Nortel Networks Symposium Call Center Server

for DMS/MSL-100
Administrator's Guide

Product release 5.0   Standard 1.0   April 2004

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Publication number:	297-2183-401
Product release:	5.0
Document release:	Standard 1.0
Date:	April 2004

Publication history

Contents

9   Managing agent to supervisor assignments   205

10   Managing agent to skillset assignments   217

11   Working with alarms and events   229

Chapter 1

Getting started

In this chapter

Overview

Introduction

The *Nortel Networks Symposium Call Center Server Administrator's Guide for DMS/MSL-100* provides information on how to configure and manage the configuration of Symposium Call Center Server.

Restrict access to this guide

This guide contains sensitive information about maintaining Symposium Call Center Server, including passwords, procedures, and information that can damage the system if not used correctly. Nortel Networks recommends that access to this guide be restricted to senior administrators only.

Optional features

Some of the features described in this guide are optional. To determine which features you have access to, Nortel Networks supplies a special code called a keycode that you use when you install the Symposium Call Center Server software. Fields and commands for features that you did not purchase are not available.

Symposium Web Client

Symposium Call Center Server Release 5.0 can also be administered using the Symposium Web Client, a browser-based thin client for administrators and supervisors. If you are using the Symposium Call Center Web Client, refer to the *Symposium Call Center Web Client Guide* and online Help.

Note: Server maintenance utilities, such as backup, restore, alarm monitor, event browser, server performance monitor, and voice prompt editor still require the use of the Symposium Call Center Server client.

Skills you need

Nortel Networks product knowledge

Knowledge of, or experience with, the following Nortel Networks products is helpful when administering Symposium Call Center Server:

- Symposium Call Center Server
- third-party voice processing system
- the DMS-100 family of switches or the MSL-100 switch

PC experience or knowledge

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

- Windows 2000 Professional, or Windows XP

Other experience or knowledge

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

- analytical skills
- knowledge of your call center organizational structure and your call center objectives

What's new in Release 5.0?

Introduction

Release 5.0 introduces the following new features that impact this guide.

Increased skillset capacity

Symposium Call Center Server Release 5.0 allows you to have a maximum of 1000 skillsets, including system-defined skillsets and local skillsets. This is an increase from Release 4.2, which allowed up to 350 skillsets.

Increased IVR capacity

Symposium Call Center Server Release 5.0 supports up to a maximum of 1000 IVR ports. Symposium Call Center Server Release 4.2 provided support for up to 500 IVR ports.

Section A: Call center setup and management tasks

In this section

Switch configuration tasks

Introduction

Before you can use Symposium Call Center Server with the switch, you must configure the switch.

Note: To use the Symposium Call Center Server with your switch, you require Intelligent Call Manager (ICM) on the switch. For more information about ICM, refer to the ICM documentation.

Switch configuration tasks

You must perform the following tasks to configure the switch for Symposium Call Center Server:

- Configure the server logon process.

- Configure RAN and music routes, including routes for forced incoming and overflow announcements, in table ACDRTE, and call treatments in table AUDIO.

- Configure the ACD groups in table ACDGRP.

- Configure the ACD subgroups in table ACDSGRP.

- Configure ACD-DNs in table DNROUTE.
  Note: Before defining ACD-DNs, you must define the area code and office code in the table TOFCNAME.

- Configure agent and supervisor phonesets using the SERVORD utility.
  Note: Before you can configure phonesets, you must define the NCOS in table NCOS, and features for the customer group in table CUSTHEAD.

- Define agent logon IDs in table ACDLOGIN.

For detailed instructions, refer to the *Symposium and DMS/MSL-100 Switch Guide*.

Initial setup tasks

Introduction

Initial setup tasks include all of those tasks required to create a system that performs in the manner required to meet your call center objectives. (For help in planning and setting up a new system, refer to the *Symposium Call Center Server Setup Guide*.)

Initial setup tasks

The following table lists initial setup tasks:

Task	For more information, see
Installing the Symposium Call Center Server client	*Installation and Maintenance Guide*
Setting up security—defining access classes and giving users authority to connect to the server and perform various functions	"Adding access classes" on page 35 and "Adding desktop user accounts" on page 51
Creating scripts	*Scripting Guide*
Creating threshold classes to control how statistics are pegged in reports and how they appear in displays	"Adding threshold classes" on page 140
Administering the switch (CDNs, music/RAN routes, phonesets, voice ports, activity codes, and DNISs)	"Adding CDNs" on page 71, "Adding music/RAN routes" on page 79, "Adding phonesets" on page 85, "Adding voice ports" on page 90, "Adding activity codes" on page 101, "Adding DNISs" on page 107
Customizing real-time displays	"Real-time displays" on page 113

Task	For more information, see
Choosing the types of historical statistics to be collected and how long they are stored	"Configuring historical statistics collection" on page 128
Creating call presentation classes	"Adding call presentation classes" on page 157
Creating skillsets	"Adding skillsets" on page 174
Creating supervisors	"Adding or changing supervisors" on page 186
Creating agents	"Adding agents" on page 195
Creating scheduled agent to supervisor assignments	"Adding agent to supervisor assignments" on page 209
Creating scheduled agent to skillset assignments	"Adding agent to skillset assignments" on page 221
Creating custom reports	*Historical Reporting and Data Dictionary*
Generating reports	*Supervisor's Guide*
Scheduling regular system backups	*Installation and Maintenance Guide*

Ongoing call center management tasks

Introduction

From time to time, changes in your call center require changes to the configuration of the server. During system installation, the installer created a default system administrator. You can add other system administrators. You must add users, user groups, and application administrators, as required, so that others can use the system.

Ongoing call center management tasks

The following table lists ongoing call center management tasks:

Task	For more information, see
Adding and maintaining threshold classes to control how statistics are treated in reports, statistics, and displays	Chapter 5, "Managing threshold classes"
Administering the switch (CDNs, music/ RAN routes, phonesets, voice ports, activity codes, and DNISs)	Chapter 3, "Administering the switch"
Changing the historical statistics collection and real-time displays configuration	Chapter 4, "Working with displays and statistics"
Adding and maintaining call presentation classes and skillsets	Chapter 6, "Managing skillsets and call presentation"
Adding and maintaining supervisors	Chapter 7, "Managing supervisors"
Adding and maintaining agents	Chapter 8, "Managing agents"
Adding and maintaining agent to supervisor assignments	Chapter 9, "Managing agent to supervisor assignments"

Task	For more information, see
Adding and maintaining agent to skillset assignments	Chapter 10, "Managing agent to skillset assignments"
Creating and modifying custom reports	*Historical Reporting and Data Dictionary*
Generating reports and using real-time displays	*Supervisor's Guide*
Scheduling regular system backups	*Installation and Maintenance Guide*
Creating and maintaining scripts	*Scripting Guide*

Section B: Using SMI Workbench

In this section

Adding servers

Introduction

This section introduces you to the System Management Interface (SMI) Workbench. Through the SMI Workbench, you access the SMI window, which contains all of the functions available on Symposium Call Center Server.

Using a dial-up connection to the server

Client PCs that are not on the same LAN as the server must use Dial-Up Networking to establish a network connection. For instructions, refer to the *Installation and Maintenance Guide*.

Note: You cannot generate reports across a dial-up (PPP) connection.

To add a server

1   From the Windows Start menu, choose Programs → SMI Workbench.

2   Double-click Add System.

   Result: The Add SMI System dialog box appears.

3   Enter the computer name or the IP address of the server you want to access.

Note: For a dial-up connection, enter the IP address.

4   If the client PC has a network connection to the server, click Verify address to verify that the computer name or IP address is correct and reachable.

5   Click Next.
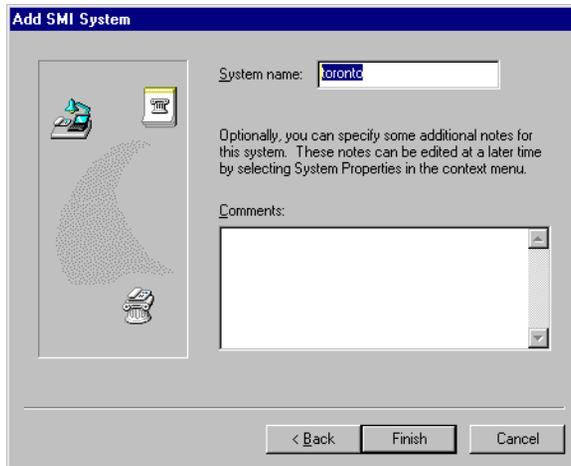
6   (Optional) Enter notes or a comment that describes this SMI system.

7   Click Finish.

Result: The server appears in the SMI Workbench folder.

To group servers by location

Group servers by location if the client PC is used to administer servers in different physical locations.

To group SMI systems, create subfolders in the SMI Workbench folder. Name these subfolders by the site (location) names. Click and drag the servers into the appropriate folders.

Logging on to the server

Introduction

To access the Symposium Call Center Server client functions, you must log on to the server.

To log on

1   Double-click the server in the SMI Workbench folder (or double-click the desktop shortcut, if one is available).

Result: The SMI Login dialog box appears.
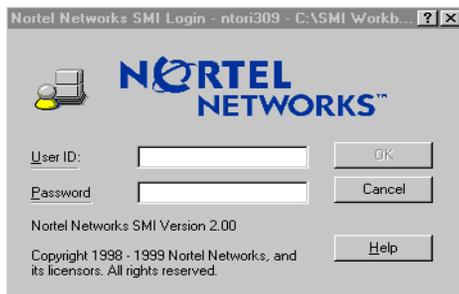
2   In the User ID box, type your user ID.

3   In the Password box, type your password.

4   Click OK.

Result: The Login dialog box closes and the SMI window appears.

Overview of the SMI window

Introduction

The SMI window displays a tree of system administration tasks to which you have access. This window appears after you log on to the server.

SMI window

The following figure shows the SMI window. The contents of the window depend on the system administration tasks available and your access permissions. Your SMI window may look different from the example below.
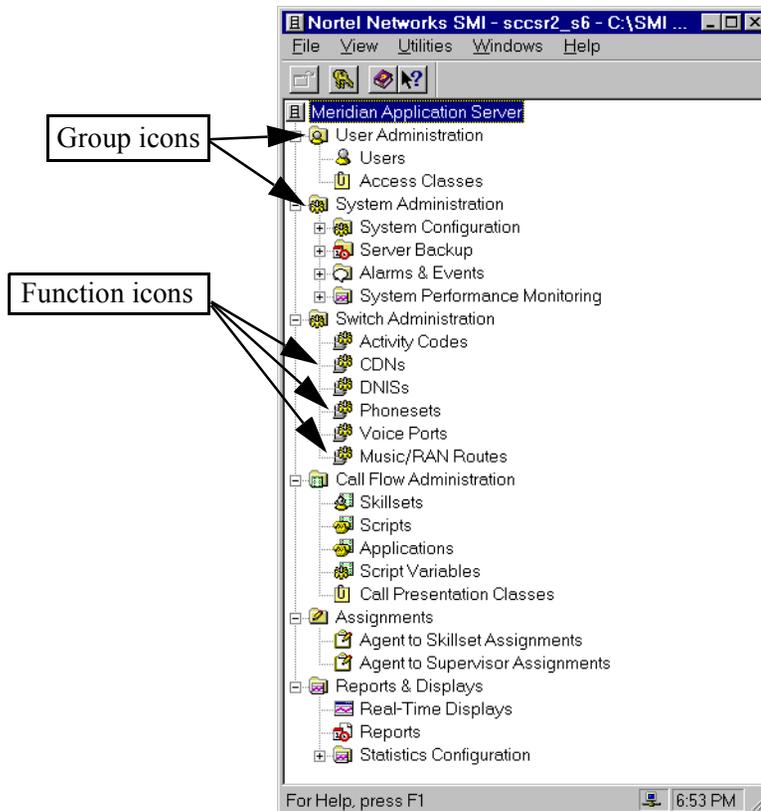
Chapter 2

Managing security

In this chapter

Overview of managing security

Introduction

Today, much information that is vital to a company's well-being is transmitted over networks. These networks must be protected so that only authorized users can access, change, or delete information.

The system administrator is responsible for establishing and maintaining system security. The administrator sets up security by assigning logon passwords and access classes to users. By assigning the appropriate access classes to the appropriate users, the administrator can help ensure system security.

Example

You may want to restrict access to call-by-call reports to senior administrators, since stored call-by-call data, such as caller-entered data, can contain confidential information. To restrict access, define an access class with the ability to

- generate reports
- generate call-by-call reports
- view user data

Then assign this access class to senior administrators.

Setting up security

To set up security, perform these tasks:

1. Define access classes.

2. For each access class, select the Symposium Call Center Server functions that members of that class can use. For a complete list of functions and privileges, see page 40.

3. Create desktop user accounts for users who require access to Symposium Call Center Server functions.

4.   Assign access classes to user accounts, giving users the privileges they need to perform their jobs.

Password retry lockout

Users are locked out of the system if they attempt to log on more than three consecutive times using an invalid password. (This is based on Windows settings configured during the installation.) To restore a user's access to the system, an administrator must reset the password retry count to zero. For more information, see "To restore a user's access to the server" on page 56.

If the locked-out user is an administrator, another administrator must restore access. (If you are logged on as sysadmin, you will not be locked out.)

Note: If there is no other administrator, only Nortel Networks customer support staff can reset the account. Therefore, be sure to create at least two users with administrator privileges.

Password expiry

The desktop user password expires after 180 days. Seven days before the expiry of the password, the Symposium Call Center Server client software starts to display a warning message during the user login. If the desktop user password is allowed to expire, the administrator must reset the password. For more information, see "Resetting desktop passwords" on page 58.

Note: The sysadmin password does not expire.

Section A: Working with access classes

In this section

Overview of access classes

Introduction

An access class is a set of privileges for the various functions available for Symposium Call Center Server.

Default access classes

The installation process creates three default access classes:

- **adminGroup:** Users belonging to this class have administrator access to the system and can access all functions.
- **Call Center Admin:** Users belonging to this class can access all functions except the switch administration functions (such as configuring phonesets and CDNs) and system administration functions (such as backup, restore, and the alarm monitor).
- **Supervisor:** Users belonging to this class can view and change reporting agents, create and run reports, and create and view real-time displays.

Adding access classes

To add an access class

1   From the SMI window, choose User Administration → Access Classes.

   Result: The Access Classes window appears.

2   Choose File → New.

   Result: The New Access Class property sheet appears.

3   In the Name box, type a name for the access class. Use a descriptive name that describes the type of user who will have this access level or the type of privileges available at this access level.

4 In the Comments box, enter additional optional information about the access class.

5 Click the Access tab.

Result: The Access page appears, showing the available Symposium Call Center Server functions and the level of access that members of this access class have for each function.
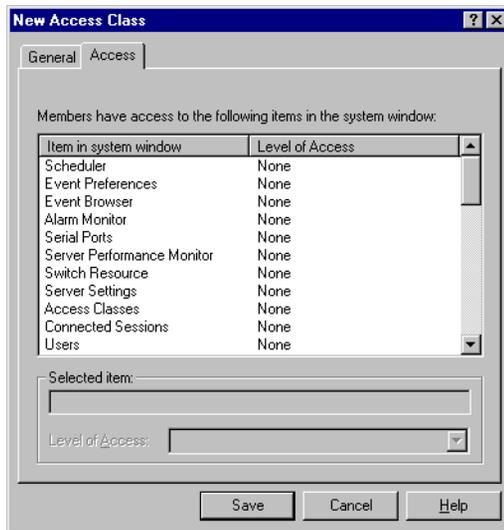
Notes:

▪ Most of the items in this list correspond to functions in the SMI window.

▪ After you assign users to an access class, a third tab appears, named Members. This tab shows you all the users who belong to the access class.

6 Select a function you want to make available to this access class. For a list of functions and available access levels, see "Functions and privileges" on page 40.

Result: The selected function appears in the Selected item box.

7 Choose the desired level of access for that function.

8 Repeat steps 6 and 7 for each function you want this access class to have.

9 Click Save.

Result: You return to the Access Classes window.

10 To return to the SMI window, choose File → Close.

Viewing the members of an access class

To view the members of an access class

1   From the SMI window, choose User Administration → Access Classes.

    Result: The Access Classes window appears.

2   Select the access class for which you want to display the members.

3   Choose File → Properties.

    Result: The Access Class Properties property sheet appears.

4   Click the Members tab.
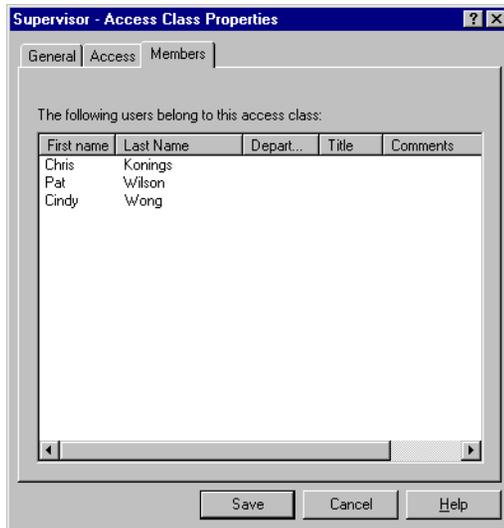
5   Click Save.

Result: You return to the Access Classes window.

6   To return to the SMI window, choose File → Close.

Other procedures for access classes

To change the properties of an access class

From the Access Classes window, select the access class you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview the list of access classes

From the Access Classes window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print the list of access classes

From the Access Classes window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete an access class

Note: You cannot delete the default access classes (AdminGroup, Call Center Admin, or Supervisor) or any access class that has members.

From the Access Classes window, select the access classes you want to delete, and then choose File → Delete.

Functions and privileges

Function	Privilege	Description
Access Classes	View	Allows users to display the Access Classes window and view the properties for any access class.
	Edit	Allows users to display the Access Classes window and view and change properties for any access class.
	Create/Delete	Allows users to display the Access Classes window and view, change, add, and delete access classes.
Activity Codes	View	Allows users to display the Activity Codes window and view properties for all activity codes.
	Edit	Allows users to display the Activity Codes window and view and change properties for all activity codes.
	Create/Delete	Allows users to display the Activity Codes window and view, change, add, and delete activity codes.
Agent Threshold Classes	View	Allows users to view the Agent Threshold Classes window and view properties for agent threshold classes.
	Edit	Allows users to view and change properties for agent threshold classes.
	Create/Delete	Allows users to view, change, add, and delete properties for agent threshold classes.

Function	Privilege	Description
Agent to Skillset Assignments	View own agents only	Allows users to display the Agent to Skillset Assignments window (showing only those assignments containing their reporting and associated agents), and view the properties, schedules, and matrixes for these assignments. The matrix specifies agents' priority for a skillset.
	View and assign own agents only	Allows users to display the Agent to Skillset Assignments window and view, change, add, and delete properties, schedules, and matrixes for assignments created for their reporting and associated agents.
	View all agents	Allows users to display the Agent to Skillset Assignments window and view properties, schedules, and matrixes for assignments created for all agents.
	View and assign all agents	Allows users to display the Agent to Skillset Assignments window and view, change, add, and delete properties, schedules, and matrixes for assignments created for all agents.
Agent to Supervisor Assignments	View all agents	Allows users to display the Agent to Supervisor Assignments window and view properties and schedules for all assignments.
	View and assign all agents	Allows users to display the Agent to Supervisor Assignments window and view, change, add, and delete properties and schedules for all assignments.
Alarm Monitor	View	Allows users to open the Alarm Monitor and view event details for system alarms.
	Create/Delete	Allows users to open the Alarm Monitor, view event details for system alarms, and clear and acknowledge alarms.

Function	Privilege	Description
Application Threshold Classes	View	Allows users to view the Application Threshold Classes window and view properties for application threshold classes.
	Edit	Allows users to view and change properties for application threshold classes.
	Create/Delete	Allows users to view, change, add, and delete properties for application threshold classes.
Applications	View	Allows users to display the Applications window and view the properties of any application.
	Edit	Allows users to display the Applications window and view and change the properties of any application.
Backup Scheduler	View	Allows users to display the Backup Scheduler window and view the scheduled date and time of backups.
	Edit	Allows users to display the Backup Scheduler window and view and change the scheduled date and time of backups.
	Create/Delete	Allows users to display the Backup Scheduler window and view, change, and delete scheduled backups.
Call Presentation Classes	View	Allows users to display the Agent Call Presentation Classes window and view the properties for all call presentation classes.
	Edit	Allows users to display the Agent Call Presentation Classes window and view and change the properties for all call presentation classes.
	Create/Delete	Allows users to display the Agent Call Presentation Classes window and view, change, add, and delete call presentation classes.

Function	Privilege	Description
CDNs	View	Allows users to display the CDNs window and view properties for all CDNs.
	Edit	Allows users to display the CDNs window and view and change properties for all CDNs.
	Create/Delete	Allows users to display the CDNs window and view, change, add, delete, acquire, and deacquire CDNs.
Connected Sessions	View	Allows users to display the Connected Sessions window.
	Create/Delete	Allows users to display the Connected Sessions window and log off connected users.
DNISs	View	Allows users to display the DNISs window and view properties for all DNISs.
	Edit	Allows users to display the DNISs window and view and change properties for all DNISs.
	Create/Delete	Allows users to display the DNISs window and view, change, add, and delete DNISs.
Emergency Help	View	Allows users to open the Emergency Help window.
Event Browser	View	Allows users to open the Event Browser and view all Informational, Critical, Minor, or Major events.
Event Preferences	View	Allows users to view event preferences configured for event codes.
	Edit	Allows users to view event preferences and increase or decrease their severity.
	Create/Delete	Allows users to create event preferences, increase or decrease their severity, and delete event preferences.

Function	Privilege	Description
Formulas	View	Allows users to display the Formulas window and view properties for all formulas.
	Edit	Allows users to display the Formulas window and view and change properties for all formulas.
	Create/Delete	Allows users to display the Formulas window and view, change, add, and delete formulas.
Historical Statistics	View	Allows users to view the Historical Statistics property sheet. This property sheet determines the type of historical statistics collected, and how long they are stored.
	Edit	Allows users to view and change the Historical Statistics properties.
Maintenance	View	Allows users to monitor the status of server components, perform maintenance operations, and run diagnostics.
Music/RAN Routes	View	Allows users to display the Music/RAN Routes window and view properties for all music/RAN routes.
	Edit	Allows users to display the Music/RAN Routes window and view and change properties for all music/RAN routes.
	Create/Delete	Allows users to display the Music/RAN Routes window and view, change, add, delete, acquire, and de-acquire music/RAN routes.
Nodal Threshold Class	View	Allows users to view the Nodal Threshold Classes property sheet.
	Edit	Allows users to view and change properties for the nodal threshold class.

