



# Troubleshooting Personal Assistant

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These topics address problems you might encounter, and provide ways to resolve them; also included are other tasks associated with problem resolution.

- [Resolving Problems Using Personal Assistant, page 6-1](#)
- [Resolving Problems Managing Personal Assistant, page 6-4](#)
- [Starting and Stopping the Servers and License Manager, page 6-6](#)
- [Collecting Trace and Debug Information, page 6-7](#)
- [Integrating with Network Management Systems, page 6-9](#)

## Resolving Problems Using Personal Assistant

These topics provide resolutions to problems users might encounter:

- [Unable to Access User Interface, page 6-2](#)
- [Unable to Use Speech Commands, page 6-2](#)
- [Directed to Operator Too Often, page 6-2](#)
- [Too Many Available Options, page 6-3](#)
- [Calls Transferred to Voice Mail Too Quickly, page 6-3](#)
- [Dial Rules Not Working Properly, page 6-3](#)
- [Calls Dropping, page 6-4](#)

## Unable to Access User Interface

If users cannot log in to the Personal Assistant user interface, verify that they are using the correct log-in name. The log-in name should match the unique user attribute you defined in the System Configuration settings. For example, if your company is using the employee e-mail address as the unique user attribute, verify that users are entering their e-mail address and not another attribute, such as their phone number.

### Related Topics

- [Configuring Personal Assistant Global Settings, page 4-2](#)

## Unable to Use Speech Commands

If users cannot use speech commands and are forced to use touch-tone dialing to interact with Personal Assistant:

- Verify that the speech recognition server is up and running. See the [“Starting and Stopping the Servers and License Manager”](#) section on page 6-6.
- Establish whether you have recently added a new speech-recognition server or additional license manager hosts. If you have, you must refresh the servers before they can support users. See the [“Configuring Personal Assistant Global Settings”](#) section on page 4-2.
- Consider whether you have an adequate number of speech-recognition servers to handle the number of users. See the [“Creating Server Clusters”](#) section on page 1-16.

## Directed to Operator Too Often

If users report that they are being directed to the operator too often when using Personal Assistant, check the Dial by Name settings on the Personal Assistant server. See the [“Fine-Tuning Speech Recognition \(Dial By Name\)”](#) section on page 4-5.

### Related Topics

- [Fine-Tuning Speech Recognition \(Dial By Name\), page 4-5](#)

## Too Many Available Options

If users report they are given too many options when using dial-by-name, you should reduce the **Max Disambiguate** parameter of the Dial by Name settings on the Personal Assistant server.

### Related Topics

- [Fine-Tuning Speech Recognition \(Dial By Name\), page 4-5](#)

## Calls Transferred to Voice Mail Too Quickly

Using the JTAPI Configuration options in the Personal Assistant Administration interface, you can designate the call pickup time. This determines how long Personal Assistant waits for a call to be picked up before it moves on to the next defined dial rule.

However, users can also configure the call pickup time (by selecting **Preferences > Settings** from the user interface), and this setting takes precedence. For example, if the server setting is 20 seconds, but a user has set their setting to 10 seconds, Personal Assistant uses 10 seconds as the call pickup time.

If users state that they are being transferred too quickly to voice mail, check the call pickup setting in both the administrator and user interfaces.

### Related Topics

- [Configuring JTAPI, page 4-10](#)

## Dial Rules Not Working Properly

You can configure dial rules through the Personal Assistant Administration and User interfaces. However, rules configured in the Administration interface take priority over those configured through the User interface. Therefore, if a user has configured a dial rule that conflicts or produces different results than one you configured as the administrator, their rules are ignored.

### Related Topics

- [Creating Dialing Rules, page 4-13](#)

## Calls Dropping

Under normal circumstances, users should not experience dropped calls while using Personal Assistant. However, if you have recently changed settings on the Personal Assistant server and saved the settings, the server might have restarted. If you do not have any failover servers, Personal Assistant might have been unavailable during this restart.

If a user is actively interacting with Personal Assistant when the server becomes unavailable, the call will drop. However, if Personal Assistant has already completed its role in the call, such as a successful transfer, the call will not be dropped.

To prevent calls from being dropped while Personal Assistant is being used, limit the changes and restarts to the Personal Assistant server to off-peak or other times of lower demand. Also, if you do not have a failover server, consider adding one in order to more reliably support your users.

