



Nortel Communication Server 1000

Central Answering Position Fundamentals

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Standard 02.01. This document is up-issued to support Communication Server 1000 Release 5.0. No new content has been added for Communication Server 1000 Release 5.0. All references to Communication Server 1000 Release 4.5 are applicable to Communication Server 1000 Release 5.0.

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Standard 01.01. This document is issued to support Central Answering Position (CAP) functionality for the IP Phone 2004 and the M3904 digital telephone.

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New in this Release

This NTP contains information about systems, components, and features that are compatible with Nortel Communication Server 1000 Release 4.5 software.

For information on legacy products and releases, go to www.nortel.com and from the main menu, select Support & Training and then Technical Documentation.

How to get help

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

Getting help from the Nortel Web site

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

www.nortel.com/support

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

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

Getting help from a specialist by using an Express Routing Code

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

www.nortel.com/erc

Getting help through a Nortel distributor or reseller

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

Getting help over the telephone from a Nortel Solutions Center

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

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

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

www.nortel.com/callus

System information

This is a global document. Contact your system supplier or your Nortel Networks representative to verify that the hardware and software described is supported in your area.

Subject

This guide describes the Central Answering Position (CAP) used with CS 1000/Meridian 1 systems. The information in this guide includes:

- description of the CAP and a list of required equipment
- procedures to configure the CAP
- procedures to log on to the ACD queue
- description of common CAP features, including procedures on how to use them

Applicable systems

This document applies to the following systems:

- Communication Server 1000M Chassis (CS 1000M Chassis)
- Communication Server 1000M Cabinet (CS 1000M Cabinet)
- Meridian 1 PBX 11C Chassis
- Meridian 1 PBX 11C Cabinet

Note: When upgrading software, memory upgrades may be required on the Signaling Server, the Call Server, or both.

System migration

When particular Meridian 1 systems are upgraded to run CS 1000 Release 4.5 and configured to include a Signaling Server, they become CS 1000M systems. Table 2 lists each Meridian 1 system that supports an upgrade path to a CS 1000M system.

This Meridian 1 system...	Maps to this CS 1000M system
Meridian 1 PBX 11C Chassis	CS 1000M Chassis
Meridian 1 PBX 11C Cabinet	CS 1000M Cabinet

Note the following:

- When a CS 1000/Meridian 1 system is upgraded to run CS 1000 Release 4.5 software, that system becomes a Meridian 1 PBX 11C Chassis.
- When an Option 11C system is upgraded to run CS 1000 Release 4.5 software, that system becomes a Meridian 1 PBX 11C Cabinet.

For more information, see *Communication Server 1000M and Meridian 1 Small System Software Upgrade (NN43011-459)*.

Intended audience

This document is intended for individuals responsible for configuring the Central Answering Position on an IP Phone 2004 or M3904 digital telephone.

Conventions

Terminology

In this document, the following systems are referred to generically as “system”:

- Communication Server 1000M (CS 1000M)
- Meridian 1

The following systems are referred to generically as “Small System”:

- Communication Server 1000M Chassis (CS 1000M Chassis)
- Communication Server 1000M Cabinet (CS 1000M Cabinet)
- Meridian 1 PBX 11C Chassis
- Meridian 1 PBX 11C Cabinet

The following systems are referred to generically as “Chassis system”:

- Communication Server 1000M Chassis (CS 1000M Chassis)
- Meridian 1 PBX 11C Chassis

The following systems are referred to generically as “Cabinet system”:

- Communication Server 1000M Cabinet (CS 1000M Cabinet)
- Meridian 1 PBX 11C Cabinet

Related information

This section lists information sources that relate to this document.

NTPs

The following NTPs are referenced in this document:

- *Telephones and Consoles Fundamentals (NN43001-567)*
- *IP Phones Fundamentals (NN43001-368)*
- *Software Input/Output Administration (NN43001-611)*
- *Communication Server 1000M and Meridian 1 Small System Installation and Commissioning (NN43011-310)*
- *Communication Server 1000M and Meridian 1 Large System Installation and Commissioning (NN43021-310)*
- *IP Line: Description, Installation, and Operation (NN43100-500)*

Online

To access Nortel documentation online, click the Technical Documentation link under Support & Training on the Nortel home page:

www.nortel.com

CD ROM

To obtain Nortel documentation on CD-ROM, contact your Nortel customer representative.

About the Central Answering Position

Contents

This section contains information on the following topics:

"Introduction" (page 17)

"Hardware requirements" (page 19)

Introduction

The Central Answering Position (CAP) is an alternative to the Nortel M2250 attendant console. It operates as an Automatic Call Distribution (ACD) agent on a IP Phone 2004 or an M3904 Digital telephone. A CAP can provide many of the call-handling features required by an attendant such as transferring, parking, and placing calls. Optional IP Phone Key Expansion modules and M3900 Key-Based Accessory modules can be added to the appropriate CAP telephone for additional lines and features, as well as to provide Direct Station Select and Busy Lamp Field functionality.

CAP functionality versus M2250 functionality

Although the CAP is an attendant position, it is an ACD agent and does not operate the same as the M2250 Attendant Console.

Note: The CAP telephone cannot be viewed as having the same capabilities as an M2250 attendant console. It is an IP Phone 2004 or M3904 digital telephone with optional key expansion or key-based accessory modules and can only deliver telephone-level features, not console-specific functionality. As a result of this limitation, the CAP telephone does not have access to attendant features such as Network Attendant Services (NAS).

