Cisco Virtualization Guide for Cisco On-premises Calling Applications

Published Date: 2026-10-13

© 2026 Cisco and/or its affiliates. All rights reserved.

Contents

About the Documentation 3
Change History 3
New and Changed Information 3
Introduction to Supported Virtualization Environments 4
VMware vSphere ESXi (standalone) vs. VVF / VCF 9 4
Nutanix AHV 5
Cisco NFVIS-for-UC (Network Function Virtualization Infrastructure Software) 5
Applicable Applications and Versions 6
Physical Hardware Categories 6
Unsupported Infrastructure 7
General Requirements 8
Recommended Design Workflow 8
In a Nutshell 9
Inter-application Compatibility 10
Per-Application Design 11
Per-Application Derive Virtual Machine (VM) count/specifications 12
Application/Hypervisor Compatibility 13
VM Placement 14
Required Hardware Specification 15
Bill of Materials (BOMs) 16
Virtualization Requirements for VMware vSphere ESXi 17
Virtualization Requirements for Cisco NFVIS-for-UC 26
Virtualization Requirements for Nutanix AHV 29
Example Hardware Bill of Materials (BOMs) 31
Summary of Hardware Examples 31
Cisco Calling Appliances running Cisco NFVIS-for-UC 31
Cisco Compute Hyperconverged with Nutanix 31
VMware VVF/VCF on Cisco UCS Servers 32
Case Study for Hardware Examples 33

© 2026 Cisco and/or its affiliates. All rights reserved.

About the Documentation

The following table provides an overview of the significant changes to the features in this guide through the current release. The table does not provide an exhaustive list of all changes made to the guide or of the new features up to this release.

Change History

Date	Change	Reason
October 2026	Updated - Republishing	See Applicable Applications and Versions.
September 2026	First publication	See Applicable Applications and Versions.

New and Changed Information

Table 1. New Features and Changed Behavior in Cisco Virtualization Guide for Cisco On-premises Calling Applications

Release	Description	Reference
September 2026	Updates for: • Unified CM 15 SU5 • VMware VVF/VCF 9.0+9.1 • Nutanix AHV 11.0, AOS 7.5 • Nutanix on Cisco Unified Edge	

© 2026 Cisco and/or its affiliates. All rights reserved.

Introduction to Supported Virtualization Environments

Cisco only supports on-premises calling applications in the following virtualization environments when configured in accordance with this document. This document covers common virtualization baseline support.

Note: For application-specific details, including any application-specific differences from this document, see the Install Guide of each application.

VMware vSphere ESXi (standalone) vs. VVF / VCF 9

VMware ESXi (formerly named ESXi, now renamed back to ESX in versions 9.0+) is an enterprise-class, type-1 hypervisor developed by VMware by Broadcom. As a Type 1 hypervisor, ESXi runs directly on bare-metal hardware without requiring a host operating system, providing direct access to hardware resources for enhanced performance and efficiency.

According to VMware.com and Broadcom.com documentation at time of this writing, standalone ESXi deployments have been supported through ESXi 8.0, but ESX 9.0+ must be deployed as part of either a VMware vSphere Foundation (VVF) or VMware Cloud Foundation (VCF) solution, with additional required components. For more information, see the licensing and technical documentation at Broadcom.com and VMware.com.Cisco on-premises Calling applications are supported on select versions of VMware vSphere ESXi and VVF/VCF, with different hardware options.

- VMware vSphere ESXi 8.0/older on a broad spectrum of Cisco Calling Appliances, Cisco General-purpose Compute/Storage, and third-party General-purpose Compute/Storage.
- ESX 9.0 as part of a VVF 9.0, VVF 9.1, VCF 9.0 or VCF 9.1 solution, on Cisco General-purpose Compute/Storage, and third-party General-purpose Compute/Storage only.
- Cisco Calling appliances, including Cisco Business Edition 6000/7000 and Expressway CE1400V, only support VMware vSphere ESXi up to and including version 8.0. Later releases, including ESX 9.0+, VVF 9.0+, and VCF 9.0+ and their subsequent versions, are not supported on these appliances. Customers must either replace hardware to remain on ESX 9.0+ or migrate ESX to Cisco NFVIS-for-UC to remain on the appliance.
- Applications do not support VMware by Broadcom virtualization on Cisco Edge Computing / Cisco Unified Edge hardware.

For more information on vSphere ESXi, see Broadcom.com and vmware.com.

For more information on Cisco on-premises calling applications support on ESXi 8.0 vs. VVF/VCF 9, see Virtualization Requirements for VMware vSphere ESXi.

For more information on Cisco on-premises calling applications' support of vSphere ESXi 7.0 and older, see Cisco Collaboration Virtualization.

© 2026 Cisco and/or its affiliates. All rights reserved.

Nutanix AHV

Nutanix is a hyperconverged infrastructure (HCI) platform that integrates compute, storage, and networking into a single, software-defined system, providing a robust foundation for hybrid cloud deployments.

Acropolis Hypervisor (AHV) is a hypervisor from Nutanix that runs alongside Acropolis OS (AOS) hyperconvergence software and Prism Central (PC), a web-based, centralized management software. These products are all part of Nutanix Cloud Infrastructure (NCI) or Nutanix Cloud Platform (NCP) portfolios.

Cisco Compute Hyperconverged with Nutanix (CCHN) is a joint solution that runs Nutanix software on Cisco hardware, with joint support from both companies.

Cisco on-premises applications are supported on select versions of Nutanix AHV, AOS, and PC with CCHN hardware. All applications except DI ESN are also supported on Cisco Unified Edge hardware.

For more information on Nutanix software, see the Nutanix Home page.

For more information on CCHN hardware, see Cisco Compute Hyperconverged with Nutanix

For more information on Cisco Unified Edge, see Cisco Unified Edge Home page.

For more information on Cisco on-premises calling applications support on Cisco Compute Hyperconverged with Nutanix, see Virtualization Requirements for Nutanix AHV.

Cisco NFVIS-for-UC (Network Function Virtualization Infrastructure Software)

Cisco NFVIS (Network Function Virtualization Infrastructure Software) is a hypervisor product from Cisco's Enterprise Network Function Virtualization (Enterprise NFV)) portfolio. It is a special-purpose Linux/KVM-based virtualization layer for deploying select application workloads on select Cisco hardware.

Cisco NFVIS-for-UC is a special edition of NFVIS, a new commercial offering with a separate product ID, distinct pricing, new licensing, and a slightly different admin User Interface.

Cisco NFVIS-for-UC supports only select On-premises Calling Applications.

Cisco NFVIS-for-UC supports only select Cisco Calling Appliances.

Cisco NFVIS-for-UC is not supported on Cisco/3rd-party General-purpose Compute/Storage hardware or Cisco Edge Computing / Cisco Unified Edge hardware.

Release 26.1 is the last release for Cisco NFVIS-for-Enterprise-NFV features, workloads/ hardware support and administration. If you are looking for the NFVIS-for-EnterpriseNFV, do not use this document; please see release 26.1 documentation.

- Optimize the virtualization layer
- Cisco Enterprise NFV Infrastructure Software

Releases 26.2 and beyond only support Cisco NFVIS-for-UC features, workload/hardware support and administration. For more information, see release 26.2 documentation.

