CallPilot Passwords		
FUNCTION	USERID	PASSWORD (Case Sensitive)
Server logon, design	ngensys	__ngen!
Server logon, GCCS	ngendesign	Nortel
Server logon, Distributor	ngendist	ntdist
Server logon, Administrator	administrator	abc123
PCAnyWhere logon	nortelsupport	ctsnamessaging
ISQL Database logon	blue	_abc97
OA&M Reporter default logon		password
Client MAT default logon	admin	admin
Client login default	sysadmin	nortel or abc123
Support Tools logon, GCCS: 1.05 -1.07.08	tas	_tas98
Support Tools logon, Distributor: 1.05- 1.07.08	distributor	$dist1
Support Tools logon, Customer: 1.05 -1.07.08	customer	#cust1
Support Tools logon, GCCS: 1.07.09	tas	CTS!2K_nt
Support Tools logon, Distributor:1.07.09	distributor	DST@2K_nt
Support Tools logon, Customer:1.07.09 (No Access)		
Support Tools logon, Distributor: 2.0	distributor	<ZagUNot:9
PCAnyWhere logon 10.5	CALLPILOTDIST	<MudABye:9
PCAnyWhere ETAS	NORTELSUPPORT	!BedUGap.4
Callpilot Manager	000000	124578
ETAS Support Tools	tas	!TazlYex.4
Mylex login	gamroot	abc123
Distributor tools password 3.0		d</\>ST*cp3
PCAnywhere 3.0	CallPilotDist	d</\>RA=cp3
To start support tools, type: nbsa_ltl - self mcetools		

555-7101-330

CallPilot

Support Tools Guide for Distributor Support Personnel

Product release 3.0 Standard 1.0 November 2004

NORTEL NETWORKS™

CallPilot

Support Tools Guide for Distributor Support Personnel

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Chapter 1

Accessing the Nortel Networks support tools

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Introduction

The following CallPilot support tools are available to distributors:

- Nortel Networks-developed support tools running on the server (these tools are described throughout the document)
- third-party tools
- desktop client tools

This document is designed for CallPilot distributors. The CallPilot distributors must use only the tools presented in this document. Nortel Networks support personnel can use the tools intended for themselves or for the distributors.

This chapter shows CallPilot distributors how to access the CallPilot support tools that they are authorized to use.

Prerequisites

Before accessing the support tools, you must be familiar with the following issues:

- accessing a server locally and remotely
- using the following interfaces:
  - command line interface (CLI)
  - menu-driven interface
  - graphical user interface (GUI)

The CallPilot support tools run under the control of the Support Tools launcher, which runs under the operating system.

Accessing the server

You can access the support tools directly using the CallPilot server or remotely using a PC running pcAnywhere. If pcAnywhere is installed on the server, verify the application configuration before you use it for the first time. For instructions on installing and configuring pcAnywhere on your client PC, refer to the Administrator's Guide for the server that you want to access.

To log in to the system

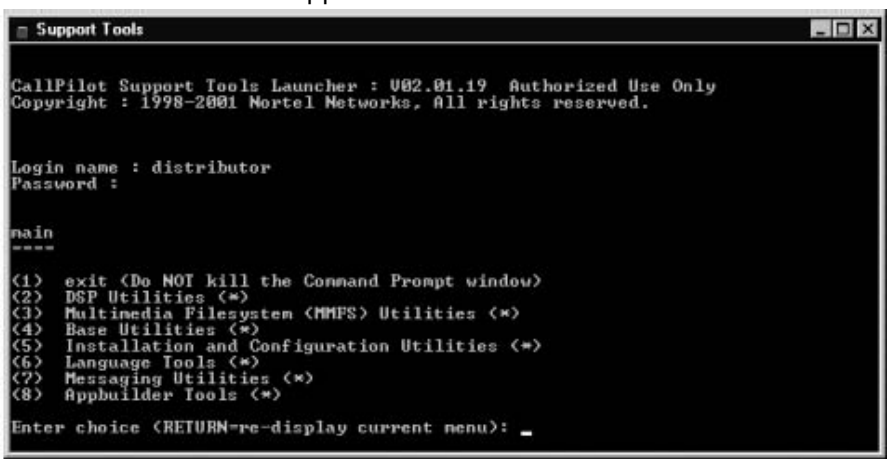
1 Click Start → Programs → CallPilot → System Utilities → Support Tools.

Result: The Support Tools window appears.

2 Type **distributor** at the `Login name:` prompt, and press **Enter**.

3 Type the password for distributor access at the `Password:` prompt, and press **Enter**.

Result: The main menu appears.



Accessing the tools

1 Type the number corresponding to the group that includes the tool that you want to run and then press **Enter**.

Result: The group menu appears, displaying the available tools in the group.

2 Type the number corresponding to the tool that you want to run and then press **Enter**.

Result: The selected utility starts to run.

Tip: From the Support Tools main menu, you also have the following options.

IF you want to	THEN
exit the Support Tools menu	type **1** and press **Enter**
redisplay the main menu	press **Enter**
access the help functions	type **/?** and press **Enter**

Running the tools

The system warns you if the utility that you are about to run can slow down or disable the server, and you can exit the program at that point. The system can also prompt you for additional information that the tool needs before it can function.

Each tool has its own CLI, menu interface, or GUI with a specific set of commands and displays. Refer to the section on each tool before using it.

Reference documents

NORTEL NETWORKS

CallPilot Customer Documentation Map

NTP Number 555-7101-(nnn)

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

End User Cards	End User Guides
Unified Messaging Quick Reference Card	Multimedia Messaging User Guide
Unified Messaging Wallet Card	Speech Activated Messaging User Guide
Command Comparison Card A-Style	Desktop Messaging User Guide for Microsoft Outlook
Command Comparison S-Style	Desktop Messaging User Guide for Lotus Notes
Menu Interface Quick Reference Card	Desktop Messaging User Guide for Novell Groupwise
Alternate Command Interface Quick Reference Card	Desktop Messaging User Guide for Internet Clients
	MyCallPilot User Guide

Chapter 2

DSP utilities

In this chapter

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Using the DSP Programmer utility 17

DSP Programmer tool

Intended audience

The DSP Programmer utility is intended for CallPilot distributors.

Purpose

The DSP Programmer utility is a CLI-based tool that reprograms the DSP sections with the DSP loads and speech recognition models.

Prerequisites

Before running the DSP Programmer, verify that the CallPilot server software and all required languages are installed.

Limitations

The system cannot perform the DSP programming operation while the target DSP is in use. Stop the CallPilot Resource Packages (services) that are controlling the target DSP sections before using the DSP Programmer tool. If possible, stop all CallPilot Resource Packages before running the DSP Programmer tool.

During a DSP reprogramming operation, the tool erases the DSP completely, and then programs the DSP with all the available sections. You cannot select sections individually, nor separate the erasing and programming flows.

Using the DSP Programmer utility

The DSP Programmer utility reprograms the DSP devices one-by-one, all DSP devices on one board or all DSP devices in the server.

Online help is available for all the commands and parameters.

After you entered a command, you can browse through the command parameters using the up and down arrow keys on the keyboard. A command can also be followed by a parameter on the same line.

DSP Programmer commands

The following table summarizes the commands available with the DSP Programmer tool.

Command	Parameter	Function
Refresh		Refreshes the internal list of DSP devices. Updates the tool's DSP device list if an MPC-8 card is inserted or removed on an IPE platform after the DSP Programmer utility has been launched.
Display	board	Displays the list of all DSP carrier boards in the server.
	DSP	Displays the list of all DSP devices on all the carrier boards in the server.
	sections	Displays the list of all sections (DSP loads and speech recognition models) available for programming.
Flash	DSP	Reprograms one DSP device. Type the number displayed in square brackets next to the DSP label in the list to select the DSP to program; see Notes.
	board	Reprograms all DSP devices on one board. Type the number displayed in square brackets next to the board label in the list to select the board; see Notes.

Command	Parameter	Function
	all	Reprograms all DSP devices on all the boards in the server. This option does not require additional parameters. The program prompts for a confirmation and gives you the chance to cancel the operation.

Notes:

- It is not necessary to type the leading zeros.
- You can cancel the command by pressing <CR> on an empty line.

Results

After you entered a programming command and the command has started to execute, the DSP Programmer utility displays the following information:

- the progress of the operation in the console window; for example, `erasing` or `programming`
- the section that is currently being programmed for each DSP device

When programming all DSP devices on one board or all DSP devices in the server using the command `Flash board` or `Flash all`, respectively, the DSP devices are programmed in parallel to minimize the execution time. As each DSP is programmed in a separate thread of execution, progress messages for individual DSP sections can be interleaved. This behavior is normal and is caused by the operating system scheduling the various threads at various suspend and resume intervals.

File locations

The DSP Programmer utility obtains the list of sections to be programmed from a profile file named Load.inf. The profile file and all DSP load files are stored in a DSP technology-specific directory.

The path to the C52 or C53 technology-specific directory is D:\Nortel\hardware\Dsp\C52. All the DSP load files stored in this directory have the extension .out.

The language models are stored in directories with names of the form, such as D:\Nortel\lang<*ABCD*>\asr, where *ABCD* is a four-digit number that corresponds to a given language. All language model files have the extension .asr.

Chapter 3

Multimedia file system utilities

In this chapter

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Introduction

The multimedia file system (MMFS) utilities are CLI-based tools intended for

- Nortel Networks support personnel
- distributors trained by Nortel Networks in the use of this tool

CAUTION

Risk of data loss

Use caution when changing or deleting files and cabinets.

CAUTION

Risk of data corruption if files or cabinets are not correctly accessed.

Do not use multiple instances of the Volume Server utility to manipulate the same file or cabinet as the utility does not have file-level locking capabilities.

Volume Server utility

Intended audience

The Volume Server utility is intended for Nortel Networks support personnel and for the distributors trained by Nortel Networks in the use of this tool.

Purpose

The Volume Server utility provides access to volume server-level APIs to access the MMFS volume and the cache server system-related and control functions.

The Volume Server utility provides access to APIs that are internal to nbosa.dll. As a result, some error checking, concurrency locking, and access checking tasks are not performed.

Prerequisites

Before you use this tool, you must be familiar with the overall architecture of the MMFS Volume and cache servers.

Limitations

The Volume Server utility works only on MMFS files, cabinets, and volumes.

Function summary

The following table describes the functions available with the Volume Server utility.

Function name	Task
audit	Performs a consistency check on the block bitmaps of an MMFS Volume (both text and voice).
getstate	Displays the MMFS Volume Server state, which can be one of the following: Normal, Auditing, Trusting, and Backup.
ofsomdisplay	Displays the operational measurements of the MMFS Cache Server.
omdisplay	Displays the operational measurements of the MMFS Volume Server.
showparms	Displays the parameters of the specified MMFS Volume. These parameters are set when the MMFS volumes are formatted. See *SysVolFormat* in nbosa_ci for details.
showvolused	Displays the percentages of the total blocks used in the MMFS. The percentage includes both text and voice block usage. Use this command to check if the Volumes are running near their capacities.
vserror	Translates the Volume Server return code.

Launch an audit to recover lost blocks if the MMFS volumes (text and voice) are nearing their storage capacity; use *ShowVolUsed* to obtain the usage percentage.

Run an audit if some blocks (text and voice) are marked as free, but are in fact referenced by existing files in the MMFS. Use the *vsblkfree* to determine the state of a block. An audit checks the file system and ensures that the blocks referenced by each file are consistent with the Volume Server internal bitmaps

Once the audit is launched, the state of the Volume Server is set to Auditting. You can verify the state by typing *OmDisplay*. After the audit, the state of the Volume Server reverts back to Normal.

Multimedia File System utility

Intended audience

The Multimedia File System utility is intended for Nortel Networks support personnel and for the distributors trained by Nortel Networks in the use of this tool.

Purpose

The Multimedia File System utility provides access to low-level APIs to access multimedia file system (MMFS) files and cabinets.

The utility provides basic file system utility (FSU) commands for viewing and manipulating MMFS files and cabinets.

Prerequisites

Before you use this utility, you must be familiar with the record structure of the files.

Limitations

The Multimedia file system utility works only on MMFS files and cabinets.

Finding a FID

You must know the File Identifier (FID) to be able to open a file.

- If you know the complete path and file name, use the getfid command.
- Use the +C option in the ls command to display the FIDs of all files in a cabinet.

Command descriptions

Command name	Function
ls	Displays cabinets and files from the current cabinet. Parameters in [] are optional. Parameters in <> indicate values, not keywords. Not all information is available for some classes.
GetFID	Displays the FID of a file, given its name.
cd	Displays or changes a working cabinet.
getfid	Converts a path to a FID.

OSA and File API utility

Intended audience

The OSA and File API utility is intended for Nortel Networks support personnel and for the distributors trained by Nortel Networks in the use of this tool.

Purpose

The OSA and File API utility provides access to application-level APIs for the Operating Systems Abstraction (OSA) layer, including the MMFS files and cabinet extensions.

The OSA and File API utility gives access to APIs that are exported from nbosa.dll and nbosafld.dll. The utility performs error checking, concurrency locking, and access checking tasks. Use the Application support tools to manipulate user mailboxes (cabinets) and messages (files).

The OSA and File API utility includes commands to

- perform system operations for MMFS (for example, volume creation, formatting, and backup operations)
- load and unload data from NTFS to MMFS and vice versa (the system prompts you to enter any required parameters)

The OSA and File API utility has three arrays of the following handles:

- 15 file handles
- 15 cabinet handles
- 15 file find handles

When using a command that requires one of the preceding types of handles, the system prompts you to enter the array index to use.

The help command displays a list of available commands.

Type	To
_F	start a path of an MMFS file. Use the backslash (\) as the path name separator. The following considerations apply to path names: ■ The maximum length of a path component depends on the type of cabinet. ■ The path names are case sensitive. ■ The path names do not have to be unique within a cabinet. **Note:** In general, an FID preceded by a leading _F (for example, _F1.328.-23660) must be supplied instead of a name.
help	display a list of all commands.
help <*cmd*>	display a short description of the command entered in the angle brackets (<>).
help fsu help dd help cm	list subsets of the commands, along with the description of each command.

The MMFS file is synonymous with record-oriented and MMFS files.

If you ares unsure of the flags or meanings of parameters, use the default parameters.

Prerequisites

Before using this tool, you must be familiar with the CallPilot MMFS and the OSA layer.

Limitations

The utility does not support all file-related commands for MMFS and Win32.

Function summary

Function name	Description
FileVolumeGetInfo	Gets information about a disk volume. For information about an MMFS volume, call with a volName like _F1. For information about a native operating system volume, call with a volName like D:\.
FileVolumeGetList	Returns a list of installed volumes as a series of null terminated values. The entire list ends in two nulls; for example, D:\<null>E:\<null>_F1<null>_F2<null><null>. **Note:** The caller is responsible for allocating memory for a returned volList.
FileVolumeGetPath	Returns the path of a list of installed volumes as a series of null-terminated values. The entire list is ends in two nulls; for example, D:\<null>E:\<null>_F1<null>_F2<null><null> **Note:** The caller is responsible for allocating memory for returned volList.
SysVSAudit	Start or stops a volume audit. *<VolName><ControlRequest><flags>*

Chapter 4

Base utilities

In this chapter

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Fault Management tool

Intended audience

The Fault Management tool is intended for Nortel Networks support personnel. The distributor personnel trained by Nortel Networks in the use of this tool have only limited access to the tool features.

Purpose

The Fault Management tool is part of the Base Utilities and is capable of

- modifying the CallPilot database
- retrieving, reporting, and forwarding events.

Purpose

The Fault Management tool is a CLI-based utility that provides access to low-level APIs in the AOS Fault Management server.

This tool provides access to the APIs exported by the AOS Fault Management server. Use caution when changing or deleting tables.

Prerequisites

Before using the Fault Management tool, you must be familiar with the AOS Fault Management Feature architecture.

Risk of server or client malfunction

Use the Fault Management tool carefully to avoid causing server or client malfunction.

