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Nortel Networks Symposium Call Center Server

Symposium and MSL-100 Switch Guide

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Nortel Networks Symposium Call Center Server
Symposium and MSL-100 Switch Guide

Publication history

Contents

Chapter 1

Getting started

In this chapter

Overview

Introduction

Symposium Call Center Server works in conjunction with other systems to ensure that calls entering your call center are successfully routed to agents qualified to handle the calls. To enable the features of your Symposium Call Center Server, you must configure the following systems:

- the MSL-100 switch
- Intelligent Call Manager (ICM), formerly CompuCALL
- Symposium Call Center Server

This guide explains how to configure the MSL-100 switch to work with Symposium Call Center Server. To find out how to configure the server, refer to the *Administrator's Guide*.

This guide assumes that you have already configured ICM to work with the switch.

Notes:

1. This guide assumes that the MSL-100 switch has been correctly installed and is operational with all current Product Enhancement Packages (PEPs) applied. For information on which PEPs to install on the MSL-100 switch, contact your Nortel Networks customer support representative.

2. The DMS and MSL-100 switches have identical, shared configuration parameters. If you are prompted for a DMS parameter, it is identical for both the DMS and MSL-100 switches.

Skills you need

Introduction

This section describes the skills and knowledge you need to use this guide effectively.

Nortel Networks product knowledge

Knowledge of, or experience with, the following Nortel Networks products can be of assistance when configuring the switch to communicate with Symposium Call Center Server:

- Symposium Call Center Server
- MSL-100 switch
- Switch release MSL09, MSL10, MSL11
- Intelligent Call Manager switch translation release ICM00001, ICM00010, or ICM00020
- Maintenance Administration Position (MAP) terminal
  - Service Orders (servord) utility
  - *Switch Translation Guide*
- Automatic Call Distribution (ACD)
- other switch administration and monitoring tools

PC experience or knowledge

Knowledge of, or experience with, the following PC products is of assistance when administering the Symposium Call Center Server:

- Microsoft Windows 95, Windows 98, or Windows NT

Other experience or knowledge

Other types of experience or knowledge that might be of use include

- TCP/IP networking

Components

Introduction

Symposium Call Center Server consists of three key components: telephony, server, and client.

Telephony component
The telephony component includes the switch, the Ethernet Interface Unit (EIU), Intelligent Call Manager (ICM), and the agent and supervisor phonesets.

Server component
The Symposium Call Center Server can be located at either the central office or customer site.

Client component
The client is installed on the supervisor workstations and accesses the server over the customer's LAN.

Symposium Call Center Server components

The following illustration shows the relationship of the components required for the Symposium Call Center Server:
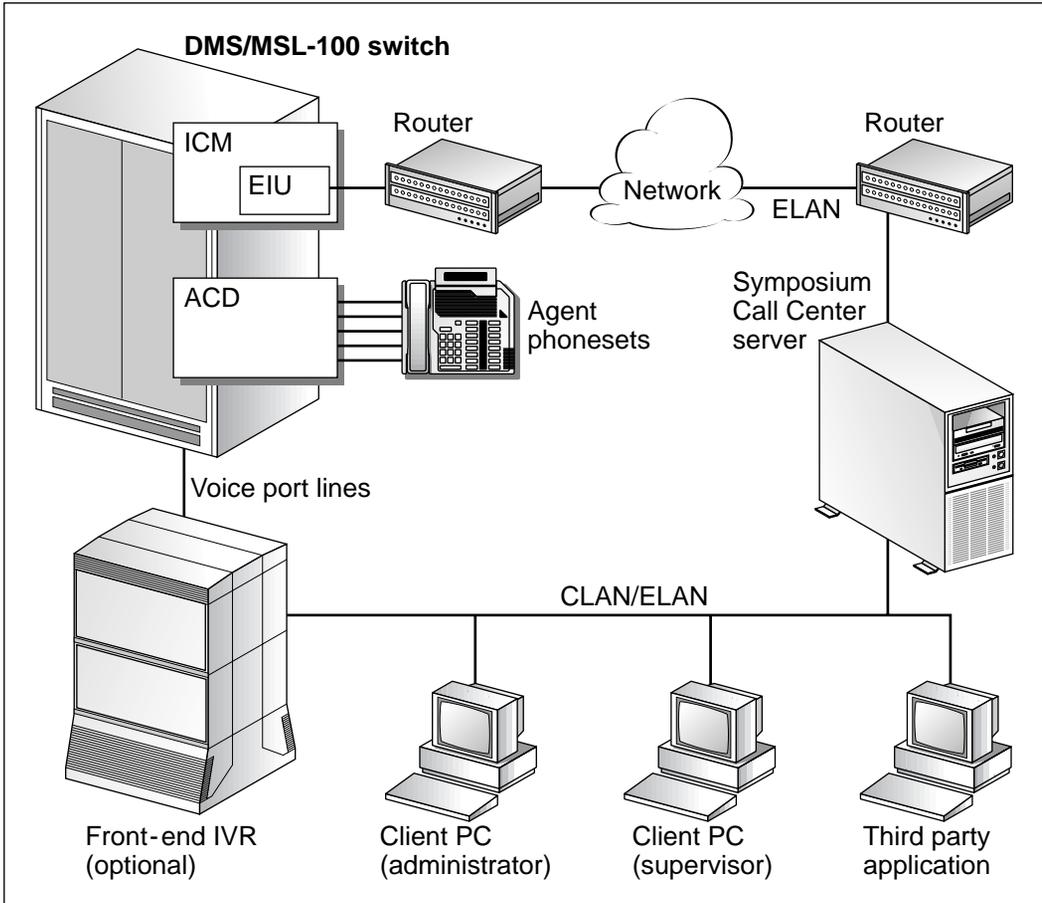
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Switch

The switch is the hardware and software component that provides telephony services. The switch sends and receives calls to and from Symposium Call Center Server. When a call arrives at the switch, the switch notifies the server, which performs call processing and routing.

To work with the Symposium Call Center Server, the switch must be running software load MSL09, MSL10, or MSL11.

Note: If the link to the server goes down, ACD routing configured on the switch provides a backup method for handling calls.

EIU

The Ethernet Interface Unit (EIU) enables the switch to connect to an Ethernet network for communication with Symposium Call Center Server.

ICM

The Intelligent Call Manager (ICM) serves as an interface between Symposium Call Center Server and the MSL-100 switch. The ICM receives information from the switch and transmits it to Symposium Call Center Server. It receives information from the server and transmits it to the switch.

The switch can support up to 16 ICM connections. The number available for Symposium Call Center Server depends on the number of other ICM-based applications connecting to the switch.

Symposium Call Center Server requires software packages ICM00001, ICM00010, or ICM00020.

Note: You must configure certain parameters to establish a secure ICM session. For more information about configuring ICM security, see the *Administrator's Guide*.

The server

The server component, which uses Microsoft Windows NT 4.0 software, is responsible for functions such as

- the logic for call processing
- call treatment
- call handling
- call presentation
- administration of agents, skillsets, and supervisors, and agent to skillset and agent to supervisor assignments
- accumulation of historical and real-time statistics

The client

The client component, located on the call center manager's or supervisor's desktop, has a graphical user interface based on Microsoft Windows 95, Microsoft Windows 98, or Windows NT 4.0. The client provides meaningful real-time call center statistics and an easy-to-use interface for the management of the call center.

CLAN

The agent and supervisor workstations are connected to the customer LAN (either an Ethernet or a Token Ring LAN). The customer LAN also provides connections to optional third-party applications, such as an Interactive Voice Response system.

ELAN

The embedded LAN (ELAN) is a dedicated Ethernet TCP/IP LAN connecting the Symposium Call Center Server and the switch. Nortel Networks recommends that the ELAN be a private isolated network. This eliminates the potential impact of caller network traffic on call processing.

Front-end IVR system (optional)

The switch can direct calls to an optional third-party Interactive Voice Response (IVR) system. This system plays voice prompts to callers and collects their responses. After the calls receive IVR treatment, the IVR system delivers the responses for the calls to Symposium Call Center Server. The server then gains control of the calls.

Third-party applications (optional)

Optional third-party applications provide the following functionality to Symposium Call Center Server:

- the ability to exchange data with the server, using Host Data Exchange (HDX)

- the ability to receive real-time updates from the server, using the real-time API (RTI)

- the ability to access configuration and statistical data in the Symposium Call Center Server database, using Open Database Connectivity (ODBC) database drivers

- the ability to trigger screen pops for inbound triggers, using Meridian Link. Meridian Link can support both Telephony Application Program Interface (TAPI) and IBM CallPath.

How Symposium Call Center Server communicates with the MSL-100

Introduction

Symposium Call Center Server and the MSL-100 switch must be able to exchange information if calls are to be successfully routed in Symposium Call Center Server. You must ensure that this communication is enabled by configuring the resources shared by both the switch and Symposium Call Center Server.

A Controlled Directory Number (CDN) is the initial point of entry for any call processed in Symposium Call Center Server. A CDN serves as a holding place while information is gathered from the call (for example, Calling Line Identification number [CLID]) and treatments are applied to the call (for example, recorded announcements).

For any call processing to begin in Symposium Call Center Server, the call must arrive at a CDN on the MSL-100 switch that is controlled by Symposium Call Center Server. Information that is gathered from the CDN and sent from the switch to Symposium Call Center Server is used to enable Symposium Call Center Server to define the path the call follows through the call center.

How Controlled Directory Numbers operate

A Controlled Directory Number (CDN) is a logical entity identified by a Dialable Number (DN) that holds onto calls waiting to be routed via Symposium Call Center Server routing instructions. Symposium Call Center Server can route calls to any local or third-party with a valid address, including agent positions and even other CDNs. In addition, call treatments (music, RAN, silence, and ringback) can be applied to calls while they are waiting for instructions from Symposium Call Center Server. Other treatments such as busy, fast busy, and disconnect can be applied to a call.

For each call arriving at a CDN, the switch informs Symposium Call Center Server of the call's arrival and starts a timer while waiting for the routing instructions. The switch handles the call according to the response returned from Symposium Call Center Server. If the timer expires before a response is received, the switch routes the call to a default ACD group, which is defined for the CDN on the switch. For more information about default ACD routing, see "Configuring CDNs in controlled and default mode" on page 55.

Note: The timer value configured on Symposium Call Center Server must be set to a value lower than the timer value configured on the MSL-100 switch.

CDN operation is based on the existing ACD model on the MSL-100 switch. A CDN can be viewed as an "ACD group" with the following characteristics:

- In the normal operation, the switch does not control the overflow or routing for a CDN ACDGRP. Calls in the CDN are handled by Symposium Call Center Server.

- There are no agents or supervisors associated with a CDN.

  In Table KSETLINE and Table IBNLINES, ACD agents cannot be defined for a CDN's ACDGROUP.

- There are no subgroups assigned to a CDN.

  A subgroup cannot be defined for a CDN in Table ACDSGRP.

- The CDN priority is set to zero.

  In Table DNROUTE, the priority of the primary DN and the priority of the secondary DN of a CDN ACDGROUP is set to zero.

- A CDN ACDGRP cannot be designated as a networked ACD group in Table NACDGRP.

- The existing table ACDGRP fields such as ACD Ring Threshold, Priority Promotion, and Forced Night Service are not applicable to an ACDGRP that has the CDN option.

- A CDN does not have the following call queues: Overflow In queue, Overflow Out queue, or Call Transfer Queue.

- A CDN has a default ACD group (or it can be another CDN), which is datafilled on the switch.

  The default ACD group is datafilled in Table ACDGRP.

- A CDN can have the following states:

  - Controlled

Incoming calls are handled by Symposium Call Center Server. For an example of controlled call routing, see "Call routing in controlled and default mode" below.

- Default

Incoming calls are routed to the default ACD group. For an example of default call routing, see "Call routing in controlled and default mode" below.

- Revert to Default

All incoming calls and existing calls in the CDN queues are routed to the default ACD group.

In addition, the state can be set by Symposium Call Center Server or the switch.

- To apply RAN or MUSIC to a CDN by Symposium Call Center Server, the AUDIO option must be datafilled in Table ACDGROUP.
- The current limit of the number of calls on a single CDN queue (MSL-100 switch) is 512.

Call routing in controlled and default mode

The diagram on the next page illustrates how calls can be routed in both controlled and default mode. The text following the illustration explains how the call is processed depending on whether it is routed through controlled or default mode.
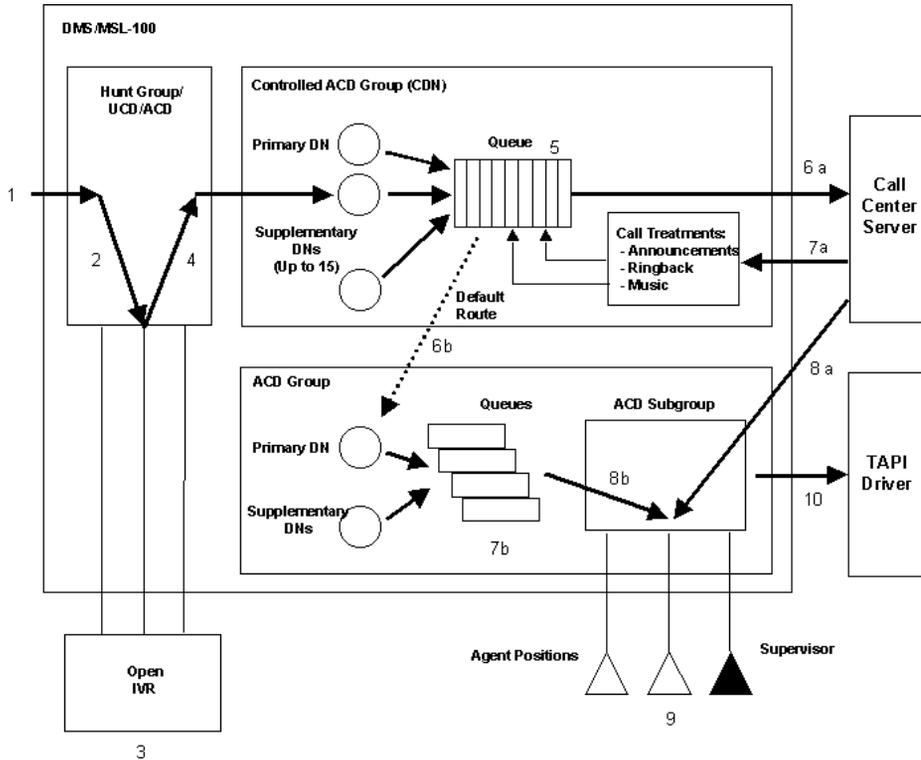
1. An incoming call arrives at the MSL-100 switch.

