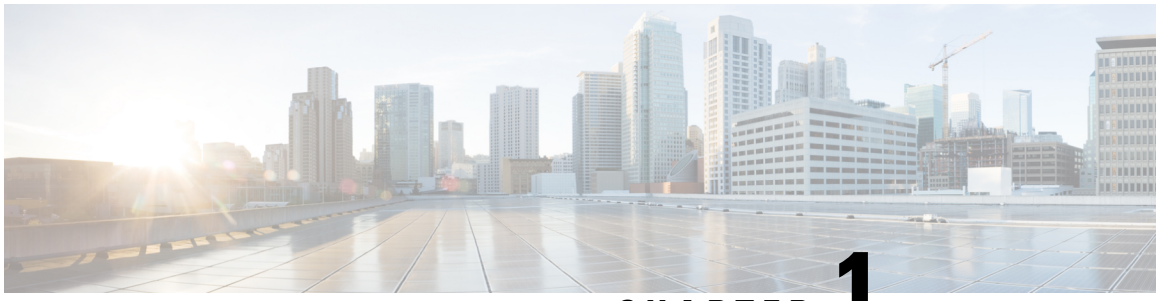
Cisco BE6000 and Cisco BE7000 (CSR 14) Coresidency Policy Requirements

First Published: 2021-03-02

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

Introduction to Coresidency

Coresidency Inclusions

Coresident means “running different Collaboration applications in dedicated virtual machines on the same virtualized Business Edition physical server or host”.

In addition to Cisco Unified Communications appliance (UC) applications that are sold with Cisco Business Edition appliance 6000 (BE6000M, BE6000H, and BE6000S) and Cisco Business Edition 7000 (BE7000M and BE7000H), Cisco also allows the installation of a broader range of Cisco and third-party virtualized applications, subject to the conditions that are detailed in this document.

- Cisco Business Edition Embedded Virtualization Basic 7.x
- Cisco Business Edition Embedded Virtualization Basic Plus 7.x
- Cisco Business Edition Embedded Virtualization Enhanced 7.x
- Cisco UC Virtualization Hypervisor Plus 6.x
- Cisco UC Virtualization Foundation 6.x
- Cisco Collaboration Virtualization Standard 6.x
- End of Support embedded virtualization offers (Cisco UC Virtualization Hypervisor 4x/5x, license-only Cisco UC Virtualization Foundation 4x/5x)

BE6000M, BE6000H, BE7000M, and BE7000H

Business Edition applications include the Collaboration applications that are explicitly integrated in the BE6000 and BE7000 Solutions. These applications are factory-preloaded on the appliance and many are integrated with BE6000 starter licensing. Business Edition applications that are preloaded on BE6000M, BE6000H, BE7000M, and BE7000H servers are as follows:

- Cisco Prime Collaboration Provisioning (10.0 and later releases only)
- Cisco Prime Collaboration Deployment
- Cisco TelePresence Management Suite

- Cisco Unified Communications Manager
- Cisco Unity Connection
- Cisco Unified Communications Manager IM and Presence Service
- Cisco Paging Server
- Cisco Expressway
- Cisco Emergency Responder
- Cisco Unified Attendant Console
- Cisco Unified Contact Center Express
- Cisco TelePresence Video Communication Server (CSR 11.5 and earlier releases only)
- Cisco TelePresence Conductor (CSR 10.x and 11.x releases only)
- Cisco TelePresence Server Virtual Machine (CSR 10.x and 11.x releases only)
- Cisco TelePresence Content Server (10.6 through 11.5 releases only)

On BE6000M, BE6000H, BE7000M, BE7000H servers with embedded virtualization software licenses:

- Cisco supports all Business Edition applications that are in the preceding list.
- Non-Business Edition applications are allowed if all rules in this document are followed. Cisco TAC support is only for products that are purchased from Cisco with a valid, active maintenance contract. Refer to the Non-Business Edition Applications.

Not all UC applications support coresidency, or they may have limited support of coresidency. See each product's page on the http://www.cisco.com/go/virtualized-collaboration for its coresidency policy.

All other general UC virtualization rules apply; for example, VMware feature support and supported ESXi versions. For more information, see the http://www.cisco.com/go/virtualized-collaboration

BE6000S

BE6000S supports only the following Core Business Edition applications that are preloaded on a BE6000S appliance:

- Cisco Prime Collaboration Provisioning
- Cisco Unified Communications Manager
- Cisco Unity Connection
- Cisco Unified Communications Manager IM and Presence Service
- Cisco Paging Server

Cisco only supports the Core Business Edition applications listed above for BE6000S appliances. No other applications (either Cisco or third party) are supported with BE6000S currently, even if other virtualization software licenses are substituted.

Non-Business Edition Applications

In a BE6000 or BE7000 deployment with one physical server, up to three third-party virtual machines may run on the server. For larger deployments, a maximum of three times the number of physical servers is permitted. The allowed quantity of third-party virtual machines can be deployed across physical servers in any combination. For example, with two physical servers, the six virtual machines can be distributed evenly across both, all, or one physical server.