Limitations

You can use the Fault Management tool only if the AOS, LDAP Server, and the database are running.

Using the Fault Management tool

The tool can use significant CPU cycles when performing major database operations; for example, when retrieving all records.

Risk of significant CPU consumption

Proceed with caution when using the Fault Management tool on an active system.

When you open the Fault Management tool, the following screen appears (distributors have access only to a subset of the menus).

Login to CallPilot Server (option 0)

You must log in to the CallPilot server to be able to forward alarms (option 2) and tables (option 6). If you do not log in to the CallPilot server, the event forwarding feature does not work.

To be able to log in to the CallPilot server, you need the following information:

Information	Example
Computer name or IP address	47.11.220.107
User ID	456987
Password	J*p2le04>F

Note: This is the same information that you enter when logging in to CallPilot Manager.

Client exit (option 1)

This option closes the Fault Management tool in an appropriate manner.

Risk of server corruption

You must always use option 1 to exit the tool.

Alarms (option 2)

You must first log in to the CallPilot server (option 0) to be able to use option 2.

The client Alarm Monitor GUI displays the list of active alarms. If for some reason the client is not available, you can also view the list of active alarms in the Fault Support utility.

At the main menu prompt, type 3 (Alarms) and press Enter, then select 4 (Get all Alarms) and press Enter. The tool displays a list of the active alarms. The list can display a maximum of 100 alarms.

You can clear an alarm by deleting it from the active alarm list. The alarm is only removed from the list, while the condition causing the alarm can still be present. Clear an alarm by selecting option 5 from the Alarms menu.

The alarm entry shows the following information:

- the date and time when the alarm was logged
- the alarm severity (for example, MIN)
- the managed object reporting the event (Fault: NT Log Monitor[0])
- any optional parameters that have been filled by the application

Notification Server tool

Intended audience

The Notification Server tool is intended for CallPilot distributors.

Purpose

The Notification Server menu-driven utility allows design, system, and verification personnel to run the utility in automated test mode.

The utility support mode allows support personnel to perform the following tasks:

- View and sometimes modify the Notification Server internal states and variables.
- Verify that the MWI Audit is scheduled correctly, runs as scheduled and executes in a reasonable amount of time. The Notification Server utility allows you to configure the MWI Audit schedule, change the delay request time or the type of MWI Audit, initiate an MWI Audit on demand, stop an in-progress MWI Audit, and query the current MWI Audit Status. The utility also allows you to configure the Notification Server retry interval, as well as limit and display all registered MAPI clients.
- Verify that the Garbage Daemon Audit is scheduled correctly, runs as scheduled and executes in a reasonable amount of time. The Notification Server utility allows you to configure the Garbage Daemon schedule, initiate a Garbage Daemon Audit on demand, stop an in-progress Garbage Daemon Audit, and query the current Garbage Daemon Audit Status.
- Verify that the Remote User Audit is scheduled correctly, runs as scheduled and executes in a reasonable amount of time. The Notification Server utility allows you to configure the Remote User Audit schedule, initiate a Remote User Audit on demand, stop an in-progress Remote User Audit, or query the current Remote User Audit Status.

- Check if an MWI is working by turning it on and off.
- Check the internal memory allocation counters for memory usage problems.
- Turn different kinds of tracing on and off for debugging purposes.

Prerequisites

You must have a basic understanding of the functionality of the CallPilot Notification Server.

Limitations

None.

Using the Notification Server tool

The caller controls the pace of the audit operation by specifying a delay in milliseconds between successive mailbox audits. For instance, the periodic audit, which is launched once a day in MCE, is not a high-priority operation. Therefore, the inter-mailbox audit delay can be set to a relatively longer interval; for example, 1 through 2 seconds. The allowed range for the audit interval is from 50 milliseconds through 10 seconds. If the specified delay interval is out of range, the tool uses the closest value to the allowed limit; for example, 50 milliseconds if the user-specified value is less than 50.

Support functions

The following table describes the support functions of the Notification Server tool.

Function	Description
NMns_MWIAuditStart	Places a request to start the MWI Audit operation on all mailboxes. If an audit is already in progress, this request is rejected. This API returns immediately after initiating the audit operation.
NMns_MWIAuditStop	Aborts the MWI audit operation in progress. The request is ignored if the MWI Audit is not in progress.

Function	Description
NMns_MWIAuditQuery	Returns the status of the MWI audit in progress. The status consists of audit state and other information; for example, the number of mailboxes audited so far and the start time. If the audit is not in progress, the return data contains the last audit information.
NMns_GDAuditStart	A request to start the Garbage Daemon Audit operation on all mailboxes. If an audit is already in progress, the request is rejected.
NMns_GDAuditStop	Aborts the Garbage Daemon Audit operation in progress. The request is ignored if a Garbage Daemon Audit is not in progress.
NMns_GDAuditQuery	Determines the status of an in-progress Garbage Daemon Audit. If no Garbage Daemon Audit is in progress, the return data contains the status of the most recent Garbage Daemon Audit.
NMns_RemoteUserAuditStart	A request to start the Remote User Audit operation. If an audit is already in progress, the request is rejected.
NMns_RemoteUserAuditStop	Stops an in-progress Remote User Audit. This API takes no action if no Remote User Audits are in progress.
NMns_RemoteUserAuditQuery	Determines the status of an in-progress Remote User Audit. If no Remote User audit is in progress, the return data contains the status of the most recent Remote User Audit.
NMns_GetConfig	An API provided to view an internal Notification Server configuration record stored in the database.
NMns_ModConfig	Modifies an internal Notification Server configuration record stored in the database.

Function	Description
NMns_Control	This API is provided for the Notification Server tool to exercise various server functions of internal notification and to turn on or off various tracing information for Desktop registration, logins, MWI audit, Garbage Daemon Audit, Remote User Audit, and so on.
NMns_Control (1. Desktop Client)	Displays the internal free desktop client counters and a list of all registered desktop clients on the CallPilot trace window.
NMns_Control (3. Lock Counts)	Displays the internal free lock counters and a list of all locks on the CallPilot trace window.
NMns_Control (4. Trace)	Turns on or off extra trace information. The CallPilot trace window displays the extra trace information.
NMns_Control (9. MWI)	Used to check if an MWI is working by turning it on and off.
NMns_DsktopCounter	Returns Internal Desktop registration counters kept by the Notification Server.
NMns_LockCounter	Returns Internal Lock counters kept by the Notification Server.

Main menu

Once the Notification Server tool is started, the main menu appears.

CAUTION

Risk of improper Notification Server tool operation

Use only the commands that are intended for the use of support personnel. The other commands are for designer use only.

The Notification Server tool commands are as follows:

Command	Support use	Description
TestProductAPIs	No	Opens the Product API Menu. Only a developer is allowed to use it for testing Notification Server APIs.
TestSupportAPIs	Yes	Opens the Support Menu.
Automated Test Menu	No	Allows automated testing to be performed. This mode is password-protected.
Connect to an Off-Node NS	No	Connects to a Notification Server running on a remote machine.
Convert UUID Struct to UUID String	No	Takes a UUID structure as input and displays a UUID string as output.
Convert UUID String to UUID Struct	No	Takes a UUID string as input and displays a UUID structure in hexadecimal format as output.
Shut-down NS	Yes	Shuts down the Notification Server immediately.
Developer test	No	Allows developer testing to be performed. This mode is password-protected.

System Manager API utility

Intended audience

The System Manager API utility is intended for Nortel Networks support personnel. Distributors trained by Nortel Networks in the use of the System Manager API tool have access only to selected features of this tool.

Purpose

The System Manager API utility is a CLI-based tool that allows you to diagnose problems with services, particularly with the System Manager service and the System Manager Daemon service.

The utility supports basic CLI commands. Use the help command to display a list of these commands. Use the help command in conjunction with a parameter to display additional information on a specific command.

The System Manager utility commands can be grouped into three general categories.

Category	Description
Integration	The integration commands are useful for checking the sanity of services. Use service-specific tools whenever possible.
Registry	The registry commands are useful to query, modify, and create registry keys and values specific to a service.
Service	Use the service commands to interact with one or more services. The interaction includes the creation, deletion and control of services.

Prerequisites

Before you can use this tool, you must have a general knowledge of the operating system services and a good idea of the purposes of each Nortel Networks service.

Limitations

Some control codes are not implemented for a particular service. If a service receives such a control code, the default action is to do nothing.

Using the System Manager API utility

Checking service status

A quick way to check the status of all Nortel Networks services is to issue the Status command. If any services are running, use the QueryService command to get more information on the specified service.

Function summary

Function	Description
FltReport	The FltReport command determines if the fault management service is functioning. To perform this task, FltReport attempts to issue a fault report. Use the Fault Management tool for full fault server testing.
Status	The Status command displays the status of all services that have a registry entry. For services that are running, additional information displays, such as the operating system return code and the service return code.
QueryService	This command queries a service. Use this command to determine the current status of a service. The displayed information includes the following: ■ State of service: stopped, running, start pending, stop pending ■ WinRC: Win32 return code providing the reason why a service is not running ■ ServRC: CallPilot return code providing the reason why a service is not running ■ Checkpoint: during a long start or stop, checkpoints indicate the service progress. ■ WaitHint: during a long start or stop, the wait hint indicates the number of seconds remaining before the next service checkpoint.

Chapter 5

Installation and configuration utilities

In this chapter

Backup/Restore utility 44

Backup/Restore utility

Intended audience

The Backup/Restore utility is intended for CallPilot distributors.

Purpose

Use the Backup/Restore utility to activate programs or display information about the status and the history of the backup/restore operation.

Only this tool provides the following backup and restore functions:

- Restore from a system backup
- Diagnose a backup/restore operation

Prerequisites

None.

Limitations

None.

Using the Backup/Restore utility

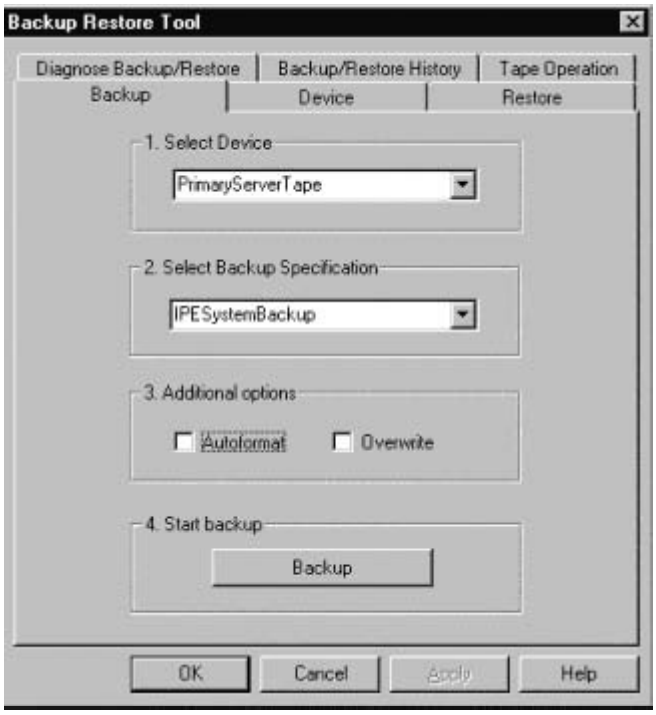
Introduction

The Backup/Restore tool provides a dialog box that has the following tabs:

Tab	Function
Backup	Backup
Device	Query, add or delete a device
Restore	Restore
Diagnose Backup/Restore	Backup/restore diagnostic
Backup/Restore History	Displays backup/restore history
Tape Operation	Tape operations such as erase tape and retension tape

Note: For certain operations, such as backup and restore, the tool displays a Cancel button you can click to stop an operation while it is already in progress.

Backup tab



To perform a backup operation, proceed as follows.

1 Select a device from the Select Device drop-down list box.

Tip: The PrimaryServerTape is the default device, used for performing a backup to the local tape. You can select the Other Device option, which is user defined, for a remote disk backup. For details on creating a remote disk device, refer to the Device tab section.

2 Select one of the following backup specifications:

- IPESystemBackup—for an IPE full system backup
- TRPSystemBackup—for a TRP full system backup

3 Select the required additional options.

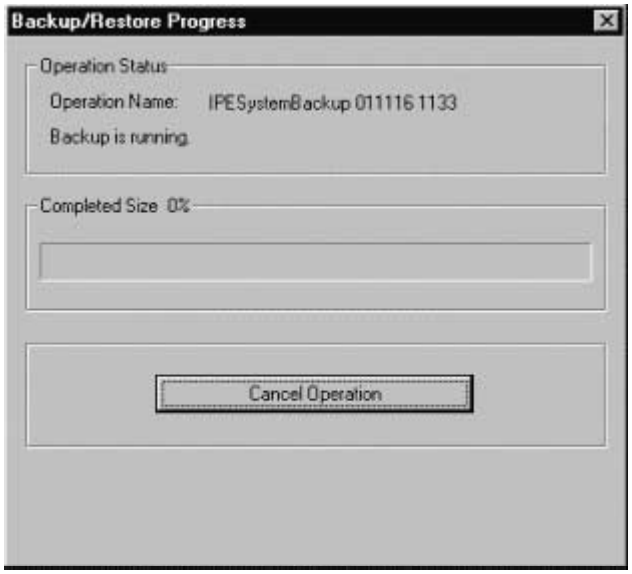
- Autoformat—select the Autoformat check box for a tape backup.
- Overwrite—select the Overwrite check box if you want to overwrite the existing data on the tape.

Tip: If you selected a remote disk backup, the additional options are shaded.

Note: If you schedule backups to run one after the other and intend to use the same tape, select Overwrite only for the first backup. If you select Overwrite on the subsequent backups, you erase the data from the first backup.

4 Click the Backup button to start the backup operation.

Result: The Backup/Restore Progress window appears. You can click the Cancel Operation button to cancel a backup operation while it is in progress.



5 When the backup is finished, close the Backup/Restore Progress window.

Device tab

Use the Device tab to query a device, and to add or delete a device.

To query a device, proceed as follows.

1 Select a device from the Query Device drop-down list.

2 Click Query Device.

Result: The Device Detail window appears.

To add a device, proceed as follows.

1 Enter a descriptive name (such as Remote Backup) in the Device Name field.

2 Enter the network path to the new device (in this case, to the remote backup directory on the file server) in the Device Path field; for example, \\server\backup, where server is the computer name of the file server, and backup is the name of the shared directory created on the file server to store the backup data.

3 Click Add Device.

Result: A message indicating that the device has been added successfully appears.

Note: You are allowed to add only devices of disk type. You cannot add tape devices using this tool.

To delete a device, proceed as follows.

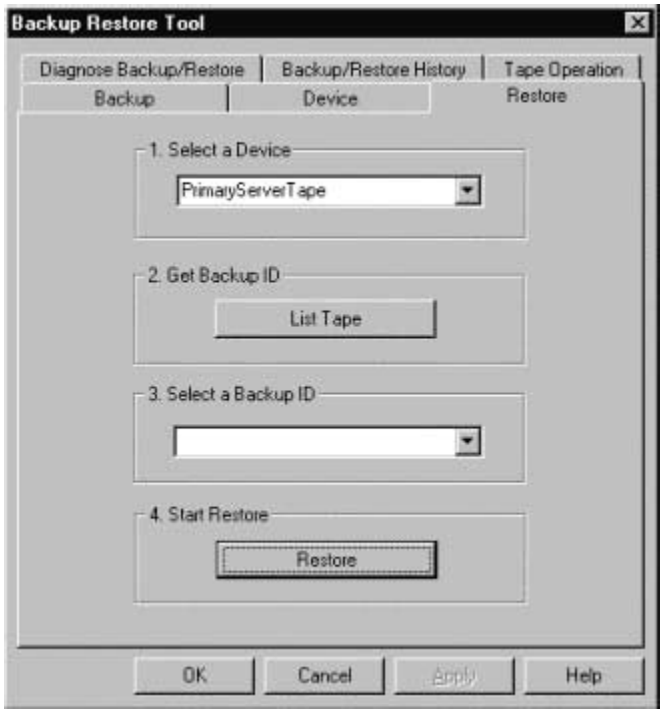
1 Select a device from the Delete Device box.

