Avaya CallPilot® Software Administration and Maintenance

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Chapter 1: Customer service

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

Navigation

- Getting technical documentation on page 7
- Getting product training on page 7
- Getting help from a distributor or reseller on page 7
- Getting technical support from the Avaya Web site on page 8

Getting technical documentation

To download and print selected technical publications and release notes directly from the Internet, go to www.avaya.com/support.

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. From this Web site, you can locate the Training contacts link on the left-hand navigation pane.

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.

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.

Chapter 2: About this guide

Introduction

The Avaya CallPilot Software Administration and Maintenance guide provides information and instructions for installing, expanding, reinstalling, and repairing CallPilot software.

CallPilot system software and the server operating system are installed at the factory. CDs shipped with the system enable you to install and uninstall components such as pcAnywhere, Service Updates, and CallPilot Manager and Reporter on a stand-alone Web server. A CD or DVD containing a disk image of the system facilitates recovery of the CallPilot server.

For more information

For more information about the CDs or DVDs included with the system, see the CallPilot Installation and Configuration Task List (NN44200-306).

For more information about CallPilot hardware and software, see:

- CallPilot Fundamentals (NN44200-100)
- CallPilot Planning and Engineering Guide (NN44200-200)

Customer Documentation Map

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

Table 1: CallPilot 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)
- Avaya Communication Server 1000 Converging the Data Network with VoIP Fundamentals (NN43001-260)
- Solution Integration Guide for Avaya Communication Server 1000/CallPilot®/NES 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® Geographic 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 Meridian 1 and Avaya CallPilot® Server Configuration Guide (NN44200-302)
  - Avaya T1/SMDI and Avaya CallPilot® Server Configuration Guide (NN44200-303)
  - Avaya Communication Server 1000 System and Avaya 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 Meridian Mail to Avaya 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.

Chapter 3: System Health Check

A system Health Check should be performed when the user would like to determine if the system is operating correctly. This check includes both hardware and software.

This chapter is a guideline to help users confirm and possibly isolate problems, and confirm that the system is in good status.

Third Party Software Checks

The following list of checks ensures that the Avaya CallPilot® server is free of third party software (with the exception of recommended anti-virus software) that may interfere with proper operation of the application. In addition, a check is made to ensure current software versions (including PEPS), and that no incompatibility issues are present.

Software Requirements Check	Results
No Third Party Software or Hardware should be installed on the Avaya CallPilot server. See Product Bulletin 99067.	
Check for Application Builder or Desktop Messaging installed on the server.	
Anti-Virus software is recommended. Only a few packages have been approved for CallPilot. See Product Bulletin P-2007-0101-Global. (Proper configuration of Anti-Virus software should be checked). Pay special attention to Virus Scan schedule to ensure it does not conflict with CallPilot Audits.	
Ensure the server has the latest PEPs, including SEC PEPs.	
Ensure the site has specific PEPs it might need for specific configurations (for example, limited or restricted).	
Verify Release of CallPilot, CallPilot Manager and Application Builder are compatible with SU, including Webserver if Reporter is being used.	

Recommend that site is running latest Desktop Client and/or MyCallPilot, if applicable.	

Configuration Checks

The following list of checks ensures that the CallPilot is connected to the PBX through the ELAN, and to the customer's network through the CLAN in the recommended manner. Failure to follow Avaya guidelines for LAN connectivity could result in broadcast storms or unexpected message types interfering with proper operation of the CallPilot. In addition, connectivity of the voice ports to the PBX are checked for stability.

Configuration Check	Results
ELAN and CLAN NICs should have static IP addresses.	
ELAN and CLAN IP addresses should not be in the same network.	
ELAN subnet should not have a default gateway.	
Ensure that ELAN and CLAN IP addresses do not conflict with other IP addresses on the network.	
Ensure that the PBX is reachable by CallPilot via ELAN (ping request should be succeeded).	
If CallPilot is a domain, verify configuration.	
Run Configuration Wizard to verify customer specific configuration.	
Computer name must match the database name.	
Ensure that all CallPilot services are running.	
Check Channel Monitor for all channels and DSPs. Verify idle and active, and look for anomalies.	
Check event logs (past 3 days).	
Check switch or hub configuration, including agent TNs and CDNs compared to CallPilot Configuration Wizard.	

For SCCS/CCMS integration case, check SCCS configuration of voice ports compared to CallPilot's IVR and Access agents in Configuration Wizard.	
Check for looped and inconsistent applications.	
Ensure that backups are running successfully and do not conflict with audit routines.	

Disk Drive Checks

Disk Drive Check	Results
If the system has RAID, are all the drives online?	
Check for appropriate free disk space on all drives. Available drive free space should be at least 300 MB on the C drive, and 600 MB on the D, E, and F drives.	
Check for any disk drive errors (media errors/ scsi timeouts).	
Check RAID array healthy state, if present.	

Performance Reviews

Performance Review	Results
Check Processor utilization for any abnormal behavior. (This should be completed during higher traffic periods).	
If the server has dual processors, verify that both processors can be seen in task manager.	
Check Memory utilization for any abnormal behavior.	

Check for DRWTSN32. Ensure “Visual Notification” is not checked. Delete the logs if they are too large.	

Security Checks

Security Check	Results
Ensure the site has not been installing Microsoft Hotfixes directly from Microsoft unless instructed by a Avaya Product Bulletin.	
Check folder shares, as they are a security threat.	
Verify auto updates are off.	

For more information on security, see Preventative Maintenance Guide (NN44200-505).

Chapter 4: Backing up and restoring the Avaya CallPilot® system

In this chapter

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Performing a full system backup on page 20

Restoring a full system backup on page 21

Diagnosing a backup or restore operation on page 21

Displaying a backup or restore history on page 22

Performing tape operations on page 22

Introduction

Many of the maintenance and recovery procedures in this guide require you to perform or restore full system backups. This chapter provides procedures for doing this using the Avaya CallPilot® Backup and Restore Tool on the Avaya CallPilot server. A full system backup backs up all critical data, including messages and configuration information, on all drives. This includes all data that can be obtained by running the various archives. The operating system and CallPilot software are not backed up.

For complete information about backing up and restoring CallPilot server data, see the online Help in CallPilot Manager.

Before performing a system backup, perform a System Heath Check. See System Health Check on page 13.

Setting up a remote disk as a backup device

If you want to back up your system to a remote file server, this section explains the requirements and steps to do so. If you are backing up to tape, you do not need to use this section.

Requirements for the remote file server

Supported operating systems for the remote file server include:

- Windows NT
- Windows 2000
- Windows XP
- Windows 2003
- Windows 7

The supported file system is NTFS; FAT32 is not supported due to the maximum file size limitation.

To set up a remote disk as a backup device

Complete the following three procedures to set up a remote disk as a backup device.

To add a local user account to the remote file server

1. Log on to the remote file server as an administrator.
2. In the Windows operating system, create a local user account that meets the following requirements:
   - It can be a member of any group (it does not have to be part of the Administrator group).
   - It should not have any special administrative privileges or access rights.
   - It should not have any access rights to the CallPilot server.

   If you are using Windows 2003, you can follow the sub-steps below to create the local user account. For other operating systems, the procedures could differ and the steps below serve only as a guideline; refer to the Windows online Help.

   a. From the Windows Start menu, click All Programs > Administrative Tools > Computer Management.

b. In the left pane, expand Local Users and Groups.
c. Right-click Users, and then click New User.
d. In the User name box, type a name for the local user account.
e. In the Password box, type a password, and then retype it in the Confirm password box.
f. Write down the User name and Password so you can enter them in the backup utility when setting up the backup device.
g. Ensure the following options are not checked: User must change password at next logon, User cannot change password, and Account is disabled.
h. Click Create, and then click Close.

To create and share a folder, and provide read/write access to the local user account

1. Log on to the remote file server as an administrator.
2. In the Windows operating system, create a shared folder for the remote disk backups, and grant Full Control access to the user account you created in the previous procedure.

   If you are using Windows 2003, you can follow the sub-steps below to create the shared folder. For other operating systems, the procedures could differ and the steps below serve only as a guideline; refer to the Windows online Help.

   a. Create a new folder for the backup data.
   b. Right-click the folder, and then click Sharing and Security.
   c. On the Sharing tab, select Share this folder.
   d. Write down the Share name (default is the folder name) so you can enter it when setting up the backup device.
   e. Click Permissions.
   f. Click Add, and then use the dialog box functions to add the local user account so it is listed on the Share Permissions tab.
   g. On the Share Permissions tab, remove any other accounts (click the account, and then click Remove).
   h. On the Share Permissions tab, click the local user account, and then select Allow for Full Control access.
   i. Click OK on both open windows.

To define a remote disk as a backup device

1. Complete the previous two procedures for adding a local user account on the remote file server and then creating a shared folder.
2. On the CallPilot server, from the Windows Start menu, click Programs > CallPilot > System Utilities > Backup Restore Tool.

The Backup Restore Tool dialog box appears.

3. Click the Device tab.
4. In the Device Name box, type a descriptive name such as Remote Backup.
5. In the Device Path box, type the network path to the shared folder on the remote computer.

   Example:

   \\Server\Backup

   In this example, Server is the computer name of the remote computer, and Backup is the share name of the shared folder created on the computer to store the backup.
6. In the User name box, type the name of the user account you created on the remote file server.
7. In the Password and Confirm password boxes, type the password for the user account.
8. Click Add Device.

   A message appears indicating that the device is added successfully.
9. Click OK.

   The new device now appears as a choice on the Backup tab.

Performing a full system backup

Use the following procedure to perform a full system backup.

To perform a full system backup

1. On the CallPilot server, from the Windows Start menu, click CallPilot > System Utilities > Backup Restore Tool.

   The Backup Restore Tool dialog box appears.
2. On the Backup tab, select a device from the Select Device box. PrimaryServerTape is the default device to back up to a local tape. To back up to a remote disk, choose an existing user-defined location, or create one using the procedure Setting up a remote disk as a backup device on page 18.
3. From the Select Backup Specification list, choose the type of backup.
4. If you are backing up to tape, under Additional options, identify whether you want to overwrite the existing backup with the new backup or append a new backup.
5. Click Backup to start the backup process.
6. When the utility indicates the backup is complete, click Close.

Restoring a full system backup

Use the following procedure to restore a full system backup.

To restore a full system backup

1. On the CallPilot server, from the Windows Start menu, click Programs > CallPilot > System Utilities > Backup Restore Tool.

   The Backup Restore Tool dialog box appears.
2. Click Restore.
3. Under Select a Device, select the location of the backup.
4. Under Get Backup ID, click List Tape or List Disk (the label depends on the device you select).

   A message prompts you to choose a backup ID from the list on the Restore tab.
5. Click Close to close the message.
6. Under Select a Backup ID, choose the backup you want to restore.
7. Click Restore.

   The Backup/Restore Progress window appears. Restore operations take longer than backup operations. All CallPilot services shut down automatically before the restore operation begins and restart automatically when the restore operation ends.
8. When the restore operation ends, click x to close the Backup/Restore Progress window.
9. If you have restored a CallPilot server in a Geographic Redundancy (GR) pair, perform a rebuild and a manual mailbox resync. For more information, refer to *Geographic Redundancy Application Guide* (NN44200-322).

Diagnosing a backup or restore operation

Use the following procedure to determine if the backup or restore operation skipped any files or if the backup operation was only partially successful.

To diagnose a backup or restore operation

1. Click Diagnose Backup/Restore.
2. From the Diagnose type list, select one of the following:
   - Select Diagnose Backup to look at the result of each backup item.

- Select Diagnose Restore to look at the result of each restore item.

A message box appears instructing you to select a backup ID.

3. Click OK.
4. From the Select Diagnose item box, select a Backup ID.
5. Click Display to display the details.

Displaying a backup or restore history

Use the following procedure to display a backup or restore history.

To display a backup or restore history

1. Click Backup/Restore History.
2. From the Display history type list, select either Backup History or Restore History.

   The resulting window shows information about operation ID, status, destination, start date, elapsed time, size in KB, primary error code, and extend error code.

Performing tape operations

Perform tape operations to erase and format a tape, or to retension it.

For optimal tape performance, you can retension the tape. Consider doing this if:

- the tape is new
- the tape has been exposed to temperature changes or shock
- the tape has not been used in over a month
- the system cannot read the tape

Note:

You may have to retension a tape multiple times.

To perform tape operations

1. On the CallPilot server, from the Windows Start menu, click Programs > CallPilot > System Utilities > Backup Restore Tool.

