



System installation

This chapter provides guidance for the installation order of components for a Cisco Unified Communications System Release 9.0(1) contact center deployment. Use this chapter along with information from the planning and design phases as input to your implementation plan. The implementation plan drives the staging, phases and deadlines of the system installation.

This document does not describe installation procedures for individual components. This information is included in the installation documents for the components. See [Related documentation, on page 11](#) for references to these documents.



Note

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.

- [Deployment models, page 1](#)
- [Component installations, page 6](#)
- [Postinstallation tasks, page 10](#)
- [Related documentation, page 11](#)

Deployment models

This section describes the general order of installation for each Cisco Unified Communications System deployment model. Because each model can include different components, compare these deployments to your deployment to best understand the installation process that is applicable in your environment.

The following sections list the installation sequence of components in the various deployment models in the Cisco Unified Communications contact center test environment:

- [Single site model, on page 2](#)
- [Multi-site centralized model, on page 4](#)
- [Multi-site distributed model, on page 6](#)
- [Clustering over WAN model, on page 6](#)

Detailed information about these contact center deployment models at different sites is available at http://www.cisco.com/cisco/web/docs/iam/unified/ipcc861/Review_Testing_Deployment_Models.html and in the following documents:

- *System Description: Cisco Unified Communications Release 9.0(1)* at:
http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/ipcc_enterprise/ippcenterprise9_0_1/design/guide/ucce_srnd_9.x.pdf
- *Cisco Unified Contact Center Enterprise Solution Reference Network Design (SRND)* at:
http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/ipcc_enterprise/ippcenterprise9_0_1/design/guide/ucce_srnd_9.x.pdf

After you determine the general installation sequence for your deployment model, use one of the installation strategies that is described in [Component installations](#), on page 6 to install your components.

Single site model

A single-site deployment refers to any scenario where all voice gateways, agents, desktops, phones, and call processing servers (Unified Communications Manager, Unified ICME/Unified CCE, and Unified IP IVR, Unified CCX or Unified CVP) are located at the same site and have no WAN connectivity between any Unified CCE software modules.

In the single site model, be aware of the following installation order for:

- 1 Infrastructure components such as:
 - Core and access switches and routers
 - Voice and data gateways and gatekeepers/proxy servers
 - Cisco Unified Communications Manager IM and Presence Service (formerly Cisco Unified Presence)¹ (as a SIP Proxy Server for Unified CVP implementation)
 - Security components
 - Wireless LAN Controllers and Access Point(s)
- 2 Directory and network service components such as:
 - Domain Controllers (including Active Directory)
 - LDAP Directory
 - NTP Server
 - DHCP Server
 - DNS Server
 - TFTP Server
- 3 Network Management applications such as:
 - Cisco Unified Operations Manager

¹ 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).

- 4 Call processing components such as:
 - Cisco Unified Communications Manager
 - Cisco Unified IP Phones and Endpoints
 - Cisco Unified IP Communicator
 - Cisco IME
- 5 Messaging components such as:
 - Cisco Unity Connection
 - Voice Recognition Server
- 6 Media resource components such as:
 - Music-On-Hold servers
 - Transcoders
 - Conference bridges
 - Media termination points
 - RSVP agents
- 7 Contact Center components such as:
 - Cisco Unified ICM system (CallRouter, Logger, Peripheral Gateway, CTI OS and Cisco Agent Desktop (CAD) servers)
 - Real-time Administration Workstation (at least one)
 - Cisco Unified Outbound Dialer
 - CTI OS Agent and Supervisor Desktop
 - Cisco Agent Desktop (CAD) and Cisco Supervisor Desktop (CSD)
 - VoIP Monitor
 - Cisco Unified Customer Voice Portal (CVP) Voice Browser/Application Server/ HTTP Media Server or Cisco Unified IP IVR
 - Cisco Unified Intelligence Center
 - Cisco MediaSense, Cisco Finesse and Cisco SocialMiner
- 8 Cisco applications co-resident on MCS servers (such as Cisco Security Agent, etc.)
- 9 Third-party on-board agents on MCS servers (such as antivirus, backup agent, management agent (SNMP))

**Note**

If using MCS servers for Unified Communications Manager Release 9.0(1), third-party on-board agents must be installed on a separate MCS server.