Note: For the rest of this document, “NFVIS” used by itself refers to NFVIS-for-UC.

For more information on Cisco on-premises calling applications support on Cisco NFVIS-for-UC, see Virtualization Requirements for Cisco NFVIS-for-UC.

© 2026 Cisco and/or its affiliates. All rights reserved.

Applicable Applications and Versions

This document applies to the following:

- Versions 15SU4a and higher of UCM, SME, IMP
- Versions 15 SU4 and higher of CUC, CER
- Version X15.4 and higher of Cisco Expressway Series
- The Enhanced Survivability Node of Webex Calling dedicated instance (“DI ESN”) is also supported; its virtualization requirements are described here: Link

Sections of this document may use the following categories of applications:

- **Core Cisco Calling** (UCM, SME, DI ESN, IMP, CUC, CER, Expressway). Broader “Cisco Calling” may also include PCD, CUACA, and CPS.
- **Other Cisco** (applications that are Cisco but not part of Cisco Calling, for example, meetings/contact center applications, virtual network functions (VNF’s) like Catalyst 8000V or security workloads like Cisco Identity Services Engine ISE).
- **3rd-party** (customer-provided non-Cisco applications)
- **Customer-homegrown** (customer-produced/-provided applications).

Physical Hardware Categories

Cisco on-premises Calling applications use the following categorizations of compute and storage hardware in this guide:

Cisco Calling Appliances

- Cisco Business Edition 6000 (BE6000 or BE6K)
- Cisco Business Edition 7000 (BE7000 or BE7K)
- Cisco Expressway CE1400V (CE1400V)

Cisco General-purpose Compute/Storage

Including but not limited to:

- Cisco UCS C-Series
- Cisco UCS X-Series
- Cisco UCS B-Series
- Cisco HCI-Series
- Cisco HCIX-Series
- Cisco HX-Series

Cisco Edge Computing

- Cisco Unified Edge

© 2026 Cisco and/or its affiliates. All rights reserved.

Third-party General-purpose Compute/Storage

- Third-party compute from various vendors.
- Third-party storage from various vendors, either local DAS, external SAN/NAS, or Hyperconverged (HCI/SDS).

Unsupported Infrastructure

Cisco does not support on-premises calling applications on infrastructure environments that are not explicitly listed in this document.

Unsupported environments/No support includes (but is not limited to) the following:

- All nodes of the same cluster of the same application must be on the same hypervisor; mixed hypervisors are not supported for production use.
- Different applications may be on different hypervisors. Different clusters of the same application may be on different hypervisors (includings Expressway-C vs. Expressway-E on different hypervisors).
- **Bare-metal / non-virtualized / physical installation** on any hardware or public cloud bare-metal solutions.
- Any **other on-premises commercial hypervisors**, for example, Microsoft Hyper-V.
- New features in **VMware Cloud Foundation (VCF)** 5.2.2 and older that touch application workloads; only traditional ESXi+vCenter supported. For example, VMware Hybrid Cloud Extension (HCX) is not supported with these Cisco applications.
- Any **customer-provided open-source environments**, for example, Red Hat OpenShift or OpenShift Virtualization, Proxmox VE, Harvester, HPE VM Essentials, KVM-based or Xen-based Linux distributions, and more.
- Any **customer-provided-3rd-party-public clouds/hyperscalers**, for example, Amazon AWS EC2 or EVS, Microsoft Azure Compute or Azure VMware Solution, Oracle OCI or Oracle Cloud VMware Solution, Google Cloud or Google Cloud VMware Engine, Alibaba Cloud, IBM Cloud, and more.
- **Hybrid infrastructure, cloud-connected or cloud extension-based environments**, for example, Amazon AWS Outposts, Azure Local, Google Distributed Cloud, OCI Dedicated Region, CloudBox, Dell Apex Cloud Platform, and more.

© 2026 Cisco and/or its affiliates. All rights reserved.

General Requirements

Recommended Design Workflow

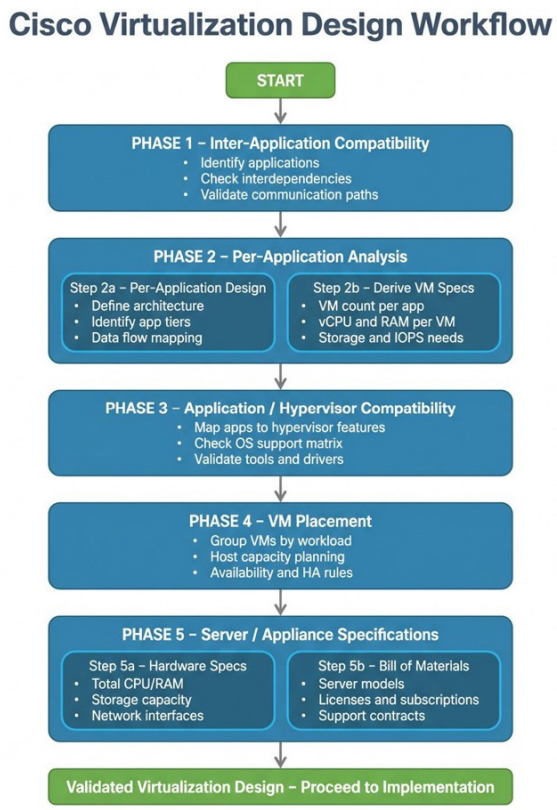
The recommended workflow to properly size and configure a virtualized environment for On-premises Calling applications is below (details in subsequent sections):

1. Inter-application Compatibility
2. For each application:
    a. Per-Application Design
    b. Per-Application Derive Virtual Machine (VM) count/specifications
3. Application / Hypervisor Compatibility
4. VM Placement
5. For each server/appliance:
    a. Required Hardware Specification
    b. Bill of Materials (BOM)

For examples of how to use this workflow, see the chapter on **Example Hardware Bill of Materials (BOMs).**

© 2026 Cisco and/or its affiliates. All rights reserved.

In a Nutshell



© 2026 Cisco and/or its affiliates. All rights reserved.

Inter-application Compatibility

Prerequisites: Identify all of your applications and their compatible versions.

For Cisco on-premises applications compatibility, see the following:

- Cisco Collaboration Systems Release 15
- Cisco Collaboration Systems Release Compatibility Matrix
- Software Compatibility Matrix of each application, for example, Cisco Unified CM+IMP 15 SU4

Result: The “output” is a list of applications and their versions.

© 2026 Cisco and/or its affiliates. All rights reserved.

Per-Application Design

Prerequisites: For each application, perform capacity planning, sizing, and cluster design based on your scale and redundancy requirements.

Use one of the following documents, based on the level of prescriptive guidance you require:

- If planning a typical best practices design and deploying on Business Edition 6000 or Cisco Unified Edge hardware, see section BE6000 Supported Solution Capacities in the appropriate Installation Guide.
- If planning a typical best practices design and deploying on Business Edition 7000 (BE7000) or similarly-spec'd hardware, see the section Simplified Sizing Examples in the appropriate Cisco Collaboration Sizing Guide.
- If you need a more customized design, see either the Cisco Collaboration Preferred Architectures or the appropriate Cisco Collaboration System Solution Network Design Guide.

