C H A P T E R **2**

Preparing for Your System Installation

This topic provides information that you should review before the actual installation process such as the general installation approach, release set software versions of the contact center components being installed, and dependencies impacting system installation.

This topic contains the following sections:

- Before You Begin
- System Installation Approach
- Release Set Versions
- System Installation Dependencies

Note Many of the contact center component names have changed as part of Cisco Unified Communications System releases. Only the latest product names are used in this document, even when referencing products from previous releases.

Before You Begin

Before you install and configure the Cisco Unified Communications contact center family of products, make sure that you have performed the required planning, design and implementation activities that are part of the Cisco Systems product deployment and lifecycle model.

Note See the Cisco Unified Communications System Technical Information Site at http://www.cisco.com/go/unified-techinfo for comprehensive system-level deployment and lifecycle model information.

This section lists some, but not all, of the required planning, design and implementation activities:

Prepare and Plan Phase
- Review preinstallation planning guidelines from Steps to Success at: http://www.cisco.com/web/partners/tools/steps-to-success/index.html
- Assess your business and technical requirements such as call flows, capacity and critical features, and incumbent dependencies.
- Consider integration for legacy and third-party products (see System Installation Overview in Chapter 1, "Planning Your System Installation").

- Assess system passwords requirements and create a password synchronization and maintenance strategy.

- Assess your services and support strategy for training and lifecycle support.

Design Phase

- Develop a high-level and low-level design including product and component selections appropriate for your needs.

- Use the recommendations of the Cisco Solution Reference Network Design (SRND) documents at: http://www.cisco.com/go/srnd

- Become familiar with Cisco Unified Communications System Release 8.5(1) components and subsystems in the *Cisco Unified Communications System 8.x SRND*: http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/srnd/8x/uc8x.html

- Review system description, architecture, and testing information for contact center systems at: http://www.cisco.com/cisco/web/docs/iam/unified/ipcc851/index.html

Note The results derived from conducting the tasks in the prepare, plan, and design phases indicate which Cisco Unified Communications System components apply to your business requirements and should be part of your overall deployment.

Implement Phase

- Confirm the design and special feature considerations developed during the design phase.

- Develop an implementation plan and a migration or integration strategy.

  Note The implementation plan derived from the implement phase should drive the staging, phases and deadlines of the system installation.

- Review preinstallation and planning documents such as site surveys, equipment lists, and product-specific documents.

- Conduct hardware installation and verification tasks at each site such as:

  – Catalog and inventory the equipment.

  – Install equipment in data racks.

  – Complete cabling and other physical connectivity tasks.

  – Ensure that no duplex mismatches exist.

  – Verify all units power up correctly.

  – Capture rack layout, cabling, port-specific details, and so on.

- Conduct software installation and verification tasks at each site such as:

  – Check that all the required installation discs are available for each system component being installed.

  – Check that all the required installation discs are available for software applications, including third-party applications.

  – Access and download the license files required to install and operate the appropriate software at: http://www.cisco.com/go/license

System Installation Approach

After you perform preinstallation tasks, install each Cisco Unified Communications Manager cluster and its associated contact center components at one time, before installing the next cluster.

The installation sequence of the contact center components should also be dictated by the following considerations:

- The relative importance of the service that these components provide. For example, basic phone service is considered to be of greater importance than supplementary services or voice messaging services.

- Integration and configuration of the system components to ensure interoperability. For additional information, see Interoperability and Compatibility Portals in Chapter 1, "Planning Your System Installation."

Table 2-1 provides the general approach to installing a contact center environment.

Table 2-1   System Installation General Sequence

	Procedure	Remarks
Step 1	Install and configure network infrastructure such as switches and routers, wireless, and security components.	These components should be installed first to ensure that the infrastructure is able to support the services that the Cisco Unified Communications System components requires.
Step 2	Install the operating system on system servers and install and configure directory and network services.	These services include LDAP, DNS, NTP, and DHCP servers.
		Note You can set up a virtualized environment by running Unified Communications applications on a virtual machine on a Unified Computing System (UCS). For additional details, including UCS hardware information and third-party requirements, see: www.cisco.com/go/uc-virtualized
Step 3	Install call processing components such as Unified Communications Manager clusters.	Make sure that you complete all initial setup and configuration procedures that are required.
Step 4	Install and configure the contact center components based on your requirements and the interdependencies of components.	See Chapter 3, "Performing Your System Installation." for the installation sequence of the components. Refer to the detailed installation and configuration tasks described in the individual product installation and configuration documents.
		Additional configuration information for contact center call flows and components tested in the Cisco Unified Communications System Release 8.5(1) is available at: http://docwiki.cisco.com/wiki/Category:Unified_Communications_System_Implementation

Table 2-1   System Installation General Sequence (continued)

	Procedure	Remarks
Step 5	Install and configure gateways, gatekeepers/proxy servers, network management tools, and other third-party services and applications.	—
Step 6	Complete postinstallation tasks.	These tasks include system validation and verification.

Release Set Versions

This section provides the software versions of the Cisco Unified Communications System Release 8.5(1) contact center components. It contains the following sections:

- Software Version Matrix
- System Installation Dependencies

Software Version Matrix

Table 2-2 lists the release versions of the Cisco Unified Communications System Release 8.5(1) components in the contact center test environment.

