



Software Administration and Maintenance

CallPilot
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- September 2002** Standard 1.0 of *CallPilot Installation and Configuration, Part 4: Software Installation and Maintenance* is released for CallPilot 2.0 general availability.



CallPilot Customer Documentation Map

- Fundamentals**
 - CallPilot Fundamentals Guide (555-7101-010)
- Planning and Engineering**
 - Planning and Engineering Guide (555-7101-101)
 - Network Planning Guide (555-7101-102)
 - Data Networking for Voice over IP Guide (553-3001-160)
- Installation and Configuration**
 - Upgrade and Platform Migration Guide (555-7101-207)
 - Installation and Configuration Task List Guide (555-7101-210)
 - Server Installation Guides**
 - 201i Server Hardware Installation Guide (555-7101-220)
 - 703t Server Hardware Installation Guide (555-7101-226)
 - 1002rp Server Hardware Installation Guide (555-7101-205)
 - 1005r Server Hardware Installation Guide (555-7101-228)
 - Configuration and Testing Guides**
 - Meridian 1 and CallPilot Server Configuration Guide (555-7101-222)
 - T1/SMDI and CallPilot Server Configuration Guide (555-7101-224)
 - Succession 1000 System and CallPilot Server Configuration Guide (555-7101-510)
 - Unified Messaging Software Installation**
 - Desktop Messaging and MyCallPilot Installation Guide (555-7101-505)
- Administration**
 - Administrator's Guide (555-7101-301)
 - Software Administration and Maintenance Guide (555-7101-202)
 - Desktop Messaging and MyCallPilot Administration Guide (555-7101-503)
 - Meridian Mail to CallPilot Migration Guide (555-7101-801)
 - Application Builder Guide (555-7101-325)
 - Reporter Guide (555-7101-310)
- Maintenance**
 - Troubleshooting Guide (555-7101-501)
 - Server Maintenance and Diagnostics**
 - 201i Server Maintenance and Diagnostics Guide (555-7101-119)
 - 703t Server Maintenance and Diagnostics Guide (555-7101-227)
 - 1002rp Server Maintenance and Diagnostics Guide (555-7101-206)
 - 1005r Server Maintenance and Diagnostics Guide (555-7101-512)
 - Symposium, M1/Succession 1000, and Voice Processing Guide (297-2183-909)
- End User Information**

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End User Guides

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Chapter 1

How to get Help

This section explains how to get help for Nortel products and services.

Getting Help from the Nortel Web site

The best way to get technical support for Nortel products is from the Nortel Technical Support Web site:

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

This site provides quick access to software, documentation, bulletins, and tools to address issues with Nortel products. More specifically, the site enables you to:

- download software, documentation, and product bulletins
- search the Technical Support Web site and the Nortel Knowledge Base for answers to technical issues
- sign up for automatic notification of new software and documentation for Nortel equipment
- open and manage technical support cases

Getting Help over the phone from a Nortel Solutions Center

If you don't find the information you require on the Nortel Technical Support Web site, and have a Nortel support contract, you can also get help over the phone from a Nortel Solutions Center.

In North America, call 1-800-4NORTEL (1-800-466-7835).

Outside North America, go to the following Web site to obtain the phone number for your region:

<http://www.nortel.com/callus>

Getting Help from a specialist by using an Express Routing Code

To access some Nortel Technical Solutions Centers, you can use an Express Routing Code (ERC) to quickly route your call to a specialist in your Nortel product or service. To locate the ERC for your product or service, go to:

<http://www.nortel.com/erc>

Getting Help through a Nortel distributor or reseller

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

Chapter 2

About this guide

Introduction

The *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. CD-ROMs 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-ROM containing a disk image of the system facilitates recovery of the CallPilot server software.

For more information

For more information about the CDs included with the system, see the sections “CallPilot software media and documentation checklist” and “Preinstalled software” in the *CallPilot Installation and Task List Guide*.

For more information about CallPilot hardware and software, see:

- *CallPilot Fundamentals*
- *CallPilot Planning and Engineering Guide*

Other CallPilot guides are referred to in the procedures of this guide. For a list of CallPilot documentation, see the documentation map on page 7.

Chapter 3

Installing Service Updates and Performance Enhancement Packages

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Introduction

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

- when they are released by Nortel 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 Nortel Meridian* PEP Library (see “How to acquire new PEPs” on page 19).

Service Updates

A Service Update (SU) is a consolidation of fixes, additional enhancements, and Performance Enhancement Packages (PEP) 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-ROM or downloaded as follows:

PEP availability format	How to acquire it
SU CD kit	Order the SU CD kit from Nortel. There is no charge for the kit.
Downloadable file from Nortel	<p data-bbox="486 501 1046 596">Access the Nortel Meridian PEP Library (MPL) at the following URL, and then navigate to the “Multimedia PEP Tools” section.</p> <p data-bbox="486 612 945 644">https://transportvo.nortel.com/mpl/mpl</p> <p data-bbox="486 660 564 692">Notes:</p> <ul data-bbox="497 708 1046 1019" style="list-style-type: none"> <li data-bbox="497 708 978 804">■ If you cannot access the Meridian PEP Library, or if you cannot find the SUs, contact your Nortel representative. <li data-bbox="497 836 1046 1019">■ The Meridian PEP Library is a secure web site requiring a user name and a password to log on. If you do not have an account, you must apply for one. It can take up to 72 hours to process your account request.

Identifying SUs and PEPs

SUs and PEPs on the PEP CD are labeled in the following format: CPxxxxxxxxyyz or CMxxxxxxxxyyz, where

CP	is CallPilot
CM	is CallPilot Manager
xxxxxxx	is the release level (for example, 20123SU)
yy	is the PEP number for the release, which can range from 01 to 99
z	identifies the component to which the PEP applies: A: administration software update D: desktop messaging software update L: language update S: server software update W: web messaging software update

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, refer to 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, refer to the procedures in this section.

ATTENTION

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

- 1 Perform a system backup.
For instructions on performing a system backup, refer to the *CallPilot Administrator's Guide*.
- 2 Take CallPilot out of service by disabling all call channels.
For instructions, refer to "Stopping and starting channels" in the *CallPilot Installation and Configuration Task List*.

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.

Result: The Run dialog box opens.

- 4 Click Browse.

Result: The Browse dialog box opens.

- 5 Navigate to the 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.

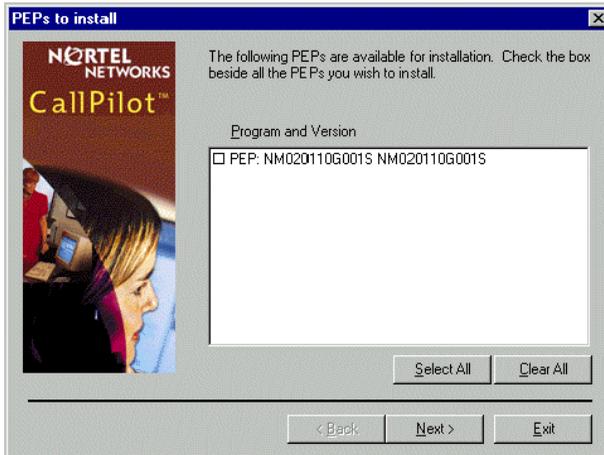
- 7 Double-click the runme.exe or runme.bat file (depending on whether this is an SU or PEP CD), and then click OK.

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

ATTENTION

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.