"CAP features versus M2250 features" (page 18) compares common CAP features to similar M2250 attendant console features:

CAP features versus M2250 features

Central Answering Position (CAP)	M2250 Attendant Console
Override.	Busy Verify
Not Ready.	Position Busy
Make Set Busy (Night Service is entered when the last Central Answering Position logs out of the ACD queue by depressing the Make Set Busy key).	Night Service
A Night Service key can also be defined for an ACD DN so equipped.	
Transfer/No Hold Conference.	Release (to extend)
Transfer.	Exclude Source/Destination
Conference/No Hold Conference.	Conference
In Calls Key (Key 0) - Incoming calls only. (1 or more DN keys can be assigned for outgoing calls).	Loop Key 0
Call Forward and Busy Status (BFS) and Add-on modules.	Busy Lamp Field
Keys configured as BFS keys enable you to connect to an extension by pressing a single key.	Direct Station Select
ACD position configured as supervisor and provisioned with an ACD agent observe key.	Supervisor Console
Overflow/Interflow.	Attendant Overflow Position
ACD Recorded Announcement.	Attendant RAN
ACD position configured as supervisor and provisioned with a Display Calls Waiting key.	Call Waiting Indicator

Attendant Console features not available with CAP

The following is a list of Attendant Console features that are not available with a CAP telephone:

- The CAP does not have the capability to provision feature keys that function like incoming call indicators
- The following attendant features have no equivalent on the CAP:
 - Trunk Group Busy
 - Incoming Call Indicators
 - Attendant Administration Function Keys
 - Multiple Loop Keys (for incoming/outgoing calls)
 - Signal Source/Destination

Consider the above information when deciding between the functionality of a CAP or a M2250 console.

Hardware requirements

The following equipment is required for a CAP:

- IP Phone 2004 or M3904 digital telephone
- Optional Key expansion module for a IP Phone 2004
- Optional Key-Based Accessory module for a M3904 digital telephone

CAP Configuration

Contents

This section contains information on the following topics:

"Introduction" (page 21)

"Key layouts" (page 21)

"Configuring CAP using CLI commands" (page 22)

"Configuring CAP using Telephony Manager" (page 28)

Introduction

This section assumes that the IP Phone 2004 or M3904 digital telephone is installed and ready to be configured as a CAP. Use one of the following methods to configure the telephone as a CAP:

- CLI commands
- Telephony Manager (TM)

Key layouts

Each CAP telephone is preconfigured with certain features that make it easy to respond to and transfer calls. For information on preprogrammed data, see *Communication Server 1000M and Meridian 1 Small System Installation and Commissioning (NN43011-310)*.

CAP features are not limited to those preconfigured; some features can be changed to meet specific needs. In addition to several fixed-feature keys, each CAP telephone comes with programmable soft keys that can be configured using the overlays described later in this section.

See *Telephones and Consoles Fundamentals (NN43001-567)* for a complete list of preconfigured features for the M3904 digital telephone.

See *IP Phones Fundamentals (NN43001-368)* for a complete list of preconfigured features for the IP Phone 2004.

Key-Based Accessory (KBA) modules

The Key-Based Accessory module (KBA) provides 22 additional line/feature keys for the M3904 digital telephone. You can add up to two KBAs for a total of 44 line/feature keys.

See *Telephones and Consoles Fundamentals (NN43001-567)* for information on the installation and configuration of M3904 digital telephones and Key-Based Accessory modules, or consult the installation guide that comes with your product.

Key Expansion Modules (KEM)

The Nortel IP Phone Key Expansion Module (KEM) is a hardware component that connects to IP Phone 2004 and provides additional line appearances and feature keys. Up to two IP Phone KEMs can be connected to an IP Phone 2004 for a total of 48 line/feature keys.

Note 1: Key Expansion Modules are supported only with RLS 4.0 or later.

Note 2: The IP Phone 2004 can also have up to 48 additional line/feature keys using the Shift key functionality and one IP Phone KEM. With two IP Phone KEMs connected, the Shift key functionality does not affect the IP Phone KEMs because the maximum number of line/feature keys is already available.

These keys act as Direct Station Select (DSS) keys and Busy Lamp Field arrays. Each of these keys is programmed with the Terminal Number (TN) of the telephone to which it corresponds.

You can use these keys to visually access the status of a telephone, or to contact and extend calls to telephones. The status of a telephone is indicated by the key lamp in the following ways:

Idle — The key lamp is off.

Busy — The key lamp is steadily lit.

Forwarding — The key lamp is flashing.

See *IP Phones Fundamentals (NN43001-368)* for information on the installation and configuration of Key Expansion Modules, or consult the installation guide that comes with your product.

Configuring CAP using CLI commands

Use the system CLI to access the following overlays in the order they are listed:

"LD 16 - Defining and modifying trunk routes" (page 23)

"LD 14 - Defining and modifying trunks" (page 23)

"LD 23 - Configuring ACD as the night number" (page 24)

"LD 15 - Configuring customer options" (page 26)

"LD 11 - Configuring CAP" (page 27)

Note: The following is a summary of the steps to follow when configuring the CAP from a CLI. Refer to *Software Input/Output Administration (NN43001-611)* for a complete listing of prompts and responses for the overlays.

Default selections for each prompt are shown in parentheses.