### Related Topics

- [Setting Up Personal Assistant Server Load Balancing, page 1-21](#)
- [Configuring Personal Assistant Servers, page 4-15](#)

## Resolving Problems Managing Personal Assistant

These topics provide resolutions to problems you might encounter when managing Personal Assistant:

- [Speech Server or License Manager Not Recognized, page 6-4](#)
- [Servers Displaying Connectivity Problem, page 6-5](#)

## Speech Server or License Manager Not Recognized




If you recently added a new speech recognition server or additional license manager hosts, you must refresh the servers before they can support users. See [“Configuring Personal Assistant Global Settings” section on page 4-2](#).

## Servers Displaying Connectivity Problem

The Personal Assistant Control Center provides you with information about the status of the Personal Assistant servers. To access the Control Center, select **System > Control Center** from the Personal Assistant administration web interface.

[Table 6-1](#) indicates the possible server status. Use this information to determine the current server status and to resolve any problems.

**Table 6-1** Server Status

Icon	Explanation	Solution
	Server is stopped.	You or Personal Assistant have stopped the server. Personal Assistant stops the servers during a normal refresh.
	Server is experiencing connectivity or permission errors.	Verify that the Personal Assistant servers are connected and up and running properly. If you have added Personal Assistant to a Windows 2000 domain, ensure that the server has administrator privileges in the domain. This is configured during installation.
	Server is started.	Server is functioning normally.

### Related Topics

- [Starting and Stopping the Servers and License Manager, page 6-6](#)
- [Control Center, page A-20](#)

# Starting and Stopping the Servers and License Manager

You can start and stop the Personal Assistant servers, speech recognition servers, and license managers through the Personal Assistant administrative web interface. This can help you add or remove servers from the Personal Assistant and speech server clusters in an orderly manner. It can also help you bring down a server that is not functioning properly.

## Procedure

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### Step 1 Select **System > Control Center**.

Personal Assistant opens the control center. The control center is divided into three sections:

- **Server Control**—lists the Personal Assistant server systems in the cluster
- **Speech Server Control**—lists the speech server systems in the cluster
- **License Manager Control**—lists the license manager systems in the cluster

The status of one type of server does not affect the status of any other type of server on the same system. For example, you can stop a license manager without stopping the Personal Assistant server on the same system, and vice versa.

### Step 2 Find the Personal Assistant server, speech-recognition server, or license manager you want to start or stop, and click the **Start** or **Stop** button that is on the same line as the server.

You can start or stop all of the Personal Assistant servers, speech-recognition servers, or license managers as a group by clicking the **Start All** or **Stop All** button associated with the group.

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## Tips

- At least one license manager must be started in order for Personal Assistant to use the speech-recognition servers. When you are stopping and starting license managers, start and stop them in an order that ensures that at least one is always active.

- During a refresh, the speech-recognition servers are automatically stopped and started in an order that ensures that at least one is always active.

#### Related Topics

- [Control Center, page A-20](#)
- [Personal Assistant Installation Procedures, page 2-4](#)
- [Servers Displaying Connectivity Problem, page 6-5](#)

## Collecting Trace and Debug Information

When you contact Cisco Technical Support for help with a problem you are having with Personal Assistant, Cisco might request that you collect trace and debug information.

Because collecting trace and debug information will affect Personal Assistant's performance, you should only turn on tracing and debugging at Cisco's request. The generated information is for Cisco's use in resolving product problems.

To collect trace and debug information, perform the following steps.

#### Procedure

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- Step 1** From the Personal Assistant web interface, select **Server**.  
Personal Assistant opens the Server Configuration page.
  - Step 2** From the left column, select the server from which you need to collect debug or trace information.  
Personal Assistant displays the settings for the server.
  - Step 3** Scroll down to the Personal Assistant Debug Package List and Personal Assistant Trace Package List sections. Select the packages that Cisco Technical Support has requested. The lists in each section are identical; make sure that you select the package in the list Cisco requested. Packages selected in the Debug list generate trace information plus extra debug data. If Cisco request you select all packages, click **Select All** from the appropriate list.