Multi-site centralized model

A multi-site deployment with centralized call processing refers to any scenario where call processing servers (Unified Communications Manager, Unified ICME, and Unified IP IVR, Unified CCX, or Unified CVP) are located at the same site, while any combination of voice gateways, agents, desktops, and phones are located remotely across a WAN link or centrally.

In the multi-site centralized model, install the central site first and then install the remote sites.

Central site

In the central site, be aware of the following installation order for:

- 1 Infrastructure components such as:
 - Core and access switches and routers
 - Voice and data gateways and gatekeepers/proxy servers
 - Cisco Unified Communications Manager IM and Presence Service (formerly Cisco Unified Presence) (as a SIP Proxy Server for Unified CVP implementation)
 - Security components
 - Wireless LAN Controllers and Access Point(s)
- 2 Directory and network service components such as:
 - Domain Controllers (including Active Directory)
 - LDAP Directory
 - NTP Server
 - DHCP Server
 - DNS Server
 - TFTP Server
- 3 Network Management applications such as:
 - Cisco Unified Operations Manager
- 4 Call processing components such as:
 - Cisco Unified Communications Manager
 - Cisco Unified IP Phones and Endpoints
 - Cisco Unified IP Communicator
 - Cisco IME
- 5 Messaging components such as:
 - Cisco Unity Connection
 - Voice Recognition Server

- 6 Media resource components such as:
 - Music-On-Hold servers
 - Transcoders
 - Conference bridges
 - Media termination points
 - RSVP agents
- 7 Contact Center components such as:
 - Cisco Unified ICM system (CallRouter, Logger, Peripheral Gateway, CTI OS and Cisco Agent Desktop (CAD) servers)
 - Real-time Administration Workstation (at least one)
 - Cisco Unified Outbound Dialer
 - CTI OS Agent and Supervisor Desktop
 - Cisco Agent Desktop (CAD) and Cisco Supervisor Desktop (CSD)
 - VoIP Monitor
 - Cisco Unified Customer Voice Portal (CVP) Voice Browser/Application Server/ HTTP Media Server or Cisco Unified IP IVR
 - Cisco Unified Intelligence Center
 - Cisco MediaSense, Cisco Finesse and Cisco SocialMiner
- 8 Cisco applications co-resident on MCS servers (such as Cisco Security Agent, etc.)
- 9 Third-party on-board agents on MCS servers (such as antivirus, backup agent, management agent (SNMP))

**Note**

If using MCS servers for Unified Communications Manager Release 9.0(1), third-party on-board agents must be installed on a separate MCS server.

Remote site

For the remote site(s), be aware of the following installation order for:

- 1 Infrastructure components such as:
 - Access switches
 - Voice and data gateways
 - Cisco Secure ASA Firewall
 - Cisco wireless LAN Controller(s) and Aironet Access Point(s)
- 2 CTI OS Agent and Supervisor Desktop
- 3 Cisco Agent Desktop and Cisco Supervisor Desktop

Multi-site distributed model

In this model, each site has its own Unified Communications Manager cluster, treatment and queue points, Peripheral Gateways, and CTI Server. However, as with the centralized call processing model, sites could be deployed with or without local voice gateways. Some deployments may also contain a combination of distributed voice gateways (possibly for locally dialed calls) and centralized voice gateways (possibly for toll-free calls) as well as centralized or distributed treatment and queue points. The multi-site distributed model includes several Unified CCE and Unified Communications Manager cluster sites interconnected by ICT or H.323 trunks.

Install the components in each cluster site and any small remote sites as listed in the [Multi-site centralized model](#), on page 4 section.

**Note**

Treat the installation of each cluster site as a separate stage in the overall system installation.

Clustering over WAN model

In the Clustering over the WAN (CoW) model, a single Unified Communications Manager cluster with its subscriber servers and Unified CCE components are split across multiple sites connected via a QoS-enabled WAN. This model provides the redundancy of the distributed model with the simplicity of administering a single Unified Communications Manager cluster and Unified CCE installation.

Install the central sites first where CoW is implemented and then install any remote sites as listed in the [Multi-site centralized model](#), on page 4 section.