Result: The “output” is a set of application nodes, each with a “T-shirt size” capacity, used to determine virtual machine information.

© 2026 Cisco and/or its affiliates. All rights reserved.

Per-Application Derive Virtual Machine (VM) count/specifications

1. The previous section details how many Virtual Machines are required.
2. To get the specifications of each application Virtual Machine, see the *Virtualization Requirements* section of each application's Installation Guide.

   For example (15 SU5 release):

   a. **UCM+IMP+SME 15 SU5**
   Reference: Link

   b. **CER 15 SU5**
   Reference: Link

   c. **CUC 15 SU5**
   Reference: Link

   d. **Expressway X15.4**
   Reference: Link

© 2026 Cisco and/or its affiliates. All rights reserved.

Application/Hypervisor Compatibility

Identify compatible release of hypervisor software and any other required infrastructure software.

For hypervisor major/minor release compatibility with applications version 15 or later, see the *Virtualization Requirements* section of each application's *Installation Guide*.

For example (15 SU5 release):

a. **UCM+IMP+SME 15 SU5**
   Reference: Link

b. **CER 15 SU5**
   Reference: Link

c. **CUC 15 SU5**
   Reference: Link

d. **Expressway X15.4**
   Reference: Link

For hypervisor maintenance/patch release compatibility, check each hypervisor-specific chapter in this document for the common virtualization requirement, and the *Installation Guide* of each application for any app-specific callouts.

Hyperconverged environments like Nutanix also require checking other components, like hyperconvergence software versions and Controller Virtual Machine (CVM) sizing..

For major/minor hypervisor releases, you can use QuoteCollab to save time.
For application releases older than 15, see the Cisco Collaboration Infrastructure Requirements document.

© 2026 Cisco and/or its affiliates. All rights reserved.

VM Placement

Derive server/appliance count using applications' VM Placement and co-residency rules vs. your needs for sites and redundant hardware.

You can use QuoteCollab to save time.

For VMware vSphere ESXi and Nutanix AHV, unless otherwise indicated in application-specific documentation, co-residency of supported Cisco core calling applications + other Cisco applications + 3rd-party/customer-homegrown applications is allowed if the underlying virtualization environment allows. For more information, see Virtualization Requirements for VMware vSphere ESXi and Virtualization Requirements for Cisco NFVIS-for-UC. Nutanix AHV/AOS deployments also require a Nutanix Controller VM (CVM) on each virtualization host.

For Cisco NFVIS-for-UC, only Cisco core calling applications are supported (and other Cisco Collaborations applications listed as supported in NFVIS-for-UC technical documentation). Other Cisco applications are not supported. 3rd-party/customer-homegrown applications are not supported. For more information, see Virtualization Requirements for Cisco NFVIS-for-UC.

All applications sharing hardware must align with the requirements in this document. To diagnose or resolve an issue with a Cisco on-premises calling application, Cisco TAC may ask that other workloads be powered down or moved to another server (for example, if a 3rd-party workload is a "noisy neighbor" causing symptoms in Cisco Unified CM, or if "IO blender" problems are suspected when debugging performance issues).

VM Placement rules for each hardware component are in the next section.

© 2026 Cisco and/or its affiliates. All rights reserved.

Required Hardware Specification

Derive raw physical hardware specs required for the set of application VMs you will run on each server, then combine with hypervisor system requirements to complete the required hardware specifications.

You can use QuoteCollab to save time by checking each hypervisor-specific chapter of this document.

© 2026 Cisco and/or its affiliates. All rights reserved.

Bill of Materials (BOMs)

Follow server- and appliance-specific rules to translate these hardware specs into orderable Bill of Materials (BOMs).

- For Cisco Business Edition 6000/7000 appliances, see their Datasheets and Ordering Guide (scroll down the page to view the guide listed in the Ordering Guides section).
- For the Cisco Expressway CE1400V appliance, see its Installation Guide and the Expressway Release Notes.
- For general UCS, see Datasheets and Spec Sheets at the following links such as:
    - UCS C: Link
    - UCS X: Link
    - UCS B: Link
- For CCHN hardware, see Datasheets and Spec Sheets at the following links such as:
    - Datasheets: Link
    - For Cisco Unified Edge hardware, see Datasheets and Spec Sheets at Link

© 2026 Cisco and/or its affiliates. All rights reserved.

Virtualization Requirements for VMware vSphere ESXi

Overview

- For an overview of VMware vSphere ESXi (ESX in VVF/VCF 9.0+) as a supported virtualization environment, see the Introduction to Supported Virtualization Environments.
- In general, applications on a compatible ESXi / ESX release are supported on Cisco and 3rd-party hardware listed in the *VMware by Broadcom Compatibility Guide* as supported for that ESXi release.
  - Cisco calling appliances: **Business Edition 6000/7000** (M5, M6, M7 generations) and **Cisco Expressway CE1400V** (M7) only support through ESXi 8.0. ESX 9.0+ in VVF/VCF 9.0+ are not supported.
  - Cisco General-purpose Compute/Storage: Cisco **UCS, HX, HCI, HCIX models** (a Cisco-specific ESXi image may be required). Hyperconverged solutions may have restrictions beyond application layer (For example, Cisco HyperFlex or Nutanix AOS).
  - 3rd-party general-purpose compute/storage: 3rd-party compute with local DAS storage or 3rd-party storage (local DAS, 3rd-party SAN/NAS, 3rd- party HCI).
    Note: According to VVF/VCF 9.0+ documents at time of this writing, VVF 9 supports local DAS storage, but VCF 9 does not (requires shared storage like vSAN, array or NVMe-oF). Verify details with VMware by Broadcom or your Broadcom partner.
- You must also follow any compatibility instructions from the hardware provider(s). For example, the **Cisco UCS Hardware and Software Compatibility tool**.
- You must also follow the application rules for CPU, Memory, Storage, and Network in this chapter.

Application / Hypervisor Compatibility

Starting with VVF/VCF 9, ESX releases 9.0+ follow a new numbering format (at time of this writing, see Broadcom knowledge base Article 410435). and can be described for convenience here as X.Y.z.n, where X is **Major**, Y is **Minor**, z is **Maintenance** and n is various forms of **Patches**.

Older standalone ESXi releases through 8.0 can be described as **Major** and **Minor**. Within a **Major/Minor**, there are various **Update and patch** releases.

There may be other versioned components like **Virtual Machine File System (vmfs)**, **Virtual Machine Hardware (vmv or vmx),** and (only for application releases previous to 15 FCS) **VMware Tools** (replaced by **Open VM Tools** in 15 FCS and beyond).

For compatibility of application releases with **ESXi or ESX Major/Minor** releases (for example, the “9.0” or “9.1” in “9.0.0.0” or “9.1.0.0”, or the older format “8.0”, “7.0”, “6.7”), see each application’s Installation Guide.

- Compatible releases will be explicitly listed.
- Unlisted releases are *not supported and not tested*.
- See Broadcom.com for when compatible releases enter Broadcom’s release end-of-life and implications for support.

© 2026 Cisco and/or its affiliates. All rights reserved.