The available packages include:

- PASRV—The main Personal Assistant server system.
- SS\_PA\_TEL—The telephony subsystem.
- SS\_PA—The Personal Assistant subsystem for LDAP access.
- SS\_PA\_MAIL—The subsystem that interacts with voice mail and paging.
- PAVmail—The speech enabled voice mail package.
- PADbn—The dial-by-name subsystem.
- PASCCP—The Skinny protocol subsystem.
- PARULES—The rules-based call routing subsystem.
- PADtmf—The DTMF interface.
- DialRules—The system-wide dialing rules subsystem.
- GRMR—Speech grammar generation.
- PASspokenName—The subsystem that records the user's spoken name.
- Perfmon—The performance monitoring subsystem.
- PASpeechUtil—Miscellaneous speech utilities.

**Step 4** Click **Save Settings** to save and activate your changes.

Personal Assistant begins generating the requested trace and debug information.

The information is placed in a log file in the /log subdirectory of the Personal Assistant installation directory. Or, if you configured Personal Assistant to use the CiscoWorks 2000 Syslog facility when you installed Personal Assistant, the data is sent to syslog. Send this information to the Cisco Technical Support group with which you are working.

**Step 5** When you have finished generating debug and trace information, turn off debug and trace by clicking **Clear All** for each section in which you have made a selection. Then, click **Save** to complete the change.

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#### Related Topics

- [Collecting System Logs with Syslog, page 6-10](#)
- [Personal Assistant Installation Procedures, page 2-4](#)
- [Server Configuration, page A-15](#)

# Integrating with Network Management Systems

You can manage the status of the Personal Assistant server remotely using CiscoWorks2000 or another SNMP-based network management system. CiscoWorks2000 is the standard Cisco network management system, but it is not bundled with Personal Assistant. For more information about CiscoWorks2000, Campus Manager, and Topology Services, refer to the documentation, available at the following URL:

<http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/index.htm>

These topics provide information to assist you in integrating Personal Assistant with network management systems:

- [Understanding CDP Support, page 6-9](#)
- [Monitoring Personal Assistant Subsystem Status, page 6-9](#)
- [Collecting System Logs with Syslog, page 6-10](#)

## Understanding CDP Support

Personal Assistant uses the Cisco Discovery Protocol (CDP) to periodically send out CDP messages, on the active interface, to a designated multicast address. These messages contain information such as device identification, interface name, system capabilities, SNMP agent address, and time-to-live. Any Cisco device with CDP support can locate a Personal Assistant server by listening to these periodic messages.

Using information provided through CDP, the CiscoWorks2000 Server can detect the Personal Assistant Server, and the Campus Manager application, Topology Services, can build topology maps displaying the Personal Assistant server.

## Monitoring Personal Assistant Subsystem Status

Personal Assistant supports the SYSAPPL-MIB that allows you to use CiscoWorks2000 or a third-party SNMP browser to remotely access information about the following Personal Assistant components:

- Personal Assistant Server
  - PAServer.exe

- PASPRM.exe
- PASPNLM.exe
- Personal Assistant Web Administration
  - PAWebAdmin.exe
- Personal Assistant Speech Recognition
  - PASPREC.exe
  - PASPCS.exe

The SYSAPPL-MIB uses the Simple Network Management Protocol (SNMP). Personal Assistant supports the following SYSAPPL-MIB tables:

- SysApplInstallPkgTable—provides installed application information such as Manufacturer, Product Name, Version installed, Date installed, and Location, which is a partial URL for accessing the associated Application Administration web page (when applicable).
- SysApplRunTable—describes the application starting time and run-time status.
- SysApplInstallElmtTable—describes the individual application elements, or associated executables, which comprise the applications defined in the SysApplInstallPkgTable.
- SysApplElmtRunTable—describes the processes, or executables, that are currently running on the host system.

## Collecting System Logs with Syslog

During installation of Personal Assistant, you can choose whether to integrate with Cisco Syslog Collector (see the [“Personal Assistant Installation Procedures” section on page 2-4](#) for details). Cisco Syslog Collector and Cisco Syslog Analyzer are offered with CiscoWorks2000 as part of the Resource Management Essentials package. You can also adapt Syslog output from Personal Assistant for use with other network management systems.

The Cisco Syslog Collector keeps common system logs of messages reported to the Personal Assistant.

The Cisco Syslog Analyzer controls and displays all events efficiently so they can easily be read, interpreted, and used for system maintenance and problem solving.