Function	Privilege	Description
Phonesets	View	Allows users to display the Phonesets window and view properties for all phonesets.
	Edit	Allows users to display the Phonesets window and view and change properties for all phonesets.
	Create/Delete	Allows users to display the Phonesets window and view, change, add, delete, acquire, and deacquire phonesets.
Real-Time Displays	View own agents	Allows users to view reporting and associated agents in the real-time displays.
	View own agents–create displays	Allows users to view reporting and associated agents in the real-time displays, and view and change the properties of real-time display definitions.
	View all agents	Allows users to view all agents in the real-time displays.
	View all agents–create displays	Allows users to view all agents in the real-time displays, and view and change the properties of real-time display definitions.
Real-time Statistics	View	Allows users to view the Real-time Statistics Configuration property sheet. This property sheet determines the type of real-time statistics collected, and the viewing mode.
	Edit	Allows users to view and change the Real-time Statistics Configuration properties.
Reports	Create and run any report	Allows users to display the Reports window. In combination with one of the following options, allows users to generate reports.
Reports– Agent Performances	Create and run any report	Allows users to modify the properties (including the schedule and selection criteria) of user-defined performance reports, and produce ad hoc performance reports.

Function	Privilege	Description
Reports–Call by Call	Create and run any report	Allows users to modify the properties (including the schedule) of user-defined call-by-call reports, and produce ad hoc call-by-call reports.
Reports–Other	Create and run any report	Allows users to modify the properties of user-defined configuration reports, and produce ad hoc configuration reports.
Scheduler	View	Allows users to display the Scheduler window and view the scheduled date and time for scheduled events. These events include all server activities that are scheduled to run unattended, including report generation, agent to skillset and agent to supervisor assignments, and backups.
	Edit	Allows users to display the Scheduler window and view and change the scheduled date and time for scheduled events.
	Create/Delete	Allows users to display the Scheduler window and view, change, and delete scheduled events.
Script Variables	View	Allows users to view the Script Variables window and view the properties of any script variable.
	Edit	Allows users to view the Script Variables window and view and change the properties of any script variable.
	Create/Delete	Allows users to view the Script Variables window and view, change, add, and delete script variables.
Scripts	View	Allows users to display the Scripts window and view scripts in the Script Editor.
	Edit	Allows users to display the Scripts window and view and change scripts in the Script Editor.
	Create/Delete	Allows users to display the Scripts window, and view and change scripts in the Script Editor, as well as add and delete scripts.

Function	Privilege	Description
Serial Ports	View	Allows users to display the Serial Ports window and view properties for all serial ports.
	Edit	Allows users to display the Serial Ports window and view and change properties for all serial ports.
Server Performance Monitor	View	Allows users to display the Server Performance Monitor. This monitor displays information about processing capacity, memory, and storage space.
Server Settings	View	Allows users to display detailed information about the server, such as the software release it is running and its serial number.
Skillset Threshold Classes	View	Allows users to view the Skillset Threshold Classes property sheet for skillset threshold classes.
	Edit	Allows users to view and change properties for skillset threshold classes.
	Create/Delete	Allows users to view, change, add, and delete properties for skillset threshold classes.
Skillsets	View	Allows users to display the Skillsets window, view the properties for all skillsets, and view the Global Settings.
	Edit	Allows users to display the Skillsets window, view, and change the properties for all skillsets, and view and change the Global Settings.
	Create/Delete	Allows users to display the Skillsets window, view, change, add, and delete skillsets, and view and change the Global Settings.
Switch Resource	View	Allows users to view the Switch Resource properties. These properties display information about the switch type.
	Edit	Allows users to view and change the Switch Resource properties.

Function	Privilege	Description
Users	View reporting agents only	Allows users to display the Users window and view properties for reporting agents.
	View and edit reporting agents only	Allows users to display the Users window and view and change properties for reporting agents.
	Edit all agents–create agents only	Allows users to display the Users window and view, change, create, and delete any agents.
	View all users	Allows users to display the Users window and view properties for all desktop users, supervisors, and agents. **Note:** This access privilege is required for generation of call-by-call reports.
	Edit all users	Allows users to display the Users window and view and change properties for all desktop users, supervisors, and agents.
	Edit all users–create any type	Allows users to view the Users window and view, change, add, and delete desktop users, supervisors, and agents.
Voice Ports	View	Allows users to display the Voice Ports window and view properties for all voice ports.
	Edit	Allows users to display the Voice Ports window and view and change properties for all voice ports.

Section B: Working with desktop user accounts

In this section

Overview of desktop user accounts

Introduction

A desktop user account uses the client application to access Symposium Call Center Server. You must create a desktop user account for each user who requires access to the server. You must also assign each account to the access class that gives users the privileges they need to perform their job.
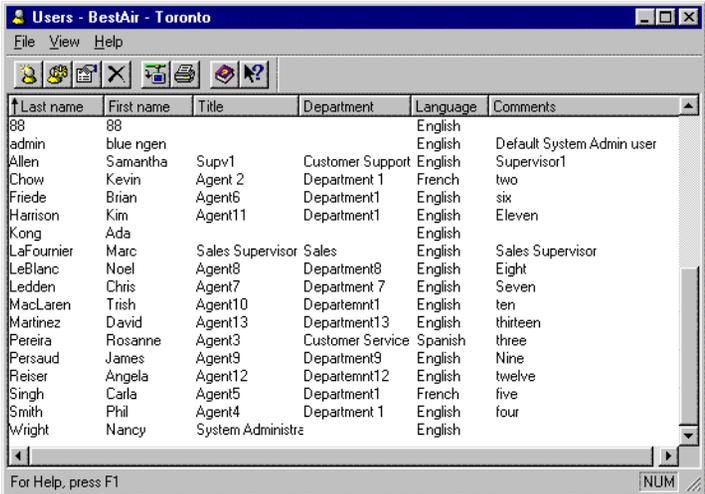
Adding desktop user accounts

Introduction

When you create a desktop user account, the account is assigned the default password, "password." When users log on to the server, they are prompted to change the password.

Note: The desktop user password expires after 180 days. Seven days before the expiry of the password, the Symposium Call Center Server client software starts to display a warning message during the user logon. Users can change their password by logging on to the server and choosing Utilities → Change Password.

To add desktop user accounts

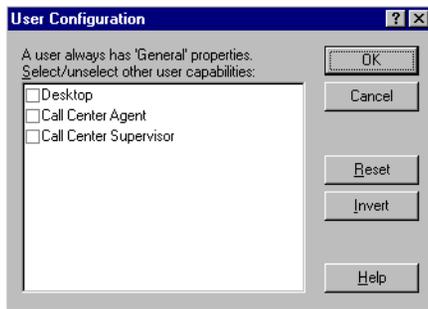**1**   From the SMI window, choose User Administration → Users.

Result: The Users window appears.

2   Choose File→ New.

    Result: The User Configuration dialog box appears.

3   Click Desktop.

    Note: If this user will also have Supervisor capabilities, select Call Center Supervisor (for more information about setting up supervisors, see Chapter 7, "Managing supervisors"). If this user will also have Agent capabilities, select Call Center Agent (for more information about setting up agents, see Chapter 8, "Managing agents"). If you assign a desktop user Agent capabilities, you must also assign Supervisor capabilities.

4   Click OK.

    Result: The New User property sheet appears.
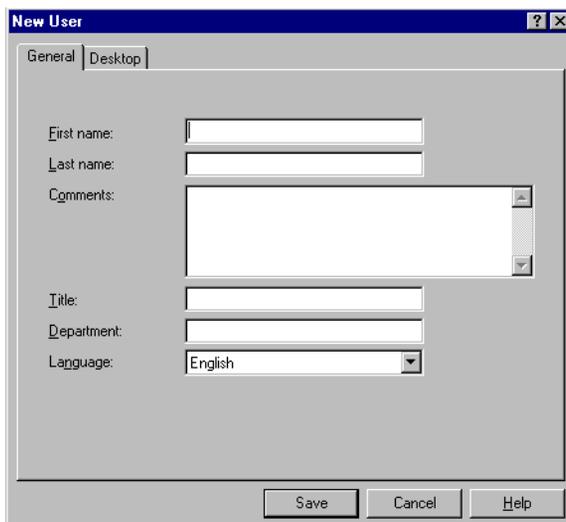
5 Enter the user's contact information in the boxes on the General property page.

6 Click the Desktop tab.

> **Result:** The Desktop property page appears.

7 Enter information into the following boxes:

User ID: The user ID with which the desktop user logs on to the server. You cannot change the user ID after you save the user account.

Password retry count: The desktop Password retry count shows the number of times the user has tried to log on and failed.

Note: When a user is locked out, you must set the password retry count to zero. To do this, restore the User desktop status to OK by clicking Restore. (The Lock Out button on the Desktop property page changes to Restore when the User is locked out.)

User desktop status: The User desktop status shows whether the user currently has access to the system. A user's status can be OK or Locked Out. Users are locked out under the following conditions:

■ when the system administrator locks them out manually (see "Controlling access to the server" on page 55)

■ when the user tries and fails to log on the maximum number of times

Note: You may need to confirm that the user ID (login ID) is configured at the switch, before the user can log on to the system.

Access Class: The access class to which you want to assign the user.

Note: The access class must already exist (for more information about adding access classes, see "Adding access classes" on page 35).

8 Click Save to save your settings and return to the Users window.

Note: If you click Save before you enter the necessary information, the system prompts you to complete the required boxes.

Result: The new user appears in the list of users.

9 To return to the SMI window, choose File → Close.

Controlling access to the server

Introduction

This section provides instructions for restricting and restoring access to the server for individual desktop users.

## To prevent users from accessing the server

ATTENTION	If the desktop user you want to lock out is currently logged on, log the desktop user off (see "Logging users off" on page 63).

1   From the SMI window, choose User Administration → Users.

   Result: The Users window appears.

2   Select the user you want to prevent from accessing the system.

3   Choose File → Properties.

   Result: The User Properties property sheet appears.

4   Click the Desktop tab.

Result: The Desktop property page appears.
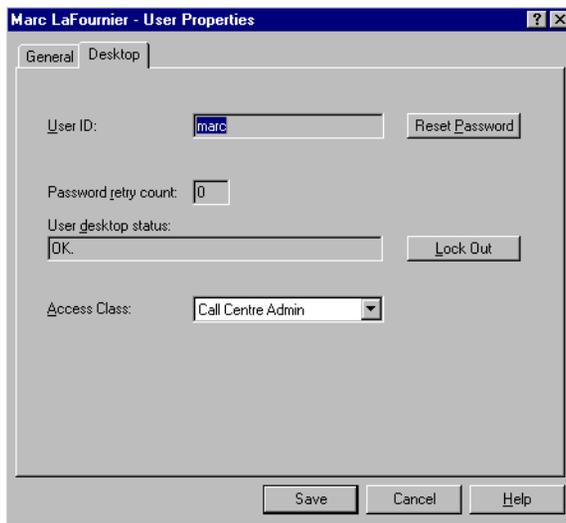
5   Click Lock Out.

Result: The User desktop status changes to Locked out by an administrator. This continues to be the current status of the user until an administrator restores it to OK. The Lock Out button changes to Restore.

6   Click Save.

Result: You return to the Users window.

7   To return to the SMI window, choose File → Close.

To restore a user's access to the server

Use this procedure when a user is locked out of the system after exceeding the password retry count, or after an administrator manually locks out a user.

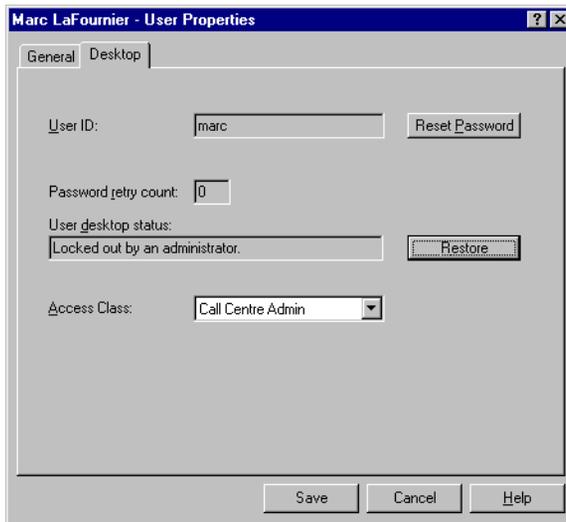**1**   From the SMI window, choose User Administration → Users.

Result: The Users window appears.

2   Select the user whose access you want to restore.

3   Choose File → Properties.

   Result: The User Properties property sheet appears.

4   Click the Desktop tab.

5   Click Restore.

   Result: The User desktop status changes to OK. The Restore button
   changes to Lock Out.

6   Click Save.

   Result: You return to the Users window.

7   To return to the SMI window, choose File → Close.

Resetting desktop passwords

When to use

Follow this procedure when users forget their desktop password or if the desktop password has expired.

By resetting user passwords, you restore the default password, which is "password." Once users are able to log on again, they must change the default password.

Notes:

- The desktop user password expires after 180 days unless users change the password within that time. Seven days before the expiry of the password, the Symposium Call Center Server client software displays a warning message during the user logon.

- You cannot change user passwords. To change their password, users log on to the server, and then choose Utilities → Change Password.

- When you reset user desktop passwords, they may be locked out of the server. If this happens, restore the user (see "To restore a user's access to the server" on page 56).

To reset the desktop password

1 From the SMI window, choose User Administration → Users.

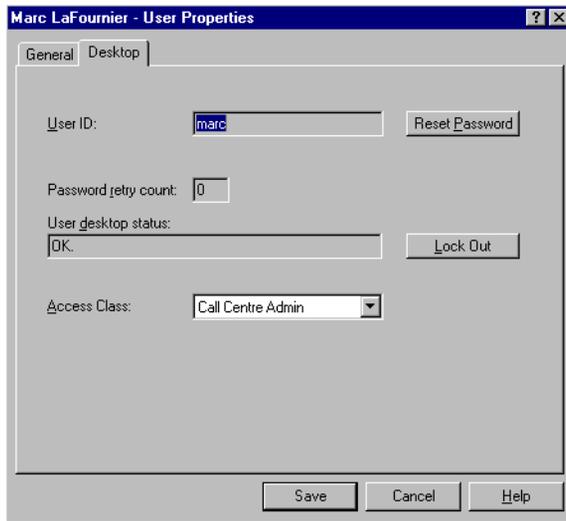**Result:** The Users window appears.

2 Select the user whose desktop password you want to reset.

3 Choose File → Properties.

Result: The User Properties property sheet appears.

4   Click the Desktop tab.

　　　　Result: The Desktop property page appears.

5   Click Reset Password.

　　　　Result: A dialog box appears indicating that the user must use the
　　　　password "password" to log on next time.

6   Click Yes to confirm.

7   Click Save.

　　　　Result: You return to the Users window.

8   To return to the SMI window, choose File → Close.

Other procedures for desktop users

To change the capabilities of a desktop user

You can assign or revoke supervisor and agent capabilities for a desktop user.

From the Users window, select the desktop user you want to change, and then choose File → Configuration.

For step-by-step instructions, press F1 to access the online Help.

To change the properties of a desktop user

ATTENTION Ensure that the user is not logged on when you change his or her access class. If the user is logged on, the server logs the user off when you make the change.

From the Users window, select the desktop user you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To print the list of users (including desktop users)

From the Users window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete a desktop user

Note: If you delete a user who is currently logged on, the user is automatically logged off.

From the Users window, select the desktop user you want to delete, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Section C: Managing user sessions

In this section
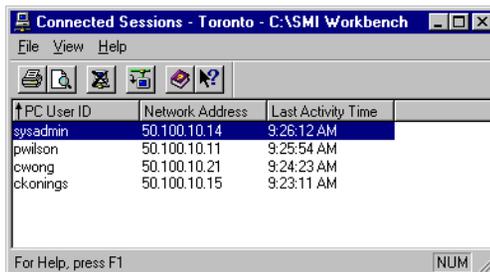
Viewing connected users

When to use

Follow the procedure in this section to check the status of a desktop user's connection to the server.

To view a list of connected users

1   From the SMI window, choose System Administration → System Configuration → Connected Sessions.

Result: The Connected Sessions window appears. This list shows the desktop users who are logged on to the server, their user IDs, their location (network address), and the time of their last activity on the system.

2   To return to the SMI window, choose File → Close.

To print a list of connected users

From the Connected Users window, choose File → Print.

For step-by-step instructions on printing, access the online Help.

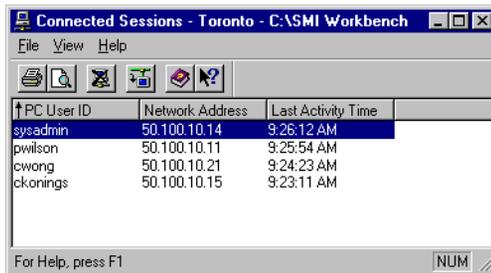# Logging users off

When to use

Follow the procedure in this section to disconnect a user from the server.

Note: This procedure disconnects and logs users off immediately. The disconnected user is not warned.

To log a user off

1   From the SMI window, choose System Administration → System Configuration → Connected Sessions.

   Result: The Connected Sessions window appears.

2   Select the PC User ID of the user you want to disconnect.

3   Choose File → Disconnect Session.

   Result: The program prompts you to confirm that you want to disconnect the user, since this action logs the user off immediately.

4   Click Yes.

   Result: You return to the Connected Sessions window. The user is no longer on the list.

5   To return to the SMI window, choose File → Close.

Chapter 3

Administering the switch

In this chapter

Overview

Acquired resources

You must configure certain resources to enable Symposium Call Center Server to acquire them from the switch. These resources include

- Controlled Directory Numbers (CDNs)
- phonesets
- voice ports

When you configure these resources on the server, you add them to a catalog maintained by the server. At startup, or whenever you make a change to the catalog of resources (for example, if you add a phoneset), the server acquires these resources. For each acquired resource, the switch sends messages regarding the resource to the server.

States of acquisition

The following table shows the states that switch resources can enter:

IF the current state is	THEN
Not Acquired	the resource has just been created or deacquired.
Acquired-Pending	there is a request into the system to acquire the resource.
Acquired	the resource is acquired from the switch.
Acquired without Secondary DN (phonesets)	the server was not able to acquire the secondary DN.
Acquired Login (voice port)	the voice port has been acquired, and is in logon state.
Acquired Logout (voice port)	the voice port has been acquired, and is in logoff state.
Acquired-Failed	a problem occurred during an attempt to acquire the resource. The server is unable to acquire it.

IF the current state is	THEN
Deacquired-Pending	there is a request into the system to deacquire the resource.
Deacquired-Failed	there is a problem deacquiring the resource from the switch, and the system is unable to deacquire it.
Deacquired without Secondary DN (phoneset)	a phoneset that was in Acquired without Secondary DN state has been deacquired.
Deacquired failed on Secondary DN (phoneset)	a problem occurred during deacquisition of the phoneset, because the server was unable to deacquire the secondary DN.

Note: A change in the status of an acquisition is not automatically reflected in the resource window. To view the current status of the acquisition of a switch resource, choose View → Refresh.

Other resources

To make your reports easier to understand, you can assign names to the following resources:

- music/RAN (Recorded Announcement) routes
- activity (line of business) codes
- DNISs

ATTENTION   Information that is configured at the switch must match the configuration on Symposium Call Center Server to ensure that the switch and the system can communicate and function properly.

Section A: Working with CDNs

In this section

Overview of CDNs

A controlled directory number (CDN) enables incoming calls to be queued into the switch and enables messages to be sent to Symposium Call Center Server regarding these calls.

To ensure that Symposium Call Center Server can track when calls are terminated at that CDN, you must do the following:

1. Add the CDN at the switch.

2. Add the CDN at the server.

3. Acquire the CDN at the server.

Adding CDNs

Introduction

To enable the server to acquire a CDN, you must do the following:

1.   Define the CDN at the switch.

2.   Add the CDN on Symposium Call Center Server.

Before you begin

Make sure that the CDN is configured in the DNROUTE table on the switch. For more information, refer to the *Symposium and DMS/MSL-100 Switch Guide*.

To add a CDN

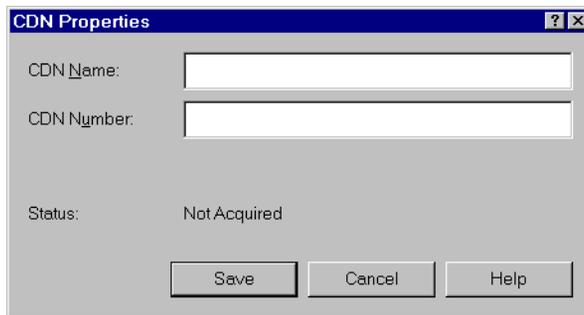**1**   From the SMI window, choose Switch Administration → CDNs.

Result: The CDNs window appears.
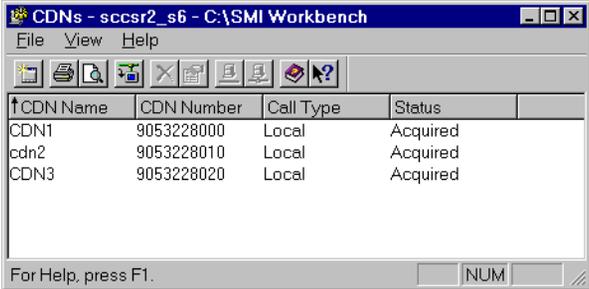
2   Choose File→ New.

Result: The CDN Properties property sheet appears.

3   Enter information into the following boxes:

CDN Name: The name of the CDN as it appears on reports.

CDN Number: The number that is passed to the switch in requests to acquire or deacquire the CDN. This number must be 10 digits, and must match the number that is configured at the switch.

4   Click Save.

Result: The new CDN is added to the list in the CDNs window. It has the status Not Acquired.

5   To return to the SMI window, choose File → Close.

After you finish

Now that you have added the CDN, you must acquire it to enable the system to track calls terminated on it. To acquire the CDN, see "Acquiring and deacquiring CDNs" on page 73.

