



Enterprise: Common

Solution Integration Guide for Communication Server 1000/CallPilot/Contact Center/Telephony Manager

ATTENTION

Clicking on a PDF hyperlink takes you to the appropriate page. If necessary, scroll up or down the page to see the beginning of the referenced section.

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Contents

How to get help	5
Finding the latest updates on the Nortel Web site	5
Getting help from the Nortel Web site	6
Getting help over the phone from a Nortel Solutions Center	6
Getting help from a specialist by using an Express Routing Code	7
Getting help through a Nortel distributor or reseller	7
About this document	9
Audience	9
Related information	9
Overview	11
Prerequisites	15
Knowledge requirements	15
Training	15
Capturing integration parameters	15
Establishing the system baseline	17
CS 1000 configuration	21
CS 1000 configuration procedures	21
Checking the system status	21
Checking the current IP address of the CS 1000 (LD 117)	21
Defining a default Gateway (LD 117)	22
Checking the Ethernet Interface status of the CS 1000 (LD 137)	23
Enabling the Ethernet interface on the CS 1000 (LD 137)	23
Checking the ELAN status on the CS 1000 (LD 48)	24
Enabling the ELAN on the CS 1000 (LD 48)	24
Configuring CallPilot resources on the CS 1000	25
Configuring the ELAN subnet (LD 17)	26
Configuring the System Parameters (LD 17)	27
Defining CallPilot in the customer data block (LD 15)	28
Configuring the route data block	32
Configuring Automatic Call Distribution (LD 23)	33
Configuring ACD agent voice ports for CallPilot (LD 11)	35
Configuring card slots	37

Defining the default Automatic Call Distribution DN (LD 23)	38
Configuring a CDN queue (LD 23)	38
Configuring attendant consoles (LD 15)	40
Configuring a phantom superloop (LD 97)	41
Configuring dummy ACD DN's (LD 23)	44
Provisioning telephones	45
Saving CS 1000 changes (LD 43)	48
Configuring Contact Center resources on the CS 1000	49
Configuring the ELAN subnet (LD 17)	49
Configuring System Parameters (LD 17)	51
Configuring Automatic Call Distribution for Contact Center (LD 23)	52
Configuring IVR Automatic Call Distribution for Contact Center (LD 23)	53
Configuring ACD agent voice ports for Contact Center (LD 11)	54
Configuring a CDN queue for Contact Center Manager (LD 23)	56
Provisioning telephones for Contact Center	58
Saving CS 1000 changes (LD 43)	61

CallPilot configuration **63**

CallPilot configuration procedures	63
Logging on to CallPilot Manager	63
Configuring the keycode and serial numbers	66
Configuring CallPilot server information	68
Configuring password information	69
Configuring multimedia allocations	70
Configuring the CS 1000 switch information	71
Configuring the links on the MGate card	72
Configuring CDN information	74
Configuring the Contact Center Language Source	75
Configuring the CallPilot LAN interface	76

Contact Center configuration **79**

Contact Center configuration procedures	79
Shutting down services	79
Configuring Contact Center Manager Server after installation	80
Configuring CDNs on the Contact Center Manager Administration Server	87
Configuring and acquiring an IVR ACD DN	88
Configuring agent telephones on the Contact Center Server	89
Configuring voice ports on the Contact Center Server	90

Telephony Manager configuration **91**

Telephony Manager configuration procedures	91
Setting up communications information	91
Setting up customer information	95
Setting up TM 3.0 applications	97
Setting up system data	99

How to get help

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

Finding the latest updates on the Nortel Web site

The content of this documentation is current at the time of product release. To check for updates to the latest documentation and software for Communication Server 1000 (CS 1000), CallPilot, and Contact Center, click one of the following links:

For the...	Go to...
Latest CS 1000E software	Nortel page for CS 1000E software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=SOFTWARE&resetFilter=1&poid=14261
Latest CS 1000M Cabinet/Chassis software	Nortel page for CS 1000E software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=SOFTWARE&resetFilter=1&poid=12515
Latest CS 1000M Half Group/Single Group/Multi-Group software	Nortel page for CS 1000E software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=SOFTWARE&resetFilter=1&poid=12516
Latest CS 1000S software	Nortel page for CS 1000E software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=SOFTWARE&resetFilter=1&poid=12514
Latest CallPilot software	Nortel page for CallPilot software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=SOFTWARE&resetFilter=1&poid=8165
Latest CS 1000E documentation	Nortel page for CS 1000E software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=DOCUMENTATION&resetFilter=1&poid=14261

For the...	Go to...
Latest CS 1000M Cabinet/Chassis documentation	Nortel page for CS 1000E software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=DOCUMENTATION&resetFilter=1&po id=12515
Latest CS 1000M Half Group/Single Group/Multi-Group documentation	Nortel page for CS 1000E software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=DOCUMENTATION&resetFilter=1&po id=12516
Latest CS 1000S documentation	Nortel page for CS 1000E software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=DOCUMENTATION&resetFilter=1&po id=12514
Latest CallPilot documentation	Nortel page for CallPilot software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=DOCUMENTATION&resetFilter=1&po id=8165
Latest Contact Center documentation	Nortel page for Contact Center software located at: http://www130.nortelnetworks.com/go/main.jsp?cscat=DOCUMENTATION&resetFilter=1&po id=8556

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. From this site, you can:

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

Getting help over the phone from a Nortel Solutions Center

If you do not find the information you require on the Nortel Technical Support Web site, and you 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

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

About this document

This document describes the planning, configuration, and troubleshooting of the integration of the Communication Server 1000 (CS 1000) system with CallPilot and Contact Center. Integrate the CS 1000 with CallPilot and Contact Center after all three systems are installed and a baseline of operation is achieved and tested.

The following systems and software releases are covered in this guide:

- Communication Server 1000 Release 4.5
- CallPilot Release 4.0
- Contact Center Release 6.0

This document is intended to be a stand-alone guide, covering the prerequisites to and implementation of a successful CS 1000/CallPilot/Contact Center integration. A minimum skill set and level of understanding is assumed. References to other NTPs, engineering guides, or troubleshooting guides are made for informational purposes.

Audience

The intended audience for this document includes network planners, installers, and maintenance personnel.

Related information

The following NTPs are referenced in this guide:

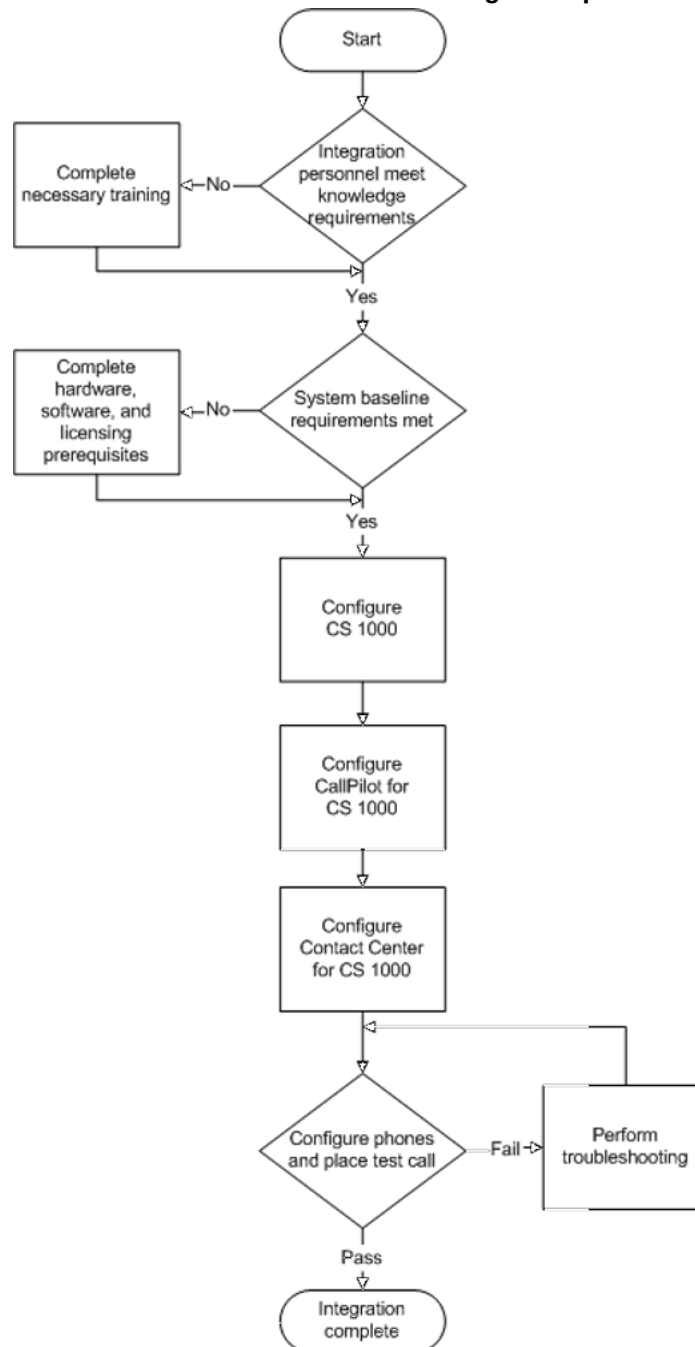
- *CallPilot Network Planning Guide* (555-7101-102)
- *Communication Server 1000E: Installation and Configuration* (553-3041-210)
- *Communication Server 1000M and Meridian 1: Large System Installation and Configuration* (553-3021-210)
- *Communication Server 1000M and Meridian 1: Small System Installation and Configuration* (553-3011-210)
- *Communication Server 1000S: Installation and Configuration* (553-3031-210)

- *Dialing Plans: Description (553-3001-183)*

Overview

Figure 1 "CS 1000/CallPilot/Contact Center integration process" (page 12) shows the sequence of procedures you perform to integrate the CS 1000, CallPilot, and Contact Center systems.

Figure 1
CS 1000/CallPilot/Contact Center integration process



The tasks in the CS 1000/CallPilot/Contact Center systems integration process are listed in [Table 1 "Task completion checklist" \(page 13\)](#). Use this checklist to implement the integration.

Table 1
Task completion checklist

Task	Reference
Configure CS 1000	1. "Checking the system status" (page 21) 2. "Configuring CallPilot resources on the CS 1000" (page 25) 3. "Configuring Contact Center resources on the CS 1000" (page 49)
Configure CallPilot	1. "Logging on to CallPilot Manager" (page 63) 2. "Configuring the keycode and serial numbers" (page 66) 3. "Configuring CallPilot server information" (page 68) 4. "Configuring password information" (page 69) 5. "Configuring multimedia allocations" (page 70) 6. "Configuring the CS 1000 switch information" (page 71) 7. "Configuring the links on the MGate card" (page 72) 8. "Configuring CDN information" (page 74) 9. "Configuring the Contact Center Language Source" (page 75) 10. "Configuring the CallPilot LAN interface" (page 76)
Configure Contact Center	1. "Shutting down services" (page 79) 2. Configuring the CallPilot connection on the Contact Center Manager Server 3. "Configuring CDNs on the Contact Center Manager Administration Server " (page 87) 4. "Configuring and acquiring an IVR ACD DN" (page 88) 5. "Configuring agent telephones on the Contact Center Server" (page 89)

14 Overview

Task	Reference
	6. "Configuring voice ports on the Contact Center Server" (page 90) 7. "Configuring Contact Center Manager Server after installation" (page 80)
Configure Telephony Manager	1. "Setting up communications information" (page 91) 2. "Setting up customer information" (page 95) 3. "Setting up TM 3.0 applications" (page 97) 4. "Setting up system data" (page 99)

Prerequisites

Before you begin to integrate the Communication Server 1000 (CS 1000), CallPilot, and Contact Center systems, ensure that you complete the following prerequisites:

- "Knowledge requirements" (page 15)
- "Capturing integration parameters" (page 15)
- "Establishing the system baseline" (page 17)

Knowledge requirements

The following knowledge and skills are required to implement a CS 1000/CallPilot/Contact Center systems integration:

- basic programming and provisioning skills for the CS 1000 system
- basic knowledge of the CallPilot Manager
- basic Knowledge of the Contact Center Manager

Training

Nortel recommends that you complete product-specific training before you begin integrating the CS 1000, CallPilot, and Contact Center systems. A complete list of courses is available at www.nortel.com.

Capturing integration parameters

Table 2 "Integration parameters" (page 15) provides a list of parameters required to successfully complete the integration. Record these parameters during the initial planning phase of the integration.

Table 2
Integration parameters

Parameter	Value
CS 1000 parameters	
Customer number to which CallPilot and Contact Center belong	

16 Prerequisites

Parameter	Value
ELAN subnet for the AML link and its associated VAS Identifier (VSID)	
VAS Identifier (VSID)	
Number of Call Registers	
Primary Ethernet IP address (ELAN)	
Primary Host Name	
Secondary Ethernet IP Address (ELAN)	
Secondary Host Name	
Subnet Mask	
Default Gateway if CS 1000 is connected to a Nortel server subnet	
Network IP address	
Private Network Identifier	
Home Location (ESN) of the CS 1000	
Local Steering Code (LSC) of the CS 1000	
ACDN for the CallPilot agent queue	
Maximum number of agents	
List of Terminal Number (TNs) for all agents	
Position IDs for each agent	
List of on ringing DN's used for outbound calls	
Default ACD DN referenced in the CDN	
DFDN used in the CDN configuration	
Control DN of the queue	
Attendant DN	
Voice messaging CDN	
Multimedia Messaging CDN	
Superloop number	
CallPilot parameters	
Switch customer number configured in CS 1000	
CS 1000 system switch IP address (ELAN)	
TN information	
a. Loop number	
b. Shelf number	
c. Card number	

Parameter	Value
d. Unit number	
e. Key 0 (position ID)	
f. Key 1 (SCN)	
g. Channel allocation	
Voice messaging CDN	
Multimedia Messaging CDN	
Contact Center parameters	
CS 1000 system name	
CS 1000 switch IP Address (ELAN)	
Switch customer number configured in CS 1000	
CallPilot server IP address	
CallPilot server port: use 10008	

Establishing the system baseline

To successfully integrate voice services, you must first establish the system baseline for the CS 1000, CallPilot, and Contact Center systems so that the systems are configured and working in a stand-alone environment.

