*.tgz` file is downloaded through your web browser.

6. When the download is complete, continue with [Install Version 5.0.0 and Set Up Networking](#) on page 11.

Install Version 5.0.0 and Set Up Networking

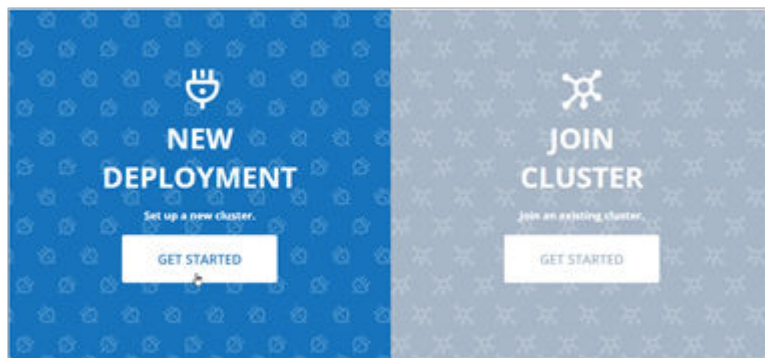
You deploy the new virtual machine with version 5.0.0 to your Hypervisor.

Before You Begin

The networking settings (such as IP address, network mask, and gateway) are not part of the backup. If you plan to reuse the existing IP addresses, then you should disconnect (shut down) the old A3 virtual machine before you apply the same IP address to the new A3 instance running 5.0.0.

Procedure

1. Install the software.
For more information, see the *Installation* chapter of the [A3 Installation and Usage Guide](#).
2. When installation is complete, navigate in your web browser to the ExtremeCloud A3 user interface at `https://<IP-address>:1443`, where `<ip-address>` is the IP address of the A3 virtual machine.
3. In the New Deployment pane, select **Get Started**.



- Provide new credentials (administrator email and password) for this new instance of A3 and then select **Next**.

Admin Email
admin@local

Password

Confirm Password

NTP Settings BACK NEXT

These credentials are temporary and will be overwritten when you restore the back-up configuration.

- When prompted, agree with the terms and conditions.
- Provide the host name, the VIP, the type, and any services for the interface, and then select **Next**.

Host Name
A3-member-A

Interfaces

NAME	IP ADDRESS	NETMASK	VIP	TYPE	SERVICES	VLAN
eth0	192.168.130.90	255.255.255.0	192.168.130.99	Manage...	RADI... x Portal x	+ Add VLAN

CANCEL NEXT

The ExtremeCloud IQ credentials dialog opens.

- Provide the admin user email and password for ExtremeCloud IQ and then select **Link with Extreme Cloud IQ Account**.

Cloud URL
https://extremecloudiq.com
Change the value only if local XIQ should be used.

Cloud Admin User
admin@example.com

Password
[Empty]

LINK WITH EXTREME CLOUD IQ ACCOUNT

CREATE AN EXTREME CLOUD IQ ACCOUNT

Continue without an Extreme Cloud Account

Setup proceeds and messages display the progress.

- When the initial setup is complete, continue with [Restore the Backup](#) on page 13.

Restore the Backup

Restore the backup from version 4.1.1 to the A3 virtual machine on which you installed 5.0.0.

About This Task

Restoration of the backup is available only when the A3 cluster consists of one virtual machine. Take the following steps to restore the backup that you created in [Create and Download the Configuration Backup](#) on page 10.

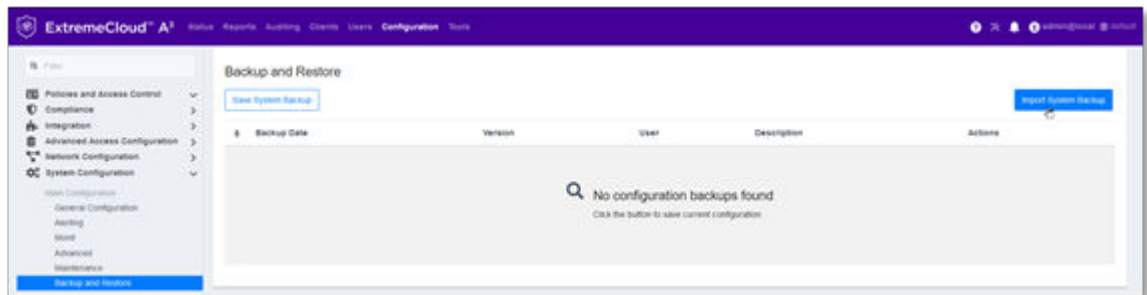


Note

The backup file (in .tgz format) that you restore must have the same file name as when it was exported. The fields in the file are exported based on the file name.

