Installation Preparation

Installation Scenarios

Unified CCX installation has the following installation options:

- Standard installation - This option allows you to install Unified CCX software from the installation disc.

- Unattended installation - This option allows you to use the installation disc and a preconfigured USB disk to install Unified CCX software unattended.

- Virtualization - Unified CCX supports installation on a virtual machine.

Note For more information, see the Unified CCX Virtualization related information located at: https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-cisco-unified-contact-center-express.html.

Table 1: Installation Scenarios

Installation Scenario	Tasks
Standalone (Single Node) Setup	Standard Installation: • Install Unified CCX from Installation DVD • Configure the first node Unattended Installation: • Perform Unattended Installation Using Answer File Generator • Configure the first node

Installation Scenario	Tasks
High Availability (Two Node) Setup	Standard Installation: • Install Unified CCX from Installation DVD • Configure the First Node • Add Second Node • Install Unified CCX on Second Node • Configure the second node Unattended Installation: • Perform Unattended Installation Using Answer File Generator • Configure the first node • Add Second Node • Perform Unattended Installation Using Answer File Generator • Configure the second node

Note You can use the Cisco Prime Collaboration Deployment application also to install your cluster. For more information, see *Cisco Prime Collaboration Deployment Administration Guide*.

System Requirements

For information about system requirements, see the Unified CCX Compatibility related information located at:

https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-device-support-tables-list.html

Note For more information about VMware ESXi's that are supported, refer to the *Virtualization for Cisco Unified Contact Center Express*.

Important Considerations Before Installation

Read the following information carefully before you proceed with the installation:

Note Both nodes in a cluster must be on the same version. However, if you have upgraded only one node and want the Cisco Unified Intelligence Center Reporting Service available on the upgraded node, do one of the following:

- Stop the Cisco Unified Intelligence Center Reporting Service on the node that is not upgraded and then restart the upgraded node.

- Before the upgrade, change the cluster mode to UDP on both nodes using the **utils cuic cluster mode** CLI command. After upgrading both nodes, set the cluster mode to TCP. For more information, see the section in the Administration Console User Guide Cluster Configuration for JVM Using Hazelcast for Cisco Unified Intelligence Center.

- For a 100 agent profile, if you want to deploy Cloud Connect on the BE6000, configure 14GB of vRAM. For the 400 agent profile, use the new OVA for which you configure 20GB of vRAM.

Note Ensure the reservation of CPU and memory adhere to the specifications mentioned in the Virtualization Wiki.

- Unified CCX can be installed only on virtual machines and not on bare metal servers.

- DNS configuration and domain fields are mandatory for Unified CCX installation. Both forward and reverse lookups are required. DNS is required for the Unified CCX Chat feature to function and for integration with ICM by hostname in Unified IP IVR.

- When you Install Unified CCX on an existing server formats the hard drive, it overwrites all existing data on the drive. It also upgrades the system BIOS, firmware, and Redundant Array of Inexpensive Disks (RAID) configuration if they are outdated.

- Ensure that you connect each Unified CCX node to an uninterrupted power supply (UPS). This protects the Unified CCX server from unexpected power failure that damages the physical media.

- All servers in a cluster must run the same release of Unified CCX. The only exception is while upgrading cluster software, during which a temporary mismatch is allowed.

- Configure the server by using a static IP address so that the server IP address remains unchanged.

- Do not attempt to perform any configuration tasks during the installation.

- The field values (namely hostname and passwords) that you enter while you are running the installation program are case-sensitive. The hostname must be in lower case and the character limit is 24 characters.

- Ensure that the administrator username is not the same as any end user in CUCM.

- When you insert or remove a USB drive, you might see error messages on the console similar to "sdb: assuming drive cache: write through." You can safely ignore these messages.

- Ensure that the third-party web services support TLS version 1.2 before you integrate any third-party web services.

- After the installation of Unified CCX, you have to select the appropriate Smart License Type. For Smart Licensing details, see *Cisco Unified Contact Center Express Features Guide*.

• When creating the OS Administrator ID, ensure that it does not start with "uccx" or "UCCX" because such IDs conflict with system account names that are used internally within the Contact Center Express server. Ensure that the OS Administration password is at least six characters long; it can contain alphanumeric characters, hyphens, and underscores.

• Ensure that the Application User password is at least six characters long; it can contain alphanumeric characters, hyphens, and underscores.

Preinstallation Tasks

Step 1 If the system time is from an Network Time Protocol (NTP) server (mandatory for VMware deployments), verify that the first node synchronizes with the NTP server before you install a second node.

Note If the first node fails to synchronize with an NTP server, installation of a second node also fails.

Step 2 If the firewall is in the routing path, disable the firewall between nodes. Increase the firewall timeout settings until you complete the installation.

Step 3 Record the network interface card (NIC) speed and duplex settings of the switch port to which you will connect the new server.

Step 4 Enable PortFast on all switch ports that are connected to Cisco servers.

Caution Do not run Network Address Translation (NAT) or Port Address Translation (PAT) between Unified CCX nodes.

Step 5 If you choose to apply a patch during installation, use a Secure File Transfer Protocol (SFTP) server that is certified by Cisco through the Cisco Technology Developer Partner program (CTDP). For more information about Supported SFTP Servers, see *System Requirements* section in *Cisco Unified Contact Center Express Admin and Operations Guide*.