To configure RAN trunk routes, respond as follows for prompts in LD 16:

LD 16 - Defining and modifying trunk routes

Prompt	Response	Comment
REQ		Request
	CHG	Change existing data block
	END	Exit overlay program
	OUT	Remove data block
	NEW	Add new data block to the system
TYPE	bbb	bbb = trunk type (COT, TIE, DID, etc.)
DMOD	1-127	Default Model number for this route (Small Systems, CS 1000S, MG 1000B, and MG 1000T)

To configure RAN trunks, respond to prompts as follows in LD 14:

Note: LD 14 is also used to assign incoming trunks with a Priority (with CLS=APY)

LD 14 - Defining and modifying trunks

Prompt	Response	Comment
REQ		Request.
	CHG	Change existing data block.
	END	Exit overlay program.
	MOV	Move data block from one TN to another. Not valid for Small System and CS 1000S Models. MOV cannot be used to move a Phantom TN. MOV command cannot be used to move trunk data blocks.

Prompt	Response	Comment
	NEW x	Add new data block to the system. Follow NEW with a value of 1-255 to create that number of consecutive trunks. You are not allowed to create more than one Phantom TN at a time. When a value different than 1 is entered for the creation of a Phantom TN, it is simply ignored and only one TN is created.
	OUT x	Remove data block. Follow OUT with a value of 1-255 to remove that number of consecutive trunks.
TYPE	aaa <m>	aaa = the trunk type (COT, TIE, DID, etc.) "m" is optional. Enter "m" if you are using a model trunk.
MODL	1-127	Model number for Small System. Model number for CS 1000S.
TN	l s c u	Terminal Number. If you enter a value for "m" this prompt does not appear.
CDEN	*D	Density. If you enter a value for "m" this prompt does not appear.
TOTN	l s c u	To Terminal Number. If you enter a value for "m" this prompt does not appear.

The CAP queue (ACD queue) is configured using LD 23. Respond to the prompts as follows:

LD 23 - Configuring ACD as the night number

Prompt	Response	Comment
REQ	NEW	Add new data to the system.
TYPE	ACD	Automatic Call Distribution data block. Requires Basic Automatic Call Distribution (BACD) package 40.
CUST	xx	Customer number associated with this data block as defined in LD 15.
ACDN	xxxx	ACD Directory Number. Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.
MWC	NO	Message Waiting Center
ACPQ	(NO), YES	Answer Call Priority Queue. International Supplementary Features (SUPP) package 131 must be installed. Answered calls are (are not) given priority when re-entered in queue.
AST	(NO), YES	Associated Set. The Associate Set assignments are performed in LD 10 and LD 11 for each ACD telephone. Associated set (only used with Meridian Link).
DSAC	(NO), YES	ACD DN is not an IS/Data Service Access Code. ACD DN is an IS/Data Service Access Code. Prompted when MWC = NO Server IS/data service access code (only used with Meridian Link).

Prompt	Response	Comment
MAXP	1-120	Maximum Number of Agent Positions. The value of the MAXP can be increased to the allowed maximum or decreased to the current number agents.
SDNB	(NO), YES	Secondary DN Blocking. Block calls to the Secondary DN while busy on ACD call. Block (or not) calls to the Secondary DN.
BSCW	(NO), YES	Block Calls to the Secondary DN on Walkaway. The caller to the source DN hears busy tone. Block (or not) calls to the secondary DN on walkaway.
ISAP	(NO), YES	Integrated Services Application Protocol (ACD messages sent across the ISDN/AP link). Set to YES for Meridian Mail applications. ACD messages sent (not sent) across the ISDN/AP link.
RGAI	(NO), YES	Ring Again for Internal calls. When internal caller dials a queue with no available agents, fast ringback is provided. If RGAI = YES, the caller can activate Ring Again to be presented to the next available agent. Enter YES for Data Service Access Code (DSAC). RGAI must = YES for DSAC. Ring again for internal calls.
FRRT	0-511	First RAN Route number for ACD. The route and at least one trunk must exist before defining FRRT. Enter X to remove.
FRT	0-2044	First RAN Time (the time in seconds allowed before unanswered incoming ACD calls are connected to the first RAN). Prompted if FRRT is defined. If a value is not entered FRT defaults to blank and there is no connection to the RAN.
SRRT	0-511	Second RAN Route number for ACD. The route and at least one trunk must exist before defining SRRT. Enter X to remove. Second RAN route number for ACD.
SRT	0-2044	Second RAN Time. Time in seconds before second RAN is connected to ACD calls. Prompted if SRRT is defined. There is no default for SRT.
NRRT	0-511	Night RAN Route number assigned as night announcement for ACD calls. If NRRT and NCFW are both defined, then NRRT course first. The route and at least one trunk must exist before defining NRRT. Enter X to remove.
FROA	(NO), YES	First RAN On Arrival (the 1st RAN to be given to incoming calls immediately; FRT time ignored). If FROA = NO, the call is forced to wait FRT time. Recorded Announcement is given only if an idle agent is not found.

Prompt	Response	Comment
NCFW	x...x	Night Call Forward DN for ACD calls (up to 23 digits) and Operator Revert DN for Meridian Mail (IMS, IVMS). NCFW is tracked on reports as interflow. NCFW can be up to 31 digits. Precede NCFW entry with X to delete. Typing four asterisks (****) at the NCFW prompt does not let the user exit.
FORC	(NO), YES	Force. Calls are forced to arrive in answered state. When FORC = YES, the call arrives on Key 0 (in-calls key) in an answered state. Headsets are recommended for this option.