Use [Table 3 "Pre-integration checklist" \(page 17\)](#) to complete system baselines prior to integration.

Table 3
Pre-integration checklist

Task	Reference	Comments
The Network Numbering Plan is implemented.	<i>Dialing Plans: Description</i> (553-3001-183)	Are you using a Uniform Dialing Plan (UDP) or a Coordinated Dialing Plan (CDP), or both? Are you also using a Group Dialing Plan (GDP), a North American Numbering Plan (NANP), or a Flexible Numbering Plan (FNP)?

18 Prerequisites

Task	Reference	Comments
CS 1000 software is Release 4.5 or later.		To check the CS 1000 software release: 1 Log on to Element Manager. 2 On the left navigation pane, select Home. The Home System View page appears. 3 In the Call Server section, the software release is referred to as Release.
Basic installation, setup, and configuration of the Call Server components are complete.	<i>Communication Server 1000M and Meridian 1: Small System Installation and Configuration (553-3011-210)</i> <i>Communication Server 1000M and Meridian 1: Large System Installation and Configuration (553-3021-210)</i> <i>Communication Server 1000S: Installation and Configuration (553-3031-210)</i> <i>Communication Server 1000E: Installation and Configuration (553-3041-210)</i>	
Attendant Overflow Position package 56 is installed.		To check that the package is loaded: 1 Open a Telnet session to the Call Server. 2 Log on to the Signaling Server. 3 Enter LD 22. 4 Enter PRT. 5 Enter PKG 56. 6 The package is loaded if you do not receive a "package is restricted" message.
CallPilot is commissioned without specific switch information.		

Task	Reference	Comments
CallPilot software is Release 4.0 or later.		
Contact Center is commissioned without specific CS 1000 switch information or Voice Services information.		
Contact Center software is Release 6.0 or later.		

CS 1000 configuration

CS 1000 configuration procedures

CallPilot can be provided only on a per customer basis on the Communication Server 1000 (CS 1000) system. AML messages used for communications between the CS 1000 system and CallPilot contain a customer number to which CallPilot belongs.

In these procedures, ensure that you enter the correct customer number in the overlays.

The sequence of CS 1000 configuration procedures is as follows:

- ["Checking the system status" \(page 21\)](#)
- ["Configuring CallPilot resources on the CS 1000" \(page 25\)](#)
- ["Configuring Contact Center resources on the CS 1000" \(page 49\)](#)

Checking the system status

The sequence of procedures in this section is as follows:

- ["Checking the current IP address of the CS 1000 \(LD 117\)" \(page 21\)](#)
- ["Defining a default Gateway \(LD 117\)" \(page 22\)](#)
- ["Checking the Ethernet Interface status of the CS 1000 \(LD 137\)" \(page 23\)](#)
- ["Enabling the Ethernet interface on the CS 1000 \(LD 137\)" \(page 23\)](#)
- ["Checking the ELAN status on the CS 1000 \(LD 48\)" \(page 24\)](#)
- ["Enabling the ELAN on the CS 1000 \(LD 48\)" \(page 24\)](#)

Checking the current IP address of the CS 1000 (LD 117)

Perform the following procedure to check the current IP address and routes in the CS 1000.

Checking the current IP address of the CS 1000 (LD 117)

Step	Action
1	Connect to the Call Server.
2	Enter LD 117 .
3	Enter the commands described in the following table.
—End—	

Table 4

LD 117 - Check the IP address

Command	Description
PRT HOST	Prints the network host table information stored in the database
PRT ROUTE	Prints the routing table information stored in the database
STAT HOST	Displays current runtime host table status
PRT MASK	Prints the subnet mask stored in the database

Defining a default Gateway (LD 117)

Perform the following procedure to add a default Gateway if one is not defined. Use the PRT ROUTE command described in "[Checking the current IP address of the CS 1000 \(LD 117\)](#)" (page 21) section to determine whether a default gateway is defined.

Defining a default Gateway (LD 117)

Step	Action
1	Connect to the Call Server.
2	Enter LD 117 .
3	Enter the commands described in the following table.
—End—	

Table 5
LD 117 - Define default Gateway

Command	Description
new route x.x.x.x a.b.c.d	Configures a new routing entry, where x.x.x.x = network IP address. For a default Gateway, enter 0.0.0.0 a.b.c.d = Gateway IP address of the local CS 1000 system

Checking the Ethernet Interface status of the CS 1000 (LD 137)

Perform the following procedure to check the Ethernet interface status.

Checking the Ethernet interface status of the CS 1000 (LD 137)

Step	Action
1	Connect to the Call Server.
2	Enter LD 137 .
3	Enter the commands described in the following table.
4	Check that the parameter ELNK is ENABLED . If ELNK is not ENABLED , perform the procedure " Enabling the Ethernet interface on the CS 1000 (LD 137) " (page 23).
—End—	

Table 6
LD 137 - Check Ethernet interface status

Command	Description
STAT ELNK	Displays the status of the Ethernet link on the active IOP card

Enabling the Ethernet interface on the CS 1000 (LD 137)

Perform the following procedure to enable the Ethernet interface.

Enabling the Ethernet interface on the CS 1000 (LD 137)

Step	Action
1	Connect to the Call Server.
2	Enter LD 137 .
3	Enter the commands described in the following table.

- 4 Check that the Ethernet interface is enabled.
Refer to the procedure "[Checking the Ethernet Interface status of the CS 1000 \(LD 137\)](#)" (page 23).

—End—

Table 7

LD 137 - Enable Ethernet interface

Command	Description
ENL ELNK	Enables the Ethernet link on the active IOP card

Checking the ELAN status on the CS 1000 (LD 48)

Perform the following procedure to check the ELAN status.

Checking the ELAN status on the CS 1000 (LD 48)

Step	Action
1	Connect to the Call Server.
2	Enter LD 48 .
3	Enter the commands described in the following table.
4	Check that the Server Task parameters are set to ENABLED . If the server task is not enabled, perform the procedure " Enabling the ELAN on the CS 1000 (LD 48) " (page 24).

—End—

Table 8

LD 48 - Check ELAN status

Command	Description
STAT ELAN	Checks the status of all configured ELAN subnets
STAT ELAN x	Checks the status of ELAN x

Enabling the ELAN on the CS 1000 (LD 48)

Perform the following procedure to enable the ELAN.

Enabling the ELAN on the CS 1000 (LD 48)

Step	Action
1	Connect to the Call Server.

- 2 Enter **LD 48**.
- 3 Enter the commands described in the following table.
- 4 Check that the ELAN is enabled.
Refer to the procedure ["Checking the ELAN status on the CS 1000 \(LD 48\)"](#) (page 24).

—End—

Table 9
LD 48 - Enable ELAN

Command	Description
ENL ELAN	Enables the ELAN server task

Configuring CallPilot resources on the CS 1000

The sequence of procedures in this section is as follows:

- ["Configuring the ELAN subnet \(LD 17\)"](#) (page 26)
- ["Configuring the System Parameters \(LD 17\)"](#) (page 27)
- ["Defining CallPilot in the customer data block \(LD 15\)"](#) (page 28)
- ["Configuring the route data block"](#) (page 32)
- ["Configuring Automatic Call Distribution \(LD 23\)"](#) (page 33)
- ["Configuring ACD agent voice ports for CallPilot \(LD 11\)"](#) (page 35)
- ["Configuring card slots"](#) (page 37)
- ["Defining the default Automatic Call Distribution DN \(LD 23\)"](#) (page 38)
- ["Configuring a CDN queue \(LD 23\)"](#) (page 38)
- ["Configuring attendant consoles \(LD 15\) "](#) (page 40)
- ["Configuring a phantom superloop \(LD 97\)"](#) (page 41)
- ["Configuring phantom DNs \(LD 10\)"](#) (page 42)
- ["Configuring dummy ACD DNs \(LD 23\)"](#) (page 44)
- ["Provisioning telephones"](#) (page 45)
- ["Saving CS 1000 changes \(LD 43\)"](#) (page 48)

Configuring the ELAN subnet (LD 17)

Define and configure the ELAN subnet for the AML link and its associated VSID in the configuration record. This provides the Ethernet connection over which AML messages are exchanged between the CS 1000 system and CallPilot. A separate ELAN must be created for CallPilot and Contact Center for the purpose of integration.

Perform this procedure only if the ELAN subnet is not provisioned.

Configuring the ELAN subnet (LD 17)

Step	Action
1	Connect to the Call Server.
2	Enter LD 17 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 10
LD 17 - ELAN subnet

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	CFN	Configuration record
ADAN	NEW ELAN xx	Configure a new link and assign it a number, where xx is within the ELAN subnet range (16–31). You can use any number in this range as long as it is not already used. Make a note of this link number for your reference.
- CTYP	ELAN	Card type
- DES	x...x	Enter a designator of up to six characters in length to identify this ELAN subnet. Because the ELAN subnet is not dedicated to a specific application, make the designator generic.
VAS	NEW	Configure a new AML link or change the existing link configuration.

Prompt	Response	Descriptions
- VSID	xx	The VAS identifier can be in the range of 16–31. For convenience, this can be the same number you assigned to the new ELAN subnet link (in response to the ADAN prompt).
- ELAN	xx	Use the same number as defined in the ADAN prompt.
- SECU	YES	Security. If you have a Contact Center server connected to your switch, enter YES (even if you are not using Contact Center's Voice Services Support).

Configuring the System Parameters (LD 17)

Perform the following procedure to configure the System Parameters.

Configuring the System Parameters (LD 17)

Step	Action
1	Connect to the Call Server.
2	Enter LD 17 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 11
LD 17 - System Parameters

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	PARM	System Parameters

Prompt	Response	Descriptions
NCR	x...x	Number of Call Registers. The range depends on the system type. Increment the current value by 2 x the number of CallPilot DS0 channels. For example, if the current NCR value is 500 and there are 24 DS0 channels, enter 548. Refer to the <i>Software Input/Output: Administration</i> (553-3001-311) for more about NCR.
CSQI	(20) to x	Maximum number of call registers for CSL input queues. Set this parameter to the number of CallPilot DS0 channels, multiplied by two. x = 25% of NCR. For example, if there are 24 DS0 channels, enter 48.
CSQO	(20) to x	Maximum number of call registers for CSL/AML output queues. Set this parameter to the number of CallPilot DS0 channels, multiplied by two. x = 25% of NCR. For example, if there are 24 DS0 channels, enter 48.

Defining CallPilot in the customer data block (LD 15)

You must define the CallPilot service in the customer data block, with the Call Park Allowed (CPA) and Message Center Included (MCI) options enabled. During this configuration, you also define how unanswered and busy calls are routed:

- Flexible Call Forward (FNAD/FNAN/FNAL) is set on a per customer basis. Define the call forward DN in the user's phoneset data.
- Call Forward No Answer/Busy (MDID/NDID/MWFB) is set on a per customer basis. All no answer and busy calls are routed to the flexible call forward DN, provided that the called phoneset has the Message Waiting Allowed (MWA) class of service enabled.

Normally, non-Direct Inward Dialing (DID) calls are routed to CallPilot when a no answer or busy condition is encountered. As an option, you can route DID calls to the attendant's or user's Hunt DN.

Configuring Call Park Allowed and Message Center Included

Step	Action
1	Connect to the Call Server.
2	Enter LD 15 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 12
LD 15 - Call Park Allowed and Message Center Included

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	FTR_DATA	Customer features and options
CUST	xx	Customer number, where xx = 0–99
OPT	CPA MCI a..a	Options. Enter CPA (Call Park Allowed) MCI (Message Center Included), and all other desired options, each separated with a space.
IDEF	YES or NO	Internal/External Definition. Set to YES if Call Forward by Call Type feature (CFCT) is enabled on the CS 1000 switch.

Configuring Call Redirection

Step	Action
1	Connect to the Call Server.
2	Enter LD 15 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.

—End—

Table 13
LD 15 - Call Redirection

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	RDR_DATA	Call Redirection
CUST	xx	Customer number (0–99)
FNAD	aaa	Call forward No Answer treatment for DID calls, where aaa = FDN for CallPilot setup
FNAT	YES or NO	Call forward No Answer treatment for external trunk non-DID calls, where aaa = FDN for CallPilot setup
FNAL	aaa	Call forward No Answer treatment for all other calls, including trunk calls marked as internal, where aaa = FDN for CallPilot setup
CFNA	1-(4)-15	Number of normal ringing cycles for Call Forward No Answer (CFNA)
CFN(X)	1-(4)-15	The number of normal ring cycles before the call is forwarded, where X = 0, 1, or 2. The CFN(X) prompts may appear instead of CFNA, depending on the release installed on the CS 1000.

