


Cisco

Personal Assistant



Cisco Personal Assistant streamlines voice communications with personal call rules and speech recognition. As an integral part of the Personal Productivity Suite and Cisco AVVID (Architecture for Voice, Video and Integrated Data), it interoperates with the Cisco CallManager and scales to meet the present and future needs of your company. Users browse voice mail, dial by name, and conference from any telephone using voice instead of the telephone keypad. The user administration interface allows users to forward and screen calls in advance or in real time. Cisco Personal Assistant enhances productivity in the workplace.

Many attempts to personalize traditional private branch exchanges (PBXs) are available today, but these are both expensive and complicated. Cisco Personal Assistant is a new world telephony application that delivers personalization and ease of use. It enhances the way users manage how and where they want to be reached, and like the Web, is easy enough to allow users to modify their environment quickly without training or requesting help from a system administrator. Cisco IP telephony is the foundation for easily distributed applications like Personal Assistant.

Feature Overview

Automatic Speech Recognition (ASR)

Cisco Personal Assistant provides a speech recognition interface that provides users with simple voice commands to perform tasks. Users verbally dial entries in their personal address books or the corporate enterprise Lightweight Directory Access Protocol (LDAP) directory. In addition to placing regular calls, users can direct Cisco Personal Assistant to establish conference calls with spoken commands.

Speech recognition also enables users to voice-navigate messaging functions such as retrieval, replying, recording, and deletion of voice messages. Cisco Personal Assistant supports Cisco Unity voice mail.

Speech recognition is available from any telephone via handset or headset. However, speech recognition through speakerphones is not supported at this time.

Managing Inbound and Outbound Calls (Rules-Based Routing)

Cisco Personal Assistant allows individual users to unify how and where they want to receive calls. Using a Web interface to create rules, users forward and screen calls based on caller-identification, time of day, and meeting schedules. Users can also instruct Personal Assistant to forward selected calls to a series of phone numbers. Cisco Personal Assistant processes the user-configured rules and dispatches the call accordingly.

For example, a user can configure a rule to forward an important sales call that is expected between 10:00 AM and 11:00 AM to directly go to the user's cellular phone, while simultaneously sending calls from colleagues to voice mail and a pager. Simply establishing rule parameters helps users improve productivity and concentrate on tasks that require immediate attention.

Cisco Personal Assistant interfaces with Microsoft Exchange 5.5 and Exchange 2000 for meeting schedule features.

Cisco Personal Assistant with Speech Recognition integrates with Cisco CallManager within Cisco AVVID. An inherent part of Cisco AVVID is a seamless solution between Cisco Personal Assistant and Cisco CallManager. Additional data and voice services can be enabled by incorporating solutions such as Cisco Unity into a customer environment.

Key Benefits

Cisco Personal Assistant streamlines communications, allowing important calls to reach users anytime, anywhere. Users can more effectively manage demands on their time, improving personal productivity.

Enhance productivity

- Unify how and where you receive calls

- Screen calls

- Forward calls

Speech enable

- Voice-mail access

- Name dialing

- Simple ad-hoc conferencing

An introductory Cisco Personal Assistant edition, the Personal Assistant Directory Dialer, will be available with the Cisco CallManager for customer lab trials. Personal Assistant Directory Dialer includes two speech recognition sessions of name dialing to encourage enterprises to explore ASR.



Administration

User Administration

Cisco Personal Assistant provides an intuitive interface for Web-based user administration, as seen in Figure 1. Users can design rules that forward and screen calls based on time of day, meeting schedule, and caller identification. Users can choose to be reached at a single phone number or a series of phone numbers or e-mail-based paging addresses. For instance, if a user does not answer their office telephone, Personal Assistant can forward the call to the user's cellular phone.

Figure 1 Cisco Personal Assistant User Administration

The screenshot shows the Cisco Personal Assistant Administration web interface. The top navigation bar includes links for Destinations, Callers, Rule-Sets, Preferences, Tools, Help, and Session. The main header features the Cisco logo and the text "Cisco Personal Assistant Administration For Cisco IP Telephony Solutions". The page title is "Rule-Sets".

Use this page to create rule-sets. Rule-sets contain your call forwarding and screening rules.

To create a rule-set, enter a name and click "Add Rule-Set." To create a rule, click "Add Rule."

Rule-set 'new' is currently active.

Rule-Set Name

List of Rule-Sets:

Rule-Set Name	Active Period	Delete
<input checked="" type="checkbox"/> mySampleRuleset	Inactive	<input type="button" value="Delete"/>
<input type="checkbox"/> new	Mon, Tue, Wed, Thu, Fri, Sat, Sun	<input type="button" value="Add Rule"/> <input type="button" value="Delete"/>

Rules

Rules	Up	Down	Delete
<input checked="" type="checkbox"/> If the caller is one of ["George Knightly*"] AND if the call arrives between 08:00 and 17:00, direct the call to destination "my cellular phone" and do not screen the call.	<input type="button" value="Up"/>	<input type="button" value="Down"/>	<input type="button" value="Delete"/>

To apply your rule-sets to incoming calls, you need to [Activate Rule-Sets](#).