Use LD 15 to do the following:

- Define and modify the attendant extension number
- Define the night number and time
- If necessary, define a second night number and time
- Define customer options

In LD 15, respond to the prompts as follows:

LD 15 - Configuring customer options

Prompt	Response	Comment
REQ:	CHG	Change existing data block.
TYPE:	NIT	Night Service
CUST	0-99	Customer Number
NIT1	x...x	Enter the ACD DN programmed in LD 23.
TIM1	hh mm	Hour and Minute for First Night Service DN. Enter the hour and minute for First Night Service DN, where: hh = 0-23, mm = 0-59. Enter X to remove the time. If no time is entered here, the system assumes a 24-hour clock.
...		
REQ:	CHG	Change existing data block.
TYPE	MPO_DAT A	Multi-Party Options
CUST	0-99	Customer Number
FMOP	(NO), YES	Flexible Misoperation options are (are not) required.
- RGNA	STD	Ring No Answer treatment. Standard Operation (STD) is default.
- AOCS	xxx yyy	All Other Cases. Where: xxx is for internal calls and yyy or ATN is for external calls.

Prompt	Response	Comment
- RY1	1 - (6) - 15	Number of Cycles of Re-ringing before forwarding to attendant or disconnecting. Applies only if RGNA = DAR or AAR.
- RY2	1 - (4) - 15	Number of Cycles of Ringing before forwarding to transferring station. Valid only for the RGNA option.

In LD 15, the customer data block and ATDN (Attendant Directory Number) default to 0. When 0 is dialed by a station user, the nonexistent console is seen by the system as being in Night Service. Therefore, all dial 0 calls are directed to the night number, which is the ACD directory number of the CAP.

All calls redirected to the CAP that are subsequently transferred to a station can be redirected to Call Pilot or recalled to the CAP ACD queue. The software associated with this produces prompts in LD 15, which determine whether or not a call is recalled to the CAP queue or redirected to a forward no answer destination, such as Call Pilot.

Note: The IP Phone 2004 has four soft-labeled, predefined soft keys that can provide up to 10 features. Because they are predefined, the user cannot change the key number assignment. Use LD 11 to program keys 16 to 26 on the IP Phone 2004.

In LD 11, respond to the prompts as follows:

LD 11 - Configuring CAP

Prompt	Response	Comment
REQ	CHG	Change existing data block.
TYPE	3904	M3904 digital telephone
	I2004	IP Phone 2004
...		
CLS	(AGN)	ACD Agent
	SPV	ACD Supervisor
	TDD	Tandem Digit Display
	SWA	Station-to-Station Call Waiting Allowed. A Call Waiting key or CWT must be defined. Must have CLS=HTD because hunting takes precedence.
...		
KBA	(0)-2	Key-Based Accessory module for M3904 (if applicable).
KEM	(0)-2	Key Expansion Module for IP Phone 2004 (if applicable).
...		

Prompt	Response	Comment
KEY	xx ACD yyyy (cccc or D) zzz	Automatic Call Distribution key xxxx=key number; yyyy=ACD DN or Message Center DN; cccc=CLID table entry of (0)-N, where N=the value entered at the SIZE prompt in LD 15 minus 1; D=the character D (when the character D is entered, the system searches the DN keys, from key 0, up to find a DN key with CLID table entry. The CLID associated with the found DN key will be used); zzz=agent's position ID.
	xx MSB	Make Set Busy key. On the M3905 key numbers 8-11 are reserved for AAG, AMG, ASP, DWC, MSB and NRD.
	xx DWC yyyy	ACD Supervisor Display Waiting Calls key. Where: yyyy=ACD DN. Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. A maximum of eight DWC keys can be assigned per queue on eight supervisors. Agent sets can only have 1 SWC key for their own queue. ACD agent telephones can support the display waiting calls key. Must have CLS=SPV and ADD or DDS. The key can be used with supervisors and agents. On the M3905 key numbers 8-11 are reserved for AAG, AMG, ASP, DWC, MSB and NRD.
	xx TRN	Call Transfer key. On the M3904 and M3905, key 17 is reserved for TRN or NUL. basic-24 On the IP Phone 2004 key 17 is reserved for TRN or NUL.
	xx AO6	Six-Party Conference key. On the M3904 and M3905, key number 18 is reserved for AO3, AO6, or NUL. On the IP Phone 2004 key number 18 is reserved for AO3, AO6, or NUL.
	xx NHC	No Hold Conference key
	xx PRK	Call Park. The Transfer (TRN), or Six-Party Conference (A06) key plus a Dial Access code can be used instead of the Park key. On the M3904 and M3905, key 21 is reserved for PRK or NUL. On the IP Phone 2004 key 21 is reserved for PRK or NUL.
	xx BFS aa bb	Busy-Forward Status. Where: TN=Terminal Number to be screened. A Key cannot be assigned to a BRI set. Note: It is possible to configure the TN of the same set against only the BFS key if the Class of Service is BFEA.

Configuring CAP using Telephony Manager

You can use Telephony Manager (TM) Desktop Services to view and modify the configuration of your telephone through a web browser. The web display includes a graphical view of the telephone and shows the configured features.

Note: Your network administrator determines the features and privileges you can use in TM Desktop Services. If you are not sure of your access privileges, contact your network administrator for more information.

You can use the Features page to modify telephone features not assigned to keys. Features are related to individual prompts in LD 10 or 11, with one or more configurable parameters.

Where applicable, a drop-down list containing all possible values for the feature is provided. If no drop-down list is provided, type the value into the field.

Telephone properties

Procedure 1

Accessing telephone properties

Step	Action
------	--------

- | | |
|---|---|
| 1 | Log on to a TM session. |
| 2 | On the Desktop Services main menu, choose a Telephone DN from the Telephones list. |

The General page appears, showing information about the telephone you selected.