   The Backup Restore Tool dialog box appears.
2. Click Tape Operation.

3. Do one of the following:
   - Click Erase/Format Tape to erase and format a tape.
   - Click Retension Tape to perform a retension tape operation.
4. Follow the on-screen instructions to complete the operation.

Chapter 5: Installing Service Updates and Performance Enhancement Packages

In this chapter

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Installing Service Updates or Performance Enhancement Packages on page 28

Uninstalling Service Updates or Performance Enhancement Packages on page 30

Introduction

When Avaya makes changes to the Avaya CallPilot® software, the changes are distributed to you as Service Updates (SUs). SUs must be installed:

- when they are released by Avaya to enable you to implement new enhancements
- each time you perform an upgrade from a previous release
- when you need to rebuild your system

You can download SUs from the Avaya Meridian* PEP Library (see How to acquire new PEPs on page 26).

Service Updates

A Service Update (SU) is a consolidation of fixes, additional enhancements, and Performance Enhancement Packages (PEPs) that have been released since the initial release of CallPilot became available. A particular SU may contain product improvement PEPs, software fix PEPs, or both. When upgrading, apply the SU after the upgrade.

Performance Enhancement Packages

Performance Enhancement Packages (PEPs) are software fixes, updates that enhance CallPilot features, or both. For an initial installation of CallPilot, additional PEPs may be provided on the CallPilot PEP CD.

How to acquire new PEPs

CallPilot SUs and PEPs are provided on the CallPilot PEP CD. When additional SUs and PEPs become available, they can be ordered on CD or downloaded as follows:

PEP availability format	How to acquire it
SU CD kit	Order the SU CD kit from Avaya. There is no charge for the kit.
Downloadable file from Avaya	Access the Avaya Meridian PEP Library (MPL) at the following URL, www.avaya.com/support

Identifying SUs and PEPs

PEPs are labeled in the following format: CPRRRSSSXYYZ, where

CP	indicates CallPilot
RRR	is the software release (for example, 5.01, 4.04)
SSS	is the required service update level to apply the PEP (for example, S01 indicates Service Update 01)
X	is the type of PEP: • G = General • R = Restricted • L = Limited • D = Diagnostic
YY	is the PEP number for the release, which can range from 01 to 99
Z	identifies the component to which the PEP applies:

- S = server
- C = CallPilot Manager
- A = Application Builder
- D = Desktop client

SUs are labeled in the following format: CPRRRRRSUYYS, where

CP	indicates CallPilot
RRRRR	is the software release (for example 5.05.01, 4.04.04)
SUYY	is the SU number (for example, SU01 indicates Service Update 01)
S	indicates this SU is for the server

Readme files

Readme files are provided in the following locations on the SU CD or in the PEP:

- in the root directory on the SU CD

  This readme file provides a general description of the PEP packages and general installation and uninstallation instructions.

- in each PEP package folder

  These readme files provide a list of all the PEPs in that package and specific installation and uninstallation instructions.

- in each PEP folder

  These readme files describe the purpose of the PEP and may provide some installation instructions.

Installing Service Updates or Performance Enhancement Packages

Before you begin

Caution:

Risk of system problems

For specific SU or PEP installation instructions, see the readme files that are provided with the SU or PEP. In many cases, SUs and PEPs must be installed and uninstalled in a specific order. The readme files provide these instructions. When the readme files instruct you to uninstall or install SUs or PEPs, see the procedures in this section.

Important:

If your CallPilot system is up and running, Avaya recommends that you do the following:

1. Perform a system backup.

   For instructions, see To perform a full system backup on page 20.
2. Take CallPilot out of service by disabling all call channels.

   For instructions, see the section on stopping and starting channels in the CallPilot Installation and Configuration Task List (NN44200-306).
3. Perform a System Health Check. See System Health Check on page 13.

Note:

If you have a RAID system, see the CallPilot Maintenance and Diagnostics guide for your server for information on splitting the RAID.

To install an SU or PEP

1. Ensure that you are logged on to the server where you want to begin SU or PEP installation.

   Use a logon account that has administrative privileges (for example, Administrator).
2. Insert the CallPilot PEP CD or the SU CD into the drive.
3. Click Start > Run.

The Run dialog box appears.

4. Click Browse.

   The Browse dialog box appears.

5. Navigate to drive Z.
6. Open and review the readme files that are in the root directory and in the folder for each SU or PEP package for specific installation instructions, uninstallation instructions, or both.
7. Double-click the runme.exe or runme.bat file (depending on whether this is an SU or PEP CD), and then click OK.

   Setup examines the system, and then the SUs or PEPs to install window appears.

   Important:

   It can take 5 to 20 minutes for the SUs or PEPs to install window to appear, depending on the number of them and the system configuration. In the meantime, a gray box may appear while the window is loading. Do not use the mouse or keyboard during this time.

8. Select the SUs or PEPs to install, and then click Next.

   If you are uncertain about which SUs or PEPs to install, see the readme file located in the root directory of the CD.

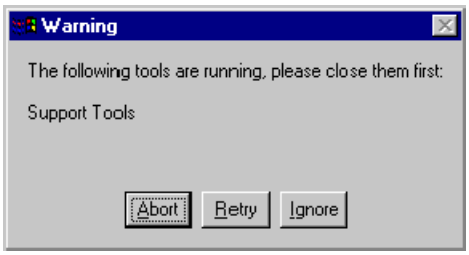
   A dialog box appears and lists all PEPs in the order in which they will be installed or uninstalled.

   Note:

   Some SUs or PEPs make earlier ones obsolete.

9. Click Yes to continue.

   The selected SUs or PEPs check the system to determine if any tools are open. If tools are open, you receive the following warning:



   Close the tools, and then click Retry.

   The system automatically shuts down only the designated services for the SUs or PEPs being installed. The time it takes to shut down the services and install the SUs or PEPs is based on what they contain. It can take a minimum of 10 to 15 minutes.

10. A pop-up dialog box may appear to indicate that some software must be uninstalled prior to installing the PEP. Click Yes to uninstall.

    Note:

    The pop-up box does not appear if no software must be uninstalled.

    When the installation is finished, a summary of the installation appears, showing the success or failure of each operation. The SUs or PEPs displayed may be different for your server.
11. Click OK.
12. Repeat this procedure for other SU or PEP packages.
13. You may or may not be prompted to restart the server.

    Note:

    You can install more than one SU or PEP and restart the server at the end. You do not have to restart the server after installing each one.

What is next?

Continue with the next step that is identified in the Service Update or PEP readme file Installing Performance Enhancement Packages.

Uninstalling Service Updates or Performance Enhancement Packages

Before you begin

Caution:

Risk of system problems

For specific SU or PEP installation instructions, see the readme files that are provided with the SU or PEP. In many cases, SUs and PEPs must be installed and uninstalled in a specific order. The readme files provide these instructions. When the readme files instruct you to uninstall or install SUs or PEPs, see the procedures in this section.

Important:

If your CallPilot system is up and running, Avaya recommends that you do the following:

1. Perform a system backup.

   For instructions, see To perform a full system backup on page 20.

2. Take CallPilot out of service by disabling all call channels.

   For instructions, see the section on stopping and starting channels in the CallPilot Installation and Configuration Task List (NN44200-306).

Note:

If you have a RAID system, see the CallPilot Maintenance and Diagnostics guide for your server for information on splitting the RAID.

To uninstall an SU or PEP

CallPilot automatically removes obsolete SUs and PEPs when you install new ones; however, there can be times when you want to uninstall a PEP yourself.

1. Log on to the server where you want to begin the uninstallation.

   Use a logon account with administrative privileges (for example, Administrator).

2. From the Windows Start menu, click Programs > CallPilot > System Utilities > PEP Maintenance Utility.

   The DMI Viewer window appears.

3. To view a list of all SUs or PEPs, click Show PEPs.

   A list of all SUs and PEPs appears.

4. Select the SU or PEP you want to uninstall.

   To select multiple SUs or PEPs to uninstall in one operation, hold down the Ctrl key while you make your selections.

5. Click Remove.

   The system prompts you to confirm this choice.

6. Click Yes.

   The system automatically shuts down all services and uninstalls the selected SUs or PEPs. The time it takes to shut down the services and uninstall the SUs or PEPs is based on what they contain. Usually, it takes a minimum of 10 to 15 minutes.

   When the uninstallation is finished, a summary appears:

7. Click OK.

   Note:

   You may be prompted to restart the server.

Chapter 6: Performing an Avaya CallPilot® server platform migration

In this chapter

Using the upgrade process for platform migration on page 33

Using the upgrade process for platform migration

Perform a platform migration when you want to migrate from one Avaya CallPilot® server to another Avaya CallPilot server without losing any existing CallPilot information. The migration path must be from an existing CallPilot platform to another equivalent or larger CallPilot platform.

The process of migrating to a CallPilot 5.1 server is covered in the general process of upgrading to a CallPilot 5.1 system. For more information, see the CallPilot Upgrade and Platform Migration Guide (NN44200-400).

Chapter 7: Expanding Avaya CallPilot® features and adding channels

In this chapter

Expanding features and adding channels on page 35

Reducing the number of reserved CallPilot seats on page 37

Expanding features and adding channels

Introduction

This section summarizes how you add features and configure additional channels. Avaya CallPilot® does not support feature reductions; however, you can reduce the number of channels and seats that were previously allocated. You cannot reduce the number of channels to 0.

Types of expansions

You can expand or add the following types of Avaya CallPilot features:

- channels
- seats (voice/fax/desktop/speech-activated messaging seats, as well as e-mail by phone seats)
- number of MPUs
- features such as Application Builder Fax, Networking, and High Availability
- languages

When you purchase additional features or system capacity, you receive a new keycode.

Expanding to a High Availability server configuration

With the High Availability feature you can configure a pair of peer CallPilot servers; one is active and the other is standing by. If the active server fails, the standby server takes over and end users can connect to the CallPilot server without changing any settings.

You require a new keycode to expand your system to a High Availability configuration; however, both servers use the same new keycode. For more information about High Availability configuration, see the High Availability: Installation and Configuration guide (NN44200-311).

Platform migration and feature expansion

If the feature expansion requires a migration from your current server to a server that provides more capacity, you must perform the platform migration before you can perform the feature expansion.

For instructions on performing a platform migration, see the CallPilot Upgrade and Platform Migration Guide (NN44200-400).

To expand features or add channels

1. Verify the information on the keycode with the CallPilot system configuration, as follows:
   - Ensure that the serial number on the keycode label (Sec. Dev. ID) matches the CallPilot serial number that appears on the CallPilot System Information screen in CallPilot Manager.

     If these two items do not match, your Avaya customer support representative must generate a new keycode so you can perform the feature expansion.
   - Ensure that the feature limits displayed on the keycode label are greater than or equal to the feature limits displayed on the CallPilot System Information screen in CallPilot Manager.

     Features cannot be reduced. For example, if three voice prompt languages are currently installed on the server, you cannot reduce the number of languages to two.

   The number of channels can be reduced, but not to zero.
2. If you are increasing system capacity, do one of the following:
   - Install any additional hardware that was shipped to you (for example, additional cards or boards).

For instructions on installing the new hardware, see the CallPilot <server model> Server Maintenance and Diagnostics guide for your server.

Note:

Expanding the system with the newly-purchased features does not always require additional hardware.

- Ensure that the switch configuration programming matches any new hardware; the switch may require additional programming.
- Migrate your server to the new platform.

  For instructions, see the CallPilot Upgrade and Platform Migration Guide (NN44200-400).

3. Run the CallPilot Configuration Wizard.

   For instructions, see the section on configuring the CallPilot server software in the <switch model> and CallPilot Server Configuration guide for your switch, and the CallPilot Manager online Help.

   In the Configuration Wizard, ensure that you do the following:

   a. Enter the new keycode and serial number.
   b. Configure any new channels.
   c. Install any languages.

4. Configure additional channels on the switch.
5. Restart the server.
6. Test the system to ensure that it works as expected.

   For instructions, see the section on testing the CallPilot software and channels in the <switch model> and CallPilot Server Configuration guide for your switch.

Reducing the number of reserved CallPilot seats

When you upgrade to a new release of CallPilot, you can request a keycode with a reduced number of reserved seats for the following features:

- voice messaging
- fax messaging
- desktop messaging
- speech-activated messaging
- e-mail by phone (TTS)

The Configuration Wizard allows you to enter a keycode with fewer seats, as long as the reduced number is equal to or greater than the number of seats currently configured for the server. Here is an example:

Seat reduction example

Your existing keycode contains 5000 fax messaging reserved seats, but only 2000 of them are currently configured. Your new keycode must have at least 2000 fax messaging reserved seats.

