# Universal Compute Platform v5.08.01.007 Release Notes

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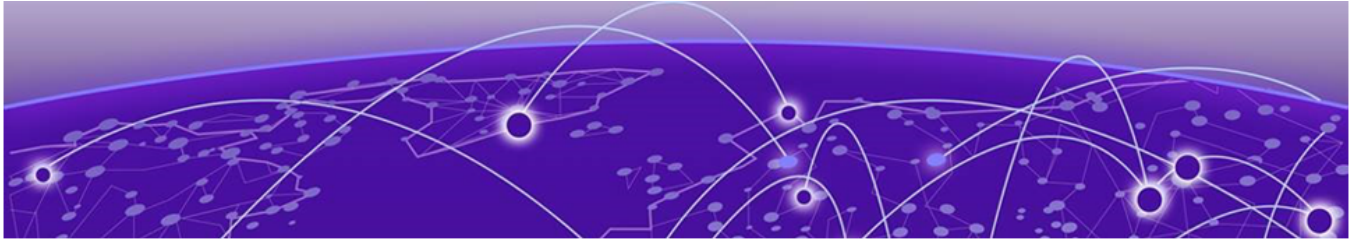

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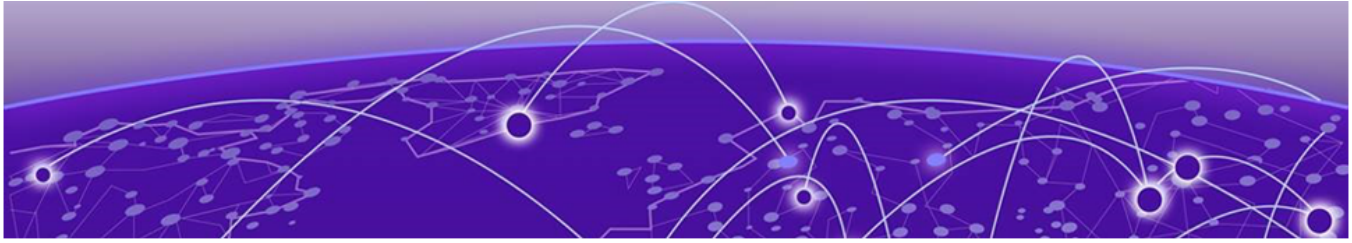
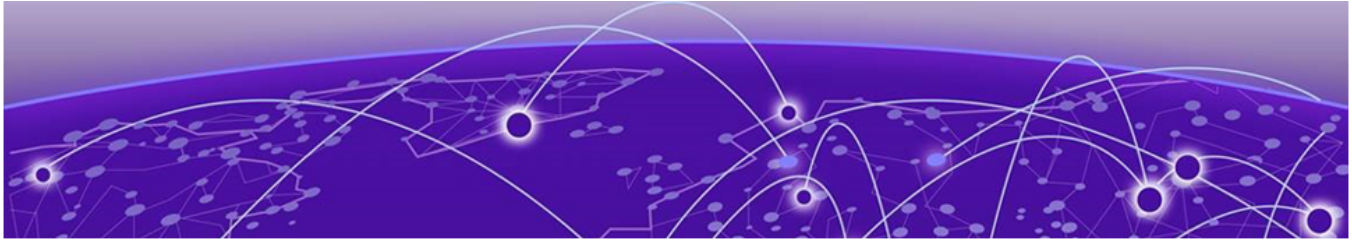


# Abstract

This release notes document for Universal Compute Platform (UCP) v5.08.01 provides detailed updates on new features, supported hardware, known issues, and critical enhancements in the platform's orchestration framework. The UCP supports container-based orchestration, facilitating deployment of applications such as ExtremeCloud IQ in both self-orchestrated and managed environments. Key features introduced in this release include support for the 2130C hardware appliance, advanced security configuration options, such as the ability to enable or disable persistent connections to the ExtremeCloud network, and an integrated deployment readiness assessment tool to validate system configurations prior to deployment. It also outlines hardware compatibility across different orchestration models, with updates on resolving an issue related to the orchestration activation process. Additionally, the document provides detailed guidance on the technical specifications, installation, configuration, and troubleshooting of the ExtremeCloud Edge platform, ensuring streamlined deployment and operational efficiency for system administrators.



# Release Notes



The Universal Compute Platform forms the basis for ExtremeCloud Edge deployment models, providing a container-based orchestration framework, in an Extreme qualified and validated high performance hardware configuration. The framework natively supports clustering, distributed file system and orchestration through Kubernetes, providing a highly resilient application operational base. CaaS is a cloud service model that allows users to manage and deploy containers, applications, and clusters through container-based virtualization.