2. The call is routed to an IVR port.

3. The caller receives an IVR treatment, prompting him or her to respond through the use of phoneset keys.

4. The IVR transfers the call to a CDN after the caller enters digits.

5. The call remains queued in the CDN awaiting further call processing.

6. The MSL-100 switch sends a call notification to Symposium Call Center Server. The call is routed in either of the following ways:

   ■ If Symposium Call Center Server receives the notification, a return notification is sent to the switch. The switch then releases control of the call to Symposium Call Center Server. The call is routed in controlled mode. Symposium Call Center Server queues to one or more skillsets.

■ If Symposium Call Center Server does not respond to the notification due to a link or server problem, the call is routed in default mode. The call is routed to the default ACD after the timeout expires.

7. The call follows a path as defined in either the controlled or default call routing mode.

   ■ In the controlled call routing mode, Symposium Call Center Server provides treatments as specified in the script.

   ■ In the default call routing model, the call remains queued in the default ACD group awaiting an available agent to answer the call.

8. The call follows a path as defined in either the controlled or default call routing mode.

   ■ In the controlled call routing mode, Symposium Call Center Server routes the call to an agent qualified and available to answer the call.

   ■ In the default call routing mode, the call is routed to an available agent in the default ACD group.

9. The call is answered by an available agent.

10. If you have purchased the Symposium Agent feature, call data sent by TAPI enables a screen pop to appear on the agent's screen.

Support for switch features

Introduction

This section describes features configurable on the switch, and explains how they interact with Symposium Call Center Server.

ACD

You must configure Automatic Call Distribution (ACD) on the switch to provide default ACD routing when Symposium Call Center Server is not available. However, the switch prioritizes ACD calls at the expense of Symposium Call Center Server controlled calls.

Announcements

Announcements held in Dynamic Random Access Memory (DRAM) or Enhanced Dynamic Random Access Memory (EDRAM) on the MSL-100 switch are supported to provide Hold in Queue announcements controlled by Symposium Call Center Server.

Controlled and default call routing

Incoming calls can be routed to a default ACD group in the event that Symposium Call Center Server does not gain control of the calls after they have been forwarded from the MSL-100 switch. For more information about controlled and default call routing, see "Configuring CDNs in controlled and default mode" on page 55.

Phoneset keys

This section describes special considerations for the use of phoneset keys.

Unsupported keys on agent phonesets

Do not configure the following keys on agent phonesets. Use of these keys results in the incorrect agent status on the real-time displays:

- Hotline
- Private line
- Voice call
- Dial Intercom

Transfers and conferences

A call is pegged as a transfer when the agent uses the Fast Transfer key. It is pegged as a conference when the agent uses the 3-way calling (3WC) key.

Note: The transfer or conference is pegged when the agent completes the transfer or conference by pressing the key the second time. Prior to this, RTD displays the agent in ConsultInit status.

Secondary DN keys

An agent phoneset can contain multiple secondary DN keys. However, in this version, Symposium Call Center Server can only monitor one DN key on each phoneset. Therefore, Nortel Networks recommends that you configure only one DN key on each agent phoneset.

You must add the ECM option against the secondary DN before the DN can be acquired by Symposium Call Center Server.

Note: Symposium Call Center Server does not support multiple appearance DNs.

Emergency key

The Emergency key enables an agent to forward a call to his or her supervisor in the event of an emergency. When an agent presses the Emergency key, the supervisor configured as the agent's reporting supervisor on Symposium Call Center Server is notified. The Emergency key on the supervisor phoneset rings, and, if the supervisor is logged on to the server, the Emergency Indicator appears.

Once the agent has forwarded the call to his or her supervisor, the light next to the agent's Emergency key flashes. If the supervisor answers the call within 30 seconds, the light next to the agent's Emergency key no longer flashes, but remains on until the supervisor disconnects from the call.

If the reporting supervisor does not answer the call within 30 seconds, the call is forwarded to a backup associated supervisor, if one has been configured on Symposium Call Center Server. To enable emergency calls to be forwarded to the associated supervisor's phoneset, you must define the associated supervisor as a member of a hunt group for the ACD subgroup to which the agent belongs.

The agent is disconnected from the call if either the reporting supervisor or the associated supervisor answers within 30 seconds of the call being forwarded to them. If neither the reporting supervisor nor the associated supervisor answers the call within 30 seconds, the agent can press the Emergency key again to repeat the process or the agent can answer the call.

Note: The switch does not allow agents to press the Emergency key while they are in conference with another agent.

Display Waiting Calls key
Call queuing occurs on the Symposium Call Center Server rather than on the switch, so the switch and ICM cannot provide meaningful call waiting statistics.

Phoneset displays

Agent and supervisor phonesets can display information such as the Calling Line Identification Service (CLID) number of the caller. However, the information displayed on the phoneset is not controlled by Symposium Call Center Server but must be configured on the MSL-100 switch.

LOB codes

Line of Business (LOB), or activity codes, identify the type of call. For example, an activity code can indicate a Sales or a Support call. To use activity codes, you must enable the LOB feature on the switch. If you want to assign names to the activity codes (for example Sales or Support) for reporting purposes, you must also define the activity codes on Symposium Call Center Server. Agents can enter up to three LOB codes during a call.

Notes:

1.   The switch does not allow agents to press the LOB key while they are in conference with another agent.

2.   The server does not monitor activity codes for DN calls.

Variable Wrap feature

When an agent releases a call, the Variable Wrap feature prevents another call from being presented to the agent for a specific period of time. Agents can use this time to perform any required post-call processing. For Symposium Call Center Server to support Variable Wrap, the feature must be configured on the switch.

There are two options available when configuring Variable Wrap:

■   If Variable Wrap is set to a value greater than zero (0), once an active call is released, the agent is not available to receive any new calls for the length of time specified. For example, if Variable Wrap is set to a value of 20, the agent has 20 seconds to record call-related information before becoming available to receive new calls.

■   If Variable Wrap is set to the value zero (0), once the active call is released, the agent immediately becomes available to receive new calls.

Note: If you do not configure Variable Wrap on the switch, the Release Guard feature is enabled. Release Guard prevents calls from being presented to the agent for one second after an active call is released.

Night service feature

Skillsets go out of service under the following conditions:

■   automatically, when all agents have logged off

■   manually, when you change the skillset mode on the Skillset Properties window on the Symposium Call Center Server client

Two out-of-service modes are available: transition mode and night service mode.

You must put skillsets into transition mode manually. In transition mode, the Symposium Call Center Server refuses any new calls, but continues to present queued calls to agents. When no more calls are waiting, the server puts the skillset into night service mode.

Skillsets go into night service mode automatically when all agents log off; you can also put them into night service mode manually. In night service mode, the server refuses calls for the skillset, and gives night treatment to any queued calls.

ATTENTION   Do not configure the night service key on supervisor phonesets. Symposium Call Center Server does not support this feature.

Preinstallation site survey and checklist

Conducting a site survey

Before attempting to configure the switch for Symposium Call Center Server, Nortel Networks recommends that you conduct a site survey to ensure you have gathered all of the required information prior to installation. This enables you to quickly reference this information in the event questions arise during the installation or if you make any modifications at a later date. For information about completing the site survey, refer to the example in Appendix A, "Preinstallation site survey and checklist."

Completing a preinstallation checklist

Before attempting to configure the switch for Symposium Call Center Server, Nortel Networks recommends that you complete a checklist of the required and optional components for the MSL-100 switch, the network and router system, and the CPE. For information about completing the checklist, refer to the example in Appendix A, "Preinstallation site survey and checklist."

Configuration tasks

Introduction

Configuration of the switch to communicate with Symposium Call Center Server involves installing and configuring the EIU, installing and configuring ICM, configuring the switch, and configuring Symposium Call Center Server.

Before you begin

Before you begin to install and configure either the EIU or the ICM link, you must ensure you have performed all tasks and recorded all required information as detailed in the following list:

- Obtain an EIU Media Access Control (MAC) address from Nortel Networks. You can request a MAC address by e-mailing a request to Nortel Networks at the following address:

     macadd@nortelnetworks.com

- Enable the MSL-100 features for ACD routing and the ICM link (Software Option Control [SOC]).

- Configure ACD groups and the included agents on the MSL-100 switch.

- Install the three required MSL-100 EIU circuit packs.

- Datafill the MSL-100 IP interface tables.

- Install the necessary client drivers (for example, IVR and TAPI).

- Test the TCP/IP link between the client application and the MSL-100 EIU interface.

- Install all required applications (for example, IVR system, Symposium Call Center Server).

If your installation of Symposium Call Center Server includes a router system and firewall, you must also complete these tasks:

- Install the network cable from the EIU to the router and firewall.

- Configure the MSL-100 side router and firewall.

- Install the network cable from the router to the Channel Service Unit (CSU) or any other transport device.

- Install the client CSU.

- Configure the connection between the MSL-100 CSU and the client CSU.

- Configure the connection between the MSL-100 CSU and the client router and firewall.

- Configure the connection between the client router and firewall, and the client applications (for example, IVR system, Windows NT Server, and Symposium Call Center Server).

- Configure the client side router and firewall.

Installing and configuring the EIU

To install and configure the EIU, you must perform these tasks on the switch:

- Install the EIU on the switch.

- Confirm the EIU is present and lists all entries as displayed in table LIUINV.

- Configure an IP address for the switch in table IPNETWRK.

- Configure IP addresses for the EIU in table IPHOST.

- Configure the EIU in tables IPROUTER and IPTHRON.

The following diagram illustrates these tables and their relationships.

IPNETWORK

KEYREF	CMIPADDR	SUBNET	OPTION	PARMAREA
0	50.200.77.1	16	(EIU 0) $	(SCRNFLAG N) $

IPROUTER

RKEY	ROUTER	SNIPADR	ETHIPADR	ETHARP	ETHARP
0	EIU 0	50.200.77.60	50.200.77.120	YES	YES
1	EIU 1	50.200.77.121	50.200.77.240	YES	YES

IPHOST

INDEX	NODENAME	NODEINFO
0	CM 0	32 4 4
1	EIU 0	50.200.77.60 50.200.77.120 16 2 2
2	EIU 1	50.200.77.121 50.200.77.240 16 2 2

IPTHRON

NODENAME	TXCAPCT	RXCAPCT	OPTION
EIU 0	32000	32000	$
EIU 1	32000	32000	$

Switch

Server

G101334

For more information, refer to the *Ethernet Interface Unit User Guide*
(NTP 297-8991-910) and the *ICM Router Guide (*NTP 297-2233-903).

Installing and configuring ICM

To install and configure ICM, you must ensure that the following tasks have
been performed on the switch:

■   Install ICM on the EIU.

■   Configure the office parameters in the following table:

OFCENG	Allocates resources for switch activities.
OFCOPT	Categorizes ICM messages in groups (this table is maintained by Nortel Networks). **Note:** For ICM MSL09, enable the Network_ICM_Active feature.
OFCVAR	Contains the operating parameters that the operating company can change.

Chapter 2

Configuring the switch

In this chapter

Overview

Introduction

This chapter provides procedures for configuring the switch to work with Symposium Call Center Server. It assumes that the switch is running software load MSL09, MSL10, or MSL11; an EIU has been provisioned for the ICM link; and the ICM software is load ICM00001, ICM00010, or ICM00020.

Section A: Configuring the ICM link parameters

In this section

Overview of configuring the server logon

Introduction

Symposium Call Center Server must log on to the switch using an ICM linkset before it can acquire switch resources and exchange messages. Up to 16 linksets can be configured on each switch. A linkset can only be associated with one installation of Symposium Call Center Server. Similarly, Symposium Call Center Server can only be associated with one linkset to the MSL-100 switch. To allow Symposium Call Center Server to log on to the switch, you must configure the following tables on the switch:

SCAICOMS	Defines linkset names and assigns them to the appropriate hardware device. This enables a logical pathway through the EIU to the Symposium Call Center Server.
BGDATA	Allows multiple switches to share MDC features. This table associates a business group ID (BGID) with a customer group.
SCAIGRP	Associates a business group ID for a customer group with a linkset. The parameters specified allow Symposium Call Center Server to log on to the switch.
SCAISSRV	Defines a series of profiles for ICM messages, and what information is included in the messages.
SCAIPROF	Assigns services to Symposium Call Center Server by associating them with a linkset.
CUSTNTWK	Assigns a network ID to your organization's network. The network ID identifies your organization's network within the telephony environment.

Before you begin

Before you perform this procedure, log on to the switch from a Maintenance Administration Position (MAP) terminal with a user ID that has the privilege levels required to change these tables.

Configuring ICM security

In order to establish a secure ICM session, you must configure the following parameters on the MSL-100 switch:

- **Linkset name**

  This is the user-defined name for the Symposium Call Center Server as it is known to the switch. The linkset name creates a logical pathway to the server on the EIU. The linkset name is configured in Table SCAICOMS. For information on the linkset name and other parameters that can be configured in Table SCAICOMS, see "Configuring SCAICOMS" on page 34.

- **Remote host IP address**

  The remote host IP address entered must match the IP address of the Symposium Call Center Server on the ELAN. The remote host IP address is configured in Table SCAICOMS. For information on the remote host IP address and other parameters that can be configured in Table SCAICOMS, see "Configuring SCAICOMS" on page 34.

- **MSL-100 password**

  The security feature, along with a valid user ID, enables a user to log on to the switch. Customers assign passwords. The MSL-100 password is configured in Table SCAIGRP. For information on the MSL-100 password and other parameters that can be configured in Table SCAIGRP, see "Configuring SCAIGRP" on page 37.

- **MAP terminal access**

  The Maintenance Access Position (MAP) must be configured in Table RMCONFIG. For information on MAP terminal access, see the *ICM Router Guide*.

- **FTP access**

  File Transfer Protocol (FTP) is a method of transferring files between a client and a server. For information on FTP access, see the *ICM Router Guide*.

- **Trusted host**

  A trusted host must be configured in Table EXDINV. For information on trusted hosts, see the *Ethernet Interface Unit User Guide*.

- **Firewall or packet filtering on routers**

For information on firewalls and packet filtering, see the *ICM Router Guide*.

Configuring logon

The following illustration displays the tables you must update to allow Symposium Call Center Server to log on to the switch. The illustration displayed is an example. Data varies depending on the specific conditions of your call center.

SCAISSRV

SUBSERV
CTXEVENT10$
ACDEVENT11$
.
.
.

SCAIPROF

PROFKEY	PROFILE
BESTAIRTOR1 11	(CTXEVENT10$) (ACDEVENT11$)
	(ACDEVENT11$) (TPCC09$) (RESOURCE11$)
	(TPAC36$) (SCAI3WC09$) (DNQUERY07$)
	(TPQC10$) (ICCM10$)

SCAICOMS

LINKSET	SCAILNKS (IP address of the server)
BESTAIRTOR1	TCP 50.100.77.65

CUSTENG

CUSTNAME
BESTAIR

CUSTNTWK

CUSTNAME	NETNAME	NETCGID	OPTIONS
BESTAIR	PUBLIC	50$	(CLID OFFNET) (ECM) $

BGDATA

BGID	OPTIONS
LOCAL 5 $	(CUSTGRP BESTAIR N 10 Y 0 0) $

SCAIGRP

SCAIGNAM	PASSWORD	NETNODID	BGID	OPTIONS
BESTLOGIN1	BESTPWD	50	LOCAL 5	(LINKSET BESTAIRTOR1)

G101335

The following illustration shows the relationships between the parameters in these tables:

SCAISSRV Service

SUBSERV
CTXEVENT10$
ACDEVENT11$
.
.
.