If this is not the case, the Configuration Wizard rejects the seat reduction.

For information about running the Configuration Wizard during an upgrade, see the CallPilot Upgrade and Platform Migration Guide (NN44200-400).

To determine how many seats are currently configured

1. Log on to CallPilot Manager.
2. Click System, and then click Server Settings.
3. In the View Server Settings for list, click Resources.

   The Description column shows the number of seats in the keycode and the Number Used column shows how many seats are configured.

Chapter 8: Installing CallPilot administrative software on a stand-alone Web server

In this chapter

CallPilot Manager requirements on page 39

CallPilot Reporter requirements on page 42

Logging on to the CallPilot server with CallPilot Manager on page 49

Uninstalling CallPilot Manager and CallPilot Reporter software on page 53

Security requirements for an external Web server to obtain technical support on page 53

CallPilot Manager requirements

Introduction

IF you	THEN CallPilot Manager
purchased a new Avaya CallPilot server	is already installed on the Avaya CallPilot server when it ships from the factory.
upgraded your CallPilot server from an earlier release	is automatically installed during the upgrade.

CallPilot Manager is always installed on a CallPilot server. You can also choose to install CallPilot Manager on a stand-alone Web server using the CallPilot Application CD. This section describes what must be installed on the stand-alone Web server before you install CallPilot Manager.

Notes:

- These software requirements are already in place on the CallPilot server. No action is required on the CallPilot server.
- The Avaya technical support personnel use pcAnywhere as a remote support tool. If you require remote support on the stand-alone Web server from Avaya, you must install and configure pcAnywhere on the stand-alone Web server and provide remote access connectivity to the server. Remote access can be through either a modem connected to the server's COM port or another Routing and Remote Access Service (RRAS) equivalent.

  Note:

  Avaya does not provide the license for pcAnywhere on a stand-alone server. The license must be purchased separately.

When to install CallPilot Manager on a stand-alone server

Install CallPilot Manager on a stand-alone server when you

- want to use CallPilot Reporter

  You cannot install CallPilot Reporter on the CallPilot server.
- expect a large amount of Web-based administration traffic, and you want to off-load the work from the CallPilot server

Stand-alone Web server requirements

The CallPilot Manager and CallPilot Reporter Web-based software run on a Microsoft Internet Information Server (IIS). To support encrypted logon and password change dialog boxes, you require IIS support for Secure Sockets Layer (SSL). For more information, see the section on the Web server in the CallPilot Planning and Engineering Guide (NN44200-200).

You can use the same server for end-user Web applications, such as My CallPilot.

The Web server must be running one of the operating systems and components described in the CallPilot Planning and Engineering Guide (NN44200-200). If you are working with an existing Web server, some of the components may already be installed. If components are missing, or if you are installing a Web server for the first time, you must supply your own Web server software.

Note:

The Password Change Service function requires an additional SSL certificate for use with IIS.

Hardware and software requirements

For information on the software and versions to install on a stand-alone server, see the system requirements section of the CallPilot Planning and Engineering Guide (NN44200-200).

Note:

Do not use the CallPilot Image CD or DVD to install the operating system on the stand-alone Web server. The operating system on the CD or DVD is designed, configured, and licensed for use on the CallPilot server only.

Filtering software requirements

Caution:

Risk of incorrect operation

Use caution when installing and configuring e-mail or file filtering software on the CallPilot Manager Web server. The .exe file extension must be allowed for Hypertext Transfer Protocol (HTTP) downloads so that the CallPilot Player installer can be downloaded. If you are installing CallPilot Manager and My CallPilot on the same Web server, the filtering software must also allow Internet message access protocol (IMAP) and HTTP uploads and downloads of the Multipurpose Internet Mail Extensions (MIME) types allowed by the external e-mail servers that you make accessible to My CallPilot.

CallPilot Reporter requirements

Introduction

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, which you can then

- view on the screen
- print on a daily, weekly, or monthly basis
- export to a variety of file formats
- customize for easier reading

CallPilot Reporter is an optional component of CallPilot Manager. If you choose to install CallPilot Reporter, you must install it on the same stand-alone Web server as CallPilot Manager. You cannot install CallPilot Reporter by itself and you cannot install CallPilot Reporter on the Avaya CallPilot® server.

Important:

The FTP publishing service must be enabled for CallPilot Reporter to function.

Web server requirements

The CallPilot Manager and CallPilot Reporter Web-based software run on a Microsoft Internet Information Server (IIS). Because CallPilot Reporter must be installed on the same Web server as CallPilot Manager, the Web server requirements are the same as for CallPilot Manager. For more details, see Stand-alone Web server requirements on page 40 and the CallPilot Planning and Engineering Guide (NN44200-200).

During installation, Crystal Reports and a Sybase database are installed on the Web server.

Compatibility with other CallPilot releases

For information on CallPilot Reporter compatibility, see the CallPilot Planning and Engineering Guide (NN44200-200).

Printing reports

To print reports on a network printer from the Web server (rather than from a client computer Web browser), change the CallPilot Reporter service credentials to a user account with network access privileges. (The CallPilot Reporter service credentials are set by default to LocalSystem.) For more information, see the CallPilot Reporter Guide (NN44200-603).

Disk space requirements

You need disk space on the Web server to store operational measurement data collected by CallPilot. The amount of space depends on the amount of CallPilot traffic and the length of time you want to keep the data. To keep one month of data, allow

- a minimum of 200 Mbytes of space for a smaller system
- up to 1 Gbyte of space for a 96-channel system

Note:

On a 96-channel system at full load, 1 hour of usage data consumes about 2 Mbytes on the Web server.

Port requirements

The following ports must be enabled when using a firewall:

- TCP port 20 (FTP)
- TCP port 21 (FTP)
- TCP port 135 (DCOM)
- UDP port 135 (DCOM)

- TCP port 143 (IMAP)
- TCP port 389 (LDAP)
- TCP port 636 (LDAP)
- TCP port 993 (IMAP)
- TCP ports 1024 to 65535 (DCOM)
- UDP ports 1024 to 65535 (DCOM)

Installing CallPilot Manager and feature sub-sets

Introduction

Before attempting to install CallPilot Manager and feature sub-sets, such as Reporter and Password Changer Service, on a stand-alone Web server, install the prerequisite components. For more details, see CallPilot Manager requirements on page 39.

Required materials

To install the CallPilot Manager and sub-set applications on a stand-alone Web server, you need one of the following:

- CallPilot Application CD
- CallPilot PEP CD

Note:

The PEP CD can contain an updated version of the CallPilot Manager installation software if fixes were made to the software after the Server Software CD was released.

To install the CallPilot Manager and sub-set software

Important:

This procedure applies only if you are installing CallPilot Manager and additional software on a stand-alone Web server. No action is required on the CallPilot server.

1. Insert the CallPilot Application CD or the PEP CD into the drive.

If your client or Web server is not running Citrix, continue to step 2. If it is running Citrix, complete the following substeps:

a. From the Windows Start menu, click Settings > Control Panel > Add/Remove Programs.
b. Click Add New Programs.
c. Click the CD or Floppy button.
d. Browse to Z:\cpmgrsetup.exe.
e. Proceed to step 5.

2. From the Windows Start menu, click Run.

   The Run dialog box appears.

3. Click Browse.

   The Browse dialog box appears.

4. Do one of the following:

IF you are using the	THEN
CallPilot Application CD	navigate to the CallPilotInstall folder on the Application CD.
PEP CD	navigate to the CallPilotManagerInstall folder on the SU or PEP CD.

5. Double-click the cpmgrsetup.exe file, and then click OK.

   Note:

   If file name extensions are not visible, click View > Details to make them visible. Make certain the option Hide extensions for known file types in Folder Options is unchecked.

   Important:

   Do not confuse the cpmgrsetup.exe file with the cpmgr.exe file, which also resides in the root folder on the CallPilot Application CD.

   If you execute the cpmgr.exe file, the program terminates immediately without installing anything. You receive an error message that cpmgr.exe cannot be executed without the appropriate data file.

   The cpmgr.exe file is executed automatically by the cpmgrsetup.exe file. It cannot be run on its own.

   You are asked to select the options to install.

6. Select all additional applications you want to install and then click OK.

   A message asks you if you want to continue.

7. Click OK.

CallPilot Manager installation begins. During the installation, the Application Installer

- displays a progress bar that indicates the percentage that is completed.
- highlights each item on the splash screen as it is processed.

When CallPilot Manager installation is finished, the Application Installer automatically begins to install the CallPilot Reporter software, if you chose to install it. (The screen title changes to reflect this.)

When all additional software installation is finished, the CallPilot Manager Installation Completed dialog box appears:

8. Click Finish.

   The Application Installer closes.

9. Restart your server.

To configure Windows 2003 with SP1 for CallPilot Reporter

Completing this procedure involves (a) adding a Network group with Remote Activation to My Computer, (b) adding a Network group with Remote Activation to CallPilot Reporter, and (c) adding a Network Service group with Local Launch and Local Activation permissions to CallPilot Reporter. These steps are explained in detail.

1. To add a Network group with Remote Activation permissions to My Computer:

   a. From the Windows Start menu, click Settings > Control Panel.

   b. Double-click Administrative Tools, and then double-click Component Services.

   c. In the left pane of the Component Services window, select Component Services.

   d. In the right pane of Component Services, double-click Computers.

   e. In the right pane of Component Services, right-click My Computer, and then select Properties.

   f. In the My Computer Properties window, click the COM Security tab.

   g. Go to the Launch and Activation Permissions area and click Edit Default to modify permissions for users or groups.

      The Launch Permission window appears.

   h. Click Add, and then click Advanced.

      The Select Users, Computers, or Groups window appears.

   i. Click Find Now.

      The Select Users, Computers, or Groups window displays a list of users and groups.

   j. Select NETWORK, and then click OK.

   k. Click OK.

l. In the Launch Permission window, go to the Permissions for NETWORK area. Under the column heading Allow, select the check box next to Remote Activation. When you select this check box, the system grants Remote Activation permission to the NETWORK group.

m. Click OK.

n. Click OK to return to the My Computer icon.

2. To add a Network group with Remote Activation to CallPilot Reporter:

   a. Double-click My Computer, and then double-click the DCOM Config folder.

   b. Right-click the CallPilot Reporter folder, and then select Properties.

   c. Click the Security tab.

   d. In the Launch and Activation Permissions area, click Customize, and then click Edit to modify the group or user.

      The Launch Permission window appears.

   e. Click Add, and then click Advanced.

      The Select Users or Groups window appears.

   f. Click Find Now.

      The Select Users, Computers, or Groups window displays a list of users or groups.

   g. Select Network, and then click OK.

   h. Click OK,

   i. In the Permissions for NETWORK area and under the column heading Allow, select the check box beside Remote Activation so that the system grants Remote Activation permission to NETWORK.

   j. Click OK, and then click OK again to return to the window that displays the contents of the DCOM Config folder.

3. To add a Network Service group with Local Launch and Local Activation permissions to CallPilot Reporter:

   a. Right-click the CallPilot Reporter folder and select Properties.

   b. Click the Security tab.

   c. In the Launch and Activation Permissions area, click Customize, and then click Edit to modify the group or user.

      The Launch Permission window appears.

   d. Click Add, and then click Advanced.

      The Select Users or Groups window appears.

   e. Click Find Now.

      The Select Users or Groups window displays a list of users or groups.

f. Select NETWORK SERVICE, and then click OK.

g. Click OK.

h. In the Permission for NETWORK SERVICE area and under the column heading Allow, select the check box beside Local Launch and the check box beside Local Activation so that the system grants these privileges to NETWORK SERVICE.

i. Click OK, and then click OK again.

4. Restart the system.

To configure the CallPilot server to work with Reporter

When you configure your CallPilot server, the following procedure is included in the configuration procedure on the factory CD.

1. From the Windows Start menu, click Settings > Control Panel.
2. Double-click Administrative Tools, and then double-click Component Services.
3. In the left pane of the Component Services window, double-click Component Services, and then double-click Computers.
4. In the right pane of Component Services, double-click My Computer, and then double-click the DCOM Config folder.
5. Right-click the nmaos folder and select Properties.
6. Click the Security tab.
7. In the Launch and Activation Permissions area, click Customize, and then click Edit.
8. For the Anonymous Logon group listed in the Group of user names area, ensure that the check boxes under the column title Allow are selected for: Local Launch, Local Activation and Remote Activation. When you select these check boxes, these permissions are granted for the Anonymous Logon group.
9. Click OK, and then click OK again.

