



Preparation

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Important Consideration



Note By default, Windows Defender is enabled on Windows Server 2016. Windows Server 2016 upgrade will prompt to uninstall the antivirus due to compatibility issue with Windows Defender. To proceed with the upgrade, uninstall the antivirus. For more information on Windows Defender antivirus compatibility, see <https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-defender-antivirus/windows-defender-antivirus-compatibility>.

Before proceeding with ICM application installation, ensure that you follow the antivirus guidelines specified in the Section, Antivirus Guidelines of the Security Guide for Cisco Unified ICM/Contact Center Enterprise at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-installation-and-configuration-guides-list.html>.

Installation Approach

Cisco HCS for Contact Center service, delivers Cisco Unified Contact Center Enterprise (Unified CCE) in a virtualized environment on Cisco Unified Computing System (UCS).

Cisco HCS for Contact Center offers the same shared management (service fulfillment and assurance) and aggregation (carrier trunks) that is common for all customer instances and used for other Cisco HCS services.

Cisco Core components include, Unified CVP, Unified CCE, Unified Communication Manager, Cisco Finesse, Unified Intelligence Center, CUBE-E. Install the core components using the golden template process as the standard approach.

Install the shared management and aggregation layer that consists of Unified Communication Domain Manager (UCDM), Cisco Unified Contact Center Domain Manager (Unified CCDM), Cisco Prime Collaboration - Assurance (PCA), and Cisco Adaptive Security Appliance (ASA). This combines the Cisco HCS components with multiple network connections and routes requests to a dedicated customer instance.

Install the network infrastructure layer that includes the implementation of UCS platform.

After you install the above, as part of post installation you can configure the customer instances for the supported deployment models. Depending upon your HCS for Contact Center deployment model, you can configure dedicated customer instances of 500, 2000, 4000, 12000, or 24000 agents and shared customer instances of 100 or 500 agents.

The following workflow describes the high-level installation sequence for Cisco HCS for Contact Center.



Related Topics

[Shared Component Installation](#)

[Core Components Installation Approach](#)

System Installation Dependencies

The components within each release set are compatible with each other and will interoperate correctly. The overall system may not be operational until you install all components or until you complete the initial configuration or setup.

For Nexus, ASA, and CUBE Enterprise supported release version, see <https://www.cisco.com/c/en/us/support/unified-communications/hosted-collaboration-solution-hcs/tsd-products-support-series-home.html>.

For information on all other component hardware and software versions and compatibility, see *Contact Center Enterprise Compatibility Matrix* at <https://www.cisco.com/c/en/us/support/unified-communications/hosted-collaboration-solution-contact-center/products-device-support-tables-list.html>.

Automation Software



Note Automation software is required for golden templates only.

Software	Version	Download	Notes
GoldenTemplateTool zip file	12.0(1)	Go to https://communities.cisco.com/docs/DOC-31448 https://communities.cisco.com/docs/DOC-35671 Golden Template Tool Click Download . Then select HCS for CC deployment scripts. https://communities.cisco.com/docs/DOC-52685 https://communities.cisco.com/docs/DOC-58521 HCS-CC_11.6.1-GoldenTemplateTool.zip	Download and extract the GoldenTemplateTool.zip file to run the automation tool. For more information, see <i>Automated Cloning and OS Customization</i> section in <i>Configuring Guide for Cisco HCS for Contact Center</i> https://www.cisco.com/c/en/us/support/unified-communications/hosted-collaboration-solution-contact-center/products-installation-guides-list.html .
PowerCLI		http://downloads.vmware.com/	Use PowerCLI to run the automation script.
OVF Tool	32-bit	https://my.vmware.com/group/vmware/datastoreGroup-VMFTools?productId=91	
WinImage	8.5 , 32-bit	See http://winimage.com/download.htm . Note WinImage is shareware. If you choose to not purchase a licensed copy, you will see pop-ups when you run this tool. Clicking No at the pop-ups will allow you to proceed.	WinImage creates a floppy image (.flp file) from the platformConfig.xml file. This file contains parameters for customizing VOS primary and secondary nodes.

Hardware Requirements

HCS for Contact Center supports the following configurations:

For information on the TRC server support for this release, see the *Virtualization for Cisco HCS for Contact Center* guide at

https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/hcs_cc_virt.html

HyperFlex M5 Support

Cisco HyperFlex HX-Series System provides a unified view of the storage across all nodes of the HyperFlex HX cluster via the HX Data Controller Platform. For optimal performance, it is recommended that all VMs

are mapped to the single unified datastore. This mapping enables the HX Data Platform to optimize storage access based on the workload and other operating parameters.

For more information, see the documentation on Cisco HyperFlex HX Data Platform at <https://www.cisco.com/c/en/us/support/hyperconverged-systems/hyperflex-hx-data-platform-software/products-installation-guides-list.html>.

For information on installing collaboration software, see the *Cisco Collaboration on Virtual Servers* at <https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-installation-guides-list.html>.

Specification Based Hardware Support

Cisco HCS for Contact Center supports specification based hardware, but limits this support only to the UCS B-Series blade hardware. This section provides supported server hardware, component version, and storage configurations.

For more information on specification based hardware such as CPU types, see the *Collaboration Virtualization Hardware* guide at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/collaboration-virtualization-hardware.html

Additional Hardware Specification

The following table lists the additional hardware specification for HCS for Contact Center.

Server	Components	Description
Cisco Unified Border Element Enterprise Gateway	CUBE-E	ISR G2 with a combination of TDM and VXML. 29xx, 39xx series routers.
Cisco Unified SIP Proxy	CUSP	Services Module with Services Ready Engine
Adaptive Security Appliance	ASA	Cisco ASA 55xx series For small contact center it should be 5585 or 5580.

Network Infrastructure

This section provides information on how to setup the network infrastructure for Cisco HCS for Contact Center. This section does not provide detailed installation instructions for individual components installation. For details information on installation, see [Cisco Hosted Collaboration Solution, Installation Guide](#).

- Install and configure the Cisco UCS Server and Cisco UCS Manager.
- Install and configure the SAN Storage.
- Install and configure the MDS Series Switch.

You can install the MDS Series Switch any time after the Nexus 7000 and 5500 switch.

- Install and configure the vCenter.

- Install and configure the Cisco Nexus 1000V Series Switch.