Within a supported **ESXi Major/Minor** release,

- A minimum **Update** release may be required for application compatibility (for example, “8.0 U1” not “8.0 GA” is the minimum requirement for “8.0” compatibility).
- Subsequent **Update/Patch** releases (for example, “8.0 U2”, “8.0 U3”) are compatible unless explicitly indicated otherwise.

Note: Certain Update/Patch releases may be compatible only with specific hardware; see Broadcom.com and your hardware’s documentation for details.

- For **Virtual Machine File System (vmfs)**, see Broadcom.com for Major/Minor/vmfs compatibility. All vmfs versions are compatible with applications unless explicitly indicated otherwise.
- For **Virtual Machine Hardware (vmv or vmx)**, see Broadcom.com for Major/Minor/vmv compatibility.
    - Application versions will define the minimum compatible version. For example, UCM 15 requires a minimum vmv 17/vmx 15.
    - Newer vmv/vmx versions are compatible unless explicitly indicated otherwise.
    - Cisco only provides Application OVAs for the required minimum vmv; if the customer needs a newer vmv, deploy OVA with the old vmv, then upgrade the vmv.
- **VMware VM Tools (vmtools)** are not compatible with applications release 15. **Open VM Tools (open-vmtools)** are required and are provided with the application.

VM Placement and Required Hardware Specifications

Co-residency of Cisco core calling applications, other Cisco applications and 3rd-party/customer-homegrown applications is allowed as indicated in VM Placement Rules.

You can use QuoteCollab to save time, or follow the **VM Placement Rules** in the sections below.

CPU/Processor Requirements

General

- For the vcpu requirements of each application’s Virtual Machine, see the *Virtualization Requirements* section of each application’s *Installation Guide*.

  For example (15 SU5 release):

  a. **UCM+IMP+SME 15 SU5**
  Reference: Link

  b. **CER 15 SU5**
  Reference: Link

  c. **CUC 15 SU5**
  Reference: Link

  d. **Expressway X15.4**
  Reference: Link

© 2026 Cisco and/or its affiliates. All rights reserved.

- If physical hardware is Cisco Calling Appliance, the CPU vendor/architecture/model is fixed-configuration in the appliance model (no changes are supported). The last supported VMware release on these appliances is ESXi 8.0.
- For Cisco General-purpose and 3rd-party General-purpose hardware, must follow:
  - CPU **vendor/architecture** must be listed in the table below. Applications are not supported for unlisted vendors/architectures (for example, ARM is not supported, nor is the Intel Processor-D architecture).
  - Within a vendor/architecture, the selected CPU **model** must follow these rules:
  - **Model range** must be listed in the table below (for example, Intel 69xxP or AMD 9xx5). Applications are not supported on unlisted model ranges. Some applications support different model ranges for different scale points.
  - Have a minimum **Base Frequency** defined by each application's Installation Guide (which may vary by scale point). Applications are not supported on frequency-scaling technologies like **Intel Turbo Boost or AMD Turbo Core / Core Performance Boost / Precision Boost**. Applications are not supported on CPUs that use power management "throttling" features.

CPU vendor/architecture codename & details on their website (unlisted vendors/architectures not supported)	Supported CPU model ranges **(unlisted ranges not supported)**	Example Model **(Cores / Base Frequency)**	**Example Cisco Product IDs**
Intel Xeon Granite Rapids Link	Xeon 6 6900 P-core (69xxP)	6960P (72C/2.7 GHz)	n/a
	Xeon 6 6700 P-core (67xxP)	6730P (32C/2.5 GHz)	UCS-CPU-I6730P
	Xeon 6 6500 P-core (65xxP) (E-core and/or 63xx models not supported)	6505P (12C/2.2 GHz)	UCS-CPU-I6505P
AMD 5th-gen EPYC Turin Link	AMD EPYC 9005 (9xx5)	9115 (16C / 2.6 GHz)	UCS-CPU-A9115
Intel Xeon Emerald Rapids Link	Xeon Platinum 8500 (85xx) Xeon Gold 6500 (65xx) Xeon Gold 5500 (55xx)* Xeon Silver 4500 (45xx)*	6526Y (16C/2.8 GHz) 4510 (12C/2.4 GHz)	UCS-CPU-I6526Y UCS-CPU-I4510
Intel Xeon Sapphire Rapids	Xeon Platinum 8400 (84xx) Xeon Gold 6400 (64xx)	6426Y (16C/2.5 GHz) 4410Y (12C/2.0 GHz	UCS-CPU-I6426Y UCS-CPU-I4410Y

© 2026 Cisco and/or its affiliates. All rights reserved.

CPU vendor/architecture codename & details on their website (unlisted vendors/architectures not supported)	Supported CPU model ranges (unlisted ranges not supported)	Example Model (Cores / Base Frequency)	Example Cisco Product IDs
Link	Xeon Gold 5400 (54xx)* Xeon Silver 4400 (44xx)*		
AMD 4th-gen EPYC Genoa Link	AMD EPYC 9004 (9xx4)	9334 (32C / 2.70 GHz) 9224 (24C / 2.5 Ghz)	
Intel Xeon Ice Lake Link	Xeon Platinum 8300 (83xx) Xeon Gold 6300 (63xx) Xeon Gold 5300 (53xx)* Xeon Silver 4300 (43xx)*	6326 (16C/2.9 GHz) 4310T (10C/2.3 GHz)	UCS-CPU-I6326 UCS-CPU-I4310T
AMD 3rd-gen EPYC Milan Link	AMD EPYC 7003 (7xx3)	7453 (28C / 2.75 GHz) 7313P (16C / 3.0 GHz)	UCS-CPU-A7453 UCS-CPU-A7313P
Intel Xeon Cascade Lake Link	Xeon 8200 Platinum (82xx) Xeon 6200 Gold (62xx) Xeon 5200 Gold (52xx) * Xeon 4200 Silver (42xx) *	6242 (16C / 2.80 GHz)	HX-CPU-I6242
Intel Xeon Skylake Link	Xeon 8100 Platinum (81xx) Xeon 6100 Gold (61xx) Xeon 5100 Gold (51xx) * Xeon 4100 Silver (41xx) *	6132 (14C / 2.60 GHz) 4114 (10C / 2.20 GHz)	UCS-CPU-6132 HX-CPU-6142 UCS-CPU-4114
* Only supported for deployments of <1K users and <2.5K devices			

VM Placement Rules

- Unless explicitly indicated otherwise in the application Installation Guide, deployments must follow these rules: **Physical CPU cores**: Each server must provide a **total physical core quantity** at least equal to the sum of all virtual machines' vcpus. For example, if your physical server is 2S/10C, you may run any combination of VMs totaling 20 vCPUs.
- If Hyperthreading is present in the hardware BIOS, always enable, but ignore any **Logical Processor** quantity shown in ESXi.
- **ESXi CPU Reservations** are hardcoded in the Cisco-provided OVA and may not be changed. Applications do not use CPU Reservations to control VM placement.

© 2026 Cisco and/or its affiliates. All rights reserved.

RAM / Memory Requirements

General

- For the vram requirements of each application Virtual Machine, see the *Virtualization Requirements* section of each application's *Installation Guide*.