Note: The following example is for illustration purposes only and may not reflect what appears on your system:

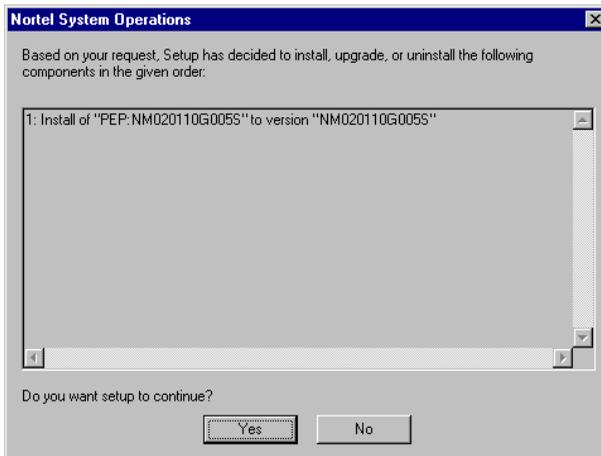


- 8 Select the SUs or PEPs to install, and then click Next.

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

Result: The Nortel System Operations window 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.

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



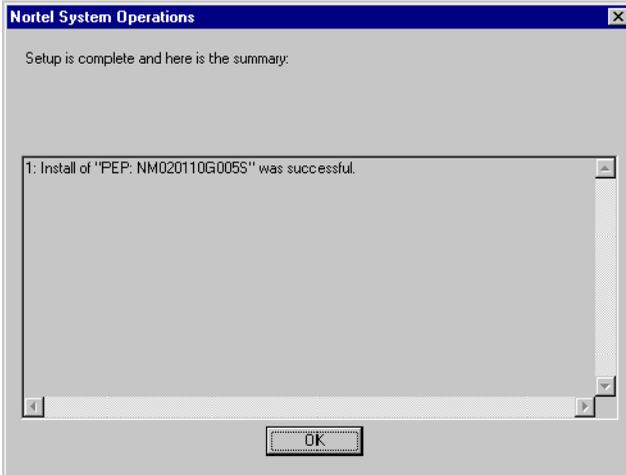
Close the tools, and then click Retry.

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.

Result: 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's 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, refer to 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, refer to the procedures in this section.

ATTENTION

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

- 1 Perform a system backup.
For instructions on performing a system backup, refer to the *CallPilot Administrator's Guide*.
- 2 Take CallPilot out of service by disabling all call channels.
For instructions, refer to "Stopping and starting channels" in the *CallPilot Installation and Configuration Task List*.

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.

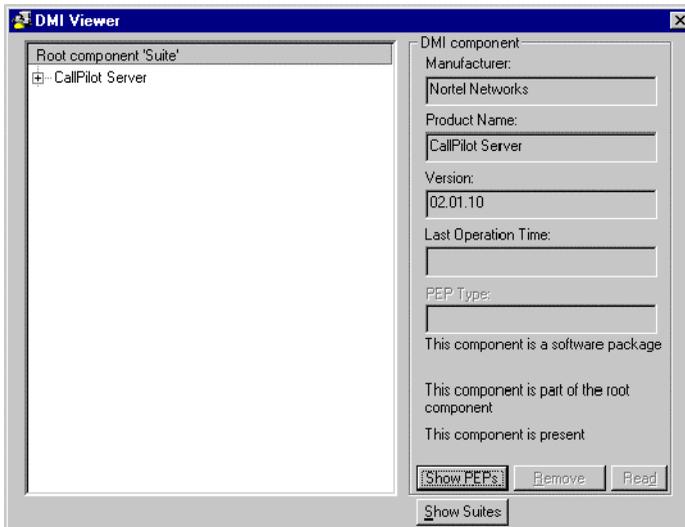
- 1 Log on to the server where you want to begin the uninstallation.

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

- 2 Click Start → Programs → CallPilot → System Utilities → PEP Maintenance Utility.

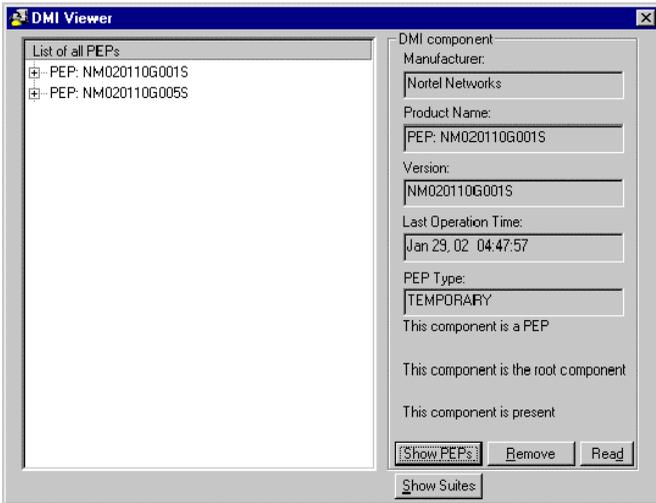
Result: The DMI Viewer window appears.

Note: The following example may not reflect exactly what appears on your system:



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

Result: A list of all SUs and PEPs appears.

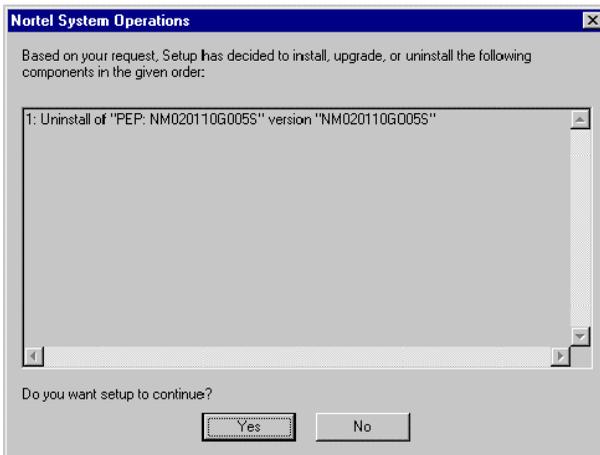


- Select the SU or PEP you want to uninstall.

You can use Ctrl-click to select multiple SUs or PEPs to uninstall in one operation.

- Click Remove.

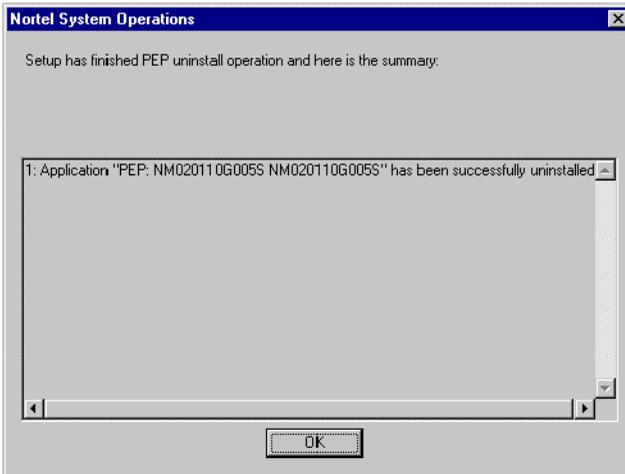
Result: The system prompts you to confirm this choice.



6 Click Yes.

Result: 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 similar to the following appears:



7 Click OK.

Note: You may be prompted to restart the server.

Chapter 4

Performing a CallPilot server platform migration

In this chapter

Using the upgrade process for platform migration

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Using the upgrade process for platform migration

Perform a platform migration when you want to migrate from one CallPilot server to another 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 4.0 server has been incorporated into the general process of upgrading to CallPilot 4.0. Refer to the *CallPilot Upgrade and Platform Migration Guide* (555-7101-207).

Chapter 5

Expanding CallPilot features

In this chapter

Expanding features

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Expanding features

Introduction

This chapter summarizes how you add features or configure additional channels. CallPilot does not support feature reductions except for the number of channels that have been previously allocated. You cannot reduce the number of channels to 0.

Types of expansions

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

- channels
- number of MPUs
- features such as AppBuilderFax and Networking
- languages

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

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. In this situation, you receive two keycodes—one for the platform migration and one for the feature expansion.

For instructions on performing the platform migration, see Chapter 4, “Performing a CallPilot server platform migration.”

To perform the feature expansion

- 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 Nortel 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, refer to 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 Chapter 4, “Performing a CallPilot server platform migration.”