SCAIPROF Service

PROFKEY	PROFILE	
BESTAIRTOR1 11	(CTXEVENT10$)	(ACDEVENT11$)
(ACDEVENT11$) (TPCC09$) (RESOURCE11$)		
(TPAC36$) (SCAI3WC09$) (DNQUERY07$)		
(TPQC10$) (ICCM10$)		

SCAICOMS Linkset name

LINKSET	SCAILNKS (IP address of the server)
BESTAIRTOR1	TCP 50.100.77.65

CUSTENG   **CUSTNTWK**

CUSTNAME
BESTAIR

CUSTNAME	NETNAME	NETCGID	OPTIONS
BESTAIR	PUBLIC	50$	(CLID OFFNET) (ECM) $

Customer group name

BGDATA

BGID	OPTIONS
LOCAL 5 $	(CUSTGRP BESTAIR N 10 Y 0 0) $

Customer group ID

SCAIGRP   Linkset name

SCAIGNAM	PASSWORD	NETNODID	BGID	OPTIONS
BESTLOGIN1	BESTPWD	50	LOCAL 5	(LINKSET BESTAIRTOR1)

G101336

To enter and edit data in the tables

If you have entered an incorrect parameter in a table, you can change the parameter without discarding the parameters that have been entered correctly.

To change an incorrect parameter.

1   Access the table for which you want to edit the incorrect parameter by typing **table <table name>** at the prompt (>), and then press Enter.

2   Type **CHA** at the prompt, and then press Enter. This allows you to step through each parameter in the table.

3   If each parameter is correct, press Enter. If not, edit the parameter and then press Enter.

4   Continue to press Enter until the prompt appears before the incorrect parameter.

5   Delete the incorrect parameter and enter the correct parameter.

6   To save the changes, type **quit**, and then press Enter.

7   Press Enter to exit the table.

Printing data in the tables

You might want to refer to information configured in the server logon tables. For example, you might want to identify, as part of the project management function, information such as ACDGRP information, RAN and music routes, and thresholds routes. Print a hard copy of this information during configuration of the switch to quickly be able to reference the information if you intend to modify the configuration parameters at a later date.

Configuring SCAICOMS

Introduction

Table SCAICOMS defines linkset names and assigns them to the appropriate hardware device. This enables a logical pathway through the EIU to the Symposium Call Center Server.

To update table SCAICOMS

1   Edit the SCAICOMS table by typing **table SCAICOMS** and pressing Enter.

   Result: The > prompt appears.

2   Type **add** and press Enter.

   Result: The LINKSET prompt appears.

3   For LINKSET, type a name for the Symposium Call Center Server as it is known to the switch, then press Enter. The LINKSET name creates a logical pathway to the server on the EIU.

   Result: The LINKSEL prompt appears.

4   Identify the connection type as **TCP** and press Enter.

   Result: The IP_ADDR prompt appears.

5   The IP address entered must match the IP address of the Symposium Call Center Server on the ELAN. To obtain the IP address of the Symposium Call Center Server, follow the procedure in "Checking the server configuration" on page 75.

   Result: The utility prompts you to save the new linkset.

6   Type **Y** and press Enter.

7   To exit from the table, type **quit** and press Enter.

Configuring BGDATA

Introduction

Table BGDATA allows you to configure multiple switches so that they can share MDC features. This table associates a business group ID (BGID) with a customer group. A business group is an entity that represents your organization on the switch.

Note: In MSL09, the switch network ID is used as the node ID.

To update table BGDATA

1   Edit the BGDATA table by typing **table BGDATA** and pressing Enter.

Result: The > prompt appears.

2   Type **add** and press Enter.

Result: The BGID prompt appears.

3   Type the Business Group ID, in the format **LOCAL GRPNUM**, and press Enter.

Result: The BGXLA prompt appears.

4   Type **$** and press Enter.

Result: The OPTIONS prompt appears.

5   Type **CUSTGRP** and press Enter.

Result: The CUSTGRP prompt appears.

6   Type the name of your customer group, and press Enter.

Result: The MBG prompt appears.

7   Type **n** and press Enter.

Result: The NUMLINES prompt appears.

8   Type **0** (zero) and press Enter.

Result: The INTRAGRP prompt appears.

9   Type **n** and press Enter.

Result: The LSCFN prompt appears.

10   Type **0** (zero) and press Enter.

Result: The LCSINCPT prompt appears.

11   Type **0** (zero) and press Enter.

Result: The OPTION prompt appears.

12   Type **0** (zero) and press Enter.

Result: The utility prompts you to save the new business group ID.

13   Type **Y** and press Enter.

14   To exit from the table, type **quit** and press Enter.

Configuring SCAIGRP

Introduction

Table SCAIGRP associates a business group ID for a customer group with one or more linksets. Each group is given a password, network node ID, linkset, and an associated BGID. These parameters allow Symposium Call Center Server to log on to the switch.

To update table SCAIGRP

1   Edit the SCAIGRP table by typing **table SCAIGRP** and pressing Enter.

   Result: The > prompt appears.

2   Type **add** and press Enter.

   Result: The SCAIGNAM prompt appears.

3   Enter the SCAIGRP name.

   Result: The PASSWORD prompt appears. For more information, see, "MSL-100 Password" on page 79.

4   Enter the password that Symposium Call Center Server uses to log on to the switch.

   Result: The NETNODID prompt appears.

5   Enter the customer network ID that you defined in table CUSTNTWK.

   Result: The BGID prompt appears.

6   Enter the business group ID that you defined in table BGDATA.

   Result: The OPTIONS prompt appears.

7   Configure the following options for Symposium Call Center Server:

Option	Value
LINKSET	The linkset name defined for the server in table SCAICOMS.

   Result: The utility prompts you to save the new configuration.

8   Type **Y** and press Enter.

9   To exit from the table, type **quit** and press Enter.

Configuring SCAISSRV

Introduction

Table SCAISSRV defines a series of profiles for ICM messages, and specifies what information is included in the messages. The switch makes these messages available to Symposium Call Center Server.

The table below indicates the default configuration of Table SCAISSRV. Nortel Networks recommends that you use the default configuration for Symposium Call Center Server.

Note: If you edit the parameters in Table SCAISSRV, you must restart Symposium Call Center Server for the changes to take effect.

SUBSERV	SPROFILE	
ACDEVENT11$	ACDEVENT	(CALLQUED Y Y Y Y Y Y Y Y Y) (CALLOFFR Y Y Y Y Y Y Y Y Y Y) (CALLANSWR Y Y Y Y Y Y Y Y Y Y Y) (CALLREL Y Y Y Y Y) (AGTLGDIN Y Y Y) (AGTLGDOUT Y Y) (AGTREADY Y Y) (AGTNREADY Y Y N) (LOBEVENT Y Y Y) (EMKEVENT Y Y Y Y Y Y)$
CALLINIT07$	CALLINIT	(MAKECALL Y Y)$
CTXEVENT10$	CTXEVENT	(SETOFFHK Y Y) (CALLOFFR Y Y Y Y Y Y Y Y Y Y Y Y Y) (CALLANSWR Y Y Y Y Y Y Y Y Y Y Y Y Y) (CALLREL Y Y Y) (CALLNAME Y Y Y Y Y)$
DNQUERY07$	DNQUERY	(DNQUERY Y)$
ICCM10$	ICCM	(SETCDNST)$
RESEVENT10$	RESEVENT	(SETOFFHK Y Y) (CALLOFFR Y Y Y Y Y Y Y Y Y Y Y Y Y) (CALLANSWR Y Y Y Y Y Y Y Y Y Y Y Y Y) (CALLREL Y Y Y) (CALLNAME Y Y Y Y Y)$

SUBSERV	SPROFILE	
RESOURCE11$	RESOURCE	(ACDQUERY) (APPSTQRY Y Y Y Y Y)$
ROUTING35$	ROUTING	(CALLRECDC Y Y Y Y Y Y Y Y Y Y) (CALLREDIR Y Y Y)$
SCAI3WC09$	SCAI3WC	(CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y) (ADDPT Y Y Y Y) (CONFPTY Y) (DROPPTY Y Y) (TRANPTY Y)$
SCAICC08$	SCAICC	(ANSWCALL) (RELSCALL Y) (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y)$
SCAIMWTI07$	SCAIMWTI	(MSGWAIT Y Y Y)$
TPAC36$	TPAC	(LOGINAGT Y Y N) (LOGOUTAGT Y) (READYAGT Y) (NREADYAGT Y N)$
THIRDPTY$	TPAC	(ADDPTY Y Y Y) (DROPPTY Y Y) (MAKECALL YY)$
TPCC09$	TPCC	(ANSWCALL) (RELSCALL Y) (CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y) (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y) (ADOPTY Y Y) (CONFPTY Y) (DROPPTY Y Y) (TRANPTY Y) (MAKECALL Y Y)$
TPCC11$	TPCC	(CONSULTEV Y) (CONFEVNT Y) (TRANSFEREV Y) (ANSWCALL) (RELSCALL Y) (HOLDCALL) (UNHOLDCALL) (CALLUNHELD Y) (ADOPT Y Y Y Y) (CONFPTY Y) (DROPPTY Y Y) (TRANPTY Y) (MAKECALL Y Y)$
TPQC10$	TPQC	(ROUTECALL) (GIVETRMT) (TRMTCOMP)$

To update table SCAISSRVs

1 Edit the SCAISSRV table by typing **table SCAISSRV** and pressing Enter.

   Result: The > prompt appears.

2 Type **add** and press Enter.

   Result: The SUBSERV prompt appears.

3 Configure the following services:

- ACDEVENT11$ (for use with MSL08 or earlier) or ACDEVENT12$ (for use with MSL09)
- CALLINIT07$
- CTXEVENT10$
- DNQUERY07$
- ICCM10$
- RESEVENT10$
- RESOURCE11$
- ROUTING35$
- SCAI3WC09$
- SCAICC08$
- SCAIMWTI07$
- TPAC36$
- THIRDPTY
- TPCC09$
- TPCC11$
- TPQC10$

When you finish entering responses, type **$**. For detailed information about the prompts, refer to the *Translations Guide*.

Result: The utility prompts you to save the new configuration.

4   Type **Y** and press Enter.

5   To exit from the table, type **quit** and press Enter.

Configuring SCAIPROF

Introduction

Table SCAIPROF defines the types of information sent by the switch to Symposium Call Center Server.

Note: If you edit the parameters in Table SCAIPROF, you must restart Symposium Call Center Server for the changes to take effect.

To update table SCAIPROF

1   Edit the SCAIPROF table by typing **table SCAIPROF** and pressing Enter.

     Result: The > prompt appears.

2   Type **add** and press Enter.

     Result: The utility prompts for the LINKSET.

3   Enter the linkset name from Table SCAICOMS.

     Result: The utility prompts for the SRVCID

4   Enter the Service ID. For more information, see "Service ID" on page 79

5   Respond to the prompts to create the group. The following prompts require special values for use with Symposium Call Center Server:

Prompt	Value
PROFKEY	Enter the linkset name and service ID.
PROFILE	CTXEVENT10$ (to support secondary DN keys)
PROFILE	ACDEVENT11$ (to support ICM)
PROFILE	ROUTING35$
PROFILE	TPCC11$ (to allow Symposium Call Center Server to transfer calls)
PROFILE	RESOURCE11$ (to support status messages)
PROFILE	TPAC36$ (to support agent logon/logoff, make ready/ not ready, walkaway codes)
PROFILE	CALLINIT07$
PROFILE	SCAI3WC09$ (to allow monitoring of secondary DN keys for transfer and conferences)
PROFILE	DNQUERY07$ (to report the state of secondary DN keys)
PROFILE	SCAICC08$ (to release or answer calls on the secondary DN)
PROFILE	TPQC10$ (to support call treatments)
PROFILE	ICCM10$ (to support CDNs and call routing)

When you finish entering responses, type **$**. For information about the prompts, refer to the *Translations Guide*.

Result: The utility prompts you to save the new configuration.

6   Type **Y** and press Enter.

7   To exit from the table, type **quit** and press Enter.

Configuring CUSTNTWK

Introduction

The table CUSTNTWK assigns a network ID to a customer group. The network ID identifies your organization's network within the telephony environment. After configuring the ECM option, you can use the CUSTNTWK table to enable a customer group to access ICM services.

Before you begin

Ensure that the network name is defined in table NETNAMES.

To update table CUSTNTWK

1   Edit the CUSTNTWK table by typing **table CUSTNTWK** and pressing Enter.

    Result: The > prompt appears.

2   Type **add** and press Enter.

    Result: The CUSTNAME prompt appears.

3   Enter the customer group name you specified in table BGDATA.

4   The NETNAME prompt appears.

5   Enter the network name as defined in table NETNAMES.

    Result: The NETCGID prompt appears.

6   Enter a valid value.

    Result: The DNREVXLA prompt appears.

7   Type **$** and press Enter.

    Result: The OPTIONS prompt appears.

8 Set the following option for use with Symposium Call Center Server:

Option	Description
ECM	This option configures the network to receive SCAI messages from the switch.

Result: The utility prompts you to save the new network ID.

9 Type **Y** and press Enter.

10 To exit from the table, type **quit** and press Enter.

Section B: Configuring switch resources

In this section

Overview of configuring switch resources

Introduction

You must ensure that the following resources are correctly configured on the switch:

- RAN and music routes
- ACD groups and subgroups
- hunt groups
- directory numbers (DNs)
- agent phonesets
- agent logon IDs

Note: The resources configured on the switch must have matching data configured on Symposium Call Center Server. If, at any time, you edit any of the data on Symposium Call Center Server, you must reconfigure the resource on the switch.

Configuring the switch to communicate with Symposium Call Center Server

To enable Symposium Call Center Server to communicate with the switch, perform the following tasks on the switch:

- Configure the switch to enable it to connect with the server. This involves datafilling the following tables: SCAICOMS, SCAISSRV, SCAIPROF, CUSTNTWK, BGDATA, SCAIGRP.
- Configure recorded announcements (RANs) and music routes.
- Configure ACD groups. Each Controlled Directory Number (CDN), primary or supplementary ACD-DN, and phoneset must be assigned to an ACD group.
- Configure ACD subgroups. You can use subgroups to divide agents into smaller groups for support and monitoring. Each subgroup can be assigned a supervisor.

- Configure each CDN to be acquired by the server and each primary or supplementary ACD-DN to be monitored by the server.

- Configure the phonesets to be acquired and monitored by the server.

- Configure the logon IDs that agents and supervisors use to log on to their phonesets.