Verifying IP and FQDN resolution

Important:

Verify that the CallPilot server and Reporter are properly configured to work with each other over the network. Verify that you can ping the CallPilot server from the Reporter server and the Reporter server from the CallPilot server, both by name and IP address.

1. From the Windows Start menu, select the command prompt (typically found under the Programs/Accessories submenu).
2. A new window appears with the Command Prompt C:\. From the command prompt, issue a ping command to the CallPilot server IP address as follows: `ping <CallPilot server IP address>` from the Reporter Server. `ping <Reporter server IP address>` from the CallPilot server.

If the response is request timed out, then issue a ping command to the fully qualified domain name (FQDN) of the CallPilot server as follows: `ping <CallPilot` FQDN> from the Reporter Server. `ping <CallPilot` FQDN> from the CallPilot server.

If you receive a ping response from the IP address but not the server name, check the following:

If you have a DNS server

- Ensure that DNS is configured on the CallPilot server and Reporter server. Under **TCP/IP** properties, select the **DNS** tab. Ensure that a DNS server is listed. Verify the IP address for the DNS server.
- Check with the DNS administrator whether the server name is on the DNS server. Verify that the correct host name is configured on the DNS server.

If you do not have a DNS server

- Set up domain name resolution using a HOSTS file on both servers. For details about setting up a HOSTS file, see the CallPilot Manager Online Help.

What is next?

Test connectivity to the CallPilot server by logging on to the CallPilot server. For instructions, see Logging on to the CallPilot server with CallPilot Manager on page 49. For instructions on logging in and using CallPilot Reporter, see the CallPilot Reporter Guide (NN44200-603).

Logging on to the CallPilot server with CallPilot Manager

Introduction

You must use a Web browser to log on to and administer the CallPilot server.

The logon process has two stages:

- Launch the Web browser (on the CallPilot server, or on any PC that has network access to the CallPilot server).

  The Web browser on the CallPilot server is configured to connect automatically to the CallPilot Manager Web server. If you launch the Web browser on a PC, you must specify the URL for the CallPilot Manager Web server. The URL syntax is

http://<Web server host name or IP address>/cpmgr/

- Log on to the CallPilot server with an administrator mailbox number and password.

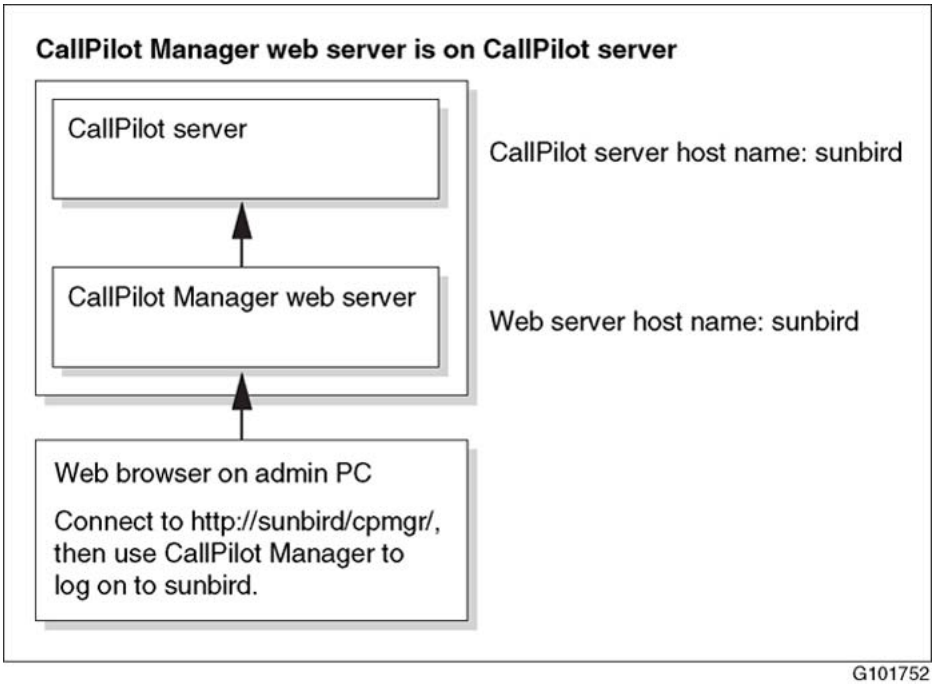
Relationship of the CallPilot Manager Web server to the CallPilot server

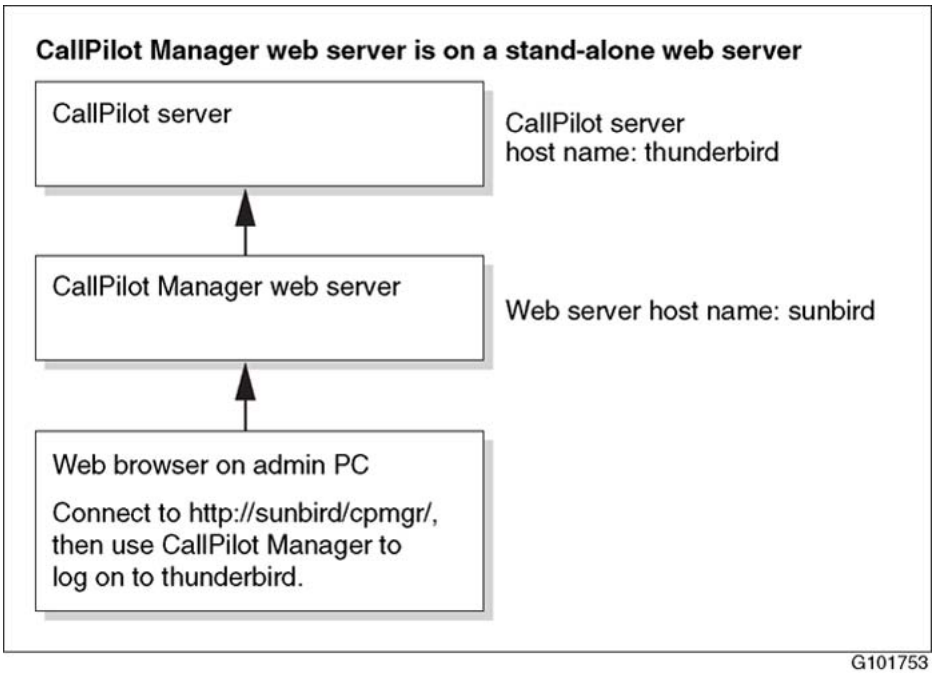
The CallPilot Manager Web server software is always installed on the CallPilot server. You can also install it on a stand-alone server. If you install the CallPilot Manager software on a stand-alone server, you must know the CallPilot Manager server host name or IP address, as well as the CallPilot server host name or IP address.

See the following diagrams:

Note:

For instructions on how to install CallPilot Manager on a stand-alone Web server, see Installing CallPilot Manager and feature sub-sets on page 44.





To log on to the CallPilot server

1. Launch the Web browser on a PC or on the CallPilot server.

IF you are launching the Web browser on	THEN
the CallPilot server	the CallPilot Manager - Login screen appears automatically. Continue with step 2 on page 52.

IF you are launching the Web browser on	THEN
your PC	enter the CallPilot Manager Web server URL in the Address or Location box of your Web browser, and then press Enter. Example: http://sunbird/cpmgr/ When the connection is established, the CallPilot Manager - Login screen appears. Continue with step 2 on page 52.

2. Enter the administrator mailbox number and password.

   The administrator mailbox number is 000000. The default password is 124578.

3. Do one of the following:

   - Enter a server or location by one of the following methods:
     - choosing the list of preconfigured servers or locations in the Preset server list box
     - choosing the Last Server Accessed item
     - entering the address manually
   - Type the CallPilot server host name or IP address in the Server box.

     Note:

     If you are logging on to the CallPilot server from a PC, type the actual CallPilot server name or IP address in the Server box. If you type local host instead of the CallPilot server name or IP address, you cannot establish an Application Builder connection to the CallPilot server from CallPilot Manager or make calls to the telephone to play or record greetings.

   - If the CallPilot server that you are connecting to has Network Message Service (NMS) installed, type the CallPilot server host name or IP address in the Server box, and then type the name of the switch location on which the administration mailbox resides in the Location box.

4. Click Login.

   The main CallPilot Manager page appears.

   Note:

   Logging on for the first time forces you to change the password using numeric characters. (This is not a strong password, as described in the CallPilot Fundamentals Guide (NN44200-100).

Uninstalling CallPilot Manager and CallPilot Reporter software

Before you begin

Important:

Ensure that you close all applications before you uninstall CallPilot Manager and CallPilot Reporter.

To uninstall CallPilot Manager, CallPilot Reporter, and Password Change Service software

1. From the Windows Start menu, click Control Panel > Add or Remove Programs.
2. Select either CallPilot Manager or CallPilot Reporter.

   Note:

   If you remove CallPilot Manager, you automatically remove CallPilot Reporter and Password Change Service.
3. Click Change/Remove.

   A message asks you to confirm your choice.
4. Click Yes.

   The software is removed from the Web server.

Security requirements for an external Web server to obtain technical support

This section describes the access rights and permissions that are required for Windows accounts to obtain technical support for a CallPilot Manager or CallPilot Reporter that is already installed or will be installed on a standalone Web server.

This section is applicable when pcAnywhere is used as a remote support tool or technical support personal access Web server directly.

Depending on the activity, support personnel may require different access rights and permissions to complete the planned activity. Avaya recommends that you create two separate Windows accounts (AvayaAdmin and AvayaSupport) with the following security settings.

The following activities require full administration rights and privileges (AvayaAdmin).

- Installing CallPilot Manager or CallPilot Reporter software on a Web server.
- Upgrading CallPilot Manager or CallPilot Reporter software to the latest release.
- Uninstalling CallPilot Manager or CallPilot Reporter software from a Web server.
- Saving Windows Event logs (both application and system) in any format (*.evt, *.txt, *.csv).
- Relocating the CallPilot Reporter database to another location (if CallPilot Reporter is installed).
- Registering or un-registering COM servers

The newly created windows account must be a member of the Administrators local group. The account has all the necessary access right and permissions by default, however, it is necessary to restrict access to some resources. Ensure that the following access rights remain available.

- Provide full control to the following folders and content:
  - <System drive>:\
  - <System root>\
  - <System drive>:\inetpub\wwwroot
- Provide Read/Write access to the following Registry keys:
  - HKEY_LOCAL_MACHINE\Software\
  - HKEY_LOCAL_MACHINE\System\
  - HKEY_CLASSES_ROOT\
  - HKEY_CURRENT_USER\Software

Other activities that do not pertain to installing CallPilot Manager or CallPilot Reporter do not require full administration rights (AvayaSupport). These activities include:

- Gathering CallPilot Manager and CallPilot Reporter log files.
- Changing CallPilot Reporter log settings (if CallPilot Reporter installed).
- Installing diagnostic patches for CallPilot Manager and CallPilot Reporter.
- Accessing the CallPilot Reporter database using Sybase Anywhere utilities (if CallPilot Reporter is installed).
- Saving (exporting) Windows Application and System Event logs into a text file (*.txt or *.csv)

These activities require a Windows account that is a member of the Users local group for Windows 2003 and Windows 2000 systems or the Power Users local group for Windows NT. The following access rights and permissions must be configured.

- Provide full control to the following folders and content:
  - <System drive>:\Nortel\
  - <System drive>:\inetpub\wwwroot\cpmgr\
  - <System drive>:\CallPilot\
  - <System drive>:\SQLANY\ (if CP Reporter installed)
  - Location of the CallPilot Reporter database (if CallPilot Reporter is installed and the database has been relocated).
- Provide Read/Write access to the Registry key HKEY_LOCAL_MACHINE\SOFTWARE \Nortel.
- Provide permissions to Start/Stop/Pause the following services:
  - CallPilot Reporter service (cpwr) (if CallPilot Reporter is installed)
  - World Wide Web Publishing Service (w3svc)
  - SQL Anywhere - CallPilot Reporter (ASANYs_cprpt) (if CallPilot Reporter is installed)
- Provide Read/Write access to Windows Application and System event logs.
- Configure permissions to log on locally.