- 3 Run the CallPilot Configuration Wizard.

For instructions, refer to “Configuring the CallPilot server software” in the *CallPilot <switch model> and CallPilot Server Configuration* guide for your switch and server, 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, refer to “Testing the CallPilot software and channels” in the *CallPilot <switch model> and CallPilot Server Configuration* guide for your switch and server.

Chapter 6

Installing CallPilot administrative software on a stand-alone web server

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CallPilot Manager requirements

Introduction

IF you	THEN CallPilot Manager
purchased a new CallPilot server	is already installed on the 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 Applications 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 Nortel technical support personnel use pcAnywhere as a remote support tool. If you require remote support on the stand-alone web server from Nortel, 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: Nortel does not provide the license for pcAnywhere on a standalone 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*.

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*. 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.

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*.

Note: Do not use the CallPilot Image CD-ROM to install the operating system on the stand-alone web server. The operating system on the CD-ROM 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 CallPilot server.

ATTENTION

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 39 and the *CallPilot Planning and Engineering Guide*

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

Note: CallPilot Reporter supports Java(TM) 2 Runtime Environment (JRE) version 1.3.x. JRE version 1.3.1_05 is included on your Application CD.

Compatibility with other CallPilot releases

For information on CallPilot Reporter compatibility, see the *CallPilot Planning and Engineering Guide*.

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*.

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)

Viewing the report

To view a report, you must have specific versions of web browser and the Java Virtual Machine installed. This software is available on the CallPilot Applications CD. For more information, see the *CallPilot Planning and Engineering Guide*.

Uninstalling CallPilot Reporter

To uninstall CallPilot Reporter, you must uninstall CallPilot Manager.

Installing CallPilot Manager and Reporter on a stand-alone web server

Introduction

Before attempting to install CallPilot Manager and CallPilot Reporter on a stand-alone web server, install the prerequisite components. For more details, see “CallPilot Manager requirements” on page 38.

Required materials

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

- CallPilot Applications 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 CallPilot Reporter software

ATTENTION!

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

Note: If the client or web server is running Citrix, you must install the software from the Control Panel.

- 1 Insert the CallPilot Applications CD or the PEP CD into the drive.
Continue to step 2 if your client or web server *is not* running Citrix.

Follow the below procedure if your client or web server *is* running Citrix.

- a. Click Start → 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 Click Start → Run.
- Result:** The Run dialog box opens.
- 3 Click Browse.
- Result:** The Browse dialog box opens.
- 4 Do one of the following:

IF you are using the	THEN
CallPilot Applications CD	navigate to the CallPilotInstall folder in the Applications CD on the drive (Z:).
PEP CD	navigate to the CallPilotManagerInstall folder in the SU or PEP CD on the drive (Z:).

- 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.

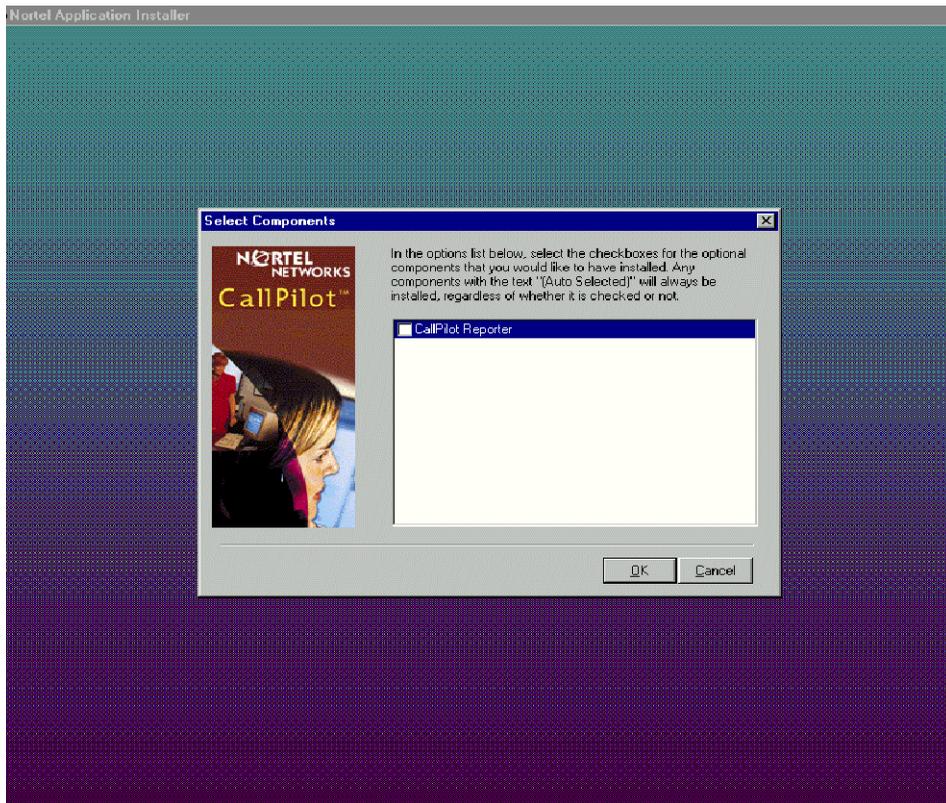
ATTENTION!

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

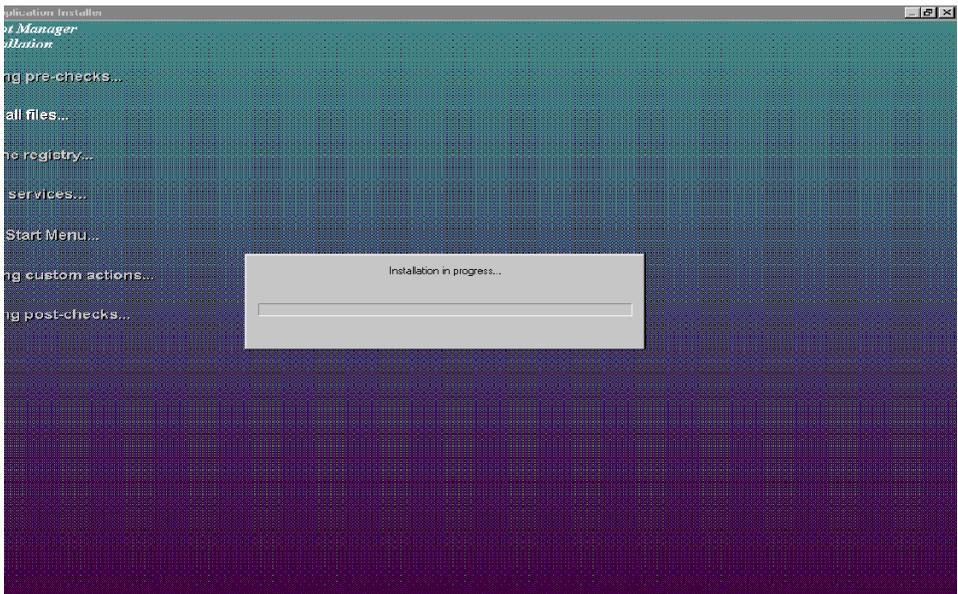
Result: You are asked to select the options to install. CallPilot Reporter is the only option listed.



