



# **Avaya CallPilot® Fundamentals Guide**

5.0  
NN44200-100, 01.10  
March 2011

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Avaya provides a telephone number for you to use to report problems or to ask questions about your Product. The support telephone number is 1-800-242-2121 in the United States. For additional support telephone numbers, see the Avaya Web site: <http://support.avaya.com>.

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# Chapter 1: New in this release

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## In this chapter

[New in Avaya CallPilot® 5.0](#) on page 7

[New features](#) on page 7

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## New in Avaya CallPilot® 5.0

This chapter, "New in this release", provides an overview of the new functionality introduced in Service Update 9 of Avaya CallPilot 5.0.

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## New features

The following two features are introduced in Service Update 9 of CallPilot 5.0:

### **Flight Recorder**

The following section has been added for this feature: [Flight Recorder](#) on page 68.

### **Geographic Redundancy**

The following section has been added for this feature: [Geographic Redundancy](#) on page 69.

New in this release

# Chapter 2: Customer service

Visit the Avaya Web site to access the complete range of services and support that Avaya provides. Go to [www.avaya.com](http://www.avaya.com) or go to one of the pages listed in the following sections.

## Navigation

- [Getting technical documentation](#) on page 9
- [Getting product training](#) on page 9
- [Getting help from a distributor or reseller](#) on page 9
- [Getting technical support from the Avaya Web site](#) on page 10

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## Getting technical documentation

To download and print selected technical publications and release notes directly from the Internet, go to [www.avaya.com/support](http://www.avaya.com/support).

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## Getting product training

Ongoing product training is available. For more information or to register, you can access the Web site at [www.avaya.com/support](http://www.avaya.com/support). From this Web site, you can locate the Training contacts link on the left-hand navigation pane.

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## Getting help from a distributor or reseller

If you purchased a service contract for your Avaya product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller for assistance.

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## Getting technical support from the Avaya Web site

The easiest and most effective way to get technical support for Avaya products is from the Avaya Technical Support Web site at [www.avaya.com/support](http://www.avaya.com/support).

# Chapter 3: Introduction

Welcome to Avaya CallPilot®!

Avaya CallPilot is a powerful unified messaging system that offers a single solution for managing many types of information, including:

- voice messages
- e-mail messages
- telephone calls
- fax messages
- directories

CallPilot users can send and receive both voice and fax messages through display-based telephone sets, wireless sets, Windows desktop computers, or a speech-recognition interface.

Whether you are new to CallPilot or have previous experience with the product, this guide is the place to start.

The Avaya CallPilot® Fundamentals Guide provides an overview of the CallPilot product. It is your introduction to the CallPilot hardware, software, and documentation.

In addition to providing overviews of the CallPilot components, this guide describes the roles of various personnel involved with the installation, configuration, administration, and maintenance of the system. The guide also examines the end-user perspective and various regulatory and environmental requirements.

One of the principal roles of this guide is to serve as your roadmap to the CallPilot documentation suite. The entire suite is extensive, comprising dozens of individual volumes, reference cards, and detailed online Help information. All the text volumes and reference cards are available in Adobe Acrobat PDF format. Refer to [Avaya CallPilot® documentation](#) on page 13 and [Avaya CallPilot® and personnel roles](#) on page 29 for detailed information about the CallPilot documentation suite and its uses.

For previous CallPilot customers and users, this guide also contains a "New in this release" section (see [New in this release](#) on page 7). This section provides a brief overview of the new functionality introduced in this release of the product.



# Chapter 4: Avaya CallPilot® documentation

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## In this chapter

[Introduction to the Avaya CallPilot documentation](#) on page 13

[Customer Documentation Map](#) on page 14

[Using online Help sources](#) on page 17

[Contacting technical support](#) on page 18

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## Introduction to the Avaya CallPilot documentation

The CallPilot documentation suite is stored on the DVD-ROM that you receive with your system. The suite is organized into six main categories:

- Fundamentals
- Planning and Engineering
- Installation and Configuration
- Administration and Support Tools Guides
- Maintenance
- End-user Information

This structure relates to the main task groups involved in installing, administering, maintaining, and using CallPilot. The documents are supplied in Adobe Acrobat PDF format. You can print part, or all, of a guide, as required.

In addition to the various guides, CallPilot contains extensive online Help information. The Help topics can be accessed from various CallPilot interface screens, such as the CallPilot Manager and the Web-based My CallPilot. The entire Help collection is also available offline. This facilitates conducting searches if you want to probe the entire body of the online text.

The PDF documents are also available from the Avaya Support Web site at:

<http://www.avaya.com/support>

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## Customer Documentation Map

The following diagram shows the overall organization and content of the CallPilot documentation suite.

**Table 1: Call Pilot Customer Documentation Map**

|  |
|--|
| Fundamentals   |
| Avaya CallPilot® Fundamentals Guide (NN44200-100)  |
| Avaya CallPilot® Library Listing (NN44200-117)   |
| Planning and Engineering   |
| Avaya CallPilot® Planning and Engineering Guide (NN44200-200)  |
| Avaya CallPilot® Network Planning Guide (NN44200-201)  |
| Converging the Data Network with VoIP Guide (NN43001-260)  |
| Solution Integration Guide for Communication Server 1000/Call Pilot/Contact Center/Telephony Manager (NN49000-300) |
| Installation and Configuration   |
| Avaya CallPilot® Upgrade and Platform Migration Guide (NN44200-400)  |
| Avaya CallPilot® High Availability: Installation and Configuration (NN44200-311)                                   |
| Avaya CallPilot® Geo-Redundancy Application Guide (NN44200-322)  |
| Avaya CallPilot® Installation and Configuration Task List Guide (NN44200-306)                                      |
| Avaya CallPilot® Quickstart Guide (NN44200-313)  |
| Avaya CallPilot® Installer Roadmap (NN44200-314)   |
| Server Installation Guides   |
| Avaya CallPilot® 201i Server Hardware Installation Guide (NN44200-301)   |
| Avaya CallPilot® 202i Server Hardware Installation Guide (NN44200-317)   |
| Avaya CallPilot® 202i Installer Roadmap (NN44200-319)  |
| Avaya CallPilot® 703t Server Hardware Installation Guide (NN44200-304)   |
| Avaya CallPilot® 1002rp Server Hardware Installation Guide (NN44200-300)   |
| Avaya CallPilot® 1002rp System Evaluation (NN44200-318)  |
| Avaya CallPilot® 1005r Server Hardware Installation Guide (NN44200-308)  |
| Avaya CallPilot® 1005r System Evaluation (NN44200-316)   |

Avaya CallPilot® 1006r Server Hardware Installation Guide  
(NN44200-320)

Avaya CallPilot® 600r Server Hardware Installation Guide  
(NN44200-307)

Avaya CallPilot® 600r System Evaluation (NN44200-315)

#### Configuration and Testing Guides

Avaya CallPilot® Meridian 1 and CallPilot Server Configuration Guide  
(NN44200-302)

Avaya CallPilot® T1/SMDI and CallPilot Server Configuration Guide  
(NN44200-303)

Communication Server 1000 System and CallPilot Server Configuration  
Guide (NN44200-312)

#### Unified Messaging Software Installation

Avaya CallPilot® Desktop Messaging and My CallPilot Installation and  
Administration Guide (NN44200-305)

#### Administration

Avaya CallPilot® Administrator Guide (NN44200-601)

Avaya CallPilot® Software Administration and Maintenance Guide (NN44200-600)

Avaya CallPilot® Meridian Mail to CallPilot Migration Utility Guide (NN44200-502)

Avaya CallPilot® Application Builder Guide (NN44200-102)

Avaya CallPilot® Reporter Guide (NN44200-603)

#### Maintenance

Avaya CallPilot® Troubleshooting Reference Guide (NN44200-700)

Avaya CallPilot® Preventative Maintenance Guide (NN44200-505)

#### Server Maintenance and Diagnostics

Avaya CallPilot® 201i Server Maintenance and Diagnostics Guide  
(NN44200-705)

Avaya CallPilot® 202i Server Maintenance and Diagnostics Guide  
(NN44200-708)

Avaya CallPilot® 703t Server Maintenance and Diagnostics Guide  
(NN44200-702)

Avaya CallPilot® 1002rp Server Maintenance and Diagnostics Guide  
(NN44200-701)

Avaya CallPilot® 1005r Server Maintenance and Diagnostics Guide  
(NN44200-704)

Avaya CallPilot® 1006r Server Maintenance and Diagnostics Guide  
(NN44200-709)

Avaya CallPilot® 600r Server Maintenance and Diagnostics Guide  
(NN44200-703)

Avaya NES Contact Center Manager Communication Server 1000/  
Meridian 1 & Voice Processing Guide (297-2183-931)

#### End User Information

##### End User Cards

Avaya CallPilot® Unified Messaging Quick Reference Card  
(NN44200-111)

Avaya CallPilot® Unified Messaging Wallet Card (NN44200-112)

Avaya CallPilot® A-Style Command Comparison Card (NN44200-113)

Avaya CallPilot® S-Style Command Comparison Card (NN44200-114)

Avaya CallPilot® Menu Interface Quick Reference Card (NN44200-115)

Avaya CallPilot® Alternate Command Interface Quick Reference Card  
(NN44200-116)

Avaya CallPilot® Multimedia Messaging User Guide (NN44200-106)

Avaya CallPilot® Speech Activated Messaging User Guide  
(NN44200-107)

Avaya CallPilot® Desktop Messaging User Guide for Microsoft Outlook  
(NN44200-103)

Avaya CallPilot® Desktop Messaging User Guide for Lotus Notes  
(NN44200-104)

Avaya CallPilot® Desktop Messaging User Guide for Novell Groupwise  
(NN44200-105)

Avaya CallPilot® Desktop Messaging User Guide for Internet Clients  
(NN44200-108)

Avaya CallPilot® Desktop Messaging User Guide for My CallPilot  
(NN44200-109)

Avaya CallPilot® Voice Forms Transcriber User Guide (NN44200-110)

The Map was created to facilitate navigation through the suite by showing the main task groups and the documents contained in each category. It appears near the beginning of each guide, showing that guide's location within the suite.

Descriptions of the suite's documents are provided in [Avaya CallPilot® and personnel roles](#) on page 29 That chapter examines the roles of various personnel within an organization with respect to installing, maintaining, administering, and using CallPilot. It directs you to the appropriate guides for the tasks you want to perform.

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## Using online Help sources

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### CallPilot administration online Help

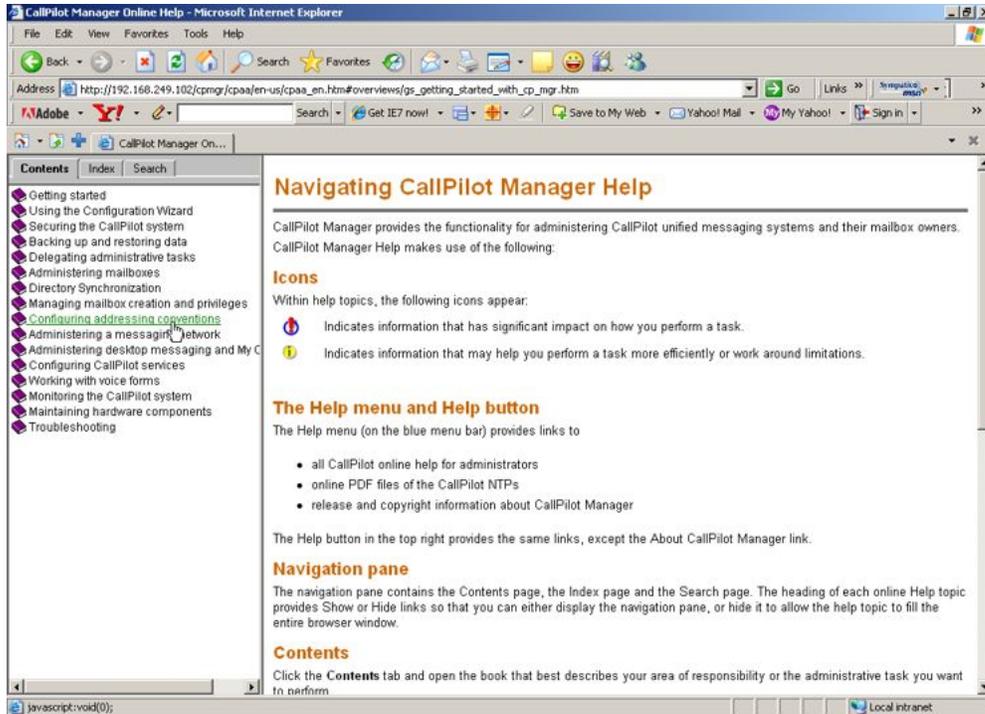
The CallPilot Manager and CallPilot Reporter software contain administration online Help areas that provide access to:

- technical documentation in Acrobat PDF format
- online Help topics in HTML format

To access online information, use either of the following methods:

- Click the white Help button at the top of any page to access the Administration Help area.
- Click the grey Help button on any page to display a topic that relates to the contents of the page.

For more information about using these Help systems, access the CallPilot Manager Help, open the Getting Started book, and click Navigating CallPilot Manager Help.



The Application Builder software contains a Windows Help system as well as context-sensitive help (available by clicking the ? button and then a field or label).

---

## CallPilot end-user online Help

The My CallPilot software contains a Useful Information area that provides access to the end-user guides in HTML format. Online user guides in Acrobat PDF format are also available from the Useful Information online Help.

To access online Help for the currently selected My CallPilot tab, click the Help button on the upper-right corner of the My CallPilot page.

Desktop Messaging provides product-specific Windows Help for groupware clients (Microsoft Outlook, Novell GroupWise, and Lotus Notes). The stand-alone version of CallPilot Player also provides addressing and troubleshooting information for Internet mail clients.

---

## Contacting technical support

Contact your distributor's technical support organization to obtain any required assistance with your system.

# Chapter 5: Safety guidelines

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## In this chapter

[General safety](#) on page 19

[Avoiding electrostatic discharge](#) on page 21

[Handling components](#) on page 22

[Handling hard drives](#) on page 23

[Handling CD-ROMs and DVD-ROMs](#) on page 25

[Single-point grounding requirements](#) on page 25

---

## General safety

When installing, replacing, or upgrading any system parts, follow Avaya safety guidelines to prevent personal injury and damage to the server or replacement parts.



### **Warning:**

Risk of personal injury and equipment damage

Field maintenance must always be performed by fully qualified, trained personnel.



### **Important:**

The guidelines discussed in this chapter are common to all server models. Ensure that you comply with any safety guidelines that are also discussed in the Avaya CallPilot® Installation and Configuration guides.

---

## Precautionary messages

This guide provides warnings when risks related to hardware installation and handling are known. Do not ignore these warnings!

---

## Symbols description

You encounter the following symbols in the Avaya CallPilot guides. Their meanings are given here. Do not ignore these symbols!

 **Voltage:**

Risk of electric shock

Warns you of an immediate electrical hazard which, if not avoided, can result in shock, serious injury, or death.

 **Warning:**

Risk of personal injury

Warns you of a situation in which you can be injured if instructions are not followed exactly as stated.

 **Caution:**

Risk of equipment damage

Alerts you to situations where data can be lost or damaged, equipment can be damaged, actions can result in service interruption, and productive time can be lost.

 **Important:**

Provides information that is essential to the completion of a task.