  For example (15 SU5 release):

  a. **UCM+IMP+SME 15 SU5**
  Reference: Link

  b. **CER 15 SU5**
  Reference: Link

  c. **CUC 15 SU5**
  Reference: Link

  d. **Expressway X15.4**
  Reference: Link

- If physical hardware is Cisco Calling Appliance, the memory configuration is fixed-configuration in the appliance model (no changes are supported). The last supported VMware release on these appliances is ESXi 8.0.
- For Cisco General-purpose and 3rd-party General-purpose hardware, must follow:
  - Physical memory hardware must be supported by the hardware vendor.
  - Cisco applications do not prescribe memory module quantity, density, speed, or layout/population.

  Follow instructions from the CPU vendor and your hardware provider. For Cisco UCS, see the server model's *Spec Sheet* and *Memory Guide*.

VM Placement Rules

- Physical memory must not be oversubscribed.
- **Usable RAM:** Memory configuration must provide at least as many GB as the sum of all virtual machines' vram plus additional memory for ESXi itself. At the time of this writing, additional usable GB required for ESXi / ESX Hardware Requirements are below (note these are for only ESXi / ESX, see Broadcom.com for requirements of any other VVF/VCF-required components such as VCF Operations, NSX Edge/Controller, etc.):
  - **ESX 9.1**: minimum 8GB, 12GB or higher recommended for typical production deployments. See Link. .
  - **ESX 9.0**: minimum 8GB, 12GB or higher recommended for typical production deployments. See Link.
  - **ESXi 8.0**: minimum 8GB, 12GB for typical production deployments. See Link.

Storage Requirements

General

- For vdisk requirements of each application Virtual Machine, see see the *Virtualization Requirements* section of each application's *Installation Guide*.

  For example (15 SU5 release):

© 2026 Cisco and/or its affiliates. All rights reserved.

a. **UCM+IMP+SME 15 SU5**
Reference: Link

b. **CER 15 SU5**
Reference: Link

c. **CUC 15 SU5**
Reference: Link

d. **Expressway X15.4**
Reference: Link

- If hardware is Cisco Calling Appliance, the storage hardware and RAID configuration are fixed-configuration in the appliance model (no changes are supported). The last supported VMware release on these appliances is ESXi 8.0. .
- For Cisco General-purpose and 3rd-party General-purpose hardware, must follow:

◦ The "storage system" is defined as all hardware and software end-to-end required for the UCM virtual machine's vdisk to be available to the application. Including but not limited to:

- The ESXi / ESX datastore configuration.
- One of the following:
  - RAID controller with local DAS disks. (not supported by VCF 9.0+ according to Broadcom technical docs at time of this writing).
  - Network adapter, transport network and 3rd-party SAN/NAS array.
  - Hyperconvergence software (vSAN, AOS, HXDP, and more) and underlying hardware.
- The entirety of the storage system must be listed as supported by the ESXi / ESX release being run, per the beginning of this chapter.

- **ESXi / ESX datastores** may be provisioned with eager zero or lazy zero.

VM Placement Rules

- **Maximum latency of storage system:** Application requirements must be met, or the storage will be inadequate for the application software load presented. For application symptoms that correlate with high storage latency, Cisco may require resolving the storage latency before proceeding with troubleshooting or resolution.

◦ Unless otherwise indicated, Cisco Collaboration applications require storage systems to have **average virtual machine operating system latency per command <= 25 ms**.

- In VMware documentation and monitoring tools like esxtop, this is also called "**GAVG/cmd**" (Guest Average Latency per command), and is the response time as perceived by the guest operating system. It is the sum of two other latency values (GAVG = KAVG + DAVG):
  - "KAVG/cmd" (VM Kernel Average Latency per command) - an indicator of CPU resources/performance. Expected to be 0ms in an ideal environment. Values greater than 2ms may cause performance problems.

© 2026 Cisco and/or its affiliates. All rights reserved.

        - "DAVG/cmd" (Device Average Latency per command) - an indicator of disk subsystem performance. Values consistently greater than 20-30ms are often indicative of performance problems in typical applications.
    - Latency values over time are expected to fluctuate. Ephemeral spikes above the application's indicated maximum with tiny duration and tiny frequency are expected, but spikes above the application's indicated maximum that are frequent, sustained, and/or high-magnitude indicate a potential problem and are likely contributors to application symptoms.
    - See VMware by Broadcom documentation for monitoring, performance, and esxtop for more details on viewing and interpreting latency values.
- **Usable space:** The storage system must provide usable space in GB at least equal to the sum of all virtual machines' vdisks. Non-appliance hardware may also use thin provisioning, with the caveat that disk space must be available to the VM as needed; running out of disk space due to thin provisioning will cause application instability and data corruption, including preventing restore from backup.
- **IOPS capacity:** Some storage system design documentation will request information on the application workloads' I/O operations, including read/write, sequential, and random. For most applications, this varies by deployment model and capacity; refer to each application's Installation Guide for details.
- Best Practices by Storage Option
    - Local DAS:
        - Make sure the RAID controller and all disks are listed by Broadcom as compatible for the ESXi release being used, and listed as supported by the hardware vendor.
        - See hardware providers for guidance on meeting application latency and IOPS requirements. Below are guidelines only; your results may vary.

RAID1	○ HDD pairs are not recommended unless the environment is very small (fewer than 100 devices or fewer). ○ Consider SSD pairs with sufficient usable space. High-endurance models are recommended, as many Cisco Collaboration applications are write-intensive.
RAID5	○ For most Collaboration deployments, RAID5 has been the best tradeoff among competing factors of maximizing usable space, IO performance, fault tolerance, and ease of failed disk replacement while minimizing total storage system price and complexity. ○ One HDD per physical CPU core, with 4-6 disks per RAID5 array (more disks per volume are discouraged as it increases the risk of long rebuild times if there is ever a multiple disk failure). ○ Each disk SAS 10kbps (15kbps recommended). The following are not recommended because they tend to be too slow: SATA disks and SAS disks with < 10 kbps.

© 2026 Cisco and/or its affiliates. All rights reserved.

RAID6	○ One HDD per physical CPU core, with 4-8 disks per RAID6 array (more disks per volume are discouraged due to slowed write times vs. many Cisco Collaboration applications are write-intensive). ○ Each disk is SAS with a minimum of 15K rpm. Otherwise, same guidelines as for RAID5.
RAID10	○ One HDD per 2 physical CPU cores, with at least 4 disks per RAID10 array ○ Each disk same as the RAID5 recommendation.

- 3rd-party SAN/NAS arrays:
  - Make sure the SAN/NAS used is listed by Broadcom as compatible for the ESXi release being used, and listed as supported by the compute vendor.
  - Network planning must include both vDisk storage traffic and vnic network traffic.
  - Follow hardware vendors' guidance for compatibility and meeting application latency and IOPS requirements.
- Hyperconverged environments:
  - Cisco Compute Hyperconverged with Nutanix.
    - AOS is the hyperconvergence software.
    - Network planning must include both vdisk storage traffic and vnic network traffic.
    - Follow AOS and hardware vendor guidance for compatibility and meeting application latency and IOPS requirements.
    - VM Placement needs to factor in a required Controller VM on each server. Specifications of this VM depend on AOS cluster sizing.