Chapter 9: Installing the Directory Synchronization Extension

In this chapter

Introduction on page 57

Installing the Directory Synchronization Extension on page 58

Maintenance on page 58

Uninstalling Directory Synchronization Extension on page 60

Introduction

If your site uses an Active Directory server, you can install and use the Directory Synchronization Extension included on the Application CD to:

- create new Avaya CallPilot® users
- link to an existing CallPilot user
- delete an existing CallPilot user
- unlink an existing CallPilot user
- define CallPilot servers that are used for the above operations

Important:

This installer does not run on the CallPilot server. You can run the installer only on the computer where the Active Directory Users and Computers MMC snap-in is already configured and regularly used.

Installing the Directory Synchronization Extension

To install the Directory Synchronization Extension

1. Ensure that you are logged on to the server where you want to begin Directory Synchronization Extension installation.

   Use a logon account that has administrative privileges to Active Directory (for example, Administrator).
2. Insert the CallPilot Application CD into the drive.
3. Click Start > Run.

   The Run dialog box appears.
4. Click Browse.
5. Navigate to the following path:

   Z:\Directorysync
6. Double-click the setup.exe file, and then click OK.

   The Welcome to the InstallShield Wizard for Avaya CallPilot Directory Synchronization dialog box appears.
7. Click Next.

   The Ready to Install dialog box appears.
8. Click Install.

   The InstallShield Wizard Completed dialog box appears.
9. Click Finish.

   The Directory Synchronization Extension is installed.

Maintenance

Once the Directory Synchronization Extension is installed, you can run setup.exe to alter it. Setup.exe switches to maintenance mode. Similar to the installation mode, maintenance mode shows which features are installed and permits you to repair corrupted files or remove the Directory Synchronization Extension.

To repair the Directory Synchronization Extension

1. Ensure that you are logged on to the server where you want to begin Directory Synchronization Extension repair.

Use a logon account that has administrative privileges to Active Directory (for example, Administrator).

2. Insert the CallPilot Application CD into the drive.
3. Click Start > Run.

   The Run dialog box appears.
4. Click Browse.
5. Navigate to the following path:

   Z:\Directorysync
6. Double-click the setup.exe file, and then click OK.

   The Welcome to the InstallShield Wizard for Avaya CallPilot Directory Synchronization dialog box appears.
7. Click Next.

   The Program Maintenance dialog box appears.

   Note:

   Repair and Remove options appear. You cannot modify the Directory Synchronization Extension.
8. Choose Repair.
9. Click Next.

   The Ready to Repair dialog box appears.
10. Click Install.

    Directory Synchronization Extension is reinstalled and corrupted files are fixed. The InstallShield Wizard Completed dialog box appears.
11. Click Finish.

To remove the Directory Synchronization Extension

You can also remove Directory Synchronization Extension from the Add and Remove Programs Control Panel applet. See Uninstalling Directory Synchronization Extension on page 60.

1. Ensure that you are logged on to the server where you want to begin Directory Synchronization Extension removal.

   Use a logon account that has administrative privileges to Active Directory (for example, Administrator).
2. Insert the CallPilot Application CD into the drive.
3. Click Start > Run.

   The Run dialog box appears.
4. Click Browse.

5. Navigate to the following path:

   Z:\Directorysync

6. Double-click the setup.exe file.

   The Welcome to the InstallShield Wizard for Avaya CallPilot Directory Synchronization dialog box appears.

7. Click Next.

   The Program Maintenance dialog box appears.

8. Choose Remove, and then click Next.

   The Remove the Program dialog box appears.

9. Click Remove.

   The Preparing To Remove dialog box appears. When finished, the Removing window opens.

   The system automatically shuts down all services.

Uninstalling Directory Synchronization Extension

Before you begin

Important:

Ensure that all applications are closed prior to uninstalling Directory Synchronization Extension.

To uninstall Directory Synchronization Extension

You can uninstall CallPilot Directory Synchronization Extension from the setup.exe application in maintenance mode (see To remove the Directory Synchronization Extension on page 59) or from the Add or Remove Programs Control Panel applet described in the following steps.

1. From the Windows Start menu, click Settings > Control Panel > Add or Remove Programs.
2. Select Avaya CallPilot Directory Synchronization.
3. Click Remove.

   The Confirmation dialog box appears.

4. Click Yes.

The Preparing To Remove window opens. When finished, the Removing window opens. The uninstallation of CallPilot Directory Synchronization Extension completes.

The system automatically shuts down all services.

Chapter 10: Recovering system software

In this chapter

Introduction on page 63

Viewing installation and configuration log files on page 66

Reinstalling languages on page 67

Uninstalling and installing pcAnywhere on page 68

Reinstalling CallPilot server software on page 69

Installing and configuring D/480JCT-2T1 Intel board software on page 73

Rebuilding the 201i server from the disk image on page 80

Rebuilding the 202i server from the disk image on page 83

Rebuilding the 1002rp or 703t server from the disk image on page 86

Rebuilding the 1006r, 1005r or 600r server from the disk image on page 89

Recovering a hard drive on page 91

Introduction

The Avaya CallPilot® server ships from the factory with software already installed. If CallPilot server software or hardware fails to function properly, you may need to reinstall software or replace hardware. Recovering a system can involve one of the following tasks:

Task	Procedures
Reinstalling languages	• Reinstalling languages on page 67

Task	Procedures
Installing or reinstalling applications from the Application CD	• Uninstalling and installing pcAnywhere on page 68 • Reinstalling CallPilot server software on page 69 • Installing and configuring D/480JCT-2T1 Intel board software on page 73
Rebuilding all system software from the image CD or DVD	• Rebuilding the 201i server from the disk image on page 80 • Rebuilding the 202i server from the disk image on page 83 • Rebuilding the 1002rp or 703t server from the disk image on page 86 • Rebuilding the 1006r, 1005r or 600r server from the disk image on page 89
Replacing and rebuilding the hard drive	• Recovering a hard drive on page 91

Important:

If a hardware recovery is required, contact your Avaya representative.

Determining your recovery strategy

IF	THEN
• the language prompts are generating alarms on the CallPilot server • errors appeared while installing the languages • there is dead air when you dial into the CallPilot system	you may need to reinstall the languages. For instructions, see Reinstalling languages on page 67
• the CallPilot server is not functioning • errors that indicate incomplete or incorrect installation appeared during the CallPilot software installation	you may need to reinstall the CallPilot server software. For instructions, see: Reinstalling CallPilot server software on page 69 **Note:** If reinstalling CallPilot server software from the Application CD fails to restore system operation, contact your Avaya

IF	THEN
	representative before using the CallPilot Image CD or DVD.
• pcAnywhere cannot connect to the server	you may need to reinstall pcAnywhere. For instructions see: Uninstalling and installing pcAnywhere on page 68
• the server is a new system and it failed while (or shortly after) running the Configuration Wizard	you may need to rerun the Configuration Wizard. For instructions, see the section about running the Configuration Wizard in the <switch model> and CallPilot Server Configuration guide for your switch. **Note:** If this does not fix the problem, contact your Avaya technical support representative.
• a RAID card failed	replace the faulty RAID card. For instructions, see the CallPilot <server model> Server Maintenance and Diagnostics guide for your server.
• a single hard drive in a RAID system failed	replace the faulty hard drive as soon as possible to maintain hard drive redundancy. Then, you must rebuild the hard drive in the RAID system pack by running the RAID administration software. For instructions on replacing the hard drive and running the RAID administration software, see the appropriate RAID operations section in the CallPilot <server model> Server Maintenance and Diagnostics guide for your server.
• the hard drive on a non-RAID system failed • both hard drives of a RAID system in a mirrored pair failed	replace the hard drive, and then rebuild and restore the CallPilot system (if a backup tape is available). **Important:** The rebuilt system must contain the same version of the operating system and CallPilot software (including any PEPs) that were present during the last backup. If there are any differences in software between the rebuilt system and the last backup, the restore from tape fails. For instructions on rebuilding the system, see Recovering a hard drive on page 91.

Before recovering system software, perform a System Health Check. See System Health Check on page 13.

Viewing installation and configuration log files

Introduction

If your CallPilot server is experiencing operational problems after installation or upgrade, you can review log files to determine if the problem is related to installation errors, configuration errors, or both.

Installation or upgrade event log file

The installation logs for CallPilot server software and CallPilot Manager software track the activities associated with any installation, reinstallation, upgrade, or uninstallation operation. The logs also track any fatal errors that interrupt these operations.

To review the installation log files, use any text editor, such as Notepad. The files are located on the server as follows:

Log file	Location
CallPilot server software installation log	c:\CallPilot\CallPilot.log
CallPilot Manager software installation log	c:\CallPilot\CPManager.log
CallPilot Upgrade Wizard log	d:\Nortel\data\Upgradewizard.log
CallPilot Setup Wizard log	c:\CallPilot\Callpilot.log
CallPilot operating system installation log	c:\os_ver.txt (operating system OS version, creation date, platform type)
	c:\cp_ver.txt (build number, creation time, platform type)
CallPilot Reporter log on a stand-alone system	c:\CallPilot\Reporter.log

Configuration Wizard log file

When an error occurs during configuration, an event or return code is recorded in the Configuration Wizard log file. To view the Configuration Wizard log file, use any text editor, such as Notepad. The file is located on the server in d:\Nortel\bin\Configwizard.log.

If you can log on to the CallPilot server with CallPilot Manager, you can see the Event Code online Help in CallPilot Manager for an interpretation of the event and return codes. If you are not able to log on to the CallPilot server with CallPilot Manager, contact your Avaya technical support representative.

Reinstalling languages

If the server is functioning but only the language prompts are not (for example, no prompts are played when you log on), you can reinstall languages to try to fix the problem.

Note:

Language reinstallation does not affect custom prompts.

Note:

You cannot uninstall a specific language that has been installed.

Important:

If you encounter problems when reinstalling the language prompts, contact your Avaya customer support representative.

Impact of language reinstallation on custom prompts

Language reinstallation does not affect custom prompts. The language reinstallation process backs up and restores the custom prompts automatically.

Requirements

To reinstall languages, you need the appropriate CallPilot Language CD.

To reinstall languages

1. Log on to the CallPilot server with CallPilot Manager.

   For instructions, see Logging on to the CallPilot server with CallPilot Manager on page 49.
2. On the main CallPilot Manager page, click Configuration Wizard.
3. On the Configuration Wizard Welcome dialog box, click Next.
4. On the Configuration Mode dialog box, select Express Mode, and then click Next.
5. On the Express Configuration List dialog box, select Language Installation, and then click Next.
6. When you reach the Language Source Directory dialog box, insert the CallPilot Language CD into the drive.
7. Type the path to the root directory of the CD, and then click Next.
8. On the Language Installation dialog box, select the language(s) and primary or/and secondary languages to install, and then click Next.
9. On the Ready to Configure dialog box, click Finish.
10. Wait for the Progress Information dialog box to indicate the installation is complete.

    The configuration changes are applied to the server. The configuration changes can take 10 to 15 minutes to apply each language. When completed, you are prompted to restart the server.
11. Restart the server.
12. Test the system to ensure it operates as expected.

    For instructions, see the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.

Uninstalling and installing pcAnywhere

On TRP servers, one licensed copy of the pcAnywhere host is installed on the CallPilot server at the factory.

Administrators can use pcAnywhere over a dial-up, direct cable, or network connection to

- query server event logs
- shut down and restart the server
- perform limited file transfers between the personal computer and the CallPilot server
- start CallPilot Manager and use it to monitor the system and perform administration tasks
- use local Windows System Tools to maintain the CallPilot server

For more information about pcAnywhere, see the sections on configuring pcAnywhere in the CallPilot Administrator's Guide (NN44200-601) and changing pcAnywhere passwords in the <switch model> and CallPilot Server Configuration guide for your switch and server.

To uninstall from Add/Remove Programs in the Control Panel

1. Exit all open applications and stop the pcAnywhere host service.
2. From the Windows Start menu, click Settings > Control Panel.
3. Double-click the Add/Remove Programs icon.
4. Select Symantec pcAnywhere.
5. Click Remove.
6. Click Yes to remove the program.

To install pcAnywhere on a CallPilot server

1. Insert the CallPilot Application CD or Upgrade CD into the drive.
2. Go to the pcAnywhere folder.
3. Double-click pcAnywhereInstaller.exe.

   pcAnywhere is installed.

Reinstalling CallPilot server software

Recovering from a software malfunction

You can use the CallPilot Application CD to reinstall CallPilot server software without a complete reimage of the server.