**Note**

Install clustered components in the same installation period and stage at each of the central sites.

Component installations

After you review the general install sequence for your specific deployment model, install your components based on the following installation strategies:

- Single-stage installation—Recommended for small single-site and multisite deployments.
- Multistage system installation—Recommended for medium and large single-site and medium multisite deployments.
- Multisite Phased installation—To install large, multisite contact center deployments to the Cisco Unified Communications release set using the multisite phased installation strategy, you can use either the single-stage or multistage system installation information listed in this section.

**Note**

After you install the system software and applications, you may also need to install client software such as CTI OS and CAD desktop software, and others on the client desktops.

To install each component, see the product-specific installation document for the relevant release for detailed information.

Related Topics

- [Single-stage installation, on page 7](#)
- [Multistage system installation, on page 7](#)
- [System installation planning](#)
- [Preparation for system installation](#)
- [Related documentation, on page 11](#)

Single-stage installation

The single-stage installation process is recommended for small single-site and multisite installations and can be performed in a single installation window.

Table 1: Single-stage installation order for Contact Center components

Order	Components Being Installed
1	Infrastructure
2	Directory and network services
3	Network management applications
4	Call processing
5	Messaging
6	Media resource
7	Contact center
8	Cisco application
9	Third-party on-board agents ²

² If using MCS servers for Unified Communications Manager Release 9.0(1), third-party on-board agents must be installed on a separate MCS server.

Related Topics

- [Preparation for system installation](#)

Multistage system installation

A multistage system installation is the recommended approach for medium and large single-site and medium multisite installations. In this installation process, components are grouped together for installing in several

stages or installation windows. Within each installation window, there is a recommended order for installing each component.

The grouping of the components into the stages may vary depending on the size of the networks being installed. For smaller networks, one or more stages may be collapsed into a single maintenance window. For larger networks, some stages may require multiple maintenance windows.

After each installation window, we recommend that you verify that the interoperability of the installed components before you initiate the next installation stage listed in the table. We also recommend that you maintain a list to track the components that have been installed and the ones yet to be installed.

The following table lists the recommended order in which to install components in stages and the sequence within each stage.

Table 2: Multistage system installation order for Contact Center components

Stage	Component Groupings	Installation Order of Components in Each Stage
1	Infrastructure components	<ol style="list-style-type: none"> 1 Core Switches 2 Access Switches 3 IOS Gateways (SIP, MGCP and H.323) 4 Cisco Unified CVP VXML Gateway 5 IOS Gatekeepers/Proxy Servers 6 Cisco Unified Border Element 7 Cisco Unified Communications Manager IM and Presence Service (formerly Cisco Unified Presence) (as a SIP Proxy Server for Unified CVP implementation) 8 Cisco Adaptive Security Appliance (ASA) 5540 Services 9 Cisco Adaptive Security Appliance 5500 AIP Security Services Module (IPS) 10 Cisco Aironet Access Point 1240AG
2	Directory and network service components	<ol style="list-style-type: none"> 1 Domain Controllers (including Active Directory) 2 LDAP Directory 3 NTP Server 4 DHCP Server 5 DNS Server 6 TFTP Server
3	Network management components	<ol style="list-style-type: none"> 1 Cisco Unified Operations Manager

Stage	Component Groupings	Installation Order of Components in Each Stage
4	Call processing components	<ol style="list-style-type: none"> 1 Cisco Unified Communications Manager 2 Cisco Unified IP Phones and Endpoints 3 Cisco Unified IP Communicator 4 Cisco IME
5	Messaging components	<ol style="list-style-type: none"> 1 Cisco Unity Connection 2 Voice Recognition Server
6	Media resource components	<ol style="list-style-type: none"> 1 Music-On-Hold servers 2 Conference bridges 3 Transcoders 4 Media termination points 5 RSVP agents
7	Contact center components	<ol style="list-style-type: none"> 1 Cisco Unified ICM system (CallRouter, Logger, Peripheral Gateway, CTI OS and Cisco Agent Desktop (CAD) servers) 2 Real-time Administration Workstation (at least one) 3 Cisco Unified Outbound Dialer 4 CTI OS Agent and Supervisor Desktop 5 Cisco Agent Desktop (CAD) and Cisco Supervisor Desktop (CSD) 6 VoIP Monitor 7 Cisco Unified Customer Voice Portal (CVP) Voice Browser/Application Server/ HTTP Media Server or Cisco Unified IP IVR 8 Cisco Unified Intelligence Center 9 Cisco MediaSense 10 Cisco Finesse and Cisco Social Miner
8	Cisco applications co-resident on MCS servers	<ol style="list-style-type: none"> 1 Cisco Security Agent