Configuring the server

To configure Symposium Call Center Server to acquire and monitor switch resources, you must perform these tasks from the System window on the client:

- Configure and acquire CDNs.

- Configure and acquire phonesets.

- Configure RAN and music routes.

- Configure Dialed Number Identification Services (DNISs) that you want the server to monitor.

- Configure agents and supervisors.

For detailed instructions, refer to the *Administrator's Guide*.

Configuring RAN and music routes

Introduction

You can use RAN and music routes to provide feedback to callers while they are waiting in queue. You might want to configure a RAN informing callers of the amount of time they can expect to remain in queue before their call is answered. While they wait in queue, you can define a specific type of music that they hear.

Configuration of RAN and music routes involves the following tasks:

1. Define the hardware locations for recorded announcements (RAN) and music in table TMINV.

2. Define trunks to be used for music and RAN in table CLLI (Common Language Locator Identifier).

3. Define RAN circuits in table DRAMS (Digital Recorded Announcement Machine).

4. Configure announcements and music in table ANN.

5. Associate announcements and music with trunk cards in table ANNMEMS.

6. Record announcements with the DRAMREC utility.

7. Define treatments in table AUDIO.

   Note: Table AUDIO defines audio routes available for broadcast for ACD groups. If you use a GIVE RAN or a GIVE MUSIC command in a script, you must include a parameter specified in the AUDIO table.

8. Associate treatments with routes in table OFRT (office route) or IBNRTE. Assign the ACDQ parameter to routes you want to make available to Symposium Call Center Server.

9. Associate routes with ACD groups in table ACDGRP.

10. Defining overflow treatments in table ACDRTE.

For detailed instructions, see the *Translations Guide*.

Configuring ACD groups

Introduction

An ACD group is a logical group that contains a set of primary or supplementary ACD-DNs, phonesets, and agents. You must create at least two types of ACD groups—one for the CDNs acquired by Symposium Call Center Server, and one for phonesets and agents.

If you want to prevent calls from immediately being presented to agents after they release a call, you can configure options such as Variable Wrap or Not Ready on Secondary DN for an ACD group.

Notes:

1.   Alternatively, you can configure the Variable Wrap or Not Ready on Secondary DN options for individual agents.

2.   Do not configure the night service option for your ACD groups.

Note: An agent can log on to any phoneset providing that he or she enters a valid logon ID. However, to ensure that the agent can use all of the key-enabled features available, the agent must log on to the phoneset that has been configured as his or her unique Position ID. For reporting purposes, an agent must log on to a phoneset configured as part of the ACD group to which the agent belongs.

Before you begin

Before you perform this procedure, you must perform the following tasks:

■   Log on to the switch from a MAP terminal with a user ID that has the privilege levels required to change the ACDGRP tables.

■   Define the customer group to which the ACD group belongs in table CUSTNTWK (see "Configuring CUSTNTWK" on page 44).

To configure ACD groups for the CDN

1   Edit the ACDGRP table by typing **table ACDGRP** and pressing Enter.

   Result: The > prompt appears.

2   Type **add** and press Enter.

Result: The ACDNAME prompt appears.

3   Enter a name for the ACD group.

Result: The utility prompts you for the CUSTGRP.

4   Enter a name for the customer group of the ACD-DN.

Result: The utility prompts you for the ACDRNGTH.

5   Enter a valid value.

Result: The utility prompts you for the THROUTE.

6   Enter a valid value.

Result: The utility prompts you for the NSROUTE.

7   Enter a valid value.

Result: The utility prompts you for the PRIOPRO.

8   Enter a valid value.

Result: The utility prompts you for the DBG.

9   Enter a valid value.

Result: The utility prompts you for the MAXCQSIZ.

10   Enter a value between 0-511.

Result: The utility prompts you for the MAXWAIT.

11   Enter a valid value.

Result: The utility prompts you for the ACDMIS.

12   Enter a valid value.

Result: The utility prompts you for the MSQS.

13   Enter a valid value.

Result: The utility prompts you for the DISTRING.

14   Enter a valid value.

Result: The utility prompts you for the OBSWTONE.

15   Enter a valid value.

Result: The utility prompts you for the FRCNGTSV.

16   Enter a valid value.

Result: The OPTION prompt appears.

17   Enter a valid CDN.

Result: The DEFAULTGRP prompt appears.

18   Enter the name of the ACD group to which calls are sent when Symposium Call Center Server is not responding.

Result: The RESPTM prompt appears.

19   Enter the time, in seconds, that elapses before calls are sent to the default ACD group when Symposium Call Center Server is not responding. Nortel Networks recommends that you enter a value of 60 seconds.

Result: The NETICM prompt appears.

20   NETICM must be defined for use with MSL09 and subsequent versions. This causes the ACD to use the node ID defined on the switch, rather than the business group ID, defined in BGDATA, to identify calls.

Result: The utility prompts you to save the new ACD group.

21   Type **Y** and press Enter.

22   Repeat steps 2 through 21 for each ACD group of this type that you want to create.

To exit from the table, type **quit** and press Enter.

To configure ACD groups for ACD-DNs, phonesets, and agents

Note: Any modifications to the ACDGRP table must be applied to the default ACD group, not the CDN.

1   Edit the ACDGRP table by typing **table ACDGRP** and pressing Enter.

Result: The > prompt appears.

2   At the > prompt in the ACDGRP table, type **add** and press Enter.

Result: The utility prompts you for the ACDNAME.

3   Enter a name for the ACD group.

Result: The utility prompts you for the CUSTGRP.

4   Enter a name for the customer group of the ACD-DN.

          Result: The utility prompts you for the ACDRNGTH.

5   Enter a valid value.

          Note: The timer value configured on Symposium Call Center Server must be set to a value lower than the timer value configured on the MSL-100 switch.

          Result: The utility prompts you for the THROUTE.

6   Enter a valid value.

          Result: The utility prompts you for the NSROUTE.

7   Enter a valid value.

          Result: The utility prompts you for the PRIOPRO.

8   Enter a valid value.

          Result: The utility prompts you for the DBG.

9   Enter a valid value.

          Result: The utility prompts you for the MAXCQSIZ.

10   Enter a value between 0-511.

          Result: The utility prompts you for the MAXWAIT.

11   Enter a valid value.

          Result: The utility prompts you for the ACDMIS.

12   Enter a valid value.

          Result: The utility prompts you for the MSQS.

13   Enter a valid value.

          Result: The utility prompts you for the DISTRING.

14   Enter a valid value.

          Result: The utility prompts you for the OBSWTONE.

15   Enter a valid value.

          Result: The utility prompts you for the FRCNGTSV.

16   Enter a valid value.

          Result: The utility prompts you for the AGTASSN.

17   Enter a valid value. This is required for ICM.

Result: The FORCING prompt appears.

18   Set FORCING to NONE.

Result: The VARWRAP prompt appears.

19   When an agent releases a call, the Variable Wrap feature prevents another call from being presented to the agent for a specific period of time. You must select the Variable Wrap feature and define TIMER (the length of the wrap period) in seconds.

If TIMER is set to a value greater than 0, once an active call is released, the agent is not available to receive any new calls for the length of time specified.

If TIMER is set to the value 0, once the active call is released, the agent immediately becomes available to receive new calls.

If you do not configure Variable Wrap on the switch, the Release Guard feature is enabled. Release Guard prevents calls from being presented to the agent for one second after an active call is released.

Result: The NRONSDN prompt appears.

20   Select this option if you do not want Symposium Call Center Server to present calls to agents who are active on their secondary DN.

Note: The server can only acquire and monitor one secondary DN on each phoneset.

Result: The utility prompts you to save the new ACD group.

21   Type **Y** and press Enter.

22   Repeat steps 2 through 8 for each ACD group of this type that you want to create.

23   To exit from the table, type **quit** and press Enter.

Configuring CDNs in controlled and default mode

Table ACDGRP defines an ACD group's configuration and the options associated with the group. Table ACDGRP must be changed to add the CDN option. The CDN option is used to indicate a controlled DN that holds incoming calls that are routed by Symposium Call Center Server. Also, the default ACD group and the ICCM_RESP timer are suboptions of the CDN option.

When the CDN is in the CONTROLLED state, the switch does not control the Audio, Overflow, or Routing for a CDN ACDGRP. Calls in the CDN are handled by Symposium Call Center Server. The existing ACDGRP fields, such as ACD Ring Threshold, Priority Promotion, and Forced Night Service, are not meaningful with an ACDGRP that has the CDN option.

The following table shows all of the fields in table ACDGRP and whether the fields are applicable for a CDN. The fields that are not valid for a CDN ACDGRP can be datafilled in table ACDGRP, but are not used.

Field name	Brief descriptions (default value for CDN ACDGRP)	Validity for a CDN ACDGRP
CUSTGRP	the customer group of the ACD-DN	Y
ACDRNGTH	any valid entry (for example, OFRT 1)	N
THROUTE	any valid route (for example, OFRT 1)	N
NSROUTE	any valid route (for example OFRT 1)	N
PRIOPRO	0	N
DBG	N	N
MAXCQSIZ	0-511 CDN queue size	Y
MAXWAIT	0	N
ACDMIS	N	Y
MSQS	N	N
DISTRING	NONE	N
OBSWTONE	N	N
FRCNGTSV	N	N

The following table shows all of the options in table ACDGRP and whether they are compatible for a CDN:

ACDGRP Option	Compatible with CDN (Y/N)
AUDIO	Y
NARS	N
MAXCQLMT	N
ACDPSAP	N
SCAIREDIR	N
OVFLINQ	N
TMDELOFL	N
ACDDISP	N
MGTRPT	N
ACDADMIN	N
QSL	N
NRONSDN	N
ACDCPK	N
ORGANN	N
FORCING	N
VARWRAP	N
TIMECXR	N
NONIMCUT	N
ACDXFER	N
OBSREST	N

ACDGRP Option	Compatible with CDN (Y/N)
3OVNS	N
QTOMSB	N

Table ACDRTE defines the enhanced overflow routes that a group can take. It also defines the audio treatments that ACD groups use. The routes defined for an ACD group in Table ACDRTE are not applied for calls in the CDN.

Configuring ACD subgroups

Introduction

You can use subgroups to divide agents into smaller groups for support and monitoring. Assign each subgroup a supervisor. The supervisor must log on at the phoneset in that subgroup that is configured as the supervisor phoneset.

Before you begin

Before you perform this procedure, you must perform the following tasks:

■   Log on to the switch from a MAP terminal with a user ID that has the privilege levels required to change the ACDGRP table.

■   Define the ACD group to which the ACD subgroup belongs in table ACDGRP (see "Configuring ACD groups" on page 51).

To configure ACD subgroups

1   Edit the ACDSGRP table by typing **table ACDSGRP** and pressing Enter.

  Result: The > prompt appears.

2   Type **add** and press Enter.

  Result: The ACDNAME prompt appears.

3   Enter the name of the ACD group to which this subgroup belongs.

  Result: The utility prompts for the subgroup number.

4   Enter the number of the subgroup.

5   Continue responding to the prompts to define the subgroup. (For more information about the prompts, see the *Translations Guide*.)

  Result: The utility prompts you to save the new ACD subgroup.

6   Type **Y** and press Enter.

7   Repeat steps 2 through 6 for each subgroup that you want to define.

8   To exit from the table, type **quit** and press Enter.

Configuring DNs

Introduction

In table DNROUTE, you must configure each of the Controlled Directory Numbers (CDNs) that Symposium Call Center Server monitors. You must also configure any ACD-DNs and supplementary DNs that you are using.

In the event that Symposium Call Center Server is unable to handle calls, ACD-DNs provide a backup call distribution system to route calls.

Note: Supplementary DNs are usually used for 1-800 numbers.

Before you begin

Before configuring DNs, you must perform the following tasks:

- Log on to the switch from a MAP terminal with a user ID that has the privilege levels required to change the DNROUTE table.

- Define the ACD group to which they belong in table ACDGRP (see "Configuring ACD groups" on page 51).

- Define the area code (SPA) and exchange (office code) in table TOFCNAME (see the *Translations Guide*).

To configure a CDN

1 Edit the DNROUTE table by typing **table DNROUTE** and pressing Enter.

   Result: The > prompt appears.

2 Type **add** and press Enter.

   Result: The AREA prompt appears.

3 Enter the area code for the CDN.

   Result: The OFC prompt appears.

4 Enter the office code for the CDN.

   Result: The STAT prompt appears.

5   Enter the remainder of the directory number for the CDN.

   Result: The DN_SEL prompt appears.

6   Type **FEAT** and press Enter.

   Result: The FEATURE prompt appears.

7   Type **ACD** and press Enter.

   Result: The ACDGRP prompt appears.

8   Type the name of the ACD group you defined for this CDN in table
   CUSTNTWK, and press Enter.

   Result: The DNTYPE prompt appears.

9   Type **PRIM** and press Enter.

   Result: The TRUNK prompt appears.

10 Type **0** (zero) and press Enter.

   Result: The LINE prompt appears.

11 Type **0** (zero) and press Enter.

   Result: The utility prompts you to save the new CDN.

12 Type **Y** and press Enter.

13 Repeat steps 2 through 12 for each CDN that you want to define.

14 To exit from the table, type **quit** and press Enter.

To configure an ACD-DN or supplementary DN

1   Edit the DNROUTE table by typing **table DNROUTE** and pressing Enter.

   Result: The > prompt appears.

2   Type **add** and press Enter.

   Result: The DN prompt appears.

3   Enter the DN for the ACD-DN or supplementary DN.

   Result: The DN_SEL prompt appears.

4   Type **FEAT** and press Enter.

   Result: The FEATURE prompt appears.

5   Type **ACD** and press Enter.

   Result: The ACDGRP prompt appears.

6   Continue responding to the prompts to define the ACD-DN or supplementary DN. (For more information about the prompts, see the *Translations Guide.*) To define an ACD-DN, at the DNTYPE prompt, type **PRIM**. To define a supplementary DN, at the DNTYPE prompt, type **SUPP**.

   Result: The utility prompts you to save the new ACD-DN or supplementary DN.

7   Type **Y** and press Enter.

8   Repeat steps 2 through 7 for each ACD-DN that you want to define.

9   To exit from the table, type **quit** and press Enter.

Configuring CDNs on the server

CDNs configured on the switch must have matching data configured on Symposium Call Center Server. If, at any time, you edit any of the data on Symposium Call Center Server, you must reconfigure the resource on the switch. For more information, refer to the *Administrator's Guide*.

Note: If you intend to reconfigure a CDN, you must first deacquire the CDN, edit the configuration parameters, and then reacquire the CDN.

Configuring DNISs on the server

If you want Symposium Call Center Server to report on calls to your primary and supplementary ACD-DNs, you must configure them as Dialed Number Identification Services (DNISs) on the server. For more information, refer to the *Administrator's Guide*.