Enabling or disabling End-to-End Signaling Tone (LD 15)

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

- | | |
|---|---|
| 1 | Connect to the Call Server. |
| 2 | Enter LD 15 . |
| 3 | Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default. |
| 4 | To exit the overlay, enter **** and press Return. |

—End—

Table 14
LD 15 - Enabling or disabling EEST

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	FTR_DATA	Customer features and options
CUST	xx	Customer number (0–99)
EEST	(NO) YES	End-to-End signaling tone to originating party. For remote CS 1000 sites, enter NO.

Configuring ISDN

Step	Action
1	Connect to the Call Server.
2	Enter LD 15 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.

—End—

Table 15
LD 15 - Configuring ISDN

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	NET_DATA	Networking
CUST	xx	Customer number (0–99)
ISDN	(NO) YES	Integrated Services Digital Network Set to YES only if NMS is purchased. Otherwise, set to NO.

Prompt	Response	Descriptions
PNI	(0)-16283	Private Network Identifier Within one network, use the same PNI value in LDs 15 and 16. When you interwork with different networks, enter the PNI of this CS 1000 system in LD 15, and the PNI of the target or remote CS 1000 system in LD 16. The default PNI = 0 prevents the operations of features such as NRAG, NACD and NMS.
HLOC	xxx	Home Location Code, where xxx = HLOC value defined in LD 90. Prompted when ISDN = YES or with Digital Private Network Signaling System (DPNSS) package 123.
LSC	yyy	Local Steering Code (LSC), where yyy = LSC defined in LD 15. LSC is required if the coordinated Dialing Plan (CDP) DNs are longer than the local PDNs. The LSC prompt appears only if a 5 or 6 dialing plan is configured or if DPNSS is equipped.

Configuring the route data block

If you have purchased Network Message Service (NMS) to allow a number of switches to share CallPilot (installed on only one switch), then configure the route data block.

For details on additional switch configuration for NMS, refer to *CallPilot Network Planning Guide* (555-7101-102).

Ensure that Digit Manipulation (DMI in LD 86) is not used to insert ESN access codes at the sending switch. ESN access code insertion must be done at the receiving switch (INAC in LD 16).

Configuring the route data block

Step	Action
1	Connect to the Call Server.
2	Enter LD 16 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.

- 4 To exit the overlay, enter **** and press Return.

—End—

Table 16
LD 16 - Configuring route data block

Prompt	Response	Descriptions
REQ	NEW or CHG	Add new data or change existing data block
TYPE	RDB	Route data block
CUST	xx	Customer number (0–99)
ROUT	x..x	Route Number, where x..x = 0-511 for Large Systems and CS 1000E Systems 0-127 for Small Systems, CS 1000S, MG 1000B, and MG 1000T systems
DES	x..x	Designator field for trunk (0 to 16 characters)
PNI	(0)-32700	Private Network Identifier
NCRD	(NO)/YES	Network Call Redirection Allowed, where NO = Network Call Redirection messages blocked YES = Network Call Redirection messages allowed Network Call Redirection can occur when NCRD is not set to YES. This prompt controls only the sending of Network Call Redirection messages, not the call itself.
TRO	(NO)/YES	Trunk Route Optimization (prompted if NCRD = YES)
INAC	(NO)/YES	Insert ESN Access Code to incoming private network call

Configuring Automatic Call Distribution (LD 23)

You must set up only one Automatic Call Distribution (ACD) agent queue to service CallPilot, unless you are enabling the Contact Center Voice Services Support feature. This queue holds all the agents that correspond to DS0 channels on the CallPilot server.

If you are enabling the Contact Center Voice Services Support feature, you must set up two additional ACD agent queues: one for ACCESS ports, and one for IVR ports. A segment of the CallPilot ports must be dedicated to the Contact Center Voice Services Support feature.

Configuring Automatic Call Distribution (LD 23)

Step	Action
1	Connect to the Call Server.
2	Enter LD 23 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.

—End—

Table 17
LD 23 - Configuring ACD agent queue

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	ACD	Automatic Call Distribution
CUST	xx	Customer number (0–99)
ACDN	xxxx	ACD Directory Number for CallPilot applications
MWC	NO	Message Waiting Center For CallPilot, set MWC to NO.
MAXP	1-120	Maximum number of agent positions
CALP	POS	Called Party DN, where POS = POSID + DNIS in the CALP DN field in the PCI message TER = Terminating DN in the CALP DN field in the PCI message For CallPilot, set CALP to POS.

Prompt	Response	Descriptions
IVR	YES	Interactive Voice Response queue For CallPilot, set IVR to YES.
ALOG	YES	Provide Automatic Login for agents For CallPilot, set ALOG to YES.

Configuring ACD agent voice ports for CallPilot (LD 11)

For CallPilot, you must define channels as ACD agents on M2008 digital sets. All agents are added to the ACD queues that you configure.

Perform the following procedure to configure agents.

Configuring ACD agent voice ports for CallPilot (LD 11)

Step	Action
1	Connect to the Call Server.
2	Enter LD 11 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.

—End—

Table 18
LD 11 - Configuring ACD agents

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	2008	Type of Data block For CallPilot, TYPE must be 2008.
TN	l s c u c u	Terminal Number A TN is required for each agent. For Large Systems, where l s c u = loop, shelf, card, unit For Small Systems, where c u = card, unit
DES	d..d	ODAS station designator, where d..d = 1-6 alphanumeric characters

Prompt	Response	Descriptions
CUST	xx	Customer number (0–99)
CLS	aaaa	Class of Service Each agent must have the VCE and MMA Class of Service. To get the VCE Class of Service on the upper 16 units (16 to 31), you must first specify the FLXA Class of Service. For Call Pilot configuration, aaaa = WTA UNR VCE MMA for units 0-15 or FLXA VCE MMA for units 16-31
AST	xx yy	Associated Set Assignment (AST) A maximum of two DN keys can be controlled by the host computer. xx and yy represent the first and second DN key controlled by the host computer. For CallPilot, xx = 00 (ACD Key) yy = 01 (SCN Key)
IAPG	1	Unsolicited Status Message Group. Range: (0)-15
KEY	xx aaa yyyy ccc zzzz	Telephone function key assignments, where xx = key number aaa = key feature or function yyyy = DN information (if required) ccc = CLID information (if required) zzzz = DN information For CallPilot, provision each agent with the following feature keys: ACD, SCN, NRD, MSB, TRN, and AO3.
	0 ACD xxxx 0 yyyy	xxx = ACD DN yyy = Agent Position DN
	1 SCN zzzz	zzzz = Non ringing DN used to make outbound calls
	2 msb	Make Set Busy (msb)
	3 nrd	Not Ready (nrd)

Prompt	Response	Descriptions
	4 trn	Transfer (trn)
	5 AO3	Three Party conference Key (AO3)

Configuring card slots

After you configure the ACD agents, use LD 32 to ensure that the card slots used by an MGate card (NTRB18CA) or 201i server are enabled.

The 201i server occupies two slots. Both slots must be enabled to use all ports supported by the 201i server.

Configuring card slots

Step	Action
1	Connect to the Call Server.
2	Enter LD 32 .
3	Enter the commands described in the following table.
4	Check the ACD agent status to ensure that the cards are successfully enabled.

—End—

Table 19
LD 32 - Card slots

Command	Description
STAT l s c	Displays the status of the ACD agents defined for this slot, where l = loop s = shelf c = card slot If the ACD agents are disabled, then enable the card slot.
ENLC l s c	Enables the card slot, where l = loop s = shelf c = card slot The 201i server occupies two slots. Both slots must be enabled to use all ports.

Defining the default Automatic Call Distribution DN (LD 23)

Perform the following procedure to define the default Automatic Call Distribution (ACD) DN.

Defining the default Automatic Call Distribution DN (LD 23)**Step Action**

- 1** Connect to the Call Server.
- 2** Enter **LD 23**.
- 3** Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
- 4** To exit the overlay, enter **** and press Return.

—End—

Table 20
LD 23 - Defining the default ACD DN

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	ACD	Automatic Call Distribution
CUST	xx	Customer number (0–99)
ACDN	xxxx	ACD Directory Number, where xxxx = Default DN. Enter the DN as the Default DN (DFDN) used in the CDN configuration.
MWC	NO	Message Waiting Center. Set to NO.
MAXP	1	Maximum number of agent positions. For the DFDN, MAXP must be set to 1.
NCFW	0	Night Call forward DN for ACD calls For DFDN, set NCFW to 0. This DN value can be up to 31 digits.

Configuring a CDN queue (LD 23)

During normal operation, the CDN is in control mode, and callers are queued to be routed and answered by CallPilot services. Under error conditions (such as when the AML link is down), the CDN operates in default mode and calls are routed to the default ACD DN defined for the CDN.

Perform the following procedure to configure these CDN queues:

- Configure a primary CDN for Voice Messaging. This becomes the main CDN queue.
- Configure a secondary CDN for Multimedia Messaging, if you want to provide users with fax capability.

Nortel strongly recommends that you use either a phantom DN or a dummy ACD DN for all other messaging services.

Configuring a CDN queue

Step	Action
1	Connect to the Call Server.
2	Enter LD 23 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.

—End—

Table 21
LD 23 - Configuring a CDN queue

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	CDN	Control DN queue
CUST	xx	Customer number (0–99)
CDN	yyyy	The Control DN of the queue. This number must be entered as the SDN for the messaging service in the SDN table.

Prompt	Response	Descriptions
DFDN	zzzz	Default ACD DN Calls to the CDN are directed to this ACD DN if the link or CallPilot goes down. Nortel recommends that this is not defined as the ACD DN of the CallPilot ACD queue.
VSID	<Dynamic>	Allow the system to dynamically assign the VAS ID to the CDN when the ELAN subnet link is enabled

Configuring attendant consoles (LD 15)

Configuring the attendant

Step	Action
1	Connect to the Call Server.
2	Enter LD 15 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 22
LD 15 - Configuring the attendant

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	ATT_DATA	Attendant Console
CUST	xx	Customer number (0–99)
ATDN	(0) – xxxx	Attendant Directory Number Calls timed for recall by the DPNSS1 redirection feature are directed to this number when the timer expires.

Prompt	Response	Descriptions
MATT	NO (YES)	Consoles Used as Message Center Set to YES if Network Message Service (NMS) is not purchased. Set the primary CS 1000 Switch to YES if NMS is purchased. Set all secondary systems to NO.
AQTT	1-(30)-255	Attendant Queue Timing Threshold in seconds
AODN	xxxx	Attendant Overflow DN For CallPilot, set this prompt to a CDN to launch the Call pilot Service when the attendant overflows. The SDN table in CallPilot must have the desired AODN service defined for DN0. The CS1000 system issues a SCH1872 error, but accepts the DN. This error is a warning that the DN must be a CallPilot CDN.

Configuring a phantom superloop (LD 97)

There are two reasons for configuring phantom DN's on the switch:

- to create dialable numbers for CallPilot services
- to create virtual fax DN's for users who want a separate fax number

Another option is to configure dummy ACD DN's instead of phantom DN's. Refer to the procedure ["Configuring dummy ACD DN's \(LD 23\)" \(page 44\)](#).

If you plan to configure phantom DN's, perform the following procedure to configure a phantom superloop.

Configuring a phantom superloop (LD 97)

Step	Action
1	Connect to the Call Server.
2	Enter LD 22 .
3	Enter the appropriate values as described in Table 23 "LD 22 - Checking for existing phantom loops" (page 42) to check whether any phantom superloops exist.
4	Enter **** and press Return to exit LD 22.

- 5 Enter **LD 97**.
- 6 Enter the appropriate values as described in [Table 24 "LD 97 - Configuring phantom loops"](#) (page 42).
- 7 To exit the overlay, enter **** and press Return.

—End—

Table 23
LD 22 - Checking for existing phantom loops

Prompt	Response	Descriptions
REQ	PRT	Print
TYPE	CEQU	Configured phantom loops are listed under the SUPL entry with the letter "P" as a prefix.

Table 24
LD 97 - Configuring phantom loops

Prompt	Response	Descriptions
REQ	CHG	Change
TYPE	SUPL	Superloop
SUPL	Nxxx	Prefix the superloop number with N to create a phantom superloop. For Large Systems, the loop number range is 0–156. For Small Systems, the range is 96–112. For systems running Fiber Network Fabric, the range is 0–252.

Configuring phantom DNS (LD 10)

Perform the following procedure to configure phantom DNS.

Configuring phantom DNS (LD 10)

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

- | | |
|---|---|
| 1 | Connect to the Call Server. |
| 2 | Enter LD 10 . |
| 3 | Enter the appropriate values as described in the following table. |

For prompts not listed in the following table, press Enter to accept the default.

- 4 To exit the overlay, enter **** and press Return.

—End—

Table 25
LD 10 - Configuring phantom DNs

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	500	PBX telephone type
TN	l s c u c u	Terminal Number For Large Systems, where l = loop, s = shelf, c = card, and u = unit. For Small Systems and CS 1000S systems, where l = loop, s = shelf, c = card, and u = unit.
CDEN	xx	The card density supported by the loop, where xx = DD (double density) or xx = 4D (quadruple density).
DN	yyyy	The DN must be single appearance.
CLS	WTA UNR	Unrestricted. Phantom DNs cannot originate calls, so this option is secure.
FTR	DCFw nn xxxx	Feature and Options DCFw = Default Call Forward nn = maximum number of digits in the DCFw DN xxxx = the CDN to which this DN forwards If this phantom DN is for a voice service, enter the Voice Messaging CDN. If this phantom DN is for a fax service, enter the Multimedia Messaging CDN. If this phantom DN is a virtual fax DN for a user, enter the Multimedia Messaging CDN.