Stage	Component Groupings	Installation Order of Components in Each Stage
9	Third party on-board agents ³ on MCS servers	<ol style="list-style-type: none"> 1 Antivirus 2 Backup agent 3 Management agent

³ If using MCS servers for Unified Communications Manager Release 9.0(1), third party on-board agents must be installed on a separate MCS server.

Related Topics

[Preparation for system installation](#)

Postinstallation tasks

After you complete the tasks in the implement phase and install the contact center components in the Cisco Unified Communications System release set, be aware of the following postinstallation phases and related tasks.



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.

Implement phase

Configure the newly-installed contact center system using the configuration information available at: http://docwiki.cisco.com/wiki/Category:Unified_Communications_System_Implementation

Operate phase

Ensure that the newly-installed contact center system is fully operational by performing tasks that include the following:

- Manage the newly installed network by conducting:
 - Fault and performance management at the platform level—Use the Real-Time Monitoring Tool (RTMT), which is a client application, to monitor CPU, memory, disk space, processes, and critical services. Cisco Unified Analysis Manager (Unified Analysis Manager) is a new application included with RTMT that collects troubleshooting information from your system and provides an analysis of that information.
 - Network management at the system level—Use Unified Operations Manager to perform SNMP/HTTP/syslog monitoring, track device and inventory status, and monitor logical relationships and physical connectivity in the network.
- Conduct Day 1 operations (cutover to customer) tasks such as:
 - Train administrators to support end-users to use the newly installed contact center system.

- Provide documentation including as-builts, equipment inventory lists, topology diagrams, and unique design or feature considerations.
- Explain the engagement process with Technical Assistance Center (TAC) support and the tasks to perform before contacting TAC.
- Conduct Day 2 operations (post-cutover) tasks such as:
 - Enforce security with the appropriate anti-virus security software, where applicable.
 - Provision for system password synchronization and maintenance.
 - Implement data backup and restore. For more information, see Backing up and Restoring Components at:
http://www.cisco.com/cisco/web/docs/iam/unified/ipcc901/Backing_Up_and_Restoring_Components.html
 - Ensure that a change control process exists within the customer's organization.
 - Plan for release set management and system and security patches updates.

Optimize phase

During this phase, perform system optimization tasks such as:

- Tune and resize the network for better performance
- Perform configuration cleanup procedures such as deleting user IDs that are no longer in use.
- Set trace logs and reporting levels to ensure optimal performance.

Related documentation

The following sections list compatibility guides and installation documentation for Cisco Unified Communications System components:

- [Compatibility guides](#), on page 11
- [Component release notes and installation and upgrade documents](#), on page 13

For information about support for legacy products and third-party product interoperability with Cisco Unified Communications contact center products, see the Cisco Interoperability Portal at:

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

Compatibility guides

For compatibility and interoperability information about Unified Communications Manager, Unified Contact Center Enterprise, Unified IP IVR and other Cisco Unified Communications contact center products, see the following sites:

- Cisco Unified Communications Compatibility Tool:
<http://tools.cisco.com/ITDIT/vtgsca>