Configuring agent phonesets

Introduction

You must configure each phoneset that Symposium Call Center Server acquires. The server must acquire phonesets so that it can

- monitor the status of each phoneset

- present calls to each phoneset

Phoneset keys

An agent can log on to any phoneset providing that he or she enters a valid logon ID. However, to ensure that the agent can use all of the key-enabled features available to him or her, the agent must log on to the phoneset that has been configured as his or her unique Position ID.

Note: For reporting purposes, an agent must log on to a phoneset configured as part of the ACD group to which the agent belongs.

The following table lists special considerations for agent phoneset keys when you are using Symposium Call Center Server:

3-Way Conference	A call is pegged as a conference when the agent presses the 3WC key, and then completes the call.
Fast Transfer	A call is pegged as a transfer when the agent uses the Fast Transfer key, and then completes the call.
DN	The Secondary DN key is usually used for personal calls. Symposium Call Center Server can only acquire and monitor one secondary DN on each agent phoneset.

Line of Business	Symposium Call Center Server can report on the time agents spend on different types of calls. To use this feature, you must enable the LOB feature on the switch, and define all activity codes on Symposium Call Center Server. When you define activity codes on the server, it allows you to give useful names to the activity codes (for example, Sales or Support) for reporting purposes.
Not Ready	Nortel Networks recommends that you configure a Not Ready key on the phoneset. If you do not do this, Symposium Call Center Server cannot report when the agent is in Not Ready status. Agents can use the Not Ready key in conjunction with an activity code to indicate the reason they are in Not Ready status.
Emergency Key	To enable the emergency screen pop on the supervisor's workstation, configure EMK for Position ID instead of DN. When an agent presses the Emergency key, Symposium Call Center Server uses the Position ID to identify the correct supervisor.
Dial Intercom	Nortel Networks recommends that you do not configure this key on the agent phoneset. If agents use this key, the agent status is incorrectly reported on the real-time display.
Hotline	Nortel Networks recommends that you do not configure this key on the agent phoneset. If agents use this key, the agent status is incorrectly reported on the real-time display.
Private Line	Nortel Networks recommends that you do not configure this key on the agent phoneset. If agents use this key, the agent status is incorrectly reported on the real-time display.
Voice Call	Nortel Networks recommends that you do not configure this key on the agent phoneset. If agents use this key, the agent status is incorrectly reported on the real-time display.

Before you begin

Before configuring a phoneset, you must perform the following tasks:

■   Log on to the switch from a MAP terminal with a user ID that has the privilege levels required to access the SERVORD utility.

■   Define the ACD group to which the agent phoneset belongs in table ACDGRP (see "Configuring ACD groups" on page 51).

■   Define the ACD subgroup to which the agent phoneset belongs in table ACDSGRP (see "Configuring ACD subgroups" on page 59).

Configuring agent phonesets

1   Start the Service Orders utility by typing **SERVORD** and pressing Enter.

Result: The > prompt appears.

2   Type **new** and press Enter.

Result: The DN prompt appears.

3   Enter the DN for the In Calls key on the phoneset.

Result: The LCC_ACC prompt appears.

4   Enter a valid value.

Result: The GROUP prompt appears.

5   Type the name of the ACD group to which the phoneset belongs, and then press Enter.

Result: The SUBGRP prompt appears.

6   Type the name of the ACD subgroup to which the agent phoneset belongs, and then press Enter.

Result: The NCOS prompt appears.

7   Enter a valid value.

Result: The SNPA prompt appears.

8   Enter a valid value.

Result: The KEY prompt appears.

9   Enter a valid value.

Result: The RINGING prompt appears.

10   Type **Y** and press Enter.

Result: The LEN_OR_LTID prompt appears.

11   Enter a valid value.

Result: The OPTKEY prompt appears.

12   Type **$** and press Enter.

Result: The utility prompts you to save the new phoneset settings.

Tip: Before you save the configuration, ensure that you perform the following tasks:

- Assign the phoneset a valid DN.

- Assign ACD to Key 1.

- Assign Make Set Busy (MSB) and ACD Not Ready (ACDNR) to valid keys.

- Define any of the following keys, if required:

    - secondary DN (only one)

    - 3-Way Conference (3WC)

    - Line of Business key (LOB)

    - Emergency key (EMK)

    - Fast Transfer key (FXR)

Notes:

- If you use the EMK, configure it for SuprPosID.

- If you define a secondary DN, the ECM option must be specified for the secondary DN key.

13   Type **Y** and press Enter.

14   Repeat steps 2 through 13 for each phoneset you want to define.

Configuring agent phonesets on the server

After configuring agent phonesets on the switch, you must configure them on Symposium Call Center Server. To do so, refer to the *Administrator's Guide*.

Notes:

1. The agent phonesets configured on the switch must have matching data configured on Symposium Call Center Server. If, at any time, you edit any of the data on Symposium Call Center Server, you must reconfigure the resource on the switch.

2. If you intend to reconfigure an agent phoneset, you must first deacquire the phoneset, edit the configuration parameters, and then reacquire the phoneset.

Configuring supervisor phonesets

Introduction

In each ACD subgroup, you must configure one supervisor phoneset. Symposium Call Center Server must acquire this phoneset so that it can monitor the status of the phoneset.

Phoneset keys

The following table lists special considerations for supervisor phoneset keys when you are using Symposium Call Center Server:

Night Service	Nortel Networks recommends that you do not configure this key on the supervisor phoneset. Symposium Call Center Server does not support this feature.

Before you begin

Before configuring a phoneset, you must perform the following tasks:

- Log on to the switch from a MAP terminal with a user ID that has the privilege levels required to access the SERVORD utility.

- Define the ACD group to which the supervisor phoneset belongs in table ACDGRP (see "Configuring ACD groups" on page 51).

- Define the ACD subgroup to which the supervisor phoneset belongs in table ACDSGRP (see "Configuring ACD subgroups" on page 59).

To configure a supervisor phoneset

1   At the > prompt in the servord utility, type **new** and press Enter.

    Result: The DN prompt appears.

2   Enter the DN for the In Calls key on the phoneset.

3   Continue responding to the prompts to define the phoneset. Be sure to define the following options:

- position ID

- Observation key (OBS)

- Answer Emergency key (AEMK)

- Agent Status key (ASK)

For more information about these and other available options, see the *SERVORD Reference Manual*.

Result: The utility prompts you to save the new phoneset.

4   Type **Y** and press Enter.

5   Repeat steps 1 through 4 for each supervisor phoneset you want to define.

6   To exit from the table, type **quit** and press Enter.

Configuring supervisor phonesets on the server

After configuring supervisor phonesets on the switch, you must configure them on Symposium Call Center Server. To do so, refer to the *Administrator's Guide*.

Notes:

1. The supervisor phonesets configured on the switch must have matching data configured on Symposium Call Center Server. If, at any time, you edit any of the data on Symposium Call Center Server, you must reconfigure the resource on the switch.

2. If you intend to reconfigure a supervisor phoneset, you must first deacquire the phoneset, edit the configuration parameters, and then reacquire the phoneset.

Configuring logon IDs

Introduction

You must configure the logon ID of each agent who logs on to a phoneset monitored by Symposium Call Center Server. If you add an agent in Symposium Call Center Server, you must configure the matching agent logon parameters on the switch.

Note: An agent can log on to any phoneset providing he or she enters a valid logon ID. However, to ensure that the agent can use all of the key-enabled features available, the agent must log on to the phoneset that has been configured as his or her unique Position ID. For reporting purposes, an agent must log on to a phoneset configured as part of the ACD group to which the agent belongs.

Before you begin

Before configuring a logon ID, you must perform the following tasks:

- Log on to the switch from a MAP terminal with a user ID that has the privilege levels required to change the ACDLOGIN table.

- Define the customer group to which the agent or supervisor belongs in table CUSTNTWK (see "Configuring CUSTNTWK" on page 44).

To configure an agent login

1   Edit the ACDLOGIN table by typing **table ACDLOGIN** and pressing Enter.

    Result: The > prompt appears.

2   Type **add** and press Enter.

    Result: The LOGINID prompt appears.

3   Enter the numeric ID that the agent uses to log on to the phoneset.

    Result: The CUSTSEL prompt appears.

4   Type **N** and press Enter.

    Result: The PSWDSEL prompt appears.

5   Type **N** and press Enter.

        Result: The OPTION prompt appears.

6   Select the VARWRAP option.

        Result: The VARWRAP prompt appears.

7   When an agent releases a call, the Variable Wrap feature prevents another call from being presented to the agent for a specific period of time. You must select the Variable Wrap feature and define TIMER (the length of the wrap period, in seconds).

        If TIMER is set to a value greater than zero (0), once an active call is released, the agent is not available to receive any new calls for the length of time specified.

        If TIMER is set to the value zero (0), once the active call is released, the agent immediately becomes available to receive new calls.

        If you do not configure Variable Wrap on the switch, the Release Guard feature is enabled. Release Guard prevents calls from being presented to the agent for one second after an active call is released.

        Result: The FORCING prompt appears.

8   Set FORCING to NONE.

        Result: The utility prompts you to save the new agent login ID.

9   Type **Y** and press Enter.

10   Repeat steps 2 through 9 for each agent login ID that you want to define.

11   To exit from the table, type **quit** and press Enter.

Configuring agents on the server

After configuring agent logons on the switch, you must configure them on Symposium Call Center Server. To do so, refer to the *Administrator's Guide*.

Note: The agent phonesets configured on the switch must have matching data configured on Symposium Call Center Server. If, at any time, you edit any of the data on Symposium Call Center Server, you must reconfigure the resource on the switch.

Section C: Checking the server configuration

In this section

Overview of server configuration

Introduction

Installation of Symposium Call Center Server enables you to configure the connection to the switch. After the installation, you can view the configuration information to confirm that it was entered correctly.

Note: This section describes how to view the configuration from a client PC. You can also use the Feature Reports utility on the server. For more information about this utility, refer to the *Software Installation and Upgrade Guide*.

Checking the server configuration

To check the switch connection

1 From the SMI window, choose System Administration → System Configuration → Server Settings.

Result: The Switch Resource property sheet appears. This property sheet shows the type of switch to which the server is connected, and how the server is configured on the switch.

Note: The following section shows the relationships between these fields and the tuples (parameters and values) in the MSL-100 tables.

2 Click the Advanced button.

Result: The Switch configuration property sheet appears. This property sheet contains additional information about the server configuration on the switch.

3 Click Close to return to the Switch Resource property sheet.

4 Click Close to return to the SMI window.

Relationship of server configuration and switch datafill

Introduction

This section shows the relationships between fields in the Symposium Call Center Server configuration and tuples in the MSL-100 tables.

Table of relationships

The following table shows the MSL-100 tuples that must match the fields on the Symposium Call Center Server Switch Configuration property page:

Symposium Call Center Server parameter	MSL-100 table	Tuple
Switch IP Address	IPNETWRK	CMIPADDR
Switch Customer Number	CUSTNTWK	NETCGID
Network Node	SCAIGRP	NETNODEID
Business Group	SCAIGRP	BGID
Linkset Name	SCAIGRP	LINKSET
MSL-100 Password	SCAIGRP	PASSWORD

Predefined values

The following fields in the Symposium Call Center Server configuration have predefined values:

Symposium Call Center Server parameter	Value	Meaning
Service ID	0–255 (from Table SCAIPROF)	Identifies the connection profile parameters for communication between the MSL-100 switch and Symposium Call Center Server.
Application ID	Any user-defined value	Symposium Call Center Server
Service Version	11	Release MSL09
	12	Release MSL10
	13	Release MSL11
	Note: Nortel Networks recommends that you use Service Version 12 for Symposium Call Center Server Release 3.0.	**Note:** The value is always 2 greater than the release number.

Note: To change the Service ID or Service Version, use the Feature Reports utility on the server. These fields must be set correctly to allow you to take advantage of the features of the operating system that you are using.

Symposium Call Center Server logon parameters

Network Node

- uniquely identifies a switch (CO switch or PBX) in a customer's network. The customer assigns the network node ID to assure a uniqueness in network that might consist of public and private nodes.

- must be a number between 0-32767

- is keyed to the NETNODID field of the SCAIGRP table

Business Group

- uniquely identifies a Meridian Business Group (MBG) customer within a public network

- is assigned by the telephone company

- is keyed to the BGID field of the SCAIGRP table

- must be a number between 1–4194304

Note: An MBG customer is a telephone company customer who uses public facilities to carry customer-specific information. This parameter uniquely identifies a given telephone company MBG customer across a number of switches in a given network, and not only within a given switch. As a result, any host applications that establish application-level sessions with multiple switches only need to be datafilled with one business group ID per network rather than per switch.

MSL-100 Password

- is a security feature that, along with a valid user ID, enables a user to log on to the switch. The customer assigns passwords.

- maintains a one-to-one relationship with the business group ID. All Service IDs of a customer are under the same password.

- is keyed to the PASSWORD field of the SCAIGRP table

- must be between 1–8 characters in length

Service ID

- uniquely identifies a service profile for a session. An operating company can define functions and parameters in service profiles on the switch. The operating company can assign a customer up to eight service IDs.

- is assigned by the telephone company

- is referenced to the PROFKEY field of the MSL-100 SCAIPROF table

- must be a number between 0–255

Application ID

- uniquely identifies Symposium Call Center Server in a customer's network—in other words, within the set of public and private switches with which a customer's host application can establish a session

- identifies the specific customer host application (for example, Symposium Call Center Server, OPEN IVR, TAPI Driver) initiating the logon request

- assigned by the customer

- must be a number between 1–32767

Service Version

- uniquely identifies the application level signaling version on a specific switch

- is keyed to the switch release level. The SCAI Service version is always 2 greater than the release level for the switch. For example, for MSL09, the ServiceVersion is 11.

- must be a number between 0–65 535

Chapter 3

Verifying the configuration

In this chapter

Overview

Introduction

This section describes how to verify that the switch has been set up correctly. Before you continue, ensure that you have configured Symposium Call Center Server as described in the *Administrator's Guide*.

Verifying the configuration

You must verify that the switch has been configured correctly. This section explains the procedure you must follow to verify the following configurations:

- Symposium Call Center Server can log on to the switch over the ICM link.
- ACD groups and subgroups are correctly configured.
- Agent phonesets are correctly configured.
- Agents and supervisors are configured to log on.
- CDNs are correctly configured.
- Music and RAN routes are correctly configured.
- DNISs (primary and supplementary ACD-DNs) are correctly configured.

Verifying that the server can log on to the switch

Introduction

Symposium Call Center Server attempts to log on to the switch at startup and—if the link goes down—whenever the link becomes available. To allow the server to log on, the following conditions must be met:

- The ICM link between the switch and Symposium Call Center Server must be correctly configured.
- The server login parameters must be correctly configured.

To verify the integrity of the ICM link

1   At the switch, use the SNPINGCI utility to ping the ELAN IP address of the Symposium Call Center Server. (For more information about the SNPINGCI utility, refer to the *DMS Utilities Guide*.)