2 Click Delete Device.

Note: The PrimaryServerTape device cannot be deleted. This is a CallPilot system file.

Restore tab

Use this tab to perform a restore from a local tape or from a remote disk file server.



To perform a restore, proceed as follows.

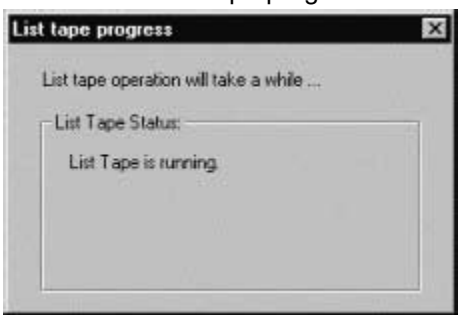
1 Select a device from the Select Device drop-down list.

Tip: The PrimaryServerTape is the default option, which is used for performing a restore from a local tape. You can select the Other Device option, which is user defined for restoring from a remote disk. For information on creating a remote disk device, refer to the Device tab section.

2 Proceed as follows, depending on the option that you selected in Step 1.

a. If you selected PrimaryServerTape, click List Tape in the Get Backup ID section.

Result: The List tape progress window appears.



When the list tape operation is completed, a message appears in this window to inform you to choose a backup ID from the Select a Backup ID drop-down list box. Close the List tape progress window.

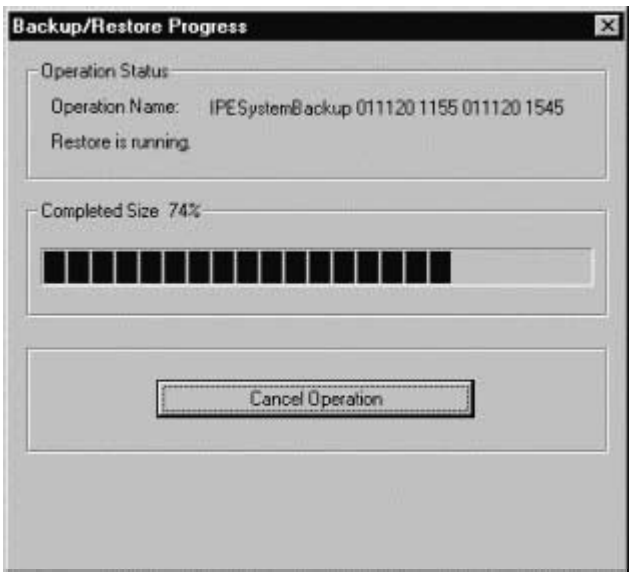
b. If you selected a user-defined device, click List Disk in the Get Backup ID section.

Result: A message box appears to inform you to choose a backup ID from the Select a Backup ID drop-down list. Click OK to close the message box.

3 Select a backup ID from the drop-down list.

4 Click Restore.

Result: The Backup/Restore Progress window appears. You can click Cancel Operation to cancel a restore operation while it is in progress.

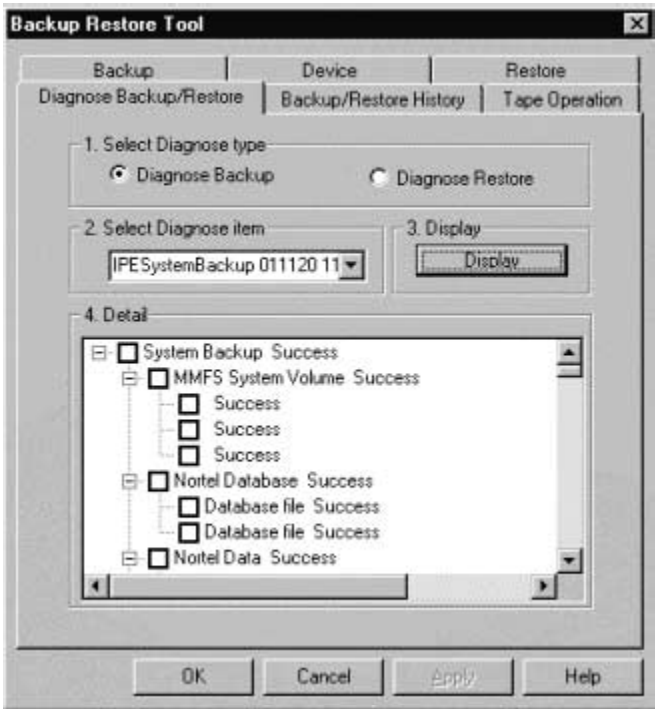


Tip: Restore operations take longer than backup operations. All CallPilot services are shut down automatically before a restore operation begins and all CallPilot services are restarted automatically when a restore operation is completed.

5 Close the Backup/Restore window when the restore is finished.

Diagnose Backup/Restore tab

Use this tab to display the result of each backup/restore item. This tab is especially useful when a backup log file indicates that some items have been skipped, or that the backup was partially successful. In this tab you can see the skipped items.



To perform a backup/restore diagnostic, proceed as follows.

1 Select a diagnostic type.

- If you want to look at the result of each backup item, select the Diagnose Backup radio box.
- If you want to look at the result of each restore item, select the Diagnose Restore radio box.

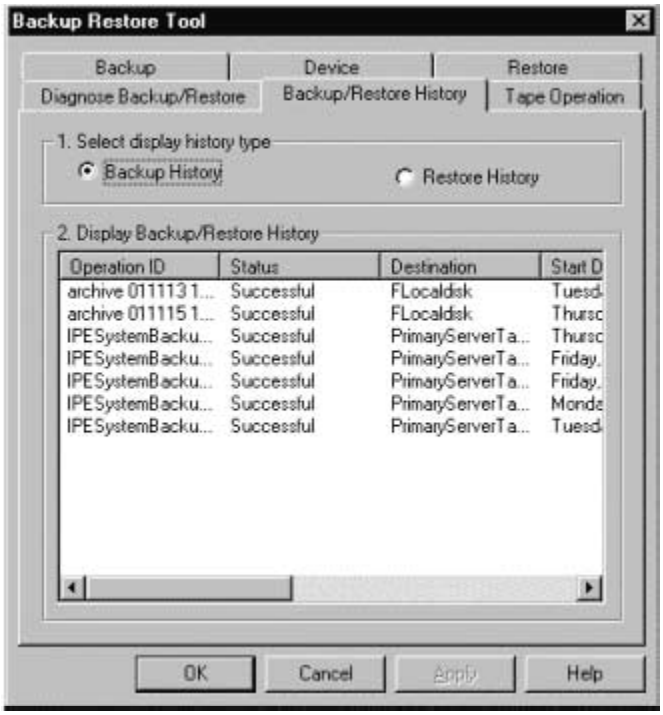
Result: A message box appears and prompts you to select a Backup ID from the Select Diagnose item drop-down list. Click OK to close the message box.

2 Select a diagnostic item from the drop-down list.

3 Click Display to display the diagnostic information.

Backup/Restore History tab

Use this tab to look at the backup/restore history of the system.



Select the display history type.

- Select the Backup History radio button to display the backup history of the system.
- Select the Restore History radio box to display the restore history of the system.

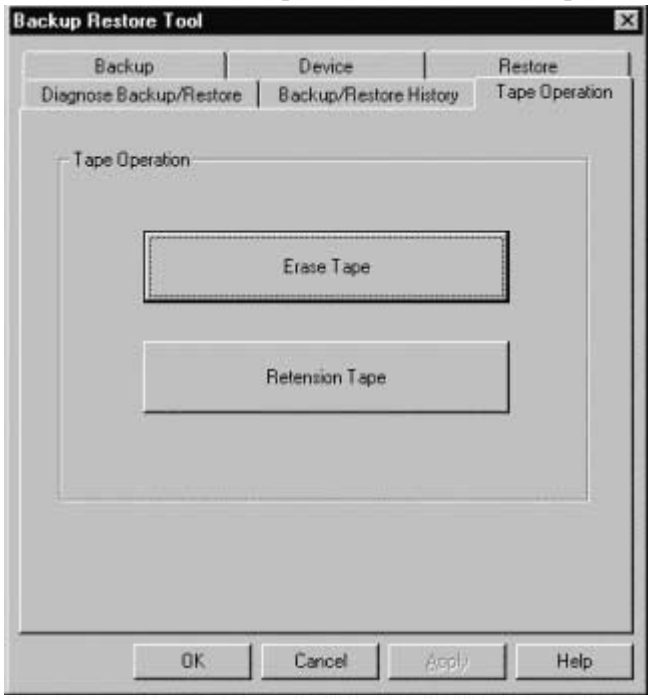
Each backup/restore contains the following information:

- Operation ID
- Status
- Destination
- Start Date
- Elapsed time
- Size in kbytes

- Primary Error Code
- Extend Error Code

Tape Operation tab

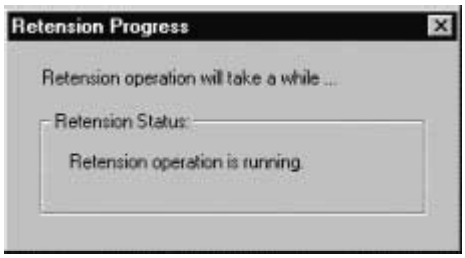
Use this tab to erase a tape or to do a retension operation on a tape.



Select the tape operation that you want to perform.

- Click Erase Tape to erase a tape.
- Click Retension Tape to retension a tape.

The Retension Progress window appears. When the retension operation is finished, close this window.



Chapter 6

Language tool

In this chapter

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Description

Intended audience

The Language tool is intended for CallPilot distributors.

Purpose

The Language tool allows you to set up and check languages, and to obtain information whether a language was installed successfully or not.

The Language language tool is CLI-based and allows you to

- see the languages that are installed on a CallPilot system
- set the system primary and secondary languages
- run a detailed integrity check of an installed language

Prerequisites

You must use the Language tools in real time only.

Using the Language tool

List Installed Languages

Use this option to display the numbers and names of the installed languages; for example, English (American) and French (Canadian). For each installed language, the system displays additional information, including the following:

- the Nortel Language ID; for example 1033 for English (American)
- the Local language ID (1, 2)
- the language category: primary or secondary

Check Language

Use this option to run a detailed integrity check of an installed language.

Enter the Nortel Language ID of the language that you want to verify; for example, 1033 English (American). The system verifies that

- all prompts are installed correctly
- all files in NTFS and MMFS are installed
- the SR load is flashed in DSP
- the database integrity is maintained

The Check Language option does not check the following information:

- versioning
- asrlex/lex tools
- prompt data integrity
- variable translation

Setting the system primary and secondary language ID

1. Select the List installed Languages option.

   Result: The system displays detailed information about each language.

2. Compare the Language Name and the Local Language ID with the existing Primary and Secondary status.

3. Select the Set Primary/Secondary Local Language ID option.

4. Type the Primary Local Lang ID (for example, type 2 to make Local Language 2 the primary language).

5. Enter the Secondary Local Lang ID (for example, type 1 to make Local Language 1 the secondary language).

6. Select the List installed Languages option.

7. Verify the result of the operation by comparing the Language Name and the Local Language ID with the new Primary and Secondary status.

Chapter 7

Messaging utilities

In this chapter

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IS_Patch utility 87

Email-by-phone Message Cleanup tool 89

Move User tool

Intended audience

The Move User tool is intended for CallPilot distributors.

Purpose

The Move User tool is a window-based application that migrates a user's mailbox from one volume to another volume. When a volume is almost full, you can add another volume to CallPilot. You can move some users from the full volume to the new volume. If disk usage needs to be balanced between volumes, use this tool to move some of the active mailbox users to a less active volume.

Limitations

The migration of mailboxes can affect users during the time that their mailboxes are being moved; perform the mailbox migration only when the users are not accessing the mailboxes. The Call Answering feature of a mailbox can be affected as well when the mailbox is moved. However, the migration of each mailbox takes only a few seconds.

Ensure that the MMFS Volume Server and the database server are up and running when you are using the Move User tool.

Using the Move User tool

The Move User tool can search for a mailbox by number, first name or last name. When the target mailbox is selected for migration, all the user's mailbox contents, including messages, greetings and fax log file, are moved from the source volume to the target volume. The system updates the user's database automatically if the moving operation is successful.

The Move User window has the following menu items.

Menu	Menu item	Description
View	Toolbar	Shows or hides the toolbar in the main window. The toolbar contains tool buttons for mailbox migration and is displayed under the menu bar.
	Status bar	Shows or hides the status bar in the main window. The status bar is displayed at the bottom of the main window.
Help	Description	Describes the Move User tool.
	About MoveUserGUI	Displays the Move User tool version.
Execute	Move Folder	Displays the Mailbox Name and Designated Volume dialog box.

The Mailbox Name and Designated Volume dialog box contains the following fields.

Field	Description
Mailbox number	Filters mailboxes by number.
Last name	Filters mailboxes by the user's last name.
First name	Filters mailboxes by the user's first name.
Destinated Volume	Enter the name of the target volume; that is, the volume to which the mailbox is moved from the current volume. Ensure that the destinated volume name has a prefix of _F. For example, to enter volume 103, type _F103 in the Destinated Volume field.

Note: You can use the wild card character "%" in the Mailbox number, Last name and First name fields to match any string of characters.

The Mailbox Name and Designated Volume dialog box also includes two buttons.

- OK—click to search for mailboxes.
- Cancel—click to cancel the mailbox search.

Search Result screen

The Search Result dialog box appears when a mailbox search is complete and contains the following boxes.

Box	Description
Entries found	Shows all available users that match the filter criteria.
Entries to move to <*volume*>	Shows all mailboxes to be moved to <*volume*>.

You can move mailboxes from one box to another as follows:

- Select a mailbox entry from the left Entries found box (the entry is highlighted) and click the >> button to move it to the right Entries to move to <*volume*> box.
- Select a mailbox entry from the right Entries to move to <*volume*> window (the entry is highlighted) and click the << button to move it to the left Entries found box.

The Screen Result dialog box also includes two buttons:

- OK—click to begin moving the user's mailbox.
- Cancel—click to return to the main Move User menu without moving any mailboxes

Move User log

The Move User tool displays the migration log in the main window. The log shows the following information:

- the mailbox(es) moved to the destinated volume
- the number of migrated messages and internal files

Outcalling Configuration tool

Intended audience

The Outcalling Configuration tool is intended for CallPilot distributors and Nortel Networks support personnel.

Purpose

The Outcalling Service Parameters tool presents you with a series of input forms (also known as property sheets) that display the various parameters. Six forms are presently available, one for each of the supported RN device types. A brief summary of each parameter is available in tool tip format when you position the mouse cursor above the text to the left of the input field.

Prerequisites

You must have a good understanding of the remote notification services in use at the customer site. For example, a paging service that uses non-standard signalling tones can require custom RN parameters so that CallPilot can deliver messages to the service.

The tool requires a single DLL (nmoutcal.dll), which is shared with the RN application on the CallPilot server and is part of a minimal CallPilot installation.

Limitations

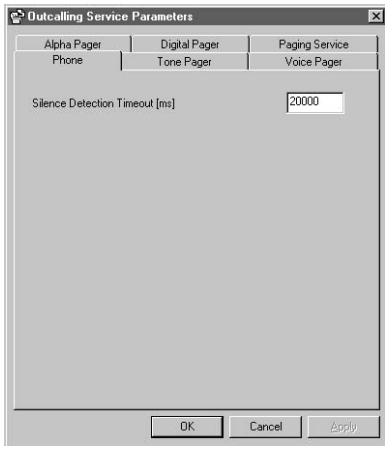
The Outcalling Configuration tool can configure only the parameters that are stored in the operating system registry. You can configure several other parameters in CallPilot Manager; these parameters are indicated at appropriate places in the following sections.

Use the Outcalling Configuration tool to configure only parameters associated with the RN section of outcalling services; do not use the tool to configure the Delivery To Telephone (DTT) or Delivery To Fax (DTF) features.