What reinstallation does

The reinstallation procedure copies CallPilot program files from the CallPilot Application CD to a CallPilot system running the same version of CallPilot software.

The CallPilot server is shipped from the factory with software already installed. However, if the system starts but is not functioning correctly (for example, if it is generating error messages), you can reinstall the CallPilot server software from the Application CD. This may correct the problem.

What reinstallation does not do

Reinstallation does not recover SUs or PEPs. These must be reinstalled manually after you reinstall the CallPilot server software.

Important:

If you encounter problems when reinstalling the CallPilot software, contact your Avaya customer support representative.

If reinstallation does not restore system operation

Note:

Contact your Avaya representative before using the CallPilot Image CD to rebuild the system.

For information on reinstalling the operating system and CallPilot server software, see:

- Rebuilding the 201i server from the disk image on page 80
- Rebuilding the 202i server from the disk image on page 83
- Rebuilding the 1002rp or 703t server from the disk image on page 86
- Rebuilding the 1006r, 1005r or 600r server from the disk image on page 89

Requirements

To recover from corrupted software, you need the following items:

- the CallPilot Application CD that has the same release that is running on the CallPilot server
- the CallPilot PEP CD
- the CallPilot Language CDs
- the current password for the Administrator account

Important:

When you reinstall the server software, all SUs and PEPs are lost. Record all SUs and PEPs installed previously to aid in reinstalling them. To determine which SUs and PEPs are installed, use the PEP Maintenance Utility as described in the CallPilot Maintenance and Diagnostics guide for your server.

Important:

For security reasons, Avaya recommends that you disconnect the CallPilot system from the Avaya server subnet before you reinstall the system software.

Caution:

Risk of system interruption or malfunction

Do not download and install any IIS security patches from the Microsoft Web site unless they have been approved for CallPilot by Avaya. Installation of unapproved security patches may result in incorrect operation of your CallPilot system.

To determine the patches Avaya has approved, see the latest issue of the CallPilot Distributor Technical Reference.

To install the CallPilot server software

1. Log on to the CallPilot server as an administrator.
2. Open the PEP Maintenance Utility at Start > Programs > CallPilot > System Utilities > PEP Maintenance Utility, and then write down the PEPs and SUs currently installed.
3. Uninstall all PEPS shown in PEP Maintenance Utility.
4. Insert the CallPilot Application CD into the drive.
5. Click Start > Run.
6. Click Browse, and then navigate to drive Z.
7. Double-click the setup.exe file that is located in the CallPilotInstall folder.
8. Click OK.

   The Application Installer asks you to confirm the installation.
9. Click OK.

   The installation continues. During the installation, the Application Installer:

   - displays a progress bar that indicates the installation percentage that is completed
   - highlights each item on the splash screen as it is processed

   A dialog box appears, prompting you to select a platform type from a list.
10. Do the following:

If your server model	THEN
appears in the list	click the model, and then click OK. CallPilot updates the operating system registry with the model that you selected.

If your server model	THEN
does not appear in the list	the server model you are using was introduced after this guide was released. Do the following: a. Click Have Disk. b. Insert the floppy disk or CD that was provided with your server into the floppy disk drive on the server. c. Locate and select the platform file you want to use, and then click Open. CallPilot updates the operating system registry with the model that you selected.

A dialog appears to confirm your platform selection.

11. Click OK.

    Installation continues. While it is finishing, the Application Installer automatically begins installing the CallPilot Manager software.

    When the CallPilot Manager software installation is finished:

    a. Remove the CD from the drive.
    b. Click Finish.
    c. Restart the server.

To install the PEPs and SUs and configure the server

The SU and PEP CDs supplied with your system were current at the time the product was released. To ensure you have the latest PEP and SU updates, visit http://support.avaya.com/css/appmanager/public/support

1. After the CallPilot server software is installed, insert the CallPilot PEP and SU CD into the drive, and reinstall the PEPs and SUs you had before.

   For instructions, see Installing Service Updates and Performance Enhancement Packages on page 25.

2. After all PEPs are reinstalled, restart the server.
3. Log on to the server with CallPilot Manager.
4. On the main CallPilot Manager window, click Configuration Wizard, and continue through the wizard as follows:

   a. Click Next on each Configuration Wizard dialog box to keep the current values.
   b. When you reach the Language Source Directory dialog box, insert the CallPilot Language CD into the drive, and then install the languages.
   c. Click Next through the remaining Configuration Wizard windows.
   d. On the last window, to apply the current configuration, click Finish.

A message informs you that applying your changes takes the server out of service.

e. Click OK.

The configuration changes are applied to the server.

Note:

The configuration changes can take up to 1 hour to apply.

You are then prompted to restart the server.

f. Restart the server.

5. Test CallPilot. For instructions, see the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.

Installing and configuring D/480JCT-2T1 Intel board software

The procedures on installing and configuring Intel D/480JCT-2T1 boards apply only to T1/SMDI systems on 1002rp servers.

Normally, you do not need to install and configure the Intel board software. The software is installed and configured on the CallPilot server at the factory.

The CallPilot Image CD also contains preconfigured Intel board software. No separate installation and configuration is required if you need to perform a complete system recovery. For more information on recovering system software, see Reinstalling CallPilot server software on page 69.

In a case where you want to reinstall only the Intel board software using the Application CD, see:

- To install the Intel board software on page 73
- To configure Intel board software on page 75

For a list of configuration parameters, see the Table 2: CTBus parameters table on page 79.

Note:

You can install Intel board software before or after you install CallPilot Server software. However, you must install the Intel software before you run the CallPilot Configuration Wizard.

To install the Intel board software

1. Insert the CallPilot Application CD into the drive.

Note:

The Intel Dialogic installation software starts automatically when you insert the CD in the drive, or you can start the installation by running setup.exe.

2. Click Install Intel Software in the Intel Dialogic System window.
3. In the Welcome to Intel Dialogic dialog box, click Next .
4. In the Customer Information dialog box, type the user name and company name, and then click Next.

Note:

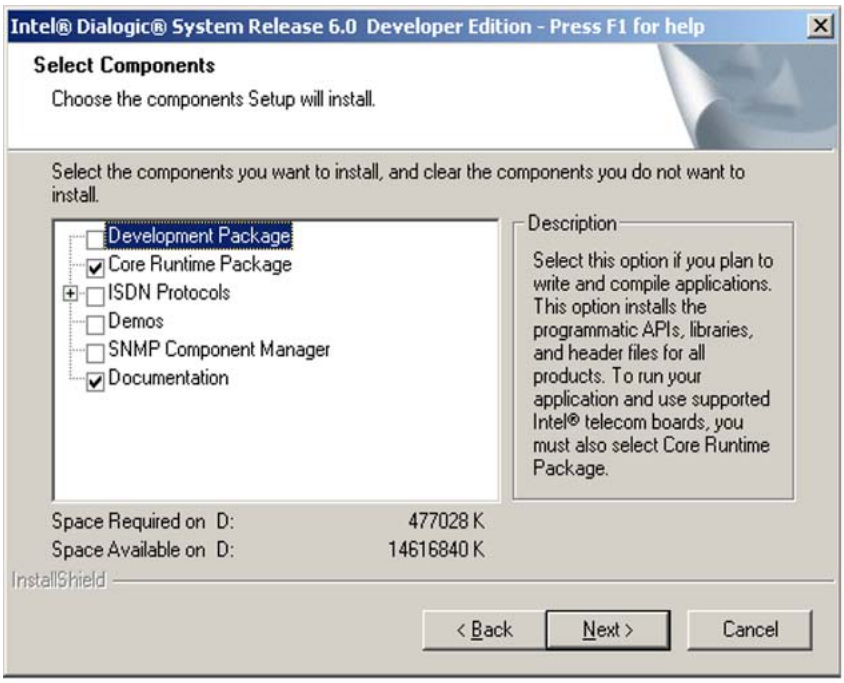
Use the user name and company name you entered for the operating system.

5. In the Choose Destination Location dialog box, click Browse to create a directory where the setup process will copy files.

   The Choose Directory dialog box appears.
6. In the Path box, type D:\Dialogic, and then click OK.
7. Click Yes in the pop-up window that asks if you want to create the directory.

   The Destination Location dialog box appears again, showing the new directory.
8. In the Destination Location dialog box, click Next .

   The Select Components dialog box appears.



9. Select the software components you want to install, and then click Next.

Note:

As a minimum, you must select Core Runtime Package.

When the files are copied, a message asks if you would like to continue with the installation.

10. Click Yes to continue with the procedure To configure Intel board software on page 75 in the following section. Otherwise, click No to quit before configuring the Intel software.

    The installation finishes and the system restarts.

11. Remove the Application CD from the drive.

To configure Intel board software

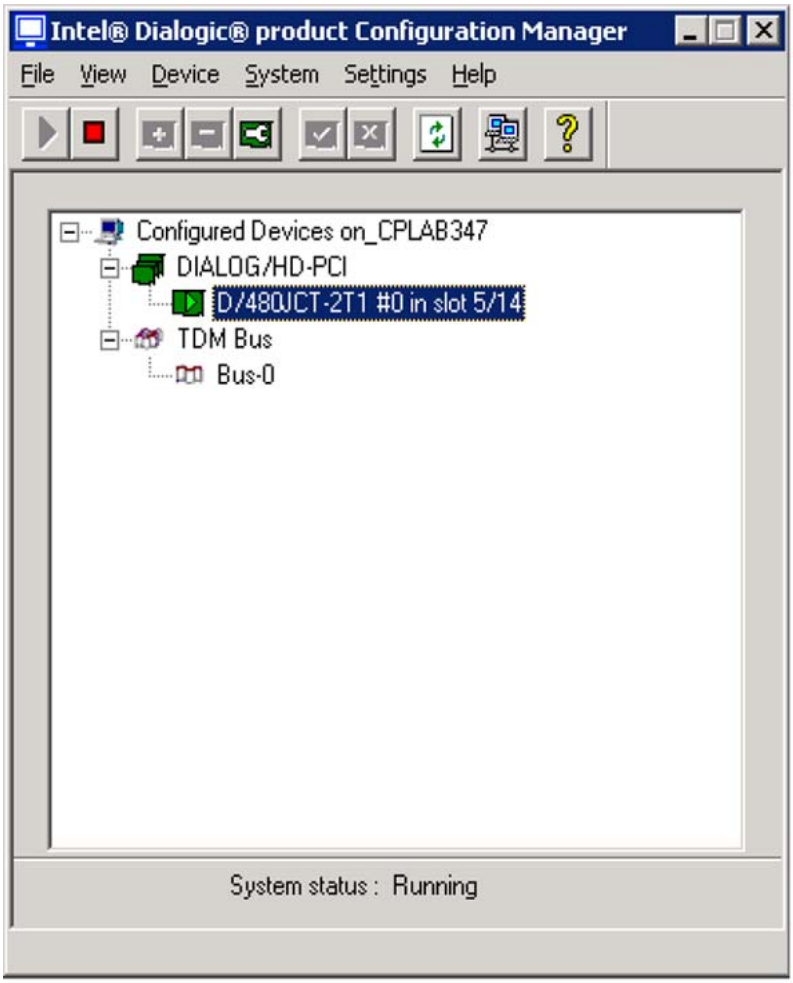
Configure the Intel board software using the Intel Dialogic Configuration Manager.