---

## General precautions

Avaya recommends the following safety guidelines for performing installation and maintenance procedures:

- To prevent electric shock, do not plug computer and peripheral devices into power sources that are not properly grounded.
- Use a surge protector or uninterruptible power supply to protect your system from sudden increases and decreases in electrical power.
- If your server is a tower or rack-mount server, you must shut down and power off the server and peripheral devices, and then unplug the server power cable before you remove the server cover.

- Ensure that nothing rests on the peripheral cables, and that you cannot trip over or step on the cables.
- Do not push any foreign objects into any server opening.
- When handling components, protect the server from electrostatic discharge by wearing an antistatic wrist strap that is attached to an unpainted metal surface, as described in the following table:

| IF your server is a        | THEN attach the antistatic wrist strap to          |
|----------------------------|--|
| tower or rack-mount server | any unpainted metal surface on the server chassis. |
| IPE server                 | any unpainted metal surface on the switch.         |

- To prevent data loss, keep magnetic screwdrivers away from backup tapes, floppy disks, and hard drives.

---

## Avoiding electrostatic discharge

Electrostatic discharge (ESD) can seriously damage component parts, such as boards, disk drives, and other parts.

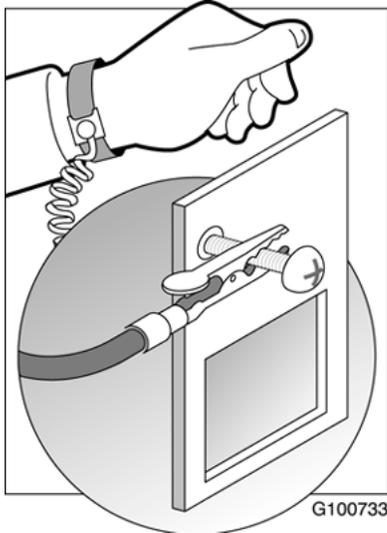
 **Important:**

Avaya recommends performing all hardware installation and maintenance procedures at an ESD workstation whenever possible.

---

## Antistatic wrist strap

If an ESD workstation is not available, provide some ESD protection by wearing an antistatic wrist strap. Ground the ESD wrist strap by attaching it to any unpainted metal surface on the chassis. The following diagram shows the lead from the ESD wrist strap clipped to an exposed screw.



---

## To discharge static

When working with server components, periodically touch a nearby unpainted metal surface to discharge any accumulated static.

---

## Handling components

Incorrect handling or installation of server components can cause damage to your server.

---

## Cooling and airflow

For proper cooling and airflow, observe the following precautions:

- If you removed any system fans, ensure that you reinstall them so that air flows in the correct direction for system cooling. For more information, refer to the CallPilot Installation and Configuration binder.
- If you removed the upper fan holder foam in the 703t server to perform component maintenance, ensure that you replace it when you are done. The upper fan holder foam ensures that:
  - fans are secure in their sockets

- correct spacing between add-in boards is maintained
- Always install the tower or rack-mount server cover before turning on the system. You risk damaging system parts if you operate the system without the cover in place.

---

## Handling boards

Avaya recommends the following precautions for any procedure that includes handling component boards:

- Store boards in their original antistatic shipping packages until you are ready to inspect or use them.
- After you remove a board from its protective wrapper or from the server, place the board component-side up on a conductive foam pad.

If possible, use antistatic floor pads and workbench pads as well.

- Do not slide a board over any surface.
- Do not touch board components or gold-edge connectors on the board.
- Hold a board by the top edge or by the side edges.

---

## Installing boards

When installing boards on the server, remember the following details:

- The backplane is flexible and supported with stand-offs.
- Board slots resist connector insertion.
- Firm, steady force seats a board in its slot properly.
- Boards seat with friction followed by a solid stop.
- External connector plates, attached to add-in boards, are seated in the rear panel and secured with a screw.

---

## Handling hard drives

Hard drives are extremely sensitive to vibration and physical shock. To protect equipment and prolong the useful life of hard drives, Avaya recommends the following precautions:

## **Avoid vibration or physical shock**

Hard drives are susceptible to even slight vibrations. A hard drive can be damaged if it is placed on a table that is accidentally knocked or moved. Use caution when handling hard drives to prevent damage.

---

## **Handle hard drives with care**

After removing a hard drive from its protective wrapper or from the server, place it on an antistatic padded workbench or workstation to avoid movement or jarring. After removing a 201i or 202i card, wait approximately one minute until the hard disk stops spinning before transporting the card.

---

## **Check for shipping damage**

If a replacement hard drive is shipped alone as an upgrade or replacement, determine if the item has been damaged during shipping. Note any dents or damage on the padded container and packaging. If the container and packaging are damaged, keep the container as proof that the part was damaged during shipping and handling.

---

## **Store hard drives carefully**

Store hard drives in padded containers. Store the packaged drives away from places where they can be moved, jarred, or damaged by the environment.

---

## **Detailed procedures**

Refer to the Avaya CallPilot® Installation and Configuration guides for detailed instructions on how to remove the hard drive.

---

## Handling CD-ROMs and DVD-ROMs

When removing a CD-ROM or DVD-ROM from its protective case or loading it into a drive, hold the disc by its center hole and outer edge. Avoid touching the data surface of the disc (the nonlabeled side.)

To protect the CD-ROM or DVD-ROM against scratches and dirt when not in use, keep it in its protective case.

---

## To load a CD-ROM or DVD-ROM

1. Press the eject button on the CD-ROM or DVD-ROM drive to eject the disc tray.
2. Place the CD-ROM or DVD-ROM on the tray with its labeled side facing up.
3. Press the eject button, or gently press the front of the disc tray to retract the tray back into the drive.

---

## To eject a CD-ROM or DVD-ROM

1. Press the eject button on the CD-ROM or DVD-ROM drive to eject the disc tray.
2. Remove the CD-ROM or DVD-ROM from the tray and put it in its protective case.
3. Press the eject button or gently press the front of the disc tray to retract the tray back into the drive.

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## Single-point grounding requirements

Switches used with CallPilot (such as Avaya Meridian 1 or Avaya Communication Server 1000) require a single-point ground (SPG) topology to which the CallPilot server and its peripherals (such as the monitor, modem, external DVD-ROM drive or tape drive, ELAN (embedded LAN)/CLAN (customer LAN) switches or hubs, and UPS) must also be grounded. The SPG is typically a copper bar or plate (a bus). In its simplest form, the SPG can be an isolated ground bus or an ACEG bus in the service panel or transformer.



**Warning:**

Risk of personal injury, risk of hardware failure

Power outlets used by the CallPilot server and its peripheral devices must be connected to the same single-point ground reference used by the switch (such as the Meridian 1 switch or Avaya CS 1000 system). If this requirement is not met, power transients can cause personal injury or hardware failure, or both.

Before the CallPilot server installation, a qualified electrician must implement the single-point ground reference as required between the power outlets of the CallPilot server and the power outlets of the switch.

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## Requirements for the SPG

Follow these requirements for the SPG:

- All ground conductors must be identified according to local codes and terminated permanently.
- Terminations must be accessible for inspection and maintenance during the life of the installation.
- All grounding conductors must be continuous, with no splices or junctions, tagged "Do not remove or disconnect", and insulated against contact with foreign grounds.
- Grounding conductors must be no-load, non-current carrying cables, under normal operating conditions.
- The ground interface in a steel-framed building must have a single connecting reference, located at the service panel, to the building steel on the same floor as the switch (or within one floor from the switch).



**Note:**

Avaya does not recommend the use of building steel as an integral part of the switch ground system. The building steel is a reference point only.

---

## Detailed procedures

For detailed information about the SPG requirements, refer to the Installation and Configuration Guide and the grounding and power requirements section in the Avaya CallPilot® Planning and Engineering Guide.

Additionally, refer to the documentation associated with the PBX switch configured with your CallPilot for further information about grounding requirements. For example, refer to the following documents:

|             |   |
|-------------|---|
| NN43021-220 | Avaya Communication Server 1000M and Meridian 1 Large System Planning and Engineering       |
| NN43021-310 | Avaya Communication Server 1000M and Meridian 1 Large System Installation and Commissioning |
| NN43011-220 | Avaya Communication Server 1000M and Meridian 1 Small System Planning and Engineering       |
| NN43011-310 | Avaya Communication Server 1000M and Meridian 1 Small System Installation and Commissioning |
| NN43011-110 | Avaya Communication Server 1000M and Meridian 1 Small System Overview                       |
| NN43041-220 | Avaya Communication Server 1000E Planning and Engineering                                   |
| NN43041-310 | Avaya Communication Server 1000E Installation and Commissioning                             |

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Also refer to the ANSI-J-STD-607-A-2002 standard Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications.



# Chapter 6: Avaya CallPilot® and personnel roles

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## In this chapter

[Introduction](#) on page 29

[Skills and knowledge you need](#) on page 30

[Configuration Planners and Managers](#) on page 32

[Installers and Technicians](#) on page 32

[Administrators](#) on page 34

[Maintenance personnel](#) on page 36

[End users](#) on page 37

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## Introduction

Implementing an Avaya CallPilot solution requires a sequential series of tasks to be performed by a variety of personnel in your organization. These tasks include the following:

- planning and managing a CallPilot solution
- installing CallPilot hardware
- installing CallPilot software
- migrating to CallPilot from other systems, if applicable
- configuring a CallPilot server and your telephone switching system
- administering a CallPilot system
- using desktop client software

As newer versions of CallPilot software become available, there is also the additional task of upgrading CallPilot software.

This chapter examines each of these tasks from a personnel point of view. It directs you to the appropriate manuals and guides in the CallPilot documentation suite to enable you to perform the specific function.

Each of the referenced guides contains detailed information regarding the specific task. In addition, CallPilot has a content-rich online Help facility that provides further information, including extensive procedural instructions. You can easily search the online Help to find any particular topic.

 **Note:**

The personnel roles cited in this chapter are intended as general guidelines only. The roles may overlap in your organization, or different titles may be in use. However, the descriptions of the guide contents assist you in identifying the document you require for a specific task.

---

## Skills and knowledge you need

You need certain skills and knowledge to install, maintain, and administer a CallPilot installation.

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## Avaya product knowledge

Knowledge of, or experience with, the following Avaya products assist you:

- previous releases of CallPilot
- Meridian Mail

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## PC knowledge

You require knowledge of the following operating systems, Web browsers, and e-mail or Internet clients before beginning the CallPilot installation. The CallPilot documentation suite does not include references for these products.

- one or more of the following operating systems:
  - Microsoft Windows 98 SE
  - Microsoft Windows 2000 Professional
  - Microsoft Windows XP
  - Microsoft Windows NT

- Microsoft Windows Server 2003
- Microsoft Windows Vista
- Internet Explorer 5 or later
- one or more of the following e-mail or Internet mail clients:
  - Microsoft Outlook
  - Microsoft Outlook Express
  - Lotus Notes
  - Novell Groupwise
  - Qualcomm Eudora Pro

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## Switch technology knowledge

You need knowledge of the switch connected to the CallPilot server, including:

- a strong understanding of how the switch routes and processes calls
- switch configuration and operation (especially trunk group access restrictions [TGARs] and network classes of service [NCOS])
- how to establish the switch cabling connections

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## Other experience or knowledge

Other types of experience or knowledge that are recommended include the following:

- networking and network management/administration
- database management
- client-server systems and architecture
- TCP/IP protocols
- T1 carrier connectivity
- RS-232 and the SMDI link
- Web server setup and maintenance
- software installation and maintenance
- hardware installation and maintenance

- flowcharting
- troubleshooting

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## Configuration Planners and Managers

For those personnel involved in planning, engineering, and managing network configurations, the *Avaya CallPilot® Planning and Engineering Guide* (NN44200-200) and the *Avaya CallPilot® Network Planning Guide* (NN44200-201) are the place to start.

The *Avaya CallPilot® Planning and Engineering Guide* provides information and instructions for selecting and planning your CallPilot system. The process of planning and engineering results in determining the best size, platform, and location for your CallPilot system. This guide examines various system configurations, and includes coverage of:

- hardware and software configurations
- connectivity requirements
- system requirements
- server engineering
- site selection

This guide also provides information about the various tools available to help you plan and engineer your CallPilot system.

The *Avaya CallPilot® Networking Planning Guide* provides an overview of key concepts and terminology necessary to implement a messaging network. This guide introduces the networking solutions offered with CallPilot and describes specific feature interactions. It includes coverage of:

- dialing plans
- security and encryption
- gathering information
- configuring switches and your CallPilot hardware
- testing and maintenance

The guide explains the process that you follow to implement one or more networking solutions. Specific procedural information is provided in the CallPilot Manager online Help.

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## Installers and Technicians

If you are involved with the installation and configuration of CallPilot hardware and software, the *AvayaCallPilot® Installation and Configuration Task List* (NN44200-306) is the first

document to consult. It provides an overview of installing system hardware and software, including:

- installing a new CallPilot server
- connecting your switch to the CallPilot server
- configuring the switch and CallPilot server
- testing CallPilot
- Desktop messaging and My CallPilot software installation tasks
- configuring and administering the CallPilot system

The task list guide also describes additional system tasks that are done during the initial installation of the system or after a system is installed. These additional system tasks include:

- migrating data
- upgrading CallPilot
- expanding CallPilot features
- installing additional software components such as the Application Builder and Desktop Messaging software

When you consult the task list for the particular task to be performed, detailed information is available in the following set of related guides:

- Server Installation Guides

Supported CallPilot servers currently include the following models: 600r, 1005r, 1006r, 201i, 202i, 703t, and 1002rp. CallPilot 5.0 is delivered on the following servers: 202i, 600r, 1005r, 1006r, and 1002rp. However, customers can upgrade to CallPilot 5.0 on the following servers: 202i, 703t, and 1002rp. All servers have a corresponding hardware installation guide:

- *Avaya CallPilot® 600r Server Hardware Installation Guide* (NN44200-307)
- *Avaya CallPilot® 1005r Server Hardware Installation Guide* (NN44200-308)
- *Avaya CallPilot® 1006r Server Hardware Installation Guide* (NN44200-320)
- *Avaya CallPilot® 201i Server Hardware Installation Guide* (NN44200-301)
- *Avaya CallPilot® 202i Server Hardware Installation Guide* (NN44200-317)
- *Avaya CallPilot® 703t Server Hardware Installation Guide* (NN44200-304)
- *Avaya CallPilot® 1002rp Server Hardware Installation Guide* (NN44200-300)

These guides cover initial preparation, specific installation procedures, power supply installation (1002rp only), and connecting peripheral devices.

- Software Installation

The *Avaya CallPilot® Desktop Messaging and My CallPilot Installation Guide* (NN44200-305) describes how to install the Desktop Messaging and My CallPilot software. Desktop Messaging is the CallPilot unified messaging application that works

with an e-mail client. It provides a single graphical interface to manage CallPilot voice, fax, text, and e-mail messages. My CallPilot is a Web-based portal that provides access to CallPilot messages and mailbox configuration over the Internet.

The *Avaya CallPilot® Software Administration and Maintenance Guide* (NN44200-600) provides information and instructions for expanding, upgrading, and reinstalling CallPilot software. Note that the CallPilot system software and the server operating system are typically installed at the factory. The CD-ROMs shipped with the equipment contain a disk image of the system and other software components. The use of these discs is detailed in this guide, because they can facilitate the recovery of the operating system and the CallPilot server software as a result of a software or hardware rebuild.