System Administration

Cisco Personal Assistant provides a powerful Web-based interface for system administration, as seen in Figure 2. Using this tool, the administrator configures the Personal Assistant Server, the Speech Recognition Server, access to the LDAP directory, and Microsoft Exchange 5.5 or Exchange 2000.

Figure 2 Cisco Personal Assistant System Administration

The screenshot displays the Cisco Personal Assistant Administration web interface. At the top, there is a navigation bar with links for System, Servers, Logout, and Help. Below this is a header banner with the text "Cisco Personal Assistant Administration For Cisco IP Telephony Solutions" and the Cisco Systems logo. The main content area is titled "System Configuration" and includes the instruction: "Specify the values for the configuration attributes and click Save." The configuration fields are as follows:

Unique User Attribute Name	<input type="text" value="cn"/>
Operator Extension	<input type="text"/>
Peer Keep-Alive Interval	<input type="text" value="20000"/>
Peer TCP Port	<input type="text" value="16001"/>
License Code	<input type="text"/>
License Capacity	8 Speech Ports

Below the main configuration fields, there are two sections for host management:

- Speech Recognition Server Hosts:** A list containing the IP address 172.20.73.10. To the left of the list are "Add" and "Remove" buttons, and an empty input field.
- Speech Recognition License Manager Hosts:** A list containing the IP address 172.20.73.10. To the left of the list are "Add" and "Remove" buttons, and an empty input field.

Specifications

Platform

- Cisco Media Convergence Server, MCS-7835-1000; highly available server, suitable for platform mounting in 19-inch racks
- Cisco Media Convergence Server, MCS-7825-800; a powerful platform at only one rack unit high (1U), becoming the most space efficient of the MCS-7800 server family

Configured Software

- Cisco Personal Assistant Server
- Cisco Personal Assistant Speech Recognition Server
- Cisco Personal Assistant Web Administration



System Capacity

Available on the Cisco MCS-7835-1000 or the Cisco MCS-7825-800 platforms, Cisco Personal Assistant with Speech Recognition allows users to retrieve their voice messages from their Cisco Unity unified messaging or voice-mail system. Cisco Personal Assistant also allows users to voice-dial contacts in their Personal Assistant address books or an LDAP corporate directory. In addition, rules-based call routing can be established based on time of day, caller ID, or the user's Microsoft Exchange 5.5 or 2000 calendar.

The competitive Cisco Personal Assistant server package includes ten user licenses and two speech recognition sessions. Customers can add more users by simply purchasing additional user licenses and increase ASR capabilities by purchasing speech recognition expansion sessions. Most customers will require one speech recognition session for approximately 50 users; however, Cisco recommends a lower user-to-session ratio for enterprise customers with high speech recognition usage. Table 1 summarizes system capacity per server.

Table 1 Server System Capacity

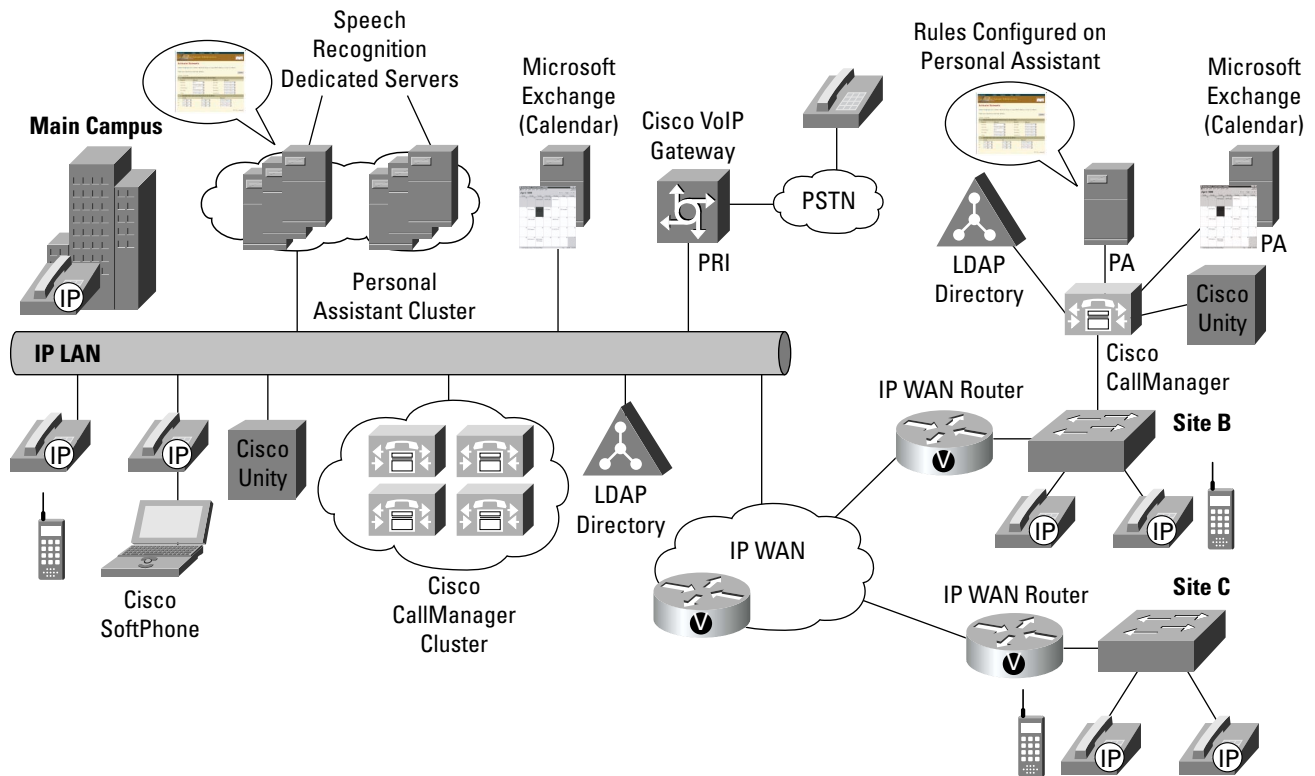
Server Installation	MCS-7825-800		MCS-7835-1000	
	Personal Assistant Users	Speech Recognition Sessions	Personal Assistant Users	Speech Recognition Sessions
Personal Assistant server and speech recognition server installed on different systems	1250 users	24 sessions	1750 users	36 sessions
Personal Assistant server and speech recognition server installed on the same system	550 users	20 sessions	750 users	24 sessions