Network Requirements

General

- For the vnic requirements of each application Virtual Machine, see the *Virtualization Requirements* section of each application's *Installation Guide*.

  For example (15 SU5 release):

  a. **UCM+IMP+SME 15 SU5**
  Reference: Link

  b. **CER 15 SU5**
  Reference: Link

  c. **CUC 15 SU5**
  Reference: Link

© 2026 Cisco and/or its affiliates. All rights reserved.

d. **Expressway X15.4**
Reference: Link

- If physical hardware is Cisco Calling Appliance, the network interface hardware is fixed-configuration in the appliance model (no changes are supported). The last supported VMware release on these appliances is ESXi 8.0.
- For Cisco General-purpose and 3rd-party General-purpose hardware, must follow:
    - **Network adapters** are defined as all NICs, HBAs, VICs, etc., used for the server to access the network for LAN access or storage access. If storage is SAN, NAS, or HCI, then network planning must include both vDisk storage traffic and vNIC network traffic.
        - Make sure all network adapters used are listed by Broadcom as compatible for the ESXi release being used, and listed as supported by the compute/storage vendors.
    - **Network infrastructure** is defined as the physical or virtual switching/routing/fabric network elements providing LAN access or storage access.
        - Make sure all virtual elements running on the server are listed by Broadcom as compatible for the ESXi release being used, and listed as supported by the compute/storage vendors.
        - For a physical access switch, you may need to check the compatibility of that switch with your compute/storage vendors.

VM Placement Rules

- **Physical network access links:** Each "server" must provide enough for the vnics of all application VMs (details out of scope for this policy).
    - Redundant physical network access links (for example, "NIC teaming") are permitted where supported by the VMware Compatibility Guide and the network hardware/software providers' instructions.
    - If you choose to use access options like VLAN trunking or link aggregation, multiple physical links will be required.
- Application vnic network traffic capacity/quality of service required:
    - **vnic traffic:** see application design guides for their "min spec" for network traffic and quality of service (for example, required bandwidth and max tolerable delay, jitter, and loss, along with which quality of service traffic marking mechanisms they support). For example:
        - For example, see Cisco Collaboration 12x guidelines for Network Infrastructure
        - For example, see Cisco Collaboration 12x quality of service guidelines
    - **vdisk traffic:** If the same network will be carrying both application VM vnic network traffic and application VM vdisk storage traffic, make sure to plan for both sets of traffic. Storage Requirements must be met for the applications to be supported.
- See Cisco network and datacenter Preferred Architectures for best practices on network element selection and configuration.

© 2026 Cisco and/or its affiliates. All rights reserved.

Virtualization Requirements for Cisco NFVIS-for-UC

Overview

For an overview of Cisco NFVIS-for-UC as a supported virtualization environment, see the Introduction to Supported Virtualization Environments.

- Cisco NFVIS-for-UC is only supported on the following hardware:
    - **Cisco calling appliances: Business Edition 6000/7000** M5, M6, M7 generations and **Cisco Expressway CE1400V** M7.
- You must also follow any compatibility instructions in Supported Platforms from NFVIS Release Notes (for example, Link).
- You must also follow the application rules for CPU, Memory, Storage, and Network in this chapter.

Application / Hypervisor Compatibility

The minimum supported releases are 15 SU4 / X15.4 with NFVIS-for-UC 4.18.2a.

Supported NFVIS-for-UC releases can be numbered as X.Y.z.n, where X is the **Major**,Y is **Minor** and z and n are **Maintenance**. Within a **Major/Minor**, there are various **Maintenance** releases.

- For compatibility of application releases with NFVIS-for-UC **Major/Minor** releases (for example, "4.18"), see the *Virtualization Requirements* section of each application's *Installation Guide*.
  For example (15 SU5 release):
    a. **UCM+IMP+SME 15 SU5**
       Reference: Link
    b. **CER 15 SU5**
       Reference: Link
    c. **CUC 15 SU5**
       Reference: Link
    d. **Expressway X15.4**
       Reference: Link
- Compatible **Major/Minor** releases will be explicitly listed. Newer hardware generations may require a newer minimum **Major/Minor** release.
- Unlisted releases are *not supported* and *not tested*. For example, 26.1 is not supported. 4.17 / older are not supported.
- See Cisco EOL Bulletins for when compatible releases enter Cisco's release end-of-life and implications for support.

Within a supported NFVIS-for-UC **Major/Minor** release,

a. A minimum **Maintenance** release may be required for application compatibility (for example, "4.18.2a" not "4.18.1" is the minimum requirement for "4.18" compatibility).

© 2026 Cisco and/or its affiliates. All rights reserved.

b. Subsequent **Maintenance** releases (for example, “4.18.2a” as the minimum compatible release vs. later “4.18.3” and “4.18.4” are **Maintenance** on “4.18” train) are compatible unless explicitly indicated otherwise.

c. There are no other versioned components that need to be tracked/managed.

VM Placement and Required Hardware Specifications

Co-residency of Cisco core calling applications is allowed as indicated in VM Placement rules below. No other applications are supported with NFVIS-for-UC. Other Cisco applications and 3rd-party/customer-homegrown applications are not supported.

You can use QuoteCollab to save time, or follow the **VM Placement Rules**.

CPU / Processor, RAM / Memory, Storage, Network Requirements

General

- NFVIS-for-UC is only supported on the Cisco Calling Appliance models listed above.
    - The entire hardware loadout and configurations are fixed-configuration in the appliance model (no changes are supported).
- NFVIS-for-UC is NOT supported on Cisco General-purpose or 3rd-party General-purpose hardware.

VM Placement Rules

NFVIS-for-UC 4.18 requires a “holdback” of 1-2 pcores and 11-13 GB per appliance (depending on appliance model). These are reserved for NFVIS-for-UC and are not available to application workloads.

- For general requirements, see Host System Requirements in the NFVIS Software Configuration Guide, Release 4.x: Link
- Here is a translation of the general requirements into holdback by appliance model (QuoteCollab will automatically account for this):

					NFVIS reservations
	Sockets	Total Physical Cores	Total Physical Memory (GB)	Physical cores	Memory (GB)
BE6000M M5	1	10	48	1	11
BE6000H M5	2	20	64	2	12
BE7000M M5	1	14	96	1	11
BE7000H M5	2	28	192	2	13
BE6000M M6	1	10	64	1	11

© 2026 Cisco and/or its affiliates. All rights reserved.

					NFVIS reservations
	Sockets	Total Physical Cores	Total Physical Memory (GB)	Physical cores	Memory (GB)
BE7000M M6	1	16	96	1	11
BE7000H M6	1	28	192	1	11
BE6000M M7	1	12	64	1	11
BE7000M M7	1	16	96	1	11
BE7000H M7	2	32	192	2	13
CE1400V	1	16	64	1	11

All other rules for CPU, RAM, Storage, and Network are the same as on VMware vSphere ESXi

© 2026 Cisco and/or its affiliates. All rights reserved.

Virtualization Requirements for Nutanix AHV

Overview

For an overview of Nutanix AHV as a supported virtualization environment, see the Introduction to Supported Virtualization Environments.