Configuring dummy ACD DN (LD 23)

As an alternative to creating phantom DN's for directly dialable services, you can create a dummy ACD DN that is set up to call forward to the appropriate CDN depending on the multimedia channel type required.

Example:

- For a service that requires only voice capability, forward the dummy ACD DN to the Voice Messaging CDN.
- For a service that requires fax capability, forward the dummy ACD DN to the Multimedia Messaging CDN.

Configuring dummy ACD DN (LD 23)

Step	Action
1	Connect to the Call Server.
2	Enter LD 23 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 26

LD 23 - Configuring dummy ACD DN's

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	ACD	Automatic Call Distribution
CUST	xx	Customer number (0-99)
ACDN	yyyy	ACD Directory Number Enter the DN for the service.
MWC	(NO) / YES	Message Waiting Center If the CallPilot server is a Network Message Service (NMS) satellite site, set to YES. Otherwise, set to NO.

Prompt	Response	Descriptions
MAXP	1	Maximum Agents Set this value to 1 to indicate that there are no agents in the queue and it is therefore a dummy queue.
NCFW	yyyy	Night Call Forward If this is a voice service , enter the Voice Messaging CDN. If this is a multimedia service , enter the Multimedia Messaging CDN.

Provisioning telephones

Set up telephones to support the following features for CallPilot:

- Call Forward No Answer to the appropriate CDN (voice or multimedia)
- Call Forward Busy to the appropriate CDN
- Call Forward All Calls to the appropriate CDN
- Message Waiting key with the appropriate CDN as the Message Center DN

If you do not plan to give fax capability to the user's mailbox, use the Voice Messaging CDN. If you plan to give fax capability to the user's mailbox, then use the Multimedia Messaging CDN.

You cannot forward users' telephones to the Speech Activated Messaging CDN because this service does not provide call answering functionality.

Perform the following procedures to set up telephones.

Provisioning digital telephones (LD 11)

Perform the following procedure to set up digital telephones.

Provisioning digital telephones (LD 11)

Step	Action
1	Connect to the Call Server.
2	Enter LD 11 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.

—End—

Table 27
LD 11 - Provisioning digital telephones

Prompt	Response	Descriptions
REQ	NEW or CHG	Add new data or change existing data
TYPE	a..a	Type of data block For a complete list of available responses, enter ?
TN	l s c u c u	Terminal Number For Large Systems, where l = loop, s = shelf, c = card, and u = unit. For Small Systems and CS 1000S systems, where l = loop, s = shelf, c = card, and u = unit.
CUST	xx	Customer number (0–99)
KEM	y	Number of expansion units, where y = 0, 1, or 2
KLS	1 – 7	Number of key/lamp strips
ZONE	0-255	Zone number which IP phones set belongs
FDN	yyyy	Flexible call forward no answer DN. yyyy = CDN of voice messaging or multimedia messaging CDN queue
HUNT	zzzz	Hunt DN of the next station in the hunt chain zzzz = CDN of voice messaging or multimedia messaging CDN queue
CLS	a..a	Class of Service For CallPilot, configure the following: Warning Tone Allowed (WTA), Unrestricted (UNR), Call Forward No Answer (FNA), Call Forward Busy Allowed (FBA), Hunting Allowed (HTA), Message Waiting Allowed (MWA)
KEY	0 SCR xxxx	Single call ringing DN, where xxxx is the user's DN.

Prompt	Response	Descriptions
- CPND	NEW	Calling Party Name Display (if adding a new set).
- - NAME	aaa	Calling Party Display Name The first single comma is treated as a delimiter. Up to 27 characters in length, including the comma.
KEY	z MSB	Make Set Busy, where z = key number
	z TRN	Transfer, where z = key number
	z AO3	Three-party conference, where z = key number Required by the Call Sender feature.
	z CFW nn xxxx	Call forward all calls, where z = key number nn = maximum number of digits in the Call Forward DN xxxx = Voice Messaging or Multimedia Messaging CDN
	z MWK yyyy	Message Waiting Key/lamp, where z = key number yyyy = Voice Messaging or Multimedia Messaging CDN

Provisioning analog (500/2500-type) telephones (LD 10)

Perform the following procedure to set up analog (500/2500-type) telephones.

Provisioning analog (500/2500-type) telephones (LD 10)

Step	Action
1	Connect to the Call Server.
2	Enter LD 10 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 28
LD 10 - Provisioning analog (500/2500-type) telephones

Prompt	Response	Descriptions
REQ	NEW or CHG	Add new data or change existing data
TYPE	500	500 telephone
TN	l s c u c u	Terminal Number For Large Systems, where l = loop, s = shelf, c = card, and u = unit. For Small Systems, where l = loop, s = shelf, c = card, and u = unit.
CUST	xx	Customer number (0–99)
DN	yyyy	Directory Number
HUNT	zzzz	Hunt DN of the next station in the hunt chain zzzz = CDN of voice messaging or multimedia messaging CDN queue
CLS	a..a	Class of Service For CallPilot, configure the following: Warning Tone Allowed (WTA), Unrestricted (UNR), Call Forward No Answer (FNA), Call Forward Busy Allowed (FBA), Hunting Allowed (HTA), Message Waiting Allowed (MWA), XFA, LPA, DTN
FTR	FDN xxxx	Flexible Call Forward no answer, where xxxx = voice or multimedia messaging CDN
	CFW yy	Call forward all calls, where yy = maximum DN length that users can specify as the call forward DN
	ACD xxxx yyyy	ACD feature allowed, where xxxx = ACD DN yyyy = ACD Position (POS-ID)

Saving CS 1000 changes (LD 43)

Perform the following procedure to save the CS 1000 changes.

Saving CS 1000 changes (LD 43)**Step Action**

- 1** Connect to the Call Server.
- 2** Enter **LD 43**.
- 3** Check that a disk is in the drive.
- 4** At the “.” prompt, enter **EDD** to dump the data to disk.
Result: The system displays the data being saved.

ATTENTION

Do not remove the disk while the LED is lit. As long as the LED is on, the disk is still being written to.

—End—

Configuring Contact Center resources on the CS 1000

The sequence of procedures in this section is as follows:

- "Configuring the ELAN subnet (LD 17)" (page 49)
- "Configuring System Parameters (LD 17)" (page 51)
- "Configuring Automatic Call Distribution for Contact Center (LD 23)" (page 52)
- "Configuring IVR Automatic Call Distribution for Contact Center (LD 23)" (page 53)
- "Configuring ACD agent voice ports for Contact Center (LD 11)" (page 54)
- "Configuring a CDN queue for Contact Center Manager (LD 23)" (page 56)
- "Provisioning telephones for Contact Center " (page 58)
- "Saving CS 1000 changes (LD 43)" (page 61)

Configuring the ELAN subnet (LD 17)

Perform the following procedure to configure the ELAN subnet. For the purpose of integration, a separate ELAN must be created for CallPilot and Contact Center.

Configuring the ELAN subnet (LD 17)

Step	Action
1	Connect to the Call Server.
2	Enter LD 17 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.

—End—

Table 29
LD 17 - Configuring the ELAN subnet

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	CFN	Configuration Record
ADAN	NEW ELAN xx	This configures a new link and assigns it a number, where xx is within the ELAN subnet range of 16-31. You can assign any number not in use. The ELAN number for Contact Center must be different than the one provisioned for CallPilot. Make a note of the link number for future reference.
- CTYP	ELAN	Card Type (CTYP)
- DES	< Description >	Enter a generic description up to six characters in length to identify this ELAN subnet. The ELAN subnet is not dedicated to a specific application. zzzz = CDN of voice messaging or multimedia messaging CDN queue
VAS	NEW	Configure a new AML link or change an existing link configuration

Prompt	Response	Descriptions
- VSID	xx	VAS Identifier xx can be in the range of 16-31. For convenience and simplicity this value is usually the same number assigned to the ELAN subnet link when ADAN is configured.
- ELAN	xx	xx = the ADAN number configured for the ELAN subnet
- SECU	YES	Security If you have MLS applications running, enter YES (even if you are not using Contact Center Voice Services Support).

Configuring System Parameters (LD 17)

Perform the following procedure to configure the System Parameters.

Configuring System Parameters (LD 17)

Step	Action
1	Connect to the Call Server.
2	Enter LD 17 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 30
LD 17 - Configuring System Parameters

Prompt	Response	Descriptions
REQ	CHG	Change existing data block
TYPE	PARM	System Parameters

Prompt	Response	Descriptions
NCR	xx	Number of Call Registers The range depends on the system type. Refer to <i>Software Input/Output: Administration</i> (553-3001-311) for details. Increment the current NCR value by twice the number of Call Pilot DS0 channels. To determine the current use of NCR, enter LD 22 and do a print on the TYPE PARM. For example, if the current value of NCR is 500 and there are 24 DS0 channels, enter 548.
CSQI	(20) to x	Maximum number of call registers for CSL input queues This parameter value is equal to the number of DS0 channels multiplied by two. $x = 25\%$ of NCR For example, if there are 24 DS0 channels then $2 \times 24 = 48$
CSQO	(20) to x	Maximum number of Call Registers for CSL/AML output queues This parameter value is equal to the number of DS0 channels multiplied by two. $x = 25\%$ of NCR

Configuring Automatic Call Distribution for Contact Center (LD 23)

A separate Automatic Call Distribution (ACD) must be configured for CallPilot and Contact Center. Perform the following procedure to configure ACD for Contact Center.

Configuring Automatic Call Distribution for Contact Center (LD 23)

Step	Action
1	Connect to the Call Server.
2	Enter LD 23 .
3	Enter the appropriate values as described in the following table.

For prompts not listed in the following table, press Enter to accept the default.

- 4 To exit the overlay, enter **** and press Return.

—End—

Table 31
LD 23 - Configuring ACD for Contact Center

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	ACD	Automatic Call Distribution
CUST	xx	Customer number (0–99)
ACDN	xxxx	ACD Directory Number
MAXP	1	Maximum number of agent positions
NCFW	X	Night Call Forward Enter X to delete NCFW. NCFW must be blank to allow the configuration of an NACD night routing table.

Configuring IVR Automatic Call Distribution for Contact Center (LD 23)

Perform the following procedure to configure IVR ACD for Contact Center.

Configuring IVR Automatic Call Distribution for Contact Center (LD 23)

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

- | | |
|---|--|
| 1 | Connect to the Call Server. |
| 2 | Enter LD 23 . |
| 3 | Enter the appropriate values as described in the following table.
For prompts not listed in the following table, press Enter to accept the default. |
| 4 | To exit the overlay, enter **** and press Return. |

—End—

Table 32
LD 23 - Configuring ACD for Contact Center

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	ACD	Automatic Call Distribution
CUST	xx	Customer number (0–99)
ACDN	x..x	ACD Directory Number
MWC	NO	Message Waiting Center
MAXP	1-120	Maximum number of agent positions
NCFW	X	Night Call Forward Enter X to delete NCFW. NCFW must be blank to allow the configuration of an NACD night routing table.
IVR	YES	Interactive Voice response Queue
ALOG	YES	Provide Automatic Login for agents
TRDN	xxxx	Treatment DN for IVR Queue

Configuring ACD agent voice ports for Contact Center (LD 11)

Perform the following procedure to configure agents.

Configuring ACD agent voice ports for Contact Center (LD 11)

Step	Action
1	Connect to the Call Server.
2	Enter LD 11 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 33
LD 11 - Configuring ACD agents

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	2008	Type of Data block For Contact Center, TYPE must be 2008.
TN	l s c u c u	Terminal Number A TN is required for each agent. For Large Systems, where l s c u = loop, shelf, card, unit For Small Systems, where c u = card, unit
DES	d..d	ODAS station designator, where d..d = 1-6 alphanumeric characters
CUST	xx	Customer number (0-99)
CLS	aaaa	Class of Service Each agent must have the VCE and MMA Class of Service. To get the VCE Class of Service on the upper 16 units (16 to 31), you must first specify the FLXA Class of Service. For Contact Center configuration, aaaa = WTA VCE MMA FXLA is required for units 16-31. CTD (optional) prevents outbound long-distance calls from a voice port.
KEY	xx aaa yyyy ccc zzzz	Telephone function key assignments, where xx = key number aaa = key feature or function yyyy = DN information (if required) ccc = CLID information (if required) zzzz = DN information For Contact Center, provision each agent with the following feature keys: ACD, SCN, NRD, MSB, TRN, and AO3.

Prompt	Response	Descriptions
	0 ACD xxxx 0 yyyy 1 SCN zzzz 2 msb 3 nrd 4 trn 5 AO3	xxx = ACD DN yyy = Agent Position DN zzzz = Non ringing DN used to make outbound calls Make Set Busy (msb) Not Ready (nrd) Transfer (trn) Three Party conference Key (AO3)
AST	00 01	Associated Set Assignment (AST) A maximum of two DN keys can be controlled by the host computer. xx and yy represent the first and second DN key controlled by the host computer.

Configuring a CDN queue for Contact Center Manager (LD 23)

Perform the following procedure to configure a CDN queue.

