



## Preparation for system installation

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This chapter 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.



### Note

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

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## 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

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See the Cisco Unified Communications System Technical Information Site at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/uc\\_system/unified/communications/system/ucstart.htm](http://www.cisco.com/en/US/docs/voice_ip_comm/uc_system/unified/communications/system/ucstart.htm) for comprehensive system-level deployment and lifecycle model information.

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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 [System installation planning](#)).
- 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 9.0(1) components and subsystems in the *Cisco Unified Communications System 9.x SRND*: [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cucm/srnd/9x/uc9x.html](http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/srnd/9x/uc9x.html)
- Review system description, architecture, and testing information for contact center systems at: <http://www.cisco.com/cisco/web/docs/iam/unified/ipcc901/index.html>



#### Note

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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.

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### Implementation phase

- Confirm the design and special feature considerations developed during the design phase.
- Develop an implementation plan and a migration or integration strategy.



#### Note

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

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- 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 [System installation planning](#)

The following table provides the general approach to installing a contact center environment.

**Table 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.  <b>Note</b> 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: <a href="http://www.cisco.com/go/uc-virtualized">http://www.cisco.com/go/uc-virtualized</a>
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.

	Procedure	Remarks
Step 4	Install and configure the contact center components based on your requirements and the interdependencies of components.	See <a href="#">System installation</a> 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 9.0(1) is available at: <a href="http://docwiki.cisco.com/wiki/Category:Unified_Communications_System_Implementation">http://docwiki.cisco.com/wiki/Category:Unified_Communications_System_Implementation</a>
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 9.0(1) contact center components.

## Software version matrix

The following table lists the release versions of the Cisco Unified Communications System Release 9.0(1) components in the contact center test environment.



### Note

For current Cisco Unified Communications System Release 9.0(1) compatible component versions, refer to the Cisco Unified Communications Compatibility Tool: <http://tools.cisco.com/ITDIT/vtgsca/VTGServlet>

**Table 2: Software versions for Contact Center components in Cisco Unified Communications System Release 9.0(1)**

Category	Component	Release 9.0(1)
Contact Center	Cisco Unified Communications Manager	9.0(1)
	Cisco Unified Intelligent Contact Management Enterprise and Cisco Unified Contact Center Enterprise	9.0(1)
	Cisco Unified Intelligent Contact Management Enterprise and Cisco Unified Contact Center Enterprise Operating System	Win2008 R2 SP1
	Cisco Unified Contact Center Express	9.0(1)
	Cisco Unified IP IVR	9.0(1)
	Cisco Unified Contact Center Express/Unified IP IVR Operating System	Bundled with Software
	Cisco Unified Customer Voice Portal	9.0(1)
	Cisco Unified Customer Voice Portal Operating System	Win2008 R2 SP1
	Cisco Unified Intelligence Center	8.5(4)
	Cisco Finesse	9.0(1)
	Cisco MediaSense	8.5(4)
Cisco SocialMiner	9.0(1) <sup>1</sup>	
Applications	Cisco Unified Communications Manager IM and Presence Service (formerly Cisco Unified Presence) <a href="#">2</a>	9.0(1)
	Cisco Unified SIP Proxy	8.5(2)
Voice Mail and Unified Messaging	Cisco Unity Connection	9.0(1)
Conferencing	Cisco TelePresence MCU MSE Series	4.3
	Cisco TelePresence Content Server	5.2 Build 3222
	Cisco Voice and Video Conferencing for ISR G2 Routers	15.2(3)T1

Category	Component	Release 9.0(1)
End Points and Clients	Cisco IP Communicator	8.6(1) <a href="#">3</a>
	Cisco Unified Video Advantage	2.2(2)
	Cisco Unified IP Phones 7900 Series (7942, 7945, 7962, 7965 and 7975)	Bundled with Unified Communications Manager. Firmware 9.3.1
	Cisco Unified IP Phones 6900 Series (6921, 6941 6961, and 6945)	Firmware 9.3.1
	Cisco Unified IP Phones models 9951 and 9971	Firmware 9.3.1
	Cisco Unified IP Phones model 8961	Firmware 9.3.1
	Cisco Unified IP Phones models 8941, 8945	Firmware 9.3.1
	Cisco Virtualization Experience Clients	Firmware 9.2.1
	Cisco IP Video Phone E20	TE 6.0.0
	Cisco TelePresence System EX90	TE 6.0.0
	Cisco TelePresence System EX60	TE 6.0.0
Wireless	Cisco Aironet 3502 Access Point	AIR-WLC4400-K9- 7-0-116-0-ER.aes
	Cisco Aironet 1142 Access Point	AIR-WLC4400-K9- 7-0-116-0-ER.aes
Security	Cisco Adaptive Security Appliance (5520, 5540, 5580) Services	8.4(3)
	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
Licensing	Enterprise License Manager	9.0(1)

Category	Component	Release 9.0(1)
Communications Infrastructure	Cisco IOS Mainline Release	15.2(3)T1 <sup>4</sup>
	Cisco 3825, 3845 (Unified CVP VXML, voice/data, H.323, SIP, MGCP, IOS-based Transcoders and Conference Bridges, and Cisco Unified Border Element gateways)	15.2(3)T1
	Cisco Integrated Services Router (ISR) 2901, 2911, 2921, 2951, 3925, 3945, 3925E, 3945E	15.2(3)T1
	Cisco 3900 series routers	15.2(3)T1
	Cisco AS5400XM (Unified CVP VXML, voice, H.323, SIP and PSTN gateways)	15.2(3)T1
	Cisco Unified Border Element Enterprise Edition for Cisco ISR Series	15.2(3)T1
	Cisco Unified Border Element Enterprise Edition for Cisco ASR 1000 Series	XE3.6
	Cisco VGD-1T3 Voice Gateway	15.2(3)T1
	Cisco 3825 MGCP gateway	15.2(3)T1
	RSVP Agent (on 38xx platforms)	15.2(3)T1
	Cisco 881 router	15.2(3)T1
	Cisco 891 router	15.2(3)T1
	Cisco SRE 910 Service Module	15.2(3)T1
	Cisco Unified Computing System B200 M2 Blade Server, Cisco Unified Computing System C200 M2 General-Purpose Rack-Mount Server, Cisco Unified Computing System C210 M2 General-Purpose Rack-Mount Server (Unified Communications Virtualization): Release 9.0(1) Version: Cisco UCS B-Series 2.0(1q), Cisco UCS C-Series 1.4(3c)2	VMWare ESXi 4.1
	Cisco UCS Express	2.0.1
	Cisco ASR1002	IOS-XE 15.1(1)S
Cisco Catalyst 6503 (access switch)	12.2(18)SXF10	

Category	Component	Release 9.0(1)
	Cisco Catalyst 6506 (access switch)	12.2(33)SXH2A
	Cisco Catalyst 3750 (access switch)	12.2(55)SE1

- <sup>1</sup> Cisco SocialMiner is tested as part of Unified CCX, not as a standalone product.
- <sup>2</sup> For Cisco Unified Communications System Release 9.0, Cisco Unified Presence has been integrated into Cisco Unified Communications Manager and is now known as Cisco Unified Communications Manager IM and Presence Service (IM and Presence Service).
- <sup>3</sup> This product is EOL on October 25, 2012.
- <sup>4</sup> IOS 15.2(3)T is not compatible with the 28xx and 38xxrouters. The option to stay on IOS 15.1(4)M may be available to maintain 28/38xx routers which will receive extended maintenance in accordance with IOS EOL and EOS policies.

## 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.