- Cisco on-premises applications are only supported with Cisco Compute Hyperconverged with Nutanix (CCHN) hardware, in deployment models HCI / Hyperconverged Node or Compute-only Node with HCI nodes.
    - Cisco HCI-Series, HCIX-Series
    - Allowed specifications of UCS C-Series, UCS X-Series, HX-Series, and (compute-only node) UCS B-Series.
    - For more information, see CCHN Spec Sheets for Hyperconverged Nodes and Compute-only Nodes at the link.
- Cisco Edge Computing: Cisco on-premises calling applications are supported with Cisco Unified Edge hardware. For more information, see Datasheets and Spec Sheets at Link.
- Applications are NOT supported on :
    - Cisco or 3rd-party Compute Only nodes with external storage (For example, Nutanix options like FlashStack with Everpure, FlexPod with NetApp or Dell options).
    - 3rd-party Hyperconverged nodes.
- You must also follow:
    - Any compatibility instructions from Nutanix and the hardware provider(s).
    - Application rules for CPU, Memory, Storage, and Network in this chapter.

Application / Hypervisor Compatibility

The minimum supported releases are 15 SU4/X15.4 with Nutanix AHV 10.0 / AOS 7.0. Certain hardware (like Cisco Unified Edge) may have different minimum supported release requirement.

Note: Make sure to use releases that are compatible with both applications and hardware.

Nutanix software releases can be described as **X.Y.z.n**, where a single **X.Y** may contain several **z.n**. For more information, see the following link

For compatibility of application releases with Nutanix AHV and AOS **X.Y** (for example, “10.0” or “7.0”), see each application’s *Installation Guide*.

- Compatible releases will be explicitly listed.
- Unlisted releases are not supported and not tested.
- See Nutanix.com for when compatible releases enter Nutanix’s release end-of-life and implications for support.

© 2026 Cisco and/or its affiliates. All rights reserved.

Within a supported Nutanix AHV or AOS **X.Y** release,

- A minimum z.n release may be required for application or hardware compatibility.
- Subsequent z.n releases are compatible unless explicitly indicated otherwise.

Note: Some releases may be compatible only with specific hardware; see Nutanix.com and the hardware documentation for details.

- There are no other versioned components that need to be tracked/managed.

VM Placement and Required Hardware Specifications

You must follow Nutanix technical documentation to determine the minimum and maximum server counts for the Nutanix cluster, as well as the Controller VM specifications for each server. At this time, calling applications require a Controller VM with 16vcpu, 64GB vram and 3 vnics, on any CCHN hardware and on Cisco Unified Edge hardware.

Co-residency of Cisco core calling applications, other Cisco applications and 3rd-party/customer-homegrown applications is allowed as indicated in VM Placement rules.

For other application requirements, you can use QuoteCollab to save time, or follow the **VM Placement Rules**.

CPU / Processor, RAM / Memory, Storage, Network Requirements

General

Only Cisco Compute Hyperconverged with Nutanix hardware listed above is supported.

VM Placement Rules

a. Rules for CPU are the same as on VMware vSphere ESXi, but must add the vcpu of the Controller VM.

b. Rules for RAM are the same as on VMware vSphere ESXi, but instead of the RAM GB overhead for ESXi, you must add the vram of the Controller VM.

c. Rules for Storage are the same as on VMware vSphere ESXi, but you must add the vdisk of the Controller VM.

d. Rules for the network are the same as on VMware vSphere ESXi.

Bill of Materials (BOM)

When Nutanix cluster design and physical hardware specifications are finalized, use the Spec Sheet for the desired CCHN server model.

© 2026 Cisco and/or its affiliates. All rights reserved.

Example Hardware Bill of Materials (BOMs)

Summary of Hardware Examples

Example designs are provided for Small Collaboration Design used for Hardware Examples, Medium Collaboration Design used for Hardware Examples, and Large Collaboration Design used for Hardware Examples. Each is built with a variety of hardware options.

Cisco Calling Appliances running Cisco NFVIS-for-UC

These examples are based on

- Cisco Calling application examples from the *Cisco Collaboration Sizing Guide for Release 15*, with application versions 15 SU4a, 15 SU4 and X15.4
- Cisco NFVIS-for-UC 4.18.2a
- Cisco Business Edition 6000 / 7000 appliances M5, M6, M7. Three appliances for N+1.
- Cisco NFVIS-for-UC as described in this Virtualization Guide.

Table - Cisco Appliance (Business Edition 6000/7000)

To view the table, click the **Attachments** () pane in the PDF.

Cisco Compute Hyperconverged with Nutanix

These examples are based on

- Cisco Calling application examples from the *Cisco Collaboration Sizing Guide for Release 15*, with application versions 15 SU4a, 15 SU4 and X15.4
- Nutanix AHV 10.0 and AOS 7.0
- Cisco HCI-Series M7 and HCIX-Series M7, as Hyperconverged nodes (all-NVMe). 3-node AOS clusters for N+1, default Replication Factor, and max / futureproofed Controller VM (CVM) footprint (16vcpu, 64GB vram, 0 GB vdisk, 3 vnic)
- Small Calling on Cisco Unified Edge

Table - Cisco Hyperconverged Node with Nutanix

To view the table, click the **Attachments** () pane in the PDF.

© 2026 Cisco and/or its affiliates. All rights reserved.

