



CHAPTER 3

Plan

Introduction to Plan

In the Plan phase, you evaluate Cisco technologies that address your business needs and create a business case for the IP telephony system that provides the best return on your investment.



Tip

You can navigate to any topic on this tab by using the tab navigation pane at the left of the content pane. This navigation pane contains the table of contents (TOC) for the active tab.

Before You Begin

Understand the features and functions of IP telephony applications. Start with the [Planning Concepts](#) and the [System Release Notes for Small and Medium Business](#). Then, review the deployment models to understand your options.

When You Are Done

You have defined and created the following:

- Your business and system requirements
- A list of components and applications that match the requirements
- A project plan based on those requirements including a proposed, high-level design

Major Concepts and Tasks in This Process

- [Planning Concepts](#)

Planning Concepts

This topic presents planning concepts. It is assumed that your network will be a converged network that combines voice, data, and video and that you have decided on one of network types discussed in the [Internetwork Design Guide](#). You should also review the information contained in the [Market Description](#).

The primary planning considerations that drive the planning stage are: types of deployment, whether it will be a new installation or migration to new installation with existing equipment; application availability based on your networking needs for multimedia and voice, security, redundancy, fault tolerance, and the costs associated with your needs.

Your goal is to minimize costs while delivering service that does not compromise established availability and performance requirements. These issues are essentially at odds. Any increase in availability and performance must generally be reflected as an increase in cost. As a result, you must carefully weigh the relative importance of resource availability, performance constraints, variables, and overall cost.

**Note**

The concepts discussed in this topic are meant to be a high-level overview of considerations and not meant to be a definitive set of rules.

The concepts that you should review are as follows:

- [Deployment Types](#)
- [Cost of Ownership](#)
- [Use Planning Tools and Templates](#)
- [Understand Your Deployment Options](#)

Deployment Types

The deployment types to consider are as follows:

New Installation

- **Greenfield**—Completely new installation of the Cisco Unified Communications System, using no existing equipment.
- **Brownfield**—Existing Cisco Unified Communications System, which requires an upgrade and migration from a previous system release to the current system release.

Single-Stage Upgrade

- **Using existing hardware**—All components in the network start at the base release set and all components can be upgraded to the target release set within a single maintenance window.
- **Using new hardware (flash-cut or shrink-and-grow)**—A parallel network should be built using new hardware and pre-staged with configuration to support the existing production network.

For more information about deployment types, see [System Installation and Upgrade for IP Telephony for Small and Medium Business](#).

Cost of Ownership

Cisco Unified Communications System provides simple, scalable and cost-effective solutions that helps in lowering total cost of ownership (TCO) for small and medium business. This solution provides you with:

- Voice, data, video, wireless mobility, and system management applications integrated into single network
- Easy to deploy and use, and it scales to accommodate business growth
- With Cisco Smart Services for small and medium business, you increase the network's business value and return on investment by increasing network availability and improving business agility

Use Planning Tools and Templates

This topic includes planning tools and links to documents that provide guidelines for designing and configuring your IP telephony system. It also includes information on quoting and ordering Cisco Unified Communications products.

Solution Reference Network Design Documents

Solution Reference Network Design (SRND) documents provide guidelines, recommendations, and best practices for implementing enterprise network solutions. The following SRNDs are recommended for designing Cisco Unified Communications Systems for small and medium businesses:

- [Smart Business Communications System Design Guide](#) 
- [Smart Design: Unified Communications 2.0](#) 
- [Cisco Unified Communications Manager Express Solution Reference Network Design](#)
- [Cisco Unified Contact Center Express SRND Release 7.0](#)
- [Cisco Unity Express Solution Design](#)

**Note**

Additional SRND resources are available at http://www.cisco.com/en/US/netsol/ns742/networking_solutions_program_category_home.html.

Solution Expert Tool

Solution Expert is a web-based tool that assists in the design, configuration, quoting, and ordering of Unified Communications products. Solution Expert is available for Cisco sales and partner systems engineers who have Unified Communications specializations.