Acquiring and deacquiring CDNs

Introduction

Follow this procedure to request the system to acquire or deacquire a CDN. Symposium Call Center Server must acquire a CDN to be able to track when calls are terminated at that CDN.

Note: Nortel Networks recommends that you deacquire a CDN before you change its configuration on the switch.

Before you begin

Make sure that the CDN has been configured on the switch and added on Symposium Call Center Server (see "Adding CDNs" on page 71).

To acquire or deacquire a CDN

1 From the SMI window, choose Switch Administration → CDNs.

   Result: The CDNs window appears.

2 Select the CDN you want to acquire or deacquire.

3 If you want to acquire the CDN, choose File → Acquire. If you want to deacquire the CDN, choose File → Deacquire.

4 To refresh the CDN status on the display, choose View → Refresh.

5 Click Save.

   Result: You return to the CDNs window.

6 To return to the SMI window, choose File → Close.

Changing CDNs on the switch

Introduction

If you need to make changes to CDNs on the switch, you must follow specific steps to avoid causing service breaks in Symposium Call Center Server. For example, if you remove a CDN that is currently acquired by Symposium Call Center Server, you can cause some services to stop processing. This prevents calls from being handled by Symposium Call Center Server.

To change CDNs on the switch

1   Deacquire the CDN from Symposium Call Center Server.

2   Delete, move, add, or make changes to the CDN as necessary on the switch.

3   Acquire the CDN on Symposium Call Center Server.

Other procedures for CDNs

To change the name of a CDN

Notes:

- You must deacquire a CDN before you change its name.

- You cannot change the number assigned to a CDN once it has been saved. You must delete the CDN and recreate it with a new number.

From the CDNs window, select the CDN you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview a list of CDNs

From the CDNs window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print a list of CDNs

From the CDNs window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete a CDN

Notes:

- Before deleting a CDN, make sure that its status is one of the following: Not-Acquired or Acquired-Failed.

- This procedure does not delete the CDN from the switch.

From the CDNs window, select the CDNs you want to delete, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Section B: Working with music/RAN routes

In this section

Overview of music/RAN routes

Introduction

A music/RAN route is a resource installed on the switch that offers music or a recorded announcement to callers on hold. Callers can be transferred to music and RAN routes in one of the following ways:

- by the switch
- by a Symposium Call Center Server script
- by an agent

If you want to include a music/RAN route name on reports, you must define the route on Symposium Call Center Server.

Default route

When you install the server, the dummy route named Default_Route is created to serve as your default RAN route. This dummy route is unlikely to be valid for your system. You must create another valid route to use as the default RAN route.

Note: Since Default_Route is a system-defined route, you cannot delete it.

Adding music/RAN routes

Introduction

You must define music/RAN routes on Symposium Call Center Server to enable the route names to appear on reports.
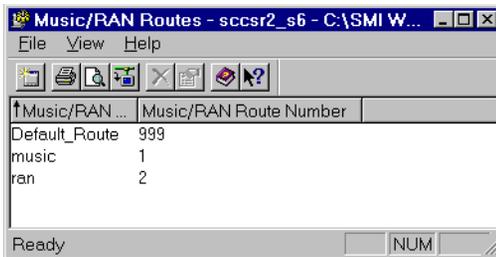
Before you begin

Make sure that the route is configured in table ACDRTE on the switch. For more information, refer to the *Symposium and DMS/MSL-100 Switch Guide*.
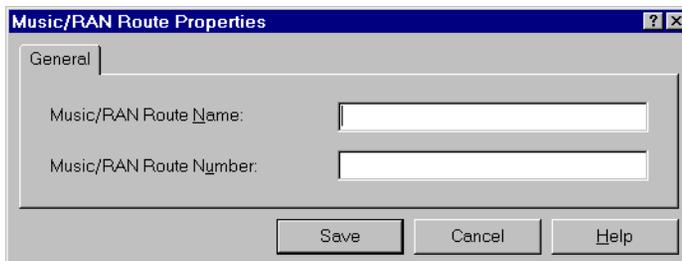
To add a music/RAN route

1 From the SMI window, open Call Center Management → Switch Administration → Music/RAN Routes.

Result: The Music/RAN Routes window appears.

2 Choose File → New.

Result: The Music/RAN Route Properties property sheet appears.

3   Enter information in the following boxes:

Music/RAN Route Name: The route name as it appears on reports.

Music/RAN Route Number: The number of the music or RAN route as it is configured at the switch.

4   Click Save.

Result: The route is added to the list in the Music/RAN Routes.

5   To return to the SMI window, choose File → Close.

Other procedures for music/RAN routes

To change the name of a music/RAN route

Note: You cannot change the number assigned to a music/RAN route once it has been saved. You must delete the route and recreate it with a new number.

On the Music/RAN Routes window, select the route you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview the list of music/RAN routes

From the Music/RAN Routes window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print the list of music/RAN routes

From the Music/RAN Routes window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete music/RAN routes

On the Music/RAN Routes window, select the routes you want to delete, and then choose File → Delete.

Note: This procedure does not delete the route from the switch.

For step-by-step instructions, press F1 to access the online Help.

Section C: Working with phonesets

In this section

Overview of phonesets

Introduction

You must add and acquire each phoneset at which agents and supervisors will log on to the system. When Symposium Call Center Server acquires a phoneset, the switch begins sending messages about the phoneset to the server.

Agent and supervisor phonesets

On the switch, each phoneset is associated with an ACD subgroup. Configure one phoneset in that subgroup as a supervisor set. Configure the remaining phonesets as ACD sets. An agent in the subgroup can log on at any ACD phoneset associated with the subgroup.

You associate agents and supervisors in the following ways:

- on the agents' Supervisor property page (see "To assign supervisors" on page 201)

- with the Agent to Supervisor application (see Chapter 9, "Managing agent to supervisor assignments")

Adding phonesets

Introduction

You must add and acquire each phoneset that you want to use with Symposium Call Center Server so that the switch can send messages to the server when an agent logs on to the phoneset.

Before you begin

Configure the phoneset on the switch with the SERVORD utility. For more information, refer to the *Symposium and DMS/MSL-100 Switch Guide*.

To add a new phoneset

1   From the SMI window, choose Switch Administration → Phonesets.

Result: The Phonesets window appears.

2   Choose File → New.

      Result: The Phoneset Properties property sheet appears.
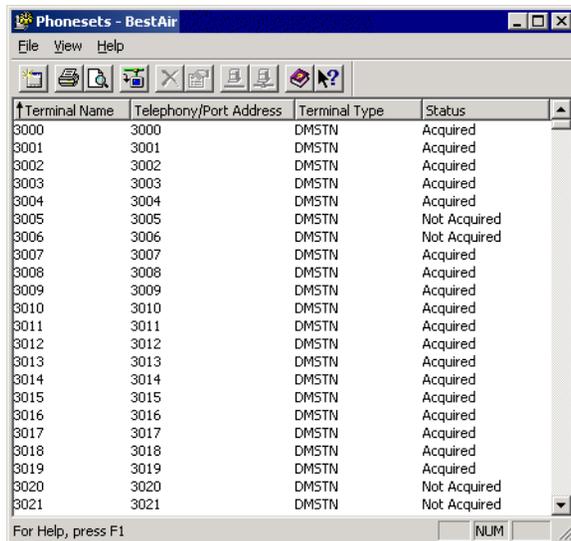
```
┌─────────────────────────────────────────────────────────┐
│ Phoneset Properties                                ? X   │
├─────────────────────────────────────────────────────────┤
│  ┌─────────┐                                             │
│  │ General │                                             │
│ ─┘         └───────────────────────────────────────────  │
│                                                           │
│    Terminal Name:          ┌──────────────────────────┐  │
│                            │                          │  │
│                            └──────────────────────────┘  │
│    Telephony/Port Address: ┌──────────────────────────┐  │
│                            │                          │  │
│                            └──────────────────────────┘  │
│    Secondary DN:           ┌──────────────────────────┐  │
│                            │                          │  │
│                            └──────────────────────────┘  │
│                                                           │
│    ☐ Add Voice Port for External IVR                     │
│                                                           │
│                                                           │
│    Status:            ┌──────────────────────────────┐   │
│                       │ Not Acquired                 │   │
│                       └──────────────────────────────┘   │
│                                                           │
│          ┌─────────┐   ┌─────────┐   ┌─────────┐         │
│          │  Save   │   │ Cancel  │   │  Help   │         │
│          └─────────┘   └─────────┘   └─────────┘         │
└─────────────────────────────────────────────────────────┘
```

3   Enter information into the following boxes:

      Terminal Name: The name of the phoneset as it appears on reports.

      Telephony/Port Address: The address of the ACD phoneset on the telephony server. This must match the Position ID configured on the switch.

      Secondary DN: The DN at which the agent can be reached for non-ACD calls.

4   Ensure that the Add Voice Port box is unchecked.

5   Click Save.

      Result: The phoneset is added to the list in the Phonesets window. It has the status Not Acquired.

6   To return to the SMI window, choose File → Close.

After you finish

After adding the phoneset, you must acquire it so that the switch sends messages to the system when an agent logs on to the phoneset.

Acquiring and deacquiring phonesets

Introduction

You must acquire each phoneset so that the switch sends a message to the system when an agent logs on to the phoneset.

Note: Nortel Networks recommends that you deacquire a phoneset before you configure it on the switch.

Before you begin

Make sure that the phoneset is configured on the switch, and has been added on Symposium Call Center Server (see "Adding phonesets" on page 85).

To acquire or deacquire a phoneset

1   From the SMI window, choose Switch Administration → Phonesets.

    Result: The Phonesets window appears.

2   Select the phoneset you want to acquire or deacquire.

3   If you want to acquire the phoneset, choose File → Acquire. If you want to deacquire the phoneset, choose File → De-acquire.

    Result: The phoneset status changes to Acquired (or Deacquired) pending.

4   To refresh the phoneset status on the display, choose View → Refresh.

5   To return to the SMI window, choose File → Close.

Other procedures for phonesets

To change the name of a phoneset

Notes:

- You must deacquire a phoneset before you change its properties.

- You cannot change the telephony/port address or secondary DN assigned to a phoneset. To change these properties, delete the phoneset and recreate it.

From the Phonesets window, select the phoneset you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview the list of phonesets

From the Phonesets window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print the list of phonesets

From the Phonesets window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete a phoneset

Notes:

- Before deleting the phoneset from the system, ensure that the phoneset status is either Not-Acquired or Acquired-Failed. You cannot delete a phoneset if it is Acquired or Deacquired-Failed.

- This procedure does not delete the phoneset from the switch.

From the Phonesets window, select the phoneset you want to delete, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Section D: Working with voice ports

In this section

Adding voice ports

Introduction

When adding a voice port, you must add a phoneset, and then configure it as a voice port.

Note: Configuration of Voice Ports in Symposium Call Center Server is not required with front-end IVR systems. Only IVR systems that have implemented integration with Symposium Call Center Server can benefit from configuring voice ports on Symposium Call Center Server.

Limitations

You can define up to 1000 voice ports.

Before you begin

Make sure that the voice port is configured on the switch. For more information, refer to the *Symposium and DMS/MSL-100 Switch Guide*.

To add a phoneset for voice port

1 From the SMI window, choose Switch Administration → Phonesets.

Result: The Phonesets window appears.

2   Choose File → New.

Result: The Phoneset Properties property page appears.

3   Enter information into the following boxes:

Terminal Name: The name of the phoneset as it appears on reports.

Telephony/Port Address: This must match the Position ID configured for the voice port on the switch.

4   Ensure that the Add Voice Port box is checked.

5   Click Save.

Result: The phoneset is added to the list in the Phonesets window.

6   To return to the SMI window, choose File → Close.

To add a voice port

1   From the SMI window, choose Switch Administration → Voice Ports.

Result: The Voice Ports window appears.

2   From the Voice Ports window, select the phoneset that you added.

3   Choose File → Properties.

Result: The Voice Port Properties property sheet appears.

4   Enter information into the following boxes:

Voice Port Name: The name of the voice port as it appears on reports, if it is different from the phoneset name.

5   Click Save.

Result: The voice port channel number is added to the list in the Voice Ports window.

6   To return to the SMI window, choose File → Close.

After you finish

After adding a voice port, you must acquire it so that the switch knows that the port is controlled by Symposium Call Center Server.

Acquiring and deacquiring a voice port

To acquire or deacquire a voice port

Note: Nortel Networks recommends that you deacquire a voice port before you configure it on the switch.

1   From the SMI window, choose Switch Administration → Voice Ports.

    Result: The Voice Ports window appears.

2   Select the voice port you want to acquire or deacquire.

3   If you want to acquire the voice port, choose File → Acquire. If you want to deacquire the voice port, choose File → Deacquire.

4   To refresh the voice port status on the display, choose View → Refresh.

Other procedures for voice ports

To change the name of a voice port

Note: You cannot change the channel or telephony/port (phoneset ID) address assigned to a voice port. To change these properties, you must delete the voice port and recreate it with the new channel.

From the Voice Ports window, select the voice port you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview a list of voice ports

From the Voice Ports window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print a list of voice ports

From the Voice Ports window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete a voice port

Note: Before deleting a voice port from the system, ensure that the voice port status is either Not-Acquired, Deacquire Failed, or Acquired-Failed.

From the Voice Ports window, select the voice port you want to delete, and then choose File → Deacquire. From the Phonesets window, select the voice port to delete, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Section E: Working with activity codes

In this section

Overview of activity codes

Introduction

An activity (line of business) code is a number that an agent enters on the phoneset keypad during a call. You can use activity codes to identify the types of calls answered by agents (such as sales, service, or support), and the amount of time that they spend on each type of call.

You can generate reports on activity codes, in combination with agent and application, to measure and compare agent performance.

Example: James Jones takes a call for the European skillset. The caller begins by asking questions about the types of vacation packages available. James enters the activity code 540 to identify the call as a vacation inquiry call. After getting the requested information, the caller decides to purchase a package. James enters 541 to indicate that he is now involved in vacation sales activity.

Notes:

- Multiple activity codes can be entered for a single call.
- For information about how activity codes are pegged, refer to the *Historical Reporting and Data Dictionary.*

System default activity code

The server ships with a system default activity code, which cannot be changed or deleted. The system default activity code is assigned to

- calls that are not queued to a skillset
- calls for which no other activity code is assigned

Not Ready reason codes

Introduction

You can use Not Ready reason codes to track the time agents spend in the Not Ready state.

What are Not Ready reason codes?

Not Ready reason codes are numbers that agents enter on the phoneset key pad when going into the Not Ready state. These numbers identify the reason for the Not Ready state. They are used to track the amount of time spent by agents on various activities.

Not Ready reason codes are similar to activity codes, except that the Not Ready activities only apply to agents in the Not Ready state.

Not Ready activities are reported in the Activity Code Agent Report in the same way as other activities. Since Not Ready activities are not associated with a call, they do not have an Application. The Activity Code by Application report shows all the Not Ready activities against a special system application.

You can view the Not Ready reason codes in the Not Ready Reason Codes by Agent report.

In Real-Time Reporting, you can view the number of agents who are in the Not Ready state in your Agent real-time displays. Additionally, in your customized Agent real-time displays, you can choose to view the reason why the agents have pressed the Not Ready key (for example, Lunch, or Break) by adding the Reason column to the display.

To add Not Ready reason codes

You can add Not Ready reason codes in the Activity Codes window, just like you add activity codes. For detailed instructions, see "Adding activity codes" on page 101.

Note: Use a different range of numbers to distinguish the Not Ready reason codes from the other activity codes.

Refer to the *Symposium and DMS/MSL-100 Switch Guide* for information about configuring Not Ready reason codes on the switch.

Adding activity codes

Introduction

You can use activity codes to track time spent on different types of calls. If you do not create activity codes, agents can still enter activity code numbers and the system will report on them. However, when you run Activity Code reports, no names will appear on the reports.

Limitations

You can define up to 998 activity codes.

Before you begin

Before you add an activity code, ensure that the line of business (LOB) feature is enabled on the switch. For more information, refer to the *Symposium and DMS/MSL-100 Switch Guide*.

To add an activity code

1   From the SMI window, choose Switch Administration → Activity Codes.

Result: The Activity Codes window appears.
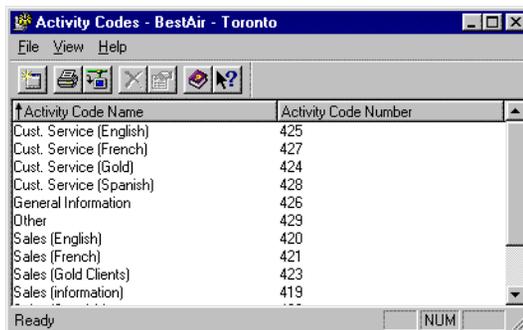
2   Choose File → New.

Result: The Activity Code Properties property sheet appears.

3   Complete the General property page by entering information into these boxes:

Activity Code Name: The name of the activity code as it appears on reports.

Activity Code Number: The number the agent enters at a phoneset to select this activity code.

4   Click Save.

Result: The new activity code is added to the list in the Activity Codes window.

5   To return to the SMI window, choose File → Close.

Other procedures for activity codes

To change the name of an activity code

Note: You cannot change the number assigned to an activity code once it has been saved. To change the number, delete the activity code and recreate it with a new number.

From the Activity Codes window, select the activity code you want to delete, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview a list of activity codes

From the Activity Codes window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print a list of activity codes

From the Activity Codes window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete an activity code

Note: You cannot delete the System_Default_Activity_Code.

From the SMI window, on the Activity Codes window, select the activity code you want to delete, and then choose File → Delete.

Section F: Working with DNISs

In this section

Overview of DNISs

You can report on the numbers (CDNs, ACD-DNs, and Supplementary DNs) dialed by your customers, using the Dialed Number Identification Service (DNIS). You must define each DNIS on which you want to report.

Adding DNISs

Before you begin

Before you configure a new DNIS, ensure that the CDN, ACD-DN, or Supplementary DN is configured in the DNROUTE table on the switch. For more information, refer to the *Symposium and DMS/MSL-100 Switch Guide*.

Limitations

The server supports up to 10 000 DNISs.

To add a DNIS

1   From the SMI window, choose Switch Administration → DNISs.

Result: The DNISs window appears.
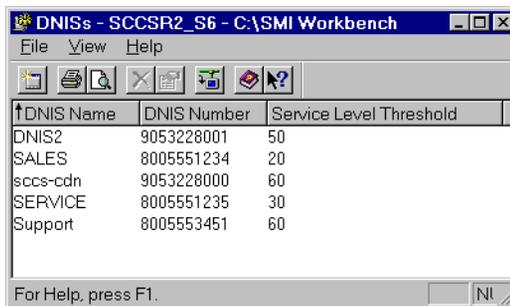
2   Choose File → New.

Result: The DNIS Properties property page appears.
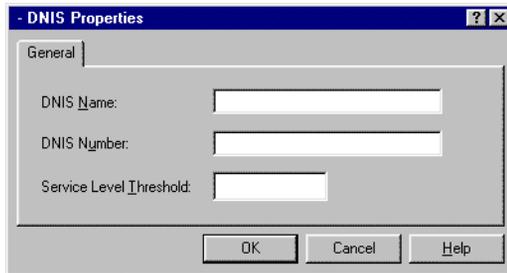
3   Complete the General property page by entering information into these boxes:

DNIS Name: The name of the DNIS as it appears on reports.

DNIS Number: The ACD-DN, CDN, or Supplementary DN number as it is configured on the switch. This number must be 10 digits in length.

Service Level Threshold: Specify the time (in seconds) within which all calls coming through on this DNIS should be answered or abandoned. This threshold value is used in real-time displays.

4   Click Save.

Result: The DNIS appears in the list in the DNISs window.

5   To return to the SMI window, choose File → Close.

Other procedures for DNISs

To change the properties of a DNIS

Note: You cannot change the number assigned to a DNIS once it has been saved. You must delete the DNIS and recreate it with a new number.

From the DNISs window, select the DNIS you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview the list of DNISs

From the DNISs window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print the list of DNISs

From the DNISs window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete a DNIS

From the DNISs window, select the DNIS you want to delete, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Chapter 4

Working with displays and statistics

In this chapter

Section A: Real-time displays

In this section

Overview

Introduction

Real-time displays provide up-to-date statistics for your call center and its resources. You can use these statistics to monitor your call center and determine its effectiveness. Symposium Call Center Server provides you with real-time statistics such as

- agents available or unavailable in a skillset
- calls waiting
- expected waiting time

To use the real-time statistics feature of Symposium Call Center Server, you must configure real-time statistics collection and create real-time displays.

Types of real-time displays

The following types of real-time displays are available:

- agent
- application
- skillset
- nodal

Standard display definitions

Symposium Call Center Server ships with a set of default, or standard, real-time display definitions. The contents of these real-time display definitions are predefined and cannot be modified. Standard real-time display definitions are stored on the server.

User-defined display definitions

You can create user-defined definitions and modify these definitions at any time. The user-defined definitions are stored on the client PC.

Types of statistics

The following types of real-time call processing statistics are available:

- application
- skillset
- agent
- nodal

You can choose which types of real-time statistics you want to display on real-time displays. For more information, see "Configuring real-time statistics collection" on page 118.

Working with real-time displays

Configuring real-time statistics collection

You must configure the server to collect the types of statistics you want to include in your real-time displays. If the server does not collect application statistics, for example, you cannot open the application real-time displays.

When you configure real-time statistics collection, you choose

- the types of statistics to be collected
- viewing modes for the different types of statistics (moving window or interval-to-date)
- the start time and length of the interval in which real-time statistics are accumulated
- the frequency with which real-time statistics are refreshed

Managing formulas

You can use formulas to create customized real-time statistics fields for use in your real-time displays. To create formulas, you combine existing fields using mathematical operators.

Creating real-time displays

You can create user-defined real-time display definitions to display the type of information you need to monitor your call center. For more information, see the *Supervisor's Guide*.

Managing real-time displays

You can change, print a list of, or delete user-defined real-time display definitions. For more information, see the *Supervisor's Guide*.

Using real-time displays

You can view, sort, and print real-time displays. Supervisors can also filter agent and skillset real-time displays to show only their agents, all agents except their agents, or all agents. For more information, see the *Supervisor's Guide*.