- Configuration and Testing Guides

These guides describe the CallPilot server configuration steps and switch setup for CallPilot systems that are connected to either a Meridian 1 switch (the *Avaya CallPilot® Meridian 1 and CallPilot Server Configuration Guide* (NN44200-302) or an Communication Server 1000 system (the *Avaya Communication Server 1000 and Avaya CallPilot® Server Configuration* (NN44200-312)).

Specific coverage is provided for:

- configuring the system switch for correct operation with CallPilot
- connecting the CallPilot system to the system switch and the Avaya server subnet
- configuring the CallPilot server software
- testing the CallPilot installation

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## Administrators

The *Avaya CallPilot® Installation and Configuration Task List* (NN44200-306) provides a task list overview of the initial configuration and administration of the CallPilot system.

Detailed information about each task is provided in the following set of referenced guides:

- The *Avaya CallPilot® Administrator Guide* (NN44200-601) covers the typical tasks performed by a CallPilot administrator. These include:
  - assigning administrative privileges
  - mailbox administration
  - setting up user groups and permissions
  - security issues
  - backing up and restoring CallPilot information
  - configuring addressing conventions and messaging service defaults

- configuring CallPilot services
- maintenance and diagnostics

These tasks are usually performed using CallPilot Manager, the Web-based application used to connect to a CallPilot server. When you connect to the server, you can create and maintain the information the server uses to provide CallPilot messaging services to authorized mailbox owners. In the event that your IP service is not available, this guide also includes information about using pcAnywhere from Symantec Corporation to control the CallPilot server over a dial-up connection or a LAN connection.

- The *Avaya CallPilot® Software Administration and Maintenance Guide* (NN44200-600) provides information and instructions for:
  - expanding and upgrading CallPilot software
  - performing server platform migrations
  - recovering from system failures
  - installing CallPilot administrative software on a stand-alone Web server
- The *Avaya CallPilot® Desktop Messaging and My CallPilot Administration Guide* (NN44200-602) is intended for the CallPilot system administrator. It provides instructions for:
  - configuring Desktop Messaging e-mail clients
  - configuring servers for Desktop Messaging and My CallPilot after installation
  - troubleshooting information.
- The *Avaya CallPilot® Meridian Mail to CallPilot Migration Guide* (NN44200-502) provides guidelines and detailed information for the migration of a Meridian Mail system to a CallPilot system. Troubleshooting information related to this process is also included.
- The *Avaya CallPilot® Application Builder Guide* (NN44200-102) details the use of Application Builder, a graphical program used to create CallPilot applications that callers access as dialable services. An application in this context is a set of functions (such as announcements, menus, and transfers) that determines the way CallPilot treats a call. When a CallPilot system receives a call, an application handles the call flow. The automated attendant application is a typical example. With Application Builder, you can:
  - specify the call functions that you want to include in an application, such as menus, announcements, and transfers
  - design the call flow (the path calls follow) in an application
- The *Avaya CallPilot® Reporter Guide* (NN44200-603) details the use of the Reporter application. Reporter is a Web-based application that helps you analyze and manage your CallPilot system. Reporter converts raw statistics from your server into easy-to-read reports.
- The document *Avaya Data Networking for Voice over IP* (NN43001-260) provides the guidelines for implementing the ELAN subnet shared by CallPilot, Avaya CS 1000, and NES Contact Center. It is intended for network deployment personnel responsible for ensuring that their data network is properly provisioned to support IP Telephony services.

The document discusses a number of areas that must be addressed when building a converged multimedia network. These include: network design, performance, Quality of Service (QoS), and operations.

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## Maintenance personnel

For personnel involved in maintaining the CallPilot system and diagnosing the system when problems occur, the documentation suite includes the following guides:

- *Avaya CallPilot® Troubleshooting Reference Guide* (NN44200-700)

This guide describes symptoms that can appear on all CallPilot server platforms, and provides basic step-by-step troubleshooting procedures. Each troubleshooting area contains symptom tables outlining basic checks that include diagnostics and resolutions for each check. You can find more troubleshooting information in the CallPilot documents that are referenced throughout this document.

This guide is applicable to all CallPilot servers. The exceptions are noted for each server, where necessary.

- *Server maintenance and diagnostics guides*

The documentation suite contains a maintenance and diagnostics guide for each model of CallPilot server. The guides are:

- *Avaya CallPilot® 600r Server Maintenance and Diagnostics Guide* (NN44200-703)
- *Avaya CallPilot® 1005r Server Maintenance and Diagnostics Guide* (NN44200-704)
- *Avaya CallPilot® 1006r Server Maintenance and Diagnostics Guide* (NN44200-709)
- *Avaya CallPilot® 201i Server Maintenance and Diagnostics Guide* (NN44200-705)
- *Avaya CallPilot® 202i Server Maintenance and Diagnostics Guide* (NN44200-708)
- *Avaya CallPilot® 703t Server Maintenance and Diagnostics Guide* (NN44200-702)
- *Avaya CallPilot® 1002rp Server Maintenance and Diagnostics Guide* (NN44200-701)

The actions discussed in these guides are divided into two groups of activities. The first activity is troubleshooting and diagnostics, where you try to identify and resolve the cause of the system problem. To facilitate this, the guides discuss the use of the operating system online diagnostic tools and the use of CallPilot Manager system utilities. The second activity is the performance of hardware maintenance. Actions such as removing and replacing the server, replacing the hard drive, and replacing the multimedia processing cards are covered.

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## End users

The end user of CallPilot has a number of reference documents available. Guides are available for the particular desktop client they are using, such as Microsoft Outlook or Lotus Notes, as well as for the speech-activated messaging and telephone keypad abilities of CallPilot. In addition, a number of reference cards are available for quick access to the CallPilot features.

In summary, the documentation suite includes:

- *Avaya CallPilot® Desktop Messaging Guide for Microsoft Outlook*
- *Avaya CallPilot® Desktop Messaging Guide for Lotus Notes*
- *Avaya CallPilot® Desktop Messaging Guide for Novell Groupwise*

These guides are specific to the stated e-mail programs. They cover all aspects of accessing the CallPilot functionality using these clients: playing and composing voice messages, sending and receiving fax and text messages, calling the sender of a message, addressing issues, sending batch messages, and more.

CallPilot also supports other e-mail programs, although with less functionality. These include Outlook Express and Qualcomm Eudora Pro. For more information about these e-mail programs, refer to *Avaya CallPilot® Desktop Messaging Guide for Internet Clients*.

An additional guide is included for the Web-based My CallPilot application. You can work with My CallPilot from any computer that has Internet access and a Web browser configured for My CallPilot. The relevant guide is the *Avaya CallPilot® Desktop Messaging User Guide for My CallPilot*.

Two other guides are provided that detail additional CallPilot functionality. They are the:

- *Avaya CallPilot® Multimedia Messaging User Guide*
- *Avaya CallPilot® Speech-Activated Messaging User Guide*

The *Avaya CallPilot® Multimedia Messaging User Guide* describes how to work with CallPilot from the keypad of your touchtone telephone. Your CallPilot mailbox stores your messages, recorded greetings, distribution lists, and other personal settings. You can log in to your mailbox at any time using the keypad to play your messages and use all of the available CallPilot features and services.

The *Avaya CallPilot® Speech-Activated Messaging User Guide* describes how to work with CallPilot by using speech commands with your touchtone telephone. You can log in to your mailbox at any time using spoken commands and then access the available CallPilot features and services.

The end user also has access to a variety of quick reference cards. These are especially useful when using keypad and voice commands, because they can be kept close at hand beside your telephone and workstation. The cards include:

- *Avaya CallPilot® Unified Messaging Quick Reference Card*
- *Avaya CallPilot® Unified Messaging Wallet Card*
- *Avaya CallPilot® Command Comparison Card A-Style*
- *Avaya CallPilot® Command Comparison Card S-Style*
- *Avaya CallPilot® Menu Interface Quick Reference Card*
- *Avaya CallPilot® Alternate Command Interface Quick Reference Card*

# Chapter 7: Avaya CallPilot® server hardware

This chapter provides a brief summary of the servers currently available with Avaya CallPilot.

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## In this chapter

- [1006r rack-mount server](#) on page 42
- [600r rack-mount server](#) on page 39
- [1005r rack-mount server](#) on page 45
- [201i server](#) on page 47
- [202i server](#) on page 50
- [703t tower server](#) on page 52
- [1002rp rack-mount server](#) on page 55

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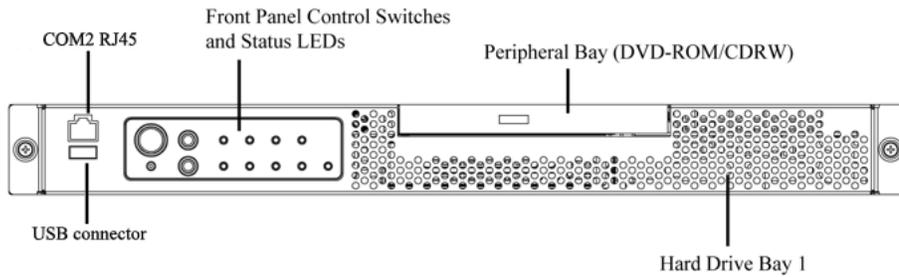
## 600r rack-mount server

The 600r server is the low-end capacity multimedia server. The 600r is a long-life industrial computer server in a standard rack-mount 1U form factor measuring approximately 1.75 in. (44.4 mm) high by 17.5 in. (444.3 mm) wide by 20 in. (507.8 mm) deep and weighing 10 kg (23 lb.) This server utilizes current Intel P4 hyper-threading technology and proven, reliable SCSI hard-drive technology. The 600r server has a fixed capacity of 96 voice channels and 1200 hours of storage.

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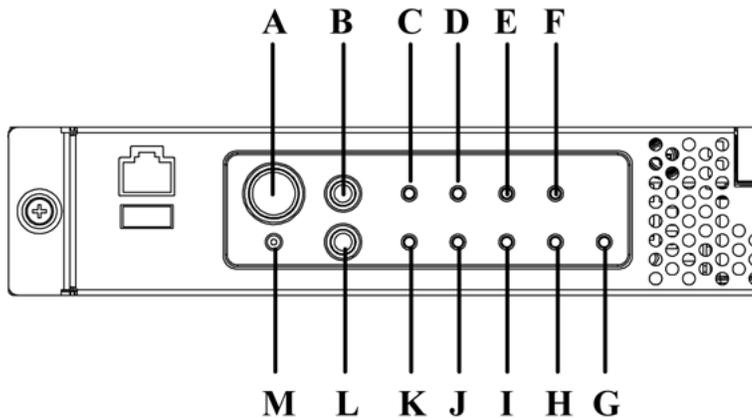
## Front panel features

The following diagram shows the front view of the server chassis with the bezel cover in place. When the bezel cover is removed, drive bay 1 is accessible.



**Figure 1: Front panel**

The following diagram shows the front panel controls and status LEDs. For more information about the front panel controls and status LEDs, see *Avaya CallPilot® 600r Server Maintenance and Diagnostics* (NN44200-703).



**Figure 2: Front panel control switches and status LEDs**

**\* Note:**

The faults described in the following table are hardware faults and are independent of CallPilot application faults.

**Table 2: Front panel**

| Label | Description        | Label | Description              |
|-------|--------------------|-------|--------------------------|
| A     | Power button       | M     | NMI button (not used)    |
| B     | Reset button       | L     | ID button                |
| C     | Critical fault LED | K     | System ID LED (white)    |
| D     | Major fault LED    | J     | NIC activity LED (green) |

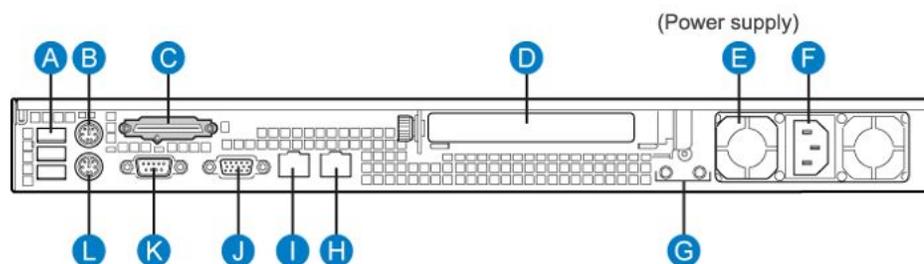
| Label | Description                             | Label | Description            |
|-------|---|-------|------------------------|
| E     | Minor fault LED                         | I     | Main power LED (green) |
| F     | Power LED                               | H     | not used               |
| G     | Disk 0 Activity/Fault LED (green/amber) |       |                        |

## Rear panel controls and features

The following diagram shows the back panel controls and features. On the right is the AC power supply bank. The PCI card bracket is in the middle of the back panel, while the connectors and ports are along the bottom and the left side.

**\* Note:**

Avaya provides only AC power supply. The server works with a DC-to-AC converter, however, you must ensure the converter meets AC requirements as specified on the label of the power supply cover. To access the power supply cover, remove the server cover.



**Figure 3: Rear panel**

**Table 3: Rear panel**

| Label | Description  | Label | Description  |
|-------|--|-------|--|
| A     | USB 0, USB 1, USB 2 (labelled 0, 1, 2 on the server) | G     | Ground studs (used with system with DC input power supply)   |
| B     | PS/2 Mouse   | H     | RJ45 NIC 2 Embedded Local Area Network (ELAN) connector for the ELAN subnet (engraved 2 on server)     |
| C     | SCSI port  | I     | RJ45 NIC 1 Customer Local Area Network (CLAN) connector for Avaya server subnet (engraved 1 on server) |

| Label | Description                              | Label | Description             |
|-------|--|-------|-------------------------|
| D     | PCI card bracket (full-height) for MPB96 | J     | Video connector         |
| E     | Power supply                             | K     | COM1 DB-9 serial port   |
| F     | AC power input                           | L     | PS/2 keyboard connector |

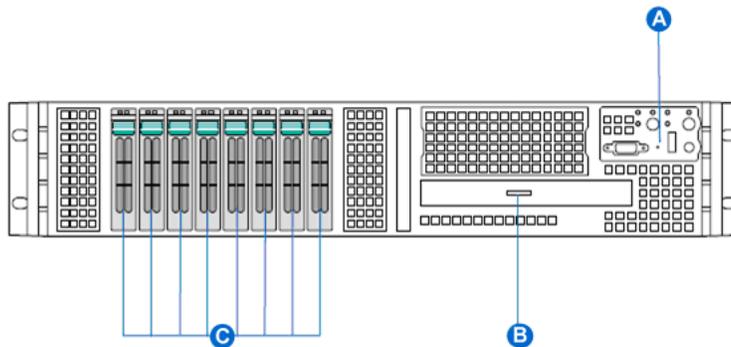
## 1006r rack-mount server

The 1006r server is the CallPilot high-end capacity multimedia telephony server. It is a rack-mounted unit, measuring approximately 87.3mm (3.44 in.) high by 435.3 mm (17.77 in.) wide by 704.8 mm (27.75 in.) deep and weighing 30kg (67 lb.) when fully loaded. The 1006r server has a capacity of up to 192 voice channels and 2,400 hours of storage.