With the Solution Expert tool, users can generate a recommended solution based on their requirements. Users can modify the recommended configuration if desired. Solution Expert validates any changes when it presents the new solution. Solution Expert also generates a bill of materials with list pricing, a Visio diagram, and other design documentation. To access Solution Expert, go to the following URL. For an overview of how to use the tool, see the introductory PDF on the home page:


<http://www.cisco.com/go/sx> 

Quote Builder Tool

The Quote Builder tool is a solutions quoting application for Cisco Unified Communications products. Quote Builder is available to specialized partners and Cisco employees. With Quote Builder, users can build a system quote with design documents to aid in the implementation of the solution. Quote Builder also validates designs for common deployments. Quote Builder generates a bill of materials, a network diagram, and design guides for deployment. To access Quote Builder, go to the following URL:

<http://www.cisco.com/web/partners/quotebuilder/index.html> 

Ordering Guides

[Ordering guides](#)  for most Cisco Unified Communications products are available for Cisco partners, Cisco sales staff, and Cisco service providers.

Understand Your Deployment Options

Review the following deployment models:

- [Deployment Models for Small Businesses](#)
- [Deployment Models for Medium Businesses](#)

Identify System Components

For a brief description of all the components that are available with Cisco Unified Communications System Release 7.0 (1) for small and medium business, refer to the Cisco Unified Communications 500 Series [Solution Components Overview](#) and Cisco Unified Communications Manager Express Solution [Solution Component Overview](#).

See the Install and Configure System Components topics in the Implement tab for links to information that describe components that are specific to the IP telephony system.

Review Release Matrix

The Release Matrix (which includes the [Software Version Matrix](#) and the [Firmware Version Matrix](#)) lists all the components and their versions for a particular release. This is the recommended set of components and specific software versions that have been tested and verified for interoperability within a specific system release.

Plan and Prepare for Your System Installation

This topic provides the system-level information required to install IP telephony for small and medium business components in Cisco Unified Communications System Release 7.0(1).

- [Planning Your System Installation](#)
- [Preparing for Your System Installation](#)

Planning Your System Installation

This topic provides links to documentation for you to review before installation and includes types of installations and components that are included in the release sets, and describes installation strategies. See the following sections:

- [Scope of this Installation Documentation](#)
- [System Installation Overview](#)
- [Component Installation Overview for Small Business](#)
- [Component Installation Overview for Medium Business](#)
- [System Installation Strategies](#)
- [Interoperability and Compatibility Portals](#)

When you have reviewed preinstallation planning, installation approach, and dependencies, go to [Preparing for Your System Installation](#). For information about the installation order and process, see [Performing Your System Installation](#) on the Implement tab.

Preparing for Your System Installation

This topic provides links to documentation for you to review before you install the Cisco Unified Communications System. It describes preinstallation tasks and the initial installation sequence. It also lists the components in the release set and provides information regarding the deployment of various components. See the following sections:

- [Before You Begin](#)
- [System Installation Approach for Small Business](#)
- [System Installation Approach for Medium Business](#)
- [Release Set Versions](#)
- [System Installation Dependencies](#)

When your installation plans are complete and you are ready to install components, go to [Small Business: Install and Configure System Components](#) or [Medium Business: Install and Configure System Components](#) in the Implement tab.

Plan and Prepare for Your System Upgrade

This topic provides links to documentation for you to review the system-level information required to upgrade IP telephony for small and medium components from previous Unified Communications releases to Release 7.0 (1).

- [Planning Your System Upgrade](#)
- [Preparing for Your System Upgrade](#)

Planning Your System Upgrade

This topic provides an overview of the upgrade process for IP telephony for small and medium business components, the software releases that are involved in the upgrade process, and the different upgrade strategies that can be used based on the size of the customer network.



Note

There may be more than one upgrade path available based on the software deployed in your specific environment. For more information, see [System Upgrade Paths](#).

This topic contains the following sections:

- [Release Sets](#)
- [Upgrade Roadmap](#)
- [Upgrade Overview](#)
- [System Upgrade Paths](#)

When your upgrade plan is in place and you are ready to upgrade, go on to [Small Business: Performing a System Upgrade](#) or [Medium Business: Performing a System Upgrade](#) on the Optimize tab.

Preparing for Your System Upgrade

This topic discusses information to review before the actual upgrade process, such as the general upgrade approach for the different IP telephony for small and medium business components, upgrade release versions of components involved in the upgrade, and release version compatibility. This topic contains the following sections:

- [System Upgrade Approach](#)
- [Upgrade Release Versions](#)

When your upgrade plan is in place and you are ready to upgrade, go to [Small Business: Performing a System Upgrade](#) or [Medium Business: Performing a System Upgrade](#) on the Optimize tab.

Cisco Unified Communications System Demos

The Cisco Unified Communications System demonstration describes the various methods available for use by Cisco sales teams to demonstrate the Cisco Unified Communications System for small and medium business.

[Cisco Unified Communications System Demonstration Programs](#)