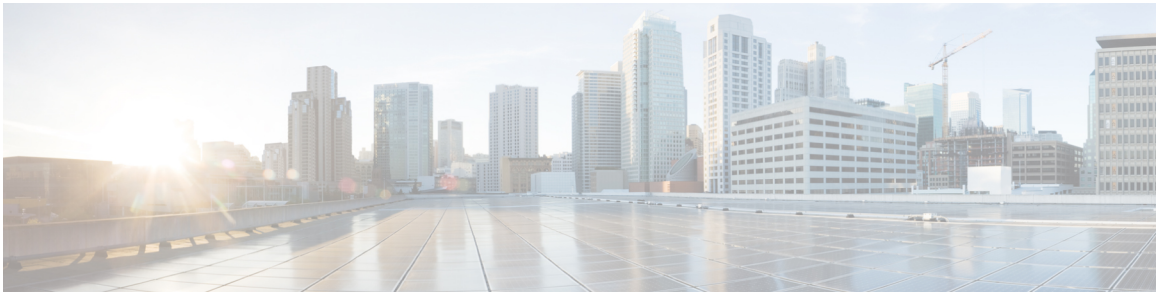


Cisco Compute Hyperconverged with Nutanix - Software Support and Field Installation Guide

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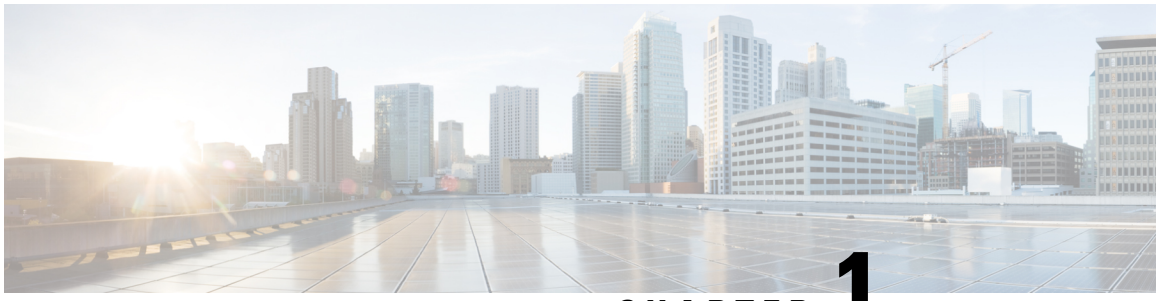
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CHAPTER 1

Cisco Compute Hyperconverged with Nutanix Support Guidelines

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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:

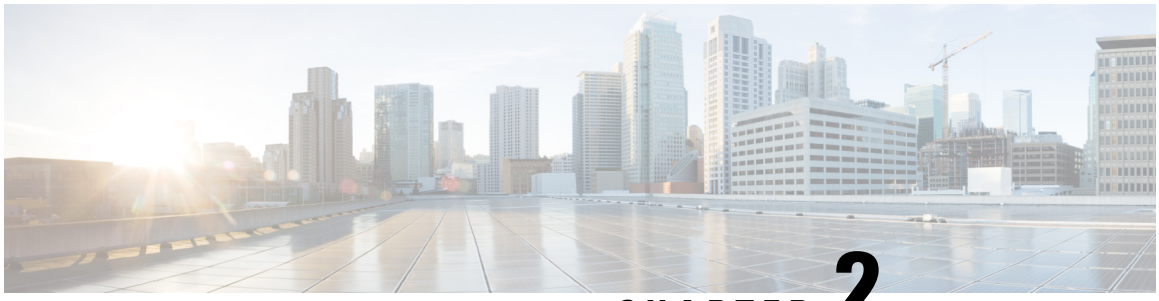
- UCS server firmware
- Hypervisor (Nutanix AHV or VMware ESXi)
- Hyperconverged software (Nutanix AOS)

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



CHAPTER 2

Cisco Compute Hyperconverged Server Firmware Guidelines

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- VMware ESXi Support Guidelines, on page 3
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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.

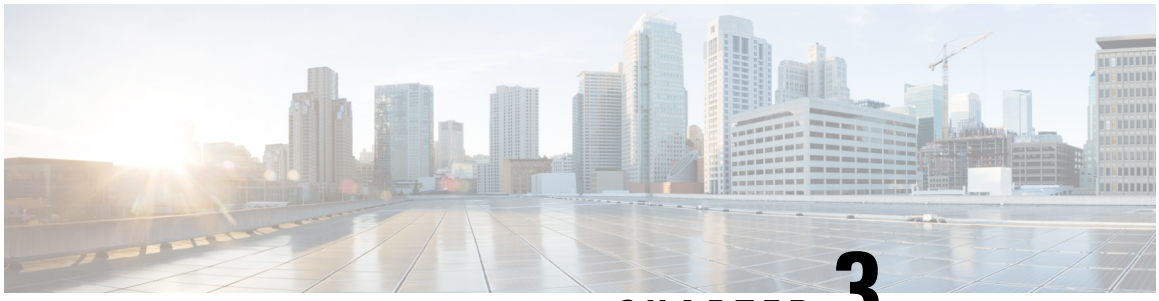
VMware ESXi Support Guidelines

- **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



CHAPTER 3

Deployment Methods and Instructions

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

FlashStack with Nutanix Installation Field Guide

FlashStack with Nutanix is a jointly validated, modular infrastructure solution that combines Cisco UCS compute, Nutanix Cloud Platform, and Pure Storage FlashArray into a single, production-ready architecture.

This deployment model uses Intersight Managed Mode (IMM) for Cisco UCS and integrates Nutanix compute-only clusters with external Pure Storage FlashArray storage over NVMe/TCP. It is the recommended installation path for customers deploying FlashStack with Nutanix.

The Cisco FlashStack with Nutanix Installation Field Guide provides end-to-end guidance, including:

- Architecture overview and supported configurations
- Network and storage connectivity design
- Step-by-step installation using Nutanix Foundation Central
- Attaching Nutanix clusters to Pure Storage FlashArray

For detailed instructions, see the Cisco FlashStack with Nutanix Installation Field Guide.

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.

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