Configuring a CDN queue for Contact Center Manager (LD 23)

Step	Action
1	Connect to the Call Server.
2	Enter LD 23 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 34

LD 23 - Configuring a CDN queue for Contact Center Manager

Prompt	Response	Descriptions
REQ	NEW	Add new data
TYPE	CDN	Control DN queue
CUST	xx	Customer number (0–99)

Prompt	Response	Descriptions
CDN	yyyy	The Control DN of the queue. This number must be entered as the SDN for the messaging service in the SDN table.
FRRT	0 – 511	First RAN route number for ACD
- FRT	0 – 2044	First RAN time
SRRT	0 – 511	Second RAN route number for ACD
- SRT	0 – 2044	Second RAN time
FROA	(NO) / YES	First RAN on Arrival If YES, the first RAN is given to incoming call immediately and FRT is ignored.
MURT	0 – 511	Music Route Number The route and at least one trunk must exist before you define MURT.
DFDN	zzzz	Default ACD DN Calls to the CDN are directed to this ACD DN if the link or CallPilot goes down. Nortel recommends that this is not defined as the ACD DN of the CallPilot ACD queue.
CEIL	0 – 2047	CDN Ceiling value CEIL limits the number of unanswered calls a CDN can have at its default ACD DN at a time. New calls receive a busy signal when the CEIL limit is reached.
OVFL	(NO) / YES	Overflow tone If NO, busy tone is given to the call. If YES, the overflow tone is given by the mobility switch.
TDNS	(NO) / YES	NO = DNIS is not an original called Party of a defined CDN queue. YES = DNIS is an original Called Party of a defined CDN queue.
RPRT	YES	Management Reporting and status display RPRT is prompted only if a SCB or ADS block exists for this customer.
CNTL	YES	Control DN is in control

Prompt	Response	Descriptions
VSID	<Dynamic>	Allow the system to dynamically assign the VAS ID to the CDN when the ELAN subnet link is enabled
HSID	0 – 15	VAS ID for the Host Application Module Link
CWTH	0 – (1) – 2047	Calls Waiting threshold
BYTH	(0) – 2047	Busy threshold
OVTH	0 – (2047)	Overflow threshold
STIO	0 – 15	Status Input / Output devices Prompted if an SCB exists.
TSFT	0 – (20) – 510	Telephone Service Factor Threshold in seconds Only prompted if an SCB exists.
ACNT	xxxx	Account (Default Activity Code) Four-digit account Note Prompted only if ADS data block is built and CNTL = YES.

Provisioning telephones for Contact Center

Perform the following procedures to set up telephones for Contact Center.

Provisioning digital telephones for Contact Center (LD 11)

Perform the following procedure to set up digital telephones.

Provisioning digital telephones for Contact Center (LD 11)

Step	Action
1	Connect to the Call Server.
2	Enter LD 11 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 35
LD 11 - Provisioning digital telephones for Contact Center

Prompt	Response	Descriptions
REQ	NEW or CHG	Add new data or change existing data
TYPE	a..a	Type of data block For a complete list of available responses, enter ?
TN	l s c u c u	Terminal Number For Large Systems, where l = loop, s = shelf, c = card, and u = unit. For Small Systems and CS 1000S systems, where l = loop, s = shelf, c = card, and u = unit.
CUST	xx	Customer number (0–99)
KLS	1 – 7	Number of key/lamp strips
KEY	xx aaa yyyy ccc zzzz	Telephone function key assignments xx = key number aaa = key feature or function yyyy = DN information (if required) ccc = CLID information (if required) zzzz = DN information Each agent must be provisioned with the following feature keys: ACD, SCN, NRD, MSB, TRN, and AO3.
	0 ACD xxxx 0 yyyy	xxx = ACD DN, yyy = Agent Position DN
	1 SCR zzzz	Single Key ringing Key
	2 msb	Make Set Busy (msb)
	3 nrd	Not Ready (nrd)
	4 trn	Transfer (trn)
	5 AO3	Three Party conference Key (AO3)

Provisioning analog (500/2500-type) telephones for Contact Center (LD 10)

Perform the following procedure to set up analog (500/2500-type) telephones.

Provisioning analog (500/2500-type) telephones for Contact Center (LD 10)

Step	Action
1	Connect to the Call Server.
2	Enter LD 10 .
3	Enter the appropriate values as described in the following table. For prompts not listed in the following table, press Enter to accept the default.
4	To exit the overlay, enter **** and press Return.
—End—	

Table 36

LD 10 - Provisioning analog (500/2500-type) telephones for Contact Center

Prompt	Response	Descriptions
REQ	NEW or CHG	Add new data or change existing data
TYPE	500	500 telephone
TN	l s c u c u	Terminal Number For Large Systems, where l = loop, s = shelf, c = card, and u = unit. For Small Systems, where l = loop, s = shelf, c = card, and u = unit.
CUST	xx	Customer number (0–99)
DN	yyyy	Directory Number
CLS	a..a	Class of Service For Contact Center, configure the following: AGTA, THFA, UND, WTD, (WTA)
SPID	xxxx	Supervisor's position ID number
PRI	(1) - 48	Priority level for agent
AACD	YES	Associated set for ACD agent For AST phones only.
FTR	ACD xxxx yyyy	ACD feature allowed, where xxxx = ACD DN yyyy = ACD Position (POS-ID)

Saving CS 1000 changes (LD 43)

Perform the following procedure to save the CS 1000 changes.

Saving CS 1000 changes (LD 43)

Step	Action
1	Connect to the Call Server.
2	Enter LD 43 .
3	Check that a disk is in the drive.
4	At the “.” prompt, enter EDD to dump the data to disk. Result: The system displays the data being saved. Do not remove the disk while the LED is lit. As long as the LED is on, the disk is still being written to.
—End—	

CallPilot configuration

This chapter describes the configuration of the switch information for CallPilot. It is assumed that CallPilot is installed and configured and that the switch information was not configured during initial the initial configuration.

The procedures in this chapter are sequential. You must complete these procedures in order, uninterrupted, to avoid losing all changes.

CallPilot configuration procedures

The sequence of CallPilot configuration procedures is as follows:

- ["Logging on to CallPilot Manager" \(page 63\)](#)
- ["Configuring the keycode and serial numbers" \(page 66\)](#)
- ["Configuring CallPilot server information" \(page 68\)](#)
- ["Configuring password information" \(page 69\)](#)
- ["Configuring multimedia allocations" \(page 70\)](#)
- ["Configuring the CS 1000 switch information" \(page 71\)](#)
- ["Configuring the links on the MGate card" \(page 72\)](#)
- ["Configuring CDN information" \(page 74\)](#)
- ["Configuring the Contact Center Language Source" \(page 75\)](#)
- ["Configuring the CallPilot LAN interface" \(page 76\)](#)

Logging on to CallPilot Manager

Perform the following procedure to log on to CallPilot Manager.

Your computer must be connected to the same network to access CallPilot Manager through the web browser.

Logging on to CallPilot Manager

Step	Action
1	In your Web browser, enter the URL of the CallPilot Manager (for example, 192.168.249.91/cpmgr). The CallPilot login page appears. See Figure 2 "CallPilot login" (page 64) .

Figure 2
CallPilot login

Selecting a CallPilot Server:
Select a server and location from the list of preset servers, or enter the server name (or IP address). The location field is required only if the indicated server has Network Message Service (NMS). In this case enter the name of the location where your mailbox resides.

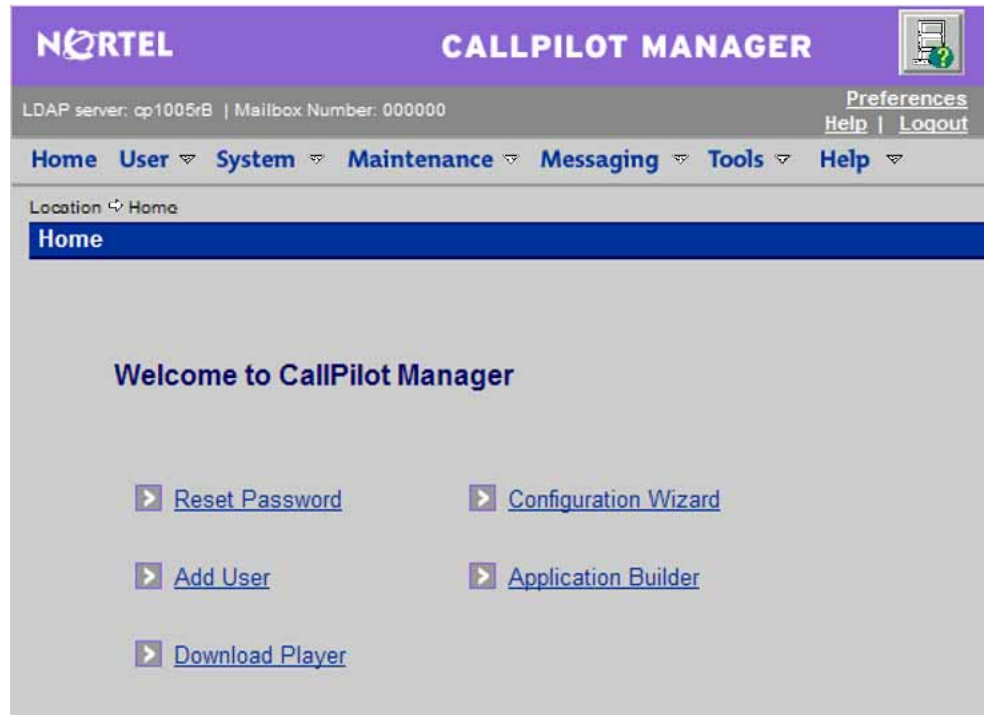
User:
Mailbox Number: 000000
Password: 000000

Server:
Preset server list: Last server accessed

Server: cp1005rB [security](#)
Location:

- | | |
|---|--|
| 2 | In the user pane, enter the following administrator information: <ul style="list-style-type: none"> • Administrator Mailbox Number (default is 000000) • Password (default is 124578) |
| 3 | In the server pane, enter the Server type: <ul style="list-style-type: none"> • manually, if the server is not defined, or • by choosing a server from the Preset Server List menu, or • by selecting the last server accessed item from the Preset Server List. |
| 4 | Click Login .
The Welcome to CallPilot Manager page appears. See Figure 3 "Welcome to CallPilot Manager page" (page 65) . |

Figure 3
Welcome to CallPilot Manager page



- 5 If you are logging on for the first time, change your password using numeric characters.
- 6 Select **Configuration Wizard**.
The Configuration Wizard: Welcome page appears.
- 7 If you previously ran the Configuration Wizard, click **OK** in the dialog box that appears.
- 8 Click **Next**.
The Configuration Wizard: Configuration Mode page appears. See Figure 4 "Configuration Mode page" (page 66).

Figure 4
Configuration Mode page

- 9 Select **CallPilot System Configuration (Standard Mode)** and click **Next**.
The Keycode and serial number page appears. See [Figure 5 "Keycode and serial number page" \(page 66\)](#).

Figure 5
Keycode and serial number page

—End—

Configuring the keycode and serial numbers

Perform the following procedure to configure the keycode and serial numbers.

Configuring the keycode and serial numbers

- | Step | Action |
|------|--|
| 1 | In the Keycode and serial number page, enter the Serial Number from the software feature key.
See Figure 5 "Keycode and serial number page" (page 66) . |
| 2 | Enter the Keycode .
The keycode is an alphanumeric key 32 characters in length that works only with a specific serial number. The keycode enables the features you have purchased. |
| 3 | Click Next .
The Feature Verification page appears. See Figure 6 "Feature Verification page" (page 67) . |

Figure 6
Feature Verification page

Location → Configuration Wizard → Feature Verification

Configuration Wizard: Feature Verification

Back Next Cancel Help

Feature Verification:

The following table contains the configuration information from your keycode. Ensure that the details match your expectations. If a feature is missing or a value is not what you expected, contact your distributor to obtain a new keycode.

Serial number: 10130179
Keycode: CEE5 2PPU LH9C 7FEC T3G3 WFA9 LJYH F5DE

Status	Feature	Current Keycode	Previous Keycode	Number Used
✓	Hardware Platform	TRP 1005r	TRP 1005r	
✓	Switch Type	Meridian 1	Meridian 1	
✓	Switch Connectivity	Proprietary CTI	Proprietary CTI	
✓	Max Voice Channels	96	96	

○ ○ ○

✓	Max Voice Message Seats	50000	50000	0
✓	Max Fax Message Seats	40000	40000	0

○ ○ ○

- 4 Review the Feature Verification page to ensure that all your features are included with the keycode you provided.

- 5 Scroll to the bottom of the page and click **Next**.
The Server Information page appears.

Figure 7
Server Information page

Location <-> Configuration Wizard <-> Server Information

Configuration Wizard: Server Information

Back Next Cancel Help

Computer Name:
If you want to change the computer name that identifies your CallPilot server on the network, enter a new computer name.
Computer Name:

Time Zone:
Select the Time Zone in which the CallPilot server is located.
Time Zone:

Dialing Information:
Enter the area code and country code that is appropriate for the location of the CallPilot server.
Area Code:
Country Code:

Ldap Search Base:
Enter the ldap search base for the database operations of ldap component.
Ldap search base:

—End—

Configuring CallPilot server information

Perform the following procedure to configure the CallPilot server information.

Configuring CallPilot server information

Step	Action
1	In the Server Information page, for Computer Name , type the CallPilot computer name.
2	Select the Time Zone where the CallPilot server resides.

- 3 Type the local **Telephone Area Code** where the CallPilot server resides.
- 4 Type the **Country Code** where the CallPilot server resides.
- 5 Enter the **Ldap search base** for the ldap database (for example, dc=Nortel,dc=ca).
- 6 Click **Next**.
The Password Information page appears.