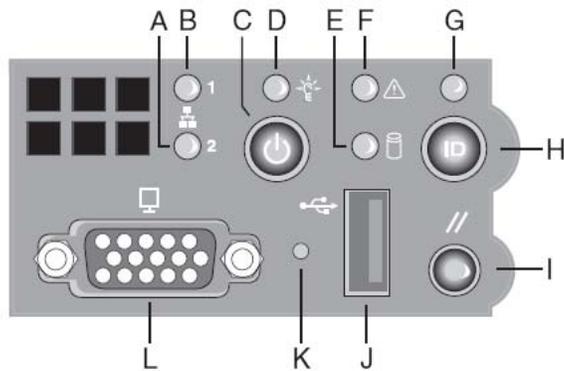
Your server configuration depends on what was ordered from Avaya. There are three PCI card slots.

- One MPB96 card (in a PCI slot) for 96 MPU of DSP capacity. No additional MPB96 cards are required.
- For high capacity, three MPB96 cards are installed in a 1006r, providing a maximum of 192 channels and 288 MPUs.

The front view of the 1006r server chassis shows the drive bays, the peripheral DVD/CD/CDRW drive, and the front serial and USB ports.



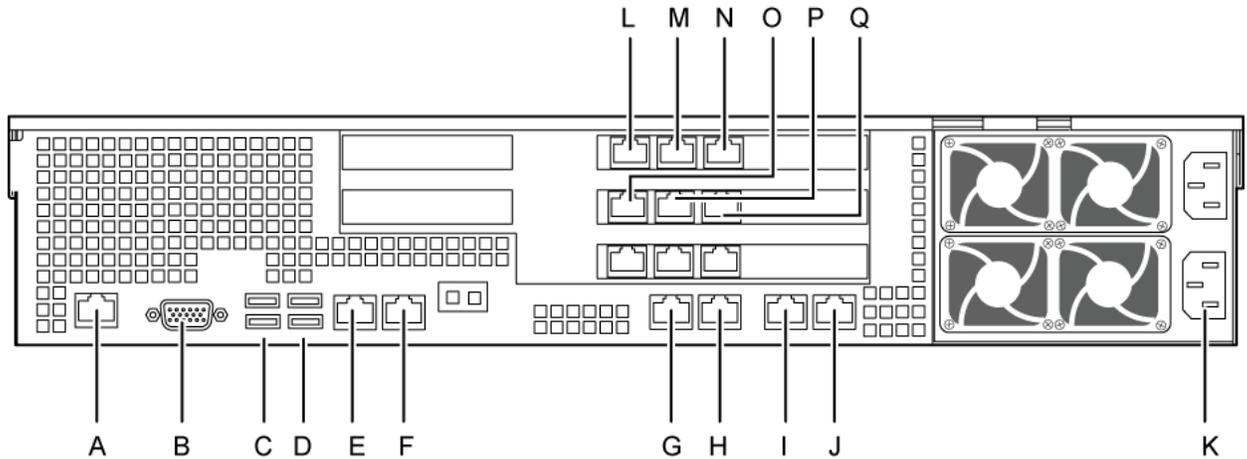
| Label | Control or feature                                  |
|-------|---|
| A     | System Control Panel (see figure below for details) |
| B     | Slimline Optical Drive Bay                          |
| C     | 2.5-inch Hard Drive Bays (8)                        |



| Label  | Control or feature                       | Function   |
|--------|--|--|
| A<br>B | NIC 2 Activity LED<br>NIC 1 Activity LED | Continuous green light indicates a link between the system and the network to which it is connected. A blinking green light indicates network activity.  |
| C      | Power/Sleep button                       | Toggles the system power on/off. This button also functions as a sleep button if enabled by an ACPI-compliant operating system.  |
| D      | Power/Sleep LED                          | Continuous green light indicates the system has power applied to it or the system is in ACPI S0 state. Blinking green indicates the system is in sleep or ACPI S1 state.   |
| E      | Hard disk drive activity LED             | Random blinking green light indicates hard disk drive activity. No light indicates no hard disk drive activity.  |
| F      | System status LED                        | Solid green indicates normal operation. Blinking green indicates degraded performance.<br>Solid amber indicates a critical or nonrecoverable condition. Blinking amber indicates a noncritical condition. No light indicates POST is running or the system is off.               |
| G      | System identification LED                | Solid blue indicates system identification is active. No light indicates system identification is not activated.   |
| H      | System identification button             | Toggles the front panel ID LED and the server board ID LED on/off. The server board ID LED is visible through the rear of the system and allows for server identification and location when working behind a rack of servers.  |
| I      | Reset button                             | Reboots and initializes the system.  |
| J      | USB 2.0 Port                             | Connector to attach a USB component to the front of the system.  |
| K      | NMI button                               | When the NMI button is pressed with a paperclip or pin, the server is placed in a halt state for diagnostic purposes and allows the issuance of a non-maskable interrupt. After issuing the interrupt, a memory download can be performed to determine the cause of the problem. |

| Label | Control or feature | Function  |
|-------|--------------------|---|
| L     | Video port         | Connector to attach a video monitor to the front of the system. The front and rear video ports cannot be used at the same time. |

The following diagram shows the back panel controls and features. On the right are the AC power supply banks. The PCI card brackets are in the middle of the back panel, while the connectors and ports are along the bottom and left side.



| Label | Control or feature       | Label | Control or feature |
|-------|--------------------------|-------|--------------------|
| A     | RJ-45 Serial A Connector | J     | HB2                |
| B     | Rear Video               | K     | Power Receptacles  |
| C     | Dual USB port            | L     | MPB96-1 DS30-3     |
| D     | Dual USB port            | M     | MPB96-1 DS30-2     |
| E     | ELAN                     | N     | MPB96-1 DS30-3     |
| F     | CLAN                     | O     | MPB96-2 DS30-3     |
| G     | HB1                      | P     | MPB96-2 DS30-2     |
| H     | Mirror                   | Q     | MPB96-2 DS30-1     |
| I     | Not connected            |       |                    |

For a more detailed description of the 1006r server and its components, and how the server can be integrated into your network, see *Avaya CallPilot® 1006r Server Hardware Installation* (NN44200-320).

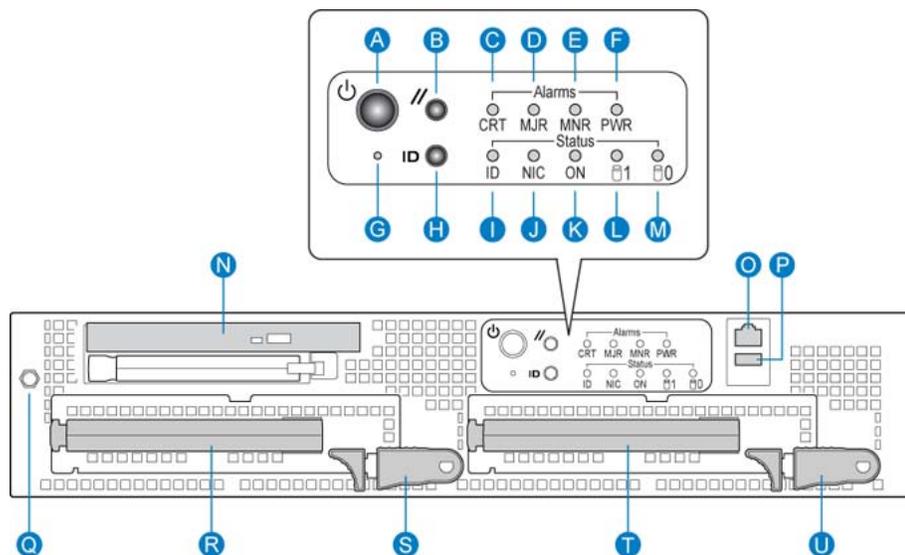
## 1005r rack-mount server

The 1005r server is the CallPilot high-end capacity multimedia telephony server. It is a rack-mounted unit, measuring approximately 87.6mm (3.45 in.) high by 435.3 mm (17.4 in.) wide by 508 mm (20 in.) deep and weighing 20 kg (44 lb.) when fully loaded. The 1005r server has a capacity of up to 192 voice channels and 2,400 hours of storage.

Your server configuration depends on what was ordered from Avaya. There are six PCI card slots; three low-profile and three full-size.

- One MPB96 card (in a PCI slot) for 96 MPU of DSP capacity. No additional MPB96 cards are required.
- For high capacity, three MPB96 cards are installed in a 1005r, providing a maximum of 192 channels and 288 MPUs.
- One RAID controller (in a PCI slot).

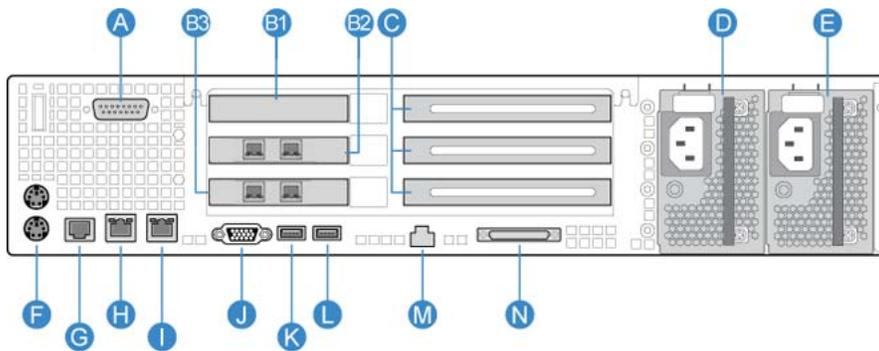
The front view of the 1005r server chassis (with the bezel cover removed) shows both hard drives, the peripheral DVD/CD/CDRW drive, the anti-static connection, and the front serial ports. When the bezel cover is on, only the DVD and USB connections, controls alarm LEDs, and status LEDs are visible.



| Label | Control or feature | Label | Control or feature               |
|-------|--------------------|-------|----------------------------------|
| A     | Power switch       | L     | HDD1 activity                    |
| B     | Reset switch       | M     | HDD0 activity                    |
| C     | Critical alarm LED | N     | DVD/CD/CDRW LED and eject button |

| Label | Control or feature    | Label | Control or feature                       |
|-------|-----------------------|-------|--|
| D     | Major alarm LED       | O     | Front serial port                        |
| E     | Minor Alarm LED       | P     | USB 2                                    |
| F     | Power Alarm LED       | Q     | Electrostatic Discharge (ESD) connection |
| G     | NMI switch (not used) | R     | Hard drive 1 pull handle                 |
| H     | ID switch             | S     | Hard drive 1 release lever               |
| I     | ID LED                | T     | Hard drive 0 pull handle                 |
| J     | NIC activity LED      | U     | Hard drive 0 release lever               |
| K     | Status LED            |       |  |

The following diagram shows the back panel controls and features. On the right are the AC power supply banks. The PCI card brackets are in the middle of the back panel, while the connectors and ports are along the bottom and left side.



| Label | Control or feature  | Label | Control or feature                    |
|-------|---|-------|---------------------------------------|
| A     | DB15 Telco alarm connector (not used)   | G     | Rear connection to Comm 2 serial port |
| B1    | PCI low-profile card #1 bracket   | H     | RJ45 NIC 1 connector                  |
| B2    | PCI card #2 dual NIC for High Availability (HA) configuration. For more information about HA, see <i>High Availability: Installation and Configuration</i> (NN44200-311). | I     | RJ45 NIC 2 connector                  |

| Label | Control or feature  | Label | Control or feature         |
|-------|---|-------|----------------------------|
| B3    | PCI card #3 dual NIC for HA configuration. For more information about HA, see <i>High Availability: Installation and Configuration</i> (NN44200-311). | J     | Video connector            |
| C     | PCI full-size card brackets. Numbered (1, 2, 3) from top to bottom.   | K     | USB 1                      |
| D     | Power Supply 1  | L     | USB 0                      |
| E     | Power Supply 2  | M     | Server management LAN port |
| F     | PS/2 mouse and keyboard connectors  | N     | External SCSI tape drive   |

For a more detailed description of the 1005r server and its components, and how the server can be integrated into your network, see *Avaya CallPilot® 1005r Server Hardware Installation* (NN44200-308).

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## 201i server

The 201i server is the CallPilot lower-end capacity range server. It is a flexible multimedia telephony server designed to integrate with Avaya Meridian 1 and Avaya Communication Server 1000 products. The server occupies two slots of a Meridian 1 IPE shelf or Avaya CS 1000 Media Gateway or Media Gateway Expansion. When it is locked into position, the server connectors attach to the backplane, which provides power and communications links.

The 201i can handle up to 40 voice channels (less if fax or speech recognition channels are provisioned) and 350 hours of storage. The base model comes with two MPC-8 cards for 24 MPU of DSP capacity. Two more MPC-8 can be added to bring the DSP capacity up to 40 MPU.

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## Primary components

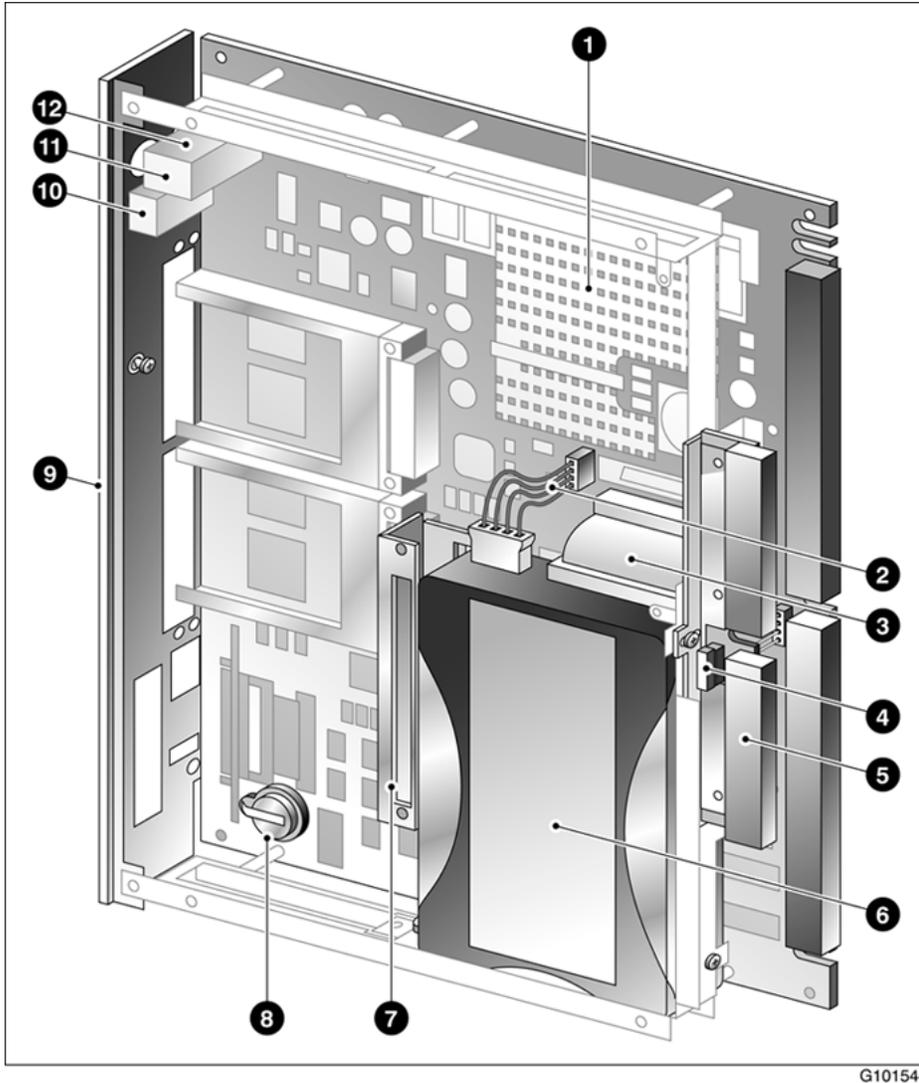
The server motherboard houses the interfaces needed:

- to communicate with the Meridian 1 switch or CS 1000 system
- to facilitate data communications on Ethernet networks

Two Ethernet controllers on the server motherboard provide Ethernet capability. These controllers provide the network interfaces for both the ELAN subnet and Avaya server subnet.