2   On Symposium Call Center Server, open a DOS window and use the PING command to ping the switch IP address (specified for parameter CMIPADDR in table IPNETWORK).

If the connection fails, the link is incorrectly configured. You must confirm that the configuration information entered on the Symposium Call Center Server matches the information defined in the resources configured on the switch.

Note: If you receive the message "destination net unreachable" when using the ping command, it might be necessary to add a static route to the MSL-100 switch.

To create a static route

1   On the Symposium Call Center Server, from the Start menu, select Programs → MS-DOS Prompt.

Result: The MS-DOS Prompt window appears.

2   Type the following text:

route add -p cmipaddr route

where cmipaddr is the actual IP address of the Symposium Call Center Server, and "route" is the IP address of the nearest router or ICM link on the EIU.

Logon failure

If the logon process is incorrectly configured, Symposium Call Center Server is unable to log on to the switch, and the server cannot acquire CDNs, phonesets, or voice ports. These resources display the status "Acquire Failed" in the CDNs, Phonesets, and Voice Ports windows on Symposium Call Center Server.

Verifying ACD groups and subgroups

Introduction

To verify that ACD groups and subgroups are correctly defined, use the ACDSHOW utility.

Before you begin

Before verifying the ACD configuration, you must log on to the switch from a MAP terminal with a user ID that has the privilege levels required to access the ACDSHOW utility.

To verify ACD configurations

Check the ACD configuration using the ACDSHOW command. (For more information about this command, refer to the *Translations Guide*.) Ensure that the following conditions have been met for each ACD group to which ACD-DNs, phonesets, and agents are assigned:

- The AGTASSN option is enabled.

- The Variable Wrap (VARWRAP) option is enabled. When an agent releases a call, the Variable Wrap feature prevents another call from being presented to the agent for a specific period of time. If you do not want to allow wrap-up time at the end of a call, set the wrap time to zero (0).

- The Not Ready on Secondary DN (NROSDN) option is enabled. Use this option if you do not want Symposium Call Center Server to present calls to agents who are active on their secondary DN.

Note: The VARWRAP and NROSDN settings must match the Variable Wrap and Not Ready on Secondary DN settings defined for the call presentation class to which agents in this ACD group belong.

Verifying that phonesets are correctly configured

Introduction

To verify that a phoneset is correctly configured, ensure that it is configured as a type Meridian Digital Contrex (MDC), and that all keys are correctly configured. (For information about the interaction of keys and Symposium Call Center Server, see "Configuring agent phonesets" on page 63, and "Configuring supervisor phonesets" on page 68.)

Before you begin

Before verifying the phoneset, you must log on to the switch from a MAP terminal with a user ID that has the privilege levels required to access the QLEN utility.

Verifying agent phoneset configurations

To verify that phonesets are correctly configured, check the phoneset configuration using the QLEN command. (For more information about this command, see the *SERVORD Reference Manual*.) Ensure that the following conditions have been met for each agent phoneset:

- The phoneset type is MDC.
- The phoneset is configured for position ID.
- The phoneset has a Not Ready key.
- The phoneset has an Emergency key.
- The phoneset does not have the following keys: Dial Intercom, Hotline, Private Line, or Voice Call. Only supervisor phonesets should have these keys configured.
- If you want to use the LOB (activity) code feature, the phoneset has a LOB key.
- If you want to distinguish between conferences and transfers, the phoneset has 3-Way Conference and Fast Transfer keys.

■   The ECM option is set on the secondary DN.

Verifying supervisor phoneset configurations

To verify that supervisor phonesets are correctly configured, check the phoneset configuration using the QLEN command. (For more information about this command, see the *SERVORD Reference Manual*.) Ensure that the following conditions have been met for each supervisor phoneset:

■   The phoneset type is MDC.

■   The phoneset has an Emergency key.

■   The phoneset does not have a Night Service key. Only agent phonesets should have this key configured.

Verifying that agents are correctly configured

Introduction

If agents are correctly configured, agents can log on to a phoneset, and their status is correctly reported in the agent real-time display.

Before you begin

Ensure that the phoneset has been acquired on Symposium Call Center Server. On a client workstation, open an Agent real-time display window.

To verify agent logons

1   At a phoneset configured as an agent set, pick up the handset.

2   Press the Make Set Busy (MSB) key.

3   Press the Incalls key.

4   Enter the agent's logon ID.

   Result: The Not Ready light goes on and the Make Set Busy indicator goes off. On the Agent real-time display window, the agent appears with the value "Not Ready" in the In Calls Status column.

5   Press the Not Ready key.

   Result: On the Agent real-time display window, the agent's In Calls Status changes to Idle.

Verifying that the CDNs are correctly configured

Introduction

If a Controlled Directory Number (CDN) is correctly configured, Symposium Call Center Server can acquire that CDN, and calls to that CDN are correctly routed.

Before you begin

Before using this procedure, complete these tasks:

1. Define two CDNs. Ensure that they are correctly configured on both the switch and Symposium Call Center Server.

2. Define two agents. Ensure that the agents are correctly configured on both the switch and Symposium Call Center Server.

3. Define two skillsets on Symposium Call Center Server. For information on defining skillsets, refer to the *Administrator's Guide*.

4. Assign one agent to each skillset on the server. For information on assigning skillsets to agents, refer to the *Administrator's Guide*.

5. Create a master script similar to the following sample, validate it, and activate it. For information on creating a master script, refer to the *Scripting Guide.*

Note: The sample script uses the skillsets *skillset_A_sk* and *skillset_B_sk*, and the CDNs 416-555-7890 and 416-555-4891.

Sample script

```
GIVE RINGBACK
WAIT 2

IF (CDN = 4165557890) THEN
QUEUE TO SKILLSET skillset_A_sk
```

```
WAIT 2
LOG "queued at CDN A"
QUIT
END IF

IF (CDN = 4165557891) THEN
QUEUE TO SKILLSET skillset_B_sk

WAIT 2
LOG "queued at CDN B"
QUIT
END IF

WAIT 5
LOG "did not arrive at either CDN"
QUIT
```

To verify CDN configurations

1   On Symposium Call Center Server, acquire the CDN by selecting it in the CDNs window, and choosing File → Acquire.

   Result: The CDN status changes to Acquire Pending and then Acquired.

2   Log on each agent to a phoneset.

3   Make a call to each CDN.

   Result: The call is routed to the correct agent.

Verifying that music and RAN routes are correctly configured

Introduction

If music and RAN routes are correctly configured, calls receive the correct recorded announcement or music treatment.

Before you begin

Before using this procedure, complete these tasks:

1. Define a CDN. Ensure that it is correctly configured on both the switch and Symposium Call Center Server.

2. Define two RAN routes. Ensure that the routes are correctly configured on both the switch and Symposium Call Center Server. For information on defining RAN routes, refer to the *Administrator's Guide*.

3. Define two music routes. Ensure that the routes are correctly configured on both the switch and Symposium Call Center Server. For information on defining music routes, refer to the *Administrator's Guide*.

4. Create a master script similar to the following sample, validate it, and activate it. For information on creating a master script, refer to the *Scripting Guide.*

Sample script

```
GIVE RINGBACK
WAIT 2
GIVE MUSIC pop_music_gv
WAIT 2
GIVE MUSIC classical_music_gv
WAIT 2
```

GIVE RAN welcome_RAN_gv
WAIT 2
GIVE RAN holiday_RAN_gv
QUIT

Verifying music/RAN route configurations

To verify that RAN or music routes are correctly configured, make a call to the CDN for which RAN or music treatment is configured. The correct treatment should be received.

Verifying that DNISs are correctly configured

Introduction

To enable Symposium Call Center Server to monitor dialed numbers (primary and supplementary ACD-DNs), you must configure them on the switch and define them as DNISs on the server. If DNISs are correctly configured, calls to DNISs receive the correct treatment.

Before you begin

Before using this procedure, complete these tasks:

1. Define a CDN. Ensure that it is correctly configured on both the switch and Symposium Call Center Server.

2. Define one DNIS. Ensure that the DNIS is correctly configured on both the switch and Symposium Call Center Server.

3. Define an agent. Ensure that the agent is correctly configured on both the switch and Symposium Call Center Server.

4. Define a skillset on Symposium Call Center Server. For information on defining skillsets, refer to the *Administrator's Guide.*

5. Assign the agent to the skillset on the server. For information on assigning agents to skillsets, refer to the *Administrator's Guide*.

6. Create a master script similar to the following sample, validate it, and activate it. For information on creating a master script, refer to the *Scripting Guide.*

Note: The sample script uses the skillset *skillset_A_sk* and the DNIS 800-555-4567.

Sample script

GIVE RINGBACK
WAIT 2

```
IF (DNIS = 8005554567) THEN
QUEUE TO SKILLSET skillset_A_sk

WAIT 2
LOG "using DNIS"
QUIT
END IF

WAIT 5
LOG "did not have DNIS"
QUIT
```

Verifying DNIS configurations

To verify that DNISs are correctly configured, make a call to the DNIS. The call should be queued to the correct skillset.

Chapter 4

Troubleshooting

In this chapter

Overview

Introduction

This section describes problems that can occur, as well as possible causes and recommended solutions for these problems.

Subsystem link problems

Introduction

This section lists problems that can occur during verification of the configuration. For each problem, it suggests possible causes.

The server does not receive information from the switch

This occurs if Symposium Call Center Server is not logged on to the switch, if your customer group is not configured to receive SCAI messages from the switch, or if the ELAN is not available or is incorrectly configured. Ensure that the following conditions have been met:

■   The server's IP address is correctly configured in table SCAICOMS.

■   The server's net node ID, business group ID, and linkset name are correctly configured in table SCAIGRP.

■   Your customer group is configured with the ECM option in table CUSTNTWK.

■   The ELAN is correctly installed and configured.

To check the ELAN, use the ping and tracert utilities on Symposium Call Center Server and the SNPINGCI utility on the switch. For more information about the ping and tracert utilities, refer to the *Software Installation and Upgrade Guide*. For more information about the SNPINGCI utility, refer to the *DMS Utilities Guide*.

The client cannot log on to Symposium Call Center Server

This occurs if the Symposium Call Center Server components are down, the customer LAN is not available, or the customer LAN is incorrectly configured. Ensure that the following conditions have been met:

■   The server components are UP.

    To check the status of the components, use the SMonW utility on the server. If all components do not have the status UP, restart the server.

■   The customer LAN or WAN is correctly installed and configured.

To check the LAN or WAN, use the ping utility. For more information about this utility, refer to the *Software Installation and Upgrade Guide*.

- The ACD group to which the phoneset belongs has the AGTASSN option.

Phonesets do not have dial tone

This occurs if the phonesets are incorrectly configured on the switch. Ensure that the phonesets are correctly configured in the Service Orders (servord) utility. For information about the Service Orders utility, see the *SERVORD Reference Manual*.

Resource configuration problems

Introduction

This section lists problems that can occur during verification of resource configuration. For each problem, it suggests possible causes.

The server cannot acquire CDNs

Ensure that the following conditions have been met:

- The CDN is configured in table DNROUTE on the switch.
- The CDN is configured correctly on Symposium Call Center Server. (The configuration on the server must match the configuration on the switch.)
- The full ten-digit CDN number is entered in Symposium Call Center Server.

The server cannot acquire phonesets

Ensure that the following conditions have been met:

- The phoneset is configured with the servord utility on the switch.
- The phoneset is configured correctly on Symposium Call Center Server. You must enter the agent position number, not the Line Equipment Number (LEN) on the secondary DN.
  (The configuration on the server must match the configuration on the switch.)

The server does not monitor activity on a secondary DN

Symposium Call Center Server can only monitor activity on one secondary DN. That secondary DN must be correctly configured on Symposium Call Center Server. Ensure that the following conditions have been met:

- The secondary DN is configured on the switch.
- The secondary DN is configured as an attribute of the correct phoneset on Symposium Call Center Server.

See also "The server does not receive information from the switch" on page 97.

Agents or supervisors are unable to log on

Ensure that the following conditions have been met:

- The agent or supervisor's logon ID is configured in table ACDLOGIN.
- The agent or supervisor is configured correctly on Symposium Call Center Server.
  The agent logon ID is a valid ID and matches the agent's ID in acdlogin.
- An agent is attempting to log on to a supervisor phoneset, or a supervisor is attempting to log on to an agent phoneset.
- Another agent has not already logged on with the same logon ID.

See also "The server does not receive information from the switch" on page 97.

Supervisors are not notified of emergencies

If an agent's supervisor is not notified when the agent presses the Emergency key, it can be the result of one of the following conditions:

- The ACDEVENT is not correctly configured in table SCAISSRV. Ensure that the Aux and SuprPosID options for EMKEVENT are both set to Y.
- The agent has logged on from a phoneset that has not been configured with the agent's Position ID.

Calls are not being presented to agents

If you are using the Variable Wrap option, agents go into Variable Wrap state after completing a call. (You configure the length of the variable wrap period on the switch.) When the variable wrap period elapses, agents go into Ready state. If no calls are being presented to agents when they return to Ready state, ensure that the settings for the variable wrap option on the switch (in table ACDLOGIN or ACDGRP) match the settings on Symposium Call Center Server (in the agent's call presentation class).

Note: If you do not configure Variable Wrap on the switch, the Release Guard feature is enabled. Release Guard prevents calls from being presented to the agent for one second after an active call is released.

Agents are not in Variable Wrap state after calls

If agents go into Not Ready rather than Variable Wrap state after calls, ensure that the following conditions have been met:

- The VARWRAP option is configured for the ACD group to which the agents belong, or for the individual agents.
- The After Call Allow Variable Wrap option is set for the call presentation class to which the agents belong.

Agents are receiving calls when they are busy on the Secondary DN

Symposium Call Center Server only monitors agent Not Ready on Secondary DN status for outbound calls. This DN must be correctly configured on Symposium Call Center Server.

If calls are being presented to agents who are on an outbound call on a secondary DN, ensure that the following conditions have been met:

- The secondary DN is configured on the switch.
- The secondary DN is configured as an attribute of the correct phoneset on Symposium Call Center Server.
- The NROSDN option is configured for the ACD group to which the agents belong, or for the individual agents.

■   The Not Ready on Secondary DN option is set for the call presentation
    class to which the agents belong.

Appendix A

Preinstallation site survey and checklist

In this appendix

Preinstallation site survey

Symposium Call Center Server Rel. 3.0
DMS/MSL100
Field Introduction Site Survey Form

SITE NAME:

DATE:

PROPRIETARY INFORMATION

The information contained in this document is the property of Nortel Networks. Except as specifically authorized in writing by Nortel Networks, the holder of this document shall (1) Keep all information contained herein confidential and shall protect same in whole or in part from disclosure and dissemination to all third parties, and (2) use same for operating and maintenance purposes only.

