



Unified Communications Application Planning

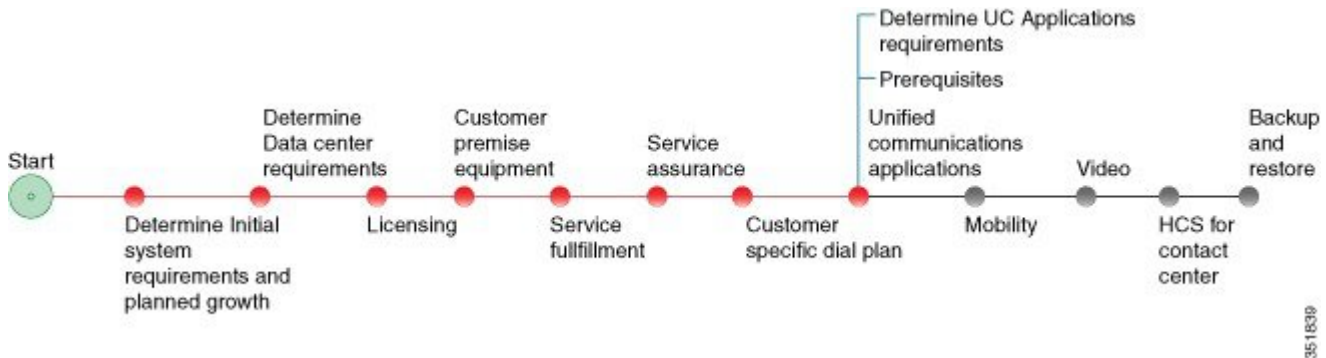
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Prerequisites

Before you plan the UC applications processes for your Cisco HCS installation, make sure that you:

- Review and have access to the *Cisco Hosted Collaboration Solution, Release 10.6(1) Solution Reference Network Design Guide*.
- Have completed the actions outlined in previous sections of this guide including:
 - Initial system requirements and planned growth
 - Data center requirements
 - Licensing
 - Customer premise equipment
 - Service fulfillment
 - Service assurance
 - Customer-specific dial plan

UC Applications Workflow



Determine UC Applications Requirements

Procedure

- Step 1** Identify customer size.
This size relies on the choice of deployment model.
For instance, if your deployment model includes Shared Instance, this affects how you deploy your Cisco Unified Communications Manager.
For instance, if you anticipate a low usage for voicemail, for example, consider partitioning Cisco Unity Connection while keeping Cisco Unified Communications Manager and Cisco Unified Communications Manager IM and Presence Service dedicated to one server.
- Step 2** Based on criteria collected, determine if the system requires central aggregation or if only local breakout is required.
- Step 3** Determine redundancy consideration based on your data center.
Based on previous steps, you should have made some decisions about redundancy for your system. You will also need to take these factors into consideration specific to your customers. To streamline your processes, you may decide to have every customer set up the same. Alternatively, if you need more flexibility, you may decide to address each customer and each customer site on a case-by-case basis. For local sites, be sure to consider using SRST.
- Step 4** Determine requirements for applications and services
Detailed background information about each of these applications is described in the *Cisco Hosted Collaboration Solution, Release 10.6(1) Solution Reference Network Design Guide*.
- a) Cisco Unified Communications Manager
You can set up your Cisco Unified Communications Manager in a number of different ways, depending on your deployment model. Consider the following:

- Decide if you want the Cisco Unified Communications Manager to reside on a dedicated server or a shared server. For more information on the different deployment models and the differences, see [Determine Your HCS Data Center Deployment Model](#).
- Decide if you want a Shared Instance deployment. For more information on Cisco Unified Communications Manager and Shared Instance see [Shared Instance](#). For restriction information as well as other feature details, see the *Cisco Hosted Collaboration Solution, Release 10.6(1) Features for Cisco Unified Communications Manager*.
- Call admissions control
- Dial Plan
- Voice gateways
- SIP trunks
- Media resources

Consider these factors concerning media resources:

- The various resources for either local Customer Premise Equipment (ISR based), data center-based or software-based system deployment.
 - MCU for ad-hoc video conferencing.
 - Bandwidth considerations for non-local resources.
- LDAP
Decide if you plan to have LDAP synchronization enabled. With synchronization, consider what information you want to synchronize initially and what information comes across in the subsequent synchs. If the LDAP server does not have synchronization enabled, then the administrator should ensure consistent configurations across Unified Communications Manager and LDAP when configuring user directory number associations. You also need to consider LDAP for endpoints as well as authentication purpose, and location of LDAP, whether on premises provided by customers or in your data center. There are also NAT considerations for location of LDAP.
 - Extension Mobility
 - Attendant Console
 - Cisco Paging Server - also known as Singlewire - InformaCast Basic Paging

b) Cisco Unity Connection

You can set up your Unity Connection in a number of different ways, depending on your deployment model. Consider the following:

- Decide if you want the Unity Connection to reside on a dedicated server or a shared server. For more information on the different deployment models and the differences, [Determine Your HCS Data Center Deployment Model](#).
- Partitioned Unity Connection
Decide if you want to partition Unity Connection to support multiple small medium businesses as tenants on a single Cisco Unity Connection installation. For more information on partitioned Unity Connection, see [Partitioned Unity Connection](#).
- Voice messaging.

Depending on how flexible you want the system to be, consider integrated messaging versus unified messaging.

- c) Cisco Unified Communications Manager IM and Presence Service
Your Cisco Unified Communications Manager IM and Presence Service can be set up in a number of different ways, depending on your deployment model. You will want to consider aspects such as compliance and logging. Also, consider the following:
 - Cisco Unified Communications Manager IM and Presence Service and federation consideration for MSFT .
 - Note** For more information on Cisco Unified Communications Manager IM and Presence Service and Shared Instance, see [Shared Instance](#). For restriction information as well as other feature details, see the *Cisco Hosted Collaboration Solution, Release 10.6(1) Features for Cisco Unified Communications Manager*.
 - Cisco Unified Communications Manager IM and Presence Service inter-domain federation.
- d) Cisco Emergency Responder.
- e) Attendant Console (CUAC).

Step 5 Determine requirements for software endpoints, such as Jabber.

- a) Determine E911 support for mobile clients, factoring in capacity impacts. You can find more details about capacity in the *Cisco Hosted Collaboration Solution, Release 10.6(1) Capacity Planning Guide*. You have two different choices for determining the support for E911:
 - Inform users if 911 will not work.
 - Force users to identify the location. With the location information, the system can either find an location to connect the emergency services or have the phone alert the user that they are not allowed to place the call.

Make sure that you understand what you are required to do from a legal perspective. Your requirements will depend on the size of company, type of service, and so forth.

- b) Determine support for software install and upgrade of mobile and desktop clients.
 - Phone support: Determine the clients that you plan to support, such as user downloading clients from the Apple app store or Google Play.
 - Desktop client support: Determine the software applications that you plan to support. These applications are stored on servers, and will factor into your data center planning. For more details on data center requirements, see [Determine Data Center Requirements](#).
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