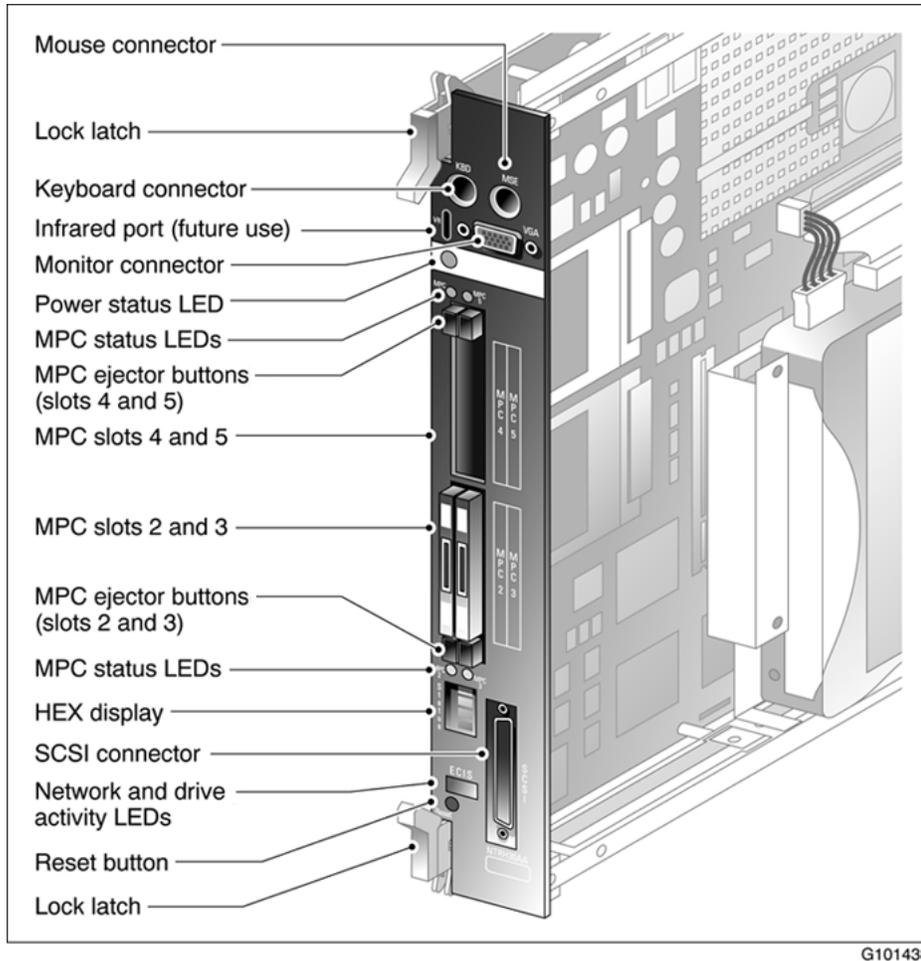
The following legend and the diagram identify the 201i main components.

| Item | Description  |
|------|--|
| 1    | Heat sink  |
| 2    | Hard drive power cable   |
| 3    | Hard drive data cable  |
| 4    | Secondary backplane connector pin  |
| 5    | Secondary backplane connector. This connector provides access to voice channels on the second slot of the IPE shelf. |
| 6    | 3.5" IDE hard drive  |
| 7    | Hard drive mounting bracket  |
| 8    | Software feature key   |
| 9    | Faceplate  |
| 10   | Monitor connector  |
| 11   | Mouse connector  |
| 12   | Keyboard connector   |



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The following diagram shows the front faceplate of the 201i server. The faceplate provides LEDs, MPC card slots, and connectors for peripheral devices.



For a more detailed description of the 201i server and its components, and how the server can be integrated into your network, refer to the *Avaya CallPilot® 201i Server Hardware Installation Guide* (NN44200-301).

## 202i server

The 202i server is a flexible multimedia telephony server designed to integrate with Avaya Meridian 1 and Avaya Communication Server 1000 products.

The 202i server occupies two slots of a Meridian 1 shelf or Communication Server 1000 Media Gateway or Media Gateway Expansion. When the server is locked into position, its connectors attach to the backplane, which provides power and communications links.

The 202i can handle up to 32 voice channels (less if fax or speech recognition channels are provisioned) and 350 hours of storage. It provides 32 MPU of DSP capacity.

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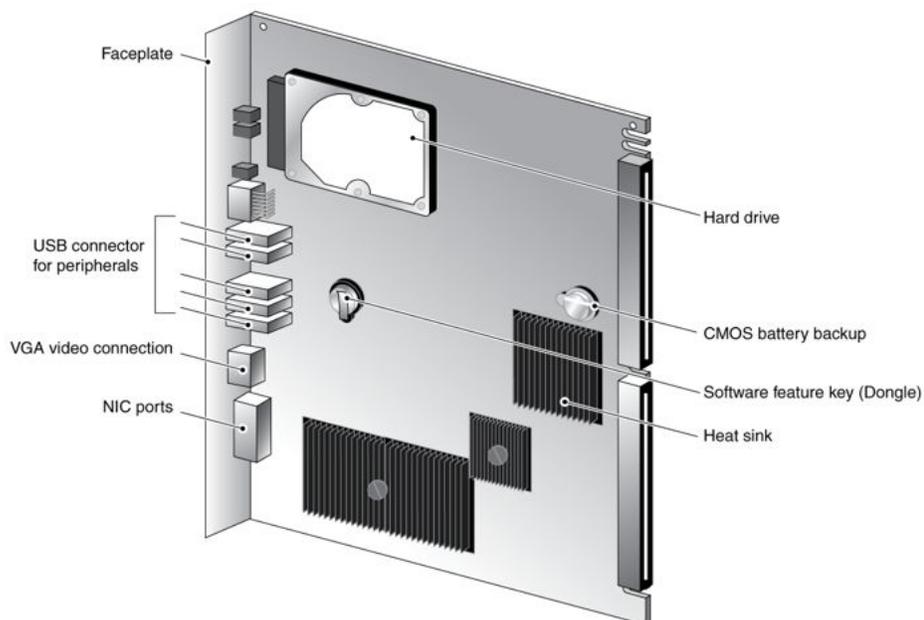
## Primary components

The 202i server motherboard houses the interfaces need:

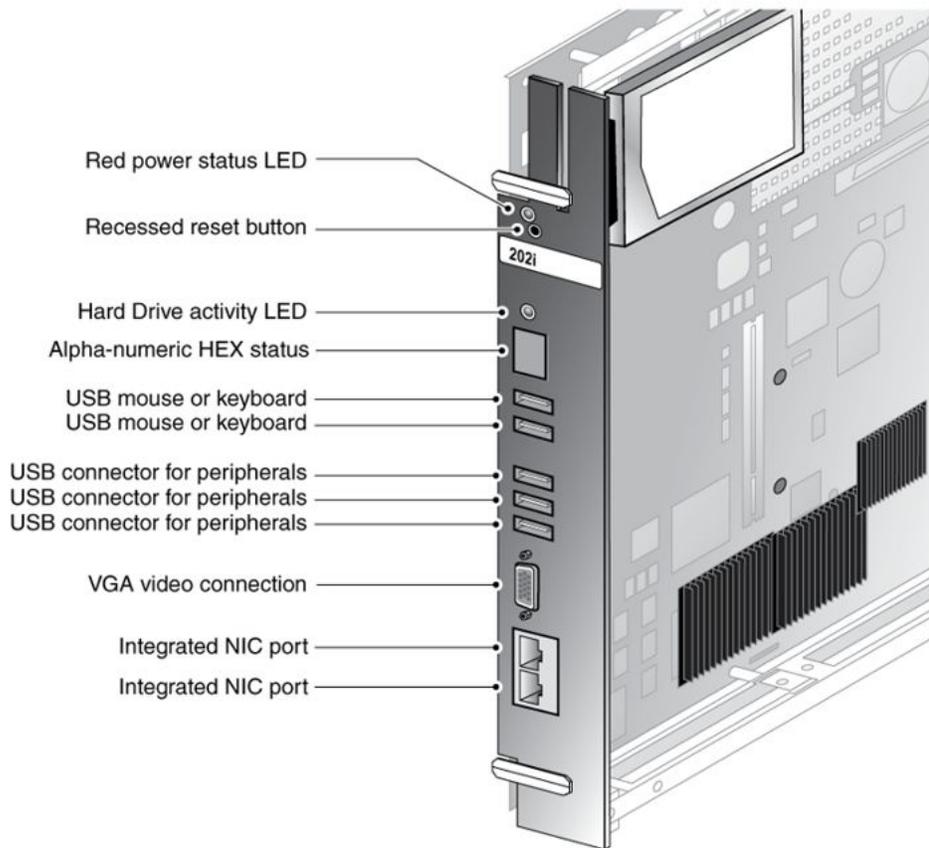
- to communicate with the Meridian 1 switch of Communications Server 1000 system.
- to facilitate data communications on Ethernet networks.

Two Ethernet controllers on the 202i server motherboard provide Ethernet capability. These controllers provide the network interfaces for both the ELAN subnet and the Avaya server subnet.

The following diagram identifies the 202i main components.



The following diagram shows the front faceplate of the 202i server. The faceplate provides LEDs and connectors for peripheral devices.



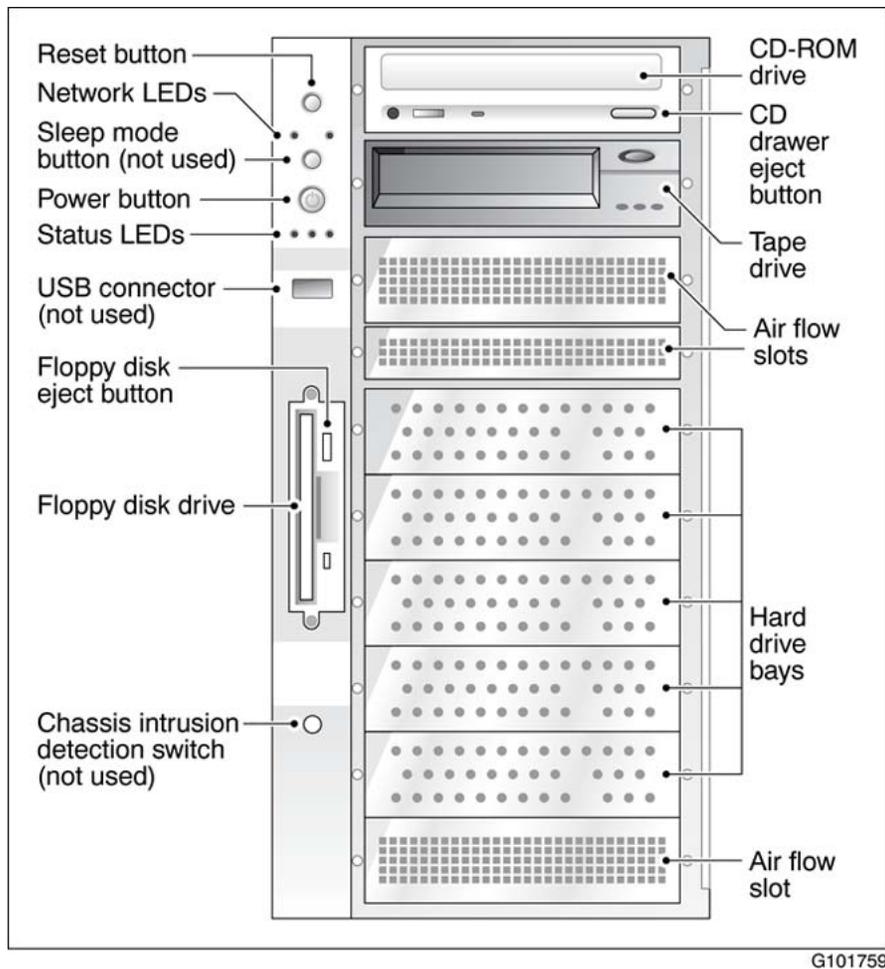
For a more detailed description of the 202i server and its components, and how the server can be integrated into your network, refer to the *Avaya CallPilot® 202i Server Hardware Installation Guide* (NN44300-317).

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## 703t tower server

The 703t server is the CallPilot midrange-capacity multimedia telephony server. It is a stand-alone unit, measuring approximately 44 cm (17.5 in.) high by 32 cm (12.7 in.) wide by 65 cm (26 in.) deep and weighing 22 kg (46 lb.) when fully loaded.

The following diagram shows the 703t front panel layout and features.