Table 2-2   Software Versions for Contact Center Components in Cisco Unified Communications System Release 8.5(1)

Category	Component	Release 8.5(1)
Call Control	Cisco Unified Communications Manager	8.5(1)

Table 2-2   Software Versions for Contact Center Components in Cisco Unified Communications System Release 8.5(1)

Category	Component	Release 8.5(1)
Contact Center	Cisco Unified Intelligent Contact Management Enterprise and Cisco Unified Contact Center Enterprise	8.5(1)
	Cisco Unified Intelligent Contact Management Enterprise and Cisco Unified Contact Center Enterprise Operating System	Win2003 SP2/ Win2003 R2 SP2
	Cisco Unified ICME Support Tools	2.4(1)
	Cisco Unified Expert Advisor	—
	Cisco Unified Expert Advisor Operating System	Bundled with Software
	Cisco Unified Contact Center Express	8.5(1)
	Cisco Unified IP IVR	8.5(1)
	Cisco Unified Contact Center Express/Unified IP IVR Operating System	Bundled with Software
	Cisco Unified Customer Voice Portal	8.5(1)
	Cisco Unified Customer Voice Portal Operating System	Win2003 SP2/ Win2003 R2 SP2
	Cisco Unified Intelligence Center	8.0(3)
	Cisco Finesse	8.5(1) Lab use only
	Cisco MediaSense	8.5(1)
	Cisco SocialMiner	8.5(1)
Applications	Cisco Unified Presence	8.5(1)
	Cisco Unified SIP Proxy	8.5(1)
Conferencing	Cisco Unified Videoconferencing 3545 MCU	—
	Cisco Unified Conferencing for TelePresence	—
Voice Mail and Unified Messaging	Cisco Unity Connection	8.5(1)

Table 2-2   Software Versions for Contact Center Components in Cisco Unified Communications System Release 8.5(1)

Category	Component	Release 8.5(1)
End Points and Clients	Cisco IP Communicator	7.0(5)—
	Cisco Unified Personal Communicator	8.0(1)—
	Cisco Unified Video Advantage	2.2(1)—
	Cisco Unified IP Phones 7900 Series (7921G (Wireless), 7940, 7940G, 7960, 7960G, 7962, 7970, and 7970G)	Bundled with Unified Communications Manager.
	Cisco Unified IP Phones 6900 Series (6911, 6921, 6941 6961, and 6945)	Firmware 9.1.1SRI
	Cisco Unified IP Phones models 9951 and 9971	Firmware 9.1.1SRI
	Cisco Unified IP Phones model 8961	Firmware 9.1.1SRI
	Cisco Unified IP Phones models 6945, 8941, 8945	Firmware 9.1.1SRI
	Cisco Unified Communications for RTX	8.5(1)
Wireless	Cisco Aironet Access Point 1240AG	—
Security	Cisco Catalyst 6500 Series Switch Firewall Services Module	—
	Cisco Adaptive Security Appliance (5520, 5540, 5580) Services	8.4(1)
	Cisco Adaptive Security Appliance 5500 AIP Security Services Module (IPS)	7.0(2) E3
	CiscoWorks Management Center for Cisco Security Agents	6.0(2)
	Cisco Security Agent for Unified Communications Manager	Bundled with Unified Communications Manager
	Cisco Security Agent for Unified IP IVR	Bundled with Unified IP IVR
	Cisco Security Agent for Unified Contact Center Express	Bundled with Unified Contact Center Express
	Cisco Security Agent for Unified Expert Advisor	Bundled with Unified Expert Advisor
	Cisco Security Agent for Unified Intelligent Contact Management Enterprise	6.0(1)
	Cisco Security Agent for Unified Customer Voice Portal	6.0(1)
Network Management	Cisco Unified Operations Manager	8.5.1

Table 2-2 ***Software Versions for Contact Center Components in Cisco Unified Communications System Release 8.5(1)***

Category	Component	Release 8.5(1)
Communications Infrastructure	Cisco IOS Mainline Release	
	Cisco 3725, 3745 (Unified CVP VXML, voice/data, H.323, SIP, MGCP, IOS-based Transcoders and Conference Bridges, and Cisco Unified Border Element gateways)	—
	Cisco 3825, 3845 (Unified CVP VXML, voice/data, H.323, SIP, MGCP, IOS-based Transcoders and Conference Bridges, and Cisco Unified Border Element gateways)	15.1(3)T
	Cisco AS5400XM (Unified CVP VXML, voice, H.323, SIP and PSTN gateways)	15.1(3)T
	Cisco Unified Border Element Enterprise Edition for Cisco ISR Series	15.1(3)T
	Cisco Unified Border Element Enterprise Edition for Cisco ASR 1000 Series	3.2
	Cisco VGD-1T3 Voice Gateway	15.1(3)T
	Cisco 3825 MGCP gateway	15.1(3)T
	Cisco 3745 gatekeeper	—
	RSVP Agent (on 38xx platforms)	15.1(3)T
	Cisco 7206VXR (core/WAN router)	15.1(3)T
	Cisco 831 router	—
	Cisco 871 router	—
	Cisco 881 router	15.1(3)T
	Cisco Catalyst 3750 (access switch)	12.2(53)SE2
	Cisco Catalyst 6506, 6509 (core switch, Supervisor 2)	8.6(6a)

System Installation Dependencies

The components within each release set are compatible with each other and will interoperate correctly. As you install individual components of the integrated system, the overall system may not be operational until all components have been installed or some initial configuration or setup is completed to ensure that the already installed components will interoperate with the newly installed component.