Real-time displays and agent keys

Agents should not use the following keys on their phonesets:

- Hotline
- Private line
- Voice call
- Dial Intercom

The use of these keys results in incorrect agent statuses on the real-time displays.

Emergency key and consultations

When an agent is in consultation with another agent (for example, during a transfer or conference), he or she cannot use the Emergency key. However, when the other agent drops off the call, this key become available again.

Viewing modes

Moving window mode

In moving window mode, statistics shown represent the last 10 minutes of system activity.

Interval-to-date mode

In interval-to-date mode, statistics are collected only for the current interval. When the interval is over, data fields initialize to zero and collection begins for the next interval.

Refresh rates

The minimum refresh rate for the collection of real-time statistics data is applied to real-time displays across the entire system. A unique refresh rate can be defined for each individual real-time display, but it cannot be less than the minimum refresh rate defined for the entire system.

Configuring real-time statistics collection

To configure real-time statistics collection

1   From the System Administration window, choose Reports & Displays →
    Statistics Configuration → Real-Time Statistics.

    Result: The Real-Time Statistics property sheet appears.

2   On the General property page, make the desired changes to the general
    properties. You can change the following properties:

    Skillset Statistics: The mode for skillset statistics collection. (For more
    information about modes, see "Overview" on page 114.)

    Nodal: The mode for nodal statistics collection.

Application Statistics: Whether to collect application statistics, and the mode for application statistics collection.

Agent Statistics: Whether to collect agent statistics, and the mode for agent statistics collection.

Data Collection Interval: The length of the period in which real-time statistics are accumulated. To ensure that intervals start at the same time each day, interval lengths can be one of the following: 15 minutes, 30 minutes, 45 minutes, 1 hour, 2 hours, 3 hours, 4 hours, 6 hours, 8 hours, 12 hours, and 24 hours.

One of the intervals starts at: The start time for one of the intervals during a day. The system uses this information to calculate the start times of all other intervals.

For example, a system administrator is modifying the real-time statistics data at 3:00 p.m. He specifies 4 hours as the interval duration. Since the agents' shifts begin at 9:00 a.m., he wants one of the intervals to start every day at that time. He enters 9:00 a.m. as the value for this field. The system automatically calculates the start time for all other intervals to be 1:00 p.m., 5:00 p.m., 9:00 p.m., and 1:00 a.m. The change takes effect immediately, so at 5:00 p.m. the next interval begins.

Minimum refresh rate for Agent Real-time Displays: The minimum refresh rate for agent real-time displays.

Minimum refresh rate for other Real-time Displays: The minimum refresh rate for displays other than agent displays.

3 Click Save.

Note: Nodal and skillset statistics are automatically collected by the system.

Creating formulas

Introduction

Use formulas to create custom real-time statistics fields by combining existing statistics fields with mathematical operators. For example, you can create a customized formula for calculating the service level.

You can select and use these custom fields in your real-time displays. You can also define display thresholds for customized formulas.

> **ATTENTION**
>
> Custom fields created by using formulas cannot be used in reports.

To create formulas

1   From the SMI window, choose Reports & Displays → Statistics Configuration → Formulas.

Result: The Formulas window appears.
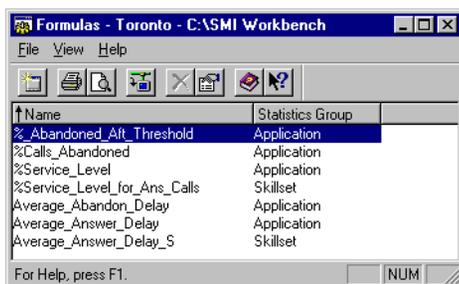
2   Choose File → New.

3 Choose the statistics class (Agent, Skillset, Application, or Nodal) that you want to use.

Result: The Formula Properties property sheet appears.

4 Enter information into the following fields:

Formula Name: The name of your formula.

Comment: Optional. Additional information about the formula.

Definition: The definition of the formula. To add a variable, select it from the Column Name box. To add numbers or arithmetic operators to the definition, click them. For example, to create a customized formula for service level, you might type the following:

Calls Answered – Calls Answered Aft Threshold / Calls Answered

The definition can be up to 250 characters long.

Notes:

- When you select a variable, it appears in the Definition field, with a percent symbol (%) preceding it. The percent symbol identifies it as a variable; the symbol is not an operator.

- You cannot use all operations buttons at all times. Operations buttons that are not available appear dimmed.

- When you click Max or Min, an open bracket is automatically inserted.

5   Click Save.

Result: The new formula is added to the list in the Formulas window.

6   To return to the SMI window, choose File → Close.

Other procedures for formulas

To change a formula

Note: You cannot change standard formulas.

From the Formulas window, select the formula, and then choose File → Open.

For step-by-step instructions, press F1 to access the online Help.

To print a formula

From the Formulas window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete a formula

Note: You cannot delete standard formulas.

From the Formulas window, select the formula, and then choose File → Delete.

For step-by-step instructions, click F1 to access the online Help.

CAUTION

Risk of data loss
The formula you are deleting might be used in existing real-time displays. If you delete a formula that is used in a display, then columns containing the formula appear as blank.

Section B: Managing historical statistics

In this section

Overview of historical statistics collection

Introduction

Symposium Call Center Server enables you to report on such historical statistics as

- the number of calls an agent took during a specified period
- the number of calls that abandoned before an agent became available
- (optionally) call events

However, to do so, you must configure the server to collect these statistics.

Note: Call-by-call statistics are available only if you purchased the call-by-call statistics option, and the option has been activated using a keycode.

Configuring historical statistics collection

When you configure historical statistics collection, you can choose

- the types of statistics to be collected
- the values for system parameters, such as number of agent positions, number of skillsets, and number of calls per hour
- how long historical statistics are stored on your system
- the applications for which call-by-call statistics are collected

The statistics are stored in the system database. The Historical Statistics Configuration window estimates required disk space for the options you have selected, and displays the amount of disk space available.

Types of statistics

When you configure historical statistics, you choose the types of statistics you want to record. The server can collect the following types of statistics:

- activity code
- agent performance

- agent by application
- agent by skillset
- application (see below)
- CDN
- DNIS
- music/RAN route
- skillset
- agent login/logout
- call-by-call

To manage your disk space usage, you can change the number and types of statistics you collect.

Configuring historical statistics collection

Introduction

Use this procedure to configure the following options for historical statistics collection:

- the types of statistics to be collected

- the values for system parameters, such as number of agent positions, number of skillsets, and number of calls per hour

- how long historical statistics are stored on your system

- the applications for which call-by-call statistics are collected

This procedure also shows you how to calculate the amount of disk space required by your selected configuration.

Removal of expired statistics

Each day, the server deletes any historical data that has exceeded the allowable age for data of its type (defined on the Duration property page of the Historical Statistics Configuration window). If the size of the statistics database exceeds the size configured during installation, then the server deletes the oldest unexpired data to provide space for new data.

To configure historical statistics collection

1   From the SMI window, choose Reports & Displays → Statistics
Configuration → Historical Statistics.

Result: The Historical Statistics property sheet appears.

2   In the Call Flows box, check the call flow statistics that you want to collect,
and clear those that you do not want to collect. You can select the following
options:

Application: To collect application statistics, such as calls abandoned and
calls answered for an application.

CDN: To collect CDN statistics, such as calls offered to a CDN and calls
terminated on a CDN.

Skillset: To collect skillset statistics, such as active time, calls answered, and calls answered after threshold for a skillset.

Activity Code: To collect activity code (line of business) statistics, such as total call time charged to an activity code.

DNIS: To collect DNIS statistics, such as calls answered and abandoned for a DNIS number.

Music/RAN Route: To collect RAN and music route statistics, such as the number of times a RAN/music route was accessed, and the total amount of time it was in use.

Note: Options selected here apply to all applications defined in the system database. They cannot be applied to a selected group of applications.

3   In the Agent box, check the agent statistics that you want to collect, and clear those that you do not want to collect. You can choose to collect the following types of statistics:

Performance: To collect agent performance statistics, such as number of ACD calls answered, conferenced, and transferred.

By-Application: To collect statistics, by agent, for individual applications. Statistics available include calls answered for the application and agent talk time for the application.

By-Skillset: To collect statistics, by agent, for individual skillsets. Statistics available include calls answered and short calls answered.

Login/Logout: To collect agent logon and logoff statistics.

4   Click the Parameters tab to configure system parameters.

Result: The Parameters property page appears.

For each parameter, this property page contains the following information:

Configured Value: The number used to calculate the required database size (for example, estimated number of activity codes).

Purchased Value: The maximum number you can configure (this number is controlled by keycodes).

Measured Value: The number currently defined in the system.

System Value: The maximum number that can be defined in the system if all available options are installed.

Note: The measured value for skillsets includes the four system skillsets. The measured value for applications includes the system applications. The number varies depending on the options installed on your server, but it can include Master_Script, ACD_DN_Application, and System_Application.

5 Click the Parameter Name for which you want to change the configured value. You can change the following parameters:

Active Agents: Purchased Value is the number of agents logged on at any time. You cannot change the configured value for this parameter. Measured Value and System Value are not applicable to this parameter.

Agent Positions (phoneset): The number of phonesets defined in the system. Purchased Value is not applicable to this parameter; the number of phonesets is not controlled by a license option.

Skillsets: The number of skillsets defined in the system. Allow for the 416 system skillsets. For example, if you want to define 25 skillsets, then enter 29 as your configured value.

Calls per Hour: The estimated number of calls arriving at the call center within an hour. Measured Value is not applicable to this parameter, as you do not configure the number of calls allowed per hour.

DNISs: The number of DNISs defined in the system.

CDNs: The number of CDNs defined in the system.

Activity Codes: The number of activity codes defined in the system. Allow for the two default activity codes when you configure this value.

Agent Events per Day: The number of agent events (logon, logoff, walkaway, return from walkaway) that occur in one day. Measured Value is not applicable to this parameter, as you do not configure the number of events allowed per day. This estimate is used to calculate usage of disk space.

RAN Routes: The number of RAN routes defined in the system.

Music Routes: The number of music routes defined in the system.

Applications: The number of applications defined in the system. Based on the options installed on your server, up to five system applications might be installed. Allow for these applications when you configure this value.

Nodes: The number of nodes in the network. (Only one node is supported in the Symposium Call Center Server for DMS/MSL-100.)

IVR Ports: The number of voice ports configured on the system.

Note: Symposium Call Center Server supports up to 1000 IVRs. The values you enter here do not affect the size of the database. However, they do control the number of entities you can add to the database.

6   In the Selected Parameter group box, change the Configured Value as required.

7   Click the Duration tab to define the storage duration.

8   Enter a value for each of the following collection periods:

Interval: The number of days that interval statistics are stored by the system.

Daily: The number of days that daily statistics are stored by the system.

Weekly: The number of weeks that weekly statistics are stored by the system.

Monthly: The number of months that monthly statistics are stored by the system.

IVR Voice Port: The number of days voice port logon and logoff statistics are stored by the system.

Agent login and logout: The number of days that agent logon and logoff statistics are stored by the system.

First business day of the week: The day defined as the first business day of the week. Weekly statistics are cumulated automatically at the beginning of the day designated as the first business day.

Length of business day: The number of hours per business day that the system collects historical statistics.

Business week contains: The number of business days per week that the system collects historical statistics.

Call by call: The number of days call-by-call statistics are stored by the system. In a Symposium Call Center Server network, use the same value for all servers in the network.

Note: These values are used to calculate the size of the database. They do not affect statistics collection.

9 Click the Call by Call tab to select applications for call-by-call statistics collection.

The list contains all applications defined on your server. You can choose whether to collect call-by-call statistics for local calls, network calls, both, or neither.

10 To change the call-by-call statistics collection method for an application, click in the Call by Call column beside the application, and select one of the following options:

  ■ **Local**—For calls originating on the local server, collect call event data for local events. Data collection ends when the call terminates.

  ■ **None**

11 To determine the disk space requirements of your selected configuration, click Calculate.

12 The Required fields are updated to show the disk space requirement of the selected configuration. The Actual fields show the disk space available.

13 Click Save.

Note: Save is enabled only if the Required value (the disk space required by the selected configuration) is less than the Actual value (the disk space available). If Save is not enabled, you must modify your configuration.

Chapter 5

Managing threshold classes

In this chapter

Overview

Introduction

A threshold class is a set of options that specifies how statistics are treated in reports and real-time displays.

You can define threshold classes to apply different standards to different types of agents, skillsets, and so on. For example, you can create different agent threshold classes for customer service trainees and for senior customer service representatives. You can also create different skillset threshold classes for weekday performance and weekend performance.

The following types of threshold classes are available:

- agent
- skillset
- application
- nodal

Many of these threshold class types contain two types of thresholds: pegging thresholds (used for reports) and display thresholds (used for real-time displays).

Pegging thresholds

Pegging thresholds are used to accumulate historical statistical data. In a threshold class, you define a value that represents a cut-off limit for statistics such as short calls or the delay before a call is answered or abandoned. Pegging thresholds allow you to define the length of a short call and the minimum delay before answer/abandon that you want to peg.

For example, you can create a skillset threshold that defines a short call as a call of less than 10 seconds. Any calls that are less than 10 seconds, and that are directed to skillsets with this threshold, are pegged as short calls and appear on short call reports.

Display thresholds

For display thresholds, you define two values—the low end and the high end of the normal range. When you create a real-time display, you can use colors to identify whether the value of the statistic is less than the low value, between the low and high value, or greater than the high value.

For example, in a skillset threshold class, you can specify low and high values for the Agent Available statistic. You might set the low value to 3, and the high value to 6. You can create a real-time display that displays this statistic in red if it is less than 3, in black if it is 3 to 6, and in blue if it is greater than 6.

Types of statistics available

The statistics that are available for a threshold class vary depending on the threshold class type. For a list of statistics by threshold class type, see "Thresholds" on page 144.

Adding threshold classes

When to use

Follow the procedures in this section to add a threshold class, add a threshold, and print a list of threshold classes.

To add a threshold class

1 From the SMI window, choose Reports & Displays → Statistics Configuration.

2 Double-click the threshold class type you want to configure (for example, Skillset Threshold Classes).

Result: The Threshold Classes window for the selected threshold class type appears.

3   Choose File→ New.

Result: A Skillset Threshold Class Properties property page appears.

4   In the Threshold Class box, enter the threshold class name.

5   Continue with the following procedure to add thresholds to a threshold class.

To add a threshold

1   From the Add Threshold drop-down list, select the statistic for which you want to define thresholds.

2   Click Add.

Result: The new statistic is added to the list box of thresholds.

3   Enter information into the following boxes:

Level 1: For a display threshold, enter the value for the low end of the normal range. For a pegging threshold, enter the cut-off value for this statistic.

Level 2: Display thresholds only. Enter the value for the high end of the normal range.

4   Repeat steps 1 to 3 for each statistic for which you want to define thresholds.

5   Click Save.

   Result: The property page closes and the new threshold class appears in the Threshold Classes window.

6   To return to the SMI window, choose File → Close.

Other procedures for threshold classes

To rename a threshold class or add, delete, or change thresholds

Note: You cannot rename a threshold class if it is currently assigned to any objects.

From the Threshold Classes window, select the threshold class you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview a list of threshold classes

From the Threshold Classes window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print a list of threshold classes

From the Threshold Classes window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete threshold classes

Note: You cannot delete a threshold class if it is currently assigned to any objects.

From the Threshold Classes window, select the threshold class and choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Thresholds

Agent thresholds

Active

Type: Display

Description: Defines upper- and low-level thresholds for the Active state. Agents are in active state when they are handling a call on their Incalls key.

Busy

Type: Display

Description: Defines upper- and low-level thresholds for the Busy state.

Call Present

Type: Display

Description: Defines upper- and low-level thresholds for the Call Present state. Agents are in Call Present state when a call is ringing at their phonesets.

Consultation

Type: Display

Description: Defines upper- and low-level thresholds for the Consultation state. Agents are in Consultation state when they are in conference with another agent.

Emergency

Type: Display

Description: Defines upper- and low-level thresholds for the Emergency state. Agents go into Emergency state when they press the Emergency key on their phoneset.

Idle

Type: Display

Description: Defines upper- and low-level thresholds for the Idle state. Agents are in Idle state when they are waiting for a call.

Logout

> **Description:** Display

> **Type:** Defines upper- and low-level thresholds for the Logout state.

Not Ready

> **Type:** Display

> **Description:** Defines upper- and low-level thresholds for the Not Ready state. Agents go into Not Ready state when they press the Not Ready key.

Variable Wrap

> **Type:** Display

> **Description:** Defines upper- and lower- level thresholds for the Variable Wrap state. Agents go into Variable Wrap state if the variable wrap option is configured on the switch.

Walkaway

> **Type:** Display

> **Description:** Defines upper- and low-level thresholds for the Walkaway state. Agents go into Walkaway state when they go into Not Ready state with a reason code other than zero.

Application thresholds

%Abandoned_Aft_Threshold

> **Type:** Display

> **Description:** The percentage of calls abandoned for an application that are abandoned after the service level threshold.

%_Calls_Abandoned

> **Type:** Display

> **Description:** The percentage of calls offered for an application that are abandoned.

%Service Level

Type: Display

Description: The percentage of incoming calls answered within the period specified in the threshold class associated with this application.

Average_Abandon_Delay

Type: Display

Description: The average wait experienced by calls that were abandoned for an application.

Average_Answer_Delay

Type: Display

Description: The average wait experienced by calls that were answered for an application.

Calls Abandoned

Type: Display

Description: The number of calls abandoned for an application.

Calls Abandoned Delay

Type: Display

Description: The average wait experienced by calls that were abandoned for an application.

Calls Abdnd Aft Threshold

Type: Display

Description: The number of calls abandoned for an application after experiencing a delay greater than or equal to the service level for the application.

Calls Answd Aft Threshold

Type: Display

Description: The number of calls answered for an application after experiencing a delay greater than or equal to the service level for the application.

Calls Answd Dly At Skillset

> **Type:** Display

> **Description:** The delay experienced by all calls from the time the call is first queued against the first skillset until it is answered.

Calls Answered

> **Type:** Display

> **Description:** The number of calls answered for an application.

Calls Answered Delay

> **Type:** Display

> **Description:** The total wait experienced by all calls answered for an application.

Calls Given Terminate

> **Type:** Display

> **Description:** The number of calls terminated with given force busy, force overflow, force disconnect, route to, or default treatment.

Calls Offered

> **Type:** Display

> **Description:** The number of calls offered for an application.

Calls Waiting

> **Type:** Display

> **Description:** The number of calls for an application that are currently waiting to be answered.

Max Waiting Time

> **Type:** Display

> **Description:** The amount of time that the oldest call for an application has been waiting to be answered.

Service Level Threshold

Type: Pegging

Description: The number of seconds specified in your service level objective for this application. For example, if your service level objective is "80 percent of calls are answered within 20 seconds," enter 20 here.

ShortCall

Type: Pegging

Description: The length, in seconds, of a short call for this application.

Waiting Time

Type: Display

Description: The total wait experienced by all calls for an application that are currently waiting.

Nodal thresholds

Calls Answered

Type: Display

Description: The number of calls answered at this site.

Calls Offered

Type: Display

Description: The number of calls offered at this site.

Calls Waiting

Type: Display

Description: The number of calls waiting at this site.

Skillset thresholds

%Service Level for Ans Calls

Type: Display

Description: The percentage of answered calls answered within the period defined in the threshold class for this skillset.

Agent Available

Type: Display

Description: The number of agents currently in Waiting state.

Agent In Service

Type: Display

Description: The number of agents assigned to a skillset who are currently logged on.

Agent Not Ready

Type: Display

Description: The number of agents logged on for a skillset who are currently in Not Ready state.

Agent On DN call

Type: Display

Description: The number of agents logged on for a skillset who are currently handling a DN call.

Agent on In call

Type: Display

Description: The number of agents logged on for a skillset who are currently handling a Symposium Call Center Server call.

Agent Unavailable

Type: Display

Description: The number of agents logged on for a skillset who are unavailable to take calls.

Agents On ACD-DN Call

Type: Display

Description: The number of agents logged on for a skillset who are currently handling ACD calls.

Agents On Other Skillset Call

>   **Type:** Display
>
>   **Description:** The number of agents logged on for a skillset who are currently handling calls for skillsets other than this skillset.
>
>   **Notes:**
>
>   - Agents can be assigned to multiple skillsets.
>   - Other skillsets can be local skillsets designed specifically for call handing at your location, or system skillsets that can be assigned from any site. An example of a system skillset is Agent Queue To.

Agents On This Skillset Call

>   **Type:** Display
>
>   **Description:** The number of agents logged on for a skillset who are currently handling a call for this skillset.

Average_Answer_Delay_S

>   **Type:** Display
>
>   **Description:** The average wait experienced by calls answered for a skillset, from the time they were queued to the skillset to the time they were answered.

Calls Answd Aft Threshold

>   **Type:** Display
>
>   **Description:** The number of calls answered for a skillset after experiencing a delay greater than or equal to the service level for the skillset.

Calls Answered

>   **Type:** Display
>
>   **Description:** The number of calls answered for a skillset.

Calls Waiting

>   **Type:** Display
>
>   **Description:** The number of calls for a skillset that are currently waiting to be answered.

Expected Wait Time

> **Type:** Display
>
> **Description:** The total time a new call is expected to wait before being answered by an agent with the required skillset.

Longest Wait Since Last Call

> **Type:** Display
>
> **Description:** The longest idle time for all agents who are currently waiting to answer calls for a skillset. This idle timer is reset whenever a call is answered. For example, the longest waiting time since the last call is currently 14 seconds; Mary and Jim have been idle 14 and 10 seconds, respectively. A call arrives and is presented to Mary. Her idle timer is set to 0, and the longest wait time is reset to 10.
>
> **Note:** This statistic includes time that agents are in Not Ready state.

Longest Wait Since Login

> **Type:** Display
>
> **Description:** The longest waiting time of all idle agents who are currently waiting to answer calls for a skillset. This idle timer is reset when the agent logs on to the skillset. Waiting time is incremented until the agent answers a call. After the call ends, waiting time is incremented until the agent answers the next call.

Max Wait Time

> **Type:** Display
>
> **Description:** The amount of time that the oldest call for an application has been waiting to be answered.

Service Level Threshold

> **Type:** Pegging
>
> **Description:** The number of seconds specified in your service level objective for this skillset. For example, if your service level objective is "80 percent of calls are answered within 20 seconds," type 20 here.