Nortel Networks Field Introduction Engineer

CSS/NPI Prime:

CSS/NPI Manager:

Customer Information

Company Name:

Site Address:

Site Contact:

Service Provider Information

Company Name:

Shipping Address:

Account Rep:

Area Service Mgr.:

Nortel Networks Contact Information

Prime SPS Contact:

Prime ENFS Contact:

Prime PLM Contact:

Site Profile

1. DMS/MSL-100 System Information

Switch Type:

Software Load:

CLLI:

Operating Company Name (DMS):

Phone:

Telco Contact Name (DMS):

Phone:

Telco Technician Name:

Phone:

Telco Translations Engineer:

Phone:

2. Call Center Traffic Information

Operating hours:

Total Number of incoming ACD trunks and routes (MSL-100):

Total Number of outgoing ACD routes and trunks (MSL-100):

Estimated total ACD call volume (CPH):

Peak:

Avg.:

Number of Active Live ACD agents taking calls at the same time:

Peak:

Avg.:

Number of Active ACD Groups with the CDN option assigned:

Peak:

Avg.:

3. Call Center Configuration

Is the site currently using NACD?

Number of NACD nodes:

Are all NACD locations DMS/MSL100s?

Description of the NACD Application:

_____

_____

_____

Number of ACD Groups:

Number of ACD Agents:

Number of ACD Supervisors:

Number of Physical Agent Line Connections (LENS):

Number of Physical Supervisor Line Connections (LENS):

ACD Group Name:

# of agents:

# of Sup.:

Is DNIS being used?

ACD Group Name

# of agents:

# of Sup.:

ACD Group Name:

# of agents:

# of Sup.:

ACD Group Name:

# of agents:

# of Sup.:

ACD Group Name:

# of agents:

# of Sup.:

CALL FLOW DIAGRAM

Describe and diagram the complete call flow for the Main ACD Queues. Include Network ACD, interflow/overflow queues, RAN, Music, IVR/Open IVR, TAPI Server, third-party vendor, and so on.

4. LAN/WAN

Do you have a LAN?

Do you have a corporate WAN?

What type of LAN will be used for the Corporate LAN (for example, Token Ring, 10Base-T)

What type of addressing scheme is used (for example, TCP/IP, Novel)

What models of routers, bridges, or gateways will be used on the ELAN?

5. Auxiliary Equipment Information

A) CCMIS

Is the site currently using CCMIS?

Hardware Platform: ____SNN ____SEE ____IPE ____HP/PDP

# of Sup. PCs: _____ # of Sup. Terminals: _____ # of Report Printers: _____

Software:

CCMIS Software Release/Issue:

HP/PDP Software Release/Issue:

Number of ACD Agents: _____ Number of LAN Sessions: _____

Number of Ports:

Number of Wallboards:

Data Stream Reporting:

Terminal Emulation:

Enhanced System Package:

Custom Formula:

Network ACD:

Number of Partitions:

Configuration Control:

Subnet Mask and Default Router/Gateway Address:

CCMIS REPORTS USED FREQUENTLY:

_____

_____

_____

B) Other Nortel Networks and Third-Party Auxiliary Systems

Please list all other Nortel Networks or third-party auxiliary products related to call center operation. For example, list all ACD wall boards, call center forecasting tools, TAPI server, Symposium Agent, keyboard telephony products (that is, FastView or FastCall), and all ACD report processing products:

Product Name:

Release:

Brief description of function:

Interface to DMS/MSL-100 or its aux. products:

6. Symposium Call Center Server Release 3.0 Field Trial

A) Dialup information

Server modem Phone Number:

RAS Login ID:

RAS Password:

pcAnywhere User ID:

pcAnywhere Password:

Server CLAN IP address:

Client User ID:

Client Password:

Server ELAN IP address:

B) Symposium Call Center Server R3.0 Planned feature Usage

Fill in the following tables as to what will be used at the beginning (**Start)** and at the end **(End)** of the Symposium Call Center Server Release 3.0 Field Trial.

Symposium Call Center Server Release 3.0 feature exposure

Symposium Call Center Server R3.0 features	Start	End
Script: Broadcast Announcement		
Script: Play Prompt collect digit		
Script: Give IVR and transfer back to CDN		
Script: Host Connectivity (HDX)		
Script: Event Handler		
Script: Priority in Queue		
Script: Expected Wait Time		

Symposium Call Center Server R3.0 features	Start	End
DHCP II (two NIC cards on client with DHCP)		
Standard Historical agent, skillset, and application Report		
Standard Historical Event Reports		
Standard Configuration Reports		
Custom Reports		
Call-by-Call Statistics		
Real-time Statistics: Agent, skillset, and application		
Real-time Statistics: Call Center Performance		
Third-Party Real-time Application Interface		
Symposium Call Center Server Meridian Link (TAPI Server)		
NACD/Symposium Call Center Server interworking		
Multiple-appearance SCR keys		
Operator xfer to CDN (extend)		

Other Symposium Call Center Server R3.0 exposure

INTERACTIONS	Start	End
Symposium Agent		
WinNt Client		
GRTD (will not be available prior to Beta)		
Nortel Networks OPEN IVR		
Third-Party OPEN IVR (500/2500)		
Office 98 client		

MAT 6.? co-located on same client PC		
DMS/MSL100		
NA10/MSL9		
NA11/MSL10		
NA12/MSL11		
DMS		
MSL-100		
Transitions		
Transition from CCMIS (for agents on the field trial only)		
Transition from CompuCall		
Transition from Other		
MAS System Types		
Symposium Call Center Server 702t		
Symposium Call Center Server 1003t		
Load Capacity		
Peak Calls per hour		
Average Calls		
Number of Clients		
Number of Agents		

C) Service Provider Readiness

Has the service provider received any training on Symposium Call Center Server 3.0? If so please list the Training Classes.

D) Symposium Call Center Server Release 3.0 Planned Ramp-up (this will be completed as part of the Migration Analysis)

7. ICM Link Survey

Date:

Site CLLI:

DMS/MSL-100 Switch Load:

DMS/MSL-100 Feature Packages:	**Packages Installed:**	**If not, the planned install date is:**
ICM00001 (includes)	Yes/No	
■ ACD000002	Yes/No	
■ ACD000007	Yes/No	
■ ACD000008	Yes/No	
■ ACD0000013	Yes/No	
■ ACD0000014	Yes/No	
■ ACD0000019	Yes/No	
ICM000010	Yes/No	
ICM000020	Yes/No	
Note: ICM Dependencies at the bottom.		

DMS/MSL-100 EIU Hardware:	Does the customer have an NTEX22BB card? What version (for example, AA, BB)	If not, when is the plan date?
	Does the customer have an NT9X84AA card? What version (for example, AA, BB)	If not, when is the plan date?
	Does the customer have an NT9X84AA card? What version (for example, AA, BB)	If not, when is the plan date?
	Does the customer have an NT9X0190 cable?	If not, when is the plan date?
	Does the customer have a MAU to connect to the Ethernet port?	
	If the customer does not have the above cards, does the customer have spare slots in the LPP for these cards?	If not, when is the plan date for another LPP or shelf?

Routers:	Is the ICM link direct connect or using routers?	If using routers, what type of router at the Central Office?
		Vendor:
		Model:
		Does this router support RIP1 protocol?
		What type of router at the Customer site?
		Vendor:
		Model:
		Does this router support PPP over a WAN?
		Will Nortel Networks be supplying the customer with Bay Network Routers?
	Are the routers using PAP or CHAP?	IF yes, what models (for example, ARN, ASN)
	Are the routers using data compression?	If yes, what is the PPP "secret"?
	Are the routers using encryption?	If yes, what type?
		If yes, what type?

Connection Info:	What type of connection will be used for the routers (T1, ISDN BRI, ISDN PRI, or 56k)? Central Office: Customer Site: How many links will be between the remote site and Central Office? Will the customer require redundant Ethernet connections between the router and the DMS/MSL-100 EIUs?	
Firewall Info:	Will the customer be using a firewall?	If Yes, what type of firewall at the Central Office? Vendor: Model/Version: What type of firewall at the Customer Site? Vendor: Model/Version:
LPP Shelf	What type of LPP shelf does the customer have (FLIS, SNSE, LIS)? What version? If no, when is the plan?	Does the customer have DMS/MSL-100 TAPI Server Client Software? What version? If no, when is the plan?

NOTE: ICM DEPENDENCIES

ICM00001 contains:

ACD00002/ACD000007/ACD00008/ACD00013/ACD00014/ACD00019

ICM00010 requires:ICM00001

ICM00013 requires:ICM00001

ICM00020 requires:ICM00010

ICM00021 requires:ICM00020

ICM00050 requires:ICM00050

Preinstallation checklist

Introduction

The following checklist includes a list of required and optional components for the MSL-100 switch, the network and router system, and the CPE. Nortel Networks recommends that you complete the checklist before attempting to configure the switch for the Symposium Call Center Server.

DMS Components

Component	Required	Optional	Description
DMS-100, MSL-100, DMS-500	Yes		Centrex Switch
LPP Frame, LIM, and LIS	Yes		Link Peripheral Processor Frame, Link Interface Module, and Link Interface Shelf. This is where the EIU resides.
NTEX22BB	Yes		(EIU Front) Integrated Processor and F-BUS
NT9X84AA	Yes		Ethernet Interface Card
NT9X85AA	Yes		(EIU Back) Ethernet Interface Paddleboard
NT9X0190	Yes		AUI Bulkhead Cable
MAU	Yes		Ethernet AUI to 10Base-T Transceiver
Dedicated Ethernet Link		Yes	Link provides higher link reliability and bandwidth by reducing packet collisions and retransmits.

Component	Required	Optional	Description
NA08 or higher load on the DMS	Yes		Provides ICM capability.
ICM00001	Yes		Call management interface (ICM software load package)
ACD Datafill	Yes		As required.
SCAI Datafill	Yes		Tables SCAICOMS, SCAIGRP, SCAISSRV, and SCAIPROF must be datafilled in the switch.
EIU Datafill	Yes		Tables LIUINV, IPNETWRK, IPROUTER, IPHOST, and IPTHRON must be datafilled in the switch.

Network and Router Components

Component	Required	Optional	Description
Dedicated Ethernet/WAN Network		Yes	Provides higher link reliability and bandwidth by reducing packet collisions and retransmits.
Firewall Software	Yes		Provides isolation of the Telco network and switch from unauthorized external access.
10Base-T Ethernet Hub	Yes		Provides Ethernet connectivity between network components. Minimum of 1 is required at both the Telco and CPE ends.

Component	Required	Optional	Description
10Base-T Category 5 UTP Cabling	Yes		Length as required.
ISDN NT-1 Adapter		Yes	Required if using a Quad-BRI adapter on a Nortel Networks ASN router for ISDN-BRI connectivity.

CPE Components

Component	Required	Optional	Description
CTI Server	Yes		Endpoint of ICM link

Glossary

A   **accelerator key**

A key on a phoneset that an agent can use to place a call quickly. When an agent presses an accelerator key, the system places the call to the configured number associated with the key. For example, if an agent presses the Emergency key, the system places a call to the agent's supervisor.

access class

A collection of access levels that defines the actions a member of the access class can perform within the system. For example, a member of the Administrator access class might be given a collection of Read/Write access levels.

access level

A level of access or permission given to a particular user for a particular application or function. For example, a user might be given View Only access to historical reports.

ACD call

See Automatic call distribution call.

ACD-DN

See Automatic call distribution directory number.

ACD group

See Automatic call distribution group.

ACD routing table

See Automatic call distribution routing table.

ACD subgroup

See Automatic call distribution subgroup.

acquired resource

A resource configured on the switch that is under the control of the Symposium Call Center Server. Resources must be configured with matching values on both the switch and the Symposium Call Center Server.

activated script

A script that is processing calls or is ready to process calls. Before you can activate a script, you must first validate it.

activity code

A number that an agent enters on his or her phoneset during a call. Activity codes provide a way of tracking the time agents spend on various types of incoming calls.They are also known as Line of Business (LOB) codes. For example, the activity code 720 might be used to track sales calls. Agents can then enter 720 on their phonesets during sales calls, and this information can be generated in an Activity Code report.

administrator

A user who is responsible for maintaining the Symposium Call Center Server.

agent

A user who is responsible for handling customer calls.

agent login ID

A unique identification number assigned to a particular agent. The agent uses this number when logging in. The agent ID is not associated with any particular phoneset.

agent to skillset assignment

A matrix that, when you run it, sets the priority of one or more agents for a skillset. Agent to skillset assignments can be scheduled.

agent to supervisor assignment

A definition that, when you run it, assigns one or more agents to specific supervisors. Agent to supervisor assignments can be scheduled.

application

1. A logical entity that represents a Symposium Call Center Server script for reporting purposes. The master script and each primary script have an associated application.The application has the same name as the script it represents. 2. A program that runs on a computer.

application program interface

A set of routines, protocols, and tools that programmers use to develop software applications. APIs simplify the development process by providing commonly used programming procedures.

associated supervisor

A supervisor who is available for an agent if the agent's reporting supervisor is unavailable. *See also* reporting supervisor.

Automatic call distribution call

A call to an ACD-DN. ACD calls are distributed to agents in an ACD group based on the ACD routing table on the switch.

Automatic call distribution directory number

Primary and supplementary DNs associated with an ACD group. Calls made to these DNs are distributed to agents belonging to the group, based on the ACD routing table on the switch.

Automatic call distribution group

An entity defined on the switch for the purpose of call distribution. When a customer dials an ACD group, the call is routed to any agent who is a member of that group.

Automatic call distribution routing table

A table configured on the switch that contains a list of ACD-DNs used to define routes for incoming calls. This ensures that incoming calls not processed by Symposium Call Center Server will be queued to ACD groups and handled by available agents.

Automatic call distribution subgroup

An entity defined on the switch to assign supervisory responsibilities. Each subgroup has one supervisor phoneset and a number of agent phonesets associated with it. Agents can log on to any phoneset within their ACD subgroup. The supervisor must log on to the supervisor phoneset to monitor his or her assigned agents.

C

call age

The amount of time a call was waiting in the system before being answered by an agent.

call intrinsic

A script element that stores call-related information assigned when a call enters the Symposium Call Center Server. *See also* intrinsic, skillset intrinsic, time intrinsic, and traffic intrinsic.

call presentation class

A collection of preferences that determines how calls are presented to an agent.

call priority

A numerical value assigned in a script that defines the relative importance of a call. If two calls are in the queue when an agent becomes available, and one call is queued with a higher priority than the other, the agent receives the higher priority call first. *See also* skillset priority.

call treatment

A script element that enables you to provide handling to a call while it is waiting to be answered by a call center agent. For example, a caller can hear a recorded announcement or music while waiting for an agent.

call variable

A script variable that applies to a specific call. A call variable follows the call through the system and is passed from one script to another with the call. *See also* global variable, variable.

Calling Line Identification

This is an optional service that identifies the telephone number of the caller. This information can then be used to route the call to the appropriate agent or skillset. The CLID can also be displayed on an agent's phoneset.

CDN

See controlled directory number.

CLAN

See Customer local area network.