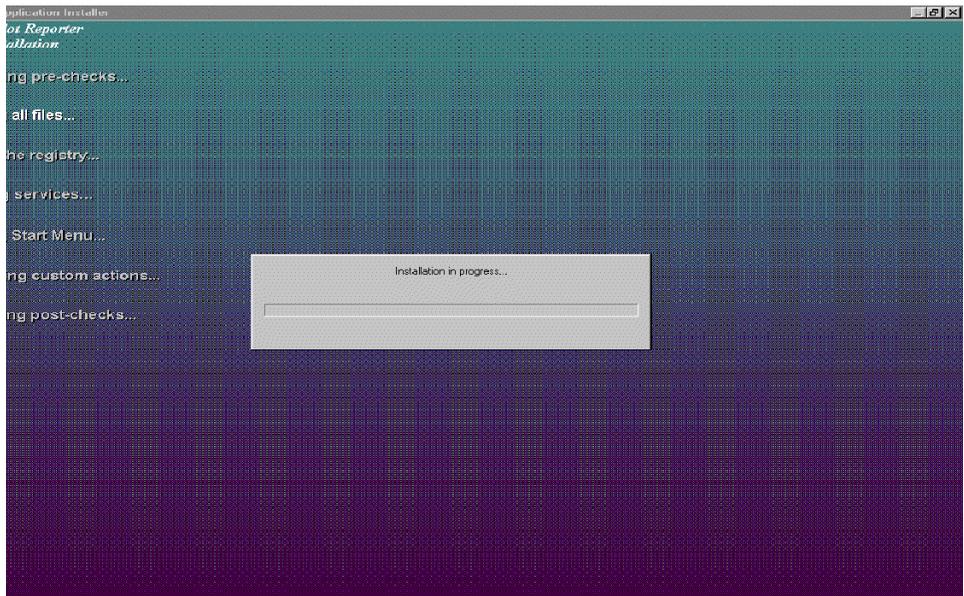
- If you want to install CallPilot Reporter, select the check box, and then click OK.

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

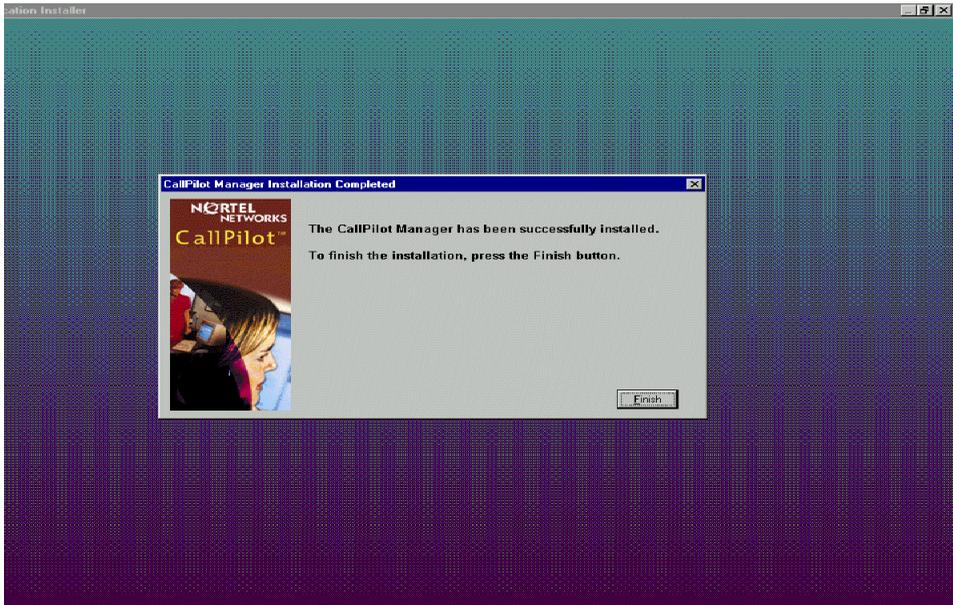
- displays a progress bar that indicates the percentage that is completed.
- highlights each item on the splash screen as it is processed.



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 the CallPilot Reporter software installation is finished, the following dialog box appears:



7 Click Finish.

Result: The Application Installer closes.

8 Restart your server.

To Install and Run CallPilot Reporter on a Windows 2003 Standalone Server with SP1

To configure Windows 2003 with SP1 for CallPilot Reporter

To configure Windows 2003 with SP1 for CallPilot Reporter you must:

- add NETWORK group with Remote Activation to My Computer
- add NETWORK group with Remote Activation to CallPilot Reporter
- add NETWORK SERVICE group with Local Launch and Local Activation permissions to CallPilot Reporter

Note: The following steps add NETWORK group with Remote Activation permission to My Computer.

- 1 Click **Start > Settings > Control Panel**.
- 2 Double-click **Administrative Tools**, and then double-click **Component Services**.
- 3 In the right pane of Component Services, double-click **Computers**.
- 4 In the right pane of Component Services, right-click **My Computer** and select **Properties**.
- 5 In the My Computer Properties window, click the **COM Security** tab.
- 6 Go to the **Launch and Activation Permissions** area and click **Edit Default** to modify permissions for users or groups.

Result: The Launch Permission window appears.

- 7 Click **Add**, and then click **Advanced**.

Result: The Select Users or Groups window appears.

- 8 Click **Find Now**.

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

- 9 Select **NETWORK**, and then click **OK**.

- 10 Click **OK**.

- 11 In the Launch and Activation Permissions window, go to the **Permissions for NETWORK** area. In the Permissions for NETWORK area and under the column heading **Allow**, select the check box next to **Remote Activation**. When you select the Remote Activation check box, the system grants Remote Activation permission to the NETWORK group.

- 12 Click **OK**.

- 13 Click **OK** to return to the My Computer icon.

Note: The following steps add NETWORK group with Remote Activation permission to CallPilot Reporter.

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

15 Right-click the **CallPilot Reporter** folder and select **Properties**.

16 Click the **Security** tab.

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

Result: The Launch Permission window appears.

18 Click **Add**, and then click **Advanced**.

Result: The Select Users or Groups window appears.

19 Click **Find Now**.

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

20 Select **NETWORK**, and then click **OK**.

21 Click **OK**.

22 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.

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

Note: The following steps add NETWORK SERVICE group with Local Launch and Local Activation permissions to CallPilot Reporter.

24 Right-click the **CallPilot Reporter** folder and select **Properties**.

25 Click the **Security** tab.

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

Result: The Launch Permission window appears.

27 Click **Add**, and then click **Advanced**.

Result: The Select Users or Groups window appears.

28 Click **Find Now**.

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

29 Select **NETWORK SERVICE**, and then click **OK**.

30 Click **OK**.

31 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 permissions to NETWORK SERVICE.

32 Click **OK**, then click **OK** again.

33 Restart the system.

To configure CallPilot server to work with Reporter

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

- 1 Click **Start > Settings > Control Panel**.
- 2 Double-click **Administrative Tools**, then double-click **Component Services**.
- 3 In the left pane of the Component Services window, double-click **Component Services**, then double-click **Computers**.
- 4 In the right pane of Component Services, double-click **My Computer**, 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 If the check boxes for **Anonymous Logon** group are not selected for Local Launch, Local Activation, and Remote Activation, select the check boxes under the column title **Allow** for **Local Launch**, **Local Activation**, and **Remote Activation**.

What's 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 55. For instructions on logging in and using CallPilot Reporter, refer to the *CallPilot Reporter Guide* (555-7101-310).

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 is completed in two stages:

1. 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/`

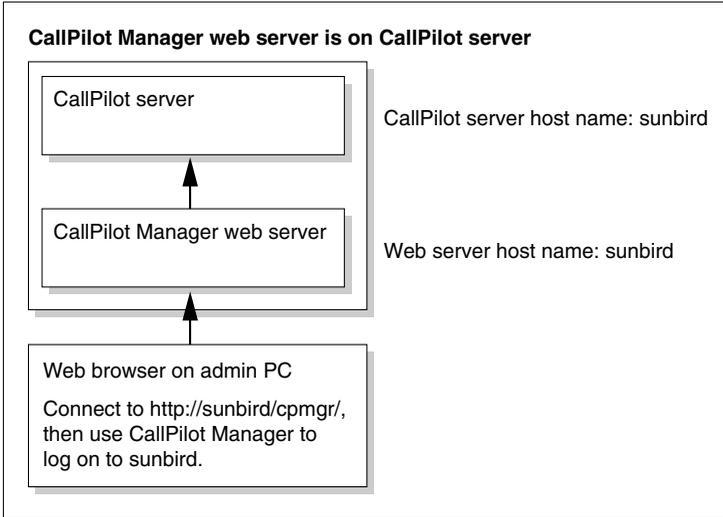
2. Log on to the CallPilot server with an administrator mailbox number and password.

