



CE1000 Deployment Guide

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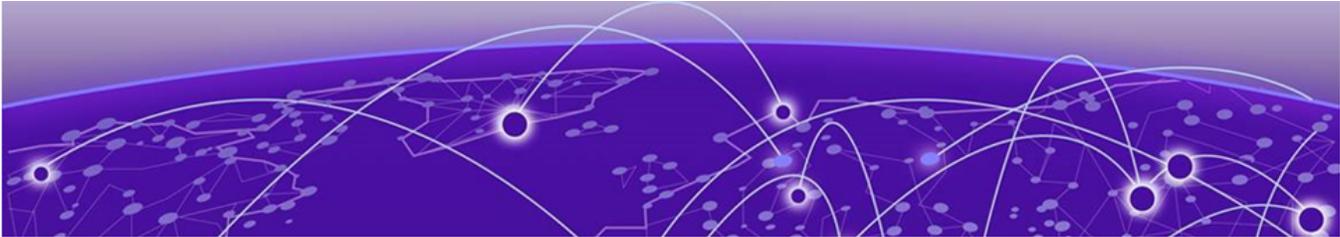
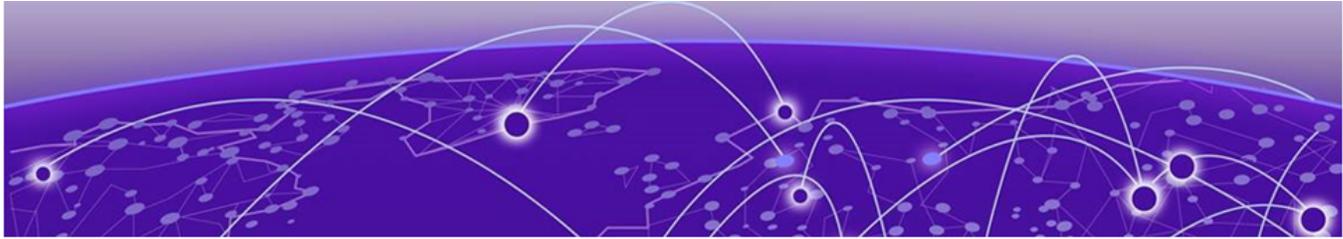


Table of Contents

| | |
|--|-----------|
| Preface..... | 4 |
| Text Conventions..... | 4 |
| Documentation and Training..... | 5 |
| Open Source Declarations..... | 6 |
| Training..... | 6 |
| Help and Support..... | 6 |
| Subscribe to Product Announcements..... | 7 |
| Send Feedback..... | 7 |
| About CE1000 Container Controller..... | 8 |
| CE1000 Characteristics and Limitations..... | 9 |
| Universal Compute Platform (UCP)..... | 9 |
| Installation Task Flow..... | 10 |
| Download the Application Image File..... | 10 |
| Upload the Application Image File to the Universal Compute Platform..... | 11 |
| Install the Application..... | 11 |
| Deploy the Application..... | 11 |
| Generate the Activation License..... | 12 |
| Index..... | 13 |



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 Extreme Networks 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 |
| <i>Words in italicized type</i> | 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 text</i> | 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 [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 articles, white papers, and case studies

Open Source Declarations

Some software files have been licensed under certain open source licenses. Information is available on the [Open Source Declaration](#) page.

Training

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit the [Extreme Networks Training](#) page.

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 2800. 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.

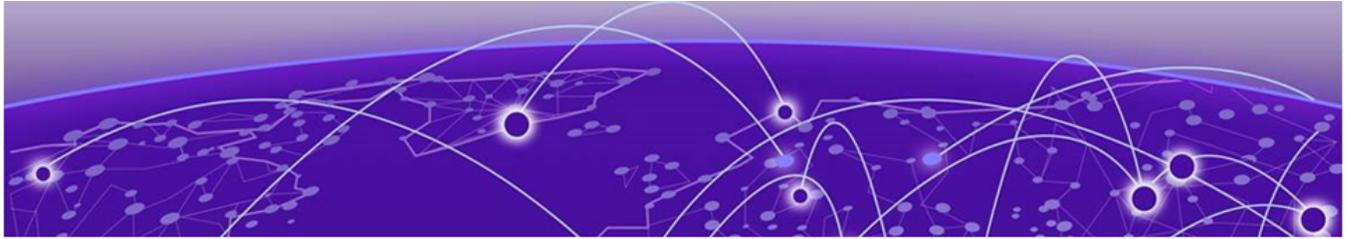
Send Feedback

The User Enablement 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, email us at documentation@extremenetworks.com.

Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.

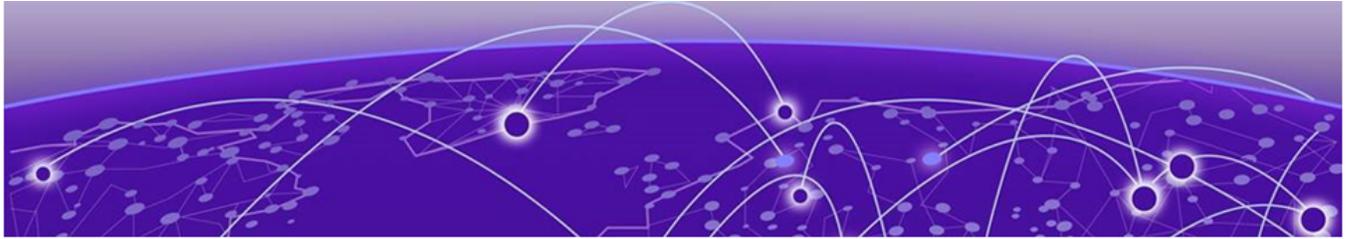


About CE1000 Container Controller

This guide provides the steps needed to install, and deploy the CE1000 container controller application for Universal Compute Platform.

The CE1000 is a KVM-based VM platform intended to run in a container on the Universal Compute Platform 1130C platform. CE1000 replaces the E1120 appliance with similar functionality and system limits as the E1120.

- Standalone: 250 APs and 2000 users
- Availability: 500 APs and 4000 users (any client distribution between controllers)



CE1000 Characteristics and Limitations

CE1000 characteristics:

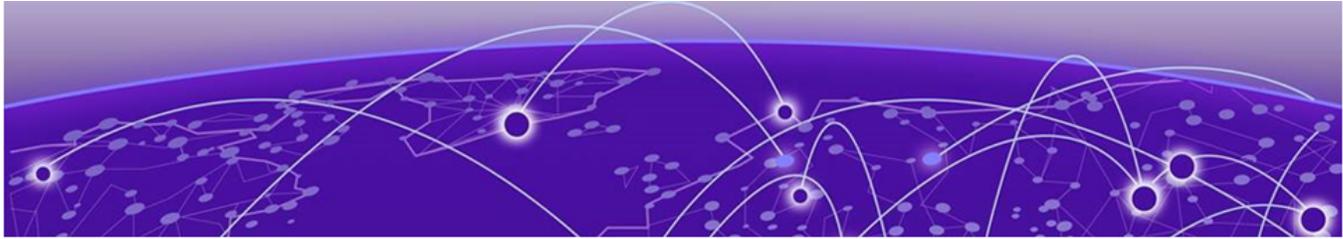
- CPU: 8 CPUs
- RAM: 16 GB
- HDD: 120 GB
- Management Port: 1Gbps (built-in e1000 driver), fixed configuration connected to Kubernetes
- Data Ports: 4 x 1Gbps (10/100/1000 Mbps) RJ45 (ixgbevf module), direct NIC H/W access over VF (SR-IOV)
- LAG Ports: 2
- USB: not supported
- Serial port: over "virtctl console" on the host or through Universal Compute Platform user interface
- Watchdog: Intel 6300ESB
- Misc:
 - Date preserved in RTC chip is UTC format
 - Jumbo Frame Support
 - Hardware Encryption Support (CRC32/IPSec)

Software image file extensions:

- dke: the main software installation image
- rdke: the rescue partition image
- qcow2: GD image (zlib compressed QCOW2)

Universal Compute Platform (UCP)

For more information about the Universal Compute Platform (UCP), see the [Universal Compute Platform](#) documentation.



Installation Task Flow

- [Download the Application Image File](#) on page 10
- [Upload the Application Image File to the Universal Compute Platform](#) on page 11
- [Install the Application](#) on page 11
- [Deploy the Application](#) on page 11
- [Generate the Activation License](#) on page 12

Installing the CE1000 application in a Universal Container deployment involves the following tasks.