ShortCall

> **Type:** Pegging

> **Description:** The length of a short call, in seconds, for this skillset.

Total Answered Delay

> **Type:** Display

> **Description:** The total wait experienced by all calls answered for a skillset from the time they were queued to the skillset until they were answered.

Total Wait Time

> **Type:** Display

> **Description:** The total waiting time for all calls for a skillset that are currently waiting.

Chapter 6

Managing skillsets and call presentation

In this chapter

Overview of skillsets and call presentation

Introduction

This chapter provides instructions for defining and configuring call presentation classes and skillsets. These features, in conjunction with scripts, determine how and when calls are presented to agents. To understand the operation of your call center, you must understand how these features function.

Skillsets

A skillset is a set of capabilities necessary to answer a specific type of call. Skillsets are the basic building blocks of skill-based routing. They are used to match callers with the agents who can best meet their needs.

Call presentation

Call presentation is the matching of available agents with calls in the queue. The order in which calls are presented is determined by the following parameters:

- call priority, as specified in the script
- call age

The agent to which a call is presented is determined by the following parameters:

- agents' priority for the skillset to which the call is being presented
- agents' idle time

Section A: Managing call presentation classes

In this section

Overview of call presentation classes

Introduction

Call presentation is the matching of available agents with calls in the queue. How the server presents calls to agents varies depending on the call presentation class to which the agent belongs. In your agent call presentation classes, you can configure the following options.

Presentation of calls to agents

You can configure how calls are presented to an agent phoneset. If a call is not answered after a specific length of time, it can

- be returned to the skillset queue
- remain queued to the agent phoneset until it is answered or abandoned

Adding call presentation classes

To add a call presentation class

1 From the SMI window, choose Call Flow Administration → Call Presentation classes.

Result: The Call Presentation Classes window opens.
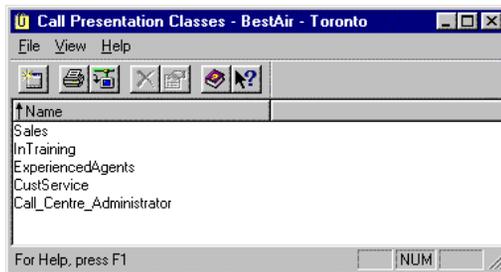
2 Choose File → New.

Result: The Call Presentation Class Properties property sheet appears.
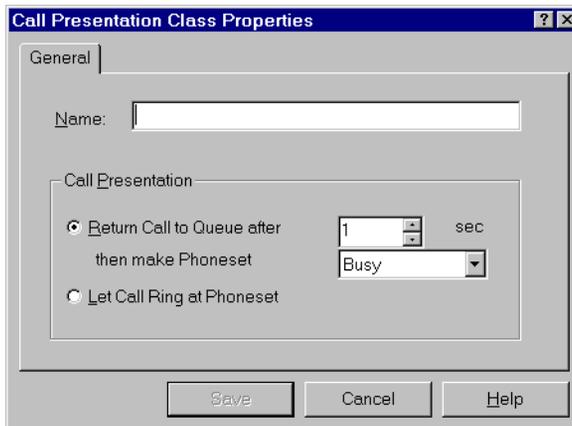
3 Enter information into the following boxes:

Name: The name of the call presentation class as it will appear in drop-down lists and on reports.

Call Presentation: Select one of the following call presentation options:

■ Return Call to Queue after—The call is returned to the queue if not answered within the time you specify. You can also choose the mode in which the phoneset is placed after the call is returned to the queue.

Note: The time you specify here must be less than the ringing threshold for the ACD group, or the call is sent to the ACD group's threshold destination.

■ Let Call Ring at Phoneset—The call rings at the phoneset until it is answered or abandoned.

4 Click Save.

5 To return to the SMI window, choose File → Close.

Other procedures for call presentation classes

Introduction

After you define a call presentation class, you can change it or delete it. You can also print a list of call presentation classes.

To change call presentation class properties

From the Call Presentation Classes window, select the call presentation class you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview a list of call presentation classes

From the Call Presentation Classes window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print a list of call presentation classes

From the Call Presentation Classes window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete call presentation classes

Note: You cannot delete a call presentation class that is assigned to an agent.

From the Call Presentation Classes window, select the call presentation class you want to delete, and then choose File → Delete.

Section B: Skillsets and skill-based routing

In this section

Skillsets

Introduction

A skillset is a set of capabilities necessary to answer a specific type of call. Skillsets are the basic building blocks of skill-based routing. They are used to match callers with the agents who can best meet their needs.

You can assign agents to skillsets by two methods:

- the agent's Skillsets property page (see "To assign skillsets" on page 200)
- agent to skillset assignments (see Chapter 10, "Managing agent to skillset assignments")

Examples of skillsets

BestAir has several different skillsets:

- **Bookings:** Agents who can accept and change bookings, and provide schedule and rate information.
- **Shipping:** Agents who can arrange for shipment of goods. Additional skillsets include agents who specialize in shipment of perishable food products and hazardous goods, as well as international shipments.
- **Cargo Tracing:** Agents who specialize in the tracing of shipments and personal luggage.
- **BestAir Travel Club:** Agents who can provide information about BestAir Travel Club benefits and air miles.
- **Vacations:** Agents who can book vacation packages. Additional skillsets specialize in **American**, **European**, **Asian**, and **Pacific** vacations.

James Jones is a booking agent with BestAir. He is a member of the Bookings skillset. Through training courses, James has become familiar with the company's vacation package offerings. After completing the courses, he was also assigned to the Vacations skillset. Through additional courses, travel, and reading, James has developed additional expertise in European travel issues. He is now also a member of the European skillset.

Skill-based routing

Introduction

Skill-based routing uses skillsets to match callers with the agents who can best meet their needs.

Example

Sandra Smith wants to book a vacation to Britain. She has called several airlines to obtain information for the trip, including

- schedules and fares information
- a British Rail pass
- a list of bed and breakfasts in the cities she is planning to visit
- information about tour packages

All of the airlines were able to provide her with schedules and fares, but most were not able to provide her with the general travel information that she wanted. They referred her to the British embassy.

However, when she called BestAir, her call was routed to the European skillset and presented to James Jones. James was able to give her information about the British Rail pass, along with a list of bed and breakfasts, and a description of the tour packages that are available.

Calls in queue

Introduction

The server must make the following decisions when presenting calls:

- If multiple agents are available, to which agent will it present the call?

- If multiple calls are waiting, which call will it present first?

Choosing an agent

If two agents are available to answer an incoming call, the server presents the call to the agent with the highest priority for the skillset to which the call is queued. Skillset priority is based on the agent's skill level for a skillset. The supervisor assigns a higher priority to agents with a higher skill level, and a lower priority to agents with a lower skill level. (Priority can range from 1–48, where 1 is the highest priority and 48 is the lowest priority.)

If more than one agent has the same priority, the server presents the call to the agent with the greatest idle time. Your administrator can configure the server to base idle time on one of the following:

- total idle time since logon

- idle time since last status change

- idle time since last Symposium Call Center Server or ACD call

Example: Skillset priority

James Jones and Emma Wright are both members of the European skillset. Emma has recently completed training on European vacations and was assigned a priority of 4 for the skillset. However, James has had additional training and experience and, therefore, was assigned a priority of 1 for the skillset.

Both James and Emma are available when a call is queued to the European skillset. Regardless of how long each of them has been idle, the system presents the call to James because he has the highest priority for the European skillset.

Example: Idle time

James Jones, Brandon Woo, and Toni Morelli are members of the European skillset. All three have a priority of 1 for that skillset. James has been idle for a total of 10 minutes since he logged on to the system. Brandon has been idle for 7 minutes. Toni has been idle for 5 minutes. The following events occur:

11:10:24	James, Toni, and Brandon are all on calls.
11:10:25	Brandon's call ends. Brandon presses Not Ready.
11:10:30	Toni's call ends.
11:10:40	James' call ends.
11:10:45	Brandon presses Not Ready again to go out of Not Ready state.
11:10:60	Call is queued to the European skillset.

The following table summarizes the idle times:

Agent	Idle time since logon	Idle time since last ACD/Symposium Call Center Server call	Idle time since last status change
James	10 minutes	20 seconds	20 seconds
Brandon	7 minutes	35 seconds	15 seconds
Toni	5 minutes	30 seconds	30 seconds

The following table shows how your configuration of idle time preference affects call queuing:

IF Idle time preference is set to	THEN call is presented to
Idle time since logon	James
Idle time since last ACD/Symposium Call Center Server call	Brandon
Idle time since last status change	Toni

Choosing a call

If two calls are waiting in a skillset queue when an agent for that skillset becomes available, the server selects the call to present based on call priority and call age. Priority is assigned to calls in the script. If two queued calls have the same priority, the server uses call age to determine which one to present.

You can configure the server to base call age on either

■   when the call was received by the server (that is, passed to the server from the switch or from an external IVR)

■   when the call was added to the skillset queue

Calls with the greatest age are presented to an agent first.

Example: Call age preference

The following events occur:

11:31:24	Lisa Lanai calls BestAir to book a flight to Switzerland. Her call arrives in the system and is queued to the Bookings skillset. Her call is presented to Rose Chan.
11:31:29	Gerda Spitz calls BestAir for information about British package queues. Her call is queued to the European skillset.
11:31:31	Lisa mentions that she is interested in vacation packages, so Rose transfers Lisa's call to the European skillset.
11:31:37	James Jones, an agent in the European skillset, becomes available, and two calls are in the queue for the European skillset.

The following table summarizes the call ages:

Caller	Time in Bookings queue	Time in European queue	Total call age
Lisa	7 seconds	6 seconds	13 seconds
Gerda	N/A	8 seconds	8 seconds

The following table shows how your call age preference affects call queuing:

IF Idle call age preference is set to	THEN the following call is presented
oldest	Lisa's call
first in queue	Gerda's call

Queuing to a default skillset

You can define one default skillset. Any calls that are not queued by the end of script execution are automatically queued to this skillset. For example, BestAir has defined Bookings as the default skillset. Calls that have not been queued by the end of the script execution are presented to agents assigned to the Bookings skillset.

Queuing to a default RAN route

If a call cannot be queued to the default skillset (for example, if the default skillset is out of service), it is routed to the default Recorded Announcement (RAN) route. After the announcement, the call is queued to the default ACD-DN of the CDN at which the call first arrived in the system.

When skillsets go out of service

Introduction

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 property sheet

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

Transition mode

Skillsets must be put into transition mode manually from the Skillset Properties property sheet. For example, you can put a skillset into transition mode if a service interruption occurs during the business day, and you want to answer all calls currently waiting in the queue before putting the skillset out of service.

Example

The computer that stores BestAir's bookings database has gone down. BestAir's information systems staff are attempting to solve the problem, but in the meantime, agents have no information about seats available on any of BestAir's flights. BestAir's call center manager has decided to take manual bookings from all customers who are currently queued for the Bookings skillset. When all waiting calls have been answered, the Bookings skillset will temporarily be put out of service.

To implement this decision, the call center manager puts the Bookings skillset into transition mode.

Night service mode

Skillsets can be put into night service mode automatically—when all agents have logged off—or manually, from the Skillset Properties property sheet.

In your scripts, you define how calls are handled when a skillset is in night service mode.

Example

Bill Bailey calls BestAir at 8:01 p.m. Unfortunately, the office is closed and the Bookings skillset is out of service, in night service mode. Bill hears the following message:

Thank you for calling BestAir. Our office hours are from 8:00 a.m. to 8:00 p.m. Monday to Friday, and 9:00 a.m. to 6:00 p.m. on Saturdays. Please call back during our regular office hours. Thank you.

Tracking call types using activity codes

Introduction

Agents can assign up to three activity (line of business) codes to each call that they answer. The system uses activity codes to track the amount of time that is spent on the various types of incoming calls.

Note: Activity codes can be one to three digits in length. To use this feature, you must enable the LOB feature on the switch and configure Line of Business codes in the ACDGRP table on the switch. Then you must define activity codes at the server to generate reports with meaningful names.

Example

When James answers Sandra's call, he asks her the question, "How did you hear about us?" She says that she saw a newspaper ad. James presses his LOB key and dials 457.

As the call proceeds, James discovers that it is a "vacation inquiry" call. He enters the activity code for this type of call (440). BestAir has also defined activity codes to be assigned to schedule inquiries, bookings, and vacation package sales.

Note: If the activity codes are defined at the server, then activity code reports generated by the call center supervisor are more meaningful—they include activity code names as well as numbers.

Using threshold classes

Introduction

A threshold class is a set of options that you can apply to individual skillsets. Threshold classes specify how statistics are treated in reports and real-time displays. For example, you can create a threshold class to define a different short call length and apply it to particular skillsets. (The short call threshold defines the length of a short call for pegging purposes.)

Example

BestAir has applied a threshold class to the European skillset that has a short call threshold of 10 seconds. This means that if a caller hangs up or is disconnected within 10 seconds of speaking to an agent assigned to the European skillset, the call is pegged as a short call. In reports, the short call peg count is incremented by one.

For example, Fred Faraday inquires about direct flights to Hamburg. He speaks to Michael Monvale, who tells him that no direct flights are available. Michael adds that BestAir does have flights to Frankfurt and Berlin, and there are frequent shuttles from both of these cities to Hamburg. Fred decides to check around for direct flights, so he thanks Michael and hangs up. The duration of this call was only 8 seconds and, therefore, is pegged as a short call.

Section C: Skillset procedures

In this section

Adding skillsets

Prerequisites

Before you configure a new skillset, do the following:

■   Define the threshold class you want to assign to this skillset if you do not
     want to use the default threshold class. For information on defining
     threshold classes, see Chapter 5, "Managing threshold classes."

Limitations

You can define up to 996 skillsets. The total number of skillsets is 1000, of
which 4 are system-defined skillsets.

To add a skillset

1   From the SMI window, choose Call Flow Administration → Skillsets.

     Result: The Skillsets window opens.

2   Choose File → New.

Result: The Skillset Properties property sheet appears.

3   Complete the General property page by entering information into the following boxes:

Name: A unique name for the skillset. Skillset names are not case-sensitive.

Comment: Optional. Additional information about the skillset.

Threshold Class: The threshold class to be assigned to this skillset.

Map Skillset to ACD DN Number: The ACD-DN number for which calls will be pegged to this skillset. If you select this option, you must enter the ACD-DN number as it is defined on the switch.

Note: To put the skillset out of service, see "Putting skillsets out of service" on page 180.

4   Click the Call Presentation tab.

Result: The Call Presentation property page appears.

Skillset Properties

General | Call Presentation | Thresholds

Call _A_ge Preference

  ○ Oldest
  ◉ First in queue

Save   Cancel   Help
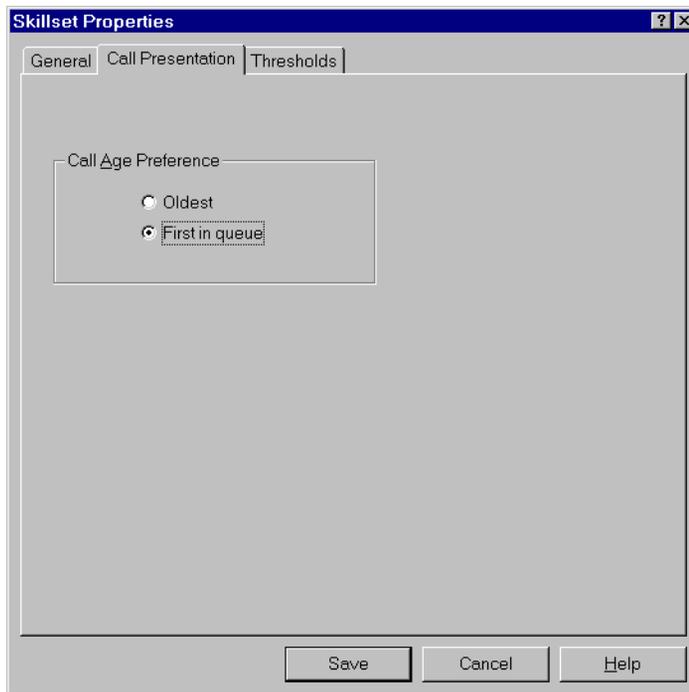
Note: The Call Source Preference options are available only for network skillsets.

5   If you want priority to be given to the oldest call in the system, check Oldest. If you want priority to be given to the first call in the queue, check First in queue. For more information on these options, see "Example: Call age preference" on page 166.

6   Click Save.

Result: The skillset is added to the list in the Skillsets window.

7   To return to the SMI window, choose File → Close.

Changing the global skillset properties

Introduction

The following properties apply to all skillsets:

- default skillset, which handles calls that are not queued to a skillset by the end of script execution

- the default Recorded Announcement (RAN) route, which is used if the default skillset is not in service

- the character used to separate fields in caller-entered data

- agent idle time preference

To change global skillset properties

1   From the SMI window, choose Call Flow Administration → Skillsets.

      Result: The Skillsets window opens.

2   Choose File → Global Settings.

Result: The Global Settings dialog box opens.

```
Global Settings                                          ? X
┌─ Default Skillset ──────────────────────────────────┐
│  Default Skillset:       [Default_Skillset        ▼] │
│                                                      │
│  RAN Route:              [999    ]                   │
│                                                      │
│  Caller Enter Data Delimiter:  [#]                   │
└──────────────────────────────────────────────────────┘
┌─ Agent Preference ──────────────────────────────────┐
│  Present calls to agent with:                        │
│                                                      │
│  ○ Longest total time in Idle state since login      │
│  ● Longest time in Idle state since last status change │
│  ○ Longest total time since last CDN/ACD call        │
└──────────────────────────────────────────────────────┘
         [  OK  ]     [ Cancel ]     [  Help  ]
```
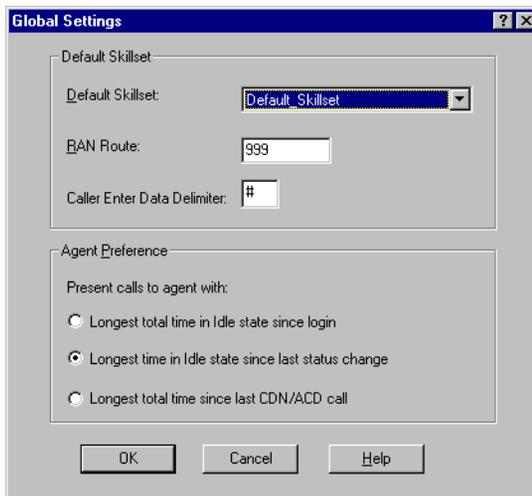
3   Make the desired changes to the following properties:

Default Skillset: The skillset to which calls are queued if they have not been queued to a skillset by the end of script execution.

RAN Route: The route number of the default RAN route, to which calls are queued if the default skillset is out of service. Enter the route number as specified on the switch and in the Routes window on Symposium Call Center Server.

Note: The server is preconfigured with a dummy RAN route, route 999. This is unlikely to be a valid RAN route in your system. Be sure to create a valid RAN route (see "Adding music/RAN routes" on page 79).

Caller Enter Data Delimiter: The character that separates caller-entered data sequences.

Agent Preference: The method for interpreting agent idle time. Choose one of the following options:

■   Longest total time in Idle state since login—The server presents new calls to the agent who has accumulated the greatest amount of idle time since logging on.

■   Longest time in Idle state since last status change—The server presents new calls to the agent who has been idle longest since his or her last

change of state. (The agent idle timer starts when an agent ends a call, or goes out of Not Ready or Walkaway state.)

■ Longest total time since last CDN/ACD call—The server presents new calls to the agent who has been idle longest since the end of his or her last Symposium Call Center Server or ACD call.

4   Click OK.

       Result: You are returned to the Skillsets window.

5   To return to the SMI window, choose File → Close.

Putting skillsets out of service

Introduction

You may need to put a skillset out of service for the following reasons:

- A service interruption occurs (for example, the customer database becomes unavailable).

- The skillset is intended for limited-time service (for example, a skillset used to support a marketing campaign).

Note: A skillset goes out of service automatically when

- the last agent serving the skillset logs off

- the last agent serving the skillset is put on standby for the skillset (either manually, from the agent's Skillsets property page, or automatically, with an agent-to-skillset assignment)

To put skillsets out of service

1   From the SMI window, choose Call Flow Administration → Skillsets.

Result: The Skillsets window opens.

2   Select the skillset you want to put out of service.

3   Choose File → Properties.

Result: The Skillset Properties property sheet opens to the General property page.
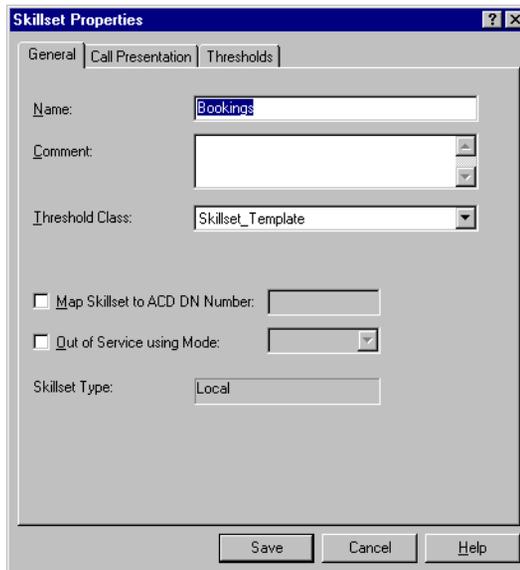
4   Check Out of Service using Mode.

5   Select the out of service mode from the drop-down list box. If you want all queued calls to be answered before the skillset goes out of service, then select Transition mode. If you want all calls, including waiting calls, to receive night service treatment, then select Night Service mode.

6   Click Save.

Result: You return to the Skillsets window.

7   To return to the SMI window, choose File → Close.

Other procedures for skillsets

To change skillset properties

From the Skillsets window, select the skillset you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To preview a list of skillsets

From the Skillsets window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print a list of skillsets

From the Skillsets window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete a skillset

Notes:

■   Before deleting a skillset, make sure it is not used in an activated script.

■   You cannot delete a skillset that is assigned to an agent.

From the Skillsets window, select the skillsets you want to delete, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Chapter 7

Managing supervisors

In this chapter

Overview

Introduction

When you add an agent, you assign that agent to one or more supervisors. Supervisors are users who have responsibility for monitoring and supporting their assigned agents.