Note: The telephones are identified by prime directory number (DN). To create this list, the Web server scans all the employee databases, one per system, on the server. If you have telephones on different systems that are served by different Optivity Telephony Manager (OTM) servers, you must log in to the different servers to access these telephones. Contact your network administrator to obtain a URL, user login name, and password for each of these OTM servers.

- | | |
|---|---|
| 3 | From the General page you can make configuration changes to your telephone by selecting the Keys or Features buttons. Each of these functions is described below. |
|---|---|

—End—

Key functions

Procedure 2

Changing key functions

Step	Action
------	--------

- | | |
|---|---|
| 1 | From the General page, click the Keys button. The Keys page appears. |
|---|---|

Note: The M3904 digital telephone has two layers of keys. You can access the second layer of keys by clicking the Shift button on the telephone image.

- 2 If an M3900 Key-Based Accessory or an IP Phone Key Expansion Module is installed, click **Next** to view the next list of available keys.
- 3 Select a key by clicking on it. The properties for the key are displayed.
- 4 Click **Change** to modify the properties for the selected key. The **Key Change Wizard** appears.
- 5 Follow the Wizard instructions to change the properties of the selected key.
- 6 After you change the keys and click the **Submit** button, the **Confirm Changes** dialog box appears.
- 7 Verify the information and click **Confirm**. If no errors exist, a change confirmation page appears.

—End—

Telephone features

Procedure 3

Changing telephone features

Step	Action
1	From the General page, click the Features button. The Features page appears.
2	From the list of features displayed, change the Value field for the feature you want to modify. Some fields have drop-down menus from where you can make a selection.
3	When you finish, click Submit to make the changes or Reset to clear the fields and undo your changes.
4	After you change the features and click the Submit button, the Confirm Changes dialog box appears.
5	Verify the information and click Confirm . If there are no errors, a change confirmation page appears.

—End—

Logging onto the ACD queue

Contents

This section contains information on the following topics:

"Introduction" (page 33)

"Logging onto the ACD queue" (page 33)

"Logging out of the ACD queue" (page 34)

Introduction

Two procedures are available for logging onto the ACD queue. The method you use to log on depends on whether your system is configured in Position ID mode or Agent ID mode. The following procedures describe how to log on and out of the ACD queue for each type of system configuration.

Logging onto the ACD queue

Procedure 4

System configured in Position ID mode

Step	Action
1	Verify the CAP is in the Make Set Busy state. The Make Set Busy lamp can be on or off.
2	Pick up the handset and place it on the desk, or, if you are using a headset, press the headset key.
3	Press the Make Set Busy key. You are logged onto the ACD queue.

—End—

Procedure 5
System configured in Agent ID mode

Step	Action
1	Verify the CAP is in the Make Set Busy state. The Make Set Busy lamp can be on or off.
2	Press the Make Set Busy key or unplug the headset.
3	Enter your Agent ID Note: The length and valid range of numbers in your agent ID depends on how the ADS feature is programmed in LD 23. The set is now in Not Ready mode.
4	Press the Not Ready key again. You are logged onto the ACD queue.

—End—

Logging out of the ACD queue

Procedure 6
System configured in Position ID or Agent ID mode

Step	Action
1	If you want to log out of the ACD queue, press the Make Set Busy key or unplug the headset. You are now logged out of the ACD queue.

—End—

Common CAP features

Contents

This section contains information on the following topics:

- "Introduction" (page 35)
- "Conference" (page 36)
- "Direct Station Select (BFS)" (page 36)
- "Directory Number (DN)" (page 37)
- "Display Queue (Disp Queue)" (page 37)
- "Make Busy" (page 38)
- "No Hold Conference (N.H. Conf)" (page 38)
- "Override" (page 38)
- "Park" (page 39)
- "Privacy Release (Priv Rls)" (page 40)
- "Program" (page 40)
- "Transfer" (page 41)

Introduction

This section describes each of the commonly configured features on the CAP and explains how to use them. The feature keys in the key layout diagram in the previous section correspond to the features listed in this section. All of the features are listed in alphabetical order.

Conference

This key lets the CAP to create conferences and to join parties together. The first party is put on hold while the second party is being added.

Procedure 7

Adding a person to a call

Step	Action
1	When you answer a call from the ACD queue and you want to add another person to the call, first press the Conf key.
2	Dial the number of the person to be added to the call or press the appropriate Direct Station Select key. The incoming call is put on hold. You can consult with the person called when they answer.
3	Press Conf to link the conference.
4	You can repeat the process to add more people to the call or press RI s to disconnect yourself from the call.
5	To talk back and forth with two people, press Hold to place your second caller on hold, and then press the ACD queue key to connect with your first caller. To connect to the second caller, press Hold and then press Conf .

—End—

Direct Station Select (BFS)

Keys configured as Busy Forward Status (BFS) enable you to connect to an extension. The keys on the add-on module work as Direct Station Select (DSS) keys.

Note: Before you press a DSS key, you must press an extension (DN) key first.

Procedure 8

Making a Direct Station Select call

Step	Action
1	Press the DN key.
2	Press the DSS extension key.

—End—

Directory Number (DN)

This key is used for internal calling or, when required, by one of the feature keys. For example, you use the DN key to retrieve a parked call. If you have a PBX system, you can use this feature for outgoing public network calls.

Note: To make outgoing calls from the CAP, you must use the DN key. You cannot use the ACD queue to make outgoing calls because it can only receive calls.

Procedure 9 Making an internal call

Step	Action
1	Lift the handset.
2	Press the DN key.
3	Dial the extension of the person that you want to call or press the DSS key.

—End—

Display Queue (Disp Queue)

This key shows the number of calls in the queue, the number of staffed CAPs, and the waiting time of the oldest call in the queue. With this feature, the telephone does not have to be idle for you to display information.