Figure 8
Password Information page

—End—

Configuring password information

Nortel recommends that you change the default passwords.

Perform the following procedure to configure CallPilot password information.

Configuring password information

Step	Action
1	In the Password Information page, select Change the password .

- 2 Type the **Current password**.
- 3 Type a **New password**.
- 4 For **Confirm the new password**, type the new password.
- 5 Repeat steps 1 through 4 for all system passwords.
- 6 Click **Next**.
The Multimedia Allocation page appears.

Figure 9
Multimedia Allocation page

Location > Configuration Wizard > Multimedia Allocation

Configuration Wizard: Multimedia Allocation

Back Next Cancel Help

Multimedia Allocation:

Click the board name to change the distribution of voice, fax, speech recognition and audio conferencing channels for the corresponding DSPs.

[Multimedia Processing Board 1
\(MPB96 in slot 01\)](#)

	Voice	Fax	ASR
Total Allocated:	24	12	12
Maximum Allowed:	96	16	16
DSP Encoding: mu-law			
Country: Generic			
	Voice	Fax	ASR
DSP01-001 (Onboard)	2	1	1
DSP01-002 (Onboard)	2	1	1
DSP01-003 (Onboard)	2	1	1
DSP01-004 (Onboard)	2	1	1

—End—

Configuring multimedia allocations

Perform the following procedure to configure Configuring multimedia allocations.

Configuring multimedia allocations

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

- | | |
|---|---|
| 1 | In the Multimedia Allocation page, select the DSP Encoding for your region. |
| 2 | Select the Country where CallPilot resides. |
| 3 | Configure the following parameters for each DSP board: <ul style="list-style-type: none"> • number of Voice channels required • number of Fax channels required • number of ASR channels required |

The total channels allocated for each of these element cannot exceed the maximum allowed number of allocations.

- | | |
|---|--|
| 4 | Click Next .
The M1 Switch Information page appears. |
|---|--|

Figure 10
M1 Switch Information page

Location: Configuration Wizard > M1 Switch Information

Configuration Wizard: M1 Switch Information

Back Next Cancel Help

Meridian 1 Switch Information:

Channel information for each Link is displayed below. Click on a link to update its channel settings.

[STI Board 1 \(MPB96 in slot 01\)](#)

[Link STI01-001](#) Switch Type: ☐ M1
☒ M1 Option 11

[Link STI01-002](#) Switch Customer Number:

[Link STI01-003](#) ☒ Enable Symposium Call Center Server Integration

Switch IP Address: Symposium Call Center Server CLAN IP Address:

STI Board MPB96		Board ID 69304320			
Link STI01-001					
#	Channel Name	TN	Key0	Key1	Channel Allocation
1	STI01-001-001	4.0.3.0	4501	4502	Multimedia
2	STI01-001-002				
3	STI01-001-003				
4	STI01-001-004				
5	STI01-001-005				

—End—

Configuring the CS 1000 switch information

Perform the following procedure to configure the CS 1000 switch information.

Configuring the CS 1000 switch information

Step	Action
1	In the M1 Switch Information page, for Switch Type , select M1 .
2	Type the Switch Customer Number .
3	Type the Switch IP Address .
4	Select the Symposium Call Center Server Integration check box.
5	Type the Symposium Call Center Server CLAN IP address .
—End—	

Configuring the links on the MGate card

Perform the following procedure to configure the links on the MGate card.

Configuring the links on the MGate card

Step	Action
1	In the left-hand pane of the M1 Switch Information page, select the Link to be configured.
2	On the bottom half of the page, select the Channel Name for the channel to be configured. The Channel Detail Information page appears. See Figure 11 "Channel Detail Information page" (page 73) .

Figure 11
Channel Detail Information page

Location → Configuration Wizard → Channel Detail Information

Channel Detail Information: STI01-001-001

OK Cancel Help

Channel Detail Information: STI01-001-001

Enter the TN, Key0, Key1 and Channel Allocation information for this channel.
 If you want the channel information to be repeated (Fill/Reset) for the subsequent channels, including this one, select the number of TNs below.
 If you leave it as 1, only the current channel information will be updated.

Number of TNs in the range: 1 Fill Reset

	Loop	Shelf	Card	Unit
TN:	0	0	3	0

Key0: 1 (Position ID)

Key1: 2 (SCN)

Class ID:

Channel Allocation: Multimedia

- 3 Select the **Number of TNs in the range** to configure several sequential channels together.
- 4 Type the TN information (**Loop, Shelf, Card, Unit**).
- 5 Enter the **Key 0 (position ID)** information.
- 6 Enter the **Key 1 (SCN)** information.
- 7 For **Class ID**, type a description.
- 8 Select the **Channel Allocation**.
- 9 Click **OK**.
The M1 Switch Information page appears.
- 10 Click **Next**.
The Meridian 1 CDN Information page appears.

—End—

Configuring CDN information

Perform the following procedure to configure the CDN information.

The CDNs configured here must match those configured in the CS 1000 system for Contact Center. If both a voice and multimedia CDN are configured on the CS 1000, be sure to add both CDNs here.

Configuring CDN information

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

- 1 Click **New**.
The M1 CDN Detail Information page appears. See [Figure 12 "M1 CDN Detail Information page" \(page 74\)](#).

Figure 12
M1 CDN Detail Information page

- 2 Enter the **CDN DN**.
- 3 Select the **Application Name**.
- 4 Click **OK**.
The CDN Detail page appears with the newly created CDN.
- 5 Click **Next**.
The Language Source Directory page appears.

—End—

Configuring the Contact Center Language Source

At least one prompt language must be configured on your server for CallPilot to function.

Perform the following procedure to configure the Contact Center Language Source.

Configuring the Contact Center Language Source

Step	Action
1	When prompted, type the location of the language CD.
2	Click Next . The Language Installation page appears.
3	Select the (re)Install check box next to the Prompt you wish to install.
4	Select the (re)Install check box next to the Speech recognition you wish to install (optional).
5	Select the Primary Language .
6	Select the Secondary Language (optional).
7	Click Next . The CallPilot Local Area Network Interface page appears.

Figure 13
CallPilot Local Area Network Interface page

Location → Configuration Wizard → CallPilot Local Area Network Interface

Configuration Wizard: CallPilot Local Area Network Interface

Back Next Cancel Help

CallPilot Local Area Network Interface:

From each list below, select the Embedded and Customer LAN network interface card and then enter the TCP/IP networking information.

Equipment LAN network interface card:

Equipment LAN network interface card:

IP address:

Subnet Mask:

Gateway:

MAC Address:

Customer LAN network interface card:

Customer LAN network interface card:

IP address:

Subnet Mask:

Gateway:

MAC Address:

—End—

Configuring the CallPilot LAN interface

Perform the following procedure to configure the CallPilot LAN interface.

Configuring the CallPilot LAN interface

Step	Action
1	In the CallPilot Local Area Network Interface page, for Equipment LAN network interface card , select ELAN .
2	For Customer LAN Network interface card , select CLAN .
3	For each ELAN and CLAN, enter the appropriate networking information, including IP address , Subnet Mask , and Gateway (if applicable).
4	Click Next .
5	Click Finish to complete the basic configuration.

**CAUTION**

If you click Cancel, all configuration changes are lost.

- 6 A message appears stating that applying your changes will take the CallPilot server out of service.
Click **OK**.
The switch configuration begins. This process takes several minutes to complete.

—End—

Contact Center configuration

This chapter describes the configuration of Contact Center.

Contact Center configuration procedures

The sequence of Contact Center configuration procedures is as follows:

- "Shutting down services" (page 79)
- "Configuring Contact Center Manager Server after installation" (page 80)
- "Configuring CDNs on the Contact Center Manager Administration Server " (page 87)
- "Configuring and acquiring an IVR ACD DN" (page 88)
- "Configuring agent telephones on the Contact Center Server" (page 89)
- "Configuring voice ports on the Contact Center Server" (page 90)

Shutting down services

Perform the following procedure to configure Contact Center Voice Services.

Before you begin configuring Voice Services, you must shut down the Nortel Contact Center Manager Server (CCMS).

Shutting down services

Step	Action
1	From the CCMS, select Start>All Programs>Nortel Contact Center>Manager Server>Shutdown .
2	A system shutdown message appears. Click OK .
3	Verify that the Service Status Log does not list any services that failed to shutdown. Click Recheck to refresh the service status.
4	If any services failed to shutdown, complete the following steps: • Select Start>Control Panel>Administrative Tools>Services. • The Services window appears.

- Right-click on any services that did not shutdown successfully and select **Stop**.
- Close the Services window.
- In the **Service Status Log**, click **Recheck** to update the status.

5 When all the services are successfully shut down, click **Accept** .

—End—

Configuring Contact Center Manager Server after installation

Perform the following procedure to configure the Contact Center Manager Server (CCMS).

Configuring Contact Center Manager Server after installation

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

- | | |
|---|--|
| 1 | Wait for the Contact Center Manager Server configuration Utility to appear.
See Figure 14 "Customer Information" (page 80). |
|---|--|

Figure 14
Customer Information

- 2 In the **Customer Information** tab, for **Customer Name**, type the name of the customer.
- 3 For **Company Name**, type the name of the company.
- 4 Click **Next**.
The Switch Type window appears.
If you are installing an NCC server, this window does not appear.
You must proceed to step 6.
- 5 For switch type, select **CS 1000 (M1)**.

ATTENTION

For migrations and upgrades, you must select the same switch type on the new server that was associated with the old server. For example, if you have a co-resident 5.0 configuration with a CS 1000/Meridian 1 switch, you cannot upgrade to a co-resident 6.0 configuration with a DMS or SIP switch.

- 6 Click **Next**.
The License Manager page appears. See [Figure 15 "License Manager "](#) (page 81).

Figure 15
License Manager

The screenshot shows the 'License Manager' window of the 'Nortel Contact Center Management Server Setup Configuration Utility'. The window has a tabbed interface with the following tabs: Voice Services, RSM IP Address, Database Replication, CCT Server, Site Name, Utilities, Customer Information, License Manager (selected), Local Area Network IP, and CS 1000 (M1) Switch Information. The 'License Manager' tab is active, displaying the 'License Manager Package Configuration' and 'License Manager Connection Configuration' sections.

License Manager Package Configuration:

- CCMS Package: CCS300N
- CCMS Optional Package(s):
 - ☒ Universal Networking
 - ☒ Open Queue
 - ☒ Standby Server
- Serial Number: 20046379
- View Features button

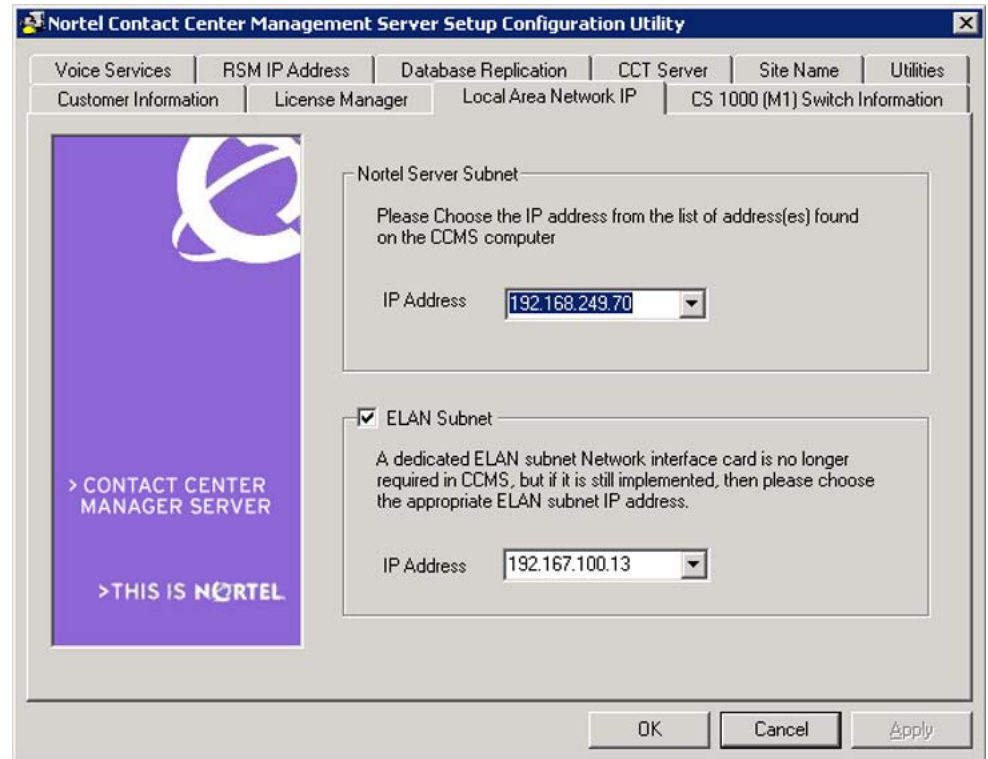
License Manager Connection Configuration:

- Primary License Manager IP: 192.168.249.70 Port: 3998
- Optional:
 - Secondary License Manager IP: . . . Port: 3998

At the bottom of the window are buttons for OK, Cancel, and Apply.