You must assign each agent a reporting supervisor. You can also assign one or more associated supervisors.

Reporting supervisors

Each agent must have one reporting supervisor who

- is notified when the user presses the Emergency key (if the agent has logged on to the phoneset configured for him or her)

- has agent keys on his or her phoneset that are mapped to the agent phoneset

Supervisors can view information about their reporting agents on their real-time displays (if the agents have logged on to a phoneset in the same ACD subgroup assigned to the supervisor).

Associated supervisors

In addition to the reporting supervisor, an agent can have one or more associated supervisors who provide backup when the reporting supervisor is unavailable. Supervisors can view information about their associated agents in the real-time displays.

Note: Nortel Networks recommends that you limit the number of associated supervisors to five per agent for maximum system performance.

Supervisor logon

Supervisors are fixed to a specific phoneset. That is, they must log on at the supervisor phoneset for their ACD subgroup. You configure a phoneset as a supervisor phoneset on the switch, using the SERVORD utility.

Supervisors and real-time displays

When viewing the real-time displays, supervisors can limit the display to

- all agents for whom they are the reporting supervisor
- all agents for whom they are an associated supervisor
- all agents for whom they are the reporting or associated supervisor
- all other agents (that is, agents for whom they are not a reporting or associated supervisor)
- all agents

Note: The options available depend on the access privileges of the supervisor.

Supervisors and reports

The agent performance and short calls reports are sorted by supervisor.

Adding or changing supervisors

Before you begin

Make sure the supervisor is defined in the ACDLOGIN table on the switch. For more information, refer to the *Symposium and DMS/MSL-100 Switch Guide*.

To add a supervisor

1   From the SMI window, choose User Administration → Users.

Result: The Users window appears.

2   Choose File → New.

Result: The User Configuration dialog box appears.

3   Select Call Center Supervisor.

Note: If this user will also have Agent capabilities, click Call Center Agent. (For more information about setting up agents, see Chapter 8, "Managing agents.") If this user will also have Desktop capabilities, click Desktop. (For more information about setting up desktop user accounts, see Chapter 2, "Managing security.")

4   Click OK.

Result: The New User property sheet appears.
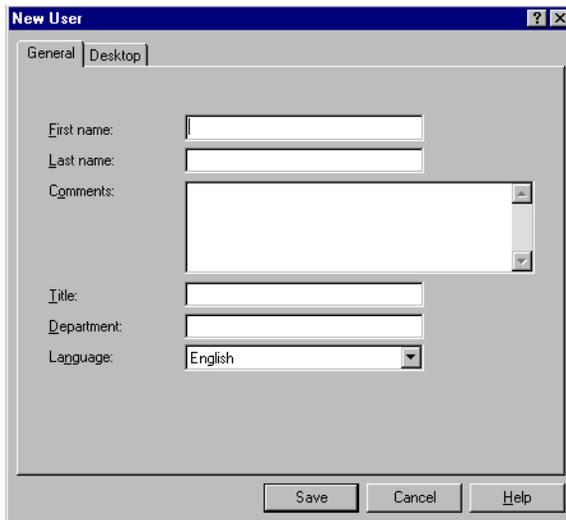
5 Complete the General property page by entering the contact information for the user.

6 Click the Phoneset tab.
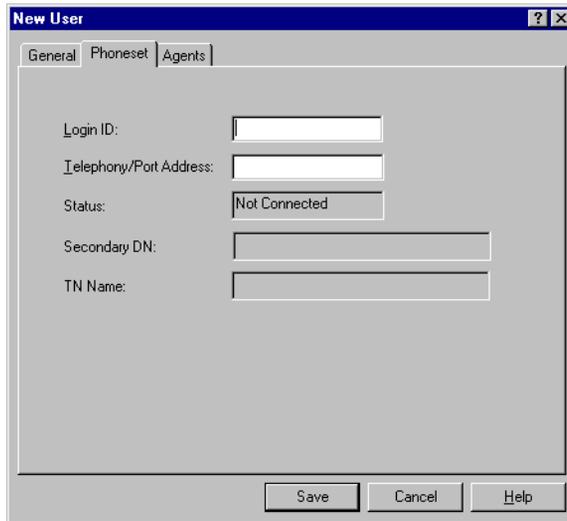
Result: The Phoneset property page appears.

7 Complete the Phoneset property page by entering information into these fields:

Login ID: The number the supervisor uses to log on to the system.

Telephony/Port Address: The position ID of the phoneset at which the supervisor logs on.

8 Click Save.

Note: If you click Save before completing the required fields, the system prompts you to finish them.

Result: The new supervisor appears in the list in the Users window.

9 To return to the SMI window, choose File → Close.

Viewing the agents assigned to a supervisor

Introduction

You assign agents to supervisors from the agents' Supervisors property page (see "To assign supervisors" on page 201). From the supervisor's Agents property page, you can view all of the agents assigned to the supervisor.

To view a supervisor's agents

1   From the SMI window, choose User Administration → Users.

Result: The Users window appears.

2   Select the supervisor whose agents you want to view.

3   Choose File → Properties.

Result: The User Properties property sheet appears. The General property page is on top.

4   Click the Agents tab.

Result: The Agents property page appears.

5   Click Save.

Result: You return to the Users window.

6   To return to the SMI window, choose File → Close.

Other procedures for supervisors

To change a supervisor's capabilities

From the Users window, select the supervisor you want to change, and then choose File → Configuration.

For step-by-step instructions, press F1 to access the online Help.

To change a supervisor's properties

ATTENTION

If you change a user's logon ID, you must check the user's configuration at the switch. Based on how the user is configured, you may need to add the new logon ID at the switch.

From the Users window, select the supervisor you want to change, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

To print a list of users

From the Users window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete a supervisor

Note: You cannot delete a supervisor who is assigned to an agent as a reporting supervisor. (You can delete supervisors who are assigned as associated supervisors.) Before you delete a reporting supervisor, reassign all agents who report to that supervisor.

From the Users window, select the supervisor you want to delete, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Chapter 8

Managing agents

In this chapter

Overview

Introduction

Agents are users who can receive incoming call center calls on their phonesets.
(The phonesets must have been configured on the switch and acquired on the
server.) An agent account has the following properties:

- threshold class
- skillsets
- call presentation class
- supervisor

Before you add an agent, make sure the agent's threshold class, skillsets, call
presentation class, and supervisor have been defined.

Agent position

In each ACD subgroup, one phoneset is configured as a supervisor's set, and the
supervisor must log on to this phoneset. Agents, however, can log on at any
phoneset that belongs to their ACD subgroup. This ensures that supervisors can
view all of their reporting agents.

To ensure that agents have access to all of the phoneset keys set up specifically
for them (for example, the emergency key that links to their reporting
supervisor), they should log on at the phoneset ID configured for them at the
switch.

Adding agents

Before you begin

Make sure that the agent's phoneset ID (telephony/port address) is defined in the ACDLOGIN table on the switch and is acquired on the server. For more information, refer to the *Symposium and DMS/MSL-100 Switch Guide*.

Notes:

- The number of agents you can add is limited by the keycodes installed on your server.

- Each agent you add uses resources on the server. Nortel Networks recommends that you only define the number of agents you need.

To add an agent

1 From the SMI window, choose User Administration → Users.

Result: The Users window appears.

2   Choose File → New.

Result: The User Configuration dialog box appears.

3   Select Call Center Agent.

Note: If this user will also have supervisor capabilities, click Call Center Supervisor. (For more information about setting up agents, see Chapter 7, "Managing supervisors.") If this user will also have Desktop capabilities, click Call Center Supervisor and Desktop. (For more information about setting up desktop user accounts, see Chapter 2, "Managing security.")

4   Click OK.

Result: The New User property sheet appears.
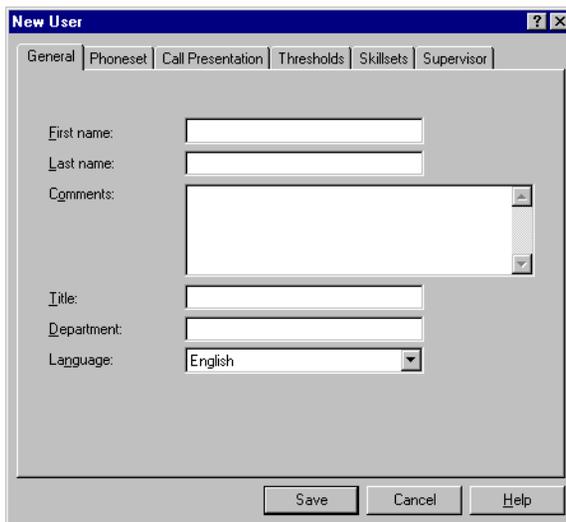
5 Complete the General property page by entering the agent's contact information.

6 Click the Phoneset tab.
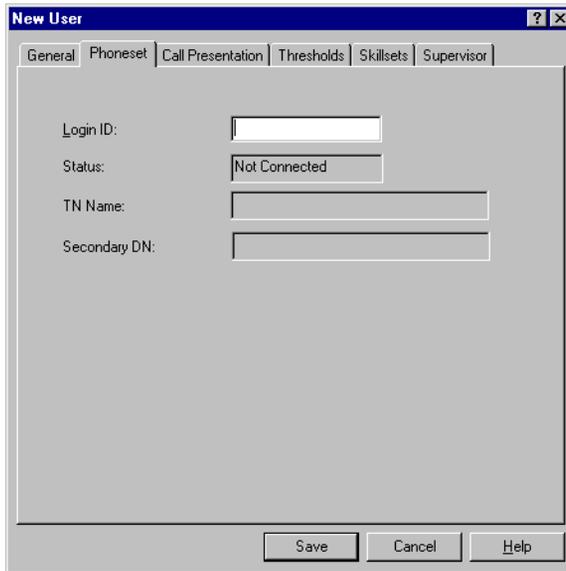
Result: The Phoneset property page appears.

7 In the Login ID box, enter the number that the agent uses to log on to the system.

8   Click the Call Presentation tab.

Result: The Call Presentation property page appears.
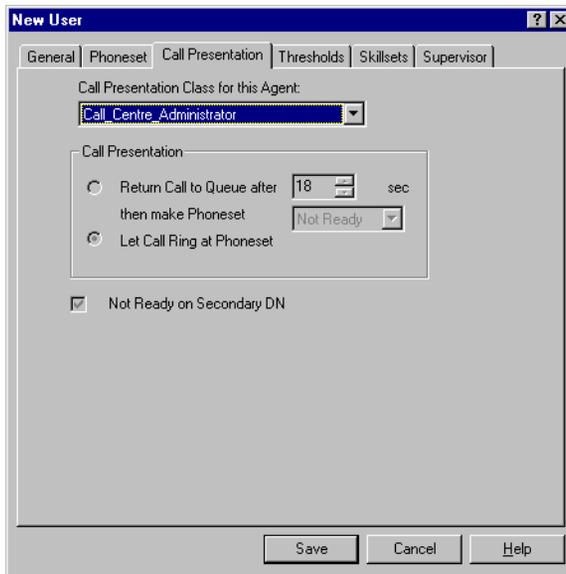
9   In the Call Presentation Class for this Agent box, select the call
presentation class you want to assign to this agent.

10 Click the Thresholds tab.

Result: The Thresholds property page appears.
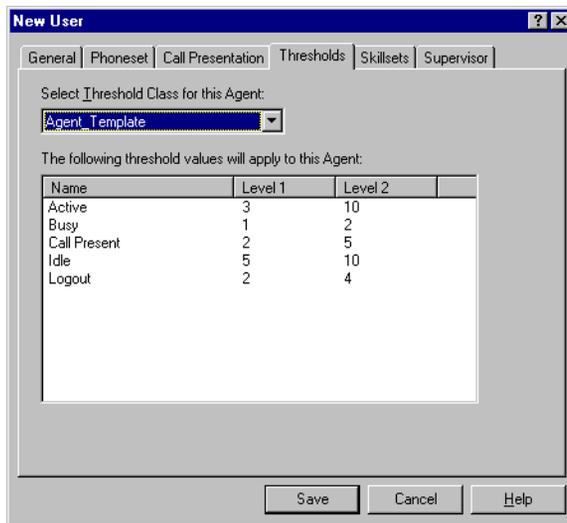
11 In the Select Threshold Class for this Agent box, select the threshold class you want to assign to this agent.

12 Continue with the following procedure to assign skillsets to the agent.

To assign skillsets

1   In the New User dialog box, click the Skillsets tab.

Result: The Skillsets property page appears.
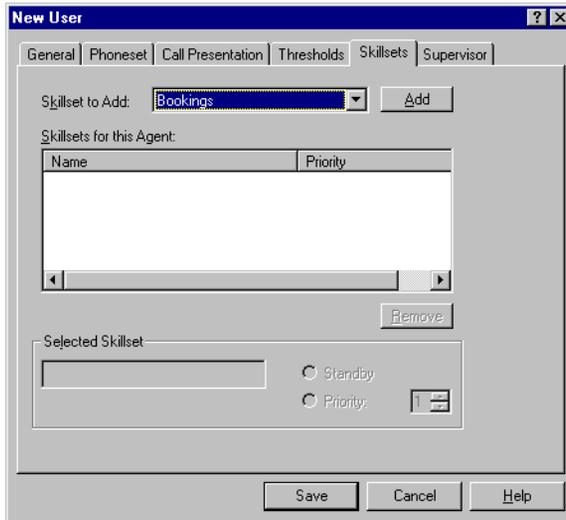
2   In the Skillset to Add box, select a skillset to be assigned to the agent.

3   Click Add.

4   In the Name column, select the skillset you just added.

5   If you want to put the agent on standby for the skillset, click Standby. If you want to set the agent priority for the skillset, click Priority, and set the priority using a value from 1– 48, where 1 is the highest priority and 48 is the lowest priority. For more information on skillset priority, see "Choosing an agent" on page 164.

6   Repeat steps 2 to 5 for each skillset to be assigned to the agent.

7   Continue with the following procedure to assign supervisors to the agent.

To assign supervisors

> **Note:** You must assign each agent a reporting supervisor. Optionally, you can assign one or more associated supervisors.

1 In the New User dialog box, click the Supervisor tab.

> **Result:** The Supervisor property page appears.

2 In the Available Supervisors table, select the supervisor to be assigned as the Reporting Supervisor.

> **Note:** The reporting supervisor must belong to the same ACD subgroup as the agent. This should be the supervisor who monitors the supervisor phoneset for the subgroup.

3 Click Report To.

4 (Optional) You can also select a supervisor to be assigned as an associated supervisor. To do so, follow these steps:

    a. Select the supervisor you want to use as an associated supervisor.

   b. Click Associate.

  Repeat this step for each associated supervisor you want to assign.

  Note: Nortel Networks recommends that you limit the number of associated supervisors to five per agent for maximum system performance.

5 Click Save.

  Result: The new agent is added to the list in the Users window.

6 To return to the SMI window, choose File → Close.

Other procedures for agents

To change an agent's capabilities

Note: You cannot assign an agent desktop capabilities, unless you also give that agent supervisor capabilities.

From the Users window, select the agent you want to change, and then choose File → Configuration.

For step-by-step instructions, press F1 to access the online Help.

To change an agent's properties

You can change an agent's contact information, logon ID, call presentation class, threshold class, supervisor assignments, and skillset assignments.

| ATTENTION | If you change a user's logon ID, you must check the user's configuration at the switch. Based on how the user is configured, you may need to add the new logon ID at the switch. |

From the Users window, select the agent you want to change, and then choose File → Properties.

Note: When you change an agent's skillset assignments, the server waits for the agent's active calls to end (if any), and then puts the agent into Not Ready state.

To print a list of users (including agents)

From the Users window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete an agent

Note: Before you delete an agent, make sure that

- the agent is not the only agent assigned to active skillsets
- the agent is not specifically referred to in scripts

From the Users window, select the agent, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Chapter 9

Managing agent to supervisor assignments

In this chapter

Overview

Introduction

Each agent has one reporting supervisor. A reporting supervisor

- is notified when an assigned agent presses the Emergency key (if the agent is logged on to a phoneset configured with his or her reporting supervisor)

- has keys on his or her phoneset that are mapped to the agent keys

Supervisors can view all reporting agents on their real-time displays, and the agent performance and short calls reports are sorted by supervisor.

You assign reporting supervisors to agents on the agents' Supervisors property page. For more information, see "Adding agents" on page 195. You can also assign reporting supervisors with agent to supervisor assignments.

Using agent to supervisor assignments

You may need to temporarily change agents' reporting supervisors for the following reasons:

- for early morning and late evening shifts, when few supervisors are available

- to cover supervisors' coffee and lunch breaks

- when supervisors are sick, on vacation, or on a course

You can manually assign temporary supervisors on the agents' Supervisors property page, and reassign the normal supervisors when they return. You can also set up automatic agent to supervisor assignments, scheduling assignments for known breaks or vacations.

Example 1:
Supervisor is sick

Pat Wilson, one of BestAir's supervisors, calls in sick for the day. The call center manager sets up an agent to supervisor assignment that assigns half of Pat's agents to Chris Konings, and the other half to Cindy Wong. The manager runs the assignment immediately, and all agents are assigned to their temporary supervisors for the day. Another assignment, scheduled for next day, automatically reassigns all agents back to Pat.

Example 2:
Supervisor is on vacation

Pat has booked vacation from the 17th to the 28th of August. BestAir's call center manager has set up an agent to supervisor assignment that reassigns Pat's agents for that period. The manager schedules the assignment to run at 8:30 a.m. on August 17th. Another assignment, which runs at 5:00 p.m. on August 28th, reassigns the agents to Pat.

Example 3:
Supervisor is on regularly scheduled training

At BestAir, all supervisors are required to participate in regular upgrading. Every four weeks, each supervisor must spend half a day in training. Training sessions are staggered to ensure adequate supervision of the call center. Pat's training occurs every third Thursday of the month. The call center manager has set up agent to supervisor assignments that automatically reassign Pat's agents for that time, and then restore their original assignments when Pat returns.

Example 4:
Providing supervisory coverage for shifts

At BestAir, agents are usually assigned to supervisors who have experience with the agents' skillsets. However, during the early morning and evening periods, only one supervisor is on duty. The call center manager has set up agent to supervisor assignments to reassign agents for those periods.

For example, from 8:00 a.m. to 9:00 a.m., Cindy Wong is the only supervisor on duty. All agents who start work at 8:00 a.m. are temporarily assigned to her. Other assignments take effect at 9:00 a.m. and 10:00 a.m., as other supervisors arrive.

Example 5:
Providing supervisory coverage for breaks and lunch

As supervisors go on break, their agents must be reassigned. For example, when Cindy goes on break at 10:00 a.m. to 10:15 a.m., an agent to supervisor assignment assigns all of her agents to Pat and Chris. When she returns at 10:15 a.m., another assignment reassigns her agents to her.

Adding agent to supervisor assignments

To add an agent to supervisor assignment

Note: Each agent to supervisor assignment uses system resources when it runs. The amount of resources it uses depends on the number of agents reassigned, and how often you run it.

1   Choose Assignments → Agent to Supervisor Assignments.

     Result: The Agent to Supervisor Assignments window appears.

2   Choose File→ New.

     Result: The Agent to Supervisor Assignment Properties property sheet appears.
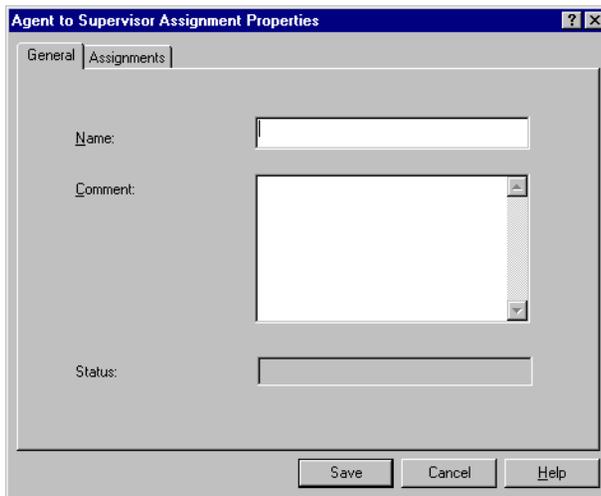
3   Complete the General property page by entering information into these boxes:

Name: The name of the assignment. Use a descriptive name that will help you to identify the purpose of the assignment (for example, "Pats_vacation").

Comment: Optional. Additional information about the assignment.

4   Click the Assignments tab.

Result: The Assignments property page appears.

5   In the Show available agents box, select the supervisor whose agents you want to assign.

Result: The agents assigned to that supervisor appear in the Show available agents list box.

6   To add an agent to the supervisor assignment, click the agent's name, and then click Add. Repeat this step for each agent to be reassigned.

Tip: To add all agents assigned to this supervisor, click Select All, and then click Add.

Result: The selected agents appear in the Agents included in this assignment list box.

7   Repeat steps 5 and 6 for each supervisor with agents to be added to the supervisor assignment.

8   In the Agents included in this assignment list box, select an agent.

9   In the Assign Agent(s) to list box, select the supervisor to whom you want to assign the agent.

10 Repeat steps 8 and 9 for each agent you want to assign to another supervisor.

11 Click Save.

   Result: The new assignment is added to the list in the Agent to Supervisor Assignment window.

12 To return to the SMI window, choose File → Close.

After you finish

If you want to schedule the assignment to take effect at a future time, you must schedule it (see "Scheduling agent to supervisor assignments" on page 212).

If you want the agent to supervisor assignment to take effect immediately, you must run it (see "Running agent to supervisor assignments immediately" on page 214).

Scheduling agent to supervisor assignments

Introduction

If you want an agent to supervisor assignment to run at a future date, or if you want it to run regularly, you must schedule it.

To schedule an agent to supervisor assignment

1   From the SMI window, choose Assignments → Agent to Supervisor Assignments.

    Result: The Agent to Supervisor Assignments window appears.

2   Select the agent to supervisor assignment you want to schedule.

3   Choose File → Edit Schedule.

    Result: The Schedule property page appears.

4   Complete the Schedule property page by entering information into the following boxes. For example, you might want to apply an assignment at 2-hour intervals, starting at 9:00 a.m. and ending at 5:00 pm.

Schedule: The frequency with which you want to run the assignment. When you select a schedule, additional boxes appear.

Day/Date/Month: The day, date, and month (as applicable) that you want to run the assignment.