- Cisco Unified Communications Manager (CallManager) Compatibility Information:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_device_support_tables_list.html
- Hardware and Software Compatibility Information for Cisco Unified Presence Release 8.5(1), including TCP and UDP port usage:
http://www.cisco.com/en/US/products/ps6837/products_device_support_tables_list.html
- Cisco Unified Contact Center Enterprise (Unified CCE) Software Compatibility Guide:
http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCE
- Hardware and System Software Specification (Bill of Materials) for Cisco Unified ICM/ Contact Center Enterprise & Hosted:
http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/icm_enterprise/icm_enterprise_9_0_1/reference/guide/_ICM9.0_BOM.pdf
- Cisco Unified Contact Center Express (Cisco Unified CCX) Software and Hardware Compatibility Guide:
http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/crs/express_compatibility/matrix/crscomtx.pdf
- Hardware and System Software Specification for Cisco Unified Customer Voice Portal (Unified CVP), Release 9.0(1):
http://www.cisco.com/en/US/products/sw/custcosw/ps1006/prod_technical_reference_list.html
- Cisco 7800 Series Media Convergence Servers:
<http://www.cisco.com/en/US/products/hw/voiceapp/ps378/index.html>
- Hardware and Software Interoperability Matrix for Unified Computing System (UCS) B-series Servers:
http://www.cisco.com/en/US/docs/unified_computing/ucs/interoperability/matrix/hw_sw_interop_matrix_seriesB_111.pdf
- Hardware and Software Interoperability Matrix for Unified Computing System (UCS) C-series Servers:
http://www.cisco.com/en/US/docs/unified_computing/ucs/interoperability/matrix/hw_sw_interop_matrix_seriesC_101.pdf
- Cisco Unified Communications Manager Server Support Matrix:
http://www.cisco.com/en/US/products/hw/voiceapp/ps378/prod_brochure0900aecd8062a4f9.html
- Cisco Unified Communications Virtualization (including links to UCS hardware information):
<http://www.cisco.com/go/uc-virtualized>
- Cisco Unified Communications System Release Summary Matrix for Contact Center:
http://www.cisco.com/en/US/docs/voice_ip_comm/uc_system/unified/communications/system/versions/CCMtrix.html
- IP Communications System Test Release Matrix:
http://www.cisco.com/en/US/docs/voice_ip_comm/uc_system/GB_resources/ipcmtrix.htm

Component release notes and installation and upgrade documents

The following table provides a listing of contact center components and URLs for related component release notes and installation and upgrade documents.

Table 3: Component-specific release notes and installation and upgrade documents

Components	Release Notes	Installation and Upgrade Documents
Cisco Unified Communications Manager	http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_release_notes_list.html	http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_installation_guides_list.html
Cisco Unified Communications Manager IM and Presence Service (formerly Cisco Unified Presence)	http://www.cisco.com/en/US/products/ps6837/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps6837/prod_installation_guides_list.html
Cisco Unified SIP Proxy	http://www.cisco.com/en/US/products/ps10475/prod_release_notes_list.html	—
Cisco Unified Intelligent Contact Management	http://www.cisco.com/en/US/products/sw/custcosw/ps1001/prod_release_notes_list.html	http://www.cisco.com/en/US/products/sw/custcosw/ps1001/prod_installation_guides_list.html
Cisco Unified Contact Center Enterprise	http://www.cisco.com/en/US/products/sw/custcosw/ps1844/prod_release_notes_list.html	http://www.cisco.com/en/US/products/sw/custcosw/ps1844/prod_installation_guides_list.html
Cisco Unified Contact Center Express and Cisco Unified IP IVR	http://www.cisco.com/en/US/products/sw/custcosw/ps1846/prod_release_notes_list.html	http://www.cisco.com/en/US/products/sw/custcosw/ps1846/prod_installation_guides_list.html
Cisco Customer Voice Portal	http://www.cisco.com/en/US/products/sw/custcosw/ps1006/prod_release_notes_list.html	http://www.cisco.com/en/US/products/sw/custcosw/ps1006/prod_installation_guides_list.html
Cisco Outbound Option	—	http://www.cisco.com/en/US/products/sw/custcosw/ps524/prod_installation_guides_list.html
Cisco Telephony Integration Object Server (CTI OS)	http://www.cisco.com/en/US/products/sw/custcosw/ps14/prod_release_notes_list.html	http://www.cisco.com/en/US/products/sw/custcosw/ps14/prod_installation_guides_list.html
Cisco Agent Desktop (CAD)	http://www.cisco.com/en/US/products/sw/custcosw/ps427/prod_release_notes_list.html	http://www.cisco.com/en/US/products/sw/custcosw/ps427/prod_installation_guides_list.html