- 7 From the **CCMS Package** list, select the package you require.
- 8 Enter the serial number for the switch.
- 9 For **Primary License Manager IP**, type the IP address for server on which you plan to install the License Manager.
If the License Manager resides on the Contact Center Manager Server, then enter the IP address for the Contact Center Manager Server.
- 10 For **Port**, confirm the port number.
The default port is 3998. You can change the Primary License Manager IP address after the installation is complete.
- 11 For **Secondary License Manager IP**, enter the Secondary License Manager IP (corporate only).
You can change the Secondary License Manager IP address after you install Contact Center Manager Server.
- 12 For **Port**, confirm the port number (corporate only).
The default port is 3998.
- 13 Click **View Features** to display Package features.
The Package Feature window appears.
- 14 Check that the features listed match the product you purchased, and then perform one of the following tasks:
 - If the information is not correct, you may have selected the wrong package. Click **OK**, and then select the correct package.
 - If the information is correct, click **OK** to close the window.
- 15 Click **Next**.
The Local Area Network IP page appears. See [Figure 16 "Local Area Network IP " \(page 83\)](#).

Figure 16
Local Area Network IP



- 16 Select the **IP Address** for the **Nortel Server Subnet**.
If you are using two network interface cards, place a check mark beside **ELAN subnet**, and then for **IP Address**, choose the IP address for the ELAN subnet.
If you are installing an NCC server, you do not require an ELAN subnet connection. You only require a Nortel server subnet connection with the NCC server.
- 17 Click **Next**.
The CS 1000 (M1) Switch Information page appears. See [Figure 17 "CS 1000 \(M1\) Switch Information " \(page 84\)](#).

Figure 17
CS 1000 (M1) Switch Information

Nortel Contact Center Management Server Setup Configuration Utility

Voice Services | RSM IP Address | Database Replication | CCT Server | Site Name | Utilities
 Customer Information | License Manager | Local Area Network IP | CS 1000 (M1) Switch Information

Please enter data for the CS1000—

Switch Name: CS1000S_CP

Switch IP Address: 192.167.100.3

Switch Customer Number: 0

OK Cancel Apply

- 18 For **Switch Name**, type the name of the switch.
 Valid characters for switch names are A–Z, a–z, 0–9, underscore (_), and period (.). Switch names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Switch names must not exceed 80 characters in length.
 If you are unsure of the correct information, or if you make a mistake, you can change the switch information after you finish the installation.
- 19 For **Switch IP Address**, enter the IP address for the switch.
- 20 For **Switch Customer Number**, enter the customer number for the switch.
- 21 Click **Next**.
 The Voice Services page appears. See [Figure 18 "Voice Services" \(page 85\)](#).

Figure 18
Voice Services

The screenshot shows the 'Nortel Contact Center Management Server Setup Configuration Utility' window. The 'Voice Services' tab is selected. The window contains a sidebar with a Nortel logo and the text '> CONTACT CENTER MANAGER SERVER' and '> THIS IS NORTEL'. The main area has the instruction 'Please fill in the voice services setup information below.' and three configuration fields: 'Voice Connection Type' with radio buttons for 'Serial (Meridian Mail)' and 'TCP (Call Pilot)' (selected); 'Call Pilot Server IP' with a text box containing '192.168.249.102'; and 'Call Pilot Server Port' with a text box containing '0'. At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

22 Perform one of the following tasks:

- If you are not using an integrated voice-processing system (Meridian Mail or CallPilot), for **Voice Connection Type**, select **Serial**.
If your computer is not configured with COM2, for **Voice Connection Type**, select **TCP**, and enter a dummy IP address and port number.
- If you are using Meridian Mail as your voice-processing system, for **Voice Connection Type**, select **Serial**.
- If you are using CallPilot, for **Voice Connection Type** select **TCP**. Specify the **ELAN subnet IP address** of the CallPilot server, and set the **CallPilot Server Port** to 10008.
Although Contact Center Manager Server is installed on a server without a COM 2 serial port, the hard-coded dependency in the MAS Access Link service can cause the Access Link Handler to restart continuously if you do not configure the COM2 port. For a Contact Center Manager Server that does not require the ACCESS Link connection to Meridian Mail, enter a dummy IP address and port number in the Voice Connection tab.)

- 23 Click **Next**.
See Figure 19 "RSM IP Address " (page 86).

Figure 19
RSM IP Address

The screenshot shows the 'Nortel Contact Center Management Server Setup Configuration Utility' window. The 'RSM IP Address' tab is selected. The window has a tabbed interface with the following tabs: Customer Information, License Manager, Local Area Network IP, CS 1000 (M1) Switch Information, Voice Services, RSM IP Address, Database Replication, CCT Server, Site Name, and Utilities. The 'RSM IP Address' tab contains a text box labeled 'RSM IP Address:' with the value '230.0.0.1' entered. Above the text box, it says 'Please enter the Real-time Statistics Multicast IP address below for this server.' At the bottom of the window are 'OK', 'Cancel', and 'Apply' buttons. On the left side of the window, there is a purple vertical banner with the Nortel logo and the text '> CONTACT CENTER MANAGER SERVER' and '> THIS IS NORTEL'.

- 24 For **RSM IP Address**, enter the RSM IP Address that you want to associate with sending real-time statistical data.
The IP multicast addresses that you select for RSM sending and receiving must be within the 224.0.1.0 and 239.255.255.255 range. The default is 230.0.0.1. Check with your network administrator for acceptable IP multicast addresses for your specific network. The RSM IP address must not be confused with your Nortel server subnet or ELAN subnet addresses.
- 25 Click **Next**.
If you selected the Standby Server optional package, enter the details for your replication server.
If you did not select the Standby Server optional package, skip to step 26.
- 26 Click **Next**.
- 27 For **Site Name**, enter the site name for the server. The site name must not contain spaces or non-alphabetical characters except for - (hyphen) and _ (underscore). The first character must be a letter.

The site name must be unique and can consist of any combination of a minimum of 6 and up to 15 characters.
You must use the same site name you used on the original server.

- 28 If you are configuring a CCT server, select the **CCT Server** tab.
Enter the CCT server **Host Name** and **Port Numbers**.
- 29 Select the **Utilities** tab and create the **Platform Recovery Disk**.
- 30 Review the tabs and make any other necessary changes, and then click **OK**.
The Complete Server Configuration window appears.
- 31 Click **Yes**.
Wait for the CCMS installation success window to appear.
- 32 Click **OK**.
- 33 Click **Finish**.
- 34 Click **Yes** to reboot the server.

—End—

Configuring CDNs on the Contact Center Manager Administration Server

Perform the following procedures to configure the Contact Center Manager Administration (CCMA) Server.

Configuring CDNs on the Contact Center Manager Administration Server

Step	Action
1	In a web browser, enter the CCMA URL.
2	Log in to the Web Manager using the system's defined user ID and password.
3	Select Configuration . The CCMS Properties page appears.
4	In the system tree pane, select the server to which you wish to add the CDNs.
5	Select the CDN (Route Points) folder. The CDN Route Point page appears.
6	For Name , type the name of the CDN to appear in reports.

- 7 For **Number**, type the CDN number.
This number must match the CDN configured on the CS 1000 system.
- 8 Select the **Call Type**.
- 9 To complete the addition, click on any other row in the table.
Result: The system adds the CDN and the status appears as Not Acquired.
- 10 Select the **Acquired** check box for the CDN you just created to acquire the CDN.
- 11 Click **Refresh Status** to view the status of the acquisition.
- 12 Repeat steps 6 to 11 to configure additional CDNs.

—End—

Configuring and acquiring an IVR ACD DN

Perform the following procedure to configure and acquire an IVR ACD DN.

Configuring and acquiring an IVR ACD DN

Step	Action
1	In a web browser, enter the Contact Center Manager URL.
2	Log in to the Web Manager using the system's defined user ID and password.
3	Select Configuration . The CCMS Properties page appears.
4	In the system tree pane, select the server to which you wish to add the IVR ACD-DN.
5	Select the IVR ACd-DNs folder. The IVR ACD-DN page appears.
6	For Name , type the name of the IVR ACD-DN to appear in reports.
7	For Number , type the IVR ACD-DN number. This number must match the DN configured on the CS 1000 system.
8	Select the Threshold Class .
9	To complete the addition, click on any other row in the table. Result: The system adds the ACD DN and the status appears as Not Acquired.

- 10 Select the **Acquired** check box for the DN you just created to acquire the ACD DN.
- 11 Click **Refresh Status** to view the status of the acquisition.
- 12 Repeat steps 6 to 11 to configure additional ACD DNs.

—End—

Configuring agent telephones on the Contact Center Server

Perform the following procedure to configure agent telephones on the Contact Center Server.

Configuring agent telephones on the Contact Center Server

- | Step | Action |
|------|---|
| 1 | In a web browser, enter the Contact Center Manager URL. |
| 2 | Log in to the Web Manager using the system's defined user ID and password. |
| 3 | Select Configuration .
The CCMS Properties page appears. |
| 4 | In the system tree pane, select the server to which you wish to add telephones and voice ports. |
| 5 | Select the Phonesets and voice ports folder.
The Phonesets and voice ports page appears. |
| 6 | For Name , type the name of the telephone to appear in reports. |
| 7 | For Type , select Not Voice Port . |
| 8 | For Address , type the TN of the telephone. |
| 9 | To complete the addition, click on any other row in the table.
Result: The system adds the telephone and the status appears as Not Acquired. |
| 10 | Select the Acquired check box for the TN you just created to acquire the telephone. |
| 11 | Click Refresh Status to view the status of the acquisition. |
| 12 | Repeat steps 6 to 11 to configure additional telephones. |

—End—

Configuring voice ports on the Contact Center Server

Perform the following procedure to configure voice ports on the Contact Center Server.

Configuring voice ports on the Contact Center Server

Step	Action
1	In a web browser, enter the Contact Center Manager URL.
2	Log in to the Web Manager using the system's defined user ID and password.
3	Select Configuration . The CCMS Properties page appears.
4	In the system tree pane, select the server to which you wish to add telephones and voice ports.
5	Select the Phonesets and voice ports folder. The Phonesets and voice ports page appears.
6	For Name , type the name of the telephone to appear in reports.
7	For Type , select Voice Port .
8	For Address , type the TN of the telephone.
9	For ACCESS voice ports only, type the Channel number.
10	To complete the addition, click on any other row in the table. Result: The system adds the voice port and the status appears as Not Acquired.
11	Select the Acquired check box for the TN you just created to acquire the telephone.
12	Click Refresh Status to view the status of the acquisition.
13	Repeat steps 6 to 12 to configure additional TNs.

—End—

Telephony Manager configuration

Telephony Manager configuration procedures

Before configuring for Telephony Manager 3.0 (TM 3.0), test the connection between TM 3.0 and your equipment, using the sample site and system configuration. The Embedded LAN (ELAN) network interface must be configured and devices must be connected to the ELAN subnet before you can test the connection. Follow the procedures in this chapter to test the connection.

For detailed instructions on adding sites and systems, see the procedure ["Setting up system data" \(page 99\)](#). After connecting successfully, refer to *Optivity Telephony Manager: System Administration* (553-3001-330) to configure your own sites and systems.

The procedures in this chapter are as follows:

- ["Setting up communications information" \(page 91\)](#)
- ["Setting up customer information" \(page 95\)](#)
- ["Setting up TM 3.0 applications" \(page 97\)](#)
- ["Setting up system data" \(page 99\)](#)

Setting up communications information

Perform the following procedure to set up communications information.

Setting up communications information

Step	Action
1	In the TM 3.0 Navigator window, select Sample Site .
2	Select Sample System , and then select File > Properties . The System Properties dialog box appears with the General tab selected.
3	Select the Communications tab.
4	Select Add .

The Add Communications Profile dialog box appears. See [Figure 20 "Add Communications Profile" \(page 92\)](#).

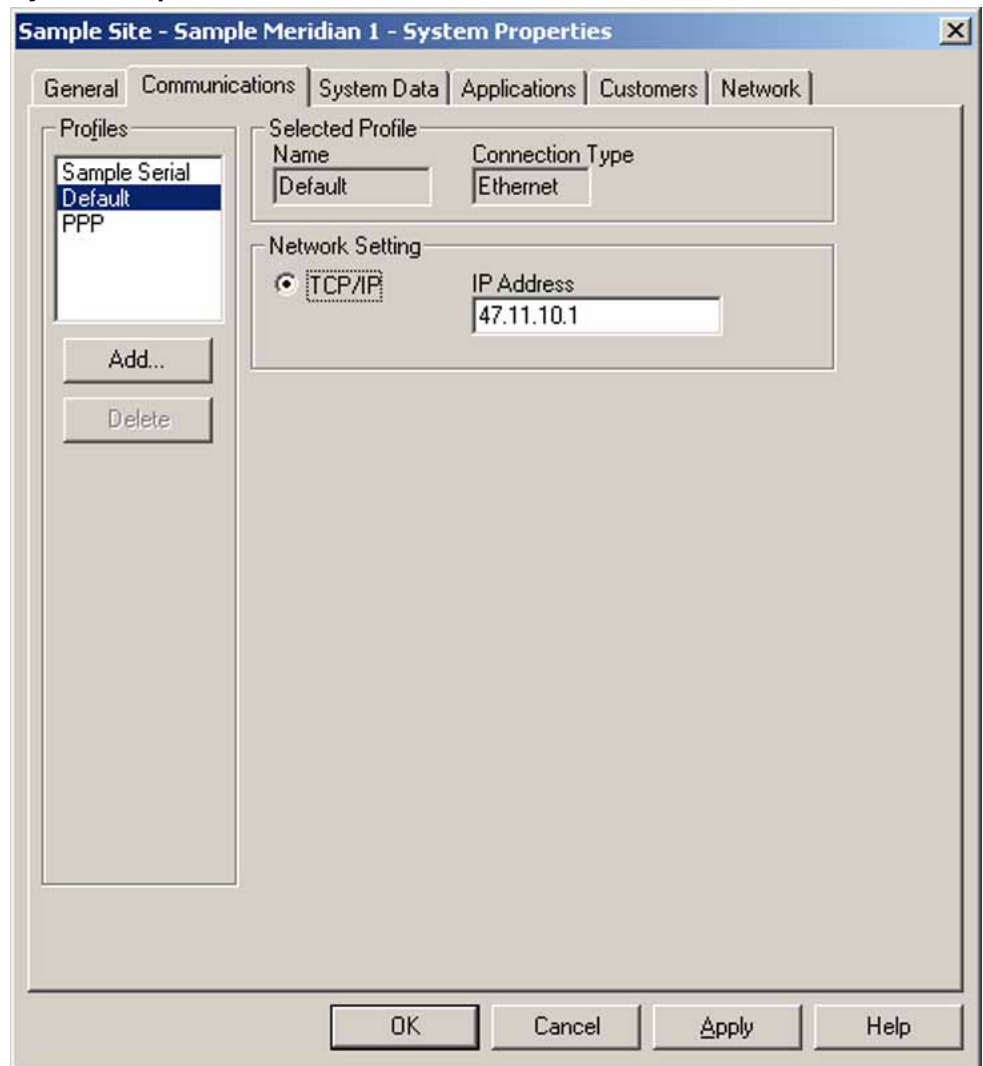
- 5 For **Type**, select a connection type for TM 3.0.