Using the outcalling configuration tool

Telephone parameter

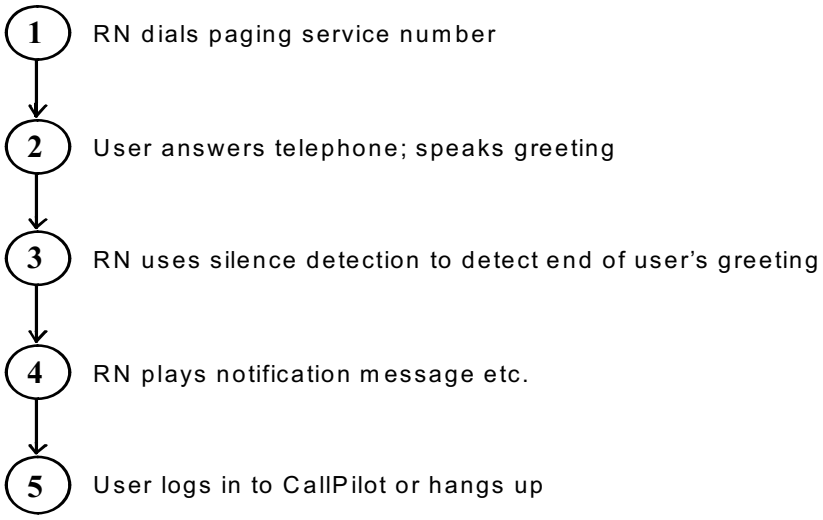
The telephone parameter determines how the RN feature works when the selected paging device is a phone.



The value entered in the Silence Detection Timeout box determines how long the RN waits for the person answering the phone to finish the greeting before the RN sends the message.

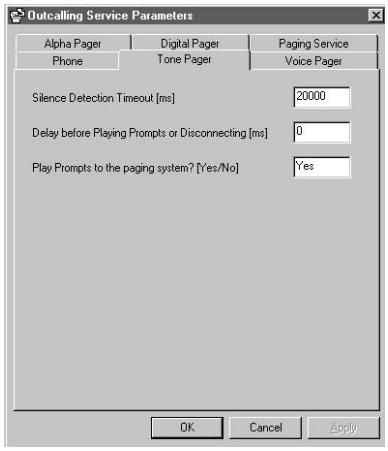
Parameter	Range	Default
Silence Detection Timeout (in milliseconds)	1000–30 000	20 000

Refer to steps 2 and 3 in the following flowchart. The RN message in this case can be "Hello, <*custom call answering greeting*> has received a message for…" If the timeout is reached before the person finishes the greeting, then the RN interrupts the greeting and proceeds to step 4.



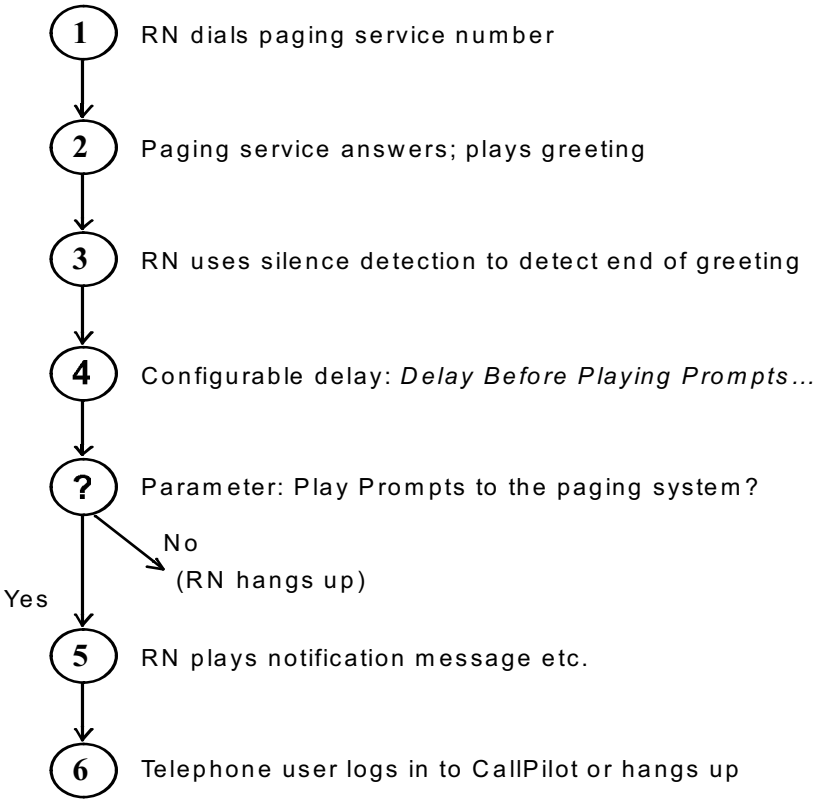
Tone Pager parameters

These parameters determine how the RN feature works when the selected paging device is a tone-only pager. A tone-only pager makes an audio signal (a beep or a tone) when it is reached.:



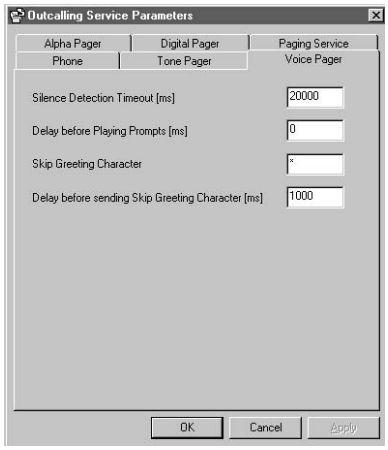
You can enter the values of three parameters in the Tone Pager input form.

Parameter	Range	Default value
Silence Detection Timeout (in milliseconds)	1000–30 000	20 000
This is how long RN waits for the paging company to finish its greeting (for example, "You have reached <*company name*> paging company…") before continuing with the RN procedure. Refer to steps 2 and 3 in the following flowchart. If the timeout is reached before the paging company greeting finishes, then the RN ignores the rest of the greeting and proceeds to step 4.		
Delay before Playing Prompts or Disconnecting (in milliseconds)	0–30 000	0
This parameter specifies a delay to be inserted at step 4 in the following flowchart after the silence detection and before playing the notification message prompts or disconnecting. A tone-only pager is not equipped to receive prompts. To avoid tying up the phone lines unnecessarily while the prompts are playing, you can suppress the prompts; see the next parameter.		
Play Prompts to the paging system (Yes/No)	Yes/No	No
Enter No if you do not want the RN/CallPilot prompts to play. Enter Yes if you want the prompts to play.		


1
RN dials paging service number
2
Paging service answers; plays greeting
3
RN uses silence detection to detect end of greeting
4
Configurable delay: Delay Before Playing Prompts...
?
Parameter: Play Prompts to the paging system?
No
(RN hangs up)
Yes
5
RN plays notification message etc.
6
Telephone user logs in to CallPilot or hangs up

Voice Pager parameters

These parameters determine how the RN feature works when the selected paging device is a voice pager. A voice pager can play a voice message when the pager is reached and activated.

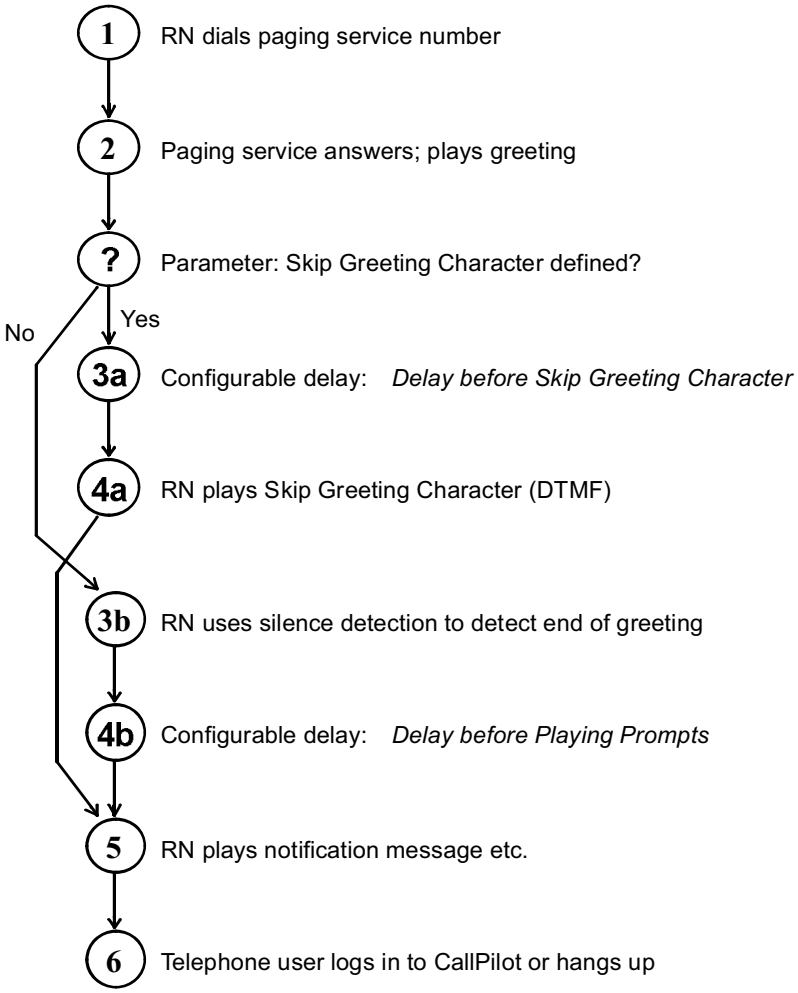


You can enter the values of four parameters in the Voice Pager input form.

Parameter	Range	Default value
Silence Detection Timeout (in milliseconds) This is how long the RN waits for the paging company to finish its greeting (for example, "You have reached <*company name*> paging company…") before continuing with the RN procedure. Refer to steps 2 and 3b in the following flowchart. The RN message in this case is "Hello, <*custom call answering greeting*> has received a message for..." If the timeout is reached before the paging company greeting finishes, then the RN ignores the rest of the greeting and proceeds to step 4b. This parameter and the next parameter are not used if a Skip Greeting Character is defined.	1000–30 000	20 000
Delay before Playing Prompts or Disconnecting (in milliseconds)	0–30 000	0

Parameter	Range	Default value
This parameter specifies a delay to be inserted at step 4b in the following flowchart, after the silence detection step and before playing the notification message. Although a voice pager can receive and play a voice message or prompt, it does not allow the user to log in to CallPilot. If the number provided to the RN reaches a touch tone phone rather than a voice pager, the notified user is still able to log in to CallPilot.		
Skip Greeting Character	0–9, #, or *	*
The Skip Greeting Character field enables you to specify the keypad character that can be used to skip the greeting of a voice paging system. Refer to step 4a in the following flowchart. The skip character is necessary because some paging systems allow a subscriber to record a very long greeting, which can exceed the Silence Detection Timeout limit of 30 seconds on a CallPilot system. Type a valid character or a two-character combination of valid characters; you can also leave this field blank.		
Delay before sending Skip Greeting Character (in milliseconds)	0–2000	1000
This parameter specifies a delay to be inserted at step 3a in the following flowchart, after the paging company starts to play its greeting and before receiving the Skip Greeting Character. **Note:** This parameter is not used unless a Skip Greeting Character is defined.		

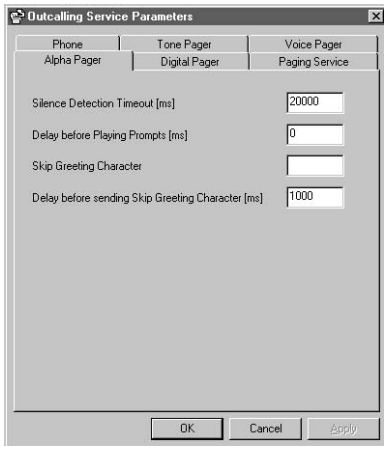
The Meridian Mail support tool equivalent to the Outcalling Configuration tool includes a parameter called Max Length for Voice Notification. In CallPilot, the system administrator configures this field using CallPilot Manager.



Alphanumeric Pager parameters

These parameters determine how the RN feature works when the selected paging device is an alphanumeric pager. An alphanumeric pager can display a text message when the pager is reached and activated.

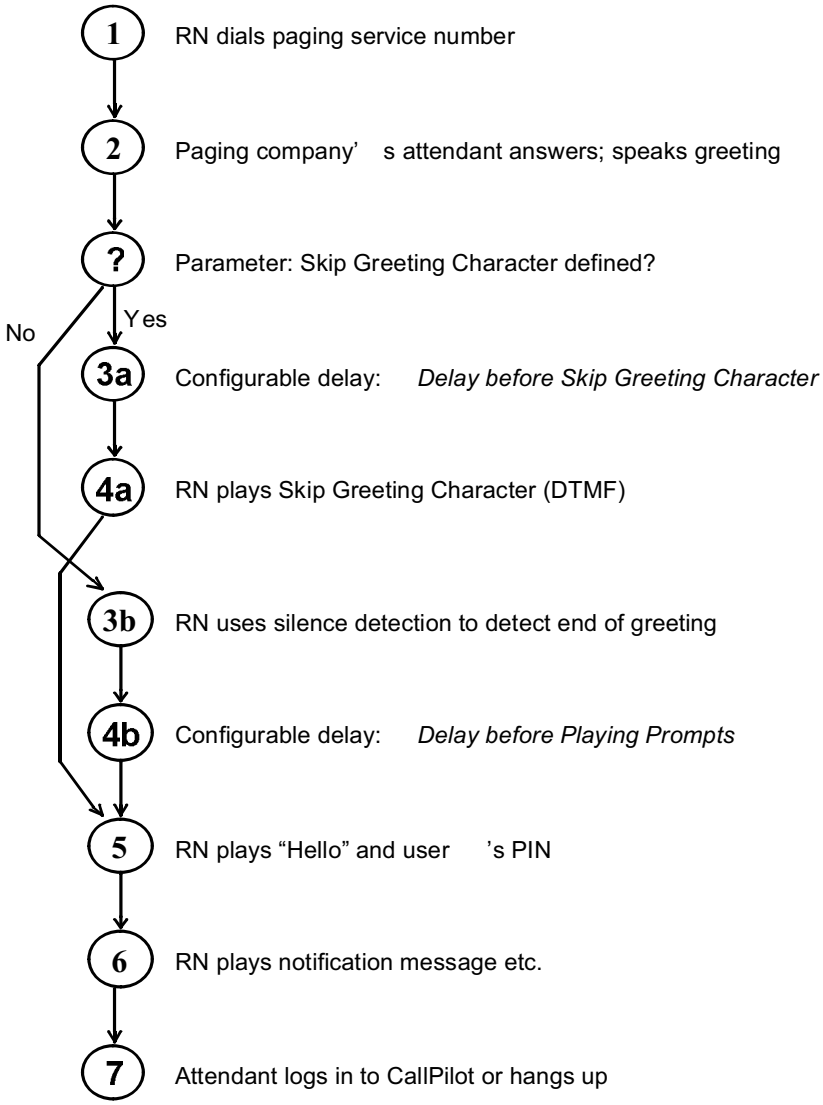
CallPilot presently supports only operator-assisted alphanumeric paging systems; a person answers the call and transcribes a spoken message into the paging system.



You can enter the values of four parameters in the Alphanumeric Pager input form.

Parameter	Range	Default value
Silence Detection Timeout (in milliseconds)	1000–30000	20000
The Silence Detection Timeout determines how long RN waits for the paging company's attendant to finish the greeting before continuing with the RN procedure. Refer to steps 2 and 3b in the following flowchart. While the attendant's greeting is playing, the attendant can be unable to receive the RN message or data. In this case, the RN message starts with "Hello, this is a message for pager owner <*pager number*>." If the timeout is reached before the attendant finishes the greeting, then the RN interrupts the greeting and proceeds to step 4b.		
Delay before Playing Prompts (in milliseconds)	0–30000	0
This parameter specifies a delay to be inserted at step 4b in the following flowchart, after the silence detection and before playing the RN greeting.		