The following table describes the parts that are identified in the preceding 703t diagram.

| Part                            | Function  |
|---------------------------------|---|
| Reset button                    | Triggers a hardware (cold) reset. Do not use this button to perform a server restart. Restart the server as described in the <i>Installation and Configuration Task List</i> (NN44200-306.) |
| Network controller LEDs (green) | Left: 10/100Base-T controller LED (NIC1 10/100 MB: ELAN for Meridian 1/CS 1000 connection)<br>Right: 10/100/1000Base-T controller LED (NIC2 1 GB: CLAN for Customer LAN connection)         |
| Sleep mode button               | Not used  |
| Power button                    | Turns the power to the server on or off.  |
| Status LEDs                     | Indicate when the server is powered up and the disk drives are active.  |

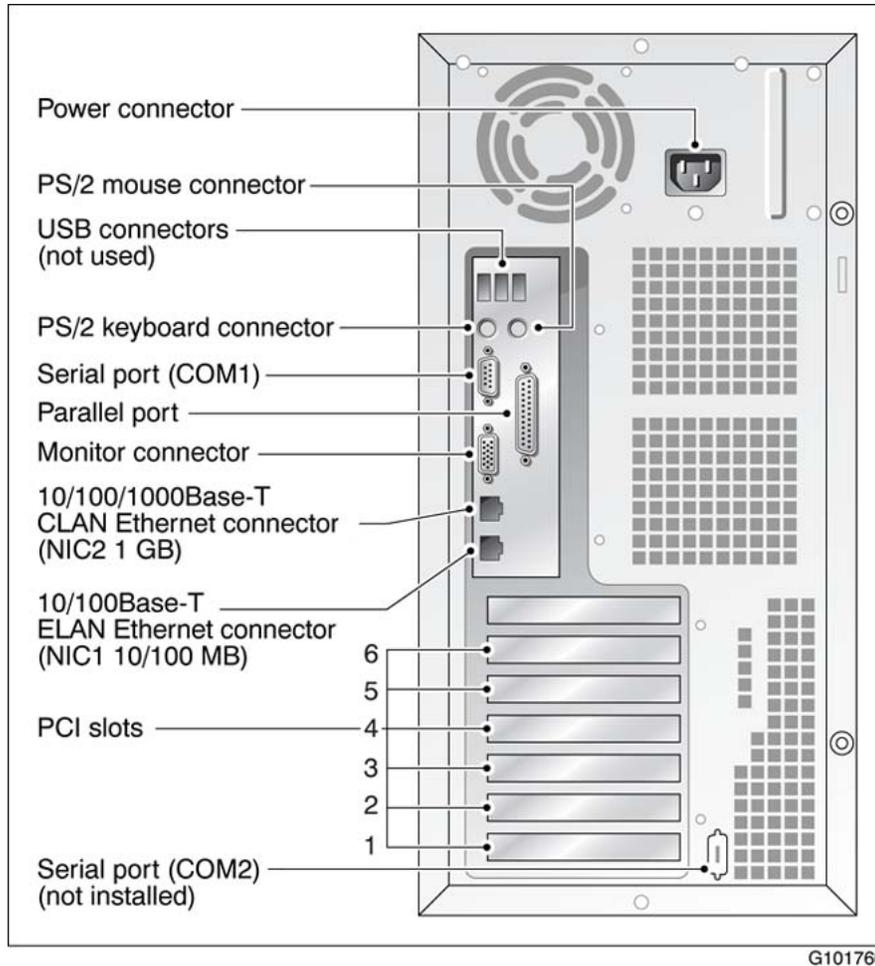
| Part                        | Function  |
|-----------------------------|---|
|                             | <ul style="list-style-type: none"> <li>• Left: hard drive activity LED (not used)</li> <li>• Center: power/sleep LED (green)</li> <li>• Right: status LED (bi-color) indicates whether the server is functioning properly, or whether a hardware event has occurred.</li> </ul> |
| USB connector               | For future use.   |
| Floppy disk eject button    | Ejects the floppy disk.   |
| Floppy drive                | Drive for 3-1/2 inch diskettes.   |
| IDE CD-ROM drive (5.25 in.) | Enables you to use the CallPilot software and documentation CD-ROMs.  |
| CD drive eject button       | Opens the CD-ROM drawer. Push the button again to close the drawer.   |
| Backup tape drive           | Allows backup of hard drive data.   |
| Hard drive 1                | 10,000 rpm hard drive   |
| Hard drive 2                | 10,000 rpm hard drive   |
| Drive bay                   | Vacant  |
| Drive bay                   | Vacant  |
| Drive bay                   | Vacant  |
| Air flow slot               | Must remain empty for proper system cooling   |

The 703t server has a capacity of up to 96 voice channels (less if fax or speech recognition channels are provisioned) and 1,200 hours of storage.

The 703t base model comes populated with:

- One MPB96 card (in a PCI slot) for 96 MPU of DSP capacity. No additional MPB96 cards are required.
- One RAID controller (in a PCI slot).

The following diagram shows the 703t server's rear panel layout and features.



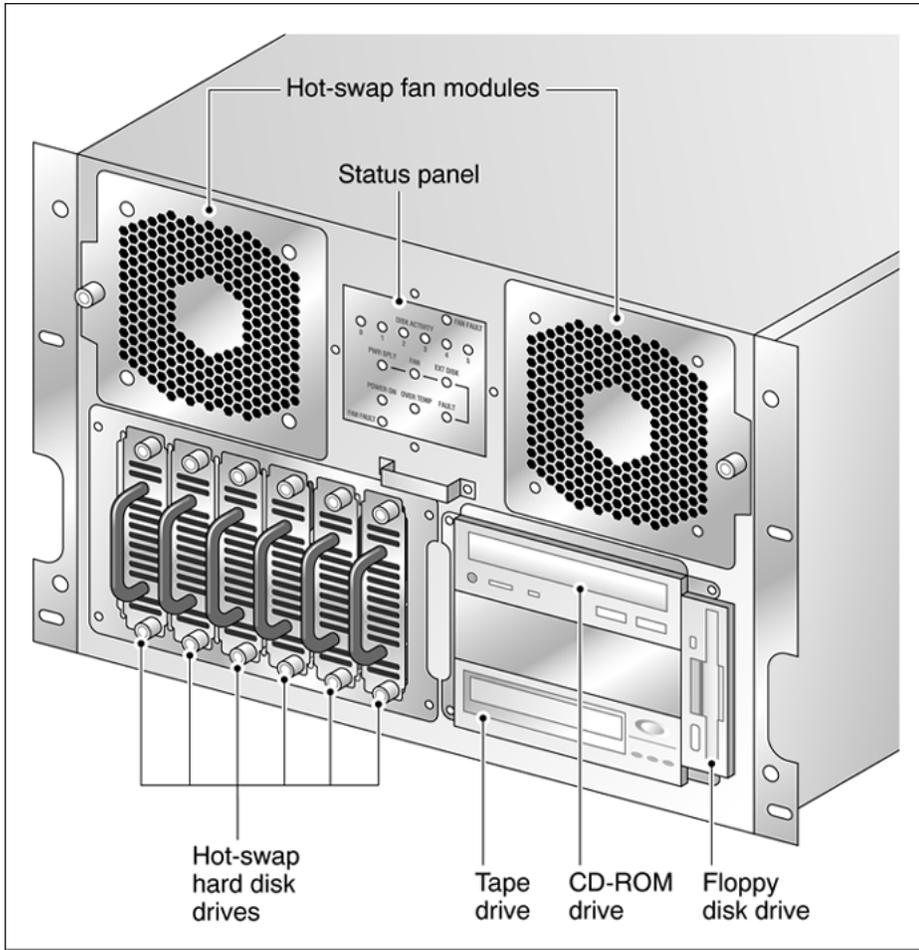
For a more detailed description of the 703t server and its components, and how the server can be integrated into your network, refer to the *Avaya CallPilot® 703t Server Hardware Installation Guide* (NN44200-304).

## 1002rp rack-mount server

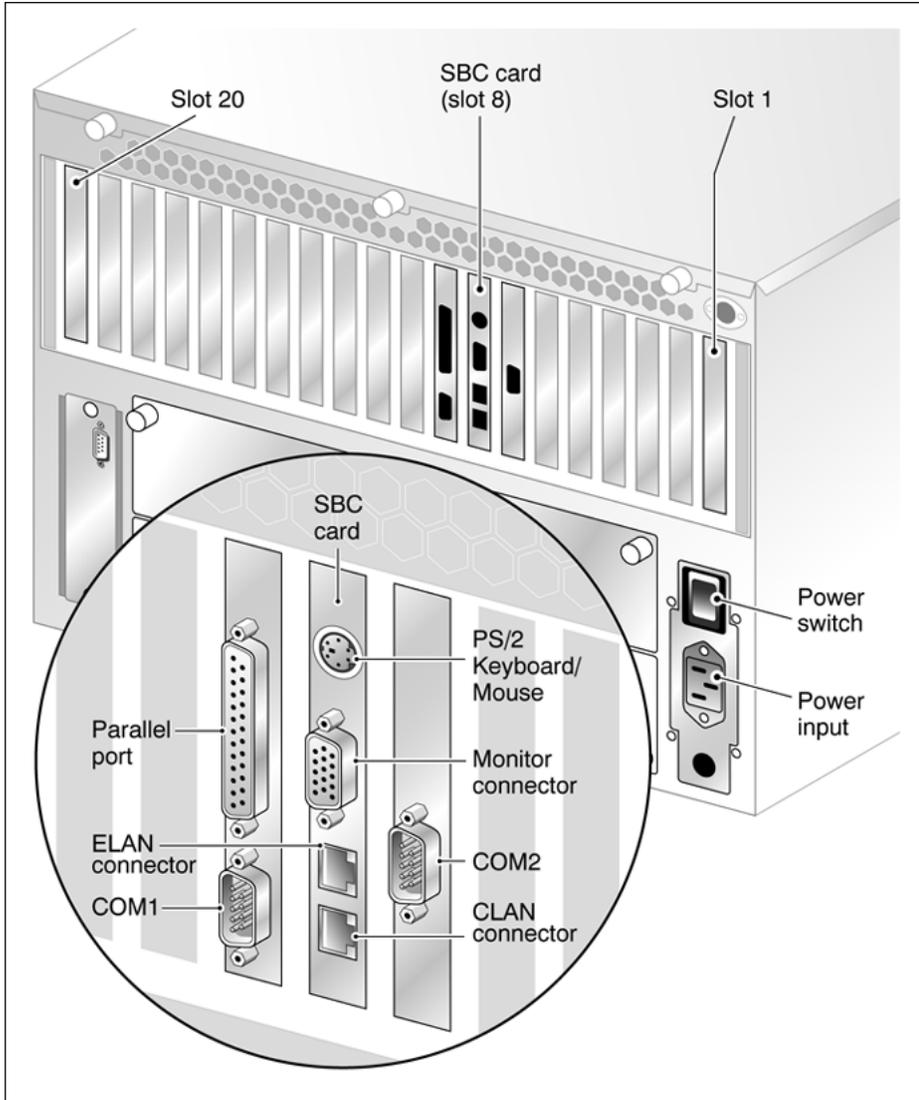
The 1002rp rack-mount server is the CallPilot high-end capacity multimedia telephony server. It is a rack-mounted unit, measuring approximately 32 cm (12.5 in.) high by 48.3 cm (19 in.) wide by 53.3 cm (21 in.) deep and weighing 45.5 kg (100 lb.) when fully loaded. Both AC- and DC-powered versions are available. The 1002rp server has a capacity of up to 192 voice channels and 2,400 hours of storage. The base model comes populated with:

- One MPB96 card (in a PCI slot) for 96 MPU of DSP capacity. No additional MPB96 cards are required. For high capacity, up to three MPB96 cards can be installed in a 1002rp, providing a maximum of 192 channels and 288 MPUs.
- One RAID controller (in a PCI slot).

The front view of the server chassis (without the bezel) shows redundant dual fans to the left and the right of the status panel. The left drive bay holds six SCSI hard drives with hot-pluggable carriers. The media drive bay, located to the right, houses the CD-ROM, tape drive, and floppy disk drive.



The following diagram shows the slot locations in the 1002rp rear panel, and the power switch and power input for the AC server. The remainder of the diagram is the same for both the AC and DC versions of the server.



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For a more detailed description of the 1002rp server and its components, and how the server can be integrated into your network, refer to the *Avaya CallPilot® 1002rp Server Hardware Installation Guide* (NN44200-300.)



# Chapter 8: Avaya CallPilot® software

This chapter provides a brief summary of the major software components of Avaya CallPilot.

For detailed information about supported environments, operating systems, and client software, consult the *Avaya CallPilot® Planning and Engineering Guide* (NN44200-200).

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## In this chapter

[CallPilot Manager](#) on page 59

[CallPilot Reporter](#) on page 60

[CallPilot Application Builder](#) on page 61

[Desktop Messaging software](#) on page 63

[My CallPilot](#) on page 64

[CallPilot server software](#) on page 67

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## CallPilot Manager

CallPilot Manager is the Web-based application used by the administrator to connect to and manage a CallPilot server. The application is installed on a Web server, which can be configured to run either directly on the CallPilot server or on a separate customer-supplied server.

You typically administer and maintain the CallPilot server over an IP connection between the server and one or more personal computers (PC). You log on to the CallPilot server using a URL, with a user ID (mailbox number) and a password.

When you connect to the CallPilot server, you can monitor its status, and you can create and maintain the information the server uses to provide CallPilot messaging services to authorized mailbox owners. CallPilot Manager, through its Configuration Wizard, lets you configure:

- user groups and permissions
- system settings (including security options, network solutions, and so on)
- messaging service settings (voice, text, fax)

- maintenance and diagnostics (including backup and restore and Flight Recorder)
- Geographic Redundancy (GR). For more information, see the *CallPilot Geographic Redundancy Application Guide, NN44200-322*.

You can also access the [CallPilot Application Builder](#) on page 61 utility by downloading it from the CallPilot Manager opening screen.

Use one of the following Web browsers to administer CallPilot:

- Internet Explorer 5.0 or later
- Mozilla Firefox 1.5 for Windows
- Safari 1.3 or later for Macintosh OS X

You can use Internet Explorer to administer CallPilot either at the local computer or from a PC on the LAN.

You can also use third-party software such as pcAnywhere from Symantec Corporation to control the CallPilot server over a dial-up connection or a LAN connection.

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## CallPilot Reporter

CallPilot Reporter is a Web-based application that helps you analyze and manage your CallPilot system. CallPilot Reporter converts raw statistics from your server into easy-to-read reports.

Reports organize the operational measurements (OMs) collected by your server into a format that you can study and analyze. When you study reports over a period of time, you can identify trends and patterns related to system usage. With this information, you can improve the overall efficiency of your system, increase system security, and troubleshoot potential problems.

CallPilot Reporter also includes alerts. Alerts are special reports that warn you about potential problems with the server's hardware, software, or security. Alerts are automatically triggered when a predefined threshold is exceeded.

The *Avaya CallPilot® Reporter Guide (NN44200-603)* provides information required to generate reports and alerts and then to analyze and interpret the data. Note that to use Reporter, you must have Full Administrator rights or Reporter Administration rights enabled in CallPilot Manager.

The main functionality of CallPilot Reporter includes:

- View on demand-View reports and alerts at any time for a period that you specify.
- Customize-Customize reports to include relevant data only. For example, you can filter the data in a report to show activities that occur in a particular department.

- Print-Schedule reports to print on a regular basis, or print reports on demand. When you use a print schedule, you can monitor system usage over a period of time and identify patterns and trends. You can also set up alerts to print when they are triggered.
- Export-Export report information to a variety of file formats so that you can easily distribute the information to others who need it. For example, you can display exported reports on the World Wide Web, over an organizational intranet, or in a spreadsheet program.

 **Note:**

CallPilot Reporter must be installed on a stand-alone Web server. The Reporter is not available for installation when you install CallPilot Manager on a CallPilot server.

For information about Web server requirements, consult the *Avaya CallPilot® Planning and Engineering Guide* (NN44200-200.)

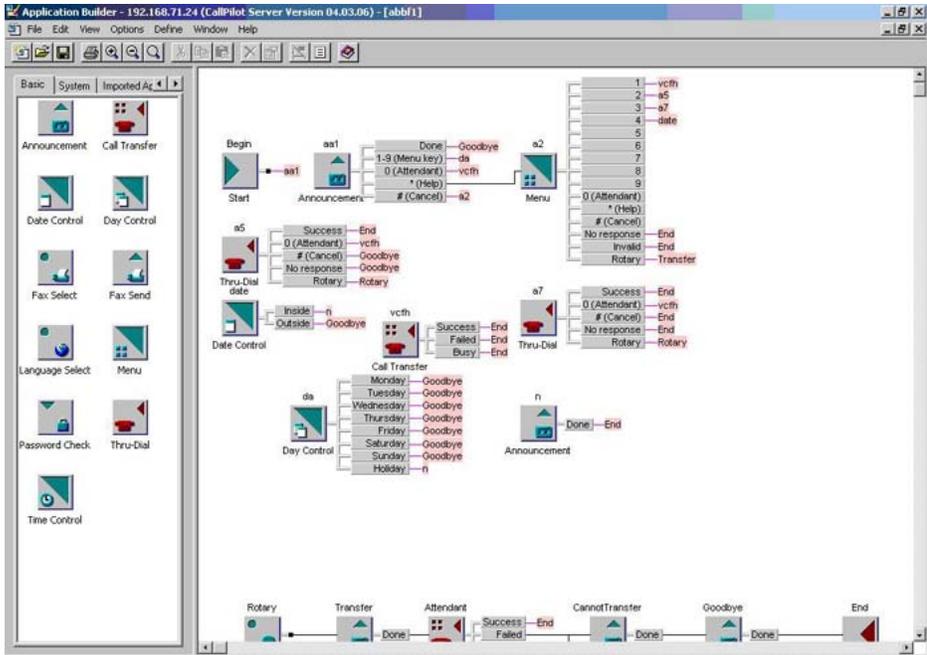
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## CallPilot Application Builder

Application Builder is a graphical program that you use to create CallPilot applications that callers access as dialable services. You select the required call functions (blocks) from palettes. You then arrange blocks in the desired call flow sequence, and then create the connections between the blocks.

