



## CHAPTER 5

# Deployment Methodology

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Deploying a Cisco Unified Communications system involves a series of several steps. These steps include analyzing your requirements, designing your system, and implementing the Cisco Unified Communications components. This process will likely involve collaboration between your business and technical personnel and various representatives and experts from Cisco.

This chapter provides a high-level overview of some of the key steps that you will follow when you deploy a Cisco Unified Communications system.

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## Step 1: Determine Your Requirements

The first step in deploying the Cisco Unified Communications system is to determine the requirements for your situation. This step involves:

- Analyzing your business operations to determine features and functions that you need. For example, consider the requirements that are described in [Table 5-1](#).

**Table 5-1 Representative System Requirements**

Requirement	Example Considerations
Business needs	<ul style="list-style-type: none"> <li>Do calls to a customer service number need to be distributed among agents at various locations?</li> <li>Do voice messages need to be recorded?</li> <li>Is intra-office abbreviated dialing required?</li> </ul>
Site requirements	<ul style="list-style-type: none"> <li>Where are the locations that the system will serve?</li> <li>How should the system components be distributed across sites?</li> </ul>
Availability	<ul style="list-style-type: none"> <li>Is availability needed 24 hours a day or only during normal business hours?</li> <li>What is the required recovery time after failure?</li> </ul>
Capacity	<ul style="list-style-type: none"> <li>How many users must be supported?</li> <li>How many simultaneous calls must be supported?</li> </ul>
Integration	<ul style="list-style-type: none"> <li>Will the Cisco Unified Communications system need to integrate with an existing application or phone system?</li> <li>Are there legacy components that must be maintained?</li> </ul>
Deployment schedule	<ul style="list-style-type: none"> <li>When must the system be installed and operating?</li> <li>How will the system be phased in?</li> </ul>

- Review options and determine the implications of each alternative.
- Define the components that meet your requirements.

## Step 2: Determine the Solution Requirements

After you determine your requirements, you are ready to define the solution that meet your requirements. In this step, you determine the component and component options that meet your business and operational needs.

The solution consists of the Cisco Unified Communications platforms and systems that make up the architecture. It also includes the features, functions, and applications that provide the services that you require.

The solution also may include third-party products.

## Step 3: Assess Your Network and Infrastructure Readiness

Network and infrastructure readiness assessment involves the review and audit of all network infrastructure areas that will be affected by the deployment. The assessment should be performed at each site where you will deploy Cisco Unified Communications. Items to assess include:

- Network design (routing and switching network)
- Software

- Hardware
- Power/environment
- Network links
- Network services

## Step 4: Assess Your Operational Readiness

Operational readiness assessment involves determining your ability to administer and manage Cisco Unified Communications. Based on this assessment, you will determine whether additional products and services are required, either temporarily or long-term, when you deploy the system.

Operational areas to consider include:

- System configuration
- System monitoring
- System upgrading

## Step 5: Develop Site Requirements

When you develop your site requirements, you identify the hardware, software, and physical and environmental needs that relate to the implementation and operation of the Cisco Unified Communications system at each location where you will deploy the solution.

To assist with this process, review the high-level design documents to understand the component requirements for the solution at each location. Consider these issues:

- Solution hardware components
- Solution software levels
- Telephone company circuits
- WAN connectivity
- Solution equipment electrical requirements
- Solution environmental/physical space requirements
- Solution equipment rack and cabinet locations and layouts

## Step 6: Develop a Detailed Design

After you develop your site requirements, you are ready to develop a detailed design for the Cisco Unified Communications system based on the requirements that you identified.

The detailed design will address a wide variety of issues regarding each Cisco Unified Communications component that you will implement. These issues include:

- Network infrastructure
- Interoperability requirements
- Call processing system requirements
- Application software requirements

- Customer interaction requirements
- Corporate directory architecture and requirements
- Messaging system architecture and requirements
- Conferencing requirements
- Current utilization of voice messaging system, integration plans and migration strategy
- Enterprise directory and messaging security requirements

## Step 7: Develop Your Implementation Plan

Developing an implementation plan involves defining the processes required to carry out the implementation the Cisco Unified Communications system. In this step, make sure to consider:

- Accurate scheduling of any site-specific actions needed prior to implementation
- Equipment delivery and staging
- Resource requirements for network and site-specific implementation, including third-party support requirements
- Project phases and deadlines
- Acceptance criteria for each project phase
- Training

## Step 8: Stage and Configure Your Solution

Staging and configuring your Cisco Unified Communications system can help make final installation more efficient. For this step, you can perform some or all of these tasks:

- Assemble the components that will be installed at each site
- Perform basic testing of the hardware and software
- Pre-configure of the devices as appropriate

## Step 9: Install the Solution

Installing the Cisco Unified Communications system involves installing and configuring your network infrastructure and installing and setting up the system components. After you verify the readiness of this equipment, you perform the following general steps to install the solution:

- Catalog and inventory the system components
- Install equipment in data racks
- Complete cabling and other physical connectivity
- Place phone units in workspaces
- Verify that all units power up correctly
- Capture Installation-specific information, including:
  - Rack layouts

- Phone placement
- Server placements and configurations
- Key connectivity specifics in routers and switches
- Port-specific details