Note: To use this feature, the CAP must be programmed to have Supervisor (SPV) Class of Service. This is done using LD 11.

Procedure 10 Displaying CAP information

Step	Action
1	Press the Disp Queue key.
2	To remove information from the display, press the Disp Queue key again.

—End—

Make Busy

This key lets the CAP to indicate that it is not staffed or cannot receive calls. When the CAP is in the Make Busy state, calls are directed to the programmed night call forward number for the CAP queue.

Procedure 11

Making the CAP appear busy

Step	Action
------	--------

- | | |
|---|---|
| 1 | Press Make Busy .
The indicator comes on. |
| 2 | To cancel the Make Busy feature, press Make Busy again.
The indicator goes off. |
-

—End—

No Hold Conference (N.H. Conf)

This key lets you to add people to a conversation. The original party is not put on hold as others are added.

Procedure 12

Adding a person to a call

Step	Action
------	--------

- | | |
|---|---|
| 1 | If you have answered a call from the ACD queue, press N. H. Conf . |
| 2 | Dial the number of the person to be added to the call or press the appropriate Direct Station Select key.
The incoming call is not put on hold. You do not hear the phone ringing, and you can still talk to the caller. |
-

—End—

Override

This key lets the CAP interrupt an established call. The priority level of the telephone involved in the call and the level of the CAP determine whether an override is permitted.

Procedure 13**Overriding a busy signal and connecting to a call****Step Action**

- 1 If you have dialed an internal call and received a busy signal, press **Override**.

You now join to the call in progress.

—End—

Park

Because you cannot hold multiple calls on the ACD queue, a call can be parked so you can receive other calls. The parked call can be retrieved by the CAP or another telephone that has access to Call Park.

Note: To retrieve calls before the call timer expires, note the extension on which the calls are parked.

Procedure 14**Parking a call on the System Park extension****Step Action**

- 1 If you are on a call, press **Park** twice.
- 2 To take the caller off Park, press **RI**s to release the call.

—End—

Procedure 15**Parking a call on an extension other than the System Park extension****Step Action**

- 1 If you are on a call, press **Park**.
- 2 Dial the extension number on which you want to park the call.
- 3 Press **Park** again.
- 4 Press **RI**s.

—End—

Procedure 16
Retrieving a parked call

Step Action

- 1 Press the **DN** key.
- 2 Dial the extension on which the call is parked if the call is parked on an extension other than the system call park number.

Note: Any telephone with access to Call Park can retrieve a call that is parked.

—End—

Privacy Release (Priv RIs)

You can use this key to join or pick up a call that is on a private line. This added party must have a telephone that shows the private line.

Procedure 17
Removing privacy from a line

Step Action

- 1 If you are on a call on a private line, press **Priv RIs**.
Any telephone that has access to this line can now join the conversation.
- 2 To disconnect from the call after someone else has joined the conversation, press the **RIs** key.

—End—

Program

You can use this key to change various display features. Data parameters such as transmission speed, parity, and terminal mode can also be changed if the CAP is equipped with an optional data adapter.

- Press **Program**.
- Use the volume control bar to scroll through the programmable features, and press the number associated with the feature you wish to program.
- Use the volume bar to adjust the feature you select.

The display features that can be programmed using this key are:

- Volume adjustment

- Predial recall
- Contrast adjustment
- Call timer enable
- Idle screen format
- Language selection
- Display diagnostics
- Key click

Transfer

You can use this key to transfer a call to an extension without having to wait for the desired party to answer.

Procedure 18

Transferring a call without consultation

Step	Action
1	If you have answered a call from the ACD queue, press Transfer .
2	Dial the desired number or press the appropriate Direct Station Select key.
3	Press Transfer while you still hear the phone ringing. You are no longer connected to the call.
4	If the call is not answered or forwarded by the call forward feature, it rings back to the CAP telephone (programmable in LD 15).

—End—

Procedure 19

Transferring a call with consultation

Step	Action
1	If you have answered a call from the ACD queue, press Transfer .
2	Dial the desired number or press the appropriate Direct Station Select key.
3	Wait until the call is answered. The original call is put on hold.
4	Speak to the person called.

- 5 To return to the original caller without extending the call, press the ACD queue extension key.
- 6 To disconnect yourself from the call and connect the calling and called parties, press **Transfer** again.

—End—

Other features

Contents

This section contains information on the following topics:

"Call Forward and Busy Status" (page 43)

"Forced Camp-on/Priority Override" (page 45)

Call Forward and Busy Status

The Call Forward and Busy Status (BFS) feature was designed for an environment where party A forwards their calls to party B, for screening.

Feature Operation

By using a BFS key, party B can:

- monitor, activate or deactivate the Call Forward feature of party A.
- override the Call Forward feature of party A, to place a call to party A.
- determine whether party A is busy on a call.

The BFS lamp state of party B indicates whether party A is:

- forwarded and not busy (lamp in wink state).
- forwarded and busy (lamp in flash state).
- not forwarded and not busy (lamp in dark state).
- not forwarded and busy (lamp in lit state).

If the customer associated with party A has Forward Key Denied Class of Service (FKD) defined in the customer data, party A's Call Forward key becomes inoperative and party B's BFS key operates as follows when it is pressed:

- If party A is forwarded to another station by another BFS key, party A remains forwarded to that station.

- If party A has been forwarded to a DN by a remote Flexible Feature Code, the call forward is overridden, and all new calls are forwarded to party B.
- If party A's calls were forwarded to party B, then party A's call forward is canceled.
- If party A's call forward is not activated, party A's calls are forwarded to party B and the CFW lamp on party A's telephone lights up.