Procedure

1. Log in to the ExtremeCloud A3 user interface.
2. Navigate to **Configuration > System Configuration > Main Configuration > Backup and Restore**.
3. Select **Import System Backup**.



4. Select the backup file.
Alternatively, you can drag the file to the upload area.



- In the Actions column on the Backup and Restore page, select **Restore** for the backup file you imported.



The Restore System Backup dialog opens.



Note

If multiple NICs are shown in the dialog, you can change the mapping if you want.

- Select **Restore**.



The backup configuration is restored and you are logged out. Note that the log-in credentials that were part of the 4.1.1 backup were also restored.

- Refresh your browser and log in to the A3 interface again.
A3 5.0.0 is running, with the same configuration as your A3 4.1.1.
- Continue with [Form the New Cluster](#) on page 14.

Form the New Cluster

Create a cluster from multiple A3 virtual machines, including the one on which you restored the backup.

Before You Begin

Repeat [Install Version 5.0.0 and Set Up Networking](#) on page 11 for each A3 virtual machine that you want to add to the cluster.

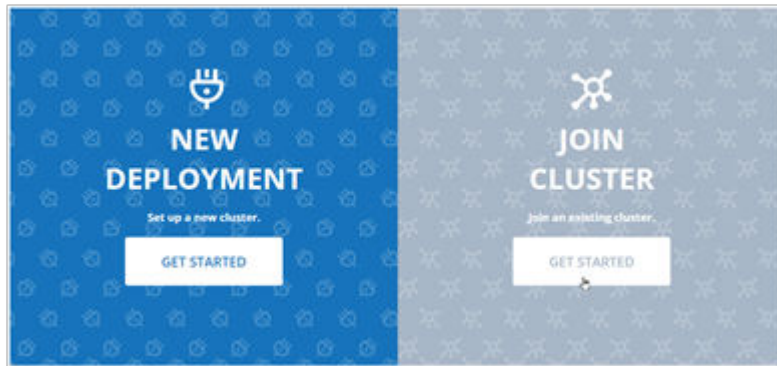
About This Task

A cluster must have an odd number of members, either 1, 3, or 5 A3 virtual machines.

Procedure

- In your web browser, navigate to the ExtremeCloud A3 user interface at `https://<IP-address>:1443`, where `<ip-address>` is the IP address of the A3 virtual machine on which you restored the configuration.

- In the Join Cluster pane, select **Get Started**.



- Provide the primary cluster IP address and administrator credentials, and then select **Join**.

 The image shows a form titled 'Cluster Primary'. It has three input fields: 'Cluster Primary' containing '192.168.130.90', 'Cluster Admin' containing 'admin@local', and 'Admin Password' containing '*****'. Below the fields are two buttons: 'BACK' and 'JOIN'. A mouse cursor is clicking on the 'JOIN' button.

- Provide the host name for the cluster member and then select **Next**.

 The image shows a form titled 'Host Name' with a text input field containing 'A3-B'. Below it is a table titled 'Interfaces' with the following data:

NAME	IP ADDRESS	NETMASK	VIP	TYPE	SERVICES
eth0	192.168.130.89	255.255.255.0	192.168.130.99	Management	Portal, RADIUS

 At the bottom right of the form are two buttons: 'CANCEL' and 'NEXT'. A mouse cursor is clicking on the 'NEXT' button.

The joining process proceeds and messages display the progress.

- Repeat steps 1 through 4 for each virtual machine that you want to add to the cluster.
In step 1, navigate to the user interface on the virtual machine you are adding.
- When all A3 virtual machines are added to the cluster, continue with [Reallocate Licenses to the New Cluster](#) on page 16.