1. Start the Intel Dialogic Configuration Manager.

   The Dialogic configuration manager can be started in two ways:

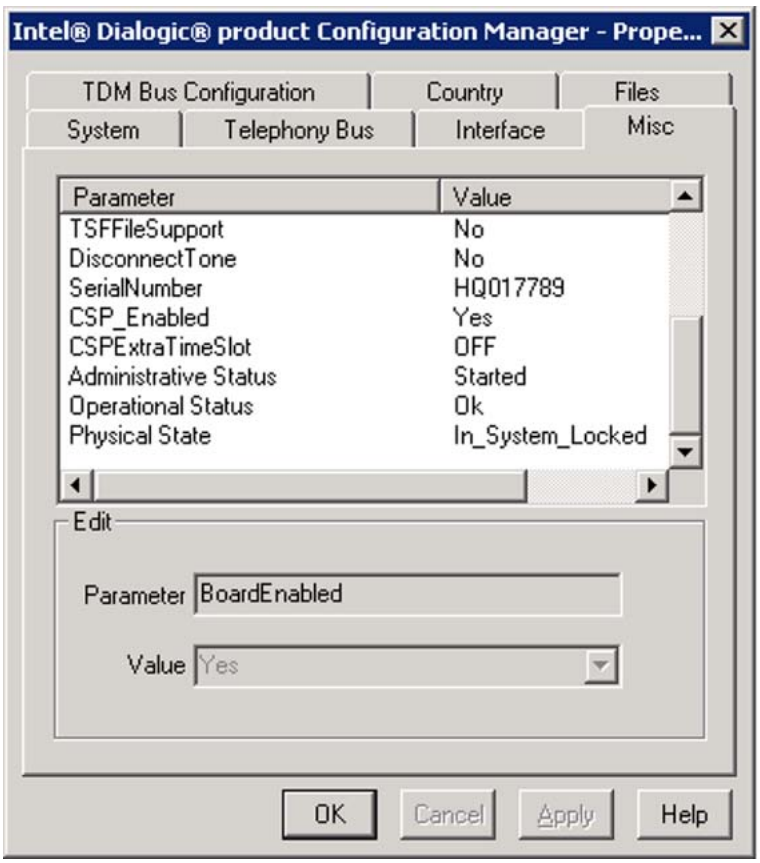
   - immediately after installing the software, by selecting Yes in step10 on page 75 of the previous installation procedure.
   - manually from the Windows Start menu, by choosing Programs > Intel Dialogic System Release PCI > Intel/Dialogic Configuration Manager

2. In the Intel Dialog Configuration Manager dialog box, select the board you want to configure.



3. From the menu, choose Settings > System/Device auto start > Start System.

   Result: The Dialogic Configuration Manager - Properties for All Devices dialog box appears.

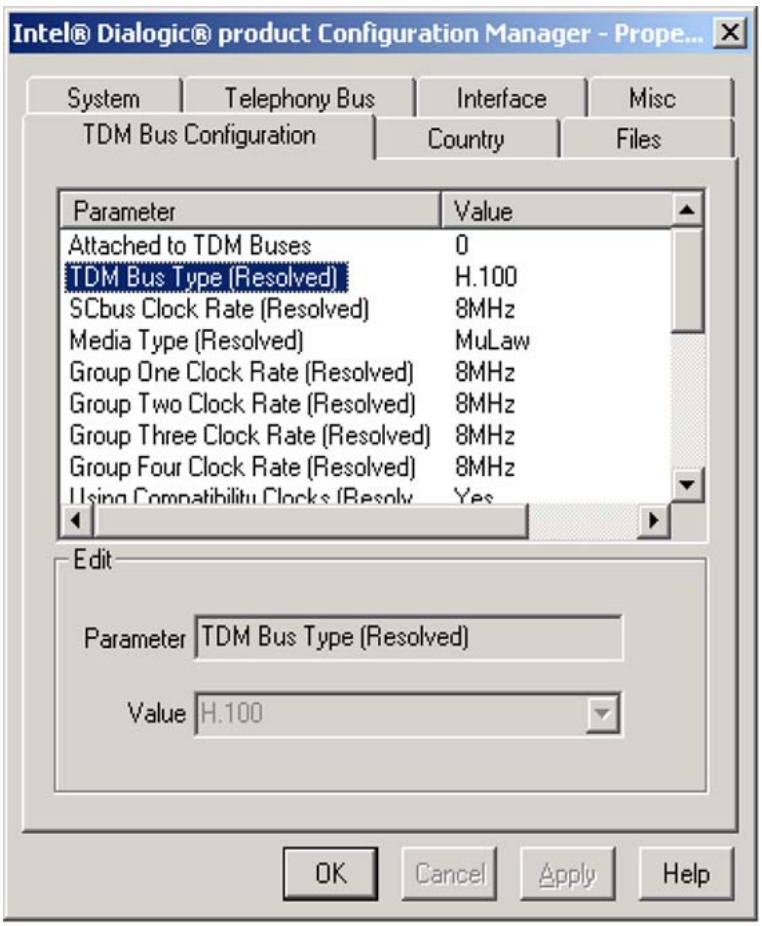


4. Click the Misc tab, and then type spandti.prm in the Parameter box.

   Note:

   The system detects the rest of the parameters on the Misc tab automatically.

5. Click the TDM Bus Configuration tab and then select CTBus from the Parameter list.



6. Click OK to apply these changes and close the window.

   Note:

   The system automatically detects the other information on the TDM Bus Configuration tab and on the System and Telephony Bus tabs.

   The Dialogic Configuration Manager dialog box appears.

   Alternatively, click Apply to apply the changes without closing the dialog box. Or, click Cancel to exit the dialog box without applying the changes.

   The Dialogic Configuration Manager dialog box appears.

7. From the menu, choose Settings > System/Device auto start > Start System.
8. Click File > Exit to exit the Dialogic Configuration Manager.
9. Open the Intel software folder on the Application CD.
10. Remove the Application CD from the drive, if it is not already removed.

Table 2: CTBus parameters table

Parameters	Value	Description
TDM Bus Type	H.100	
SCbus clock rate	8MHz	
Media Type	MuLaw	Determines encoding method for the currently selected TDM bus.
Group One Clock Rate	8MHz	The first set of sixteen streams in the H.100/110 bus is divided into four groups of four streams. Each group can operate at a different clock speed. (The second set of sixteen streams in the H.100/110 bus always operates at 8MHz.)
Group Two Clock Rate	8MHz	
Group Three Clock Rate	8MHz	
Group Four Clock Rate	8MHz	
Using Compatible Clocks	Yes	Indicates whether the SpringWare compatibility clock is used.
Master Status	Primary Master	Indicates whether the device specified by Primary Master FRU parameter is the clock master for the currently selected bus.
Using Primary Master	Yes	See Master Status
Using Secondary Master	No	See Master Status
Using NETREF One	Yes	Indicates whether NETREF_1 is used as the source of clocking for the current clock master
Derive Clock From	NETREF_1	Specifies the network interface that determines the clocking for the NETREF_1 line.
Primary Master FRU	Yes	Identifies the FRU or technology that drives the clocking line specified by the Primary Line parameter.
Primary Lines	A	Indicates whether the Primary line is Line A or Line B. The line that is not selected as the Primary Line serves as the Secondary Line.
Provide NETREF One	Yes	Indicates whether the currently selected device provides clocking to NETREF_1.

Parameters	Value	Description
Provide NETREF One From	NetworkInterfaceOne	If the currently selected device provides clocking to NETREF_1, this parameter identifies the network interface from which it provides clocking.
NETREF One Clock Rate	8MHz	

Rebuilding the 201i server from the disk image

Caution:

Risk of data loss

Ensure that all data is backed up before you rebuild the server from the disk image. When you reinstall software using the CallPilot Image CD, all previous data is removed.

Important:

To ensure data security, Avaya recommends that you install Microsoft hot fixes and antivirus software.

Using ROM-DOS to start the server

You must start the 201i server with ROM-DOS to access the CallPilot Image CD. ROM-DOS is a read-only version of DOS included on the 201i server. You do not have to install it. It is currently defined as drive A. ROM-DOS is accessible only when you select it during the 201i server startup.

Important:

ROM-DOS is a read-only version of DOS. Therefore, you cannot write to drive A (for example, copy files) while running ROM-DOS.

When you start the 201i server in ROM-DOS, you can perform the following tasks:

- access the CD-ROM drive
- install the CallPilot server image from the CallPilot Image CD
- access Network share on the Avaya server subnet

Before you begin

Ensure that all data has been backed up (if required).

Perform any required hardware changes to the server. For instructions, see the CallPilot 201i Server Maintenance and Diagnostics guide for your server.

Important:

For security reasons, Avaya recommends that you disconnect the CallPilot system from the Avaya server subnet before you reinstall the system software.

Installing the CallPilot image for a 201i server

1. Disconnect the Avaya server subnet network cable.
2. Insert the CallPilot Image CD Disk 1 into the CD-ROM or DVD-ROM drive.
3. Restart the server.
4. During startup, when the system prompts you to boot into ROM-DOS mode, type Y.

   A menu appears.
5. Select 1. SCSI CD ROM, and then press Enter.

   A DOS A:\> prompt appears.
6. To navigate to the CD-ROM directory, type z:, and then press Enter.
7. To start the installation, at the z:\> prompt, type image.bat, and then press Enter.

   A menu appears.
8. Select 1. Install CallPilot Server image for 201i then boot (recommended).

   A prompt asks if you are upgrading from a previous release of CallPilot to CallPilot 5.1.
9. Type N.

   A prompt asks if you want to continue and overwrite all of the data on the system.
10. Type Y.
11. When prompted to insert media and press Enter, remove the current CD, insert the next CD, and then press Enter.

    The imaging program automatically installs a fresh image of the operating system, CallPilot software, plus additional third-party software on the server. When the image finishes installing, it automatically restarts the system.

Note:

If the server does not automatically restart and a dialog box appears, you must manually restart the system.

12. Remove the CD from the CD-ROM or DVD-ROM drive.

    The server starts the Windows 2003 mini-setup process. During this time, the server restarts automatically several times as the Windows 2003 configuration is finalized. After the last restart sequence, the Windows logon box dialog appears.

What is next?

Continue with To configure the 201i server on page 82.

To configure the 201i server

1. Log on to the server as Administrator with the password Bvw250. The password is case-sensitive.
2. Install antivirus software on the server (optional).

   Note:

   You must supply your own antivirus software. For information about the antivirus software packages that have been approved by Avaya for CallPilot, see the product bulletin titled CallPilot Support for AntiVirus Applications.
3. Reconnect the cable for the Avaya server subnet to the server.
4. Run the Setup Wizard.

   When the system restarts after the image is installed, the setup wizard automatically launches. The Setup Wizard rechecks for platform and software validity, and then upgrades and restores your existing data.

   a. Install any new SU/PEPs.

      The Setup Wizard first prompts you to install all outstanding PEPs.

      Note:

      You might be prompted to close the Setup Wizard before installing PEPs or SUs. This is OK. When you restart the server after installing the PEPs or SUs, the Setup Wizard reappears.

   b. Check platform and software validity.

      The Setup Wizard checks the software and hardware components of your system to ensure that data can be safely restored from backup onto the server.

   c. Restore your backed up data.

After a successful system check, the Setup Wizard provides you the option to restore your data. If you have data to restore, the Setup Wizard will take you through the process.

Note:

If you are restoring data from a network drive, you must configure the Avaya server subnet (CLAN) network parameters in the operating system first. To do this, click Start > Settings > Network Connections. Right-click CLAN, and then click Properties. Click Internet Protocol (TCP/IP), and then click Properties. Edit the network parameters, and then click OK on each window.

When the Setup Wizard completes, the system restarts.

5. Run the Configuration Wizard to configure the server.

   For instructions on configuring the server, see the section on configuring the CallPilot server software in the <switch model> and CallPilot Server Configuration guide for your switch.

6. Test the system to ensure that it is working as expected.

   For instructions, see the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.

7. Perform a full system backup.

Rebuilding the 202i server from the disk image

Caution:

Risk of data loss

Ensure that all data is backed up before you rebuild the server from the disk image. When you reinstall software using the CallPilot Image CD, all previous data is removed.

Important:

To ensure data security, Avaya recommends that you install Microsoft hot fixes and antivirus software.

Before you begin

Ensure that all data has been backed up (if required).

Perform any required hardware changes to the server. For instructions, see the CallPilot 201i Server Maintenance and Diagnostics guide for your server.

Important:

For security reasons, Avaya recommends that you disconnect the CallPilot system from the Avaya server subnet before you reinstall the system software.

To install the CallPilot image for a 202i server

1. Disconnect the Avaya server subnet network cable.
2. Verify the external USB-DVD drive is attached. If it is not attached, attach it.
3. Insert the CallPilot Image DVD for the platform type you are recovering into the DVD-ROM drive.
4. Restart the server.
5. During startup, set the BIOS to boot from the DVD-ROM.

   A menu appears.
6. Select 1. Install CallPilot 202i server image and then press Enter.

   A prompt asks if you are upgrading from a previous release of CallPilot to CallPilot 5.0.
7. Type N.

   A prompt asks if you want to continue and overwrite all of the data on the system.
8. Type Y.

   The imaging program automatically installs a fresh image of the operating system, CallPilot software, plus additional third-party software on the server. When the installation is complete, a message appears stating that the CallPilot 5.0 image is installed on your server.
9. Remove the DVD.
10. Using the button on the server's front panel, reboot the server.