Relationship of the CallPilot Manager web server to the CallPilot server

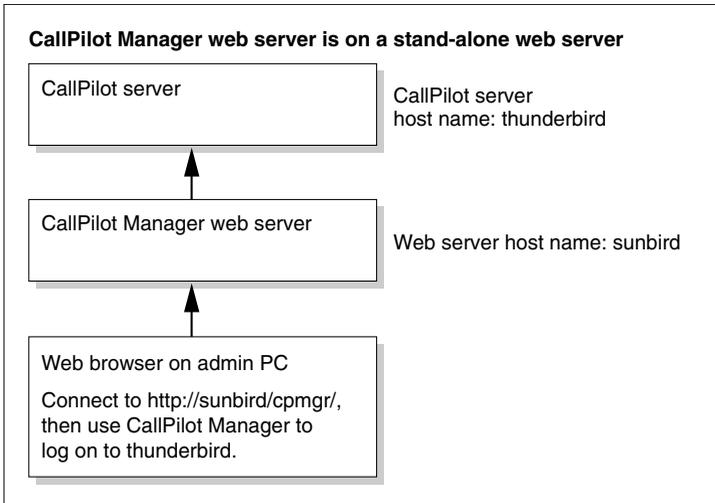
The CallPilot Manager web server software can be installed on the CallPilot server or on a stand-alone server. If the CallPilot Manager software is installed on a stand-alone server, you must know the CallPilot Manager server host name or IP address, as well as the CallPilot server host name or IP address.

See the following diagrams:

Note: For instructions on how to install CallPilot Manager on a stand-alone web server, see “Installing CallPilot Manager and Reporter on a stand-alone web server,” on page 44.



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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

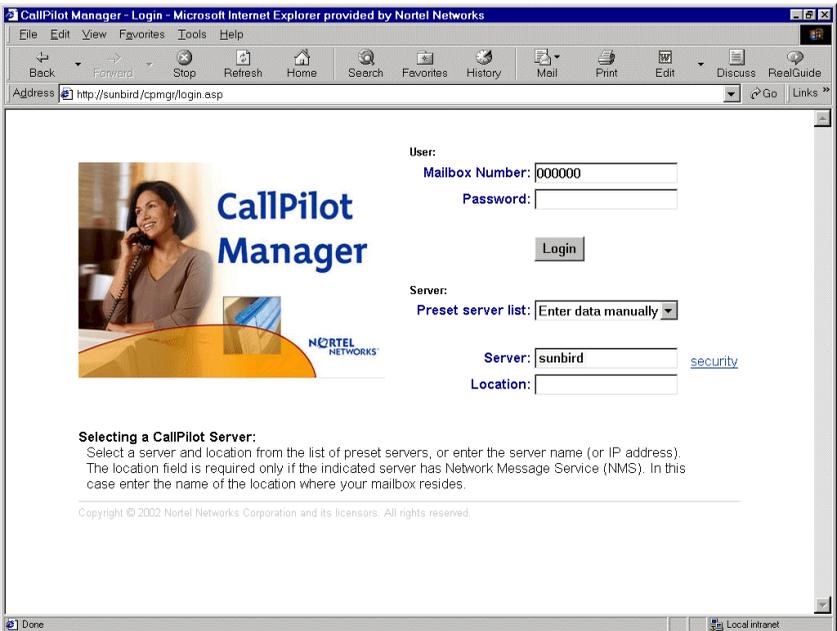
the CallPilot Manager - Login screen appears automatically. Continue with step 2.

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.



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

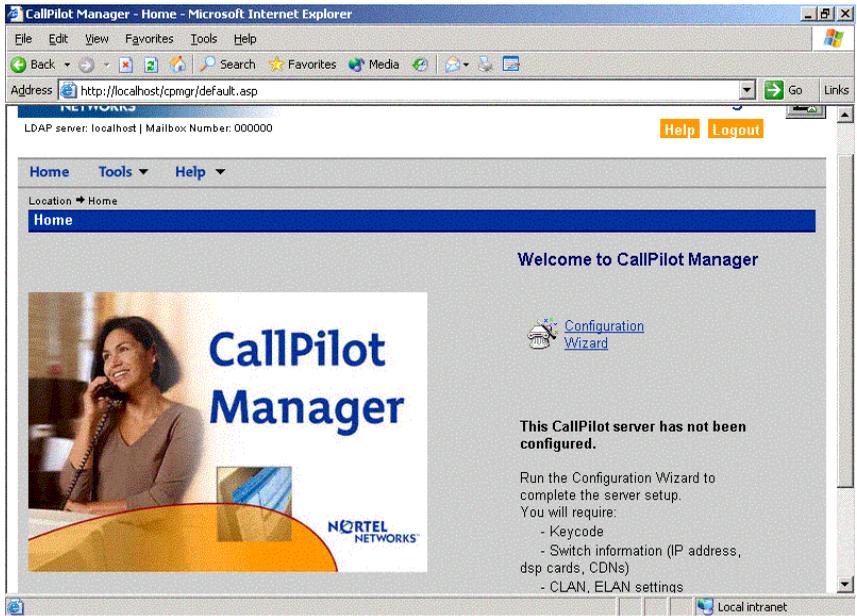
- Type the CallPilot server host name or IP address in the Server box.

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 phoneset 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.

Result: The main CallPilot Manager screen 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*.)

Security requirements for an external (stand-alone) web server to obtain technical support directly or by remote 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 stand-alone 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. Nortel recommends that you create two separate Windows accounts (NortelAdmin and NortelSupport) with the following security settings.

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

- 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).

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 (NortelSupport). 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 7

Installing Directory Synchronization Extension

In this chapter

Introduction	64
Installing Directory Synchronization Extension	65
Maintenance	66
Uninstalling Directory Synchronization Extension	69

Introduction

The CallPilot Directory Synchronization Extension installer is written for the Microsoft Windows installer.

ATTENTION

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 Directory Synchronization Extension

To install 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 Applications CD into the drive.
- 3 Click Start → Run.

Result: The Run dialog box opens.

- 4 Click Browse.

Result: The Browse window appears.

- 5 Navigate to the drive (Z:\Directorysync).

- 6 Double-click the setup.exe file, and then click OK.

Result: The Preparing To Install Wizard window opens. When it is finished, the Wizard Welcome dialog box opens.

- 7 Click Next.

Result: The Ready to Install dialog box opens.

- 8 Click Install.

Result: The Install Wizard Completed dialog box opens.

- 9 Click Finish.

Result: The Directory Synchronization Extension is successfully installed.

Maintenance

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

To Repair 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 Applications CD into the drive.

- 3 Click Start → Run.

Result: The Run dialog box opens.

- 4 Click Browse.

Result: The Browse window opens.

- 5 Navigate to the drive (Z:\Directorysync).

- 6 Double-click the setup.exe file, and then click OK.

Result: The Directory Synchronization Extension Maintenance Welcome screen opens.

- 7 Click Next.

Result: The Preparing to Repair screen opens.

Note: Modify, Repair and Remove options are displayed. You cannot modify Directory Synchronization Extension. You can repair or remove it.

- 8 Choose Repair.

9 Click Next.

Result: The Ready to Repair dialog box opens.

10 Click Install.

Result: Directory Synchronization Extension is reinstalled and corrupted files are fixed.

To Remove Directory Synchronization Extension

Note: You can also remove Directory Synchronization Extension from the Add and Remove Programs Control Panel applet. See “Uninstalling Directory Synchronization Extension” on page 69.

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 Applications CD into the drive.

3 Click Start → Run.

Result: The Run dialog box opens.

