



Cisco Compute Hyperconverged with Nutanix - Software Support and Field Installation Guide

First Published: 2025-05-15

Americas Headquarters

Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 USA http://www.cisco.com Tel: 408 526-4000

800 553-NETS (6387) Fax: 408 527-0883



CONTENTS

CHAPTER 1

Cisco Compute Hyperconverged with Nutanix Support Guidelines 1

Cisco Compute Hyperconverged with Nutanix Support Guidelines 1

CHAPTER 2

Cisco Compute Hyperconverged Server Firmware Guidelines 3

Major Release of Cisco Hyperconverged Server Firmware 3

Nutanix AOS Support Guidelines 3

Nutanix AHV Support Guidelines 3

VMware ESXi Support Guidelines 3

Where To Find Interoperability Documentation 4

CHAPTER 3

Deployment Methods and Instructions 5

Intersight Standalone Mode (ISM) 5

Intersight Managed Mode (IMM) 5

UCS Managed Mode (UMM) 6

Communications, services, and additional information ?

Cisco Bug Search Tool vii

Documentation feedback vi

Full Cisco Trademarks with Software License ?



Cisco Compute Hyperconverged with Nutanix Support Guidelines

• Cisco Compute Hyperconverged with Nutanix Support Guidelines, on page 1

Cisco Compute Hyperconverged with Nutanix Support Guidelines

Cisco Compute Hyperconverged with Nutanix is a hyperconverged infrastructure solution integrating Cisco's best-in-class compute (Cisco Unified Computing System), datacenter networking, and SaaS infrastructure management platform (Cisco Intersight) with market-leading hyperconverged software from Nutanix (Nutanix Cloud Platform).

The Cisco Hyperconverged with Nutanix family of appliances delivers pre-configured UCS servers that are ready to be deployed as nodes to form Nutanix clusters in a variety of configurations. Each server appliance contains three software layers:

- · UCS server firmware
- Hypervisor (Nutanix AHV or VMware ESXi)
- Hyperconverged software (Nutanix AOS)

Interoperability among these layers is ensured by rigorous joint validation between Cisco and Nutanix, and is governed by a time-based release model that aims to deliver a stable and feature-rich product in a reliable and predictable cadence.

This document provides guidance on support among server firmware, hypervisor, and hyperconverged software, and where you can find the most up-to-date compatibility and interoperability information for the whole solution.

The information contained in this document is informational only and subject to change. Cisco recommends that you check the Cisco Compute Hyperconverged with Nutanix hardware and software compatibility information at https://ucshcltool.cloudapps.cisco.com/public/ to ensure that you are reviewing the most current supported hardware and software compatibility information.

Cisco Compute Hyperconverged with Nutanix Support Guidelines



Cisco Compute Hyperconverged Server Firmware Guidelines

- Major Release of Cisco Hyperconverged Server Firmware, on page 3
- Nutanix AOS Support Guidelines, on page 3
- Nutanix AHV Support Guidelines, on page 3
- VMware ESXi Support Guidelines, on page 3
- Where To Find Interoperability Documentation, on page 4

Major Release of Cisco Hyperconverged Server Firmware

In general, Cisco Compute Hyperconverged with Nutanix supports a select subset of UCS server firmware releases. Cisco periodically (approximately once every 6 months) qualifies the latest recommended version of UCS server firmware version. However, based on critical fixes, Cisco may qualify new server firmware thereby resetting the 6-month clock.

Nutanix AOS Support Guidelines

When a new AOS version is released, the latest UCS server firmware qualified for the Cisco Compute Hyperconverged with Nutanix solution is regression tested by Nutanix with the last qualified UCS server firmware version. If you are running a version of firmware not listed as supported by the version of AOS you want to upgrade to or deploy with, then you will need to upgrade or downgrade your server firmware.

Nutanix AHV Support Guidelines

When a new AHV version is introduced by Nutanix, it is regression tested with UCS server firmware last qualified with the Cisco Hyperconverged with Nutanix solution.