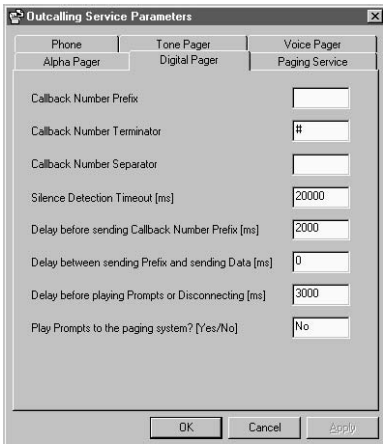
Parameter	Range	Default value
Skip Greeting Character	0–9, #, or *	None
The Skip Greeting Character field enables you to specify the keypad character(s) that can be used to skip the greeting of the paging system. Refer to step 4a in the following flowchart. In the current implementation of CallPilot RN, it is expected that a person answers the phone and this field is typically left blank. Type a valid character or a two-character combination of valid characters; you can also leave this field blank.		
Delay before sending Skip Greeting Character (in milliseconds)	0-2000	1000
This parameter specifies a delay to be inserted at step 3a in the following flowchart, after the paging company's attendant starts to speak the greeting and before receiving the Skip Greeting Character.		



Digital Pager parameters

These parameters determine how the RN feature works when the selected paging device is a digital pager. A digital pager can display a message (caller's number or callback number, or both).

The callback number is defined when the mailbox is configured in CallPilot Manager, and this can be overridden using the RN setup menu under CallPilot.

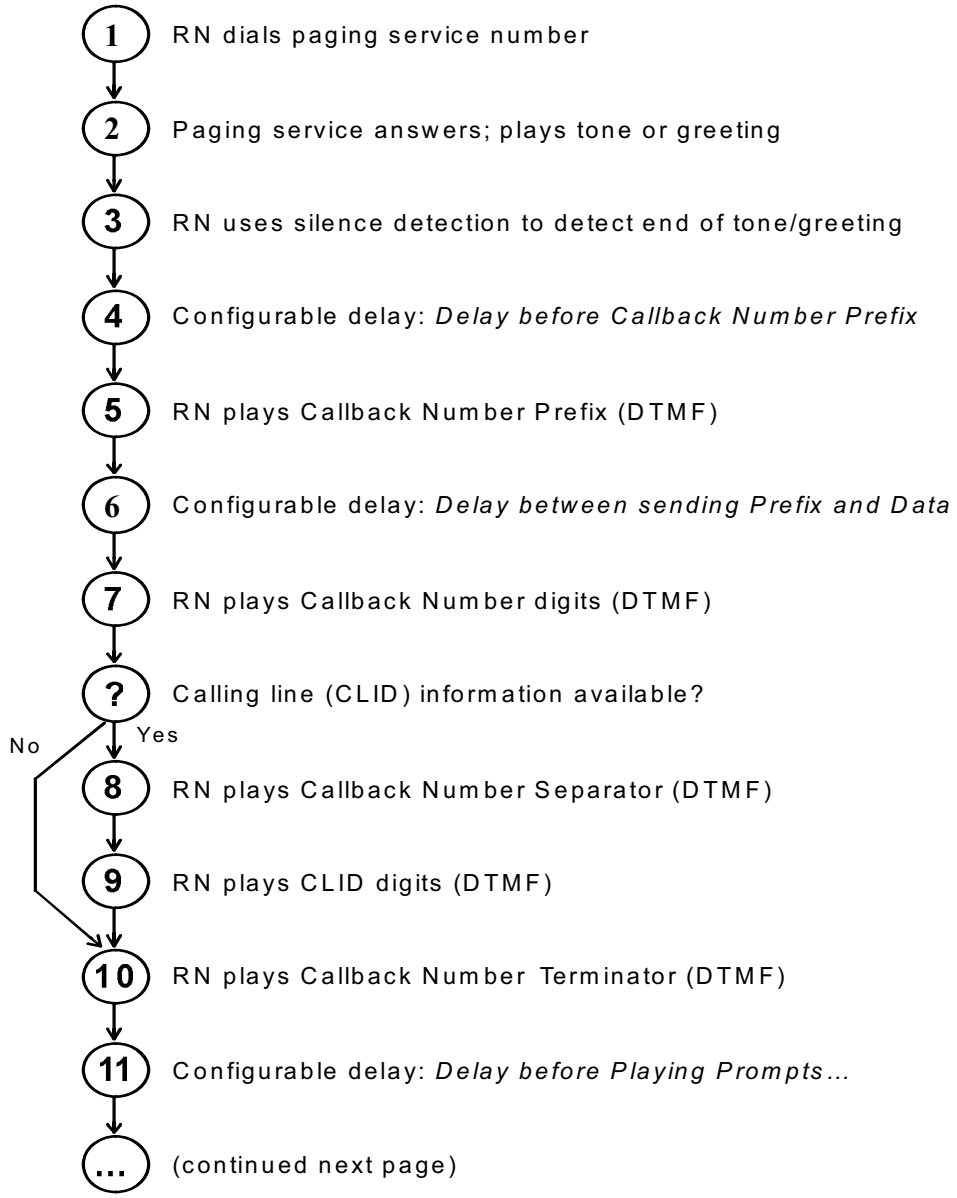


You can enter the values of eight parameters in the Digital Pager input form.

Parameter	Range	Default value
Callback Number Prefix	0–9, #, or *	No value
The Callback Number Prefix is sent to the paging company before the callback number. Refer to step 5 in the following flowchart. Type a valid character or a two-character combination of valid characters; you can also leave this field blank if the paging company does not require a Callback Number Prefix.		
Callback Number Terminator	0–9, #, or *	#
The Callback Number Terminator is sent to the paging company after the callback number (and the caller's number, if available). Refer to step 10 in the following flowchart. Type a valid character or a two-character combination of valid characters; you can also leave this field blank if the paging company does not require a Callback Number Terminator.		
Callback Number Separator	0–9, #, or *	None

Parameter	Range	Default value
The Callback Number Separator enables you to specify the keypad character used to insert a separator (such as a blank space) between the callback number and the caller's number, if available. Refer to step 8 in the following flowchart. Type a valid character or a two-character combination of valid characters; you can also leave this field blank if the paging company does not require a Callback Number Separator. No default value is available, but * is a typical value for paging systems that support a Callback Number Separator.		
Silence Detection Timeout (in milliseconds)	1000–30 000	20 000
This parameter determines how long the RN waits for the paging company to finish playing the paging device tone or the speech greeting before continuing with the RN procedure. Refer to steps 2 and 3 in the following flowchart. If the timeout is reached before the paging company greeting finishes, then the RN ignores the rest of the greeting and proceeds to step 4.		
Delay before sending Callback Number Prefix (in milliseconds)	0–30 000	2000
This parameter specifies a delay to be inserted at step 4 in the following flowchart, after the silence detection and before sending the Callback Number Prefix or the callback number if no prefix is applicable.		
Delay between sending Prefix and sending Data (in milliseconds)	0–30 000	0
This parameter specifies a delay to be inserted at step 6 in the following flowchart, after the Callback Number Prefix and before sending the callback number itself. The Callback Number Terminator is sent after the callback number and the caller's number, if available.		
Delay before Playing Prompts or Disconnecting (in milliseconds)3000	0–30 000	3000

Parameter	Range	Default value
This parameter specifies a delay to be inserted at step 11 in the following flowchart, after the Callback Number Terminator and before sending the RN/CallPilot prompts or disconnecting. A digital pager is not equipped to receive the RN/CallPilot prompts; you can suppress the prompts (see the next field) so that the phone lines are not tied up unnecessarily while the prompts are playing.		
Play Prompts to the paging system (Yes/No)	Yes, No	No
Enter No if you do not want the RN/CallPilot prompts to play. Enter Yes if you want the prompts to play. When the number provided to the RN reaches a touch tone phone, the notified user is still able to log in to CallPilot if the prompts are allowed to play (enter Yes in this field). You can allow the prompts to play even though the configured paging device in this case is not a phone. If your greater concern is not to tie up the line longer than necessary, suppress the login prompts by entering No in this field.		


1
RN dials paging service number
2
Paging service answers; plays tone or greeting
3
RN uses silence detection to detect end of tone/greeting
4
Configurable delay: *Delay before Callback Number Prefix*
5
RN plays Callback Number Prefix (DTMF)
6
Configurable delay: *Delay between sending Prefix and Data*
7
RN plays Callback Number digits (DTMF)
?
Calling line (CLID) information available?
No
Yes
8
RN plays Callback Number Separator (DTMF)
9
RN plays CLID digits (DTMF)
10
RN plays Callback Number Terminator (DTMF)
11
Configurable delay: *Delay before Playing Prompts...*
...
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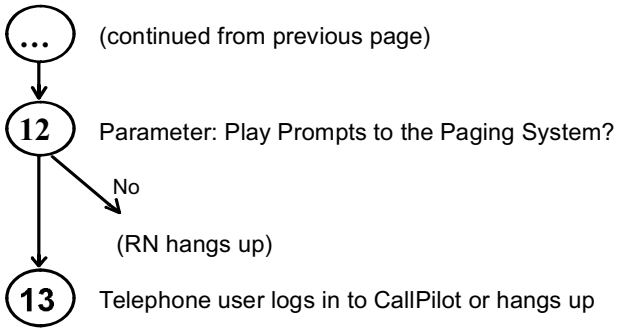
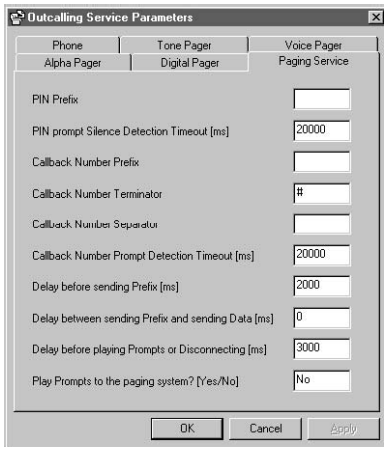


Paging Service parameters

These parameters determine how the RN feature works when the selected paging device is a paging service. A paging service requires a Pager Identification Number (PIN) to identify the pager. You define the PIN and callback number when you set up the mailbox using CallPilot Manager. You can also override the callback number using the RN setup menu under CallPilot.



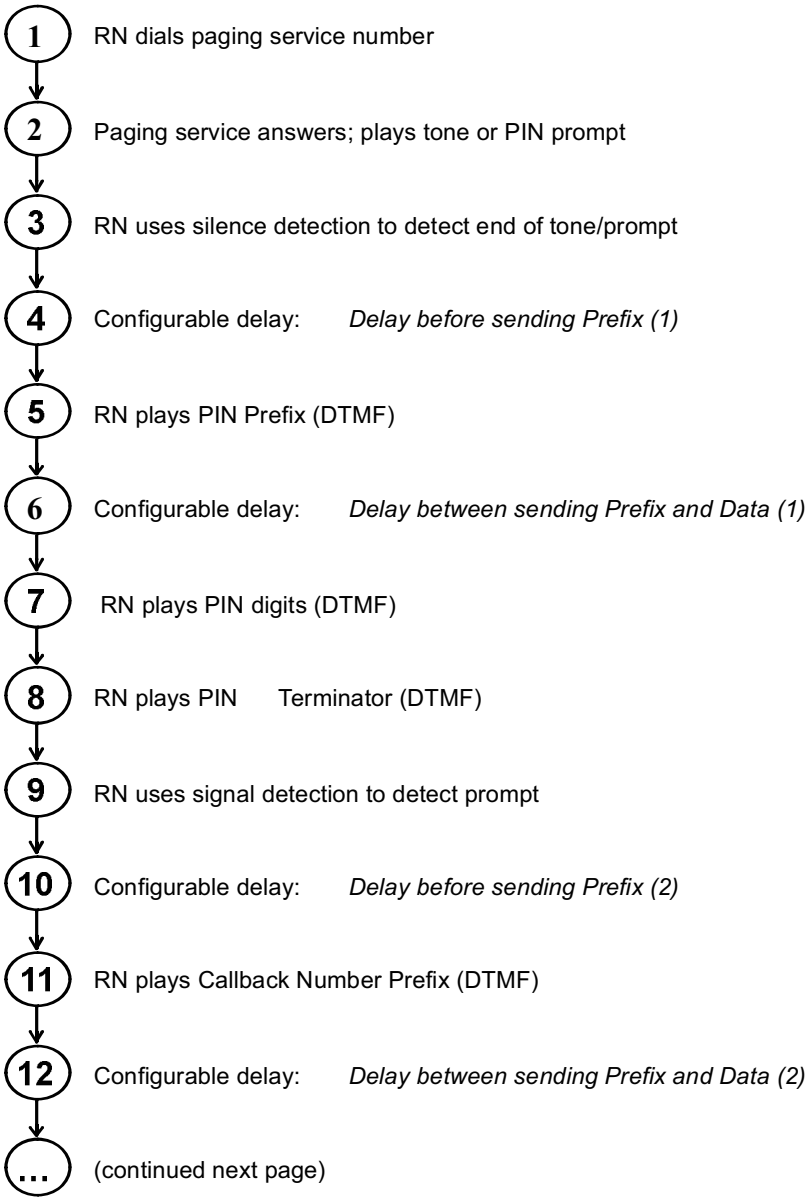
You can enter the values of ten parameters in the Paging Service input form.

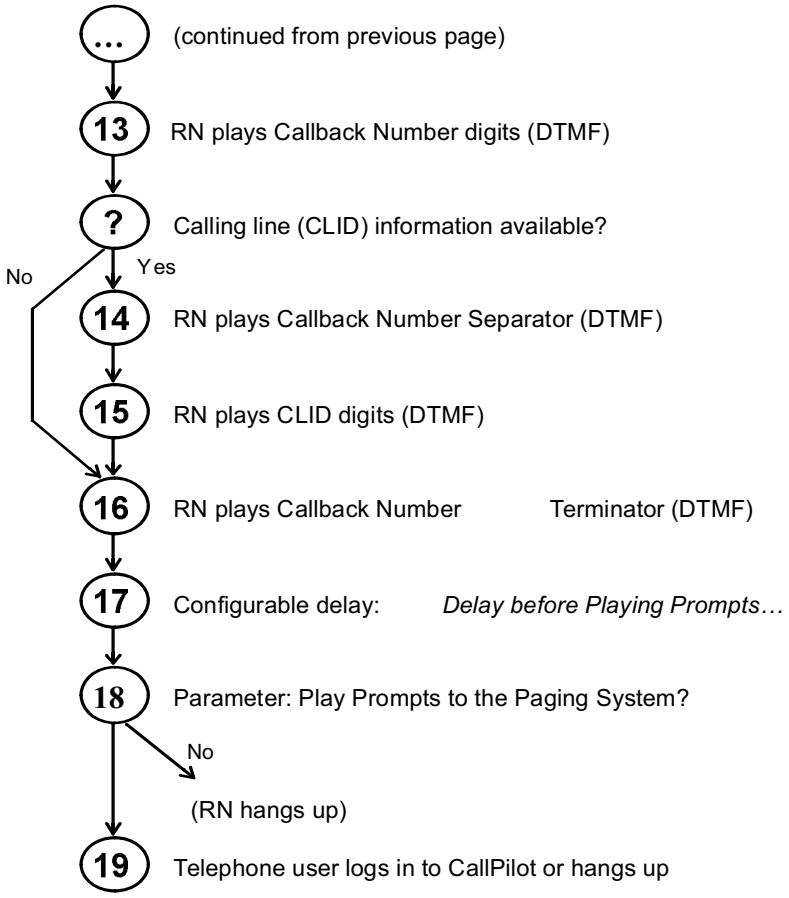
Parameter	Range	Default value
PIN Prefix	0-9, #, or *	None
The PIN Prefix is sent to the paging company before the PIN. Refer to step 5 in the following flowchart. Type a valid character or a two-character combination of valid characters; you can also leave this field blank if the paging company does not require a PIN Prefix.		
PIN prompt Silence Detection Timeout (in milliseconds)	1000–30 000	20 000
This parameter determines how long the RN waits for the paging company to finish playing the paging device tone or the PIN prompt before continuing with the RN procedure. Refer to steps 2 and 3 in the following flowchart. If the timeout is reached before the paging company greeting finishes, then the RN ignores the rest of the greeting and proceeds to step 4.		
Callback Number Prefix	0–9, #, or *	None
The Callback Number Prefix is sent to the paging company before the callback number. Refer to step 11 in the following flowchart. Type a valid character or a two-character combination of valid characters; you can also leave this field blank if the paging company does not require a Callback Number Prefix.		
Callback Number Terminator	0–9, #, or *	#
The Callback Number Terminator is sent to the paging company after the callback number (and the caller's number, if available). Refer to step 16 in the following flowchart.Type a valid character or a two-character combination of valid characters; you can also leave this field blank if the paging company does not require a Callback Number Terminator.		
Callback Number Separator	0–9, #, or *	None