4 Click Browse.

Result: The Browse window opens.

5 Navigate to the drive (Z:\Directorysync).

6 Double-click the setup.exe file, then click OK.

Result: The Directory Synchronization Extension Maintenance Welcome screen opens.

7 Click Next.

Result: The Preparing to Remove screen opens.

8 Choose Remove.

Result: The Confirmation screen opens.

9 Click Yes.

Result: The Preparing To Remove window opens. When finished, the Removing window opens. The uninstallation of CallPilot Directory Synchronization Extension is successfully completed.

The system automatically shuts down all services.

Uninstalling Directory Synchronization Extension

Before you begin

ATTENTION

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 Directory Synchronization Extension” on page 67) or from the Add or Remove Programs Control Panel applet.

- 1 Click Start → Settings → Control Panel → Add or Remove Programs.
- 2 Select CallPilot Directory Synchronization Extension.
- 3 Click Remove.

Result: The Confirmation screen opens.

- 4 Click Yes.

Result: The Preparing To Remove window opens. When finished, the Removing window opens. The uninstallation of CallPilot Directory Synchronization Extension is successfully completed.

The system automatically shuts down all services.

Chapter 8

Recovering system software

In this chapter

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Reinstalling CallPilot server software	82
Installing and configuring D/480JCT-2T1 Intel board software	89
Rebuilding the 201i server from the disk image	98
Rebuilding the tower or rackmount server from the disk image	102
Recovering a hard drive	105

Introduction

The 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	Procedure
Reinstalling languages	■ page 78
Installing or reinstalling applications from the Applications CD	■ “Uninstalling and installing pcAnywhere” on page 80 ■ “Reinstalling CallPilot server software” on page 82 ■ “Rebuilding the 201i server from the disk image” on page 98 ■ “Rebuilding the tower or rackmount server from the disk image” on page 102 ■ “Reinstalling CallPilot server software” on page 82 ■ “Installing and configuring D/480JCT-2T1 Intel board software” on page 89
Rebuilding all system software from the Image CD	■ “Rebuilding the 201i server from the disk image” on page 98 ■ “Rebuilding the tower or rackmount server from the disk image” on page 102
Replacing and rebuilding the hard drive	■ “Recovering a hard drive” on page 105

ATTENTION

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

Determining your recovery strategy

IF	THEN
<ul style="list-style-type: none"> ■ 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 	<p>you may need to reinstall the languages. For instructions, see “Reinstalling languages” on page 78.</p>
<ul style="list-style-type: none"> ■ the CallPilot server is not functioning ■ errors that indicate incomplete or incorrect installation appeared during the CallPilot software installation 	<p>you may need to reinstall the CallPilot server software. For instructions, see: “Reinstalling CallPilot server software” on page 82</p> <p>Note: If reinstalling CallPilot server software from the Applications CD-ROM fails to restore system operation, contact your Nortel representative before using the CallPilot Image CD-ROM.</p>
<ul style="list-style-type: none"> ■ pcAnywhere cannot connect to the server 	<p>you may need to reinstall pcAnywhere. For instructions see: “Uninstalling and installing pcAnywhere” on page 80</p>
<ul style="list-style-type: none"> ■ the server is a new system and it failed while (or shortly after) running the Configuration Wizard 	<p>you may need to rerun the Configuration Wizard. For instructions, see the section about running the Configuration Wizard in the <i>CallPilot <server model> Server Hardware Installation</i> guide for your server.</p> <p>Note: If this does not fix the problem, contact your Nortel technical support representative.</p>

IF	THEN
<ul style="list-style-type: none"> ■ a RAID card failed 	<p>replace the faulty RAID card. For instructions, refer to the <i>CallPilot <server model> Server Maintenance and Diagnostics</i> guide for your server.</p>
<ul style="list-style-type: none"> ■ a single hard drive in a RAID system failed 	<p>replace the faulty hard drive as soon as possible to maintain hard drive redundancy.</p> <p>Then, you must rebuild the hard drive in the RAID system pack by running the RAID maintenance utility.</p> <p>For instructions on replacing the hard drive and running the RAID system maintenance utility, refer to the appropriate “Maintaining the RAID system” section in the <i>CallPilot <server model> Server Maintenance and Diagnostics</i> guide for your server.</p>
<ul style="list-style-type: none"> ■ the hard drive on a non-RAID system failed ■ both hard drives of a RAID system in a mirrored pair failed 	<p>replace the hard drive, and then rebuild and restore the CallPilot system (if a backup tape is available).</p> <p>ATTENTION</p> <p>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.</p> <p>For instructions on rebuilding the system, see “Recovering a hard drive” on page 105.</p>

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:\Norte\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)

Log file	Location
	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 refer to 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 Nortel 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.

ATTENTION

If you encounter problems when reinstalling the language prompts, contact your Nortel 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-ROM.

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 55.
- 2 On the main CallPilot Manager window, click Configuration Wizard.
- 3 Click Next on the Configuration Wizard Welcome window.

- 4 On the Configuration Mode window, select Express Mode, and then click Next.
- 5 Select Language Installation on the Express Configuration List screen, and then click Next.
- 6 When you reach the Language Source Directory screen, insert the CallPilot Language CD into the drive.
- 7 Enter the path to the root directory of the CD, and then click Next.
- 8 Select the language(s) and primary or/and Secondary Languages to install on the Language Installation screen, and then click Next.
- 9 Click Finish on the Ready to Configure screen.
- 10 Wait for the Progress Information screen to finish the installation.

Result: 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, refer to “Testing the CallPilot installation” in the *CallPilot <server model> Server Hardware Installation* guide for your server.

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* and changing pcAnywhere passwords in the *CallPilot <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 Click Start, point to Settings, and then click Control Panel.
- 3 Double-click the Add/Remove Programs icon.
- 4 Select Symantec pcAnywhere.
- 5 Click the Remove button.
- 6 Click Yes to remove the program.

To install pcAnywhere on a CallPilot server

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

Result: pcAnywhere is installed.

Reinstalling CallPilot server software

Recovering from a software malfunction

What reinstallation does

The CallPilot Applications CD enables you to reinstall CallPilot server software without a complete reinstall of the disk image.

(For more information on the disk image, see “Rebuilding the 201i server from the disk image” on page 98 and “Rebuilding the tower or rackmount server from the disk image” on page 102.)

The reinstallation procedure copies CallPilot program files from the CallPilot Applications 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 Applications 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.

ATTENTION

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

If reinstallation does not restore system operation

Note: Contact your Nortel 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 98
- “Rebuilding the tower or rackmount server from the disk image” on page 102

Requirements

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

- the CallPilot Applications CD that has the same release that is running on the CallPilot server
- the CallPilot PEP CD
- the CallPilot Language CD(s)
- the current password for the Administrator, NGenSys, or NGenDist account

ATTENTION

For security reasons, Nortel recommends that the CallPilot system be disconnected from the Nortel Server Subnet (NS Subnet) before you reinstall the system software.

To reinstall the CallPilot server software

ATTENTION

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.

Internet Information Server

The CallPilot Manager web-based software requires Internet Information Server (IIS). For more information, see the *CallPilot Planning and Engineering Guide*. If you are performing a system rebuild, IIS is installed automatically when you reinstall the operating system.



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 Nortel Networks. Installation of unapproved security patches may result in incorrect operation of your CallPilot system.

To determine which patches have been approved by Nortel Networks, refer to the latest issue of the *CallPilot Distributor Technical Reference*.

Materials you need

To install the CallPilot server software on your server, you need:

- CallPilot Applications CD with the same release that is running on the CallPilot server
- CallPilot PEP CD
- CallPilot Language CD(s)

current password for the Administrator, NGenSys, or NGenDist account

To install the CallPilot server software

1 Insert the CallPilot Applications CD into the drive.

2 Click Start → Run.

Result: The Run dialog box opens.