If the customer associated with Party A has Forward Key Allowed Class of Service (FKA), and party B presses the BFS key, the result is one of the following:

- If party A is already forwarded to a station other than B, party A remains forwarded to that station.
- If party A's calls are not forwarded, they are forwarded to party B, and the CFW lamp on party A's telephone lights up.
- If party A's calls are forwarded to party B, party A's call forward is canceled.

Note: If party B presses the BFS key while receiving a dial tone or special dial tone, the BFS key works as an Auto Dial key to party A.

If a call is placed to party A, and the BFS key on that telephone is pressed, the call automatically transfers to party B, which is the designated Call Forward/Busy number. If party B is in Call Forward state, the call rings three times, then immediately transfers to party C.

If a call originates to party A and the BFS key is not pressed, the call automatically transfers to party C.

Feature Requirements

Party B must have a Meridian M3904 digital telephone or an IP Phone 2004. Party A can have a Meridian M3904 digital telephone, an IP Phone 2004, or an Analog (500/2500 type) telephone, with Call Forward All Calls equipped.

A station can be monitored by a maximum of 16 other stations using the BFS key.

The same Feature requirements apply as for Call Forward All Calls.

Feature Interactions

None.

Feature Programming

To activate this feature, use the following task list in LD 11 and LD 15.

LD 11 - Configure a BFS key

Prompt	Response	Comment
REQ	CHG	Change existing data block
TYPE	3904	M3904 digital telephone
	I2004	IP Phone 2004
MODL	1-127	Model number Prompted for Small System and CS 1000S Model telephones.
TN	c u	Terminal Number, where c=card and u=unit.
...		
KEY	xx BFS TN	Busy Forward Status key Where: TN=Terminal Number to be screened. A Key cannot be assigned to a BRI telephone. Note: It is possible to configure the TN of the same telephone against the BFS key only if the Class of Service is BFEA.

LD 15 - Configure customer for Forward Allowed

Prompt	Response	Comment
REQ	CHG	Modify existing data block.
TYPE	FTR_DATA	Features and options
CUST	0-99	Customer number for Large Systems For CS 1000E
	0-31	For Small Systems For CS 1000S For MG 1000B For MG 1000T
...		
OPT	(FKA)	Forward Key Allowed

Forced Camp-on/Priority Override

Forced Camp-on lets a station camp-on to another party involved in an active call regardless of whether they have an internal or external call on hold. When used with Priority Override, the capability is called Enhanced Override.

Forced Camp-on is activated automatically (if Automatic Forced Camp-on, AFCO, is defined for the customer) or manually using the Enhanced Override (EOVR) key on Meridian digital telephone telephones or the Enhanced Override Flexible Feature Code on Analog (500/2500 type) telephones.

Four new station Class Of Service entries are associated with this feature:

- CPFD/CPFA - Forced camp-on from another telephone denied/allowed.
- CPTD/CPTA - Forced camp-on to another telephone denied/allowed.

These Class of Service entries are used to identify the ability of a station to invoke the camp-on feature or to be camped-on by another station.

You can use the Priority Override feature to interrupt an established call and present another call to the desired party. Before barge-in occurs, a warning tone is given to all parties involved in the established call. The telephone performing the override must have a priority level equal to or higher than both telephones being overridden.

To activate Priority Override, the user of an Analog (500/2500 type) telephone must invoke a recall and then dial the Override Flexible Feature Code, while the user of a Meridian digital telephone simply presses the Override key (OVR). Priority Override can also be activated using the Enhanced Override Flexible Feature Code or the Enhanced Override key (EOVR) as described in the preceding paragraph.

Associated with the Priority Override feature are seven priority levels that can be assigned to Analog (500/2500 type) and Meridian digital telephones. These levels define the ability of one telephone to override another as follows:

- level 0 — This telephone cannot override and cannot be overridden.
- level 1 — This telephone cannot override but can be overridden.
- level 2 — This telephone can override level 1 and 2 telephones and can be overridden by telephones with priorities 2 - 7 (This is the default level).
- level 3-6 — These telephones are similar to level 2 and can override telephones of equal or lesser priority level excluding those of level 0, and can be overridden by telephones of greater or equal priority level.
- level 7 — These telephones can override levels 1 - 7 but can only be overridden by another telephone of priority 7.

Note: Camp-on is not affected by the override levels.

A Class Of Service (COS) for stations called Override Denied/Allowed (OVRD/OVRA) defines the ability of a station to use or be overridden by the Priority Override feature.

Feature Operation

Several combinations of the Automatic Forced Camp-on and Priority Override features exist. Each combination provides the station with specific call scenarios, which are detailed as follows:

- Setting the Automatic Forced Camp-On (AFCO) prompt to NO in the customer data, and equipping only an OVR key or OVRD flexible feature code disallows the use of forced camp-on. The priority override feature remains operational.
- Setting the Automatic Forced Camp-On (AFCO) prompt to NO, the priority level to 0, and the camp-on classes of service to CPFA and CPTA enables only manual camp-on.
- Setting the Automatic Forced Camp-On (AFCO) prompt to NO, and adding an OVR and EOVR key/FFC gives the user the option of using only priority override (OVR key/FFC) or using manual forced camp-on that is invoked by the first press of the EOVR key/FFC, followed by priority override (the second press of the EOVR key/FFC).
- Setting the Automatic Forced Camp-On (AFCO) prompt to YES and equipping only the OVR key/FFC automatically applies forced camp-on where applicable, and allows the use of the OVR key/FFC to implement priority override.
- Using the EOVR key/FFC with AFCO set to YES simulates the OVR key/FFC and attempts a priority override, unless Automatic Forced Camp-on is initially denied. In this case, forced camp-on is attempted again.