The Universal Compute Platform offers flexible application orchestration, enables self-guided application installation, management, and full SaaS deployment of select applications such as ExtremeCloud™ IQ.

## New Features

The following table lists 5.08.01 features per deployment type.

**Table 1: New Features per Deployment Type**

| | Self-Orchestration | Managed Orchestration |
|---|---|---|
| 5.08.01 Features | • Support for 2130C Hardware Appliance | • Non-Persistent Connection to ExtremeCloud<br>• Readiness Assessment for ExtremeCloud IQ Installation |

The following table provides feature descriptions for new features in v5.08.01.

**Table 2: Feature descriptions for v5.08.01**

| Feature | Description |
|---|---|
| XCACP-526 | Support for 2130C Hardware Appliance<br>Universal Compute Platform now supports the 2130C hardware appliance for medium-sized deployments of ExtremeCloud Edge - Self-Orchestration. The 2130C support includes:<br>• Two 2.0 USB ports<br>• Two 3.0 USB ports<br>• One DB9 Console port<br>• 2 x 10 Gbps ICC Ports/RJ45<br>• 2 x 10 Gbps Data Ports/RJ45<br>• 2 x 25 Gbps Data Ports/SFP28<br>The 2130C supports up to one instance of ExtremeCloud IQ Controller or two instances of ExtremeCloud Tunnel Concentrator.<br>Note: The 2130C appliance does not support ExtremeCloud Edge - Managed Orchestration deployments. |
| XCACP-637 | Non-Persistent Connection to ExtremeCloud<br>The new **CloudOps Management** setting provides control over the state of the connection that the cluster uses to receive application firmware updates.<br>By default, this connection is persistent (set to ON). However, with this update, you can toggle the state of the connection to OFF.<br>Note:<br>A persistent connection is required, and is mandatory, during software maintenance windows. If the state was changed to OFF, please ensure that the state is re-enabled for upcoming upgrade/Maintenance windows. Extreme Networks provides advanced notice on upcoming firmware upgrade maintenance windows at least 1 week in advance. However, such access may also be required during service escalation resolution or pre-emptive adjustments.<br>For more information, see *ExtremeCloud Edge - Managed Orchestration Deployment Guide*. |
| XCACP-736 | Readiness Assessment for ExtremeCloud IQ Installation<br>The Readiness Assessment helps you check for errors in your settings before you configure your system for an ExtremeCloud Edge - Managed Orchestration deployment. Run the assessment immediately prior to installing the ExtremeCloud IQ engine. The assessment does the following:<br>• Pulls service groups and ports for inbound and outbound connections.<br>• Lets you enter the IP addresses that you plan to deploy.<br>• Tests your configuration and reports the results.<br>If you have errors, reconfigure your system and then run the assessment again. Once you receive a PASS, you can proceed to register your cluster with your Public ExtremeCloud IQ account. |

**Table 2: Feature descriptions for v5.08.01 (continued)**

| Feature | Description |
|---|---|
| | Registering the cluster provides basic connectivity information from which CloudOPS can then proceed with Extreme Cloud application(s) deployment.<br><br>**Note:** Make sure that your firewall is configured to allow connectivity to the assessment server at `ucp0-console.extremecloudiq.com`.<br><br>For more information, see *ExtremeCloud Edge - Managed Orchestration Deployment Guide*. |

# Supported Hardware for Self-Orchestration

ExtremeCloud Edge - Self-Orchestration deployments of Universal Compute Platform support the following hardware appliances. Depending on the hardware, you may be able to install more than one instance of an application on a node.

**Table 3: Supported Hardware for ExtremeCloud Edge - Self-Orchestration**

| Hardware Appliance | Details |
|---|---|
| 1130C | Ports:<br>• 2 x 1 Gbps ICC Ports/RJ45<br>• 4 x 1 Gbps Data 1-4/RJ45<br>Self-Orchestration deployment application capacity:<br>• Tunnel Concentrator—One instance per node<br>• ExtremeCloud IQ Controller (CE1000)—One instance per node<br>For additional server specifications, along with hardware installation information, see Extreme Networks Universal Compute Platform Appliance 1130C Installation Guide. |
| 2130C | Ports:<br>• 2 x 10 Gbps ICC Ports/RJ45<br>• 2 x 10 Gbps Data Ports 1-2/RJ45<br>• 2 x 25 Gbps Data Ports 3-4/SFP28<br>Self-Orchestration deployment application capacity:<br>• Tunnel Concentrator—Two instances per node<br>• ExtremeCloud IQ Controller (CE2000)—One instance per node<br>For additional server specifications, along with hardware installation information, see Extreme Networks Universal Compute Platform 2130C Installation Guide (available in fall 2024). |
| 4120C/4120C-1 | Ports:<br>• 2 x 1/10 Gbps ICC Ports/RJ45<br>• 2 x 1/10 Gbps Data 1-2/RJ45<br>• 2 x 1/10/25/40/50 Gbps Data 3-4/QSFP<br>Self-Orchestration deployment application capacity:<br>• Tunnel Concentrator—Up to three instances per node.<br>• ExtremeWireless WiNG (CX9000)—One instance per node<br>For additional server specifications, along with hardware install information, see Extreme Networks Universal Compute Platform Appliance 4120C Installation Guide. |