Components	Release Notes	Installation and Upgrade Documents
Cisco Unified Intelligence Center	http://www.cisco.com/en/US/products/ps9755/prod_release_notes_list.html	—
Cisco Unified Personal Communicator	http://www.cisco.com/en/US/products/ps6844/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps6844/prod_installation_guides_list.html
Cisco Unified Operations Manager	http://www.cisco.com/en/US/products/ps6535/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps6535/prod_installation_guides_list.html
Cisco MediaSense	http://www.cisco.com/en/US/products/ps11389/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps11389/prod_installation_guides_list.html
Cisco Finesse	http://www.cisco.com/en/US/products/ps11324/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps11324/prod_installation_guides_list.html
Cisco Social Miner	http://www.cisco.com/en/US/products/ps11349/prod_release_notes_list.html	—
Cisco Unified Computing System	http://www.cisco.com/en/US/products/ps10477/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps10477/prod_installation_guides_list.html
Cisco ASA 5500 Series Adaptive Security Appliances	http://www.cisco.com/en/US/products/ps6120/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps6120/tsd_products_support_install_and_upgrade.html
Cisco Security Agent	http://www.cisco.com/en/US/products/sw/secursw/ps5057/prod_release_notes_list.html	http://www.cisco.com/en/US/products/sw/secursw/ps5057/tsd_products_support_install_and_upgrade.html
Cisco Series 800 Routers	http://www.cisco.com/en/US/products/hw/routers/ps380/prod_release_notes_list.html	http://www.cisco.com/en/US/products/hw/routers/ps380/prod_installation_guides_list.html
Cisco 2900 Series Integrated Services Routers	--	http://www.cisco.com/en/US/products/ps10537/index.html
Cisco Series 7200 Routers	http://www.cisco.com/en/US/products/hw/routers/ps341/prod_release_notes_list.html	http://www.cisco.com/en/US/products/hw/routers/ps341/prod_installation_guides_list.html
Cisco Catalyst 3600 Series MultiService Platforms	—	http://www.cisco.com/en/US/products/hw/routers/ps274/prod_installation_guides_list.html

Components	Release Notes	Installation and Upgrade Documents
Cisco AS5400 Series Universal Gateways	http://www.cisco.com/en/US/products/hw/univgate/ps505/prod_release_notes_list.html	http://www.cisco.com/en/US/products/hw/univgate/ps505/prod_installation_guides_list.html
Cisco 3800 Series Voice Gateways	http://www.cisco.com/en/US/products/ps5855/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps5855/prod_installation_guides_list.html
Cisco 3900 Series Routers	—	http://www.cisco.com/en/US/products/ps10536/prod_installation_guides_list.html
Cisco VGD 1T3 Voice Gateway	—	http://www.cisco.com/en/US/products/ps9890/prod_installation_guides_list.html
Cisco Catalyst 3750 Series Access Switches	http://www.cisco.com/en/US/products/hw/switches/ps5023/prod_release_notes_list.html	http://www.cisco.com/en/US/products/hw/switches/ps5023/prod_installation_guides_list.html
Cisco Catalyst 6500 Series Switches	http://www.cisco.com/en/US/products/hw/switches/ps708/prod_release_notes_list.html	http://www.cisco.com/en/US/products/hw/switches/ps708/prod_installation_guides_list.html
Cisco Unified IP Phone 9900 Series	http://www.cisco.com/en/US/products/ps10453/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps10453/prod_installation_guides_list.html
Cisco Unified IP Phone 8900 Series	http://www.cisco.com/en/US/products/ps10451/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps10451/prod_installation_guides_list.html
Cisco Unified IP Phone 7900 Series	http://www.cisco.com/en/US/products/hw/phones/ps379/prod_release_notes_list.html	http://www.cisco.com/en/US/products/hw/phones/ps379/prod_installation_guides_list.html
Cisco Unified IP Phone 6900 Series	http://www.cisco.com/en/US/products/ps10326/prod_release_notes_list.html	—
Cisco Aironet Access Point 1240AG	http://www.cisco.com/en/US/products/ps6521/prod_release_notes_list.html	http://www.cisco.com/en/US/products/ps6521/prod_installation_guides_list.html
Cisco IOS Software Releases 15.2	http://www.cisco.com/en/US/products/ps10592/prod_release_notes_list.html	—