Start: The time on the selected day that you want to run the assignment. For the above example, enter 9:00 a.m. in this box.

End: For assignments run at intervals (specified in the Interval box). The time you want to stop running the assignment. For the above example, enter 5:00 p.m. in this box.

Interval: The frequency, in 15-minute increments, with which the assignment is to be run between the start and end times. For the above example, type 2:00.

Extension: The amount of time the system should wait after a system interruption before abandoning the agent to supervisor assignment schedule.

Note: If system recovery takes place before the Extension time expires, the agent to supervisor assignment schedule runs.

5   Click Save.

Result: You are returned to the Agent to Supervisor Assignments window.

6   To return to the SMI window, choose File → Close.

Running agent to supervisor assignments immediately

When to use

Follow this procedure to make an assignment (either scheduled or unscheduled) effective immediately.

To run an agent to supervisor assignment immediately

1 From the SMI window, choose Assignments → Agent to Supervisor Assignments.

Result: The Agent to Supervisor Assignments window appears.
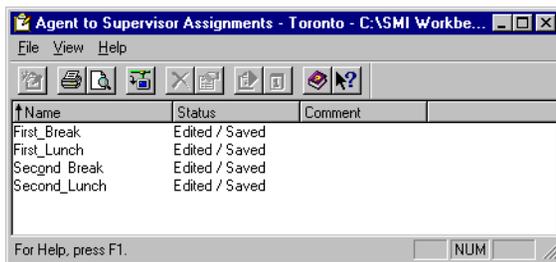
2 Select the agent to supervisor assignment you want to apply.

3 Choose File → Run Now.

4 A message appears asking `Are you sure you want to run this assignment now?` Click Yes.

5 To return to the SMI window, choose File → Close.

Other procedures for agent to supervisor assignments

To change an agent to supervisor assignment

You can change the properties (the name and comments) of an agent to supervisor assignment, add agents to, or remove agents from the assignment, and change agents' supervisor assignments.

From the Agent to Supervisor Assignments window, select the assignment, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

Note: Changes to an agent to supervisor assignment take effect the next time the agent to supervisor assignment runs.

To preview a list of an agent to supervisor assignment

From the Agent to Supervisor Assignments window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To print a list of agent to supervisor assignments

From the Agent to Supervisor Assignments window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete an agent to supervisor assignment

To delete an agent to supervisor assignment, on the Agent to Supervisor Assignments window, select the assignment, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Chapter 10

Managing agent to skillset assignments

In this chapter

Overview

Introduction

A skillset is a group of agents with the expertise necessary to answer a specific type of call. Each agent is assigned to one or more skillsets. Skillsets are used to set up skill-based routing to ensure that callers are matched to the agent best able to meet their needs.

You can make an agent active for a skillset on the agents' Skillsets property page (see "Adding agents" on page 195). You can also use agent to skillset assignments to make agents active for skillsets.

Using agent to skillset assignments

You may need to temporarily assign agents to different skillsets for the following reasons:

- for shifts when fewer agents assigned to a skillset are available
- to cover other agents' breaks
- when agents are sick, on vacation, or on a course

You can manually assign temporary skillsets on the agents' Skillsets property page, or you can use automatic agent to skillset assignments.

To use an automatic agent to skillset assignment, assign agents to skillsets on their Skillsets property page. If you do not want the agent to be active in the skillset immediately, put the agent into Standby mode for this skillset. Then use the agent to skillset assignment to change the agent's priority for the skillset (thus activating the agent for the skillset) at the desired time.

Scenarios to ensure coverage of skillsets

Example 1:
Agents are sick

Mark Schultz, an agent in BestAir's Cargo Tracing skillset is sick and absent from work today. This has left the Cargo Tracing skillset understaffed, particularly for the period from 10:00 a.m. to 4:00 p.m., the skillset's busiest time. The call center manager creates an agent to skillset assignment that assigns Rose Stefanopolis (an agent who has worked in this skillset before) to the Cargo Tracing skillset. The manager runs the agent to skillset assignment immediately. The manager creates another assignment that restores Rose to her normal skillset when Mark returns to work.

Example 2:
Coffee and lunch breaks

As agents go on break, their skillsets become understaffed. To improve skillset coverage for coffee and lunch breaks, BestAir's call center manager reassigns agents during these periods.

Example 3:
Shifts

During the early morning and evening periods, few agents are available. As a result, many skillsets, such as Bookings, are understaffed. Others, such as the Cargo Tracing skillset, are only in service from 9:00 a.m to 5:00 p.m. BestAir's call center manager has set up an agent to skillset assignment to automatically assign members of the Cargo Tracing skillset to Bookings, the busiest skillset, during early morning and evening periods.

Example 4:
Agents are on vacation

Mark has booked vacation time from the 29th of June to the 10th of July. BestAir's call center manager has set up a scheduled agent to skillset assignment that reassigns Rose to the Cargo Tracing skillset for that period. The manager schedules the assignment to run automatically on June 29th at 8:30 a.m., and schedules another agent to skillset assignment to run on July 10th at 5:00 p.m., restoring Rose's normal skillset assignments.

Example 5:
Agents are on a course

At BestAir, all agents are expected to participate in regular upgrading of their skills, requiring them to be absent while they attend courses. In June, all members of the Europe skillset must attend a one-day course to learn about changes to the company's European vacation packages. To provide adequate coverage while the agents are on course, the call center manager has set up an agent to skillset assignment to assign other qualified staff to the Europe skillset. The manager has scheduled the assignment to run on the day of the course. Another assignment, scheduled to run the next day, restores the agents' normal skillset assignments.

Adding agent to skillset assignments

Introduction

When you use the Agent to Skillset Assignments window, you can add an agent to skillset assignment and change an agent's priority for a currently assigned skillset. You can only change the priority for skillsets that have already been assigned to an agent on the agent's Skillsets property page (see "To assign skillsets" on page 200).

Note: Each agent to skillset assignment uses system resources when it runs. The amount of resources it uses depends on the number of agents reassigned, and how often you run it.

To add an agent to skillset assignment

1   Choose Assignments → Agent to Skillset Assignments.

Result: The Agent to Skillset Assignments window appears.

2   Choose File → New.

Result: The Agent to Skillset Assignment Properties property sheet appears.

3   Complete the General property page by entering information into these boxes:

Name: The name of the assignment. Use a descriptive name that allows you to identify the purpose of the assignment (for example, "Early_morning").

Comment: Optional. Additional information about the assignment.

4   Click the Agents tab.

      Result: The Agents property page appears.
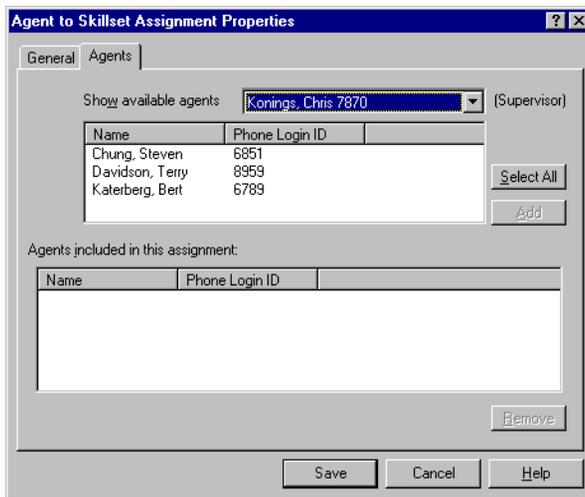
5   From the Show available agents drop-down list box, select the supervisor whose agents you want to assign.

      Result: The agents assigned to that supervisor appear in the Show available agents list box.

6   To add an agent to the skillset assignment, select the agent's name, and then click Add. Repeat this step for each agent to be reassigned.

      Tip: To add all agents assigned to this supervisor, click Select All, and then click Add.

      Result: The selected agents appear in the Agents included in this assignment list box.

7   Repeat steps 5 and 6 for each supervisor with agents to be added to the skillset assignment.

8   Click Save.

      Result: The new assignment is added to the list in the Agent to Skillset Assignment Properties window.

9   Select the new agent to skillset assignment.

10 Choose File → Open.

Result: The agent to skillset assignment matrix appears. The matrix shows the skillsets to which each agent is assigned, and the agent's priority for each skillset.
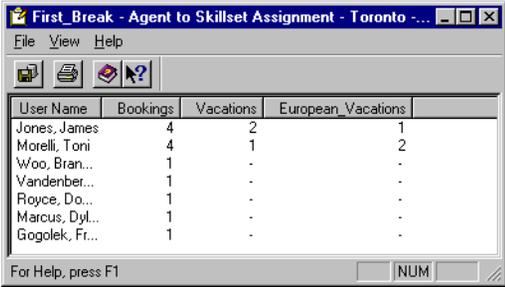
User Name	Bookings	Vacations	European_Vacations
Jones, James	4	2	1
Morelli, Toni	4	1	2
Woo, Bran...	1	-	-
Vandenber...	1	-	-
Royce, Do...	1	-	-
Marcus, Dyl...	1	-	-
Gogolek, Fr...	1	-	-

11 To change an agent's priority for a skillset, select the priority (the number appearing in the cell opposite the agent's name, and under the desired skillset), and select a new priority from the drop-down list. Repeat this step for each priority you want to change.

12 Choose File → Save.

Result: A confirmation dialog box appears, asking if you want to save the assignment.

13 Click Yes.

14 Choose File → Close.

Result: You return to the Agent to Skillset Assignments window.

15 To return to the SMI window, choose File → Close.

After you finish

If you want to schedule the assignment to take effect at a future time, you must schedule it (see "Scheduling agent to skillset assignments" on page 225).

If you want the agent to skillset assignment to take effect immediately, you must run it (see "Running agent to skillset assignments immediately" on page 227).

Scheduling agent to skillset assignments

When to use

If you want an agent to skillset assignment to take place at a future date, you must schedule it.

Note: When you change an agent's skillset assignments, the server waits for the agent's active calls to end (if any), and then puts the agent into Not Ready state.

To schedule an agent to skillset assignment

1   From the SMI window, choose Assignments → Agent to Skillset Assignments.

Result: The Agent to Skillset Assignments window appears.

2   Select the agent to skillset assignment you want to schedule.

3   Choose File → Edit Schedule.

Result: The Schedule property page appears.

4   Complete the Schedule property page by entering information into these boxes:

Schedule: The frequency with which you want to run the assignment. When you select a schedule, additional boxes appear.

Day/Date/Month: The day, date, and month (as applicable) that you want to run the assignment.

Start: The time on the selected day that you want to run the assignment.

End: For assignments run at intervals (specified in the Interval box). The time you want to stop running the assignment.

Interval: The frequency, in 15-minute increments, with which the assignment is to be run between the start and end times.

Extension: The amount of time the system should wait after a system interruption before abandoning the agent to skillset assignment schedule.

Note: If system recovery takes place before the Extension time expires, the agent to skillset assignment schedule runs.

5   Click Save.

Result: You return to the Agent to Skillset Assignments window.

6   To return to the SMI window, choose File → Close.

Running agent to skillset assignments immediately

To run an agent to skillset assignment immediately

Note: When you change an agent's skillset assignments, the server waits for the agent's active calls to end (if any), and then puts the agent into Not Ready state.

1   From the SMI window, choose Assignments → Agent to Skillset Assignments.

     Result: The Agent to Skillset Assignments window appears.

2   Select the agent to skillset assignment you want to apply.

3   Choose File → Run Now.

4   The following message appears: `Are you sure you want to run this assignment now?` Click Yes.

5   To return to the SMI window, choose File → Close.

Other procedures for agent to skillset assignments

To change the properties of an agent to skillset assignment

You can change the name or comments of an agent to skillset assignment or add agents to or remove agents from the assignment.

From the Agent to Skillset Assignments window, select the assignment, and then choose File → Properties.

For step-by-step instructions, press F1 to access the online Help.

Note: Changes to an agent to skillset assignment take effect the next time the agent to skillset assignment runs.

To change agents' skillset priorities

From the Agent to Skillset Assignments window, select the assignment, and then choose File → Open.

For step-by-step instructions, press F1 to access the online Help.

Note: Changes to an agent to skillset assignment take effect the next time the agent to skillset assignment runs.

To preview a list of agent to skillset assignments

From the Agent to Skillset Assignments window, choose File → Print Preview.

For step-by-step instructions, press F1 to access the online Help.

To delete an agent to skillset assignment

From the Agent to Skillset Assignments window, select the assignment, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Chapter 11

Working with alarms and events

In this chapter

Overview

Introduction

The Event Browser and Alarms Monitor both show events that occur on the server. These programs provide many common features for viewing events. The table below lists features and identifies the program that offers the feature.

Note: To view client events, such as successful logon or logoff, or failure to connect, use the PC Events utility on the SMI workbench.

Event Browser

The main advantages of the Event Browser are as follows:

- It allows you to filter events by several categories including severity and event code range.
- It allows you to limit the display to the most recent events.

Notes:

- In the Alarm Monitor, you can only filter events by severity.
- The Alarm Monitor does not display Information events.

Alarm Monitor

The main advantage of the Alarm Monitor is that it automatically appears in the foreground of the desktop when an event occurs, thus alerting you to problems immediately. You can specify whether the Alarm Monitor displays in the foreground for only critical events, major and critical events, all events, or whether it stays in the background.

Event Browser versus Alarm Monitor feature matrix

Feature	in Event Browser?	in Alarm Monitor?
view events	Yes	Yes
view online Help for an event	Yes	Yes
sort events by category	Yes	Yes
save a list of events	Yes	**No**
print a list of events	Yes	Yes
view minor, major, critical events	Yes	Yes
view information events	Yes	**No**
filter events by code, type, severity, latest events	Yes	**No**
filter events using Event Preferences graphical user interface	Yes	Yes
automatically show the graphical user interface in the foreground when an event occurs	**No**	Yes
clear an event	**No**	Yes

Section A: Viewing events

In this section

Overview of viewing events

Introduction

This section describes how to view and filter events with the Event Browser.

Notes:

- You can also use the Windows Event Viewer to view events. For detailed instructions, see the *Installation and Maintenance Guide.*

- Symposium Call Center Server also supports Simple Network Management Protocol (SNMP) traps. You can use SNMP to send Symposium Call Center Server events to a Network Management System (NMS) on your network. For more information, see the *Installation and Maintenance Guide.*

This chapter describes procedures for the following tasks:

- viewing, sorting, and printing the event log using the Event Browser on the client

- changing the filtering criteria for the Event Browser

- using the event throttling option to prevent events from repeating in the event log

Events

Events are log entries that record activities in Symposium Call Center Server, such as

- sending or receiving messages

- opening or closing applications

- errors

Some events are for information purposes only, while others can indicate problems. Events are categorized by severity.

Event severity

Events are assigned a default severity of Information, Minor, Major, or Critical. The Alarm Monitor does not report Information-level events.

Information
These events indicate that something noteworthy has happened on the system, but do not mean that there is a problem. For example, an information-level event can indicate that a service has started or stopped. These events appear in the Event Browser but not in the Alarm Monitor.

Minor
These events indicate that a non-service-affecting fault condition exists, and that you must take corrective action to prevent a more serious fault. For example, a minor event is generated when the file system is 90 percent full.

Major
These events indicate that a service-affecting condition has developed and an urgent corrective action is required. The event condition can cause severe degradation in server performance, and you must restore full capacity. For example, a major event is generated when the file system is 100 percent full.

Critical
These events indicate that a service-affecting condition has occurred and an immediate corrective action is required. Critical events are reported when a component is completely out of service and you must take immediate action to restore it. For example, a critical event is generated when the file system crashes.

Opening the Event Browser

Introduction

Symposium Call Center Server generates alarms to notify you when minor, major, and critical system events occur. It also issues information messages. Alarms are displayed in both the Alarm Monitor and the Event Browser on the client PC. Information messages appear only in the Event Browser.

Note: By default, only the latest 100 *critical* events appear in the Event Browser. You can configure the filter to display all events. For more information, see "Changing the filtering criteria for events" on page 241.

Follow the procedure in this section to view events in the Event Browser.

To open the Event Browser

From the SMI window, choose System Administration → Alarms & Events → Event Browser.

> **Result:** The Event Browser window opens.
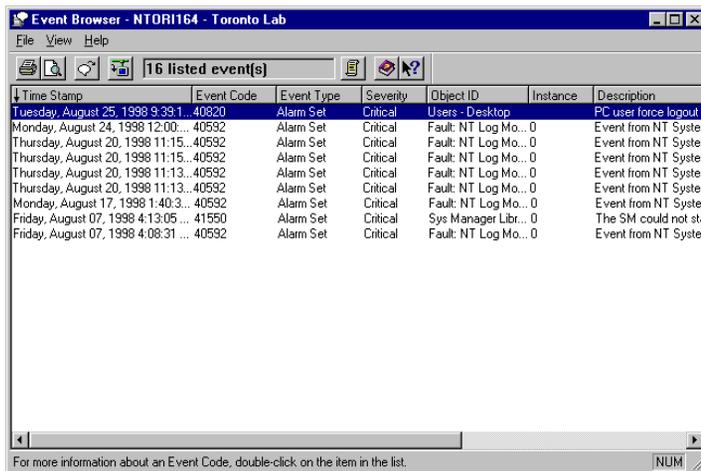
To adjust the column widths, place the cursor on the bar between the column heading names, and scroll to the left or right.

To sort events

Click the header of the column by which you want to sort. For example, to sort the events by type, click the Event Type header.

Note: The default order lists the latest event first.

Viewing online Help for an event

Introduction

You can view online Help for a selected event. The online Help may provide a recommended action to correct the problem or more information about the event.

To view online Help for an event

1   In the Event Browser or Alarm Monitor, double-click the event that you are investigating.

Result: An Event Details dialog box appears.
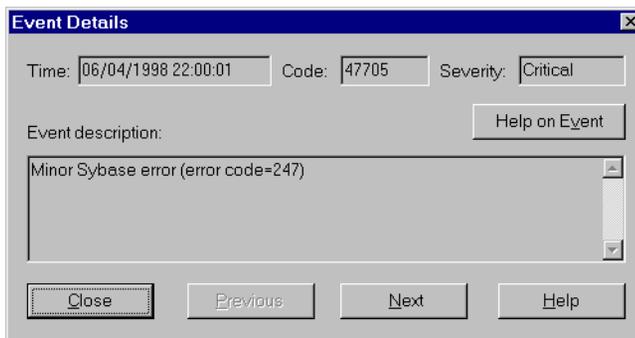
2   Click Help on Event.

Result: The online Help for the selected event appears.
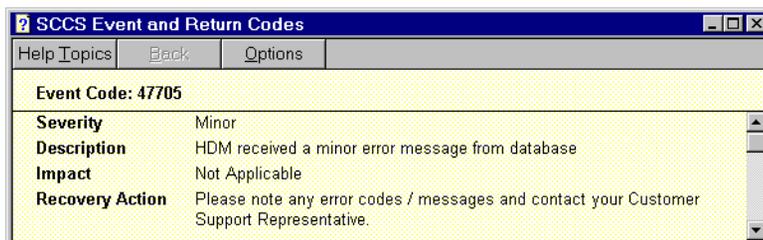
Saving a list of events from the Event Browser

Introduction

Nortel Networks recommends printing or saving any relevant sections of the event log in case of a problem with your system. The log helps technical support representatives to conduct a thorough analysis of your system.

Before you begin

Make sure that the filter settings are set to show the type and number of events you want to save. For more information, see "Changing the filtering criteria for events" on page 241.

To save events

1   From the SMI window, choose Alarms & Events → Event Browser.

Result: The Event Browser appears.
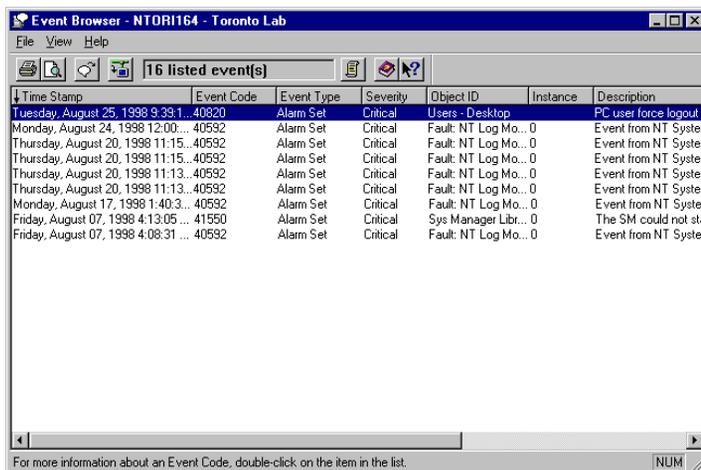
2   Choose File → Save Event Log.

Result: The Save Event dialog box appears.

3   Choose one of the following options:

- To save all of the events in the Event Browser, check All events.

- To save only the events that are currently selected, check Selected event(s).

4   Click OK.

Result: A dialog box appears for you to provide a file name and select a location.

5   Enter a recognizable file name and location.

6   Click Save.

To print a list of events

From the Event Browser window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

Changing the filtering criteria for events

Introduction

If you want to reduce the number of events shown in the Event Browser at one time, you can screen the log to view a specific number of the most recently filtered events.

Filter settings

You can set the event log filter to display

- a specific number of latest events, or all events (all events available on or retrieved from the system)
- events of a certain severity (critical, major, minor, information)
- a specific event code range, or all event codes
- a specific type of alarm (alarm set, alarm cleared, or message)
- events that occurred during a specific date and time interval

Note: The Set Event Filter Properties tabs work with one another.

Example

At BestAir, system engineer Jane Oliver is testing a new server component. Before she performs the tests, she changes the filtering criteria to display all events, including information events. (These events tell her whether system components are starting up.) When Jane finishes her tests, she changes the filtering criteria back to the default setting.

To view all events

1   From the SMI window, choose Alarms & Events → Event Browser.

2   Choose File → Change Filter criteria.

   Result: The Set Event Filter Properties property sheet appears. The
   Report and Severity page appears first.

3   Click All events.

4   Click all the Severity levels.

5   Click the Code and Type tab.

   Result: The Code and Type page appears.
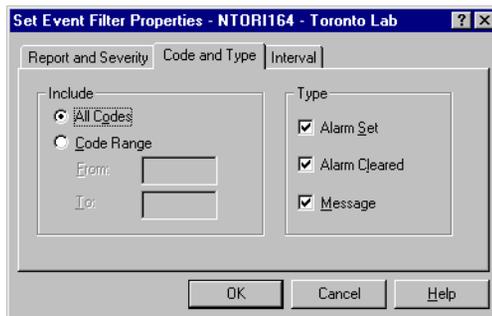
6   Select All Codes.