In this context, an application is a set of functions that determines the way CallPilot treats a call. When a CallPilot system receives a call, an application handles the call flow. The automated attendant application is a typical example. This application greets callers to the organization and lets them transfer to a department or to a specific individual. An automated attendant can also handle calls differently, depending on the day of the week or the time of day.

The following screen shows the Application Builder main interface.



With Application Builder, you can:

- specify the call functions that you want to include in an application, such as menus, announcements, and transfers
- design the call flow or, in other words, the path calls follow
- include fax functions in your CallPilot applications, if your CallPilot system includes fax messaging

Application Builder provides the following benefits and capabilities:

- It enables you to plan your CallPilot services online rather than on paper.
- It provides a simple graphical interface for adding functions to the application and connecting functions to create the call flow.
- It lets you record voice items while you create your application. After you create a new voice item, such as a menu or an announcement, the application prompts you to record the new voice item.
- It shows the call flow graphically. The application window shows you, at a glance, how calls are handled by the system.
- It enables you to import an application into other applications. This lets you save a group of functions that you want to share among multiple applications.

The *Avaya CallPilot® Application Builder Guide* (NN44200-102) provides overview information about using Application Builder, including planning considerations, design guidelines, and requirements. It also provides lessons that guide you through the process of developing an application. Each subsequent lesson builds on the lesson in the previous chapter.

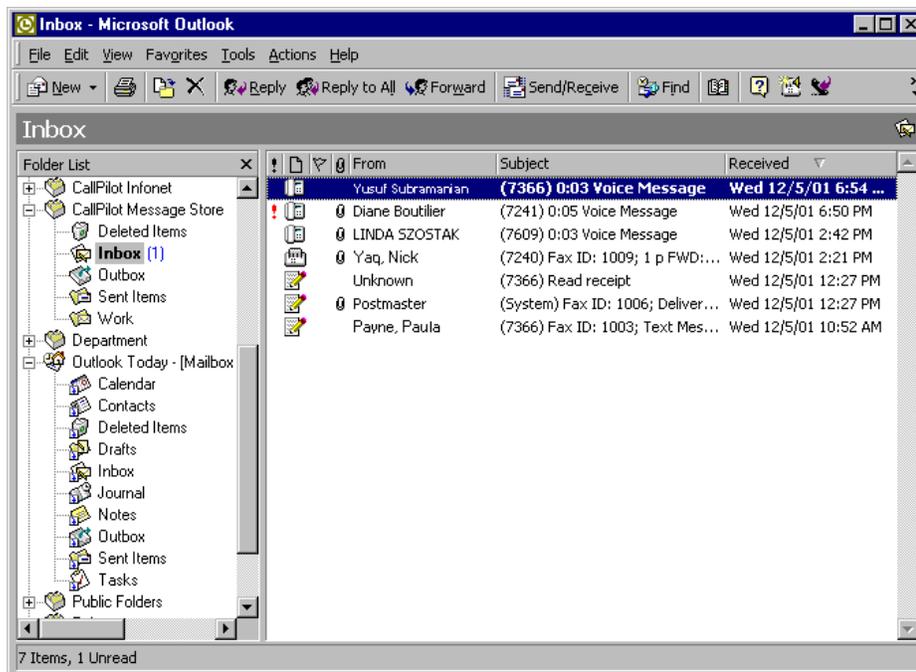
## Desktop Messaging software

You can work with CallPilot from your telephone or your computer. Desktop Messaging gives you access to your CallPilot mailbox through your e-mail software application.

CallPilot supports market-leading e-mail clients such as Microsoft Outlook, Lotus Notes, and Novell Groupwise. A variety of other e-mail clients is also supported.

For a detailed listing of the supported e-mail clients, consult the *Avaya CallPilot® Planning and Engineering Guide* (NN44200-200.)

This view shows the CallPilot message mailbox location in the main interface of the Microsoft Outlook e-mail client.



CallPilot Desktop Messaging lets you use your e-mail to:

- view your e-mail messages
- listen to, record, and send voice messages (using the CallPilot player)
- view and print fax messages
- create and send fax messages, including batch faxes
- forward and reply to voice and fax messages
- contact the sender of a message
- add message options such as urgent and private

- add voice, fax, or text file attachments to messages
- create personal distribution lists
- change your CallPilot password
- access Web-based My CallPilot to view user information and change your feature settings

Note that not all of the supported e-mail clients support the full Desktop Messaging feature set. Consult the applicable *Avaya CallPilot® Desktop Messaging User Guide* for your e-mail client for details on the specific features supported.

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## My CallPilot

My CallPilot is the Web-based software interface to CallPilot. It offers the end user exceptional flexibility for managing messaging needs. You can work with My CallPilot from any computer that has Internet access and a Web browser configured for the application. My CallPilot lets you:

- View useful information about your mailbox.
- Receive, forward, reply to, and send voice messages, faxes, and e-mails.
- Change the setup of your mailbox features.
- Transcribe responses for Voice Forms Transcription application (Note that Voice Forms is a keycoded application.)
- Change your CallPilot password.
- Create personal distribution lists.
- Set up remote notification to a telephone or pager.
- Set up text message notification for a wireless e-mail device.

The following sections describe the interface tabs that provide access to the CallPilot functionality.

---

## CallPilot Messages tab

You can use the CallPilot Messages tab to access voice messages and view faxes; delete, forward, and reply to messages; and compose new messages.



To use the CallPilot Messages tab, desktop messaging must be enabled for your mailbox.

You can compose a message that is any combination of voice, fax, or text. To record voice messages, you use the embedded or the downloaded CallPilot Player.

Note also that your CallPilot administrator must enable fax capability for your mailbox in order for you to receive faxes.

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## Voice Forms Transcription tab

You can use the Voice Forms Transcription tab to retrieve and transcribe caller responses archived in the Voice Forms application.



Because Voice Forms is a keycoded feature, this tab appears only if your organization purchases the appropriate keycode. Also, to use the Voice Forms Transcription tab, the administrator must grant the user transcription privileges.

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## E-mail Account tab

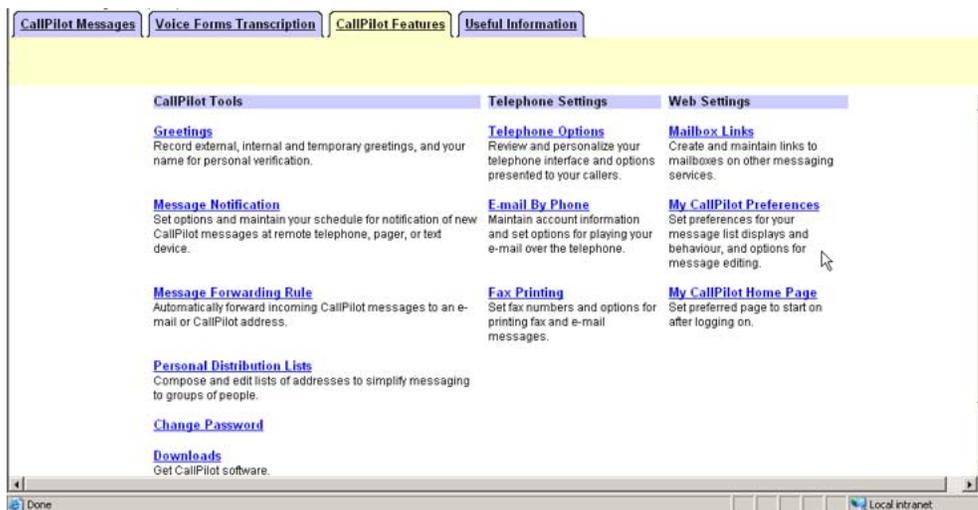
While you are logged in to My CallPilot, you can check your e-mail messages through the E-mail Account tab. You can also forward and reply, and send new e-mails, if appropriately configured.



You can access up to five IMAP e-mail accounts, or other CallPilot mailboxes. One of these accounts can be set up for access from your telephone. You can also set up access to a second CallPilot mailbox, which can be on another server.

## CallPilot Features tab

You can use the CallPilot Features tab to change the settings for your CallPilot features and telephone options, and to set preferences for Web-based access.

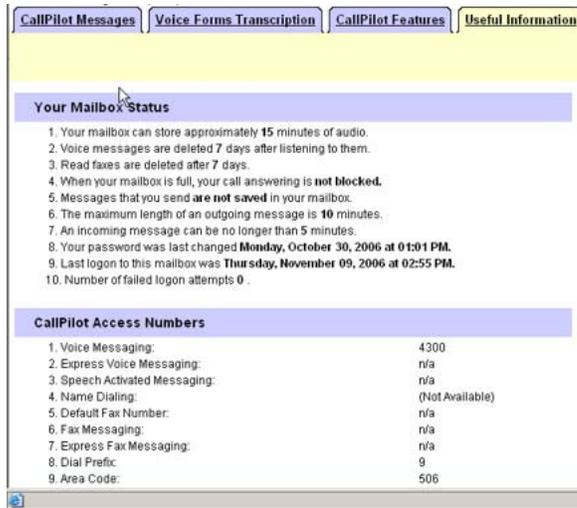


The top page of the CallPilot Features tab displays only the features that are available for you to use. You can then click any title to open its settings page.

## Useful Information tab

The CallPilot Useful Information tab lets you:

- View status and details about your mailbox.
- View online user guides.
- Print online user guide files on your laser printer.



## CallPilot server software

The software running on the CallPilot server drives the core functionality of the server. This software is factory-installed on your server, along with the Windows operating system. The CallPilot Manager Configuration Wizard is then used to configure the server software for your switch after the CallPilot system is installed in your location.

Depending on your server, a number of CallPilot software CD-ROMs and DVD-ROMs are supplied with your system. These discs include:

- CallPilot Image discs

These two discs contain an exact initial image of the operating system and server software. If a catastrophic hard disk failure occurs, you can use these discs to reinstall these components as they were at the factory when your system was shipped. You can then also use the regularly scheduled backups you make of your system to restore your current specific operational configurations.

- CallPilot Applications disc

This disc contains setup software to reinstall or add various CallPilot software components, including the following: the CallPilot server software; the Manager, Reporter, and Application Builder applications; pcAnywhere; and Adobe Acrobat Reader.

- Other CD-ROMs and DVD-ROMs

Other supplied discs include CallPilot software for Service Updates and PEPs, Desktop Client and My CallPilot software, CallPilot language prompts, and CallPilot documentation.

For a complete list of CallPilot software, see the *Avaya CallPilot® Installation and Configuration Task List* (NN44200-306) and the *Avaya CallPilot® Planning and Engineering Guide* (NN44200-200.)

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## Flight Recorder

Flight Recorder (FR) is a feature that has been added to CallPilot which continuously captures traces from critical CallPilot Server modules that handle call processing (AML, BCR, CCR, SLEE) and collects relevant operating system performance information (CPU usage, memory usage, disk usage). If there is a ever problem on the server, the traces and logs can be utilized by support personnel to identify the root cause of the problem, often without having to wait for the problem to reoccur.

The purpose of this feature is to capture the system state prior to a problematic issue such that technical support and product design teams can determine what caused the issue.

CallPilot administrators can manage FR via CallPilot Manager. Through the FR pages, the administrator can do any of the following tasks: enable or disable the traces, archive and download the captured data, and manage obsolete archives of previously captured traces.

Below is a table that lists all platforms and the default settings associated with various traces.

**Figure 4: Default Flight Recorder trace values**

|                | NBBCR | NBCCR | Performance Counter | System Log (See Note 1) | SLEE (See Note 2) | AML Trace | NBSL | NBAPE (See Note 3) | MLink Trace (See Note 3) | MLink Postlog (See Note 3) | AMLink Postlog |
|----------------|-------|-------|---------------------|-------------------------|-------------------|-----------|------|--------------------|--------------------------|----------------------------|----------------|
| 201i           | On    | On    | On                  | On                      | OFF               | On        | N/A  | On                 | On                       | OFF                        | OFF            |
| 202i           | On    | On    | On                  | On                      | On                | On        | N/A  | On                 | On                       | OFF                        | OFF            |
| 703t           | On    | On    | On                  | On                      | On                | On        | N/A  | On                 | On                       | OFF                        | OFF            |
| 600r           | On    | On    | On                  | On                      | On                | On        | N/A  | On                 | On                       | OFF                        | OFF            |
| 1002rp T1/SMDI | On    | On    | On                  | On                      | OFF               | N/A       | On   | On                 | On                       | OFF                        | OFF            |
| 1002rp AML     | On    | On    | On                  | On                      | OFF               | On        | N/A  | On                 | On                       | OFF                        | OFF            |
| 1005r          | On    | On    | On                  | On                      | On                | On        | N/A  | On                 | On                       | OFF                        | OFF            |
| 1006r          | On    | On    | On                  | On                      | On                | On        | N/A  | On                 | On                       | OFF                        | OFF            |

 **Note:**

- (1) System Logs are not traced. Copies of the current logs are taken when the System Logs are archived. System logs include: sysinfo, IP config, installed PEPS,DSP load, Windows event logs, Windows hosts file, Windows Update log, Appbuilder. ED files, SMTP logs, restore logs, RAID info, CallPilot logs, Windows mini-dump files, HA (EMC) logs, Dr. Watson logs, CallPilot database table dumps and backup logs. SLEE tracing is disabled by default on the 201i and 1002rp platforms because there is not enough CPU available to enable the traces without negatively impacting system performance.
- (2) NBAPE, MLink Trace and MLink Postlog Trace are only available when Contact Center integration is enabled on the CallPilot server.
- (3) Center integration is enabled on the CallPilot server.



**Warning:**

MLink Postlog and AMLink Postlog traces are included in the Flight Recorder but disabled by default on all platforms. Enabling the traces should only be done if requested by Avaya support. Traces put a heavy load on the server when they are enabled and call processing can be affected.

## Geographic Redundancy

Geographic Redundancy (GR) is a configuration in which two CallPilot servers are linked together to create a geographic redundant pair with continuous, near real-time replication of users and mailbox messages between the servers. In the event that one CallPilot server experiences an outage or is taken offline for maintenance, users are redirected to a second CallPilot server (GR partner) and are given access to a copy of their mailbox. Any new incoming calls directed at the offline server are also redirected to the GR partner.

For more information about GR, see the *CallPilot Geo-Redundancy Application Guide*, NN44200-322.