Parameter	Range	Default value
The Callback Number Separator enables you to specify the keypad character used to insert a separator (such as a blank space) between the callback number and the caller's number, if available. Refer to step 14 in the following flowchart. Type a valid character or a two-character combination of valid characters; you can also leave this field blank if the paging company does not require a Callback Number Separator. No default value is provided, but * is a typical value for paging systems that do support a Callback Number Separator.		
Callback Number prompt (Voice) Detection Timeout (in milliseconds) This parameter determines how long the RN waits for the paging company to play the callback number prompt before continuing with the RN procedure. Refer to step 9 in the following flowchart. A variable delay can occur before the paging company prompt starts to play, and the paging company is not always ready to receive the callback number data before the prompt. If the timeout is reached before the paging company prompt is detected, the RN continues anyway. If the paging company does not provide a callback number prompt, then you must set this field to the minimum value to replace the prompt detection with a one-second delay.	1000–30 000	20 000
Delay before sending Prefix (in milliseconds) This parameter specifies a delay to be inserted at two places: ■ at step 4 in the following flowchart, after the silence detection and before sending the PIN Prefix or the PIN if no prefix is applicable ■ at step 10 in the flowchart, after the signal detection and before sending the Callback Number Prefix or the callback number if no prefix is applicable.	0–30 000	2000
Delay before sending Prefix and sending Data (in milliseconds)	0–30 000	0

Parameter	Range	Default value
This parameter specifies a delay to be inserted at two places: ■ at step 6 in the flowchart, after the PIN Prefix and before sending the PIN ■ at step 12 in the flowchart, after the Callback Number Prefix and before sending the callback number		
Delay before Playing Prompts or Disconnecting (in milliseconds) This parameter specifies a delay to be inserted at step 17 in the flowchart, after the Callback Number Terminator and before sending the RN/CallPilot prompts or disconnecting. This type of paging service is not usually equipped to receive the RN/CallPilot prompts; you can suppress the prompts (see the next parameter) so that the phone lines are not tied up unnecessarily while the prompts are playing.	0–30 000	3000
Play Prompts to the paging system (Yes/No) Enter No if you do not want the RN/CallPilot prompts to play. Enter Yes if you want the prompts to play. When the number provided to the RN reaches a touch tone phone, the notified user is still able to log in to CallPilot if the prompts are allowed to play; enter Yes. As a result, you can allow the prompts to play even though the configured paging device is not a phone. If your greater concern is not to tie up the line longer than necessary, suppress the login prompts by entering No.	Yes, No	No

The parameter in the equivalent Meridian Mail support tool is called PIN Terminator. In CallPilot, the system administrator configures this field in CallPilot Manager.


1
RN dials paging service number
2
Paging service answers; plays tone or PIN prompt
3
RN uses silence detection to detect end of tone/prompt
4
Configurable delay: Delay before sending Prefix (1)
5
RN plays PIN Prefix (DTMF)
6
Configurable delay: Delay between sending Prefix and Data (1)
7
RN plays PIN digits (DTMF)
8
RN plays PIN Terminator (DTMF)
9
RN uses signal detection to detect prompt
10
Configurable delay: Delay before sending Prefix (2)
11
RN plays Callback Number Prefix (DTMF)
12
Configurable delay: Delay between sending Prefix and Data (2)
...
(continued next page)


...
(continued from previous page)
13
RN plays Callback Number digits (DTMF)
?
Calling line (CLID) information available?
No
Yes
14
RN plays Callback Number Separator (DTMF)
15
RN plays CLID digits (DTMF)
16
RN plays Callback Number Terminator (DTMF)
17
Configurable delay: Delay before Playing Prompts…
18
Parameter: Play Prompts to the Paging System?
No
(RN hangs up)
19
Telephone user logs in to CallPilot or hangs up

Alert messages

If any of the parameters associated with a particular device has not been configured, then the following alert message appears. This means that one or more parameters have been set to system default values prior to displaying the input form.

If you attempt to enter a value that is outside the permitted range for a parameter, an alert message similar to the following appears. After dismissing the alert, the user must either enter valid data or press Cancel.

IS_Patch utility

Intended audience

The IS_Patch utility is intended for CallPilot distributors and Nortel Networks support personnel.

Purpose

The IS_Patch is a CLI-based utility, which finds and fixes inconsistencies between the database content and the file system.

The IS_Patch tool used with a distributor account functions in diagnostic mode and reports the following information:

- Users whose database records point to nonexistent folders.
- Folders that are not owned by any user.
- Users that do not exist in the specified volume.

The tool generates a report file: D:\Nortel\MPCX\Bin \IS_PATCHLOG.txt, where D: is the CallPilot logical drive. IS_Patch deletes the report file automatically when you exit or terminate the utility. If you want to keep a record of the tool activities, you must make a copy of the report before exiting the utility.

Limitations

You can use this tool only if the MMFS volume server, the MMFS volume(s) and database server are up and running.

Command description

Command	Description
Check users	Checks if the mailbox folder name specified in the user mailbox properties exists for all the users in the database. If the folder does not exist, the utility generates a report in the IS_PATCHLOG.txt file. The user is deleted from the database if the IS_Patch utility is in modification mode.
Check cabinets	Checks if each of the cabinets in the _F<*volume*>\users cabinet is owned by any user and performs the following operations: ■ Logs an entry in the ISPATCHLOG.txt file when a mailbox cabinet is not referenced. ■ Deletes the mailbox cabinet (folder or directory) if it determines that no user uses the cabinet (only if IS_Patch is in modification mode).
Check volume	Checks if each of the users in the database exists in the specified volume. If the user does not exist in the specified volume, the tool performs the following operations: ■ Logs a report in the IS_PATCHLOG.txt file. ■ Creates a mailbox folder in the specified volume for the user (only if IS_Patch is in modification mode).
Turn ON/OFF Modification Mode	Switches the access mode between the modification mode and the diagnostic mode. **Note:** This command applies to support accounts only.

Email-by-phone Message Cleanup tool

Intended audience

The Email-by-phone Message Cleanup tool in intended for Nortel Networks support and CallPilot distributors.

Purpose

The EMAIL-by-phone message cleanup tool provides a command line interface (CLI) and allows you to remove temporary e-mail messages that are left over from a previous EMAIL-by-phone session.

Prerequisites

Use this tool only if you have experience in the support tool environment. Use the tool as a last resort because e-mail messages must not remain in the end user's mailbox. The EMAIL-by-phone message cleanup tool must be used only as a temporary solution.

Command usage

The EMAIL-by-phone message cleanup tool has a self-explanatory Yes/No/Help interface.

Chapter 8

Application Builder tools

In this chapter

Application Builder Data Integrity and Repair tool 92
Application Builder Move Application utility 96

Application Builder Data Integrity and Repair tool

Intended audience

The Application Builder Data Integrity and Repair tool is intended for CallPilot distributors.

Purpose

The Application Builder data integrity and repair tool is a server-side utility. The main purpose of this tool is to correct any inconsistent Application Builder applications.

The Application Builder applications are not stored as a single unit, but are scattered in various locations such as database tables, MMFS volumes, and files in the native file system. The tool collects Application Builder data from all the sources and checks data consistency. The tool determines whether all references are valid or not, and then corrects inconsistent references either by creating the missing data items required or by removing all incomplete references if not enough data is available to recreate the correct references.

Prerequisites

The Application Builder data integrity and repair tool works only if it is connected to the Database and MMFS Volume servers. The Database server must be available and the Volume server must be running.

Limitations

Do not make changes to the contents of the database, the MMFS files, or the Application Builder files in the native file system during the execution of the tool. The tool first gathers all information from the various sources and then proceeds with the corrections. If you change the contents of the data sources, the corrective actions do not succeed or can cause incorrect changes to the data.

Using the Application Builder Data Integrity and Repair tool

You can launch the Application Builder data integrity and repair tool in one of the following modes:

- automated mode—user intervention is not required
- normal mode—you must decide whether the tool must make corrections after it discovers an error.

The Application Builder data integrity and repair tool has the following command buttons.

Button	Description
Close	Use this button to close the main dialog box and exit the tool. This button terminates any processing that is in progress.
Start	In the normal execution mode, click this button to start the processing. In the automated execution mode, you do not need to press this button since the processing starts automatically.
Cancel analysis	Click this button at any time to stop the processing. This button is visible only when the tool is processing.
View repair rules	Click this button to generate a temporary dump file. This file contains all the rules that the tool uses to decide if a set of data for an Application Builder application is inconsistent, and the corrective action to perform to correct an inconsistent set of data items.
View analysis results	Click this button to display all the Application Builder data found in a specialized secondary dialog. This button is visible only after the data gathering and analysis are complete.

Start

Once the tool is running in normal execution mode, press this button to start the processing; in the automated mode, the processing starts automatically. Once the processing has started, this button is deactivated and the Cancel Analysis button appears next to it. When the processing ends because you clicked Cancel Analysis or the tool either encountered an error or completed the normal processing, the Start button is reactivated and the Cancel Analysis button disappears.

Cancel analysis

This button is visible and active only while the tool is processing and allows you to terminate the processing. To make sure that the processing ends without leaving the data sources in an inconsistent state, the tool closes all files, deallocates all internal data, and so on. The termination takes a few seconds. During this wait period, the Cancel Analysis button is deactivated and its text changes to “Terminating...” Once the processing ends, the button disappears and the Start button is reactivated so that you can restart processing.

View repair rules

Use this button to view the set of rules that the tool uses to determine which data sets are inconsistent and which corrective action must be performed on each inconsistent data set. The tool generates a temporary dump file in text format and launches the default text file viewer to view it; the default file viewer application on most computers is Notepad. The dump file is formatted so that it looks as close to a table as possible. The formatting depends on the fonts used; if the rules are not aligned as a table, then try changing the font to a fixed width font, such as Courier.

View analysis results

This button is visible only after the tool completed the data collecting and analysis. When you click this button, it brings up a secondary dialog box displaying all the data sets found.

The upper list presents all Application Builder application references that are considered to be consistent according to the tool rules. The bottom list shows the application references that are found to be inconsistent and the action that will be performed for each one. If inconsistent application references exist, then two Repair buttons at the bottom left corner of the dialog box are active.

Button	Description
Repair All	Repairs all inconsistencies. Use this button if you fully understand all inconsistencies and corrective actions.
Repair	Repairs only some of the inconsistencies. Selected the applications that you want to be fixed from the bottom list and then click Repair. **Note:** If the tool is unable to perform the corrective actions, it generates an entry in the log file. To view the log file, click the View log file button at the bottom of the dialog box.

In automated execution mode, the tool starts to perform the corrective actions without user intervention. In normal execution mode, the tool presents the dialog box described in the preceding section after the corrective actions are complete so that you can assess the results of the actions. If inconsistent application references are still present, you can continue with the corrections. This gives you more control over the actions that the tool performs.

Application Builder Move Application utility

Intended audience

The Application Builder Move Application utility is intended for CallPilot distributors.

Purpose

This tool allows you to move an Application Builder application from one volume to another.

When an application is moved, the tool creates new files in NTFS and MMFS, as well as a new database entry for the new application on the new volume.

Prerequisites

The utility needs some DLL files to work: NMobj.dll, NBosa.dll and NMvm.dll. CallPilot must be installed on the system.

Limitations

The utility can move only one application at a time.

Using the Application Builder Move Application utility

Starting the Application Builder move application utility

1. Click Programs → CallPilot → System Utilities → Support Tools.
2. Log in to the Support Tools.
3. Select Appbuilder tools.
4. Select the Appbuilder Move Application Utility.

5 Specify the following parameters: <*CustID*> <*AppID*> <*VolumeID*> where

Parameter	Description
CustID	Customer ID
AppID	Application Builder application ID
VolumeID	Target volume ID

6 Press Enter.

Note: If you start the AppBuilder Move Application tool without parameters, the system prompts you to enter the parameters individually.

Example

To move the customer application ID=1002 to volume ID=102, start the utility with these parameters.

Parameter	Value
CustID	1
AppID	1002
VolumeID	102

Specify the parameters as follows: 1 1002 102

Sample output

```
OK:Init DB

OK:DB handle opened

OK:AppID=1002 locked! Current version=4, New version=0

OK:Create NTFS
directory:E:\nortel\cust\cust1\nm_abd\uprog\1002\0
```

```
OK:File
D:\nortel\cust\cust1\nm_abd\uprog\1002\4\1002.ED
copied to
E:\nortel\cust\cust1\nm_abd\uprog\1002\0\1002.ED

OK:File
D:\nortel\cust\cust1\nm_abd\uprog\1002\4\1002.RUN
copied to
E:\nortel\cust\cust1\nm_abd\uprog\1002\0\1002.RUN

Warning: Can't copy file
D:\nortel\cust\cust1\nm_abd\uprog\1002\4\1002.RLL to
E:\nortel\cust\cust1\nm_abd\uprog\1002\0\1002.RLL

OK:Cabinet _F102\cust\cust1\nm_abd opened

OK:Cabinet 1002 created

OK:Cabinet _F102\cust\cust1\nm_abd\1002 opened

OK:Cabinet 0 created

OK:File _F1\cust\cust1\nm_abd\1002\4\1002 copied to
_F102\cust\cust1\nm_abd\1002\0\1002

OK:Read 1 AppProfile item(s)

OK:New AppProf record created!

OK:ImportedApp entry read!

OK:ImportedApp new records created!

OK:AppRPL records read!

OK:AppRPL records created!


MOVE APPLICATION 1002 TO VOLUME 102 SUCCESSFUL!

Press any key to continue.
```

Chapter 9

Other tools

In this chapter

CPTrace utility 100

MTest utility 104

PEP Maintenance utility 106

System Monitor tool 108

TTS Engine Settings tool 118

Diagnostic tool 119

CPTrace utility

The CP Trace utility is a desktop client tool, not a Nortel Networks support tool running on the CallPilot server.

Intended audience

The CPTrace utility is intended for users, designers and support personnel.

Purpose

The CPTrace tool allows you to collect information about problems occurring with desktop clients. You can save the data collected by the utility to disk and then analyze it to determine the cause of the problem.

The CPTrace utility can help you solve the following types of problems:

- CallPilot Player problems
- troubles connecting to the CallPilot server
- address book problems
- message compose, reply, forward, delete, and notification problems

The current CPTrace version replaces an older CPTrace tool, as well as the logging interface provided in older versions of Microsoft Exchange and Microsoft Outlook client.

The operating system registry stores the tool options so that the utility runs each time with the existing settings.

Limitations

You must have a good understanding of the CallPilot Desktop Client functionality and of the corresponding components on the IMAP server.

Using the CPTrace utility

The CPTrace utility is installed with each desktop client. The utility location varies according to the desktop client installed.