3 Click Browse.

Result: The Browse dialog box opens.

4 Navigate to the drive (Z:).

5 Double-click the setup.exe file that is located in the CallPilotInstall folder.

6 Click OK.

Result: The Application Installer asks you to confirm the installation.

7 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

8 Do the following:

IF your server model	THEN
appears in the list	click the model, and then click OK. Result: CallPilot updates the operating system registry with the model that you selected.
does not appear in the list	the server model you are using was introduced by Nortel Networks after this guide was released. Do the following: a. Click Have Disk. Result: The Open dialog box appears. b. Insert the floppy disk that was provided with your server into the floppy disk drive on the server.
does not appear in the list (continued)	c. Locate and select the platform file you want to use, and then click Open. Result: CallPilot updates the operating system registry with the model that you selected.

Result: A dialog box similar to the following appears to confirm your platform selection:

9 Click OK.

Result: Installation continues. When it is finished, the Application Installer automatically begins installing the CallPilot Manager software.

When the CallPilot Manager software installation is finished, the following dialog box appears:

10 Remove the CD from the drive.**11** Click Finish.**12** Restart the server.

To install the PEPs

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 the Nortel Web site to access the latest SU and PEP updates. Access the Nortel Meridian PEP Library (MPL) at the following URL, and then navigate to the “Multimedia PEP Tools” section.

<https://transportvo.nortel.com/mpl/mpl>

Note: If you cannot access the Meridian PEP Library, or if you cannot find the SUs, contact your Nortel representative.

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

For instructions, see “Installing Service Updates or Performance Enhancement Packages” on page 21.

- 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.
 - a. Click Next on each Configuration Wizard window to keep the current values.
 - b. When you reach the Language Source Directory window, 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, choose Apply the Current Configuration, and then click Finish.

Result: The configuration changes are applied to the server. When completed, you are prompted to restart the server.

Note: The configuration changes take up to 1 hour to apply.

- e. Restart the server.
- 5 Test CallPilot.

For instructions, refer to “Testing the CallPilot installation” in the *CallPilot <switch model> and CallPilot Server Configuration* guide for your switch and server.

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.

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 82.

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

- “To install the Intel board software” on page 89
- “To configure Intel board software” on page 91

For a list of configuration parameters, see the “CTBus parameters table” on page 96.

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 Applications 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 Click Next in the Welcome to Intel Dialogic screen.
- 4 Enter the User Name and Company Name in the Customer Information screen, and then click Next.

Note: Use the User Name and Company Name you entered for the operating system.

- 5 Click Browse in the Choose Destination Location screen to create a directory where the setup process will copy files.

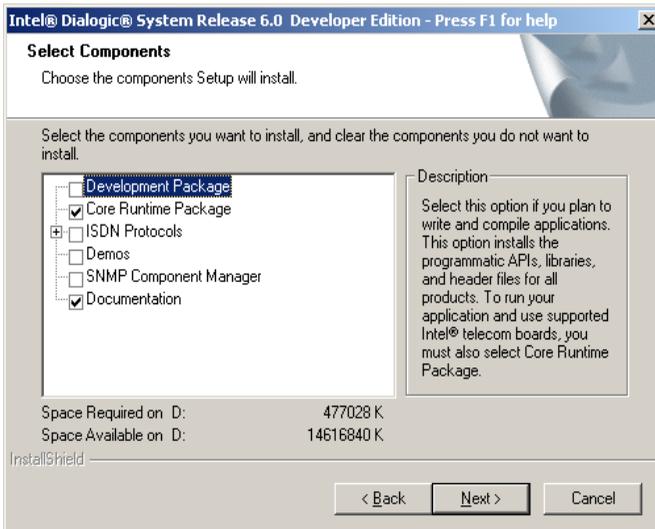
Result: The Choose Directory dialog box appears.

- 6 Enter D:\Dialogic in the Path field, and then click OK.
- 7 Click Yes in the pop-up window that asks if you want to create the directory.

Result: The Destination Location window displays again, showing the new directory.

- 8 Click Next in the Destination Location window.

Result: The Select Components screen appears.



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

Note: As a minimum, you must select Core Runtime Package.

Result: The copying files status window appears. When the files are copied, a dialog box asks: "Would you like to continue with the installation?"

- 10 Click Yes to continue with "To configure Intel board software" on page 91. Otherwise, click No to quit before configuring the Intel software.

Result: After you click Yes, the installation finishes and the system restarts.

- 11 Remove the Applications CD from the drive.

To configure Intel board software

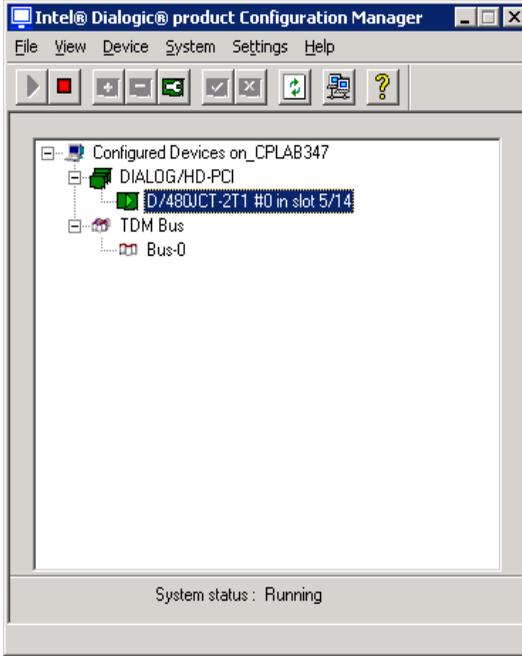
Configure the Intel board software using the Intel Dialogic Configuration Manager.

- 1 Start the Intel Dialogic Configuration Manager.

The Dialogic configuration manager can be started in two ways:

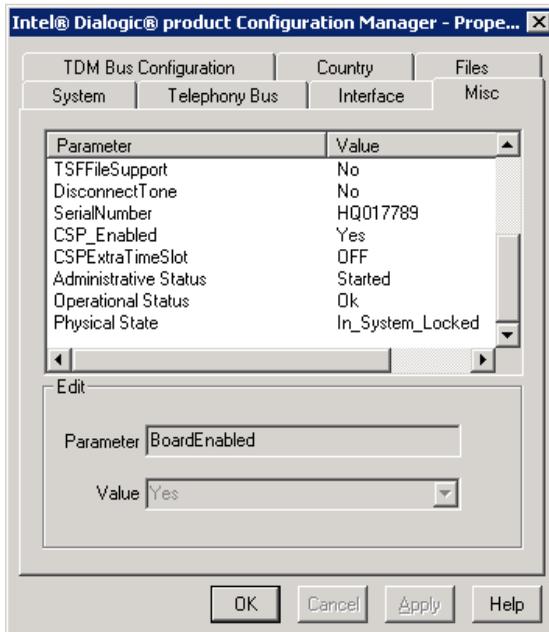
- immediately after installing the software, by selecting OK
- manually from the Start menu, by choosing Start › Programs › Intel Dialogic System Release PCI › Intel/Dialogic Configuration Manager

- 2 In the Intel Dialog Configuration Manager window, select the board you want to configure.



- From the menu, choose Settings → System/Device auto start → Start System.

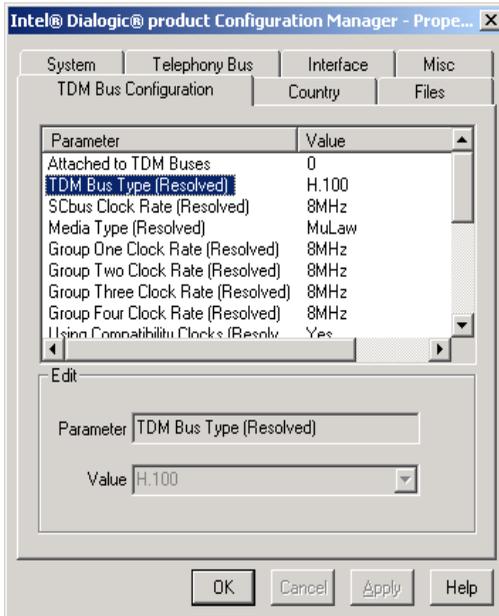
Result: The Dialogic Configuration Manager - Properties for All Devices window appears.