Figure 20
Add Communications Profile



- 6 Enter a **Profile Name**.
- 7 Click **OK**.
- 8 In the System Properties—Communications window, enter the information for the connection type selected in step 5.
For an Ethernet connection type (see [Figure 21 "System Properties - Communications tab" \(page 93\)](#)):
 - a. Enter the IP address that you configured on the system.
 - b. Click **Apply**.

Figure 21
System Properties - Communications tab



For a PPP connection type (see [Figure 22 "System Properties - Communications tab - PPP Profile"](#) (page 94)):

- c. Enter all modem parameters and dial-up information.
- d. For **Modem Script**, select **PPP**.
- e. Type the telephone number.

There can be conditions, depending on your particular installation, where you can be required to enter a modem access ID, a modem password, and a modem initialization string.

- f. For **IP address**, type the local IP address as configured on the system.

- g. Click **Apply**.

Figure 22
System Properties - Communications tab - PPP Profile

The screenshot shows the 'Sample Site - Sample Meridian 1 - System Properties' dialog box with the 'Communications' tab selected. The 'Profiles' list on the left contains 'Sample Serial', 'Default', and 'PPP', with 'PPP' selected. The 'Selected Profile' section shows 'Name' as 'PPP' and 'Connection Type' as 'PPP'. The 'Port' dropdown is set to 'Com2'. The 'Connection Parameters' section includes 'Data Rate' (9600), 'Stop Bits' (1 bit), 'Parity' (None), 'Data Bits' (8 bits), 'Delay(secs)' (0.616), and 'Timeout(secs)' (30). The 'System Access' section has 'Modem Script' set to 'PPP', with empty fields for 'Phone Number', 'Modem Access ID', 'Modem Password', and 'Modem Initialization String'. The 'Network Setting' section has 'TCP/IP' selected and 'IP Address' set to '0.0.0.0'. At the bottom are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

For a Serial connection type:

- h. Enter all modem parameters and dial-up information.
- i. For **Modem Script**, select the appropriate value.
 This is commonly "None", unless a specific value is defined for your system.
- j. Click **Apply**.

Figure 23
System Properties - Communications tab - Serial Profile

The screenshot shows the 'Sample Site - Sample Meridian 1 - System Properties' dialog box with the 'Communications' tab selected. The 'Serial Profile' section is active. On the left, a list of profiles includes 'Sample Serial', 'Default', and 'PPP'. The 'Selected Profile' section shows 'Sample Serial' as the name and 'Serial' as the connection type. The 'Ports' section shows 'Com2' as the selected port. The 'Connection Parameters' section includes fields for 'Data Rate' (9600), 'Stop Bits' (1 bit), 'Parity' (None), 'Data Bits' (8 bits), 'Delay(secs)' (0.616), and 'Timeout(secs)' (30). The 'System Access' section includes fields for 'Modem Script' (none), 'Phone Number' (9555-1212), 'Modem Access ID', 'Modem Password', 'Buffer Equipment Type' (none), and 'Modem Initialization String'. At the bottom are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

—End—

Setting up customer information

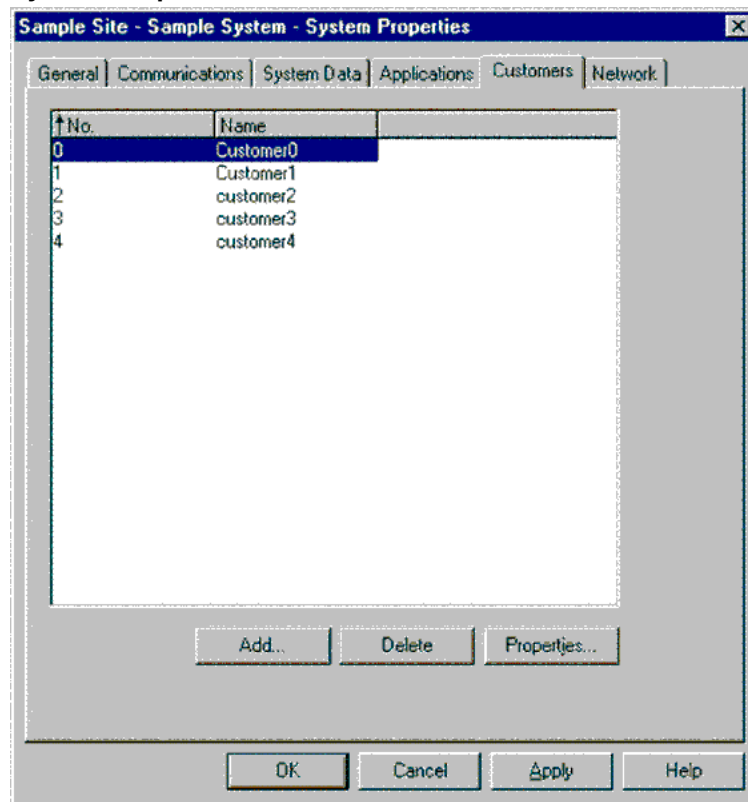
Perform the following procedure to set up the customer information.

Setting up customer information

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

- | | |
|---|---|
| 1 | Select the Customers tab. See Figure 24 "System Properties - Customers tab" (page 96). |
|---|---|

Figure 24
System Properties - Customers tab



2 Select Properties.

The Customer Properties dialog box appears with the General tab selected. See [Figure 25 "Customer Properties - General tab" \(page 97\)](#).

Figure 25
Customer Properties - General tab

The screenshot shows a Windows-style dialog box titled "Customer1 - (Customer 1) Properties". It has three tabs: "General", "Features", and "Numbering Plans". The "General" tab is selected. Inside the dialog, there are several input fields and buttons. At the top, there are two labels: "Customer Name" and "Number". Below "Customer Name" is a text box containing "Customer1". Below "Number" is a small box containing "1". Below these is a group box labeled "Directory Numbers" containing three stacked text boxes; the top one contains "408-555-1212". Below the "Directory Numbers" group box is a label "HLOC" followed by a text box containing "0". Below that is a group box labeled "Scheduler System ID" containing two sub-fields: "User ID" with a text box containing "Maria", and "Password" with a text box containing "****". At the bottom of the dialog are four buttons: "OK", "Cancel", "Apply", and "Help".

- 3 For **Scheduler System ID**, change the **User ID** and **Password** to one that is valid for logging onto the system.
- 4 Click **OK**.
HLOC appears the home location code (ESN) defined in LD 90.

—End—

Setting up TM 3.0 applications

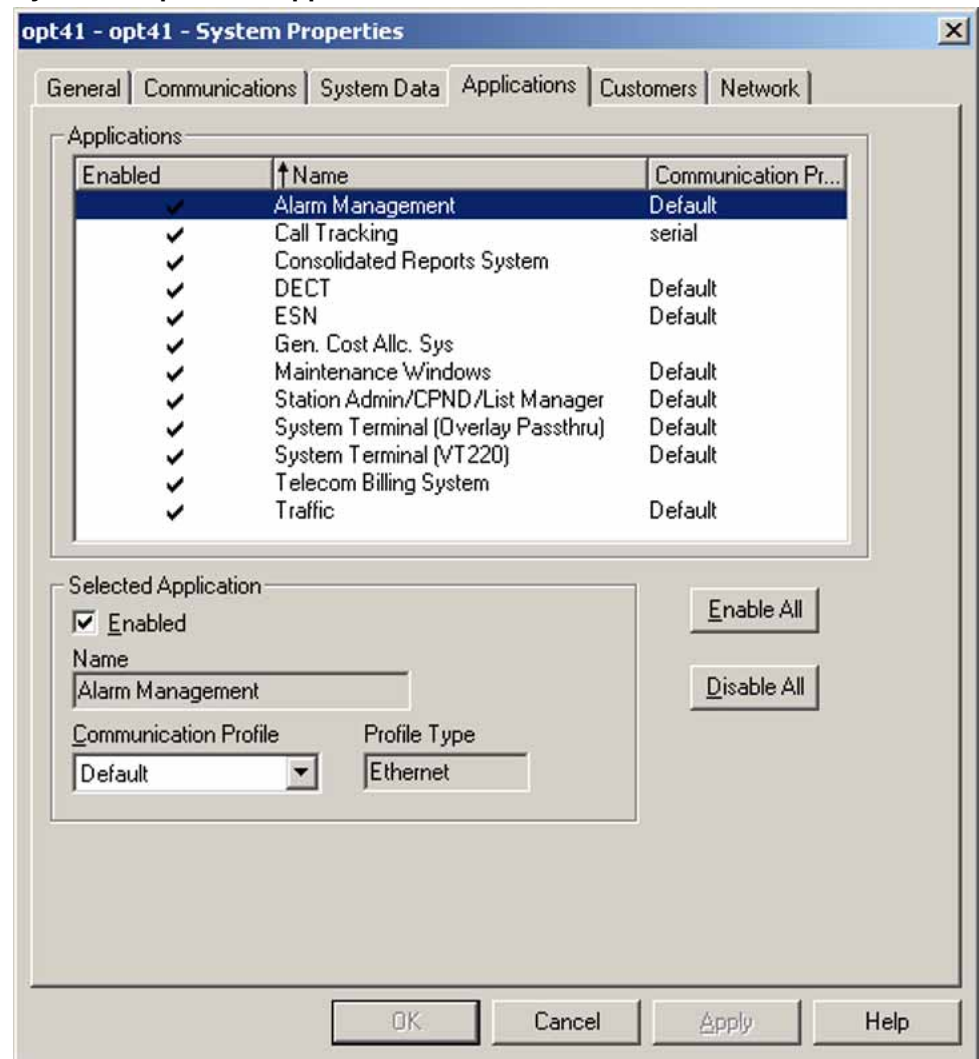
You must enable applications to make them available in the System window.

Setting up TM 3.0 applications

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

- | | |
|---|--|
| 1 | Select the Applications tab.
See Figure 26 "System Properties - Applications tab" (page 98). |
|---|--|

Figure 26
System Properties - Applications tab



- 2 By default, each application is selected. Modify these selections by deselecting applications.
- 3 Choose one the following:
 - a. **Enable All** — enables the default communication profile for all available applications under the Application tab (with the exception of Call Tracking, which is always serial). If there is no serial profile added, then Call Tracking is not enabled. If the user has added any serial profile, then the first profile is set as the communication profile. The General Cost Allocation System and Telecom Billing System applications are enabled without a communication profile.

- b. **Disable All** — disables the communication profile for all available applications under the Application tab.

4 Click **OK**.

—End—

Setting up system data

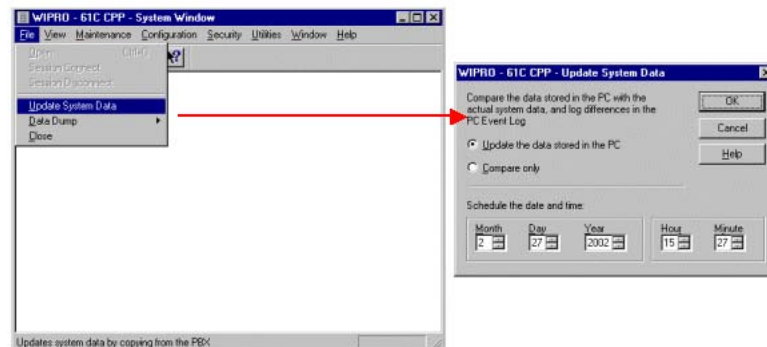
Perform the following procedure to set up system data.

Setting up system data

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

- 1 Double-click the **Sample System** icon.
The System window appears.
- 2 Select **File > Update System Data**.
- 3 Select **Update Data Stored in the PC**.

Figure 27
System Update



- 4 Click **OK**.
The system data (such as the PBX type and software packages) is copied into TM 3.0 directly from the system.
When the data is copied from the system into TM 3.0, the test procedure is complete.

—End—

Enterprise: Common

Solution Integration Guide for Communication Server 1000/CallPilot/Contact Center/Telephony Manager

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