Desktop client	CPTrace location
Microsoft Exchange and Outlook	Program Files\Nortel\nmdc
Lotus Notes	Program Files\Nortel\nmlnc

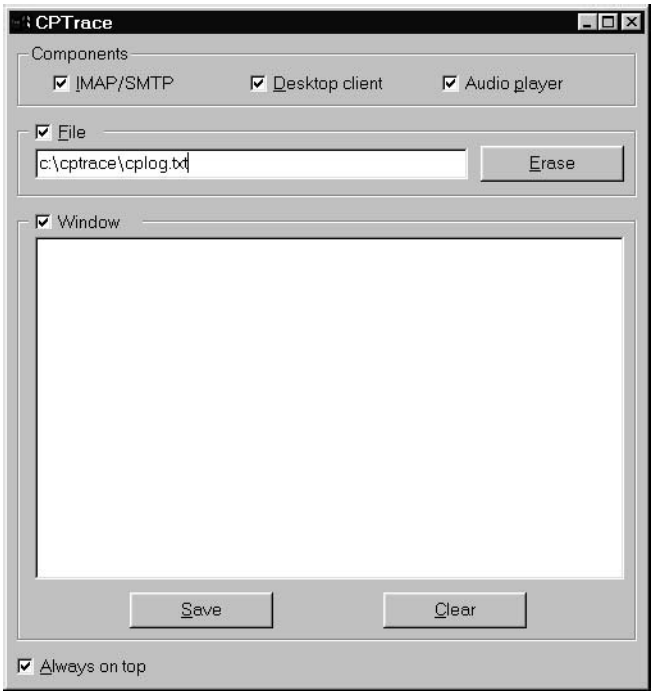
CAUTION

Risk of impact to CallPilot

The CPTrace tool impacts the dynamics of the CallPilot client. You are not able to reproduce problems while the CPTrace utility is running. This behavior is not common, but you must understand it.

1 Double-click the CPTrace.exe file in the \Program Files\Nortel directory.

Result: The CPTrace window appears.



2 Specify the required options.

Note: The options that you select are stored in the operating system registry, so that the utility runs each time with the existing settings.

CPTrace options

The following table describes the CPTrace tool options.

Option	Description
IMAP/SMTP	Logs all IMAP/SMTP traffic.
Desktop client	Logs internal Exchange/Outlook, Lotus Notes and GroupWise traffic.
Audio Player	Logs Audio Player traffic.
File	Writes logs to a file. **Note:** Trace statements continue to be written to the log file even if the CPTrace utility is shut down. When you close CPTrace with the File option checked, a dialog box appears prompting you to confirm that you want to continue file tracing. If you choose Yes, the desktop messaging client continues to write information to the specified file. This slows down slightly the desktop messaging operation. The log file never gets larger than 1 Mbyte. When the file size reaches 1 Mbyte, the tool purges 10 percent of the file, starting with the oldest data.
Window	Writes logs to the display window.
Erase	Empties the log file.
Clear	Clears the display window.
Save	A Save As dialog appears allowing you to save the trace to a file.
Always on Top	Keeps the CPTrace tool always on top of other windows.

MTest utility

The MTest utility is a desktop tool that you can use on any Windows computer to verify that a network connection (such as a modem or a LAN connection) can access a CallPilot mailbox.

Intended audience

The Mtest utility is intended for CallPilot distributors, as well as for Nortel Networks support personnel and designers.

Purpose

After the CallPilot server is installed, the system administrator or CallPilot installation technician can use MTest to verify that a user's computer can connect to the CallPilot server before installing desktop messaging.

You can also use MTest to debug desktop messaging problems. For example, if a desktop messaging user cannot log in to the mailbox, you can use MTest to determine if the problem is with the desktop messaging software or with the network connection to the CallPilot server.

The MTest utility allows the you to check if

- the user's computer can locate the CallPilot IMAP server using the host name or IP address provided by the CallPilot administrator
- the user's mailbox is accessible using the mailbox number and password provided by the CallPilot administrator

Limitations

None.

Using the MTest utility

1 Open a DOS window.

2 Type MTEST at the command line and then press Enter.

Tip: You can also open the MTest utility by double-clicking the mtest.exe file in its directory.

Result: The system prompts you to enter the CallPilot server host name.

3 Type the CallPilot server host name or IP address and then press Enter.

Result: If the MTest utility connects successfully to the CallPilot server, the following message appears:

```
Connected to IMAP server on <CallPilot host name>
```

The system also prompts you to enter mailbox information.

4 Type the user's mailbox number, including the SMTP/VPIM prefix, and then press Enter.

Result: The system prompts you to enter the mailbox password.

5 Type the user's mailbox password and then press Enter.

Result: If MTest successfully logs in to the user's mailbox, the following message appears:

```
Able to connect and log in successfully using IMAP
server on <CallPilot host name>
```

PEP Maintenance utility

Audience

The PEP Maintenance Utility is intended for Nortel Networks support personnel, as well as for CallPilot distributors and customers.

Purpose

This tool lists the Performance Enhancement Packages (PEP) that are installed on the CallPilot system and provides the capability to remove PEPs.

Using the PEP Maintenance utility

Listing PEPs

1 Log in to the CallPilot server.

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

Result: The DMI Viewer window appears.

3 Click Show PEPs to view a list of all the PEPs installed on your CallPilot server.

Result: A list of all PEPs appears.

Uninstalling PEPs

CallPilot removes obsolete PEPs automatically when you install new PEPs. However, it is possible that sometimes you want to uninstall a PEP manually.

1 Log in to the CallPilot server on which you want to uninstall the PEP.

Tip: Use a login account that has administrative privileges; for example, Administrator.

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

Result: The DMI Viewer window appears.

3 Click Show PEPs.

Result: A list of all the installed PEPs appears.

4 Click the PEP that you want to uninstall to select it.

Tip: Press and hold down Ctrl, and then click each PEP to select multiple PEPs to uninstall in one operation.

5 Click Remove.

Result: The system prompts you to confirm this choice.

6 Click Yes.

Result: The system shuts down automatically all services and uninstalls the selected PEPs. The PEP contents determine the duration of this operation (10-15 minutes at the minimum).

When the uninstall is finished, the system automatically restarts all services and then displays a PEP removal summary.

Note: Restart the server if the system prompts you to do so.

7 Click OK.

Result: The system displays the DMI Viewer window.

Note: After you uninstall a PEP, the PEP is still visible in the list of components until you restart the DMI Viewer.

8 Close the DMI Viewer window.

System Monitor tool

Intended audience

The System Monitor tool is intended for Nortel Networks support personnel, as well as for CallPilot distributors and customers.

Purpose

The System Monitor tool shows the following information

- the status of CallPilot-related services
- the state of DSP channels and the media type of each channel
- the state of Call channels
- the duration of the CallPilot system service
- the CallPilot software release, platform and keycoded features
- the DSP firmware release
- the operating system release
- the login user name
- the host name
- the IP addresses
- the keycode
- the dongle ID
- the ASDNs
- the PEPs (if any)

Prerequisites

Because the System Monitor tool uses a large amount of memory (more than 10 Mbytes), you must use it with discretion. This tool does not require any login name or password. The tool shows read-only information, which you cannot modify.

Limitations

Ensure that the LDAP and AOS services are fully up before you run the System Monitor tool. The status of third-party services (such as CTMedia server, Telephone service and Sqlany service) is never indicated as “full service”.

Using the System Monitor tool

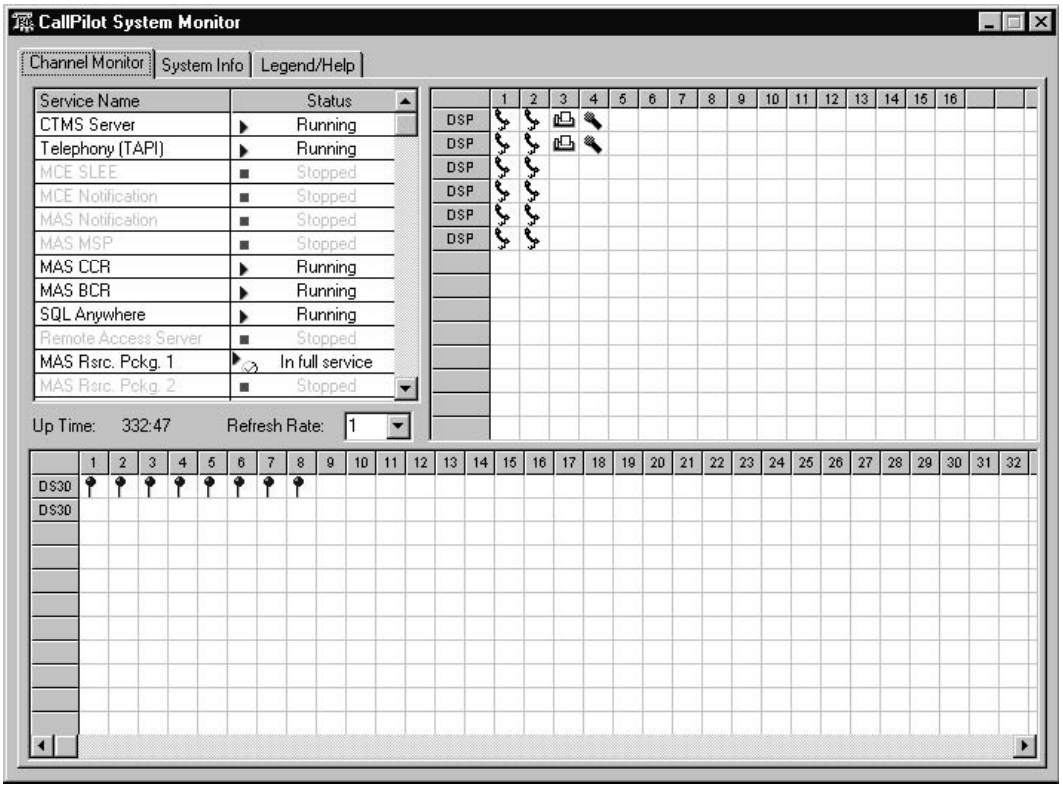
Introduction

To run the System Monitor tool, click Start → Programs → CallPilot → System Utilities → System Monitor.

This tool has three tabs: Channel Monitor, System Info and Legend/Help.

Channel Monitor

The following illustration shows the Channel Monitor tab.



Service name and status

This panel shows the status of all CallPilot-related services.

Status	Meaning
Stopping	The service is stopping.
Paused	The service is paused.
Stopped	The service is not running.
Pausing	The service pause is pending.
Continuing	The service continuation is pending.
Starting	The service is starting.
Running	The service is running.
In Full Service	The service is fully operational. This status applies to Nortel Networks proprietary services only.

DSP channels

This panel shows the status and the media type of each DSP channel. The following table details the status of DSP channels.

Status	Meaning
Unknown	The state of the DSP channel is unknown.
Idle	The DSP channel is idling.
Active	The DSP channel is in operation.
Disabled	The DSP channel is unusable, likely due to failure in diagnostic test.
Offduty	The DSP channel is usable, but currently not ready to be operational. Use CallPilot Manager to bring it into operation.
In-test	A diagnostic test is currently conducted on the DSP channel.

Status	Meaning
Loading	The DSP channel is in transition from offduty to idle.
Unloading	The DSP channel is in transition from idle to offduty.
Not_configured	The DSP channel is not configured.
No_resource	The DSP channel does not exist.

The following table details the media types of DSP channels.

Media type	Meaning
Voice	The DSP channel handles voice data.
Fax	The DSP channel handles fax data.
Speech Recognition	The DSP channel handles speech recognition data.

Call channels

This panel shows the status of each call channel. The following table describes the status of call channels.

Status	Meaning
Unknown	The state of the call channel is unknown.
Idle	The call channel is idling.
Active	The call channel is in operation.
Offduty	The call channel is usable, but currently not ready to be operational. You can use CallPilot Manager to make the call channel operational.
Loading	The call channel is in transition from offduty to idle.
Unloading	The call channel is in transition from idle to offduty.
Not_configured	The call channel is not configured.

Status	Meaning
Remote_Offduty	The switch determines that the call channel is not operational.
Remote_Alarm	The switch determines that all call channels in a specific T1 link are not operational. (for SL100 only).
Local_Alarm	CallPilot system determines that all call channels in a specific T1 link are not operational. (for SL100 only).

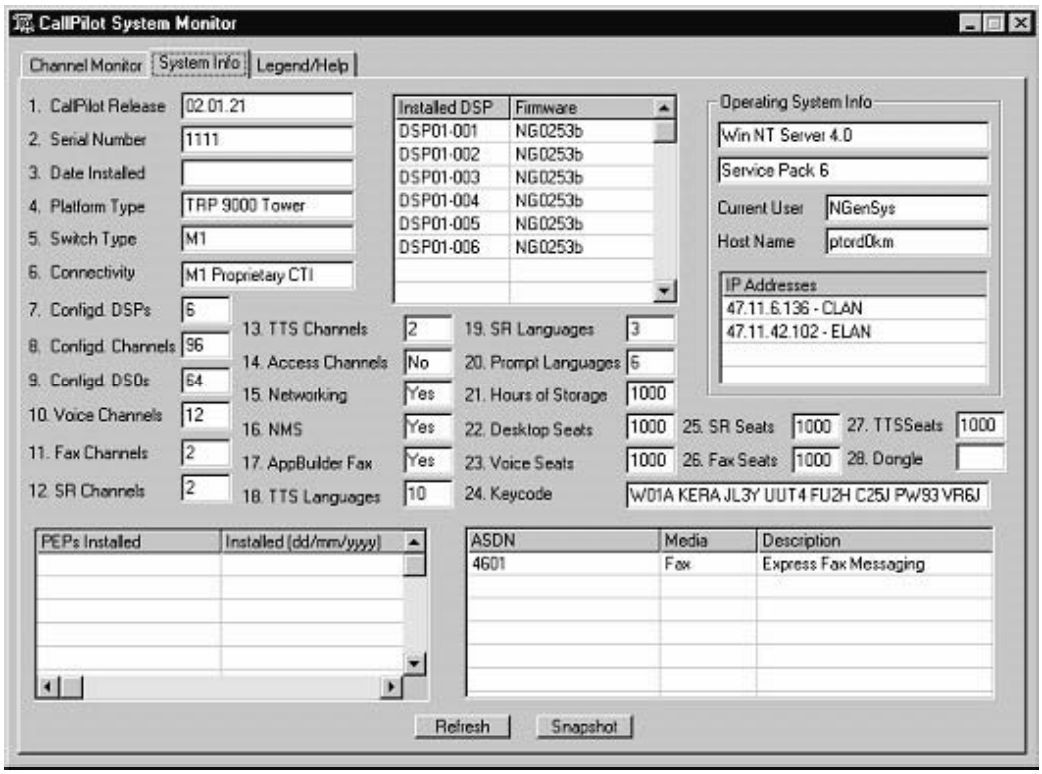
Other features

In addition to the previous panels, the Channel Monitor tab also provides the following features.

Feature	Type	Description
Up Time	Counter	This counter indicates how long the CallPilot system has been running in hours and minutes.
Refresh Rate	List	The rate at which the information on the Channel Monitor tab is updated. You can use the list options to update the information every 1, 5, 15, or 60 seconds. Higher refresh rates require high CPU and memory usage.

System Info

The following illustration shows the System Info tab.



The System Info tab displays the following information:

Information	Description
CallPilot Release	The software release of the CallPilot system.
Serial Number	The serial number that comes with the keycode. **Note:** In most cases, the serial number must match the dongle ID.
Date Installed	The date when the CallPilot software was installed on the system.