Table 4: Installation Task Flow

| | Procedure | Description |
|---|--|---|
| 1 | Download the CE1000 Application Image File | Download the CE1000 application image file from the Extreme Networks support portal Download area. |
| 2 | Upload the CE1000 Application Image File to the Universal Compute Platform | Upload an engine application image and see it displayed below the Choose Image File pane. Optionally delete image files. |
| 3 | Install the Application Engine | Install the engine application and view confirmation notice. |
| 4 | Deploy the Application Image File | After you have uploaded the CE1000 application image file and installed the application image, deploy the application image file to a node. |
| 5 | Generate the Activation License | All customers must generate and install an activation license. After you install the CE1000 container, use this procedure to generate and install the activation package. |

Download the Application Image File

Download the CE1000 application image file from the Extreme Networks [support portal](#) Download area.

1. Go to the Extreme Networks [support portal](#) to obtain the application image.
2. Select **Downloads** and log in.
3. Navigate to the application image and select it.

The selected image downloads to your local system.

Upload the Application Image File to the Universal Compute Platform

To upload an engine application image, take the following steps:

1. From the Universal Compute Platform, go to **Engines > Image Management**.
2. Choose one of the following:
 - Select the **Choose Image File** pane and navigate to the image file. Or,
 - Drag and drop the image file onto the **Image File** pane.

A list of uploaded image files is displayed below the **Choose Image File** pane.

To delete an uploaded image, select the check box next to the image file. Then, select **Delete**.

To refresh the image file list, select **Refresh**.

Install the Application

To install the engine application, take the following steps:

1. In the Universal Compute Platform, go to **Engines > Installation**.
2. From the pane for the CE1000 application, select **Install**.



Note

If you have not yet uploaded the CE1000 application image file, you will be prompted to do so.



Note

The installation time will depend on a variety of factors, be prepared for it to take some time.

A confirmation notice is displayed after installation is complete. Only one instance is required for the cluster.

Deploy the Application

After you have uploaded the CE1000 application image file and installed the application image, deploy the application to a node.

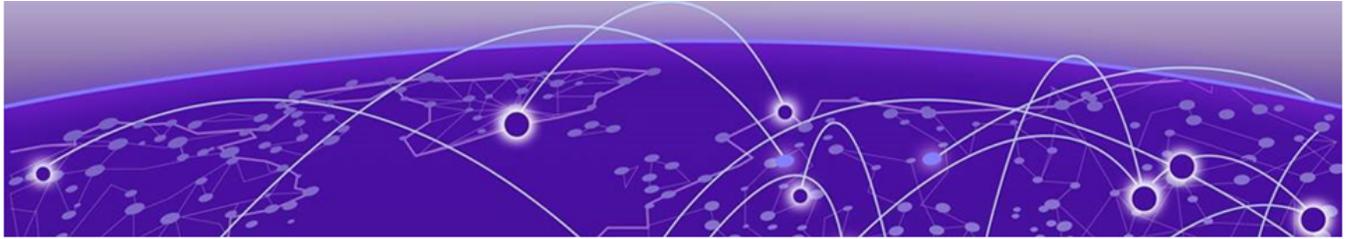
To deploy the application:

1. In Universal Compute Platform, go to **Engines > Installation**.
2. Select the CE1000 engine instance link For example, "ce1000 #1".
3. Select **Deploy**.
4. Select **Save**.

Generate the Activation License

All customers must generate and install an activation license. After you install the CE1000, use this procedure to generate and install the activation package.

1. Obtain the Locking ID of the CE1000 instance:
 - a. Log in to the CE1000 instance.
 - b. Under **Upload Activation License**, copy the **Serial Number (Locking ID)** value.
2. Obtain the activation file:
 - a. Log in to the [Extreme Networks Support Portal](#).
 - b. Go to **Assets > Licenses Home** and select the CE1000 Voucher ID line item from the list.
 - c. On the **Voucher Details** page, select **Generate Activation Key**.
 - d. Provide the serial number for the CE1000 activation.
 - e. Select the box to accept **Terms and Conditions** and select **Submit** to generate the activation file.
 - f. Download the activation file.
3. Install the activation file on CE1000:
 - a. If you signed out of CE1000, sign back in.
 - b. Upload the license file to the **Upload Activation License** pane of CE1000.



Index

A

about the CE1000 container controller 8
activation 12
announcements 6, 7

C

characteristics 9
conventions
 notice icons 4
 text 4

D

deployment 11
documentation
 feedback 7
 location 5, 6
download image file 10

F

feedback 7

I

installation 11
installation steps 10

L

licensing 12
limitations 9

N

notices 4

P

product announcements 6, 7

S

specifications 9
support, *see* technical support
support portal 10, 12

T

technical support
 contacting 6, 7

U

UCP 11
Universal Compute Platform 11
upload image file 11

W

warnings 4