**Note**
Support is for a single application type per node. Application mixing on a single appliance is not supported.

# Supported Hardware for Managed Orchestration

ExtremeCloud Edge - Managed Orchestration deployments of Universal Compute Platform support the following hardware appliances.

**Table 4: Supported Hardware for ExtremeCloud Edge - Managed Orchestration**

| Hardware Appliance | Details |
|---|---|
| 4120C-1 | Ports:<br>• 2 x 1/10 Gbps ICC Ports/RJ45<br>• 2 x 1/10 Gbps Data 1-2/ RJ45<br>• 2 x 1/10/25/40/50 Gbps Data 3-4/QSFP<br>For additional server specifications, along with hardware install information, see Extreme Networks Universal Compute Platform Appliance 4120C Installation Guide. |

# Documents

Refer to the following documents for information on Universal Compute Platform.

### Hardware Appliance Installation Documents

- Extreme Networks Universal Compute Platform Appliance 1130C Installation Guide —Describes how to install the 1130C physical hardware appliance to support the Universal Compute Platform.
- Extreme Networks Universal Compute Platform 2130C Installation Guide (available in fall 2024) —Describes how to install the 2130C physical hardware appliance to support the Universal Compute Platform.
- Extreme Networks Universal Compute Platform Appliance 4120C Installation Guide —Describes how to install the 4120C or 4120C-1 physical hardware appliance to support the Universal Compute Platform.

### Universal Compute Platform Documents

- ExtremeCloud Edge – Self-Orchestration Deployment Guide for Universal Compute Platform—Describes how to install and deploy a Self-Orchestrated standalone deployment of ExtremeCloud Edge for Universal Compute Platform (4120C or 1130C).
- ExtremeCloud Edge – Managed Orchestration Deployment Guide for Universal Compute Platform—Describes how to install and deploy a Managed Orchestration clustered deployment of ExtremeCloud Edge for Universal Compute Platform (4120C-1 only).
- Universal Compute Platform User Guide—Describes how to configure, maintain, and upgrade Universal Compute Platform.

# Resolved Issues

The following issues have been resolved in v5.08.01.

| Issue | Description |
|---|---|
| XCACP-738 | 1130C Fails to Create Cluster due to Empty VRRP in ICC Interface |

# Known Issues

## Activation Required Message with Factory-Default Versions

An issue exists with the factory-default version of Universal Compute Platform. When unpacking your system, you may see an "Activation Required" message along with Locking ID. The message instructs you to select your license PKI file for activation. Ignore this message as your system will not lock up. This issue has been fixed with newer versions of Universal Compute Platform.

## Kubernetes Certificate Expiration and Renewal for Long-Running Nodes

The ExtremeCloud Edge platform leverages Kubernetes at its core for managing the orchestration of applications,whether in a single node or multi-node cluster. When Kubernetes is installed or upgraded, the framework automatically self-generates an operational certificate. This certificate is valid for one calendar year following the installation date. You must check certificate validity periodically to ensure that it does not expire. Certificate expiratation leads to the halting of the Kubernetes platform and the functionality that the installed applications provide.

Automated monitoring and refreshing of these certificates is a task in progress that will be addressed in a future release.

In the interim, for systems that have been installed and running for a while, we advise you to validate the state of certificates and their expiration. If any certificates are expiring within 90 days, complete the following procedure to refresh them. For multi-node cluster installations, complete the procedure on each member node of the cluster.

### Refresh Kubernetes Certificates

For each cluster node, open a terminal connection to the node and run the following shell commands:

1. Change the directory by running the command `cd ~/.kube`.
2. Run the command `kubeadm certs check-expiration`.

   The command output displays the list of certificates and certificate authorites, along with expiration dates and the number of days before expiration (in the **RESIDUAL TIME** field).
3. If any certificates show a **RESIDUAL TIME** that is less than 90 days, renew all certificates by running the command `kubeadm certs renew all`.

After renewing certificates, All certificates should show 364 days remaining.

4. Run this procedure on each of the other cluster nodes.

## 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

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