System Requirements

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Set up Active Directory

Ensure that you have a completed plan for your domain structure and Active Directory implementation before you set up your network.

Warning The Unified CCE servers should be in the same domain, and multiple domains are not supported.

For more information, see the *Staging Guide for Cisco Unified ICM/Contact Center Enterprise* at http://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-installation-guides-list.html.

Transport Layer Security Version 1.2 Required

Contact center enterprise solutions require the use of TLS 1.2 only connections in this release. Our services accept incoming TLS connections only over TLS 1.2. All outgoing TLS connection use only TLS 1.2.

All clients that connect to either our web interfaces or databases must support TLS 1.2.

Note The older versions of the TLS/SSL are disabled by installer.

For more information see, *Contact Center Enterprise Compatibility Matrix* at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-device-support-tables-list.html.

Installation Tools

During installation, use one or all of the following tools, as required:

- ICM-CCE-Installer—The main Unified CCE Installer copies all files into relevant folders, creates the base registries, and installs needed third-party software such as JRE and Apache Tomcat. It uses the Microsoft .NET Framework which is an integral software of Windows Server.

Note Optionally, you can update the JRE installed by the Unified CCE Installer with a later version of the JRE. See Java Upgrades.

If the ICM-CCE installer installs JRE on the Windows platform, the system retains only the Cisco approved CA certificates in the java certificate store, and removes all the unapproved certificates.

Do not run the installer remotely. Download the installer to a local machine for installation.

- ICM12.6.2.exe—The Unified CCE patch installer. It copies all files into relevant folders, updates the registries, and installs needed third-party software such as JRE, Apache Tomcat, and Microsoft .NET Framework.
- Cisco Unified Intelligent Contact Management Database Administration (ICMDBA) Tool—Used to create new databases, modify or delete existing databases, and perform limited SQL Server configuration tasks.
- Domain Manager—Used to provision Active Directory.
- Web Setup—Used to set up the Call Routers, Loggers, Network Gateways, Network Interface Controllers, and Administration & Data Servers.
- Peripheral Gateway (PG) Setup—Used to set up MR PIMs and CG.

VMware Hosting and Hardware Support

See the *Virtualization for Cisco Packaged CCE* at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/uc_system/virtualization/pcce_virt_index.html for the supported specification based hardware, Cisco UCS C-Series servers for Packaged CCE fresh installs and upgrades, and supported VMware vSphere ESXi versions.

Software Compatibility

See the Contact Center Enterprise Compatibility Matrix at https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/products-device-support-tables-list.html

- Endpoints for agents and callers
- Cisco gateway hardware and software
- Third-party software

Software Licenses

The following table lists the Cisco components that comprise a Packaged CCE solution:

Components	License requirements
Cisco Packaged Contact Center Enterprise	One server license for each of the voice applications. One agent license for each concurrent user with different feature tiers.
Cisco Unified Communications Manager	One license for each Cisco Unified Communications Manager node, plus device licenses for connected devices.
Cisco Unified Customer Voice Portal (CVP)	You must register CVP instance with Cisco Smart Licensing Server which includes CVP Call Server and VXML Server in order to use the appropriate licenses. For more information, see *Administration Guide for Cisco Unified Customer Voice Portal* at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-customer-voice-portal/tsd-products-support-series-home.html.
Cisco Finesse	Cisco Finesse: User licenses included with selected tiers of Cisco Unified Contact Center Enterprise user licenses. One license for each server pair. One license for each Media Kit.
Cisco Customer Collaboration Platform	User license included with Packaged CCE Agent License. One server license for each Customer Collaboration Platform server.

Note Packaged Contact Center Enterprise is enabled with Smart Licensing. For information on Smart Licensing, see the Packaged Contact Center Enterprise Administration and Configuration Guide at https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/products-maintenance-guides-list.html.

Before you begin an installation or upgrade of any part of your contact center, confirm the following:

- That you have all the required software products.
- That all the software versions are compatible with each other.
- That all software versions are also compatible with all hardware and VMware.

Java Requirements

CCE has transitioned from Oracle to OpenJDK for the Java runtime environment (JRE). All CCE components require OpenJDK JRE version 1.8 (32-bit), update 352 or later. The 12.6(2) installer will install the required OpenJDK 1.8 version. If the existing Oracle JRE is not needed, you may uninstall it from the system manually.