



Unified CCX Provision Checklist

The Cisco Unified Communications Manager (CM) product supports both single-node and two-node (high availability) deployments available for the Cisco Unified Contact Center Express (CCX).

The deployment model is transparent to the Unified CCX installer as the clustering for Unified CM is performed through the Unified CCX Administration using the Unified CCX setup wizard. The high availability over WAN feature of Unified CCX is supported only for Unified CM deployments.

The following topics introduce the Unified CCX subsystem and explain how to modify the Unified CM information from Unified CCX.

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Unified CCX

The Unified CCX system uses the Unified CCX subsystem as part of an ACD system to provide resource distribution and queuing to call centers.

Two types of routing are available:

- **Contact Service Queue (CSQ)-based routing**—CSQs are entities that route calls to your resources (agents). Each CSQ controls incoming calls and determines where an incoming call is placed in the queue and to which agent the call is sent.

Each CSQ selects resources from an associated resource pool that you define or from resource skills for all Unified CCX license packages. When an agent becomes available to take a call, the system chooses a queued call from one of the CSQs whose resource pool includes the agent, and routes that call to that agent.

- **Agent-based routing**—Agent-based routing provides the ability to send a call to a *specific* agent, rather than any agent available in a CSQ.

A Unified CCX agent can participate in both CSQ-based and agent-based routing. A Unified CCX agent can be any one of the following:

- Cisco Finesse
- IP Phone Agent
- Extension Mobility (EM) Agent

- Supervisor (if the supervisor is taking calls)



Note A supervisor who is not taking calls is not considered to be an agent.

Calls are queued in the Unified CCX server and sent to agents by the Unified CCX server.

The machine you install your Unified CCX system on determines how many agents and IVR ports Unified CCX can accommodate. However, be aware of the following general configuration rules:

- Each agent cannot be associated with more than:
 - 25 CSQs (This is a configuration design guideline; Unified CCX Administration does not enforce the rule.)
 - 50 skills (Unified CCX Administration enforces this rule.)
- Each CSQ cannot be associated with more than 50 skills. (Unified CCX Administration enforces this rule.)
- A call should not queue for more than 25 CSQs. (This is a configuration design guideline; Unified CCX Administration does not enforce the rule.)

Provision Unified CCX

To provision Unified CCX, complete the following tasks:

Step	Task	Unified CM
Step 1	Configure Unified CM users who will be agents in your Unified CCX system.	Provision Unified CM for Unified CCX
Step 2	Provision resources information for Unified CCX telephony and media.	Provision Unified CM Telephony Subsystem
Step 3	Provision RmCm Provider to allow RmCm Subsystem to be in service.	RmCm Provider Configuration
Step 4	Create resource groups.	Resource Groups
Step 5	Create skills.	Skills Configuration
Step 6	Assign agents to resource groups and assign skills to agents.	Agent Configuration
Step 7	Create Contact Service Queues.	Contact Service Queue Configuration
Step 9	Provision agent-based routing—if using Unified CCX Enhanced or Premium.	Configure Agent-Based Routing

Step	Task	Unified CM
Step 10	Create teams and assign agents to teams.	

Change Licensing Packages

The following three license upgrade options are available for Unified CCX system:

- Standard to Premium
- Standard to Enhanced
- Enhanced to Premium

While upgrading the licenses, you need to configure the following system parameters:

- **Standard to Premium or Enhanced**—Only Enhanced and Premium package licenses support Recording. When you upgrade to Enhanced or Premium license package, you need to manually change the Recording Count to a desired value to enable the recording functionality.
- **Standard to Premium or Enhanced**—Only Enhanced and Premium package licenses support Recording.
- **Standard or Enhanced to Premium**—You need to configure the Number of Outbound Seats while upgrading to a Premium license.
- **Standard or Enhanced to Premium**—You need to configure the Number of Direct Preview Outbound Seats while upgrading to a Premium license.



Note Downgrade of license is not supported in Unified CCX.

Procedure

Choose **System > System Parameters** from the Cisco Unified CCX Administration menu bar to open the System Parameters Configuration web page where you can update these values.