Feature Requirements

The Flexible Feature Code package (FFC) 139 and Multiple-Party Operation package (MPO) 141 must be equipped.

All stations involved in an established call that is interrupted must have warning tone allowed Class of Service. Otherwise, both priority override and forced camp-on features are denied.

Priority Override and Forced Camp-on can operate independently of each other.

Priority Override and Forced Camp-on cannot be applied to telephones involved in any of the following:

- a non-established call
- a conference call
- an attendant call
- a Release Link attendant call

- an attendant call through Centralized Attendant Service or Primary Rate Access/Integrated Services Digital Network trunk
- an ACD call
- a data call
- a parked call
- a call-waiting call
- a held call
- an operator call back or toll operator barge-in call
- Make Set Busy active
- Do Not Disturb active

External trunks cannot perform priority override. They can only be overridden if they are the undesired party of an established call that is interrupted.

Feature Interactions

Multiple-Party Operation: When a consultation call is made on a telephone equipped with Priority Override, a control digit must be dialed from the telephone to perform a recall and return the call on hold.

Override: Priority Override, when activated, replaces normal override.

Digit Display: After Priority Override is performed on a telephone, its digit display shows the DN of the overriding telephone.

Feature Programming

To activate this feature, use the following task lists in LD 10, LD 11, LD 14, LD 15, LD 16 and LD 57.

LD 10 - Configure Forward Camp-On/Priority Override on a telephone

Prompt	Response	Comment
REQ	CHG	Modify existing data block.
TYPE	500	500/2500 telephone data block
	500 M	500/2500 Model telephone data block for Small System and CS 1000S
MODL	1-127	Model number for small systems Model number for CS 1000S This prompt appears for Small System and CS 1000S Model sets.
TN	c u	Terminal Number, where c=card and u=unit.

Prompt	Response	Comment
...		
CLS	CPFA	Forced Camp-On from another set Allowed
	CPTA	Forced Camp-On to another set Allowed. CPTA is the default for VCE TNs.
	WTA	Warning Tone Allowed
...		
PLEV	0-(2)-7	Priority Level, prompted with Priority Override/Forced Camp-On (POVR) package 186 or Enhanced DPNSS1 Services (DPNSS_ES) package 288. 2 = set can override sets of level 1 and 2, and can be overridden by sets of level 2-7.
		Note: Prompted when POVR package is equipped.

LD 11 - Configure Forward Camp-On/ Priority Override on a telephone.

Prompt	Response	Comment
REQ	CHG	Modify existing data block.
TYPE	3904	M3904 digital telephone
	I2004	IP Phone 2004
MODL	1-127	Model number for small systems Model number for CS 1000S This prompt appears for Small System and CS 1000S Model sets.
TN	c u	Terminal Number, where c=card and u=unit.
...		
CLS	CPFA	Forced Camp-On from another set Allowed
	CPTA	Forced Camp-On to another set Allowed. CPTA is the default for VCE TNs.
	WTA	Warning Tone Allowed
...		
PLEV	0-(2)-7	Priority Level, prompted with Priority Override/Forced Camp-On (POVR) package 186 or Enhanced DPNSS1 Services (DPNSS_ES) package 288. 2=set can override sets of level 1 and 2, and can be overridden by sets of level 2-7.
		Note: Prompted when POVR package is equipped.

Prompt	Response	Comment
KEY	xx OVR	Override key
	xx EOVR	Enhanced Override key

LD 14 - Configure Warning Tone Allowed

Prompt	Response	Comment
REQ	CHG	Modify existing data block
TYPE	aaa	Trunk type
...		
CLS	WTA	Warning Tone Allowed

LD 15 - Configure Multi Party Operations

Prompt	Response	Comment
REQ	CG	Modify existing data block
TYPE	MPO	Multi Party Operations data block
CUST	0-99	Customer number for Large Systems
		For CS 1000E
	0-31	For Small Systems
		For CS 1000S
		For MG 1000B
		For MG 1000T
...		
AFCO	YES	Automatic Forced Camp-On. Prompted with Priority Override (POVR) package 186.

LD 16 - Configure Priority Level in route data

Prompt	Response	Comment
REQ	CHG	Modify existing data block.
TYPE	RDB	Route Data Block
CUST	xx	Customer number associated with this route as defined in LD 15
DMOD	1-127	Default Model number for this route (Small Systems, CS 1000S, MG 1000B, and MG 1000T)
ROUT	x...x	Route Number, where x...x= 0-511: Large System For CS 1000E System 0-127: Small System

Prompt	Response	Comment
TKTP	xxx	For MG 1000B and MG 1000T Trunk Type
...		
PLEV	0-(2)-7	Priority Level. Priority Level 2 sets can override sets of Level 1 and 2, and can be overridden by sets of Level 2-7. Prompted with Priority Override/Forced Camp-On (POVR) package 186 or Enhanced DPNSS1 Services (DPNSS_ES) package 288.

LD 57 - Configure Flexible feature codes

Prompt	Response	Comment
REQ	NEW	Add new data to the system.
	CHG	Modify existing data block.
...		
EOVR	xxxx	Enhanced Override (manual Forced Camp-On followed by Priority Override)
OVRD	xxxx	Override and Priority Override.

Nortel Communication Server 1000

Central Answering Position Fundamentals

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