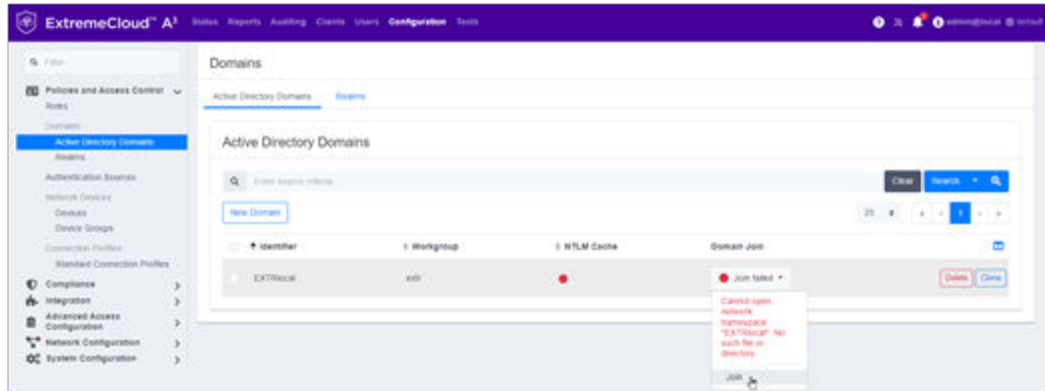
Join the Master and Cluster Members to Active Directory

If your A3 environment uses Active Directory, then each member of the new cluster must join Active Directory.

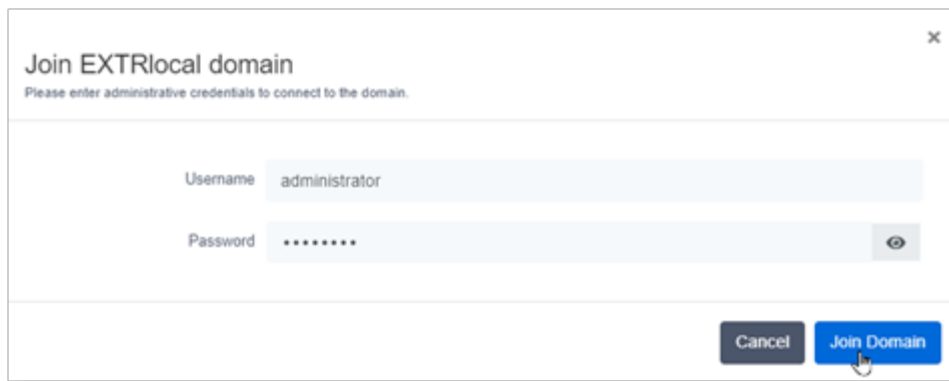
Procedure

- Log in to the ExtremeCloud A3 user interface for a cluster member.

- Navigate to **Configuration > Policies and Access Control Roles > Domains > Active Directory Domains**.



- In the **Domain Join** field, select **Join**.
- Provide the user name and password for the domain and then select **Join Domain**.



- Repeat steps 1 through 4 for each remaining cluster member.

Reallocate Licenses to the New Cluster

You reallocate your XIQ-NAC licenses from the cluster that is running version 4.1.1 to the cluster that is running 5.0.0.

About This Task

Although you have 90 days to reallocate your licenses, as a best practice reallocate them when you create the new cluster.

Licenses are assigned to a Cluster ID in ExtremeCloud IQ. The new cluster has a new Cluster ID.

Procedure

- Log in to ExtremeCloud IQ.

2. Select your profile and navigate to **Global Settings > Administration > License Management > NAC Entitlements**.

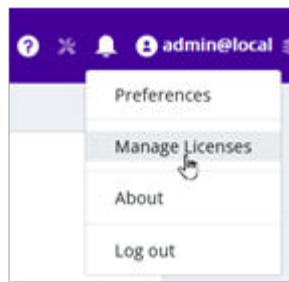
NAC Entitlements

Total NAC entitlements: 1000
Available NAC entitlements: 0

ENTITLED SERIAL NUMBER	NAME	ALLOCATED %	ALLOCATED ENTITLEMENTS
[REDACTED]	A3 [REDACTED]	0	0
[REDACTED]	A3 [REDACTED]	100	1000

CANCEL SAVE

3. Change the values of the fields in the **Allocated %** column to reallocate licenses as appropriate for your A3 environment.
4. Select **Save**.
5. (Optional) Verify the license allocation.
 - a. Log in to the ExtremeCloud A3 user interface.
 - b. Select your profile and then select **Manage Licenses**.

**Tip**

The Manage Licenses page also displays the Cluster ID.