# Chapter 9: Avaya CallPilot® networking

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## In this chapter

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[CallPilot networking solutions](#) on page 71

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[Enterprise networking](#) on page 73

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[Network Message Service](#) on page 75

[Combining networking solutions](#) on page 75

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## Overview

Avaya CallPilot offers a range of coordinated messaging networking solutions that provide great flexibility and service. In this context, a networking solution is the Avaya implementation of a specific messaging protocol.

A brief synopsis of each networking solution is provided in this chapter. The *Avaya CallPilot® Network Planning Guide* (NN44200-201) and the CallPilot Manager online Help system provide detailed conceptual and procedural information about the implementation process for each solution.

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## CallPilot networking solutions

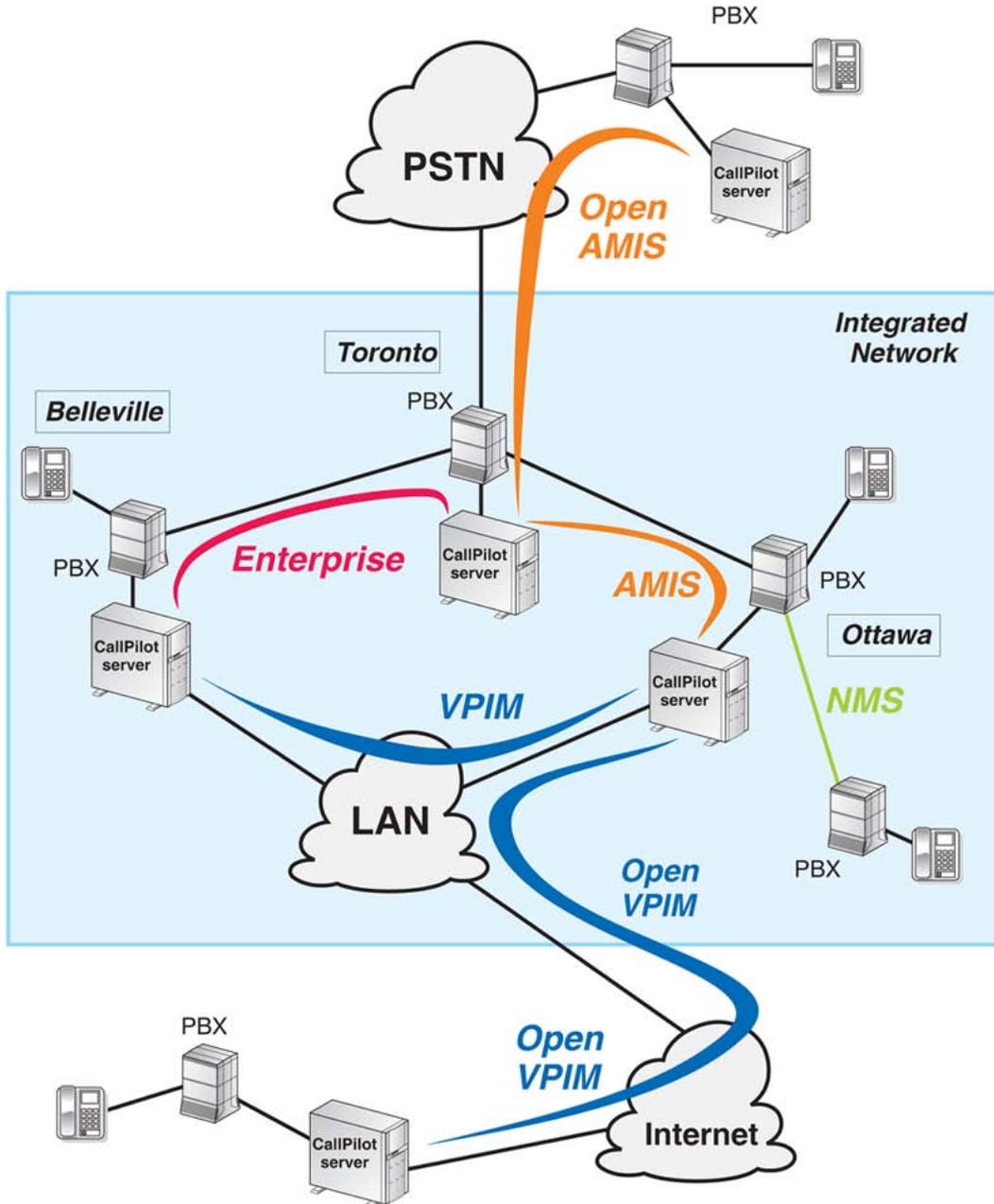
CallPilot currently offers three networking solutions:

- AMIS Networking
- Enterprise Networking
- VPIM Networking

These solutions are available through a single software option.

In addition, CallPilot supports switches that are networked using Network Message Service (NMS). This is implemented by its own software option.

The following diagram shows a hypothetical network that makes use of all the available CallPilot networking solutions. Different solutions are implemented between different sites, depending on the corporate requirements.



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## Audio Messaging Interchange Specification (AMIS) networking

Audio Messaging Interchange Specification (AMIS) networking provides voice messaging to different mailboxes located at different sites over a voice network. A network, as it is referred to here, is a collection of offices, locations, or sites connected by a telecommunication link.

AMIS uses the industry-standard analog AMIS-A protocol. AMIS networking lets users exchange messages with users of any voice messaging systems that support the AMIS-A protocol. AMIS networking uses dual-tone multi-frequency (DTMF) tones to send information. AMIS supports voice messages, but not fax and text messages.

AMIS networking can be integrated or open.

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## Integrated AMIS networking

Integrated AMIS networking is used to exchange messages between sites within an integrated network. When a remote site that uses the AMIS-A protocol is defined within the local network database, it is called an integrated site. For integrated AMIS, the CallPilot administrator is responsible for configuring the remote site's System Access Number (SAN).

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## Open AMIS networking

Open AMIS networking is used to exchange messages between a site within the integrated network and a site outside the integrated network. For open AMIS, the remote site is not defined within the local network database; therefore, the sender must enter the SAN for the remote site.

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## Enterprise networking

Enterprise networking is an analog networking protocol that works over a voice network. It uses the Enterprise Networking protocol. This protocol is based on proprietary Avaya extensions to the AMIS protocol and, as such, offers many advantages over AMIS Networking.

Enterprise Networking also uses DTMF tones to send information. Enterprise Networking supports voice messages but does not support fax and text messages.

## Enterprise advantages over AMIS

The Enterprise Networking protocol offers several advantages over the AMIS protocol.

| Feature             | AMIS protocol   | Enterprise Networking protocol  |
|---------------------|---|---|
| Multiple recipients | Sends one message to each recipient; requires greater system resources and long-distance toll charges | Sends a single message to multiple recipients; requires less system resources and lowers long-distance toll charges.  |
| Message length      | 8-minute maximum  | 120-minute maximum of all parts, where any individual part can be up to 99 minutes in length.   |
| Security            | Uses no special security features   | Uses initiating and responding passwords between the sending and receiving sites before exchanging messages.  |
| Increased features  | Limited feature availability  | Supports additional features such as message privacy, message read acknowledgments, sending Username and Subject information, and Names Across the Network. |

## VPIM networking

With VPIM networking, CallPilot can exchange multimedia messages (voice, text and fax) using a standard data communications network. VPIM Networking can exchange messages with any other system that uses the same data communications protocol, regardless of vendor.

VPIM Networking formats and sends messages using the standard Internet Simple Mail Transfer Protocol (SMTP) protocol. Messages are sent across either a private data network, such as an intranet, or a public data network, such as the Internet, for delivery.

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## Integrated and open VPIM networking

VPIM Networking also lets users exchange messages between open and integrated sites. For VPIM Networking to work within an integrated network, the destination must support VPIM and be in the local network database.

In addition, because VPIM Networking transmits messages over data networks, the messages do not incur long-distance toll charges.

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## Network Message Service

Network Message Service (NMS) permits one CallPilot messaging server to provide messaging services to users on more than one switch location. The CallPilot messaging server is directly connected to a prime switch location. Up to 999 satellite switch locations can be attached to the prime switch location. The CallPilot messaging server provides messaging services to all switch locations.

NMS is transparent to users. A user whose telephone or desktop is attached to a satellite switch location can receive the same services as a user attached to the prime switch location. All users dial the same way to reach the same services.

The collection of switch locations, connections, and the messaging server is known as an NMS network. If an NMS network is a site in a private messaging network, it is called an NMS site.

 **Note:**

There is no support for an NMS network in T1 connectivity solutions.

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## Combining networking solutions

A messaging network can combine the available networking solutions. Many messaging networks are combinations of several solutions at various sites. In addition, one or more of the sites in a messaging network can be NMS sites. This ability to combine networking solutions lets you optimize your messaging network and create a customized solution for different business requirements.

However, to exchange messages between any two sites in a messaging network, both sites must have a common networking solution implemented and must agree to use it.

The *Avaya CallPilot® Network Planning Guide* (NN44200-201) provides detailed information about these solutions and how to implement and combine them.

# Chapter 10: Regulatory information

This chapter includes regulatory information for international installations pertinent to applications such as Avaya CallPilot®.

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## In this chapter

[Grounding](#) on page 77

[General compliance and safety information for specific countries](#) on page 78

[Electromagnetic compatibility](#) on page 80

[Radio and TV interference](#) on page 81

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## Grounding

Ensure that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, connect together. This precaution is for the users' protection, and is particularly important in rural areas. Avaya recommends that the Avaya CallPilot server and peripherals be grounded to a common single-point ground with the M1 IPE shelf or Avaya Communication Server 1000 media gateway.

 **Caution:**

Risk of equipment damage

The CallPilot system frame ground of each system cabinet or chassis must be tied to a reliable building ground reference.

 **Warning:**

Risk of electrocution

Do not attempt to make electrical ground connections yourself. Contact your local electrical inspection authority or electrician to make electrical ground connections.

For more information about the preceding issues, refer to the *Avaya CallPilot® Planning and Engineering Guide*.

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## General compliance and safety information for specific countries

If insufficient planning or technical information is available for your country of operation, contact your regional telecommunications distributor or authority for assistance.

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## Information for European countries

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### Safety specifications

The CallPilot system meets the following European safety specifications: EN 60825 and EN 60950.

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### RoHS compliance

Certain Avaya servers meet requirements of the Restriction of Hazardous Substances Directive 2002/95/EC, applicable in countries affected by the EUED (European Union Environmental Directives). RoHS requirements impose restrictions on the type and quantity of materials used in the manufacturing and construction of Electronic and Electrical Equipment (EEE). The following table outlines which servers are RoHS compliant.

| Server model | Notes  |
|--------------|--|
| 600r         | This server is RoHS compliant.   |
| 1005r        | This server is RoHS compliant.   |
| 1006r        | This server is RoHS compliant.   |
| 201i         | Avaya is phasing in RoHS-compliant 201i servers in countries affected by the EUED. This hardware replaces or supplements the non-RoHS version. In general, the RoHS parts are backward compatible with the supported software, and they have equivalent functionality to the parts they are replacing. |

| Server model | Notes                          |
|--------------|--------------------------------|
| 202i         | This server is RoHS compliant. |

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## Information for North America

CallPilot server models 1005r, 1006r, 703t, and 1002rp comply with the following standards:

- UL 60950-1 Information Technology Equipment Safety Part 1- General Requirements (U.S.A.)
- CSA-C22.2 No. 60950-1-03 Safety Telecom Information Technology Equipment Safety, Part 1- General Requirements (Canada)

 **Note:**

Because the 201i or 202i server is housed in the Avaya CS 1000 Media Gateway, its safety compliance falls under the standards the CS 1000 supports.

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## Information for Japan

The following applies to server models 600r, 1005r, 1006r, 703t, and 1002rp.

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 **Warning**


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Please be aware of the following while installing the equipment:

- Please use the connecting cables, power cord, and AC adaptors shipped with the equipment or specified by Avaya to be used with the equipment. If you use any other equipment, it may cause failures, malfunctioning or fire.
  - Power cords shipped with this equipment must not be used with any other equipment. If the above guidelines are not followed, it may lead to death or severe injury.
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 **警告**


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本製品を安全にご使用頂くため、以下のことにご注意ください。

- 接続ケーブル、電源コード、ACアダプタなどの部品は、必ず製品に同梱されております。添付品または指定品をご使用ください。添付品・指定品以外の部品をご使用になると故障や動作不良、火災の原因となることがあります。
- 同梱されております付属の電源コードを他の機器には使用しないでください。上記注意事項を守らないと、死亡や大怪我など人身事故の原因となることがあります。

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## Electromagnetic compatibility

The following table summarizes the electromagnetic compatibility (EMC) specifications for Class A devices.

| Jurisdiction  | Standard              | Title   |
|---------------|-----------------------|---|
| United States | FCC CFR 47 Part 15    | FCC Rules for Radio Frequency Devices (see Note 1)  |
| Canada        | ICES-003              | Interference-Causing Equipment Standard: Digital Apparatus  |
| Europe        | EN 55022/<br>CISPR 22 | Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement (see Note 2) |
|               | EN 55024              | Information technology equipment - Immunity characteristics - Limits and methods of measurement                       |
|               | EN 61000-3-2          | Limits for harmonic current emissions (equipment input current $\leq$ 16 A per phase)                                 |

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| Jurisdiction      | Standard             | Title   |
|-------------------|----------------------|---|
|                   | EN 61000-3-3         | Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current $\leq$ 16 A |
| Australia         | CISPR 22/AS/NZS 3548 | Limits and methods of measurement of radio disturbance characteristics of information technology equipment (see Note 2)   |
| Korea             | KN22                 | Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement                  |
| Korea (continued) | KN24                 | Information technology equipment - Immunity characteristics - Limits and methods of measurement                           |
| Taiwan            | CNS 13438            | Limits and methods of measurement of radio disturbance characteristics of information technology equipment                |

**Note:**

FCC CFR 47 Part 15.21 statement: "Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense."

**Note:**

EN 55022/CISPR 22 statement: "WARNING This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures."

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## Radio and TV interference

**Important:**

The user must not make changes to the CallPilot system that are not expressly approved by Avaya. Any such changes can void the user's authority to operate the equipment.

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## Information for the United States

The CallPilot systems comply with Part 15 of the FCC rules in the United States. Operation is subject to the following two conditions:

- The system must not cause harmful interference.
- The system must accept any interference received, including interference that can cause undesirable operation.

If the CallPilot system causes interference to radio or television reception, which can be determined by placing a telephone call while monitoring, the user is encouraged to try to correct the interference by the following measures:

- Reorient the receiving TV or radio antenna where this can be done safely.
- Move the TV or radio in relation to the telephone equipment.

If necessary, ask a qualified radio or television technician or supplier for additional information. Also, you can refer to the document "How to Identify and Resolve Radio-TV Interference", prepared by the Federal Communications Commission. This document is available from:

U.S. Government Printing Office Washington DC 20402

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## Information for Canada

The CallPilot systems do not exceed Class A limits for radio noise emissions from digital apparatus, as set out in the radio interference regulations of Industry Canada.

This equipment complies with the CE Marking requirements.



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## Information for Japan

The following applies to server models 600r, 1005r, 1006r, 703t, and 1002rp:

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a

domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective action.

この装置は、情報処理装置等電波障害自主規制協議会 (VCCI) の規定に基づくクラス A 装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を取るよう要求されることがあります。



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