7   Select each box in the Type column.

8   Select the Interval tab.

Result: The Interval page appears.
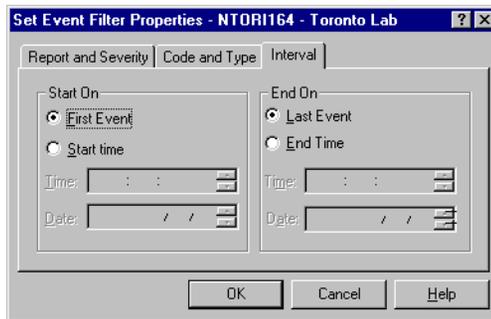
9   To view all events, ensure that the date and time boxes are blank.

10   Click OK to change the filter.

To filter the events

Follow the steps in "To view all events" on page 242, except specify the criteria you are looking for. Events that match the criteria on all tabs in the Set Event Filter Properties property sheet are listed in the Event Browser.

Report and Severity tab

On this tab, specify the number of latest events to view, or select all events to view all events that match the other filter criteria. Also, specify the severity of events to view.

Code and Type tab

On this tab, specify the range of event codes to view, or select all codes. Also, specify the types of alarms to view.

Interval tab

On this tab, you can specify that you want to view events from a specific date and time range. If you do not want to restrict the list of events to a certain date and time range, leave the date and time range blank.

Section B: Managing event preferences

In this section

Overview

Introduction

This section describes how to change the classification of particular events. For example, you can choose to treat a major event as a minor event if you are aware it exists and the situation is being resolved.

You can create an event preference to override the default severity or throttling parameters of any event code. You might want to change the preferences of an event for the following reasons:

- to increase the severity of an event (for example, from Information to Minor). By increasing an event's severity, you ensure that the event appears in the Alarm Monitor when it occurs.

- to reduce the severity of a recurring alarm to Information. By reducing an event's severity, you prevent it from appearing in the Alarm Monitor.

- to set the throttling parameters to reduce the frequency with which an event is logged

Previous occurrences of the event are not affected. You can revert to the default event definition at any time by deleting the event preference for that event code.

Example

At BestAir, Symposium Call Center Server is generating a critical alarm because of a database error. The system engineer, Jane Oliver, has ordered a replacement for the malfunctioning disk drive that is causing the problem. Since she is aware of the problem, Jane does not want to see an alarm on her console every time the error occurs.

Jane can use the event preferences to reduce the severity of the error from Critical to Information. After the new disk is installed, she can delete the event preference to restore the severity to Critical.

Adding event preferences

Introduction

To create an event preference for an event, follow the procedure in this section. If an event preference has already been defined for the event, you can change the event severity. See "To change an event preference" on page 251.

To add an event preference

1   From the SMI window, choose System Administration → Alarms & Events → Event Preferences.

Result: The Event Preferences window appears.
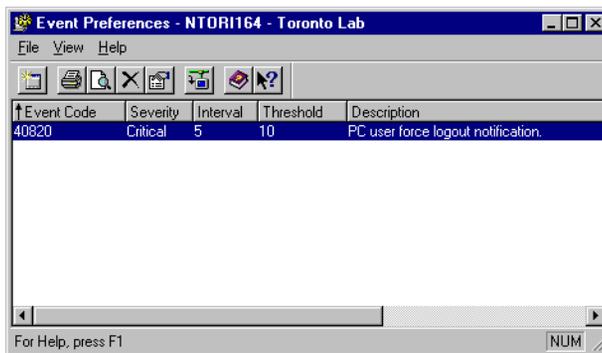
2   Choose File → New.

Result: The New Event Preference Properties property sheet appears.
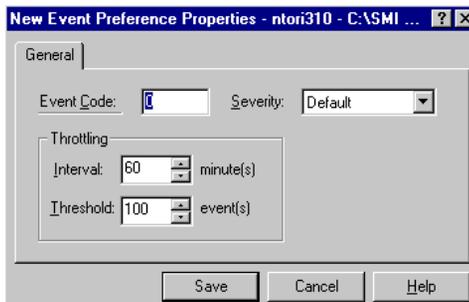
3   In the Event Code box, type the event code number for the event you want to add.

   Note: Symposium Call Center Server does not accept unrecognized event codes. For a complete list of valid event codes, go to the Event Browser and select Event Code Reference from the Help menu.

4   From the Severity drop-down list box, select the severity you want to assign to the event.

5   In the Interval box, type the throttling interval (the time interval during which the event can be logged a specified number of times).

   Example: In 30 minutes (the interval), allow the event to be logged a maximum of 10 times (the number).

6   In the Threshold box, type the number of instances of the event that can be logged during the specified interval.

7   Click Save to return to the Event Preferences window.

   Result: The new event is added to the list of events.

8   To return to the SMI window, choose File → Close.

Throttling all events

Introduction

Event throttling lets you control the frequency with which events are recorded by the server log. You can throttle all events to prevent the log from becoming overcrowded. If too many instances of each event are recorded, there may not be enough space in the log to record more important events. Too many instances of the same event can distract users, causing them to overlook other important events.

Note: To set throttling on specific event codes, see "Adding event preferences" on page 247.

To throttle all events

1   From the SMI window, choose Alarms & Events → Event Preferences.

     Result: The Event Preferences window appears.
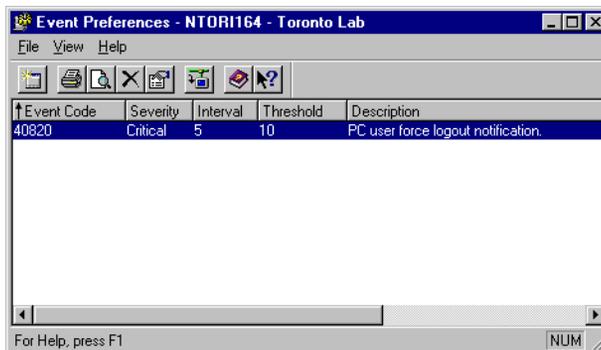
2   Choose File → Default Throttling.

Result: The Set Default Throttling Properties property sheet appears.
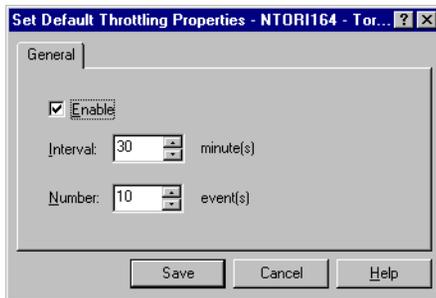
3   Select Enable.

4   In the Interval box, type the interval for which you want to configure throttling.

5   In the Number box, type the number of instances of each event that you want logged.

6   Click Save to return to the Event Preferences window.

7   To return to the SMI window, choose File → Close.

Other procedures for event preferences

To change an event preference

From the Event Preferences window, select the event preference you want to change, and then choose File → Properties.

Note: If the event code that you want does not appear in the list, define an event preference first. For information about creating a new event preference, see "Adding event preferences" on page 247.

For step-by-step instructions, press F1 to access the online Help.

To print the list of event preferences

From the Event Preferences window, choose File → Print.

For step-by-step instructions, press F1 to access the online Help.

To delete an event preference

When you delete an event preference, the event settings for severity and throttling revert to their default values.

From the Event Preferences window, select the event preference you want to delete, and then choose File → Delete.

For step-by-step instructions, press F1 to access the online Help.

Section C: Using the Alarm Monitor

In this section

Overview

Introduction

This section describes how to view and manage alarms. Symposium Call Center Server generates alarms to notify you when minor, major, and critical system events occur.

You can configure the Alarm Monitor to appear in either of the following locations when a new alarm is registered:

- the foreground
- the background

In the Alarm Monitor, you can access, clear, and print system alarm information.

Preventing recurring alarms

You can prevent an alarm from recurring in the following ways:

- Change the throttling parameters for all events (see "Throttling all events" on page 249).
- Change the throttling parameters for a specific event (see "Adding event preferences" on page 247).
- Override the default severity of the event so it no longer appears in the Alarm Monitor. For more information, see "Adding event preferences" on page 247.

Viewing events in the Alarm Monitor

When to use

By default, the Alarm Monitor appears in the foreground when a critical, major, or minor event occurs. If you cannot see the Alarm Monitor or if it has been closed, follow the steps in this section to open it.

To open the Alarm Monitor

1   From the client PC, log on to the server.

2   From the SMI window, choose System Administration → Alarms & Events → Alarm Monitor.

Result: The Alarm Monitor window appears.
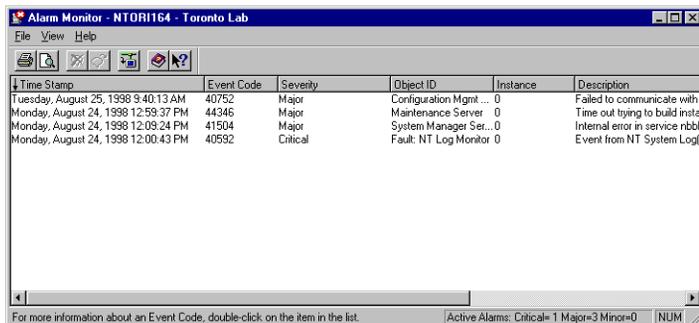
To adjust the column widths, click the cursor on the bar between the column heading names, and drag the cursor to the left or right.

To refresh the Alarm Monitor

From the Alarm Monitor window, choose View → Refresh.

Note: After you refresh the Alarm Monitor, the number of alarms may decrease. Any alarms that have been cleared by other processes are removed from the Alarm Monitor.

To sort events

From the Alarm Monitor window, click the header of the column by which you want to sort. For example, to sort the events by type, click the Event Type header.

Note: By default, events are sorted on Timestamp in reverse chronological order.

To specify when the Alarm Monitor appears in the foreground

By default, the Alarm Monitor appears in the foreground when any event occurs (that is, it takes the focus from the currently active window). You can configure the severity of alarm that will force the Alarm Monitor to appear in the foreground.

From the SMI window, on the Utilities menu, click one of the following options:

- Alert All Alarms - This option shows the Alarm Monitor window every time an alarm is registered or updated.

- Alert Major and Critical Only - This option shows the Alarm Monitor window every time a Major or Critical alarm is registered or updated.

- Alert Critical Only - This option shows the Alarm Monitor window every time a Critical alarm is registered or updated.

To configure the Alarm Monitor to appear in the background

If you do not want to see the Alarm Monitor every time it receives and updates a new alarm, you can force it to appear in the background of your display.

1   From the SMI window, choose System Administration → Alarms & Events → Alarm Monitor.

Result: The Alarm Monitor window opens.
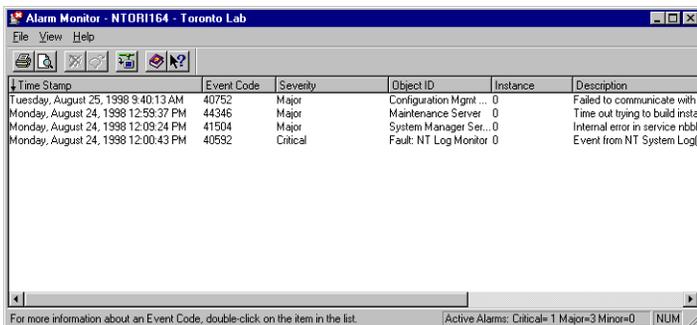
2   From the SMI window Utilities menu, click Alerting Off.

Result: The Alarm Monitor is moved to the background. When a critical alarm is registered, the Alarm Monitor window taskbar flashes until the Alarm Monitor window is brought to the foreground.

Note: If you select Alerting Off, and then minimize the Alarm Monitor, the minimized Alarm Monitor flashes when a critical alarm is registered until the Alarm Monitor window is restored.

To obtain more information about an alarm

1   Double-click an alarm's entry in the Alarm Monitor.

2   The Event Details dialog box appears.

3   Click Help on Event.

Clearing active alarms

When to use

Alarms are cleared from the Alarm Monitor in one of two ways:

■   Symposium Call Center Server automatically clears alarms when the alarm
     condition changes.

■   You can clear alarms manually.

When you clear an alarm, you remove the selected alarm (but not the event that
raised it) from the event log. The action also removes the selected alarm from the
list shown in the Alarm Monitor. If the event occurs again, however, the alarm
reappears in the Alarm Monitor.

Example

At BestAir, an alarm appears with the description "Disk is 90% full." Mark
Brown, the system administrator, checks the system disk space, removes
temporary files, and might even decide to order a larger hard drive. Only after he
has resolved the problem does he clear the alarm from the Alarm Monitor.

To clear an alarm

1   From the SMI window, choose System Administration → Alarms & Events
       → Alarm Monitor.

       Result: The Alarm Monitor window opens.
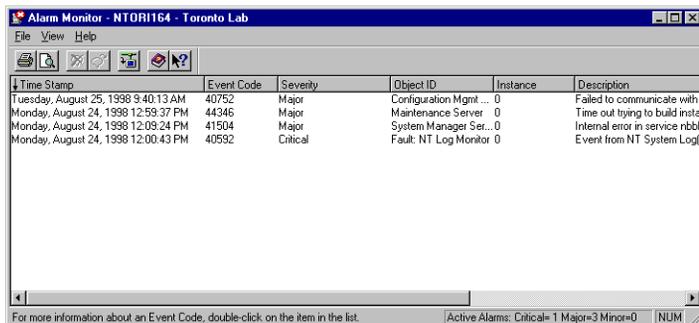
2   Select the alarm you want to clear.

3   Choose File → Clear Alarm.

   Result: A dialog box asks you to confirm that you want to clear the selected alarm.
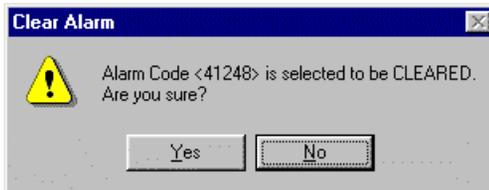
4   Click Yes.

   Result: The alarm entry is removed from the Alarm Monitor.

Appendix A

Troubleshooting on the client

In this appendix

Overview

This section provides troubleshooting checklists and procedures in case you experience any problems with the application software or with connecting to the network or server.

Troubleshooting problems with application software

Introduction

Problems with the client application software can result from improper network cabling, improper network card configuration, and incorrect configuration of Windows 2000 on the server.

To troubleshoot problems with the client application software

1   Ensure that all cables are installed correctly. See the maintenance guide for your server for detailed information.

2   Verify that the system board jumpers are set correctly. See the maintenance guide for your hardware platform for detailed information.

3   Verify that the Windows 2000 server is properly configured for the system. See the *Installation and Maintenance Guide* for instructions on configuring Windows 2000.

If the problem persists, contact your Nortel Networks customer support representative for assistance and more information.

Troubleshooting the connection to the server

Introduction

If the client cannot connect to the server, it displays a dialog box with the message `IP address is unreachable. Connection failed.` Click OK to dismiss the dialog box, and follow the steps in this section to solve the problem.

ATTENTION If you discover that you must change the server's CLAN or ELAN IP address, see the *Installation and Maintenance Guide*. You must make IP address changes in Symposium Call Center Server utilities, as well as in the Network control panel.

Things to check first

1 Make sure you are using the drivers that are shipped on the system configuration software CD for the CLAN/ELAN network controller.

2 Make sure the driver is loaded and the protocols are bound.

3 Ensure that the network cable is securely attached to the connector at the system back panel, and that the network controller link LED is on and visible at the back panel. If the cable is attached but the problem persists, try a different cable.

4 Ensure that the hub port is configured for the same duplex mode as the network controller.

5 Check with your LAN administrator about the correct networking software that needs to be installed.

6 If you are directly connecting two servers, some hubs may also require a crossover cable. Check your hub documentation for more information on crossover cables.

7 Check the visible network controller LEDs through an opening at the system back panel.

8   From the client, try to ping the server's CLAN IP address. If you are using a dial-up connection, establish the modem connection before pinging.

Result: If the ping is successful, then the network is fine between the server and the client. If the ping is not successful, then you might be using the wrong IP address for the server, or there might be a network problem.

To check the client PC

If using a dial-up connection to the server

1   Check that the Dial-Up Networking connection profile that you are using for the SMI system to connect to the server is set up correctly. Check that the dial-up connection information is correct (IP address for the server and phone number).

2   Try to connect to other PCs on the local network to ensure that you are not having a local network problem.

If connecting to the server over the LAN

1   Check that the connection information for the SMI system is correct (IP address or computer name for the server). See "Adding servers" on page 24.

2   Try to connect to other PCs on the LAN to ensure that you are not having a local network problem.

To check the server

1   Check that the network card TCP/IP addresses are correct. See the *Installation and Maintenance Guide*.

Note: If you must change the server's CLAN or ELAN IP address, see the *Installation and Maintenance Guide*.

(The remaining steps apply only if the client is using a dial-up connection to the server)

2   Check that the client PC's IP address is in the range of IP addresses defined for Remote Access Service (RAS) on the server. See the *Installation and Maintenance Guide*.

3   Check that Remote Access Service is started. See the *Installation and Maintenance Guide*.

Troubleshooting problems with the network

Network problems

If you are having network problems, check the following list for possible solutions.

The network driver fails to start or hangs the server on starting

- Use the SCU software to verify interrupt and other system resource settings. For more information, refer to the *Installation and Maintenance Guide*.
- Verify that the proper Windows Service Pack is loaded.
- Verify that diagnostics on the card pass.

Diagnostics pass but the connection fails

- Ensure the network cable is securely attached.
- Ensure you specify the correct frame type in your net.cfg file.

The Link LED does not light

- Ensure you have loaded the network drivers.
- Check all cable connections.
- Try another port on the hub.
- Ensure you have the correct type of cable between the adapter and the hub. Some hubs require a crossover cable, while others require a straight-through cable. For more information about crossover cabling, see the manufacturer's hub directions.

The Activity LED does not light

- Ensure you have loaded the correct network drivers.
- The network might be idle. Try to access a server.

The controller stopped working when an add-in adapter was installed

- Ensure the cable is connected to the port from the onboard network controller.

- Ensure your PCI BIOS is current. For more information, refer to the *Installation and Maintenance Guide*.

- Ensure that the adapter is not attempting to share interrupts, since Windows NT does not support shared interrupts. For more information, refer to the *Installation and Maintenance Guide*.

- With the system powered down, try reseating the add-in adapter.

The add-in adapter stopped working without apparent cause

- With the system powered down, try reseating the adapter. If the problem persists, try installing the card in a different slot. This helps you identify whether the problem is with the adapter or with the slot.

- The network driver files might be corrupt or deleted. Delete and then reinstall the drivers.

- Run the diagnostics.

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 Symposium Call Center Server. Resources must be configured with matching values on both the switch and Symposium Call Center Server.

activated script

A script that is processing calls or is ready to process calls.

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 setting up and maintaining the Symposium Call Center Server.

agent

A user who is responsible for handling customer calls.

agent logon ID

A unique identification number assigned to a particular agent. The agent uses this number when logging on. 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.

API

See application program interface.

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

A means of automatically distributing an organization's incoming calls among a number of answering positions (ACD agents). Automatic call distribution is useful in operations where callers want a service rather than a specific person. Calls are serviced in the order they arrive and are distributed so that the workload at each answering position is approximately equal.

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. *See also* Automatic call distribution directory number.

Automatic call distribution directory number

A primary or supplementary DN associated with an ACD group. Calls made to an automatic call distribution directory number 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 Symposium Call Center Server. *See also* intrinsic, skillset intrinsic, time intrinsic, 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, script variable.

Calling Line Identification

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.

CallPilot

A multimedia messaging system you can use to manage many types of information, including voice messages, fax messages, e-mail messages, telephone calls (including conferencing), calendars, and directories.

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.

CTI

Computer Telephony Integration

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. An agent can receive calls from customers calling in on different DNISs and, if the DNIS is displayed on the phoneset, can prepare a response according to the DNIS.

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

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
See 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. Several applications can use a DLL at the same time.

E

ELAN
See embedded local area network.

embedded local area network
A dedicated Ethernet TCP/IP LAN that connects the server in 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, 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 below 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. You can only change the value of a global variable in the Script Variable Properties sheet. You cannot change it 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, 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, relational expression.

M   Management Information Base
A data structure that describes the collection of all possible objects in a network. Each managed node maintains one or more variables (objects) that describe its state. Symposium Call Center Server Management Information Bases (MIBs) contribute to the overall network MIB by

- identifying Nortel Networks/Meridian/Symposium Call Center Server nodes within the network

- identifying significant events (SNMP traps), such as alarms reporting

- specifying formats of alarms

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, 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, relational expression.

MIB

See Management Information Base.

MSL-100

Meridian Stored Logic 100 switch

music route

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

N

network interface card

An expansion board that enables a PC to be connected to a local area network (LAN).

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

A unique identifier for a phoneset, used by the switch to route calls to the phoneset. 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, 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, 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, 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, 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. 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 systematic way of monitoring and managing a computer network. The SNMP model consists of four components:

- managed nodes, which are any device, such as hosts, routers, and printers, capable of communicating status to the outside world via an SNMP management process called an SNMP Agent

- management stations, which are computers running special network management software that interact with the Agents for status

- management information, which is conveyed through exact specifications and format of status specified by the MIB

- Management Protocol or SNMP, which sends messages called protocol data units (PDUs)

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, 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 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 Transmission 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, 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, 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.

Transmission 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 Symposium Call Center Server. *See also* call variable, global variable.

W   WAN

See also 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

Symbols

A

Reader Response Form

Nortel Networks Symposium Call Center Server
Product release 5.0
Administrator's Guide for DMS/MSL-100

Tell us about yourself:

Name: _____

Company: _____

Address: _____

_____

Occupation: _____ **Phone:** _____

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1. What is your level of experience with this product?

   ☐ New user   ☐ Intermediate   ☐ Experienced   ☐ Programmer

2. How do you use this book?

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3. Did this book meet your needs?

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4. What chapters, sections, or procedures did you find hard to understand?

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   _____

5. What information (if any) was missing from this book?

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6. How could we improve this book?

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Reader Response Form

Nortel Networks Symposium Call Center Server

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