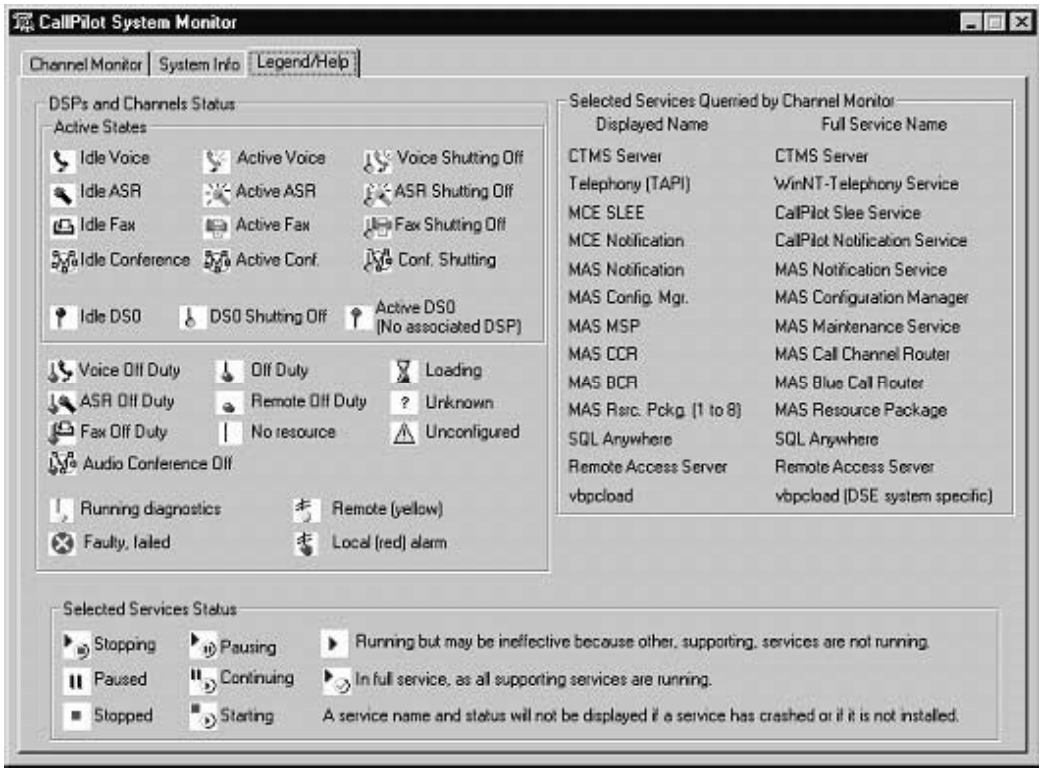
Information	Description
Platform Type	The type of the hardware platform of the CallPilot system.
Switch Type	The type of switch to which the CallPilot system is connected.
Connectivity	The switch connectivity of the CallPilot system. This information relates to the switch type.
Configd. DSPs	Number of DSP channels that are configured.
Configd. Channels	Number of channels that are configured.
Configd. DS0s	Number of call channels that are configured.
Voice Channels	Maximum number of channels allowed in the keycode that can handle voice data.
Fax Channels	Maximum number of channels allowed in the keycode that can handle fax data.
SR Channels	Maximum number of channels allowed in the keycode that can handle speech recognition data.
TTS Channels	Maximum number of channels allowed in the keycode that can handle text-to-speech data.
Networking	This box indicates if the CallPilot system allows network messaging; the keycode specifies this feature.
NMS	This box indicates if the CallPilot system allows network message service (NMS); the keycode specifies this feature. The NMS is normally used if a CallPilot system is connected to a switch that connects to other switches. The mailboxes on those switches can use CallPilot services if the NMS is enabled.
AppBuilder Fax	This box indicates if the CallPilot system allows fax capability for Application Builder applications; the keycode specifies this feature.

Information	Description
TTS Languages	The maximum number of text-to-speech languages that the keycode allows.
SR Languages	The maximum number of speech recognition languages that the keycode allows.
Prompt Languages	The maximum number of voice prompt languages that the keycode allows.
Hours of Storage	The maximum number of hours of message storage that the keycode allows.
Desktop Seats	The maximum number of seats for desktop clients that the keycode allows.
Voice Seats	The maximum number of seats for voice channels that the keycode allows.
Keycode	The keycode issued to the customer site.
Fax Seats	The maximum number of seats for fax channels that the keycode allows.
SR Seats	The maximum number of seats for speech recognition channels that the keycode allows.
TTS Seats	The maximum number of seats for text-to-speech channels that the keycode allows.
Dongle	The identifier (ID or serial number) programmed in the dongle.
Installed DSP and Firmware	The version of firmware that is present on each DSP. The firmware on all DSPs must be of the same version.
Operating System Info	The operating system name, the major service pack from Microsoft, the login account name, the host name and the IP address(es) that are present on the system.

Information	Description
Peps Installed	The PEPs that are installed on the CallPilot system and the dates of installation.
ASDN table	The ASDNs that are configured on the CallPilot system, as well as the media type and description for each ASDN.

Legend/Help

This page provides detailed descriptions and legend for each icon shown on the Channel Monitor panel.



TTS Engine Settings tool

Intended audience

The TTS Engine Settings tool is intended for Nortel Networks support personnel, as well as for CallPilot distributors and customers.

Purpose

The TTS Engine Settings tool provides you with the capability to customize the settings of each supported Email-by-phone language.

Setting	Description
Silence between sentences	Adjusts the silence duration between sentences from 0 through 1800 ms.
Volume	Adjusts the volume of the user-defined speaker for a defined language.
Pitch	Adjusts the tune of the sound of the user-defined speaker.
Rate	Adjusts the speed at which the message is read.
Minimum confidence for Language detection	This feature is not used at this time. The CallPilot software performs the language detection.

Prerequisites

Use the TTS Engine Settings tool only if you are familiar with the Email-by-phone feature. You must reboot the system so that the changes take effect.

Diagnostic tool

Intended audience

The Diagnostic tool is intended for Nortel Networks support personnel, as well as for CallPilot distributors and customers.

Purpose

The Diagnostic tool is a simple GUI-based tool that you can use to enable or disable the running of diagnostics on the DSP, Timeswitch, SC Bus and Telephony board when CallPilot is starting up. The running of diagnostics is enabled by default.

CAUTION

Risk of unidentified hardware problems

If you disable the startup diagnostics, CallPilot cannot identify hardware problems automatically during startup.

Using Diagnostic Tool

To open the Diagnostic tool, click Start → Programs → CallPilot → System Utilities → Diagnostic Tool.

To enable the Diagnostic tool, click Configuration → Maintenance Startup Diag → Enable.

To disable the Diagnostic tool, click Configuration → Maintenance Startup Diag → Disable.

Glossary

A

ACCESS Link

An asynchronous link between Meridian Mail and a host running a Meridian ACCESS application, and between Meridian Mail and AdminPlus.

ACD

Automatic Call Distribution—a system for distributing incoming calls to groups of answering positions while efficiently managing system resources.

ACE

Access Control Entry—identifies access rights that a certain security group has on a certain ManagedObject.

ACK

Acknowledge—a message sent from the DSP to the Host confirming that the DSP has received the related command from the Host.

ACL

Access Control List—identifies the ManagedObject used in security management.

Adjunct Task

A software thread that runs on the DSP and is associated with a Channel Task, deriving its PCM input signal from that of the Channel Task and having no PCM output signal of its own. The only type of Adjunct Task in CallPilot is the Speech Recognition Adjunct Task.

ADPCM

Adaptive Differential Pulse Code Modulation—provides double the channel capacity of the PCM technique. It is a method that can be applied to both linear and non-linear PCM. The ADPCM adapts the step size of the coder as the signal changes.

AMIS-A
Audio Message Interchange Specification-Analog—an analog standard for voice mail networking between systems, possibly from different vendors.

AML
Application Module Link—a link between CallPilot and Meridian 1 used to send call processing messages; formerly known as a CSL or ISDN/AP link.

ANI
Automatic Number Identification

API
Application Programming Interface

ASN.1
Abstract Syntax Notation 1

ASR
Automatic Speech Recognition

ATM
Asynchronous transfer mode—a high speed protocol in which fixed-length cells of data are switched to their various destinations.

B

BER
Bit Error Rate—the ratio of error bits to the total number of bits transmitted. The BER is used for measuring the quality of digital data or voice paths.

BlueUser
Identifies General portion of CallPilot user.

C

Call ID
A reference number that uniquely identifies a call generated on the PBX.

CCR
Customer Controlled Routing—a CallPilot feature that provides the capability of controlling the treatment of calls while in queue.

CCR
Call Channel resource—a middleware object that is the software representation of a media channel (for example, a DS0).

CCS
Centa Call Second (Hundred Call Second)—a traffic measurement unit that measures the number of 100 seconds of connect time in one hour.

CDP
Coordinated Dialing Plan—a Meridian 1 feature that allows several switches to be networked together while providing unique DNs for each switch. This is accomplished using steering codes as part of the DN.

Centi-MIP
1/100 of a MIP (Million Instructions Per Second). Unit that measures the DSP CPU power allocation.

Channel task
A software thread that runs on the DSP and handles all the signal processing related to a voice or fax channel.

CLID
Calling line ID—the number of the person who called (the source DN).

CPE
Customer premises equipment. Equipment that resides on customer's premises and is controlled by the customer as opposed to the central office.

CPTD
Call Progress Tone Detection—used to indicate call progress.

CPU
Central processing unit—used to describe the main processing device on a CallPilot node.

CTS
Customer Technical Service

DCE
Distributed Computing Environment

D

DLL
Dynamic Link Library

DLT
Digital Linear Tape

DMI
Desktop Management Interface

DMS
Digital Multiplex Switch. A Nortel Networks switch for the central office market.

DMTF
Desktop Management Task Force—an industry consortium formed to standardize the method of managing hardware and software components on a PC platform. The DMTF has published the Desktop Management Interface (DMI) standard.

DN
Directory Number

DS0
A 64 kbit/s duplex media channel used to carry voice data. In CallPilot, the DS0s carry voice data between a switch and a server. A group of 32 DS0s are multiplexed onto a single cable.

DS30
A media interface connection that contains 32 DS0s.

DSP
Digital Signal Processor

DTMF
Dual-Tone Multi-Frequency—a tone generated by pressing a key on the telephone set

DTR
Digi-Tone Receiver—name of the DTMF Receiver algorithm

E

ENS
External Notification Service—the ACCESS ENS provides an application with asynchronous notification of message arrivals and logout events.

ERP
Enhanced Reporting Package. Also known as AdminPlus for Windows, this is a PC-based application that provides the capability to transfer operational measurement data from CallPilot to a PC. The data can then be manipulated to create standard or customized reports.

ESN
Electronically Switched Network

EULA
End User Licence Agreement

Exec
Executive—the operating system on the DSP

F

FAT
File Allocation Table—file system originally used by MS-DOS

FID
File identifier (in the multimedia file system)

FIR
File Information Record—a unit of information stored in an MMFS cabinet.

FRU
Field Replaceable Unit

FSU
File system utility

G

G3
The most commonly used protocol for sending and receiving fax messages.

GUI
Graphical user interface

H

HPFS
High Performance File System—a file system (originally developed for OS/2) that is supported as a native file system in some versions of Windows.

Host
Main system processor—an Intel Pentium CPU in CallPilot.

I

ICCM
Integrated Call Center Manager—the next generation of call centre functionality, integrating ACD, MAX, CCR and Link. Symposium Call Center Server is an ICCM.

IDDD
International Direct Distance Dialing—a format for a DN that includes the country code, area or city code and phone number.

IPC
Inter-Process Communication

IPE
Intelligent Peripheral Equipment
This designation refers to the form factor and electrical interfaces for the boards that are utilized in the CallPilot peripheral equipment shelves.

IVR
Interactive Voice Response—an application that allows telephone callers to interact with a host computer via prerecorded messages and prompts.

L

LAPB
Link Access Protocol Balanced—a CCITT X.25 Protocol standard that is used as the second layer of 3 in the AML link.

LRU
Least Recently Used

M

M1
Meridian 1 switch

MAS
Meridian Application Server

Meridian ACCESS
APIs used by Nortel Networks or third parties to develop applications requiring both control of Meridian 1 connectivity and Voice Processing capabilities.

MIB
Management Information Base

MIF
Management Information Format

MIPS
Million instructions per second

MLHG
Multi-Line Hunt Group

MMFS
Multimedia File System

MObj
Managed Object

MPB
Multimedia processing board—type of PCI boards used in CallPilot servers; for example, MPB-96.

MPC
Multimedia processing card—a DSP card that can support channels of voice recording and playback.

MTBF
Mean time between failure

MTTR
Mean time to repair

Mutex
A Win32 synchronization object whose state is signal when it is not owned by any thread and signaled when it is owned by a thread.

MWI
Message Waiting Indicator

N

NACK
Negative Acknowledge—a message sent from the DSP to the Host indicating that it did not recognize or could not accept the related command from the Host.

NDA
New DSP load and ASR language models

NLI
Network Loop Interface—the voice path between the Meridian 1 switch (Option 21 and larger) and CallPilot

NMS
Network Management System

NMS-MM
Network Message Services-Meridian Mail—feature that allows one Meridian Mail system to serve multiple Meridian 1 locations with voice services (also known as Centralized Voice Mail in the market).

NTFS
New Technology File System—the file system introduced as part of the Windows NT operating system. <how does the OS Refresh affects it?>

NTP
Nortel Networks Technical Publication (customer documentation)

O

OA&M
Operations, Administration, and Maintenance

ODBC
Open Database Connectivity

OFS
Often-accessed File Server (component of the MMFS)

OM
Operational Measurements—data stored by CallPilot to provide information on system usage.

OSA
Operating System Abstraction

OSAL
Operating System Abstraction Layer

OSF
Open Software Foundation

OSI
Open Systems Interconnection

OutDial
The DSP Signal Processing Component that contains the CPTD module.

P

PBX
Private Branch Exchange—a privately-owned telephony switch

PCI
Present Call Information—a switch message indicating that a call has arrived and must be answered.

PCI
Peripheral Component Interconnect—a high-speed, processor-independent bus for PCs

PCM
Pulse Code Modulation—used to convert analog signals into sampled digital data. Also used as an adjective to describe the digital data format.

PCMCIA
Personal Computer Memory Card International Association—standard software and hardware interface for accommodating hardware cards into a PC.

PCUser
The Desktop portion of CallPilot user

PMSI
Property Management System Interface—link from Meridian Mail to a Property Management System

PSTN
Public Switched Telephone Network

Q

qRW
Quick Read Write (mode in the opening of an MMFS file)

R

RAID
Redundant Array of Inexpensive Disks

- type 0—disk striping, no parity/redundancy
- type 1—disk mirroring, disk shadowing
- type 2—not useful
- type 3—large fast transfers for single user machines
- type 4—not useful
- type 5—disk striping with distributed parity (1-disk tolerance)

RRAS
Routing and Remote Access Server

RPC
Remote Procedure Call

S

SBC
Single Board Computer (used on Meridian Mail platforms)

SBC
Sub Band Coding—high-quality voice compression algorithm used to store voice messages and voice prompts in CallPilot.

SCM
Service Control Manager—operating system process that manages the different services on the computer.

SCSA
Signal Computing Signal Architecture—emerging unified open standard designed to cover telephony and signal processing APIs, as well as the application/server software and hardware architecture.

Service
Process that adheres to structure and requirements of the operating system. Services provide system functionality.

SL-100
A Nortel Networks switch for large customers.

SM
System Manager

SMDI
Simplified Message Desk Interface—Telcordia standard that can be used to interface central office switches with voice messaging systems. The SMDI can be used to pass MWI and Present Call Information messages.

SMP
Symmetric Multiprocessing—a load-sharing CPU arrangement

SNMP
Simple Network Management Protocol

SPC
Signal Processing Component—a collection of signal processing algorithms that work together to provide a specific feature set.

Support PC
The PC used by support groups to remotely administer a CallPilot platform.

T

TCP/IP
Transmission Control Protocol/Internet Protocol—connection-oriented transport layer protocol

TDI
Transport Device Interface

TLI
Transport Layer Interface—an abstraction that hides the actual transport layer protocol from the application (for example, TCP/IP and IPX/SPX).

TSM
Telephony Services Manager

V

VAD
Value Added Developer—term typically used in reference to ACCESS application programming

VPM
Voice Prompt Maintenance—a service that allows an administrator to change the recorded voice prompts for menus and announcements.

VS
Volume Server (term related to the Multimedia File System)

W

WIN32
The 32-bit API used to access the operation system.

CallPilot

Support Tools Guide for Distributor Support Personnel

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