Non-Business Edition applications include the following:

- Other Cisco Collaboration applications that are listed at www.cisco.com go virtualized-collaboration (such as MediaSense) that are not explicitly listed as part of the BE6000 or BE7000 solutions. This includes Microsoft Windows, SQL Server, or ActiveDirectory dedicated to a Cisco application (such as Unified Contact Center Enterprise, TelePresence Media Server, or Spark Hybrid Service connectors).
- Virtualized third-party applications that are included in the Solution Partner Program (SPP), formerly known as Cisco Developer Network (CDN) Marketplace Solutions Catalog for Collaboration. A list of all permitted third-party Collaboration applications can be found here. Select **Technology = Collaboration.**

Note You may only use third-party applications from the Collaboration category with the Business Edition embedded Hypervisor licenses.

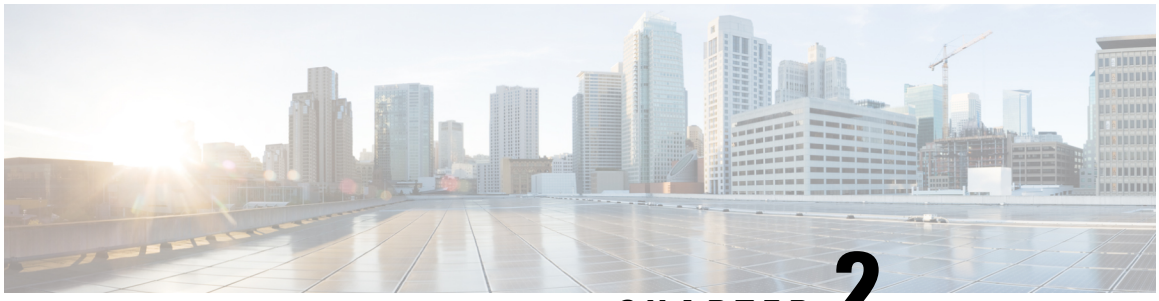
- Virtualized third-party applications that are offered through the Cisco SolutionsPlus Program and complementary to Collaboration are described at the http://www.cisco.com/web/partners/pr46/solutions_plus/index.html.
- Cisco Smart Software Manager satellite

For more details on supported Non-Business Edition applications, see the application links in the “Cisco Collaboration Virtualization Support” table at www.cisco.com go virtualized-collaboration.

Regardless of virtulization license, all non-Business Edition applications must be qualified to run virtualized on VMware and must align with the virtualization software requirements for Cisco Collaboration that are outlined at the http://www.cisco.com/go/virtualized-collaboration/

Important

1. All applications must support the version of VMware vSphere ESXi on the Business Edition appliance and align with supported versions of Business Edition and Non-Business Edition Collaboration applications.
2. If you run a coresident deployment that includes third-party non-Business Edition applications, you must agree to temporarily reduce the number of virtual machines that are running on a host if we deem it necessary for debugging purposes.
3. You must permanently reduce the number of virtual machines that are running on a host if we determine that the host is overloaded.
4. If you are unwilling to agree to these requirements, Cisco TAC will not support the coresident deployment.
5. Support for third-party applications is provided by the vendor of the individual application.



CHAPTER 2

Planning for Coresidency

Sizing for Coresidency

When planning a coresident deployment, consider four areas: CPU, RAM, storage, and network.

For details on virtual to physical sizing rules in a coresidency context, see https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-infrastructure.html

Co-residency examples may be found at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-infrastructure.html#Intro

CPU

See the CPU/Processor Requirements section at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-infrastructure.html#Specs . For assistance with aligning with these specs, use the QuoteCollab tool at https://cqc.cloudapps.cisco.com/#/.

Sum of vCPUs must be less than or equal to the quantity of physical CPU cores.

Some applications will require their virtual machines to have ESXi setting "Latency Sensitivity" set to "High".

Due to Cisco application VM placement rules, no requirement to configure CPU reservations or limits.

RAM

See the CPU/Processor Requirements section at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-infrastructure.html#Specs_Ram. For assistance with aligning with these specs, use the QuoteCollab tool at www.cisco.com/go/quotecollab.

Sum of vRAM must be less than or equal to physical RAM (less physical RAM required by ESXi).

Note The overhead reservation by ESXi hosts is not applicable to BE6000S release 11.0 and older. As BE6000S is a special configuration with deployment model restrictions, in release 11.0 and older, it does not ship with, or require extra memory for ESXi as described for other Business Edition models.

Disk Storage and Performance

Replace entire section with See Storage Requirements & Guidelines section at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-infrastructure.html#Specs_Storage. For assistance with aligning with these specs, use the QuoteCollab tool at www.cisco.com/go/quotecollab.

Cisco Collaboration applications require max storage latency, min usable space and min IOPS capacity. BE6000/7000 appliance hardware specs follow these requirements for their targeted capacity points and application mixes. 3rd-party apps must abide by these rules; e.g. they must not overload the storage system (causing problems with latency or IOPS) and their required usable space must fit within what the appliance can provide.

Network

See Network Requirements & Guidelines section at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-infrastructure.html#Specs_Network. For assistance with aligning with these specs, use the QuoteCollab tool at www.cisco.com/go/quotecollab.

The total network load of Cisco applications and 3rd-party applications must not exceed the capacity of the appliance's physical networking interfaces.

Understand the networking requirements of the virtual machines that are deployed on the host and how to set up the host networking hardware to meet those needs. If we determine that application performance problems are due to networking congestion within the host, then some VMs must be moved off the host.