- 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 dialog box automatically.

- 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 screens and on the System and Telephony Bus screens.

Result: You are returned to the Dialogic Configuration Manager window.

Alternately, click Apply to apply the changes without closing the window. Or, click Cancel to exit the window without applying the changes.

Result: You are returned to the Dialogic Configuration Manager window.

- 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 Applications CD.
- 10 Remove the Applications CD from the drive, if it is not already removed.

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”

CTBus parameters table

Parameters	Value	Description
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.
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-ROM, all previous data is removed.

ATTENTION

To ensure data security, Nortel 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. 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.

ATTENTION

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 drive
- install the CallPilot server image from the CallPilot Image CD
- access Network share on the Nortel Server Subnet (NS Subnet)

Before you begin

Before you begin, ensure that all data has been backed up (if required).

Perform any required hardware changes to the server. For instructions, refer to the *CallPilot <server model> Server Maintenance and Diagnostics* guide for your server.

ATTENTION

For security reasons, Nortel recommends that the CallPilot system be disconnected from the Nortel Server Subnet (NS Subnet) before you reinstall the system software.

Installing the CallPilot Image for a 201i server

- 1 Disconnect the Nortel Server Subnet (NS Subnet) network cable.
- 2 Power on the server.
- 3 Insert the CallPilot Image CD Disk 1 into the drive.
- 4 Boot the server into ROM-DOS.
- 5 Select SCSI CD.
- 6 Navigate to z:drive
- 7 Run z:\image.bat from the CD.
- 8 Select 1. Install CallPilot 201i from the menu.
- 9 Enter "Y" to start restoring the image when the warning is displayed that this will overwrite all of the data on the system
- 10 You may be prompted for one or two additional CDs depending on the size of the hard drives in the server. When prompted "Insert media and press Enter to continue" remove the current CD and insert the next CD and then press Enter.
- 11 The imaging program automatically installs a fresh image of the operating system, CallPilot software, plus additional third-party software on the server.

- 12 Remove the CD from the drive.
- 13 The server will automatically restart after the image has been applied. If the server does not automatically restart and a dialog box appears, you are required to manually restart the system.
- 14 The server then starts the Windows 2003 mini-setup process. During this time, the server restarts automatically several times as the Windows 2003 configuration is finalized.

What's next?

Continue with “To configure the 201i server” on page 100.

To configure the 201i server

- 1 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 Nortel for CallPilot, refer to *Product Bulletin 2003-0151-Global: CallPilot Support for AntiVirus Applications*.

- 2 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.

- 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.

d. When the Setup Wizard is completed, the Configuration Wizard is automatically launched.

3 Run the Configuration Wizard to configure the server.

For instructions on configuring the server, refer to “Configuring the CallPilot server software” in the *CallPilot <switch model> and CallPilot Server Configuration* guide for your switch and server.

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

For instructions, refer to “Testing the CallPilot installation” in the *<switch model> and CallPilot Server Configuration* guide for your switch and server.

5 Perform a full system backup.

For instructions, refer to “Backing up and restoring CallPilot information” in the *CallPilot Administrator's Guide* (5551-7101-301).

Rebuilding the tower or rackmount 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-ROM, all previous data is removed.

ATTENTION

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

Before you begin

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

ATTENTION

For security reasons, Nortel recommends that the CallPilot system be disconnected from the Nortel Server Subnet (NS Subnet) before you reinstall the system software.

To Install the CallPilot Image for a tower or rackmount server

- 1 Disconnect the Nortel Server Subnet (NS Subnet) network cable.
- 2 Power on the server.

- 3 Insert the CallPilot Image CD Disk 1 (or DVD) that is appropriate for the platform type you are recovering into the DVD/CD drive.
- 4 Set the BIOS to boot from the DVD/CD.
- 5 When the server boots from the DVD/CD, select option 1 “Install CallPilot server image for <server model>” and press Enter.
- 6 You will be prompted if you are performing an upgrade. If you are not performing an upgrade, proceed to Step 9.
- 7 You will be prompted if you have successfully completed running the upgrade wizard. If you have not, you must before you can continue. Remove the DVD/CD from the DVD/CD drive, restart the server, log in to Windows and complete the upgrade wizard before continuing.
- 8 You will be prompted if you have updated/verified the server hardware. The server hardware must be updated/verified before you can continue.
- 9 Enter Y to start restoring the image when the warning is displayed that this will overwrite all of the data on the system
- 10 You may be prompted for one or two additional CDs depending on the size and number of hard drives in the server. When prompted “Insert media and press Enter”, remove the current CD, insert the next CD, and then press Enter.
- 11 The imaging program automatically installs a fresh image of the operating system, CallPilot software, plus additional third-party software on the server.
- 12 The server restarts after the image has been applied.
- 13 Remove the DVD/CD from the DVD/CD drive.
- 14 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.
- 15 After the last restart sequence, the Windows login dialog appears.

What’s next?

Continue with “To Configure the tower or rackmount server” on page 104.

To Configure the tower or rackmount server

- 1 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 Nortel for CallPilot, refer to *Product Bulletin 2003-0151-Global: CallPilot Support for AntiVirus Applications*.

- 2 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.

- 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.

- d. When the Setup Wizard is completed, the Configuration Wizard is automatically launched.

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

For instructions, refer to “Testing the CallPilot installation” in the *CallPilot <switch model> and CallPilot Server Configuration* guide for your switch and server.

- 4 Perform a full system backup.

For instructions, refer to “Backing up and restoring CallPilot information” in the *CallPilot Administrator’s Guide* (5551-7101-301).

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 server	“To recover a non-RAID system from a hard drive failure” on page 106
tower or rackmount server with RAID	<p data-bbox="583 539 997 595">“To recover a RAID system from a hard drive failure” on page 107</p> <p data-bbox="583 627 1031 754">Note: If both of the hard drives in a mirrored pair fail, then see “To recover a non-RAID system from a hard drive failure” on page 106</p>

Requirements

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

- a new hard drive

ATTENTION

The new hard drive must be a hard drive that is supported by Nortel for your server model. To obtain a new hard drive, contact your Nortel 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, refer to 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 and, if required, PEPs.

For instructions, see “Rebuilding the tower or rackmount server from the disk image” on page 102.

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

For instructions, refer to “Configuring the CallPilot server software” in the *CallPilot <switch model> and CallPilot Server Configuration* guide for your switch and server.

- 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 “Testing the CallPilot installation” in the <i>CallPilot <switch model> and CallPilot Server Configuration</i> guide for your switch and server.

- 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.

For instructions on restoring server data, refer to “Using the Backup and Restoring tool” in the CallPilot Manger online Help.
- 7 Restart the restored system.

For instructions, refer to “Restarting the server” in the *CallPilot Installation and Configuration Task List*.
- 8 Test CallPilot to ensure that it can receive calls, as described in “Testing the CallPilot installation” in the *CallPilot <switch model> and CallPilot Server Configuration* guide for your switch and server.
- 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, see “To recover a non-RAID system from a hard drive failure” on page 106.

To recover a RAID system from a hard drive failure

- 1 Replace the faulty hard drive.

For instructions, refer to the *CallPilot <server model> Server Maintenance and Diagnostics* guide for your server.
- 2 Rebuild the hard drive as described in the “Maintaining the RAID system” 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 “Testing the CallPilot installation” in the *CallPilot <switch model> and CallPilot Server Configuration* guide for your switch and server.

- 4 When you are satisfied that the system is working correctly, perform a full system backup.

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