CLID

See Calling Line Identification.

client

The part of Symposium Call Center Server that runs on a personal computer or workstation and relies on the server to perform some operations. *See also* server.

command

A building block used with expressions, variables, and intrinsics to create scripts. Commands perform distinct functions, such as routing a call to a specific destination, playing music to a caller, or disconnecting a caller.

controlled directory number

A special directory number that allows calls arriving at the switch to be queued when the CDN is controlled by an application such as Symposium Call Center Server. When a call arrives at this number, the switch notifies the application and waits for routing instructions, which are performed by scripts in Symposium Call Center Server.

Customer local area network

The LAN to which your corporate services and resources connect. The Symposium Call Center Server and client both connect to the CLAN. Third-party applications that interface with the server also connect to this LAN.

D   DBMS

Database Management System

deactivated script
A script that does not process any new calls. If a script is in use when it is deactivated, calls continue to be processed by the script until they are completed.

default activity code
The activity code that is assigned to a call if an agent does not enter an activity code manually, or when an agent presses the activity code button twice on his or her phoneset.

default skillset
The skillset to which calls are queued if they have not been queued to a skillset or a specific agent by the end of a script.

desktop user
A configured user who can log on to the Symposium Call Center Server from a client PC.

DHCP
See dynamic host configuration protocol.

Dial-Up Networking
See Remote Access Services.

Dialed Number Identification Service
An optional service that allows Symposium Call Center Server to identify the phone number dialed by the incoming caller.

directory number
The number that identifies a phoneset on a switch. The directory number (DN) can be a local extension (local DN), a public network telephone number, or an automatic call distribution directory number (ACD-DN).

directory number call
A call that is presented to the DN key on an agent's phoneset.

display threshold
A threshold used in real-time displays to highlight a value below or above the normal range.

DMS
Digital Multiplex Switch.

DN
See directory number.

DN call
See directory number call.

DNIS
See Dialed Number Identification Service.

dongle
The attachment plugged into the parallel port of a server connected to a DMS/ MSL-100 switch that authenticates the serial number required at the time of server installation.

dynamic host configuration protocol
A protocol for dynamically assigning IP addresses to devices on a network.

dynamic link library
A library of executable functions or data that can be used by a Windows application. Typically, a DLL provides one or more particular functions and a program accesses the functions by creating either a static or dynamic link to the DLL. A DLL can be used by several applications at the same time.

E

ELAN
See embedded local area network.

embedded local area network
A dedicated Ethernet TCP/IP LAN that connects the Symposium Call Center Server and the switch.

Emergency key
A key on an agent's phoneset that, when pressed by an agent, automatically calls his or her supervisor to notify the supervisor of a problem with a caller.

event

1. An occurrence or action on the Symposium Call Center Server, such as the sending or receiving of a message, the opening or closing of an application, or the reporting of an error. Some events are for information only, while others can indicate a problem. Events are categorized by severity: information, minor, major, and critical. 2. An action generated by a script command, such as queuing a call to a skillset or playing music.

expression

A building block used in scripts to test for conditions, perform calculations, or compare values within scripts. *See also* logical expression, mathematical expression, and relational expression.

F **first-level threshold**

The value that represents the lowest value of the normal range for a statistic in a threshold class. The system tracks how often the value for the statistic falls outside this value.

G **global settings**

Settings that apply to all skillsets that are configured on your system.

global variable

A variable that contains values that can be used by any script on the system. The value of a global variable can only be changed in the Script Variable Properties sheet. It cannot be changed in a script. *See also* call variable, variable.

I **ICM**

See Intelligent Call Manager.

Incalls key

The key on an agent phoneset to which incoming ACD and Symposium Call Center Server calls are presented.

Intelligent Call Manager
A high capacity call center TCP/IP interface to the switch that enables the exchange of messages between the switch and a remote host computer.

Internet Protocol address
An identifier for a computer or device on a TCP/IP network. Networks use the TCP/IP protocol to route messages based on the IP address of the destination. The format of an IP address is a 32-bit numeric address written as four values separated by periods. Each value can be 0 to 255. For example, 1.160.10.240 could be an IP address.

intrinsic
A word or phrase used in a script to gain access to system information about skillsets, agents, time, and call traffic that can then be used in formulas and decision-making statements. *See also* call intrinsic, skillset intrinsic, time intrinsic, and traffic intrinsic.

IP address
See Internet Protocol address.

L   LAN
See Local area network.

Line of Business code
See activity code.

LOB code
See activity code.

Local area network
A computer network that spans a relatively small area. Most LANs connect workstations and personal computers and are confined to a single building or group of buildings.

logical expression

A symbol used in scripts to test for different conditions. Logical expressions are AND, OR, and NOT. *See also* expression, mathematical expression, and relational expression.

M   master script

The first script executed when a call arrives at the Symposium Call Center Server. A default master script is provided with Symposium Call Center Server, but it can be customized by an authorized user. It can be deactivated but not deleted. *See also* primary script, script, and secondary script.

mathematical expression

An expression used in scripts to add, subtract, multiply, and divide values. Mathematical expressions are addition (+), subtraction (-), division (/), and multiplication (*). *See also* expression, logical expression, and relational expression.

music route

A resource installed on the switch that provides music to callers while they wait for an agent.

N   night mode

A skillset state in which the server does not queue incoming calls to the skillset, and in which all queued calls are given night treatment. A skillset goes into night mode automatically when the last agent logs off, or the administrator can put it into night mode manually. *See also* out-of-service mode, transition mode.

NPA

See Number Plan Area.

Number Plan Area

Area code

O

object linking and embedding
A compound document standard that enables you to create objects with one
application and then link or embed them in a second application.

ODBC
See Open Database Connectivity.

OEM
Original equipment manufacturer

OLE
See object linking and embedding.

Open Database Connectivity
A Microsoft-defined database application program interface (API) standard.

out-of-service mode
A skillset state in which the skillset does not take calls. A skillset is out of
service if there are no agents logged on or if the supervisor puts the skillset into
out-of-service mode manually. *See also* night mode, transition mode.

out-of-service skillset
A skillset that is not taking any new calls. While a skillset is out of service,
incoming calls cannot be queued to the skillset. *See also* skillset.

P

pegging
The action of incrementing statistical counters to track and report on system
events.

pegging threshold
A threshold used to define a cut-off value for statistics such as short call and
service level. Pegging thresholds are used in reports.

PEP
See Performance Enhancement Package.

Performance Enhancement Package

A Symposium Call Center Server supplementary software application that enhances the functionality of previously released software by improving performance, adding functionality, or correcting a problem discovered since the original release.

phoneset

The physical device, connected to the switch, to which calls are presented. Each agent and supervisor must have a phoneset.

phoneset display

The display area on an agent's phoneset where information about incoming calls can be communicated.

Position ID

1. A unique identifier for a phoneset, used by the switch to route calls to the phoneset. 2. Referred to as Telephony/Port Address in Symposium Call Center Server.

primary ACD-DN

A directory number that callers can dial to reach an ACD group.

primary script

A script that is executed or referenced by the master script. A primary script can route calls to skillsets, or it can transfer routing control to a secondary script. *See also* master script, script, and secondary script.

R   RAN

recorded announcement

RAN route

See recorded announcement route.

RAS

See Remote Access Services.

recorded announcement route

A resource installed on the switch that offers a recorded announcement to callers.

relational expression

An expression used in scripts to test for different conditions. Relational expressions are less than (<), greater than (>), less than or equal to (< =), greater than or equal to (> =), and not equal to (< >). *See also* expression, logical expression, and mathematical expression.

Remote Access Services

A feature built into Windows NT and Windows 95 that enables users to log on to an NT-based LAN using a modem, X.25 connection, or WAN link. This feature is also known as Dial-Up Networking.

reporting supervisor

The supervisor who has primary responsibility for an agent. When an agent presses the Emergency key on the phoneset, the emergency call is presented to the agent's reporting supervisor. *See also* associated supervisor.

S

sample script

A script that is installed with the Symposium Call Center Server client. Sample scripts are stored as text files in a special folder on the client. The contents of these scripts can be imported or copied into user scripts to create scripts for typical call center scenarios.

SCM

See Service Control Manager.

script

A set of instructions that relates to a particular type of call, caller, or set of conditions, such as time of day or day of week. *See also* master script, primary script, and secondary script.

script variable

See variable.

second-level threshold

The value used in display thresholds that represents the highest value of the normal range for a given statistic. The system tracks how often the value for the statistic falls outside this value.

secondary directory number

A DN defined on the agent's phoneset as a Centrex line for incoming and outgoing non-ACD calls.

secondary script

Any script (other than a master or primary script) that is referenced from a primary script or any other secondary script. There is no pegging of statistics for actions occurring during a secondary script. *See also* master script, primary script, and script.

server

A computer or device on a network that manages network resources. Examples of servers include file servers, print servers, network servers, and database servers. The Symposium Call Center Server is used to configure the operations of the call center. *See also* client.

service

A process that adheres to a Windows NT structure and requirements. A service provides system functionality.

Service Control Manager

A Windows NT process that manages the different services on the PC.

service level

The percentage of incoming calls answered within a configured number of seconds.

service level threshold

A parameter that defines the number of seconds within which incoming calls should be answered.

Simple Network Management Protocol
A set of protocols for managing complex networks. SNMP works by sending messages, called protocol data units (PDUs), to different parts of a network and then analyzing the responses.

site
A system using Symposium Call Center Server that can be accessed using SMI.

skillset
A group of capabilities or knowledge required to answer a specific type of call.

skillset intrinsic
A script element that inserts information about a skillset in a script. Skillset intrinsics return values such as skillsets, integers, and agent IDs. These values are then used in queuing commands. *See also* call intrinsic, intrinsic, time intrinsic, and traffic intrinsic.

skillset priority
An attribute of a skillset assignment that determines the order in which calls from different skillsets are presented to an agent. When an agent becomes available, calls might be waiting for several of the skillsets to which the agent belongs. The server presents the call queued for the skillset for which the agent has the highest priority.

standby
In skillset assignments, a property that grants an agent membership in a skillset, but makes the agent inactive for that skillset.

supervisor
A user who manages a group of agents. *See also* associated supervisor, reporting supervisor.

supplementary ACD-DN
A DN associated with a primary DN. Any calls to the supplementary DN are automatically routed to the primary DN. A supplementary DN can be a toll-free (1-800) number.

switch

The hardware that receives incoming calls and routes them to their destination.

switch resource

A device that is configured on the switch. For example, a CDN is configured on the switch, and then is used as a resource with Symposium Call Center Server. *See also* acquired resource.

Symposium Call Center Server call

A call to a CDN that is controlled by the Symposium Call Center Server. The call is presented to the Incalls key on an agent's phoneset.

system-defined script

The Master_Script. This script can be customized or deactivated by a user, but cannot be deleted. This script is the first script executed for every call arriving at the call center.

T

TCP/IP

See Transport Control Protocol/Internet Protocol.

telephony

The science of translating sound into electrical signals, transmitting them, and then converting them back to sound. The term is used frequently to refer to computer hardware and software that perform functions traditionally performed by telephone equipment.

threshold

A value for a statistic at which system handling of the statistic changes.

threshold class

A set of options that specifies how statistics are treated in reports and real-time displays. *See also* display threshold, pegging threshold.

time intrinsic

A script element that stores information about system time, including time of day, day of week, and week of year. *See also* call intrinsic, intrinsic, skillset intrinsic, and traffic intrinsic.

Token Ring
A PC network protocol developed by IBM. A Token Ring network is a type of computer network in which all the computers are arranged schematically in a circle.

traffic intrinsic
An intrinsic that inserts information about system-level traffic in a script. *See also* call intrinsic, intrinsic, skillset intrinsic, and time intrinsic.

transition mode
A skillset state in which the server presents already queued calls to a skillset. New calls queued to the skillset are given out-of-service treatment. *See also* night mode, out-of-service mode.

Transport Control Protocol/Internet Protocol
The communication protocol used to connect devices on the Internet. TCP/IP is the standard protocol for transmitting data over networks.

treatment
See call treatment.

U

user-created script
A script that is created by an authorized user on the Symposium Call Center Server system. Primary and secondary scripts are user-created scripts.

user-defined script
A script that is modified by an authorized user on the Symposium Call Center Server system.

utility
A program that performs a specific task, usually related to managing system resources. Operating systems contain a number of utilities for managing disk drives, printers, and other devices.

V   validation

The process of checking a script to ensure that all the syntax and semantics are correct. A script must be validated before it can be activated.

variable

A placeholder for values calculated within a script, such as CLID. Variables are defined in the Script Variable Properties sheet and can be used in multiple scripts to determine treatment and routing of calls entering the Symposium Call Center Server. *See also* call variable, global variable.

W   WAN

See Wide area network.

Wide area network

A computer network that spans a relatively large geographical area. Typically, a WAN consists of two or more local area networks (LANs). The largest WAN in existence is the Internet.

workload scenarios

Sets of configuration values defined for typical patterns of system operations. Five typical workload scenarios (entry, small, medium, large, and upper end) are used in the Capacity Assessment Tool for capacity analysis for the Symposium Call Center Server.

Index

A

ACD
    configuring groups, 51
    groups and subgroups verification, 85
    groups for CDN, configuring, 51
    subgroups, configuring, 59
    verification, 85
ACD DNs
    ACD groups configuration, 53
    configuring, 61
agents
    calls not presented, 101
    configuring ACD groups configuration, 53
    configuring logon IDs, 70
    configuring on the server, 71
    configuring phoneset, 66
    configuring phoneset keys, 63
    configuring phoneset on the server, 66
    configuring phonesets, 63, 65
    unable to log on, 100
    verifying agents configuration, 88
    verifying configuration, 88
    verifying phoneset configuration, 86, 88

B

BGDATA
    configuring, 35
    updating table, 35
Business Group, logon parameters, 79

C

CDNs
    configuring, 60
    configuring in controlled mode, 55
    configuring in default mode, 55
    configuring on server, 62
    verifying configuration, 89
client
    components, 7
components
    client, 7
    server, 6
configuration
    checking for server, 75
    DNIS sample script, 93
    logon failure, 84
    music and RAN routes sample script, 91
    server, 74
    server and switch datafill, 77
    troubleshooting, 99
    verification overview, 82
    verifying ACD, 85
    verifying ACD groups and subgroups, 85
    verifying agent phonesets, 86
    verifying agents, 88
    verifying CDNs, 89
    verifying DNISs, 93
    verifying ICM link, 83
    verifying music and RAN routes, 91
    verifying phonesets, 86
    verifying server logon, 83
    verifying supervisor, 88
    verifying supervisor phonesets, 87
configuring
    ACD, 53
    ACD DN, 61
    ACD groups, 51
    ACD groups for ACD DNs, 53
    ACD groups for agents, 53
    ACD groups for CDN, 51
    ACD subgroups, 59
    agent logon IDs, 70
    agent phoneset keys, 63
    agent phonesets, 65
    agent phonesets on the server, 66

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