For large enterprise customers, these servers can be scaled in N+1 configurations for redundancy and also can be deployed in distributed environments. Customers can configure multiple Personal Assistant servers into a single environment, tied to a single Cisco CallManager cluster. Figure 3 illustrates a Personal Assistant network configuration example.

For furthering information on provisioning, refer to the *Cisco Personal Assistant Design Guide*. Like all products associated with the Cisco CallManager, the Personal Assistant system administrator must understand the impact of configuration decisions on the Cisco CallManager environment.

The speech recognition server can support a maximum of 10,000 entries for accurate recognition in the standard configuration. Please refer to the Cisco Personal Assistant Design Guide for instructions on procedures that handle larger deployments.

Figure 3 Network Configuration with Cisco Personal Assistant



Features:

Automatic Speech Recognition

- Name dial using Personal Assistant address book or corporate directory
- Retrieve, reply, forward, record, or delete voice messages stored in Cisco Unity voice mail or unified messaging system
- Perform call-back to voice messages stored in Cisco Unity voice mail or unified messaging system
- Perform simple ad-hoc conferencing

Managing Inbound and Outbound Calls (Rules-Based Routing)

- Route calls by user designed rules
 - Time of day
 - Meeting schedule
 - Caller identification
- Forward calls to user-defined phone numbers and e-mail-based paging addresses
 - Single number
 - Series of numbers (that is, ring office phone, if no answer, ring cellular phone)

- Screen calls
 - Select which calls to accept in real time
- Create caller groups or buddy lists to which specific rules are applied

User and System Administration

Cisco Personal Assistant provides intuitive interfaces for Web-based user administration and system administration.

The user administration interface includes the following features:

- Create and modify destinations (phone numbers and e-mail-based paging addresses where a user wants to be reached)
- Create and modify destination groups for multiple number reach
- Create and modify callers in Personal Assistant address book
- Create and modify groups of callers
- Create and modify rules and rule-sets
- Activate rule sets
- Create and modify dial rules

- Test call-forwarding rules
- Test dial rules
- Turn on/off call forwarding and screening capabilities
- Create alternate names to aid speech recognition
- Select time zone
- Set name dialing preference
- Reset spoken name
- Select call-pickup timeout

The system administration interface includes the following features:

- Set central Personal Assistant system call-in number
- Load balance calls
- Configure Personal Assistant redundant servers
- Configure Personal Assistant to access LDAP directory
- Configure Personal Assistant to access Microsoft Exchange 5.5 and Exchange 2000
- Provide information, warning, and error messages
- Provide system and error reporting
- Manage Personal Assistant system control center

Ordering Information

Description	Part Number
Cisco Personal Assistant Server with Speech Recognition	SW-PASR1.1-SVR2
Personal Productivity Users License	SW-PASR1.1-USR
Cisco Personal Assistant, Expansion Speech Recognition Session	SW-PASR1.1-KX* * Various session combinations available

Cisco Personal Assistant can be purchased with an MCS-7825-800 or an MCS-7835-1000 media convergence server. The customer also has the option to purchase the software and licenses, providing their own Cisco certified server.

Cisco Service and Support Solutions

The Cisco AVVID IP Telephony Service and Support Solutions are designed for one purpose—to ensure customer success by delivering a suite of proactive services. Rapid deployment, core, and advanced service and support covering the entire network life cycle can be delivered directly by Cisco, or via its ecosystem of best-in-class partners.

The award-winning Cisco Service and Support offerings provide presales network audit planning, design consulting, network implementation, operational support, and network optimization. By including service and support when purchasing Cisco AVVID IP Telephony Solutions, customers can confidently deploy a converged network architecture utilizing Cisco expertise, experience, and resources.



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