VMware VVF/VCF on Cisco UCS Servers

These examples are based on

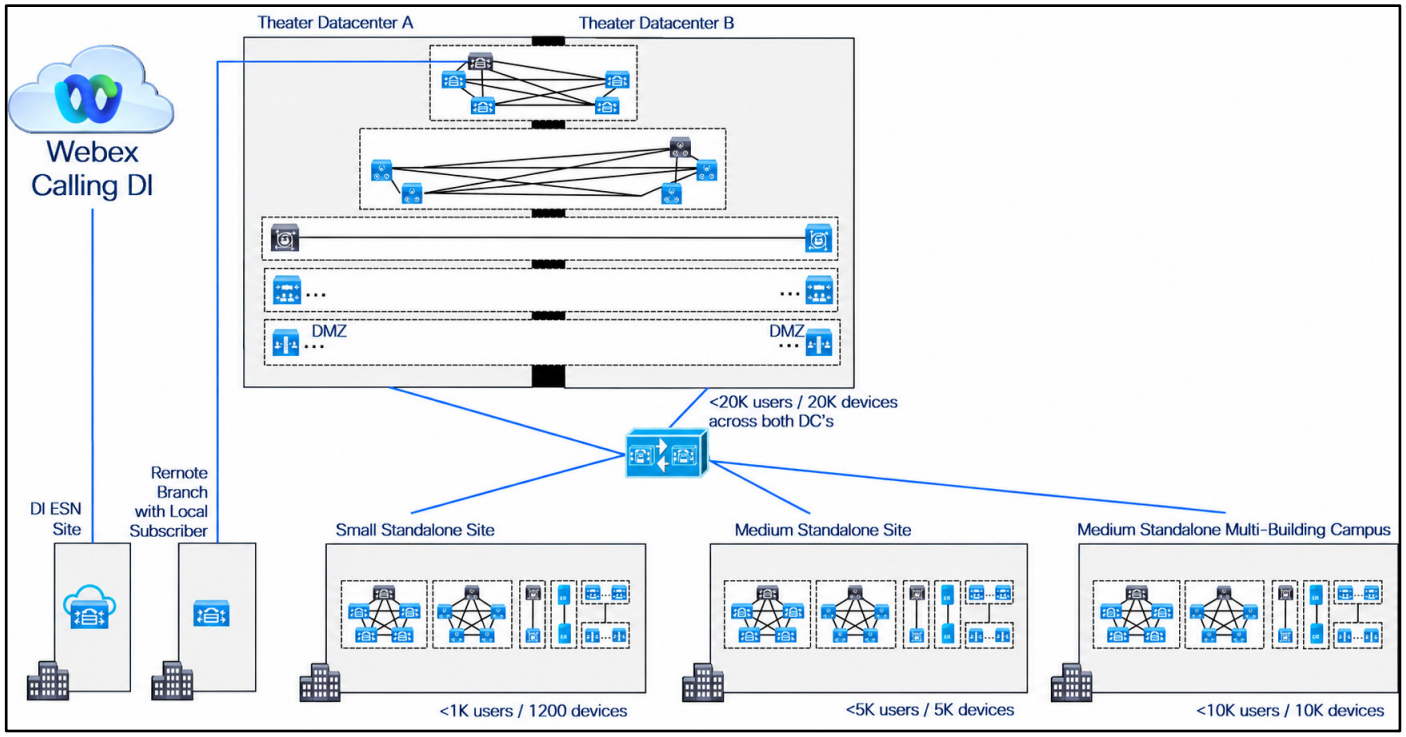
- Cisco Calling application examples from the *Cisco Collaboration Sizing Guide for Release 15*, with application versions 15 SU4a, 15 SU4 and X15.4
- Standalone VMware vSphere ESXi 8.0 (other required VVF/VCF components not shown).
- Cisco UCS C-Series M7 with Local Storage or UCS X-Series M7 diskless / boot-from-SAN. Three servers per site for N+1.
- Based on Broadcom/VMware technical docs at time of this writing:
    - These examples only cover ESXi and vCenter. They do not account for any other VVF 9 / VCF 9 required components.
    - For ESX 9.0/9.1 in VVF 9, these examples will otherwise look substantially similar, but do not account for other VVF-required components like VCF Operations.
    - For ESX 9.0/9.1 in VCF 9, the Local Storage examples are not supported by VCF 9.0+. The diskless/boot-from-SAN examples do not account for for other VCF-required components like VCF Operations, NSX Edge/Controller, etc.

Table - VMware VVF/VCF on Cisco UCS Servers

To view the table, click the **Attachments** () pane in the PDF.

© 2026 Cisco and/or its affiliates. All rights reserved.

Case Study for Hardware Examples



Each site in the above case study can be represented as:

- One of the application examples from the *Cisco Collaboration Sizing Guide for Release 15*, with application versions 15 SU4a, 15 SU4 and X15.4 (15 SU5 for Cisco Unified Edge hardware).
- One of the Example Hardware BOMs for desired hypervisor (Cisco, Nutanix or VMware by Broadcom).

See the Cisco Collaboration Sizing Guide for Release 15, Simplified Sizing Examples, Small Example.

For the Small Site that will fit on Cisco Business Edition 6000 appliances, the application example is modifed to align with BE6000 Supported System Capacities in the *Installation Guide for Cisco Business Edition 6000 and 7000, Release 15 (M7 Appliances, zero factory preload 14X15X-K9-17 / 14X15X-XU-17)*

DI ESN Site or Remote Branch with Local Subscriber

- Assume single-site for this example.
- Application Example: single workload only (either a single DI ESN or UCM Medium/Large Virtual Machine), version 15 SU4a.
- Virtualization with Example Hardware:

© 2026 Cisco and/or its affiliates. All rights reserved.

- Cisco NFVIS 4.18.2a on Cisco Business Edition 7000M (M7) Appliance for Medium Collaboration.

Small Standalone Site

- Assume single-site for this example.
- Application Example: see Small Collaboration Example from the Cisco Collaboration Sizing Guide *for Release 15*, with application versions 15 SU4a, 15 SU4 and X15.4.
- Virtualization with Example Hardware:
  - Cisco NFVIS 4.18.2a on Cisco Business Edition 6000M (M7) Appliance for Small Collaboration.
  - Nutanix AHV 10.0 / AOS 7.0 on Cisco HCIAF220c M7SN Rack Hyperconverged Node Example for Small Collaboration
  - Nutanix AHV 11.0 / AOS 7.5 on Cisco Unified Edge (XE130c M8 Compute Node)
  - VMware ESXi 8.0 on UCS C220 M7SX Rack with Local Storage Example for Small Collaboration

Medium Standalone Site

- Assume single-site for this example.
- Application Example: see Medium #1 *Collaboration Example from the Cisco Collaboration Sizing Guide for Release 15*, with application versions 15 SU4a, 15 SU4 and X15.4.
- Virtualization with Example Hardware:
  - Cisco NFVIS 4.18.2a on Cisco Business Edition 7000M (M7) Appliance for Medium Collaboration.
  - Nutanix AHV 10.0 / AOS 7.0 on Cisco HCIAF240c M7SN Rack Hyperconverged Node Example for Medium Collaboration
  - VMware ESXi 8.0 on UCS C240 M7SX Rack with Local Storage Example for Small Collaboration

Medium Standalone Multi-Building Campus

- Assume a single-site, three-building campus for this example.
- Application Example: see Medium #2 *Collaboration Example from the Cisco Collaboration Sizing Guide for Release 15*, with application versions 15 SU4a, 15 SU4 and X15.4.
- Virtualization with Example Hardware:
  - Cisco NFVIS 4.18.2a on Cisco Business Edition 7000M (M7) Appliance for Medium Collaboration.

© 2026 Cisco and/or its affiliates. All rights reserved.

- Nutanix AHV 10.0 / AOS 7.0 on Cisco HCIAF240c M7SN Rack Hyperconverged Node Example for Medium Collaboration
- VMware ESXi 8.0 on UCS C240 M7SX Rack with Local Storage Example for Small Collaboration

Large dual-Datacenter

- Assume two sites for this example.
- Application Example: see Large Collaboration Example from the *Cisco Collaboration Sizing Guide for Release 15*, with application versions 15 SU4a, 15 SU4 and X15.4.
- Virtualization with Example Hardware:
  - Cisco NFVIS 4.18.2a on Cisco Business Edition 7000H (M7) Appliance for Large Collaboration.
  - Nutanix AHV 10.0 / AOS 7.0 on either
    - Cisco HCIAF240c M7SN Rack Hyperconverged Node Example for Large Collaboration
    - Cisco HCIX210c M7SN Blade Hyperconverged Node
  - VMware ESXi 8.0 on either:
    - Cisco UCS C240 M7SX Rack with Local Storage Example for Large Collaboration
    - Cisco UCS X210c M7SN Blade diskless / boot from SAN Example for Large Collaboration

© 2026 Cisco and/or its affiliates. All rights reserved.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **https://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/go/trademarks. 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)

© 2026 Cisco and/or its affiliates. All rights reserved.