VMware ESXi Support Guidelines

• ESXi Major Releases, for example, ESXi 8.0, 9.0: The goal is to qualify a new ESXi major version within 90 days of general availability.

- ESXi Update Release, for example, ESXi 8.0 U2, U3: The goal is to qualify a new ESXi update version within 45 days of general availability.
- Deployment Methods and Instructions

Where To Find Interoperability Documentation

- For interoperability between UCS server platform, UCS server firmware, and Nutanix AOS software coupled with hypervisor software, refer to the UCS HCL Tool: https://ucshcltool.cloudapps.cisco.com/public/
- For software interoperability among Nutanix Cloud Platform software modules, refer to the Nutanix Compatibility and Interoperability Matrix: https://portal.nutanix.com/page/documents/compatibility-interoperability-matrix
- Cisco UCS Manager GUI User Guides: https://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-manager/products-installation-and-configuration-guides-list.html
- For interoperability between UCS server firmware and UCS Manager Infrastructure Software (A Bundle), refer to the Cisco UCS Manager Firmware Management Guide: https://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-manager/products-installation-guides-list.html



Deployment Methods and Instructions

- Intersight Standalone Mode (ISM), on page 5
- Intersight Managed Mode (IMM), on page 5
- UCS Managed Mode (UMM), on page 6

Intersight Standalone Mode (ISM)

In an ISM deployment, nodes are connected to two Top-of-Rack (ToR) switches and do not require Fabric Interconnects (FIs). Only rack-mount servers are supported. Servers are centrally managed using Cisco Intersight.

- We recommend deploying three nodes for a standard Nutanix production cluster.
- Single node and two-node clusters can be deployed in Edge and branch locations with an existing high-performance network fabric.

For detailed cluster deployment instructions using ISM, see the Cisco Compute Hyperconverged with Nutanix ISM Field Guide.

Intersight Managed Mode (IMM)

In an IMM deployment, nodes are connected to either two Cisco UCS® 6400 Series FIs or two Cisco UCS 6500 Series FIs. Both nodes and FIs are managed from Intersight using SaaS, Private Virtual Appliance (PVA), or Connected Virtual Appliance (CVA):

- Both C series rack mount and modular X-series servers are supported.
- We recommend deploying three nodes for a standard Nutanix production cluster.
- Single node and two-node clusters can be deployed in Edge and branch locations.

For detailed deployment instructions using IMM, see the Cisco Compute Hyperconverged with Nutanix IMM Field Guide.

UCS Managed Mode (UMM)

In a UMM deployment, nodes are connected to either two Cisco UCS® 6400 Series FIs or two Cisco UCS 6500 Series FIs and managed as a single system using UCS Manager.



Note

UMM is a legacy deployment method. We highly recommended the ISM or IMM deployment methods.

- We recommend deploying three nodes for a standard Nutanix production cluster.
- One-node and two-node clusters are not supported with UMM.

To deploy the servers using UMM, see the Cisco Compute Hyperconverged with Nutanix UCS Managed Mode Field Guide.

- To receive timely, relevant information from Cisco, sign up at Cisco Profile Manager.
- To get the business impact you're looking for with the technologies that matter, visit Cisco Services.
- To submit a service request, visit Cisco Support.
- To discover and browse secure, validated enterprise-class apps, products, solutions, and services, visit Cisco DevNet.
- To obtain general networking, training, and certification titles, visit Cisco Press.
- To find warranty information for a specific product or product family, access Cisco Warranty Finder.

© 2023 Cisco Systems, Inc. All rights reserved.

Cisco Bug Search Tool

Cisco Bug Search Tool (BST) is a gateway to the Cisco bug-tracking system, which maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. The BST provides you with detailed defect information about your products and software.

Documentation feedback

To provide feedback about Cisco technical documentation, use the feedback form available in the right pane of every online document.

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental

All printed copies and duplicate soft copies of this document are considered uncontrolled. See the current online version for the latest version.

Cisco has more than 200 offices worldwide. Addresses and phone numbers are listed on the Cisco website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/c/en/us/about/legal/trademarks.html. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)

© 2023 Cisco Systems, Inc. All rights reserved.