    The server starts the Windows 2003 mini-setup process. During this time, the server automatically restarts several times as the Windows 2003 configuration is finalized. After the last restart sequence, the Windows logon dialog box appears.

What is next?

Perform any required hardware changes to the server. For instructions, see the CallPilot <switch model> and CallPilot Server Configuration guide for your switch.

Caution:

Avaya recommends that you do not install any PEPs or service updates earlier than CallPilot 5.0 service update 4 as they are not compatible with the 202i server.

To configure the 202i server

1. Log on to the server as Administrator with the password Bvw250. The password is case-sensitive.
2. Install antivirus software on the server (optional).

   Note:

   You must supply your own antivirus software. For information about the antivirus software packages that are approved by Avaya for CallPilot, see the product bulletin titled CallPilot Support for AntiVirus Applications.
3. Reconnect the cable for the Avaya server subnet to the server.
4. Run the Setup Wizard.

   When the system restarts after the image is installed, the Setup Wizard automatically launches. The Setup Wizard rechecks for platform and software validity, and then upgrades and restores your existing data.

   a. Install any new SU/PEPs.

      The Setup Wizard first prompts you to install all outstanding PEPs.

      Note:

      You might be prompted to close the Setup Wizard before installing PEPs or SUs. This is OK. When you restart the server after installing the PEPs or SUs, the Setup Wizard reappears.

   b. Check platform and software validity.

      The Setup Wizard checks the software and hardware components of your system to ensure that data can be safely restored from backup onto the server.

   c. Restore your backed up data.

      After a successful system check, the Setup Wizard provides the option to restore your data. If you have data to restore, the Setup Wizard takes you through the process.

      Note:

      If you are restoring data from a network drive, you must configure the Avaya server subnet (CLAN) network parameters in the operating system first. To do this, click Start > Settings > Network Connections. Right-click CLAN, and then click Properties. Click Internet Protocol (TCP/IP), and then click Properties. Edit the network parameters, and then click OK on each window.

   d. When the Setup Wizard completes, the server restarts.
5. Test the system to ensure that it is working as expected.

For instructions, see the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.

6. Perform a full system backup.

Rebuilding the 1002rp or 703t server from the disk image

Caution:

Risk of data loss

Ensure that all data is backed up before you rebuild the server from the disk image. When you reinstall software using the CallPilot image CD, all previous data is removed.

Important:

To ensure data security, Avaya recommends that you install Microsoft hot fixes and antivirus software.

Before you begin

Perform any required hardware changes to the server. For instructions, see the CallPilot <switch model> and CallPilot Server Configuration guide for your switch.

Important:

For security reasons, Avaya recommends that you disconnect the CallPilot system from the Avaya server subnet before you reinstall the system software.

To install the CallPilot image for a 1002rp or 703t server

1. Disconnect the Avaya server subnet network cable.
2. Insert the CallPilot Image CD Disk 1 for the platform type you are recovering into the CD-ROM drive.

   Important: The next step explains how to check and change the boot sequence in the BIOS to ensure the server boots from the CD. If your server is already set this way, restart the server now and continue to step 4.
3. To change the boot sequence to boot from the CD:

   a. Restart the server, and then press the F2 key when prompted during startup to enter the BIOS.

      The system runs hardware checks, and then the BIOS menu appears.

b. Using the keyboard arrow keys, move to the boot menu, select Boot Device Priority, and then press Enter.

c. Use the arrow keys to select 1st boot device, and then press Enter.

d. Use the arrow keys to select CD ROM as the first boot device, and then press Enter.

e. Repeat the previous two steps for the second and third boot devices so that the order is 2. Hard Drive and 3. Removable Device.

f. To save these settings and exit the BIOS, press F10.

g. Select OK, and then press Enter.

The server continues the boot cycle and checks for a bootable CD.

4. When the main menu for the CallPilot Image CD appears, select 1. Install CallPilot 5.0 703t/1002rp server image then boot (recommended), and then press Enter.

   A prompt asks if you are upgrading from a previous release of CallPilot to CallPilot 5.0.

5. Type N.

   A prompt asks if you want to continue and overwrite all of the data on the system.

6. Type Y.

7. When prompted to insert media and press Enter, remove the current CD, insert the next CD, and then press Enter.

   The imaging program automatically installs a fresh image of the operating system, CallPilot software, plus additional third-party software on the server. When the image finishes installing, it automatically restarts the server.

   Note:

   If the server does not automatically restart and a dialog box appears, you must manually restart the server.

8. Remove the CD from the drive.

   The server starts the Windows 2003 mini-setup process. During this time, the server automatically restarts several times as the Windows 2003 configuration is finalized. After the last restart sequence, the Windows logon dialog box appears.

What is next?

Continue with To configure the 703t or 1002rp server on page 88.

To configure the 703t or 1002rp server

1. Log on to the server as Administrator with the password Bvw250. The password is case-sensitive.
2. Install antivirus software on the server (optional).

   Note:

   You must supply your own antivirus software. For information about the antivirus software packages that are approved by Avaya for CallPilot, see the product bulletin titled CallPilot Support for AntiVirus Applications.
3. Reconnect the cable for the Avaya server subnet to the server.
4. Run the Setup Wizard.

   When the system restarts after the image is installed, the Setup Wizard automatically launches. The Setup Wizard rechecks for platform and software validity, and then upgrades and restores your existing data.

   a. Install any new SU/PEPs.

      The Setup Wizard first prompts you to install all outstanding PEPs.

      Note:

      You might be prompted to close the Setup Wizard before installing PEPs or SUs. This is OK. When you restart the server after installing the PEPs or SUs, the Setup Wizard reappears.

   b. Check platform and software validity.

      The Setup Wizard checks the software and hardware components of your system to ensure that data can be safely restored from backup onto the server.

   c. Restore your backed up data.

      After a successful system check, the Setup Wizard provides the option to restore your data. If you have data to restore, the Setup Wizard takes you through the process.

      Note:

      If you are restoring data from a network drive, you must configure the Avaya server subnet (CLAN) network parameters in the operating system first. To do this, click Start > Settings > Network Connections. Right-click CLAN, and then click Properties. Click Internet Protocol (TCP/IP), and then click Properties. Edit the network parameters, and then click OK on each window.

   d. When the Setup Wizard completes, the system restarts.
5. Test the system to ensure that it is working as expected.

For instructions, see the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.

6. Perform a full system backup.

Rebuilding the 1006r, 1005r or 600r server from the disk image

Caution:

Risk of data loss

Ensure that all data is backed up before you rebuild the server from the disk image. When you reinstall software using the CallPilot Image DVD, all previous data is removed.

Important:

To ensure data security, Avaya recommends that you install Microsoft hot fixes and antivirus software.

Before you begin

Perform any required hardware changes to the server. For instructions, see the <switch model> and CallPilot Server Configuration guide for your switch.

Important:

For security reasons, Avaya recommends that you disconnect the CallPilot system from the Avaya server subnet before you reinstall the system software.

To install the CallPilot image for a 1006r, 1005r or 600r server

1. Disconnect the Avaya server subnet network cable.
2. Insert the CallPilot Image DVD for the platform type you are recovering into the DVD-ROM drive.
3. Restart the server.
4. During startup, set the BIOS to boot from the DVD-ROM.

   A menu appears.
5. Select 1. Install CallPilot 5.0 <server model> server image and exit to DOS (recommended), and then press Enter.

A prompt asks if you are upgrading from a previous release of CallPilot to CallPilot 5.0.

6. Type N.

   A prompt asks if you want to continue and overwrite all of the data on the system.

7. Type Y.

   The imaging program automatically installs a fresh image of the operating system, CallPilot software, plus additional third-party software on the server. When the installation is complete, a message appears stating that the CallPilot 5.0 image is installed on your server.

8. Remove the DVD.

9. Using the button on the server's front panel, power the server off, and then power it back on.

   The server starts the Windows 2003 mini-setup process. During this time, the server automatically restarts several times as the Windows 2003 configuration is finalized. After the last restart sequence, the Windows logon dialog box appears.

What is next?

Continue with To configure the 1006r, 1005r or 600r server on page 90.

To configure the 1006r, 1005r or 600r server

1. Log on to the server as Administrator with the password Bvw250. The password is case-sensitive.

2. Install antivirus software on the server (optional).

   Note:

   You must supply your own antivirus software. For information about the antivirus software packages that are approved by Avaya for CallPilot, see the product bulletin titled CallPilot Support for AntiVirus Applications.

3. Reconnect the cable for the Avaya server subnet to the server.

4. Run the Setup Wizard.

   When the system restarts after the image is installed, the Setup Wizard automatically launches. The Setup Wizard rechecks for platform and software validity, and then upgrades and restores your existing data.

   a. Install any new SU/PEPs.

      The Setup Wizard first prompts you to install all outstanding PEPs.

Note:

You might be prompted to close the Setup Wizard before installing PEPs or SUs. This is OK. When you restart the server after installing the PEPs or SUs, the Setup Wizard reappears.

b. Check platform and software validity.

The Setup Wizard checks the software and hardware components of your system to ensure that data can be safely restored from backup onto the server.

c. Restore your backed up data.

After a successful system check, the Setup Wizard provides the option to restore your data. If you have data to restore, the Setup Wizard takes you through the process.

Note:

If you are restoring data from a network drive, you must configure the Avaya server subnet (CLAN) network parameters in the operating system first. To do this, click Start > Settings > Network Connections. Right-click CLAN, and then click Properties. Click Internet Protocol (TCP/IP), and then click Properties. Edit the network parameters, and then click OK on each window.

d. When the Setup Wizard completes, the server restarts.

5. Test the system to ensure that it is working as expected.

For instructions, see the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.

6. Perform a full system backup.

Recovering a hard drive

This section provides a high-level overview of how to recover your server from a hard drive failure, as follows:

Server model	See
201i, 202i, and 600r server	To recover a non-RAID system from a hard drive failure on page 92
703t server, 1002rp server, 1005r server and 1006r server	To recover a RAID system from a hard drive failure on page 93

Server model	See
	Note: If both of the hard drives in a mirrored pair fail, see To recover a non-RAID system from a hard drive failure on page 92.

Requirements

To recover from a hard drive failure, you need the following items:

- a new hard drive

  Important:

  The new hard drive must be a hard drive that is supported by Avaya for your server model. To obtain a new hard drive, contact your Avaya channel partner.

- all software media that came with the CallPilot system:
  - CallPilot Image CD
  - CallPilot PEP CD
- a system backup (if available)

To recover a non-RAID system from a hard drive failure

1. Replace the faulty hard drives.

   For instructions, see the CallPilot <server model> Server Maintenance and Diagnostics guide for your server.

2. Install the operating system and CallPilot server software from the CallPilot Image CD or DVD and, if required, PEPs.

   For instructions, see either:

   - Rebuilding the 201i server from the disk image on page 80
   - Rebuilding the 202i server from the disk image on page 83
   - Rebuilding the 1006r, 1005r or 600r server from the disk image on page 89

3. Run the Configuration Wizard to configure the CallPilot server software.

   For instructions, see the section on configuring the CallPilot server software in the <switch model> and CallPilot Server Configuration guide for your switch.

4. Do one of the following:

If your CallPilot system	THEN
failed during operation	continue with the rest of this procedure.
failed before it became operational	you have completed the recovery process. Test CallPilot to ensure that it can receive calls, as described in the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.

5. Log on to the CallPilot server as Administrator or with any account that has local administrative privileges.
6. Restore the last known good system backup of the CallPilot system from backup tape.
7. Restart the restored system.

   For instructions, see the section on restarting the server in the CallPilot Installation and Configuration Task List (NN44200-306).
8. Test CallPilot to ensure that it can receive calls, as described in the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.
9. When you are satisfied that the system is working correctly, perform a full system backup.

To recover a RAID system from a mirrored-pair failure

If both hard drives in a mirrored pair fail, then you must replace both hard drives, and then perform the recovery as if the system did not have RAID. For instructions, seeTo recover a non-RAID system from a hard drive failure on page 92.

To recover a RAID system from a hard drive failure

1. Replace the faulty hard drive.

   For instructions, see the CallPilot <server model> Server Maintenance and Diagnostics guide for your server.
2. Rebuild the hard drive as described in the RAID operations section in the CallPilot <server model> Server Maintenance and Diagnostics guide for your server.
3. Test CallPilot to ensure it can receive calls, as described in the section on testing the CallPilot installation in the <switch model> and CallPilot Server Configuration guide for your switch.
4. When you are satisfied that the system is working correctly, perform a full system backup.

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